

# X SERIES UNLIMITED



A COMPREHENSIVE GUIDE FOR MASTERING  
TECHNIQUES AND MAXIMIZING CREATIVITY  
WITH YOUR **FUJIFILM** CAMERA

November 2022 Edition

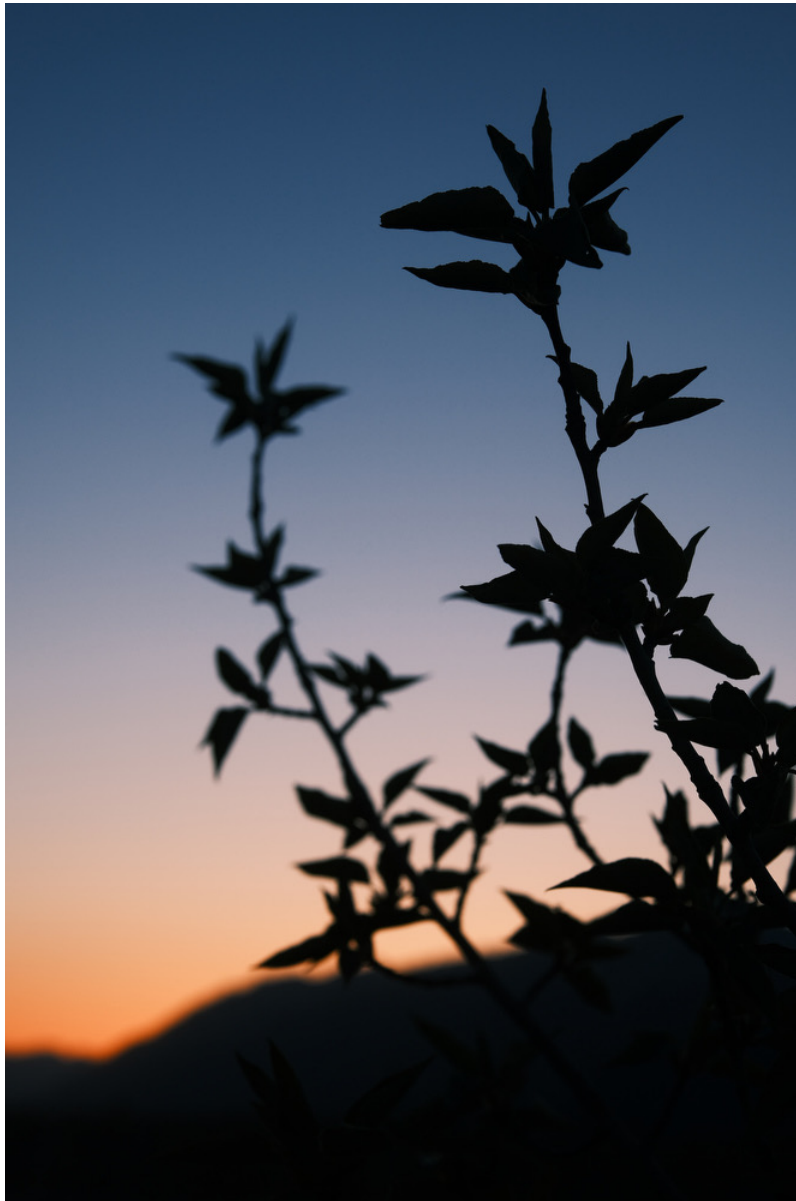
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# THE FINE PRINT



Although I have a professional relationship with FUJIFILM North America Corporation as an official FUJIFILM X PHOTOGRAPHER, this book is in no way sponsored by FUJIFILM Corporation or any of its affiliates. Although I have asked a few friends who are FUJIFILM employees to help clarify certain topics covered in this book, the entire project was done strictly as a personal undertaking by me to help educate and inform other people who use X SERIES cameras.

Although I occasionally use the word “Fuji” and “FUJIFILM” interchangeably in this book when describing the gear, please note that the correct designation for this equipment is FUJIFILM,” and that FUJIFILM and X SERIES/X Series and the X SERIES Logo are all trademarks of FUJIFILM Corporation. Any and all mentions of FUJIFILM or the X SERIES cameras herein are used solely to reference equipment manufactured by FUJIFILM Corporation. \*Whew!\*



# ABOUT THE NOVEMBER 2022 UPDATE

This November 2022 edition of X SERIES UNLIMITED adds full coverage of the brand new 5<sup>th</sup> Gen X Series models, the X-H2, X-H2S and X-T5. I have also done major revisions to the [MOVIE SETTINGS](#) and [CONNECTION SETTINGS](#) chapters, and have added an additional [Video Shooting](#) section in the “Nuts and Bolts” chapter, with expanded info about shooting movies with the X Series.

In addition, there are a few new features that have been added to the X-T4 via firmware update, most notably the [XLR Mic Adapter Setting](#), which allows you to record multi-channel audio along with your movie through the use of special XLR mic adapters, such as the [TASCAM CA-XLR2d-F](#).

This guide has been an evolving project over the past five and a half years. If this is your first time reading X SERIES UNLIMITED, then I hope you find it to be a very helpful resource. If you’re updating from an older version, then I hope you’re able to take advantage of the new additions. In either case, thank you so much for your support.



# INTRODUCING THE X-H2 and X-H2S



The Fujifilm X-H2 and X-H2s are the first X Series models to use the new 5<sup>th</sup> generation X-Trans CMOS 5 sensor and X-Processor 5 image processing engine, which gives twice the processing speed of the previous models. This new technology gives these updated X-H models a number of powerful innovations, advanced functions and ultra-high performance on a level not seen on any previous X Series model, and in some cases, on any previous camera model in the industry.

At the same time, they still retain the basic X Series DNA and function like any other X Series model, with nearly the same set of useful settings and creative features that are found on all of the other recent Fujifilm models from the six years, going back the X-Pro 2 and X-T2. In fact, some of the features found on these new X-H models were introduced on the earliest X Series models, like the X-T1, X10/20 and the original X100.

In this section, I'll outline all of the major features and advancements found on the two new X-H models, but you'll also find all of the settings described in full in the "MENU" chapters of this book.



# X-H2 - Built for The Highest Quality Imagery



The fifth generation X-H2 brings unrivaled image quality and ultra-high resolution to the X Series, with a brand new 40.2 megapixel APS-C sensor and a host of features that allow for a whole new world of creative possibilities when shooting still images and video.

The new 5<sup>th</sup> generation Back Side Illuminated X-Trans CMOS 5HR sensor uses a new, highly advanced processing algorithm that boosts resolution without compromising signal-to-noise. It also has an improved pixel structure that allows for more efficient light capture and a lower sensitivity of IOS 125.

Video capabilities have been greatly improved with higher quality (up to 8K

shooting) and more flexibility for capture rates, format and export. With its new heat-dissipating structure, the X-H2 has improved recording time. When used with the dedicated vertical battery grip, the X-H2 can record up to 160 minutes of 8K/30p video. An optional cooling fan also available, which extends video shooting in high temperatures.

NOTE: Although any current Fujifilm XF lens will produce very high quality imagery when used with the X-H2, the following lenses have been designed to allow for the maximum benefit and full resolving power of the 40.2 MP sensor on the X-H2.

XF16mm f/2.8 WR  
XF18mm f/1.4 R LR WR  
XF23mm f/1.4 R LR WR  
XF23mm f/2 R WR  
XF27mm f/2.8 R WR  
XF33mm f/1.4 R LM WR  
XF35mm f/2 R WR  
XF50mm f/1.0 R WR  
XF50mm f/2 R WR  
XF56mm f/1.2 R WR  
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XF200mm f/2 R LM OIS WR  
XF8-16mm f/2.8 R LM OIS WR  
XF16-55 mm f/2.8 R LM WR  
XF18-120mm f/4 LM PZ WR  
XF50-140mm f/2.8 LM OIS WR  
XF70-300mm f/4-5.6 R LM OIS WR  
XF100-400mm f/4.5-5.6 R LM OIS WR  
XF150-600mm f/5.6-8 R LM OIS WR

Here are some of the notable new features found on the X-H2

- **IBIS 7.0 Stops:** The X-H2 has a new 5-axis in-body stabilization system that offers up to 7 stops of compensation. It also allows for the new Pixel Shift Multi Shot. (See below.)

- **Ultra High 1/180,000 sec. Electronic Shutter Speed:** The X-H2 has a maximum electronic shutter speed of 1/180,000 second, which is an increase of



2.5 stops over other X Series cameras. This allows for greatly expanded creative options when shooting with wide open apertures in extremely bright light environments, or when trying to freeze very fast motion subjects.

- **160MB Pixel Shift with Multi Shot:** The X-H2 has a feature called Pixel Shift Multi Shot, which can produce a single, ultra high resolution 160MB image, with a single press of the shutter. By using its advanced in-body stabilization system, the X-H2 creates 20 individual images, shifting the sensor by one-half pixel between frames. You can combine the RAW frames using [Fujifilm's Pixel Shift Combiner software](#). Press the DRIVE button for this option, and use a tripod for capture.

- **HEIF/JPEG Image Format:** The X-H2 supports HEIF image format, which is the same format your smartphone uses to capture images. [Select JPEG or HEIF](#) when capturing photos "straight out of camera." HEIF offers 10-bit image quality with files that are 30% smaller than standard JPEGs.

- **New "NOSTALGIC Neg." Film Simulation:** Coming over from the GFX, the new [NOSTALGIC Neg.](#) Film Sim is inspired by classic color prints of the 1970s. It similar to CLASSIC Neg., but with a warmer tone, more vibrant reds, and slightly less contrast that gives you more shadow details.

- **New Subject Detection Autofocus:** The X-H2's higher pixel count sensor increases the number of phase detection pixels, which allows for increased focusing accuracy and improved AF-S performance when tracking still subjects.

In addition, Fujifilm's new X-Processor 5 processing engine drives a new intelligent [Subject Detection](#) AF system, that's based on Deep Learning technology. The system automatically detects and and tracks a broad range of subjects, including animals, birds, cards, motorcycles, bicycles, airplanes and trans, as well as human faces and eyes. This powerful capability allows the photographer to concentrate on the composition, with full confidence that the camera will properly acquire and track your subject across the frame.

- **New MF Assist Focus Meter:** The X-H2 features a focus meter than can be used for MF Assist when shooting video to enable more precise focus adjustments. This feature can also be used in combination with Focus Peaking for even more precise control.

- **8K / 30p Video:** The X-H2 can record exceptional high quality 8K/30p video in 4:2:2 10-bit color that can be recorded directly to HDMI devices, or as 8-bit 4:2:0 video saved internally to either an SD card or a Cfexpress Type B memory card.
- **8K Oversampled 4K HQ Mode:** In addition to shooting straight 8K video, the X-H2 has a 4K HQ mode. This takes advantage of the camera's 40MP sensor by oversampling the original 8K video to create 4K video that has enhanced clarity, higher quality, reduced noise at roughly one third the file size of a regular 8K video clip.
- **Apple ProRes Support:** The X-H2 supports [Apple ProRes File Format](#) including ProRes 422 HQ, ProRes 422 and ProRes 422 LT, and the highly compressed ProRes 422 Proxy, which offers full resolution video at low data rates. Apple ProRes is a video codec that allows for multi stream, real-time editing performance, impressive image quality and reduced storage rates, and has widespread adoption and compatibility across the video post-production industry.
- **F-Log 2 Support:** The X-H2 support both F-Log and F-Log2 video, which allows for expanded dynamic range of up to 13+ stops.
- **RAW Video Output to HDMI:** When used with a compatible HDMI recording device from Atomos or [Blackmagic Design](#), the X-H2 can record 12-bit RAW video as Apple ProRes RAW or Blackmagic RAW at resolutions up to 8K / 29.97 fps.
- **Improved Digital Zoom:** With it's 40mp sensor and powerful X-Processor 5 engine, the X-H2 features a new digital zoom function that delivers up to 2x zoom, with little to no loss in image quality and resolution when recording in 4K. When using the new [XF18-120mm f/4 LM PZ WR lens](#), you can extend with twice the reach and transition seamlessly to the digital zoom function when the lens reaches its maximum focal length.
- **Lens Function (Fn) Control:** In addition to the normal Fn button/touch gestures, the X-H2 allows for Fn control on new XF lenses that feature Fn controls on the barrel. For example, the XF18-120mm f/4 LM PZ WR lens has three Fn controls: a Zoom/Focus Control Ring, and a Rocker Zoom button that can be pressed up or down. Any of these three can be programmed with assignable Fn controls.



# X-H2S - Built for Speed and Power



The fifth generation X-H2S brings unrivaled speed and power to the X Series, with a brand new 26.1 megapixel Stacked APS-C sensor, and a host of features that allow for maximum performance when capturing fast action and ultra high speed stills and video.

The new 5<sup>th</sup> generation Stacked Layer, Back Side Illuminated X-Trans CMOS 5HS sensor uses a new design, which places the components that read and process signals on the back of the sensor surface. This results in 4x fast readout speeds than previous X Series models, and 30x faster readout speeds than were possible on the first gen X-Trans sensor.

It also allows for dramatically improved performance, including ultra high speed 40 fps blackout-free shooting, 30 fps shooting for over 1,000 frames, and significantly better autofocus performance during burst shooting. In addition the X-H2S has greatly improved electronic shutter performance.

Video capabilities on the X-H2S have been vastly improved as well. With the ability to shoot Open Gate 6.2K/30p at 4:2:2 10-bit color, you can capture 3:2 6240 x 4130 video and then crop to any one of 5 standard resolution formats, including 16:9 UHD 4K and even 16:9 4K vertical format video. The X-H2S can also record high-speed at 4K/120 for dramatic, high quality slow motion footage.

With its new heat-dissipating structure, the X-H2S also has improved recording time. When used with the dedicated vertical battery grip, the X-H2S can record up to 240 minutes of 4K/30p video. An optional cooling fan also available, which extends video shooting in high temperatures.

Here are some of the notable new features found on the X-H2S:

- **IBIS 7.0 Stops:** The X-H2 has a new 5-axis in-body stabilization system that offers up to 7 stops of compensation. It also allows for the new Pixel Shift Multi Shot. (See below.)
- **HEIF/JPEG Image Format:** The X-H2 supports HEIF image format, which is the same format your smartphone uses to capture images. [Select JPEG or HEIF](#) when capturing photos “straight out of camera.” HEIF offers 10-bit image quality with files that are 30% smaller than standard JPEGs.
- **New “NOSTALGIC Neg.” Film Simulation:** Coming over from the GFX, the new [NOSTALGIC Neg.](#) Film Sim is inspired by classic color prints of the 1970s. It similar to CLASSIC Neg., but with a warmer tone, more vibrant reds, and slightly less contrast that gives you more shadow details.
- **New Subject Detection Autofocus:** With its stacked sensor and newly developed AF Prediction algorithms, the X-H2S has a major boost in focusing accuracy and improved AF-S performance. It excels when tracking moving subjects and shooting in low-contrast conditions.

In addition, Fujifilm’s new X-Processor 5 processing engine drives a new intelligent

[Subject Detection Setting](#) AF system, that's based on Deep Learning technology. The system automatically detects and tracks a broad range of subjects, including animals, birds, cars, motorcycles, bicycles, airplanes and trains, as well as human faces and eyes. This gives the X-H2S the fastest, most accurate AF tracking capabilities of any X Series camera, and one of the fastest, most capable AF systems of any modern camera.

- **6.2K / 30p 3:2 Open Gate Video:** The X-H2S can record exceptional high quality 6.2K/30p video in 4:2:2 10-bit color that can be recorded internally to either an SD card or a Cfexpress Type B memory card, or cropped to any standard aspect ratio in post-production, even cropping to 4K vertical, with no loss of quality.
- **Apple ProRes Support:** The X-H2 supports [Apple ProRes File Format](#) including ProRes 422 HQ, ProRes 422 and ProRes 422 LT, and the highly compressed ProRes 422 Proxy, which offers full resolution video at low data rates. Apple ProRes is a video codec that allows for multi stream, real-time editing performance, impressive image quality and reduced storage rates, and has widespread adoption and compatibility across the video post-production industry.
- **F-Log 2 Support:** The X-H2 support both F-Log and F-Log2 video, which allows for expanded dynamic range of up to 13+ stops.
- **RAW Video Output to HDMI:** When used with a compatible HDMI recording device from Atomos or [Blackmagic Design](#), the X-H2 can record 12-bit RAW video as Apple ProRes RAW or Blackmagic RAW at resolutions up to 6.2K / 29.97 fps.
- **Remote Rec Function:** By adding the optional [Fujifilm FT-HX File Transmitter](#), you can remotely control up to four X-H2S cameras simultaneously from a browser over LAN networks.

As I mentioned above, both the X-H2 and X-H2S **offer nearly all of the same technical and creative features found on every other X Series models**, including the film simulations, the same SINGLE, ZONE and WIDE/TRACKING autofocus system and fully customizable Fn buttons. In other words, the X-H2S is X Series through and through, and if you've used any other other X Series camera, you should have no trouble adapting to this model.



With a few slight additions, the X-H2S has an nearly identical menu as the X-T4. If you have read this book before and are not new to the X-Series, then you should be able to follow along with the menus and controls found on your camera as they compare to the menu items listed in this guide.

If this is your first X Series model, then make sure you read through the entire [THE IMPORTANT NUTS-AND-BOLTS STUFF](#) chapter, which will get you up to speed on the main controls and features found in the Fujifilm X Series cameras.



# X-T5 - 5<sup>th</sup> Gen POWER with CLASSIC STYLING



The X-T5 brings the new 5<sup>th</sup> Gen power and features to the classic X-T line. With a body style that's nearly identical to the X-T3, this model features the same 40MP X-Trans 5 HR BSI sensor and X-Processor Pro 5 chip that's used in the X-H2. In fact, the X-T5 is nearly identical to the X-H2 in terms of features and overall specifications.

- 15 frames per second shooting with the new Mechanical Shutter
- Up to 20 frames per second with the Electronic Shutter
- Up to 7 stops of Internal Body Image Stabilization (IBIS)
- Same 3-Way Tilt LCD screen found on the X-T1/2/3

- 160MP Multi Shot Pixel Shift Feature
- NOSTALGIC Neg. Film Simulation
- Subject Detect AF
- 1/180,000 max shutter speed with the Electronic Shutter
- 6.2k/30p 10-bit 4:2:2 video with up to 2x Digital Zoom
- Up to 13+ stops of dynamic range with F-Log2
- Externally record Apple ProRes or Blackmagic RAW video

However, there are a few major performance differences between the X-T5 and X-H2 that are likely to be consistent with other 5<sup>th</sup> Gen models that follow in the future.

- The X-T5 has dual SD card slots and does not use CFexpress Type B memory cards.
- The X-T5 has a Mini HDMI port instead of the standard Type A HDMI port, as found on the X-H2 and X-H2S.
- The X-T5 chip uses 32-bit processing, whereas the X-H2 and X-H2S use 64-bit processing.

What this means is that the X-T5 has lower video performance specs than the X-H2 and X-H2S. It has a lower max bit rate (360 Mbps, compared to 720 Mbps), and it cannot internally record F-Log or F-Log2 4:2:2 10-bit Apple ProRES video to the SD card.

The X-T5 is still an extremely capable still and video camera that will meet the needs of most photographers, even those who shoot professional video projects. It just doesn't have the same high speed capabilities of the X-H2S or ultra high res 8K capture of the X-H2.

In short, the X-T5 offers modern high performance options for photographers who want that classic look, feel and operation of a "traditional" X Series camera.



# NAVIGATING THE X-S10 and X-H2/S CONTROLS

The X-H2 series cameras and the X-S10 use a slightly different top-deck body configuration than most of the other X Series models. I have included this section to help you navigate the controls on these cameras.





# MODE DIAL

The Mode Dial on the X-S10 allows you to select your shooting mode. Here are the settings you can use:

- **AUTO:** The camera optimizes exposure/camera settings according to the scene.
- **P S A M:** These four icons represent your four main [Exposure Modes](#): Program Mode, Shutter Priority, Aperture Priority and Manual.
- **CUSTOM 1-4:** Allows you to save and recall seven custom still and movie camera configurations that you have previously stored in the [Custom Settings](#) Menu. (X-S10 only has C1-4 and can only save still photography settings.)
- **MOVIE:** Shoot in video mode. Edit movie settings in the [Movie Settings](#) Menu.
- **FILTER:** This mode allows you to shoot using a variety of fun, creative modes, also referred to as the [ADV Mode Filters](#).
- **SP:** Also called [Scene Position Mode](#). Using this “Full-Auto” setting, you choose a scene that best fits the subject you’re shooting and let the camera take care of all of your exposure and other settings for optimum result.

# ISO BUTTON

The dedicated ISO button allows you to set the camera’s sensitivity. Pressing this button allows you set your camera to one of three options:

- **AUTO (1,2,3):** This setting gives you a choice of three different AUTO ISO options, where the camera’s sensitivity will automatically be adjusted based on the current shooting conditions.
- **125-12800 (160-12800 on the X-S10):** Allows you to manually select your ISO setting in any one of the camera’s native ISO values.
- **L 64/80/100 (X-H2 and S) or 80/100/125 (X-S10) and H (25600/51200):** This is ISO LOW and HIGH. For shooting in extremely bright or low light. Shooting in ISO L produces extremely sharp photos with minimal noise and slightly reduced dynamic

range. Shooting in ISO H produces extremely graining photos, but allows shooting in near darkness. There's also a dedicated ISO Menu option inside the MOVIE SETTINGS menu that allows you to choose between **AUTO**, **MANUAL**, and **H**.)

## FUNCTION BUTTONS

As with all X Series models, these cameras have a number of programmable [Function \(Fn\) Buttons](#) that allow for quick access to specific camera settings. While you may find the default settings useful, you can assign different functions to any one of these buttons, in the [FUNCTION Fn SETTING](#) Menu, or by pressing and holding the **DISP/BACK** button.

## FN FUNCTION DIAL

The left side FN (Function) dial on the X-S10 allows you to quickly adjust any number of settings, based on the current shooting mode. You can also disable the Fn Dial so you don't accidentally change settings. The default mode for this dial is to select your [Film Simulation](#). (If the Mode Dial is set to M, then the default setting is EXPO. COMP.) You can change the operation of the Fn Dial in the [FUNCTION \(Fn\) SETTING](#) Menu.

## TOUCH FUNCTION GESTURES

You're also able to perform "touch-function gestures" on the LCD screen that act as additional Function (Fn) controls. **Flick up, down, left and right controls specific [Function Button Controls](#)**. Like all the other X Series cameras, you can program any number of settings to the Fn buttons and control them with just a simple swipe of your finger on the screen. Press and hold the **DISP/BACK** button to set these up.

By default, the four touch gestures are configured as follows:

**T-Fnm1 (Flick Up):** Histogram

**T-Fnm2 (Flick Left):** [Sports Finder Mode](#)

**T-Fnm3 (Flick Right):** [Large Indicators MODE](#)

**T-Fnm4 (Flick Down):** Electronic Level

To understand how all of the main controls operate on these cameras, including the two [Command Dials](#), [Drive Control](#) and all other camera settings, please refer to the [NUTS AND BOLTS STUFF](#) Chapter. For all other controls and settings, please read [THE MENUS](#) chapters and follow along with the specific menus found on your camera.



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- H. Reset Wireless Settings
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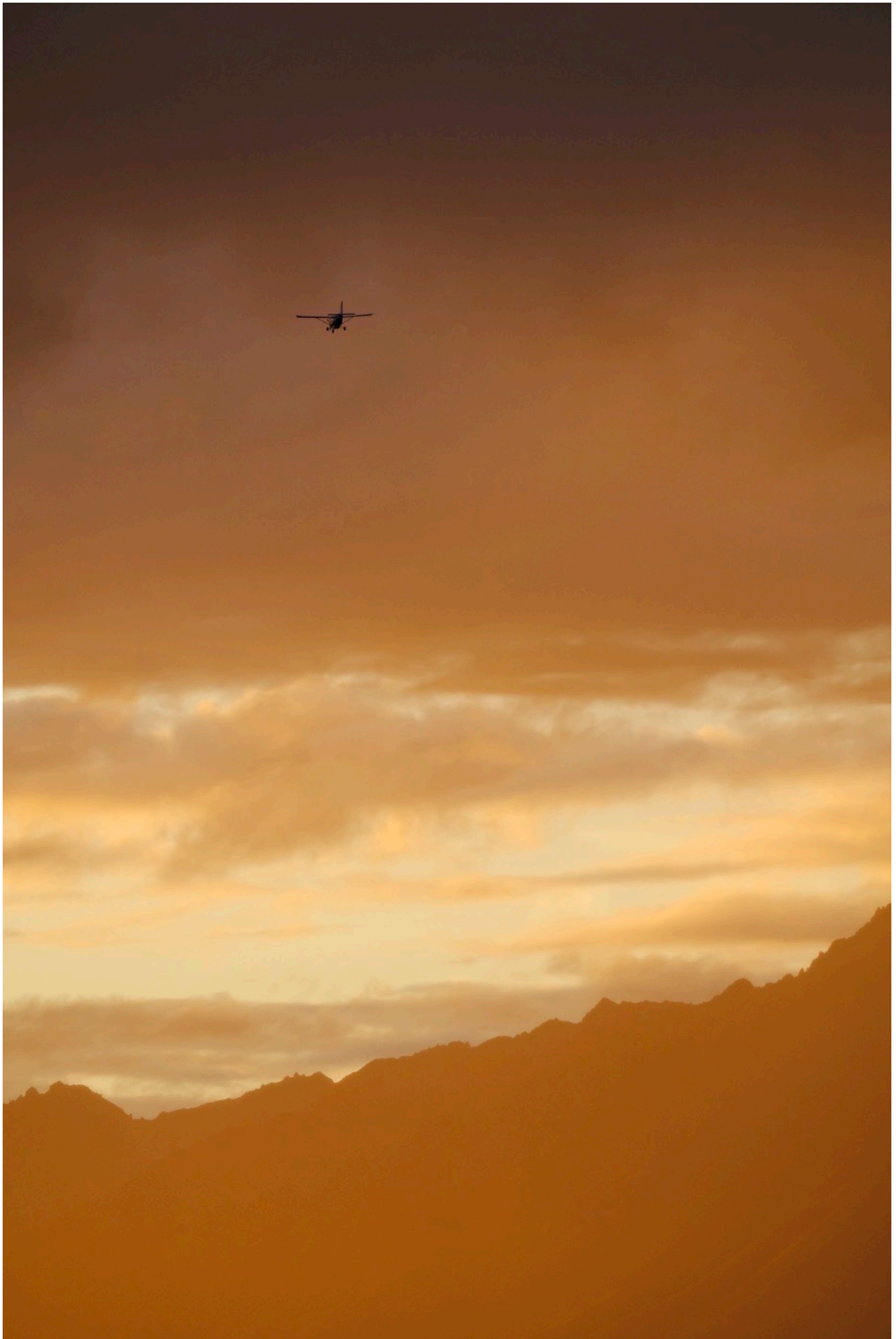
- 1. Playing Back Images
- 2. Switch Slot
- 3. RAW Conversion
- 4. HIEF To JPEG/TIFF Conversion
- 5. Erase
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# INTRODUCTION

In 2015, I released my [FUJIFILM Tips and Tricks Guide](#). Originally conceived as a potential blog post, it turned into a 28-page eBook that's been downloaded by thousands of people in over 30 countries around the world. Now, over five years later, this new edition has been updated to keep up with Fujifilm's latest generation of X Series cameras.

My goal for this guide has always been very simple. I want to share my passion for the X Series and introduce people to some of the features I feel best highlight the technical capabilities, the beautiful ergonomic functionality and the sense of creative liberation these cameras offer.

My ideas appear to have resonated well with people, and I've received messages from many readers who have thanked me for helping them become a little more familiar with their Fujis. Nearly everywhere I do a Fuji-related event or workshop, I meet people face to face who tell me that they've downloaded and enjoyed my guide.

Since writing my free tips guide, I worked hard to expand on this information with my blog, presentations and my personal interactions with other shooters.

Then in June of 2017, after giving an Advanced X Series talk at Glazer's Camera in Seattle, where the questions never stopped coming from the full classroom of attendees, I decided it was time for me to write a full-length, advanced X Series book and pick up where my original guide left off.

I'd resisted writing a book like this in the past, probably because I was afraid it would get lost in the shuffle of all the other cameras books out there. Also, I never would have thought I'd be writing a book of this scope right at the beginning of summer.

Fortunately, I didn't wait.

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I meet a lot of photographers who are great shooters, and who are very excited about their Fujis, but who don't know even a fraction of what their cameras can do. This is not surprising, and it's certainly no comment on them as intelligent shooters.

For as clean and classic as they are on the outside, when you dig deep, you find that there is an astounding set of features tucked away inside all of the X Series models.

If you take the time and learn to master even a few of these features, you'll be able to take the technical and creative aspects of your photography to a new level of proficiency.

That said, the fact remains that most people simply don't have the time to spend learning what every single setting does or how to use them in real life shooting situations.

## **That's where I come in.**

I've been using the X Series cameras for over ten years now. I was one of the first people in the U.S. to shoot with the X-T1 in early 2014, and one of a select number of photographers to shoot with the X-T2 when the first pre-production models were sent out in the spring of 2016.

Having worked closely with the FUJIFILM tech reps and product managers, and having taught numerous Fuji-specific workshops and classes, I know these cameras inside and out, and not just on paper. I know how they function out in the world and I've tested them with a wide range of subject matter in extremely challenging conditions, environments and shooting situations.





As a professional shooter, X Series ambassador, instructor, author, and expert user, I feel I'm exactly the right person to write this guide. Between my X Series knowledge, my experience and my genuine passion for sharing my photography insight with others, I'm confident I can help you get the most from your Fuji camera.

During the past decade, I've helped many photographers get the most from their X Series cameras, both online, and in person at workshops, classes, trade shows and in-store events. I've explained countless features in great detail, helped people set up and optimize their cameras, solve problems and troubleshoot common, and sometimes, uncommon issues.

**Now let me help you.**

# THE LAYOUT OF THIS GUIDE

It took me awhile to come up with the best format for this guide. I didn't want to just duplicate the regular camera menus, but in a way, that seemed like the best place to start.

Every single feature, function and menu item is there for reason, either to help you nail a particular kind of shot or to solve a specific photography problem. So, I figured I'd break them all down and explain each one with real-world applications in mind.

If you compare your camera's menu to the contents of this book, you'll see that **nearly every single menu item matches an item heading in this guide**. I say nearly, because a few features are specific to certain models, but for the most part, all of the X Series cameras share a common set of features. So, it should be easy to follow along as you navigate both the book and your camera. While they might not all be in exactly the same order, they'll be close.

I've also include a [NUTS-AND-BOLTS](#) chapter that contains a variety of specific tips and personal insight designed to help you get the most from your FUJIFILM camera. These range from practical tips, like how to set up your Fn buttons and how to configure your camera for shooting fast action, to ideas more geared towards creativity and approach.

However, my goal is not just to instruct you in mechanical operation, but with an overall approach to creative photography. I've included topics like how I use the film simulations, how you can customize the look of your images, and showed you ways the Fuji cameras have helped me achieve creative breakthroughs with my own photography.

In the end, I hope this guide does more than just teach you which button does what and when to use the XYZ menu setting. Ultimately, I want you to attain a level of mastery with your Fujifilm camera as if it were a musical instrument or a paintbrush, only a really fancy paintbrush with lots of dials and stuff.

I want you to be able to know your camera so well and be so comfortable with its operation that it no longer becomes just a tool, but a **seamless extension of your own creativity**. My goal is to train you to achieve the ultimate level of creative freedom, inspiration and artist expression with your photography.

The Japanese have a few words to express this kind of path towards mastery:

Shūjuku. 習熟 means to “study and ripen” with your knowledge and skill level.

Jukuren 熟練 means expertise, skilled or to be proficient through practice and repetition. The literal translation is to “ripen and repeat.”

This book will help you begin the process of Shūjuku, where you’ll study and ripen your knowledge about everything your FUJIFILM camera can do.

Then, it will be up to you try out all these settings and controls, figure out what works for your style of shooting, and then use your camera as often as possible.

A few minutes each day will make a huge difference. Even if you’re not actually shooting anything, you can still practice and pretend. Anytime you play with the camera or fiddle with the buttons and menus, you’ll learn something new and you’ll get better.

Got a few minutes during your lunch break or while waiting for the train? Instead of checking Facebook, pick up your camera, learn one or two settings and think about how you might use them in your photography.

Scroll through the menus to see where each setting lives. Find one that looks useful? Assign it to a Fn button or stick it in your My Menu and put it into action next time you’re out shooting.

You can even keep this eBook right on your phone or tablet for quick recall. In fact, I would encourage this. I’ve formatted it with a number of links so you can quickly jump back and forth to find the specific entry you’re looking for or to read more about a particular topic.

As with anything in life, the key is repetition. Only with regular practice will you attain the level of **Jukuren** photographer.

**Let’s get started.**

# DIFFERENTIATING CAMERA MODELS

In 2016, FUJIFILM redesigned the look and organization of the menu system. Moving forward, all of the cameras introduced since the X-Pro2 use the new system, which features white text on black, and includes a brand new “My Menu”.

At the time of this writing, cameras which feature the newer menu system are the X-Pro 2/3, X-T2/3/4/5, X-H1/2, X-T20/30, X-E3/4 and X-100F/V. For the purposes of identification, I'll refer to these models as the **“MY MENU”** cameras when discussing specific menu items or features that are specific to these models.

These are all of the cameras that use the “X Processor Pro” processing engine. Compared to previous models, these updated chips have added an enormous jump in processing power, allowing for increased performance, as well as specific features and upgrades that Fuji's first and second generation X Series models don't have.

For simplicity, when discussing specific features, I often specify 4<sup>th</sup> and 5<sup>th</sup> Gen models. 4<sup>th</sup> Gen models include X-T3, X-T4, X-Pro 3, X-T30, X-E4, X-S10, X100V and X-T200. 5<sup>th</sup> Gen models include X-H2, X-H2S and X-T5.

When referring to the Non X-Processor Pro cameras, (I don't want to say “older,” because that makes them sound less relevant, which they are most certainly not!), I'll use the term **“RED/BLUE MENU”** cameras. These include the X-Pro1, X-T1, X-T10, all X100 models prior to the “F” model, the X-E1/2, X-A series, the new X-T100 and XF10, and the now discontinued X10/20/30/70.

As we go forward, the latest generation of X Series cameras have even more new features.





# HOW THIS BOOK IS FORMATTED

Since most of the X Series cameras moving forward use the newer menu system, I've decided to format this book according to the layout of the menus found in these "MY MENU" models.

So, if you have an X-T5, X-T4, X-T3, X-T2, X-Pro 3, X-Pro2, X-H1, X-H2, X-H2S, X-T30, X-T20, X-E3, X-E4, X100V, X100F or X-S10, it should be extremely easy for you to follow along. Each section will correspond to the exact layout of the menu system on your camera. That said, many of the features found in the "MY MENU" cameras are also found in the "RED/BLUE" models as well.

Wherever possible, I will notate where you will find each feature I discuss in the "RED/BLUE" models with a simple color designation. For example, you'll find the IMAGE SIZE menu item in one of the **RED MENUS** and BUTTON/DIAL SETTING in one of the **BLUE MENUS**, and so forth. I wish the RED/BLUE menus were standard on all cameras, but they're not. They differ wildly between models. This means you'll have to go looking, but at least you'll know where to start.

While about 90% of the settings I'll cover in this book are universal to all the models, **not all cameras have every single feature**. Each generation is built with new, more powerful settings, some of which are eventually ported down the line via firmware updates, but due to processing limitations or price point, some new features are not given to the older models.

The same goes for the first and second generation "RED/BLUE models." Although I have tried to notate where specific features are limited to certain models, I'm simply not able to cover which cameras have what feature for every single model without making this book a big mess and saying goodbye to my entire summer. (Up here in Alaska, summer is a precious commodity!)

If you have a RED/BLUE MODEL, know that **you still have a very capable FUJIFILM camera that has most of the settings discussed in this book**. It may not have everything, so as much as I hate to say this, if you're unsure about whether your camera has a certain feature or not, please refer to your camera manual.

If you don't like paging through your paper manual, [you can find searchable electronic versions of all the X Series manuals here](#).



# THE MENUS

1. [THE IMPORTANT NUTS-AND-BOLTS STUFF](#)
2. [IMAGE QUALITY MENU](#)
3. [FOCUS MENU - AF/MF SETTINGS](#)
4. [SHOOTING SETTINGS](#)
5. [FLASH SETTINGS](#)
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# THE IMPORTANT NUTS-AND-BOLTS STUFF

There's a huge amount of content in this book but I've tried to make it easy to follow. I don't want you to get bogged down or lost while you're trying to search for some setting you can't remember the name of, so I've included lots of links. This will help you find your way around the guide, and also to let you skip around, if that's your style.

**We'll start with the important nuts-and-bolts stuff.** Although this is a very long chapter, (encompassing one third of the entire book), it contains a wealth of essential X Series information I feel is essential knowledge for any Fuji shooter, since the X Series cameras operate with some unique controls or functions you may not be familiar with.

This is where you'll find topics such as how to navigate the menus and the basic [Camera Controls](#), how to use the things like the [Function Buttons](#) and [Q Menu](#), and how to switch between the different [Exposure Modes](#) and use features like [Bracketing](#), [Multiple Exposure](#) and the [ADV Mode Filters](#).

I've also included specific tips on how to better understand the X Series [Focus System](#), how to [shoot fast action](#), and how to take a ["Film-Like approach"](#) with your photography by using the creative efficiency of the film simulations.

In a sense, the Nuts-and-Bolts chapter dives right in and teaches you the fundamentals of the Fuji system. **This section will teach you more about how to use your camera than anything else in the book**, so pay close attention, especially if you're new to the Fuji system.

If you came from DSLRs, then the Nuts-and-Bolts chapter will go a long way towards helping you make that transition to this new system and discover a whole new world of creativity and skill with your photography.

Although most photography techniques are universal to all cameras, **you'll find that the mirrorless X Series cameras often inspire a different approach than what you may be used to.** My goal with this chapter is to help you break some of your old DSLR shooting habits so that you can form new ones, which are more applicable to what the X Series cameras have to offer.

Even if you've been using the Fujifilm cameras for awhile, this chapter will serve as a comprehensive brush-up on how to use your camera and how to become a more proficient photographer.

I'm sure you'll want to read everything, but maybe not all at once, or not necessarily in order. To get you started, here are a few random features, settings, and tips I find essential, useful, or at least interesting.



# A FEW TIPS AND TRICKS

To get you started, here are a few random features, settings, and tips I find essential, useful, or at least interesting.

- **IN CAMERA RAW PROCESSING:** You can use the camera to process your RAW files using the [RAW CONVERSION](#) option. You can even do this with older RAW files. As long as you still have the original RAW file, you can copy it to a memory card, stick it back into your camera (it must be the same model of camera you used to create the image) and the camera will be able to read and perform the conversion.

NOTE: This also applies to images you want to transfer to your mobile device using the FUJIFILM Camera Remote App.

- **BACK BUTTON FOCUS:** I know that some of you are eager to learn how to set up the camera for back button focus. You can find information about that topic in the [Focus Control](#) section.

- **T MODE:** The X Series cameras all have a “T” setting on the shutter speed dial. This mode allows you to control your shutter speed with one of the command dials and allows for a wider range of shutter speeds, down to 15 minutes on some models. [See more about T Mode here.](#)

- **FUNCTION BUTTONS:** All X Series models have customizable function buttons which allow for personalized setup of the camera based on your own shooting style. To set any Fn button, press and hold the DISP/BACK button to bring up the Fn Button menu. Read more about [Function Buttons here.](#)

- **Q MENU:** The Q Menu is quick-access menu that can also be customized to include the shooting features you use most. Read more about the [Q MENU here.](#)

- **HOW TO SHOOT FAST ACTION:** Many photographers struggle with how to set up their cameras for shooting action and how to achieve sharp images. I cover this in depth in the [Shooting Fast Action section.](#)

- **SOMETHING NOT WORKING?** If a specific function won't work, check to make sure you didn't accidentally switch your Drive dial to another setting or that your AUTO Switch isn't engaged. These are often the likely cause of many issues. Read the



[Troubleshooting section](#) to see a few more solutions to common and uncommon problems.

• **FORMAT MEMORY CARD SHORTCUT:** If you have a MY MENU camera, press and hold the TRASH button for about 2.5-3 sec, and then while still holding it down, press the rear command dial to bring up the FORMAT confirmation page.

## OTHER INTERESTING SETTINGS

- [AE/AF-Lock Mode](#)
- [Custom Settings](#)
- [AF+MF](#)
- [MF Assist](#)
- [Store AF Mode by Orientation](#)
- [Preview EXP/WB in Manual Mode](#)
- [Preview Picture Effect](#)
- [SHUTTER AE/AF](#)
- [AE/AF-Lock Mode](#)
- [Voice Memo Setting](#)
- [Photobook Assist](#)
- [Instax Printer Print](#)
- Geotagging Setup

## ONE LAST THING

I have included a lot of pictures in this book. Some are used to directly illustrate specific topics within each section, while others are there to act as page and chapter breaks, and eye candy. As you look at the picture, try to identify some of the techniques and settings you think I might have used in order to make that shot happen, and consider the specific settings *you* might use in a similar situation.

# CAMERA CONTROLS

The hands-on, traditional layout of the FUJIFILM cameras allows for quick access to the tools and settings you need, without forcing you to scroll through multiple pages of cameras menus. This is one of the most fundamental and conceptual intentions behind their design, and in my mind, it's one of the things that helps make you a better, more efficient photographer. **The faster you can make a change, the more likely you'll be to nail the shot.**

It's also one of the reasons why many FUJIFILM shooters find these cameras so much more enjoyable to use. Traditional, mechanical dials and switches on the top deck and working aperture rings on the lenses provide tactile, physical controls with which to adjust all of your basic camera settings, like shutter speed, aperture, ISO and exposure compensation. These controls lie right where you'd expect them to be, it feels good to handle them and they let you change your settings quickly and with satisfying clicks.

Add in the command dials, function buttons, the control ring on the X100F and X70, the PSAM/C1-7 mode dial on the X-H models, the Q Menu and the My Menu, and you have access to nearly every setting you would ever need to change in a real-world right at your fingertips.

This is the beautiful functionality of the X Series. You could shoot all day, all week, or even during an entire month-long trip without ever having to dig into the actual menus. If your fingers know exactly where to go and what to do in order to nail the shot, it will just be second nature.

On any given day, you may find yourself in an entirely new type of situation. You'll suddenly remember a feature or setting you rarely use, but that might come in handy for this shot. Again, you'll know exactly where to find it and you'll remember what it does because you read and studied this book and practiced with that setting, even if it was just once or twice.

Your fingers will already be navigating to the right menu; you'll pull it up, set it accordingly and nail the shot. That's what it means to be a **Jukuren** photographer.

# NAVIGATING THE MENUS

Although I just said that you could shoot all day without using the menus, the fact is that you'll have to dig down under the hood at some point. That's where all those special settings live that make the X Series cameras so powerful and highly customizable. The menus are where you'll set many of the specific parameters that make the camera *do what you want it to, in the way that you want*.

With that in mind, it helps to be as efficient as you can with your camera, even when scrolling through menus and changing settings. Here's a quick primer on how the basic controls and the menu system work and how to get around the menus quickly and efficiently.

## GETTING INTO AND AROUND THE MENUS

The way you access the menus on your X Series camera is by pressing the MENU/OK button. I know that's probably pretty evident, but just in case... we got it out of the way.

This will bring you up to the very first menu item in the very first menu. On the MY MENU cameras, you'll land at the IMAGE SIZE setting in the I.Q. MENU at the top. On the RED/BLUE cameras, you'll land at the first **RED MENU**, which unfortunately has a different setting for almost every single model.

On the MY MENU cameras, pressing the OK button will bring you right to the first item in your MY MENU, if you have saved anything to this menu. [See this section for more info](#).

**To move around the menus**, you can either scroll using the four buttons on the THUMB PAD, or you can scroll by using the AF JOYSTICK, which is found on all of the newer models, or you can use swipe gestures on Touch-screen enabled cameras. You can also use the command dials to scroll. On the MY MENU cameras, use the front command dial to move between pages and the Rear dial to move between items.

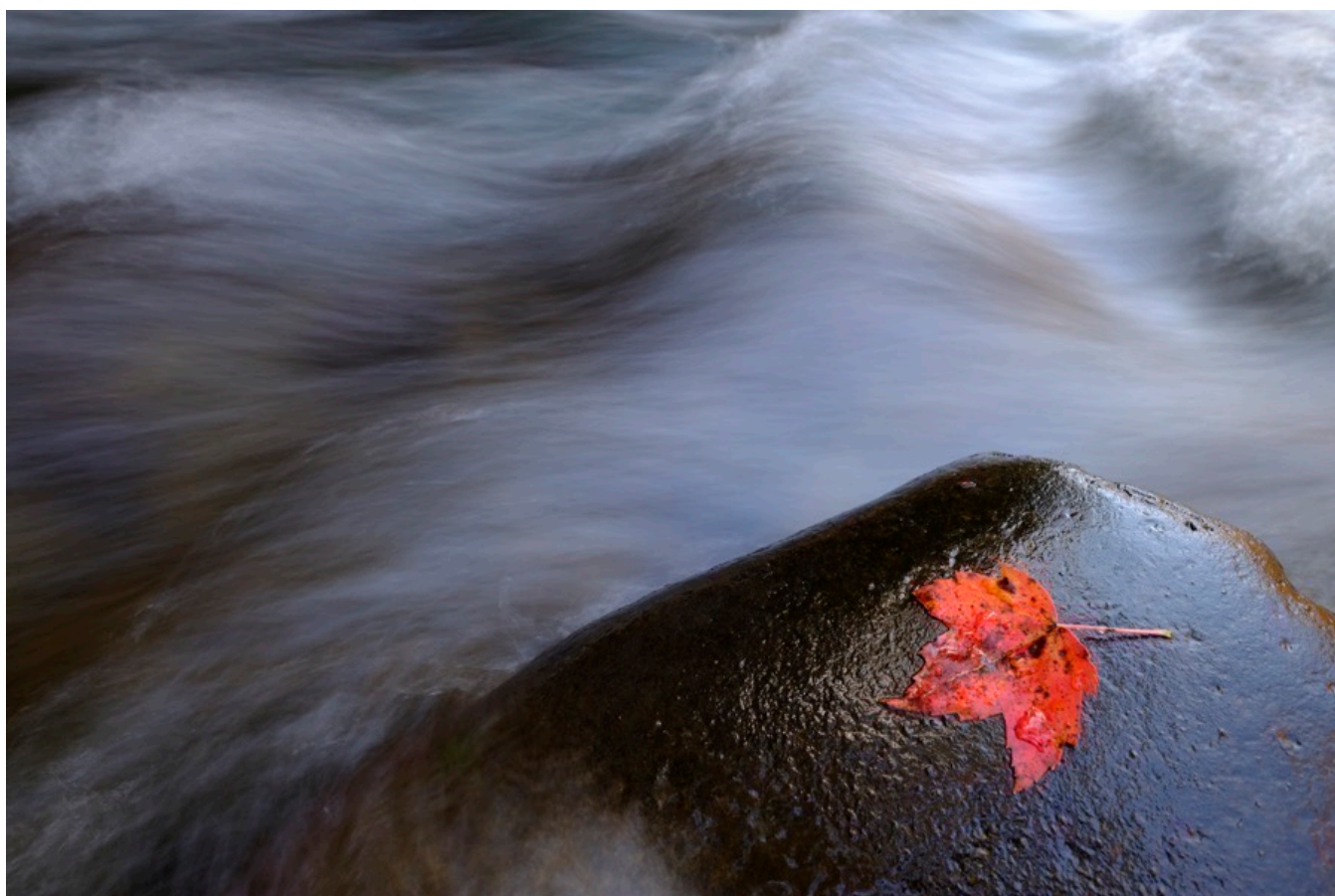
**To select anything in the menu**, press the MENU/OK button. You can also press the AF JOYSTICK. The official name for this control is the FOCUS LEVER, but most people know it as the JOYSTICK, and that's what I usually call it, so I'll probably use that term most of the time.

If you have a joystick-equipped Fuji, using the JOYSTICK for both movement and selection is the fastest and easiest way to navigate the menus.

This is also the way you navigate through any settings you have assigned to a Fn BUTTON. Note, when using Fn BUTTON settings, you don't actually have to select anything, you simply scroll to the option you want and then resume shooting. This will save you even more time.

## GETTING BACK OUT OF THE MENUS

The easiest way to exit any regular menu, FN BUTTON menu or Q MENU is to simply tap the shutter button lightly. This brings you right back to your viewfinder display. You can also press the DISP/BACK button, it does the same thing. I prefer the shutter button method, since it immediately puts you back into picture taking position with your finger on the shutter.



# TOUCH SCREEN CONTROLS

Some X Series cameras feature a “Touchscreen LCD” which allows youth perform certain functions by “tapping” and “pinching” in and out on the screen.

All of these models allow you to use optional “Touch Shooting” features, which include Tap to shoot, Tap to Focus and Tap to Zoom/Pinch to Zoom during Playback. (The X-A5 allows you to perform Pinch to Zoom in “Shooting Mode”, which gives you a digital zoom effect. You can turn the Touch Controls off.

In designing the X-E3, X-E4, and the X-Pro 3/4, X-T30 and X100V, the Fuji engineers eliminated the four Thumb Pad/Fn buttons from this camera, and instead gave it an innovative set of new touchscreen controls. The new touch screens have been programmed to recognize a number of commands, including *tap*, *double tap*, *pinch in and out*, *drag* and *flick*. When performing these gestures, you can quickly control a number of camera functions. Here’s what they do:

## SHOOTING MODE AND PLAYBACK MODE

**1 – Flicking up, down, left and right acts as additional Fn button controls**, just as if you were pressing the four Thumb-Pad buttons. Like all the other X Series cameras, you can program any number of settings to the Fn buttons and control them with just a simple swipe of your finger on the screen. Combined with the four regular Thumb-pad Fn buttons, this option gives the X-T3 and X-H1 a total of 13 Fn controls.

**2 – Double Tap instantly zooms your image in and out to 100%** during playback and performs focus check while shooting.

**3 – Tap and/or Drag controls AF Area Selection.** Even if you have a an AF Joystick, it can be even faster to select and move your selected AF point around the screen using the touchscreen. (Tap “AF Touch” to activate.) This is a very cool feature. Even though I’m proficient with the AF Joystick, I was impressed with how well this works. The points will much move as fast as you can tap or drag your finger around the screen.

**4 – Pinch in/out operates Playback zoom.** Whereas Double Tap does instant 100% zoom, pinching lets you zoom in and out to view the image at different magnifications levels and sizes on the screen.

**5 – Swipe left and right gives you your next picture** in Playback mode.

**6 – Q Menu:** After bringing up the Q Menu, **you can quickly select and change your settings by tapping the screen.**

## **TOUCH PANEL OPERATION WHILE USING THE EVF**

I know what you're thinking. While these functions work extremely well if you're shooting via the LCD screen, it could be tough to navigate the screen if you've got your eye up to the electronic viewfinder, right?

Well, Fuji apparently thought of that, because the screens now give you the option to set the touch range of the panel to either Full Screen, Right Half Only, Left Half Only or Off. This function has also been added to the X-T20 in the v.1.10 firmware update.

**Note to X-E3/4 users:** Wherever I indicated a function in this book that requires pressing a Thumb Pad button, you'll need to perform a flick gesture instead.



# THE COMMAND DIALS

In addition to the very pretty and very classic milled metal dials that control shutter speed, ISO, EV+/- and Drive Mode, the X Series cameras all have front and rear command dials, except for the X70, which has a sort of “dial switch.”

The command dials on every camera rotate and let you scroll through a number of parameters, like shutter speed, aperture, ISO, and EV+/- . They also let you scroll through the Q MENU, switch between pictures in Playback mode and zoom in or out when viewing your photos.

In addition, one or both dials are “pressable” on most of the Fuji cameras. In certain modes, this secondary function allows you to toggle between things like shutter speed, EV+/- , ISO and performs zoom functions in Playback mode. As this varies between cameras, please refer to your manual to see what these functions do on your particular model.

## FRONT COMMAND DIAL

On most cameras, rotating the Front Command Dial adjusts aperture. It also selects your exposure compensation value when **C** is selected on the EV+/- dial, and allows you to [scroll through your pictures during playback](#).

When the aperture ring on the lens is set to A (or if the lens doesn’t have a ring), the EV +/- Dial is set to C, the Front Command Dial can be used to set the aperture or shutter speed, and pressing it will toggle between A/SS, EV+/- or ISO. You set this preference in the [Command Dial Setting](#) menu item.

## REAR COMMAND DIAL

Rotating the rear command dial lets you choose your desired combination of shutter speed and aperture in Program Mode, fine-tune shutter speed, adjust settings in the Q menu, choose size of focus frame, or zoom in or out in full-frame or multi-frame playback.

Pressing the Rear Command Dial lets you zoom in to 100% on your selected focus

point in shooting mode, or on your shot images when playing back your photos. **This is an extremely useful and highly recommended function, as it instantly allows you to check your scene or your images for sharpness.**

You can also swap command dial functions. See the [Command Dial Setting](#) to see more info.



# DRIVE CONTROL

The DRIVE Control allows you select between your different shooting modes. All X Series cameras have the following DRIVE modes:

- STILL IMAGE/SINGLE
- CONTINUOUS L
- CONTINUOUS H
- [BRACKETING](#) (AE/ISO/FILM SIM/WB/DR/FOCUS)
- [PANORAMA](#)
- [MULTIPLE EXPOSURE](#)
- [ADV FILTER](#)

Depending on which camera you're using, you either access your DRIVE settings via the selector switch beneath the ISO dial, the left top deck dial (X-T10/20/30) or via a dedicated DRIVE button, either on the back of the camera or on the top deck (X70). From there, you can choose a shooting mode, and adjust some the settings.

Depending on your camera, there are different ways to access your DRIVE settings. On the X-T2/3/4 and X-T20/30, access [Drive Settings](#) in the CAMERA MENU, or assign a Fn button to DRIVE SETTINGS.

On cameras that have a dedicated **DRIVE button**, you'll adjust all of your drive settings right from there. Simply scroll down until you find your desired function, then adjust accordingly.

On the X-Pro2/3, you set your AE BKT SETTING right in the DRIVE button menu, and FILM SIMULATION BKT in the CAMERA MENU. On the X-E3, you'll find both of these items in the CAMERA MENU.

On the X-T1, X-T10 and older X100 models, look for BKT/Adv. SETTING which is found somewhere in the **RED MENU**. (I wish all the RED/BLUE menus were standard, but they're not. \*Sigh.\* (On the X-T1, it's **RED1**. On the X-T10, it's **RED5**.

On the X-E2 and X-E 2S, FILM SIMULATION BRACKETING needs to be changed in the **RED SHOOTING MENU**.





# EXPOSURE COMPENSATION DIAL

The Exposure Compensation dial is an extremely useful tool. When working in any auto exposure mode (aperture priority, shutter priority or program), turning the EV+/- dial adjust your exposure by the number of stops indicated on the dial, up to +/- 3 stops.

## **I use this dial ALL THE TIME.**

I often shoot in aperture priority, and if the scene I'm looking at in the viewfinder is lighter or darker than what I'm intending, I simply nudge the dial one way or the other in order to adjust the scene. In that way, it's essentially an exposure override knob that lets me fine tune my scenes exactly how I want.

I would HIGHLY ENCOURAGE you to make use of the EV+/- dial in your photography. Work it into your shooting style and you'll see how it can help you. One of the best things about shooting with mirrorless cameras is that what you see is what you get, no matter if you're looking through the EVF or on the LCD screen.

If your exposure looks too dark, then lighten it up with the EV dial. If it's too light, turn it the other way until your scene looks exactly like you want it to. The key is that you can make it look exactly like you want, because what you see in the viewfinder will be exactly what you get when you press the shutter.

Get to know the EV+/- dial. If you shoot in auto mode, it's your best friend. Unless you shoot in Manual mode. Then it does nothing.

NOTE: The X-H series cameras do not have a dedicated EV+/- dial. Instead, the rear command dial is used for exposure compensation, as per the [Command Dial Setting](#).

## **EV "C Mode"**

All the latest X Series cameras with an EV+/- dial have a special Custom, or "C" Setting on the EV+/- dial that lets you adjust up to +/-5 stops of exposure compensation. To operate this mode, turn the dial to C, and press the front command dial to active. You can now rotate the front command dial to make your EV adjustments. When you've got the look you want, press the dial again to lock it.

This prevents you from inadvertently nudging the dial and making accidental adjustments. You can also combine this with the special [AUTO ISO Dial Settings A](#) setting when the ISO dial is set to A. This allows you to toggle between setting ISO and shutter speed (and aperture, if there isn't an aperture ring on the lens), using the front command dial for both. (On the X-T4, set the ISO Dial to C to toggle between f/stop, EV and ISO.)



Metered exposure.



Reduced exposure using the EV+/- dial.



# AE-L AND AF-L BUTTONS

Most X Series cameras have AE-L and AF-L/AF-ON, buttons which function as Auto Exposure Lock and Autofocus Lock controls. Some cameras (X-Pro series, X-E series, X70) have a single button that controls both AE-L and AF-L. For these cameras there's a specific menu item that will allow you to set the button to control either AE-L, AF-L or Both.

When shooting in any of the Auto Exposure modes, if you press the shutter halfway down, you engage your camera's exposure meter and autofocus system. If you keep your finger pressed halfway on the shutter, AND you press and hold either the AE-L or AF-L button, you'll lock the exposure and/or focus for your scene.

You can then remove your finger from the shutter and recompose your scene, and as long as you keep your finger pressed on either of those "lock" buttons, your exposure/focus will stay remain locked until you finally take your picture.

There's also a menu item called AF-LOCK MODE, which allows you to configure the AF-L button to function as either **AF LOCK ONLY**, or as **AE/AF LOCK**, which locks both exposure and focus. Also, most X Series cameras have a menu setting called [AE/AF-LOCK MODE](#), which allows you to further customize how these buttons operate.

The AF-L/AF-ON button can also be used for "Back Button Focus" operation. (See the [FOCUS CONTROL](#) section for details on how to set your camera up for this mode.) Once you have this configured, pressing the AF-L button will activate focus. Depending on the camera, you may have to have the AF Selector Switch set to Manual Focus mode for this to work. For some reason, it doesn't quite work the same way across all models. For example, the X-T1 needs to be in Manual Focus, but the X-T10 doesn't.

These two buttons can also be changed. In the BUTTON DIAL SETTINGS Menu on most models, you can even swap the function of the AE-L and AF-L Buttons, and on the MY MENU cameras, the AE-L and AF-L operate as two additional Fn buttons. This means you can keep them as AE/AF-L buttons, or assign them to any other function you desire.

# FUNCTION BUTTONS

All of the X Series models are designed with a number of programmable Function (Fn) buttons. These are great tools that let you customize the operation of your cameras according to your own personal style. I consider this to be one of the most powerful features they have, because it allows you to access often-used menu items with a single tap of your thumb or finger, without actually having to dig into the menus.

For this reason, the Fn buttons add a high degree of streamlined usability to the FUJIFILM cameras. As you'll see in this book, every single model contains over 100 menu items. Many of these items are designed to solve very specific problems or allow you greater efficiency and speed when faced with specific types of shooting situations.

Some of these menu items and settings are universal, and thus commonly used by every Fuji user; others, less so. A few are things you might use on a regular basis, some not so often. However, all of them add a certain level of power and performance to the camera and are designed to make you a better photographer.

However, not everyone has the same style and approach to photography. For this reason, the Fuji cameras allow you to customize all of the Fn buttons, so you can access the most useful settings with the mere tap of your thumb or index finger.

Between the Fn buttons and [Touch Screen "Swipe Gestures,"](#) all recent Fuji cameras have at least seven or more programmable Fn controls. (1<sup>st</sup> Gen models only have one.) You'll find 11 Fn controls on the X-Pro 3, 13 on the X-T3, and 14 on the X-T4 and 5<sup>th</sup> Gen models. Even the X100V has 10 Fn controls. Most come with default settings, which you may elect to keep.

Most current models have over [50 separate menu items and functions you can assign to the Fn Buttons.](#) (The new X-H2S reigns supreme with 75 items). To see all of the options or assign any Fn button, **press and hold the DSIP/BACK button** until the Fn Button menu comes up. From there, you can select which button you'd like to change, hit OK, then scroll through all of the possible items you can set. Or navigate to the [FUNCTION \(Fn\) SETTING](#), which is found in the SETUP - BUTTON/DIAL SETTINGS, inside the [BLUE MENUS](#) on the RED/BLUE menu models.

On the 5<sup>th</sup> Gen models, you can also assign Lens Fn controls to compatible lenses, like the XF18-120mm f/4 LM PZ WR, which has three Fn controls: A Fn button and a two-way rocker Fn switch.



# HOW SHOULD YOU SET YOUR FUNCTION BUTTONS?

Good question.

The answer depends somewhat on which model you're using, but mostly on your own shooting style and preferences.

I often recommend leaving some or all of them at the default setting, as these functions have been well thought out based on the specific layout and capabilities of each model. Get used to the camera before you go wild changing things, unless you know that there's a setting you really want.

## Here are my favorite settings I like to use as Fn buttons:

As I have with all of my X Series cameras, I the I leave two of my four "Thumb Pad" buttons at the default settings, which are **Left:** FILM SIMULATION, and **Right:** WHITE BALANCE.

**Bottom** is PERFORMANCE but I've changed mine to AF-C CUSTOM SETTINGS. I figure if I'm in BOOST Mode, there's a good chance I'm using the vertical grip, which has its own BOOST Mode switch.

I have **Top** set to RAW. I'm often shooting in JPEG mode on my Fuji cameras, and by pressing this Fn button, I can switch to shoot the next frame in RAW. Then it will go back to JPEG. Using this method, I make shooting RAW a choice that's based on a specific situation and ideas I have for that particular scene, instead of making it the default and always shooting in RAW.

If there are times when I want to shoot an entire series or sequence in RAW, I'll switch to shooting RAW+F in the Q menu.

**SHUTTER TYPE:** On my X-T4, I have my AF-ON button set to Shutter Type, so I can quickly change between shooting between the mechanical shutter and the electronic shutter.

**PLAYBACK:** I currently have my AE-L button set as a second Play button. This lets me easily view images during times when I'm shooting one-handed. Instead of having

to reach up with my left hand and use the regular Play button, I can just tap the second button with my thumb.

On my X-T3 and 4, my four “Swipe Gestures” are set to HISTOGRAM, CLARITY, PRE-SHOT ES and ELECTRONIC LEVEL, so I can turn it off if I want a cleaner viewfinder.

Here are some of the other Fn controls I think are important.

FOCUS MODE: Although this is an important setting, (it’s where you choose between Single, Zone and Wide/Tracking autofocus,) **I recommend leaving the camera set to AF ALL**. This allows you to scroll seamlessly through all three modes, instead of switching them in the AFMF menu. It’s so much faster this way.

FILM SIMULATIONS: For me, the most important Fn button setting is Film Simulation. This is probably the creative control I access more than anything else, so I want it right where I’ll be able to find it with my eyes closed.

**ISO**: If your camera doesn’t have a dedicated ISO dial, then I’d highly recommend setting one of your Fn buttons to ISO. It might already be assigned that way. That said, if you usually shoot in AUTO ISO, or if you don’t change ISO settings very often, then you could probably get by with accessing ISO in the Q MENU. This will free up yet another Fn button. Yay!

DRIVE SETTINGS (DRV): This has multiple functions, depending on your current Drive Dial settings. (The default Fn button for DRIVE on the X-T models is the front button.) DRIVE SETTINGS is where you’ll find all of your bracketing and ADV mode settings, and it’s where you set your frame rate for shooting in continuous mode on the My Menu cameras.

Some cameras already have a dedicated DRIVE button, so you don’t need to set another one.

If you regularly shoot with flash, you may want to assign a Fn button to PREVIEW EXP/WB IN MANUAL MODE. You’d turn it OFF whenever shooting with flash, which would allow you to still see the subject in the EVF/LCD when shooting at higher sync speeds or when shooting in very low light.

With so many possible options, assigning Fn buttons allows for intense



customization based on your shooting style. I currently have the AF-L button assigned as a second Playback button. This lets me press it and review my images when I'm shooting one handed.

Finally, nothing says that once you assign a Fn button you have to keep it that way. You may find that you have separate configurations for specific types of photo shoots or different subject matter. Experiment with the options and see what works best for you.



# CONTROL RING

If you have an X100T/V or an X70, then you have a [Control Ring](#) on your camera. The Control Ring is the free-turning ring on the lens right in front of your aperture ring, and it acts as another type of quick-access function dial.

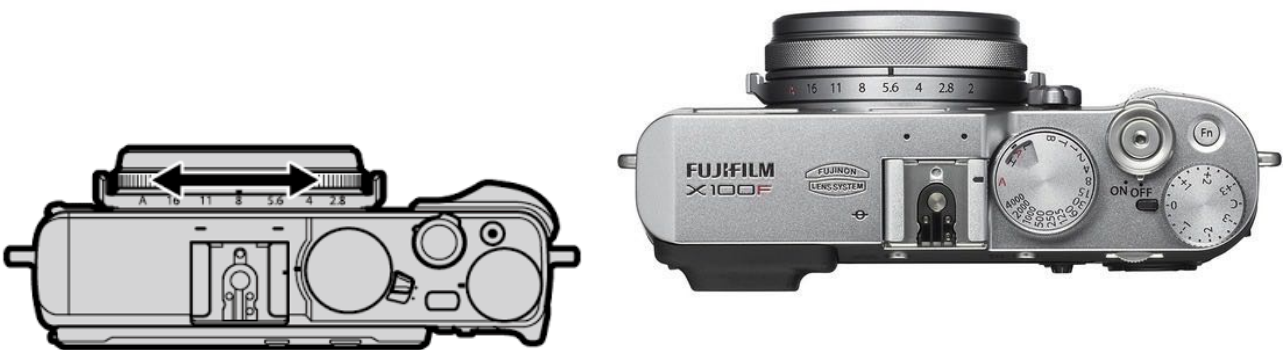
The Control Ring can be set to one of the following modes.

- DEFAULT
- WHITE BALANCE
- FILM SIMULATION
- DIGITAL TELE-CONV.

The Default mode switches between functions, depending on what shooting mode you're in. In Full Auto on the X70, it allows you to select your "Scene Mode."

In the other shooting modes, it functions as the Digital Teleconverter, which gives you three traditional view angles: 35mm, 50mm and 70mm. Essentially, it's just cropping and engaging the image, but there's some special pixel wrangling going on inside the image processor so the quality is quite good.

You can also set the Control Ring to adjust/select ISO, Film Simulation or White Balance.



# Q MENU

The Q Menu gives you another place to store often-used settings and allows for even further customization.

Pressing the Q Button on the back of the camera opens a 16-slot menu where you can quickly access any number of settings and menu items. To select any of the settings, navigate to that slot via the THUMB PAD buttons or the AF Joystick and change by rotating the rear command dial.

Once you're done, simply hit OK, DISP/BACK or press the shutter button lightly. This is always the preferred method, as my finger usually lives near there all the time anyway. This works for anything. If you're ever in a menu and want to escape, you can simply hit DISP/BACK or tap the shutter lightly.

To Customize the Q MENU, press and hold the Q Button until you get the customization screen. Then scroll to any slot, press OK and then choose through the list until you find the item you'd like to assign to that slot. Hit OK to assign it, then hit DISP/BACK or tap the shutter to escape.

NOTE: On the X-Pro 3, X-T4, X100V and X-T30, you can choose to set the Q Button to perform as a Fn Button, or you can disable it entirely, so that you don't accidentally hit it with the heel of your hand. In the X100V's [Edit/Save Quick Menu](#), you can change the Q Menu to include either 4, 8, 12 or 16 items. On the latest models, you can set the Q Menu so that it has a transparent background.



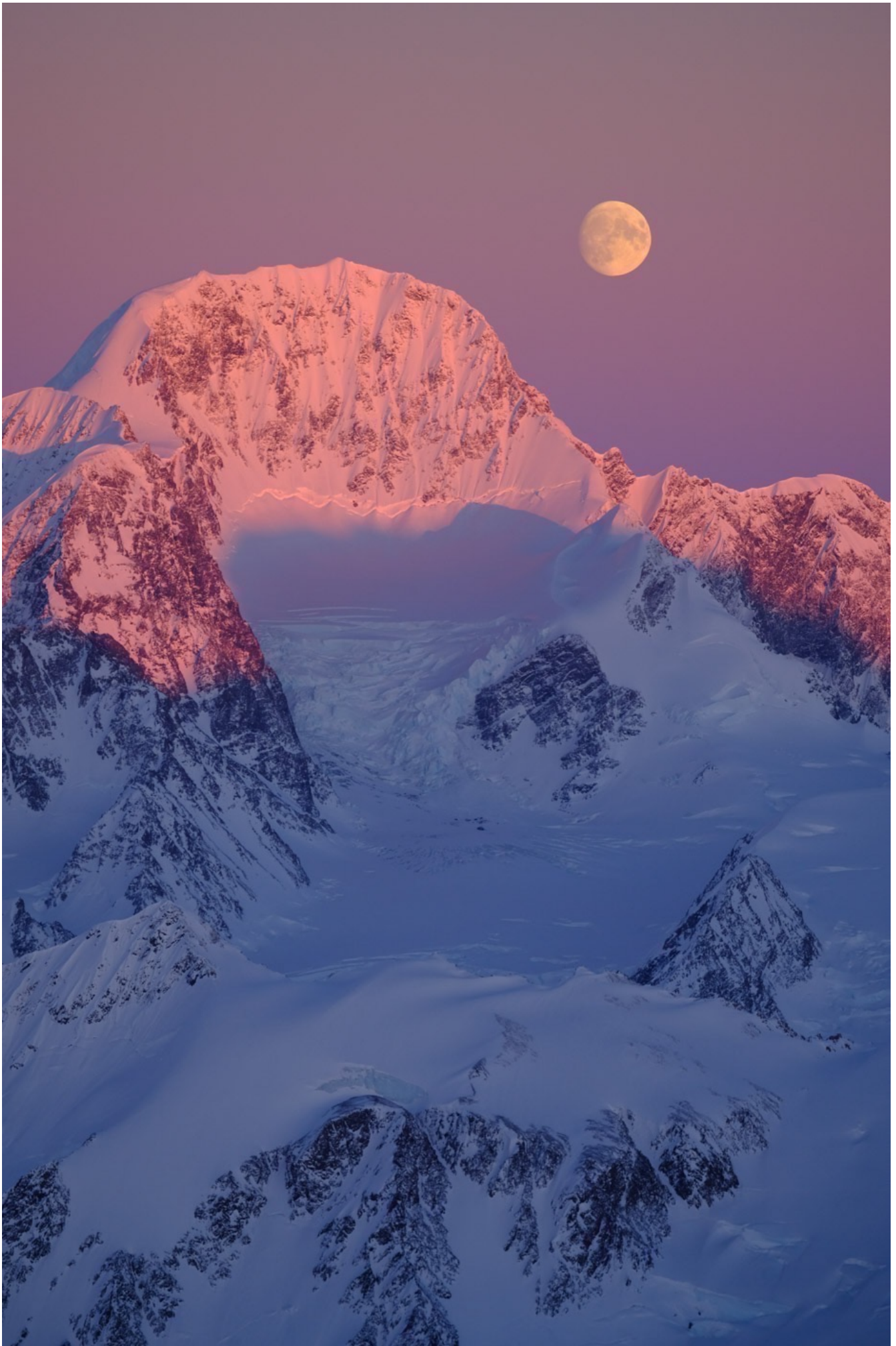
## WHAT SHOULD YOU PUT IN THE Q MENU?

The Q Menu is a great place to put frequently used settings that may not get used in every situation, but that you still want to access quickly when the need arises. Things like [Image Size/Quality](#), [Highlight/Shadow Tone](#), [Self Timer](#), [Movie Mode](#), [Face Detection](#), [Shutter Type](#), ISO, [ADV Filter](#), [LCD Brightness](#), [MF Assist](#), etc...

I recommend putting the most important settings near the top and left, so you can access them as quickly as possible. The lesser-used items should live down near the bottom and right side of the grid. Also, nothing says you can't assign the same function to two or more slots for even quicker access.









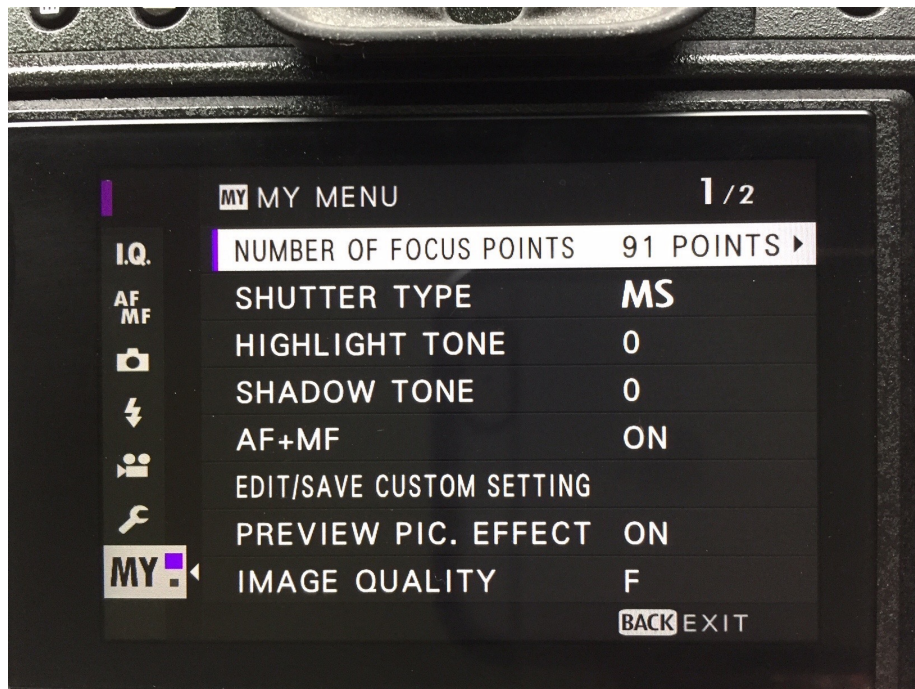
# MY MENU

The newer 24MP X Series cameras feature a new MY MENU slot at the bottom of the camera menu. Offering even more customization and quick access of commonly used features and settings, once you put anything in your MY MENU, even if it's just one item, the top item in your MY MENU will be the first thing that comes up whenever you hit the MENU/OK button.

You access the [My Menu Setting](#) in the USER SETTINGS Menu. This is where you add, remove and rank (reorder) your My Menu Items. You can store sixteen items as two banks of eight.

As with the Q MENU, this is where you store important settings that you don't/can't have assigned as Fn buttons. However, unlike the Q MENU, which can only store certain items, your MY MENU can store almost every single item and setting found in any of the camera menus.

As if this writing, my current My Menu on my X-T3 contains [B&W ADJ. \(Warm/Cool\)](#), [Movie Mode](#), Audio Settings, [Number of Focus Points](#), [Shutter Type](#), [Highlight/Shadow Tone](#), [AF+MF](#), [MF Assist](#), [Focus Check](#), [Color Chrome Effect](#), [Image Size/Quality](#), and Edit/Save [Custom Settings](#).



# THE DISP/BACK BUTTON

The DISP/BACK button has a number of different functions, depending on whether you're in shooting or playback mode, and whether you're looking at the LCD or the EVF.

**In shooting mode, using the LCD screen, DISP/BACK toggles between four display settings:**

**1. STANDARD: Full magnification with all shooting data displayed,** as well as film simulation, image size/quality, exposure meter, battery level and other screen effects you've turned on in the [Display Custom Settings](#) menu, (things like framing grid, electronic level, histogram, shooting mode, etc...)

**2. FULL: Scene w/ no data at all,** for a nice, quiet uninterrupted view of your scene.

**3. Comprehensive shooting data only, with no scene.** This shows you nearly every single setting currently applied inside your camera, including your focus zone and location, histogram, film simulation, highlight and shadow tone, color, noise reduction, etc...

This is a good way to quickly preview your cameras settings and make sure that nothing is on that you DON'T want on. Maybe you shot with a SHADOW TONE adjustment yesterday and forgot to turn it off. (You can also check the Q MENU to see if any of your settings are still on.)

**Pressing DISP/BACK when looking through the EVF,** you toggle between the two image magnification sizes: large and not quite as large. I always opt for the large view, but this is personal preference.

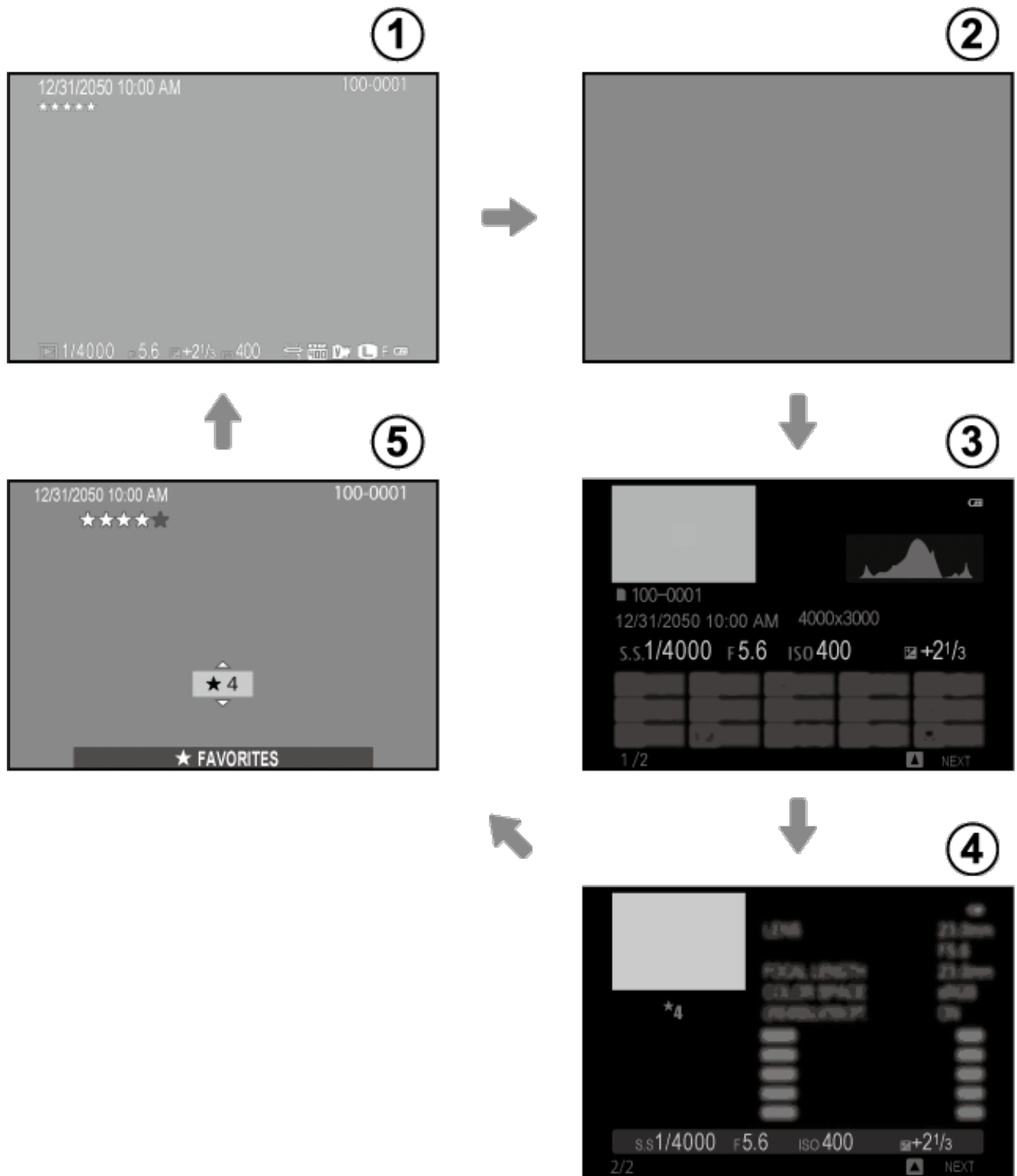
When shooting in Manual Focus, you have an extra option: DUAL DISPLAY Mode. In this mode, the viewfinder shows you a split screen that lets you see both a regular view of the scene, as well as the Focus Assist view at the same time, (when using Focus Peaking and Digital Split Image Focus). This helps make manual focusing even easier and more precise.



The X-T2 has a special [Dual Display Setting](#), which lets you swap views, so you can see the entire scene on the big screen and the closeup view on the second screen, or vice versa.

**In Playback mode, (both EVF and LCD), DISP/BACK toggles between four settings:**

- 1. STANDARD: Full size image with shooting data.**
- 2. Full size image with no shooting data.** Nice and clean!
- 3. Regular and thumbnail image with comprehensive shooting data, as described above.**
- 4. Full size image with date/time, image#, and assignable "Favorites" or star rating.**



Scrolling Through the DISP/BACK button views during PLAYBACK

# EXPOSURE MODES

All the X Series cameras have the four standard exposure modes: P,S,A,M, which stand for **Program**, **Shutter Priority**, **Aperture Priority** and **Manual**.

## PROGRAM

Program Mode is essentially “AUTO” mode. When you put the camera into PROGRAM Mode you’re letting the camera make your exposure decisions. Shutter Speed and Aperture are set automatically, according to your current ISO setting.

Program Mode is an ideal mode when you don’t want to worry about exposure and you just want to focus on how to use the light and compose your scene. That said, you can always adjust your exposure using the [EV+/- Dial](#).

Also, if you like your current exposure, but you’d rather use a different combination of shutter speed and aperture, you can make a “Program Shift” adjustment, by simply turning whichever Command Dial you have set to control shutter speed. (You set this with the [Shutter Speed Operation](#) menu item.) This lets you override the camera’s basic exposure settings with the command dial.

To set the camera to Program Mode, **turn the main Shutter Speed dial to A** and **set the aperture ring on your lens to A**. You’ll see P at the bottom left of your display.

For lenses that don’t have a numbered aperture ring, such as the XF18-55mm or XF18-135mm lens, **turn the main Shutter Speed dial to A**, then **set the Aperture switch on the lens barrel to A**.

For lenses that don’t have an aperture ring at all, like the 27mm f/2.8, **turn the main Shutter Speed dial to A**, then **turn whichever command dial controls aperture all the way past the maximum aperture** on the lens, which is f/16 on the 27mm lens. You should see the color of the Aperture setting change. (To see which dial to turn, look at the exposure settings in the bottom of your LCD/EVF display- it will tell you which dial does what).

See the [Aperture Setting](#) menu to see more about how to adjust aperture when using lenses without aperture rings.



## SHUTTER PRIORITY

With Shutter Priority Mode, you adjust the shutter speed and the camera automatically adjusts the aperture based on the current ISO setting. In that way, it's sort of like Half-Auto mode, because you're still making decisions about the exposure and how you want your picture to look.

To make adjustments to your exposure, turn the EV+/- dial.

To set the camera to Shutter Priority Mode, **choose a shutter speed on the main Shutter Speed dial** and **set the aperture ring on your lens to A**. You'll see S at the bottom left of your display.

For lenses that don't have a numbered aperture ring, such as the XF18-55mm or XF18-135mm lens, **choose a shutter speed on the main Shutter Speed dial**, then **set the Aperture switch on the lens barrel to A**.

For lenses that don't have an aperture ring at all, like the 27mm f/2.8, **choose a desired shutter speed on the main Shutter Speed dial**, then **turn whichever command dial controls aperture all the way past the maximum aperture** on the lens, which is f/16 on the 27mm lens. (You should see the color of the Aperture setting change.) To see which dial to turn, look at the exposure settings in the bottom of your LCD/EVF display- it will tell you which dial does what).

See the [Aperture Setting](#) menu to see more about how to adjust aperture when using lenses without aperture rings.


## APERTURE PRIORITY

With Aperture Priority Mode, you adjust the aperture and the camera automatically adjusts the shutter speed, based on the current ISO setting. It's the other Half-Auto mode, because again, you're still making your own decisions regarding how you want the picture to look.

To make adjustments to your exposure, turn the EV+/- dial. **This is my preferred method for shooting.**

To set the camera to Aperture Priority Mode, **turn the main Shutter Speed dial to**

**A**, then **manually adjust your aperture on the lens with your left hand**. (I like to hold the camera so that my left hand is cradling the lens from the bottom.) You'll see A at the bottom left of your display.

For lenses that don't have a numbered aperture ring, such as the XF18-55mm or XF18-135mm lens, **turn the main Shutter Speed dial to A**, then **set the Aperture switch on the lens barrel to the  and rotate the aperture ring**.

For lenses that don't have an aperture ring at all, like the 27mm f/2.8, **turn the main Shutter Speed dial to A**, then **turn whichever command dial controls aperture**. Don't go past the max setting, or you'll shift to PROGRAM Mode. (To see which dial to turn, look at the exposure settings in the bottom of your LCD/EVF display- it will tell you which dial does what).

See the [Aperture Setting](#) menu to see more about how to adjust aperture when using lenses without aperture rings.

In a way, both Shutter and Aperture Priority do the very same thing. Think about it: With S, you set the shutter speed with your command dial and watch the aperture change automatically. With A, you set the aperture with the appropriate command dial and watch the shutter speed change.

Keep an eye on the display and stop when you see the parameter you want, whether it's shutter speed or aperture. Neither way is right or better, and both methods will get to you the same place.

I prefer Aperture Priority mode, partly because it's what I've always used. More than anything, it's a carryover from my early days when aperture was adjusted by rotating the f/stop ring on the lens with your left hand. This is one reason I like the X Series camera system; most of the lenses have functioning aperture rings.


Regardless of which method you use, consider S and A interchangeable methods to get the exact same results.

# MANUAL

Manual Mode is the original exposure mode. It's actually quite easy and fast to use MANUAL Mode on the X Series cameras, because you can instantly see your exposure changes. In addition, the controls are quite easy to manipulate with your fingertips while you're looking through the viewfinder.

With Manual Mode, you set both shutter speed and aperture yourself. A little graph inside your viewfinder tells you if your current settings will give you proper exposure, or if you'll over or underexpose the scene. As long as you have [Preview EXP/WB in Manual Mode](#) set to ON, you'll be able to see exactly what your exposure will look like.

To set the camera to Manual Mode, **choose your desired shutter speed on the main Shutter Speed dial** then **manually adjust your aperture on the lens with your left hand**. (I like to hold the camera so that my left hand is cradling the lens from the bottom.) You'll see M at the bottom left of your display.

For lenses that don't have a numbered aperture ring, such as the XF18-55mm or XF18-135mm lens, **choose your desired shutter speed on the main Shutter Speed dial**, (or use [T Mode](#)), then **set the Aperture switch on the lens barrel to the**  **and rotate the aperture ring**.

For lenses that don't have an aperture ring at all, like the 27mm f/2.8, **choose your desired shutter speed on the main Shutter Speed dial**, then **turn whichever command dial controls aperture**. Don't go past the max setting, or you'll shift to PROGRAM Mode. (To see which dial to turn, look at the exposure settings in the bottom of your LCD/EVF display- it will tell you which dial does what).

I still use manual mode quite a bit, especially when I'm shooting in tricky light or with flash. I'm not alone here, many X Series photographers love using Manual Mode.

# METERING (PHOTOMETRY)

The latest generation of X Series cameras all have four metering patterns. (Older models may not have all four.)

Some cameras have a dedicated Photometry selector switch under the Shutter Speed dial. On most other models, look for the PHOTOMETRY setting in the CAMERA MENU. On the X-E1 and X-E2, press the AE button on the back of the camera to bring up your Photometry options.



This is FUJI's Multi-Segment Metering pattern. Similar to Nikon's Matrix Metering system, MULTI determines optimum exposure by analyzing color, subject placement and brightness across the entire frame.

This is the recommended pattern for most scenes, and it does a great job with nearly every kind of situation. I keep all my cameras on MULTI nearly all the time, only changing to SPOT on rare, specific occasions.

That said, much of the time, I just forget to change it, so I would encourage you to experiment with these four choices and see what works of you and your preferred subject matter.



CENTER WEIGHTED meters the entire scene, but bases the majority of exposure information on the middle of the frame. CENTER WEIGHTED is recommended for shooting portraits, and especially people and faces who are backlit.



In SPOT mode, the camera bases all of the exposure information in an area that encompasses about 2% of the frame. By default, it looks at the center of the frame,

but you can use the [Interlock Spot AE & Focus Area](#) menu option in the AF/MF Menu to couple the spot meter to your selected focus area.

SPOT metering is ideal for backlit subjects and in situations where a relatively small subject is placed against a excessively bright or dark background.

## [ ] AVERAGE

AVERAGE metering establishes an average exposure for the entire scene. It's designed to provide consistent exposure when shooting multiple frames in the same lighting conditions. AVERAGE is often effective for shooting landscapes and portraits.





# T MODE SHUTTER SPEEDS

This is one of the hidden gems in the Fuji cameras. All of the X Series models have a "T" (TIME) setting on the shutter speed dial, located between "1" and "B." By setting the shutter dial to T, you gain full control of all shutter speeds via the front or rear command dial depending on which dial you have set to control shutter speed. (I currently have mine set to front on my X-T2.)

With the first generation of X Series cameras, T Mode only allowed you to set speeds between 2-30 seconds. The firmware 4.0 update on 2<sup>nd</sup> Gen. models changed this so that in T mode, you can now use the command dial to set any shutter speed.

Combine this with the Electronic Shutter (ES) in the [SHUTTER TYPE](#) menu, and you can use the dial to select any exposure time between 1/32,000 sec and 30 seconds. The latest firmware for the X-T2 and X-Pro2 now allows it to shoot all the way down to 15 minutes. Just think of what you could do with that! A 10-stop neutral density filter and super long exposures can produce some pretty cool results when shooting water, moving clouds, traffic, city scenes, etc...



I love using T Mode because it speeds things up dramatically. You can shoot in

Manual or Shutter Priority mode without having to mess with the shutter speed dial. (When the lens is set to "A," you're in Shutter Priority mode; when you're manually selecting aperture on the lens, you're in Manual.)

With your left hand on the aperture ring and your right index finger or thumb on the command dial, T mode makes shooting in Manual mode a breeze. It's even fast enough to shoot action and fast breaking scenes in tricky light. You don't even have to move, you just crank your finger/thumb back and forth on the dial. This makes it much easier to keep your eye glued right to the viewfinder and your subject.

Add the Histogram to your viewfinder in the [DISPLAY CUSTOM SETTINGS](#) menu, turn [PREVIEW EXP/WB in MANUAL MODE](#) ON in the SCREEN SETUP menu, and you speed things up even more, since you'll be able to see the effects of your exposure adjustments in real time.

And while we're talking about the [Display Custom Setting](#) menu, I like to add the ELECTRONIC LEVEL to my viewfinder as well. It looks a bit intrusive at first, but it's an easy way to make sure your pictures come out straight.

NOTE: On the X-E1, you control your T mode shutter speeds via the Left and Right Thumb Pad buttons.



# FULL AUTO SWITCH & SCENE MODES

The X-T10/20/30, X-E3 and X70 all have a special AUTO Switch on the top deck of the camera. Flipping this switch puts you into FULL AUTO mode, which disables and overrides a number of Focus options, IMAGE QUALITY settings and SHOOTING MODE options. (NOTE: The Drive dial/menu must be set to S, or STILL IMAGE to use this setting.)



For example, the camera defaults to ISO AUTO, WIDE/TRACKING, and disables all of your IMAGE QUALITY settings, including FILM SIMULATION and the exposure and tone control options.

It drops into what's called SCENE POSITION mode, which allows you to use any number of presets and let the camera make all the decisions with regards to exposure settings, color and focus.

In addition to specific modes that reflect a variety of shooting conditions, like SUNSET, FLOWER, SNOW, BEACH, UNDERWATER, PORTRAIT, SPORT, LANDSCAPE, you can also choose ADVANCED SR AUTO, or SR+, which throws the camera into "full auto auto." In SR+, the camera evaluates the lighting conditions and chooses its own settings. (NOTE: The EV+/- control still functions normally.)

In other words, you outsource everything in the entire picture taking process except for your own compositional ideas.

Sometimes it's nice to go Full Auto. You don't have to think about anything, and that can be liberating. Just flip the switch and go. It's also what you do right before



you hand the camera to your non-photographer friend or family member, or when you ask a stranger to take your picture.

To change SCENE POSITION modes, look for the SCENE POSITION menu; when the switch is set to AUTO, this becomes the **RED 1** menu item on the X-T10 and X70. On the X-T20/30 and X-E3, you'll find SCENE POSITION in the CAMERA MENU.

On the X70, you can also select your SCENE MODES by rotating the Control Ring.  
NOTE: The Control Ring must be set to the DEFAULT setting for this to work.







# SHOOTING LIKE FILM



Shooting RAW with the X Series cameras is awesome. The X-Trans sensor captures a vast amount of tonal information, and each new generation holds even more tonal range and color accuracy, thanks to their faster image processors. This gives you enormous latitude when working with your images in Lightroom, or whatever post processing software you use. (My post processing software of choice these days is [DxO PhotoLab](#).)

However, this isn't why I love the Fuji cameras. On the contrary, my love for the X Series revolves around the fact that **I don't have to shoot RAW** in order to get great images.

Besides, that, processing RAW files takes time, and I'm a high volume shooter, so this means spending hours at the computer. While some people genuinely enjoy working with photo software, not everyone has the time, the skills, or the same enjoyment level for this aspect of digital photography.





"Moon Rising over the Knik Glacier" (Original RAW File)



"Moon Rising over the Knik Glacier" (Processed from the RAW file)

Another inherent problem with a traditional RAW workflow is that **you defer an important element of your creative process to a time that's far removed from the**

**actual emotions and experiences you had when you shot the photo.** Hours, days, or weeks later when you're back at your computer, are you going to remember the look and feel you were going for with every single frame? Probably not.

In the days before digital, there was no deferring this part of the process. As soon as you loaded a roll of film and snapped the shutter, you applied a specific color palette onto your photos that could never be altered. Your creative decisions about how you wanted your images to look were forever fixed into the acetate, and since film had such limited latitude, you either nailed your exposure or you threw the slide away.

We've largely gotten away from this fixed approach with digital photography, but thankfully, the design of the X Series fosters this style of picture taking. For much of my work, I'm back to shooting with a film mindset, and it has brought me a sense of creative liberation.

These days, my goal as a photographer is to shoot the scene as it reflects my ideas in the moment, and walk away with an image I love. Of course, now I have an LCD screen and histogram, so I instantly know if I nailed my exposure or not. In the end, if I can spend as little time processing my photos as possible, I'm a happy guy.

I'm not advocating against shooting RAW. There are times when you want maximum exposure control in order to take full advantage of your luscious, high latitude X-Trans captures. That said, *I often encourage photographers to explore a more "back to basics" style of photography.*

While RAW definitely has its place, we all know how awesome the Fuji JPEGs are, don't we? In most situations, you'll get the look you want, without the work, and you'll get to enjoy all the instant, organic creative satisfaction that goes with this kind of approach. Of course you can always shoot RAW+JPEG (which I often do), but over time, you may find that most of those extra RAW files just end up stealing hard drive space.

You'll also avoid the dreaded agony of choice. Lightroom gives you endless options for adjusting your color, exposure and tone. This is not always a good thing, as too many choices can paralyze us in life.

Don't believe me? How often do you spend more time trying to choose something to watch on Netflix versus actually picking something and watching it? Now think



about the endless number of hours you could spend dragging sliders in Lightroom and wondering if you got it right. Don't worry, it's not your fault, it's the curse of our culture.

Fortunately, the Fuji cameras give you a wide range of creative control without going overboard. The combination of film simulations and on-board processing tools are powerful, without being overwhelming; deliberate with just enough variation to inspire a wide range of creativity.

Besides, why not outsource your color choice to the experts? You know, the ones who have been innovating in the field of color reproduction for over 80 years.



## It All Starts With Film

The [Film Simulations](#) are the lifeblood of the X Series. This wonderful collection of nine ultra-classic color palettes, nine monochrome styles, including ACROS and Sepia, give you 18 of the most iconic looks in the history of photography.

Developed over decades and culled to perfection for the X Series, these built-in color presets offer you a diverse and dynamic set of tones with which to craft your electronic artistry.

Before snapping away, gauge your subject matter and think about how you want the photo to look. What are you going for? Bold and beautiful, subtle and subdued? Rich and powerful, careful and contemplative? Clean and crisp, garish and gritty?

You've got it all right there at your fingertips, from the dramatic eye-popping saturation of VELVIA, the kinder, gentler brush of ASTIA, to the soft, muted colors of ProNeg Low, and the timeless palette of Classic Chrome. And we haven't even talked about the black and white modes!

Forget about shooting "flat" which is a common technique for shooting RAW, when your only concern is to make sure your histograms aren't blown. **Shoot like you want it to look.** Pick a color and run with it. Bring your creativity into the mix right then and there.

Make sure you set your Film Simulation control to one of the Function Buttons so you can access it quickly, and then experiment. If you're shooting quick scenes or if you can't decide which one you like best, you can always [Bracket your film simulations](#). This lets you pick three different looks. Maybe go one bold, one more subdued look and one black and white.





## Adding Grain - Adding History

Nothing says your photos all have to be smooth and tight. Pixel peeping is fun, but so is playing with tradition. That's why you have an X Series camera, right? A little film grain never hurt anyone, and neither will cranking up the ISO dial on your Fuji. Remember, photography is supposed to be representational and symbolic, not exact. It's supposed to have a mood, and nothing adds mood like a little grain.

Or a lot of grain. Don't be afraid to crank it up into the nosebleed section. These cameras do high ISO really well, especially those cameras that have native ISO speeds of 12800. Combine 12800 with ACROS and you have pure magic.

You'll find that at higher speeds, the noise isn't noise anymore, it's grain- gorgeous, messy film grain that's dripping with history and style. I also love the look of ISO 3200 with black and white, it's got rich, bold contrast and it holds together well. Heck, 3200 even looks great in color! In my mind, ISO 3200 produces some of the best looking photographs.

If you have one of the new MY MENU cameras, you can also use the new [GRAIN EFFECT](#) setting, which is found in the [IMAGE QUALITY](#) menu. This lets you add two types of grain to your image, Strong or Weak, regardless of your current ISO setting. They both look great.

When compared to the look of the higher ISO settings, like 3200, 6400 and 12800, the GRAIN settings give you more "straight grain," whereas the higher ISO speeds add a tiny bit more noise. The STRONG grain setting is quite bold and even adds some noticeable sharpness.

If you want a film grain look but you want to shoot wide open in bright light, the GRAIN EFFECT is your answer.



## Tweaking The Film Simulations

Buried in the Menus and the Q MENU by default, you'll find a set of useful, but little understood exposure controls. These consist of COLOR, SHARPNESS, SHADOW TONE, AND HIGHLIGHT TONE.

These controls are overlooked by many photographers, me included. We can all be forgiven, because the Fuji camera manuals don't offer much explanation for what they do. I'll admit that having been an X Series shooter for five years, I only recently started experimenting with them. I'm kicking myself for waiting so long, because they're quite useful and they increase the times when you can get by without having to shoot RAW.

Basically, all these controls go from +4 down to -2. "Plus" gives you more contrast and "minus" gives you less. Zero is neutral. With Shadow and Highlight Tone, a setting of -1 or -2 can help rescue your lights and darks from the edge of the histogram.

With the waterfall example in the [HIGHLIGHT/SHADOW TONE](#) section, a -2 on the Shadow Tone helps brighten those dark areas and adds definition, much like the Shadow slider in Lightroom. Or I could increase the contrast by going +2 instead. At the same time, -2 on the highlight tone helps bring the bright whites of the water under control.

Color increases or decreases saturation and vibrancy, just like in Lightroom. Want to bump up Velvia even more, go +4 for maximum, candy-color pop. Make it a little less contrasty? Go minus on the Shadows. Want to mute ProNeg Low even more? Go -1 or -2 on and you're even softer. You get the idea. Finally, "+" on the Sharpness and Clarity adds crispness, while "-" softens things up.





You realize how powerful these simple controls are when you start combining settings. I often go for bold colors (VELVIA) when photographing things like bike racing, especially when shooting in bright sun.

However, to shake things up while shooting a particular cyclocross race, I decided to tweak Classic Chrome with settings of +1 Shadows, -2 Highlight, -3 Color and +1 Sharpness. This gave me a crisp, high contrast look, sort of like if I had pushed a roll of Kodachrome, but with very muted colors. I loved the results so much that I saved those settings as a Custom Setting, which I can now access again in the Q MENU.









In addition to the four controls I've mentioned above, you can even add White Balance as one of your saved parameters. Go a little blueish or greenish with your WB and you've got the cross-processed look. Tweak toward red or magenta and you can simulate the look of film that's well past its expiration date. Go orangish yellow and you've just aged your photos by a few decades.

Think about it, the options are endless. Whether you're simply rescuing lights and darks or radically altering colors, these simple controls offer a huge amount of creative flexibility.

Not only has my "film" approach to photography saved me an enormous amount of time, it frees up my brain to focus on being more creative on the spot. I'm more passionate about my photography now as I ever have been and I don't feel that I've given anything up. On the contrary, I feel as if I've come full circle and gained every advantage on the way around.

I'll occasionally shoot RAW when I'm faced with really challenging light, or if I'm shooting a complex assignment. For the majority of my photography, though, and I hear this from many Fuji shooters, I'm shooting JPEGs and loving it. I encourage you to experiment with this kind of film mentality and see what it does for your photography.





# Why The FUJIFILM Images Are So “Film-Like”

Image files from just about every camera that's made today look really good too. Nikon images look great. So do Canon, Olympus and Sony images.

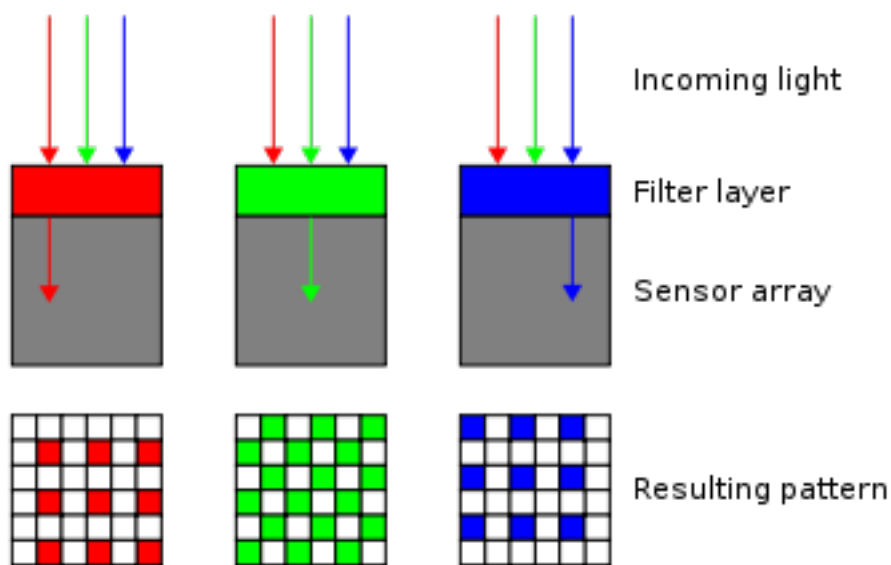
However, there's something slightly different about the way the Fuji images, especially their JPEGs, look compared to other cameras, and this appeals to many photographers. Fuji's Secret Sauce is their proprietary X-Trans sensor. Let's look at how it's different, and more importantly, why it's different.

Digital camera sensors are built around a set number of equally sized and equally spaced photosensors, or as we commonly refer to them, pixels. A 16MP sensor contains 16 million pixels.

In order to reproduce color, each pixel is covered with a single filter, either red, green or blue. Since the cone cells of the human eye are most sensitive to green light, camera sensors use twice as many green pixels as red and blue, in order to best mimic the way that we see.

During capture, each pixel on the sensor records the incoming light as a single color. During the demosaicing stage, which occurs in the camera's image processor, various algorithms are used to interpolate this information into full color image. When shooting and processing RAW files, the demosaicing stage happens inside your computer's imaging software. i.e., inside Lightroom or Photoshop.

(Note- previous version of Lightroom and Photoshop had a hard time processing the Fuji RAW files, because their demosaicing algorithms were written for Bayer pattern sensors. They weren't able to bring out the maximum level of detail in the files, which led many people to believe that the Fuji files weren't as sharp as they actually are. The latest versions of LR & PS CC do a vastly better job in this area.)



The most common filter array is the Bayer Pattern arrangement, which is named after Bruce Bayer, a former Kodak employee who developed this technology in 1974. Patented in 1976, the checkerboard pattern Bayer Filter is used in nearly every single digital capture device today.

The FUJIFILM X-Trans sensor, however, does not use the 2×2 Bayer filter pattern. Fuji sensors use a proprietary non-regular 6×6 color filter array that creates a much more “random” color gathering process. This gives it two very distinct advantages over Bayer type sensors.

Bayer filter can sometimes produce moiré effects with certain subjects. To combat this, most Bayer pattern cameras use an optical low pass filter in front of the sensor. However, the OLPF can cause a slight decrease in sharpness.

With its non regular array, the X-Trans sensors do not use optical low pass filters, which is why the smaller APS-C size sensors of the X Series cameras are able to compete with full frame sensors with regards to sharpness and detail.

In addition, **the irregular pattern of the X-Trans sensor more closely replicates the look of film.** This is no accident. With their 80+ year legacy of film photography, the Fujifilm team continues to work very hard to bring their film traditional film heritage into the modern era.



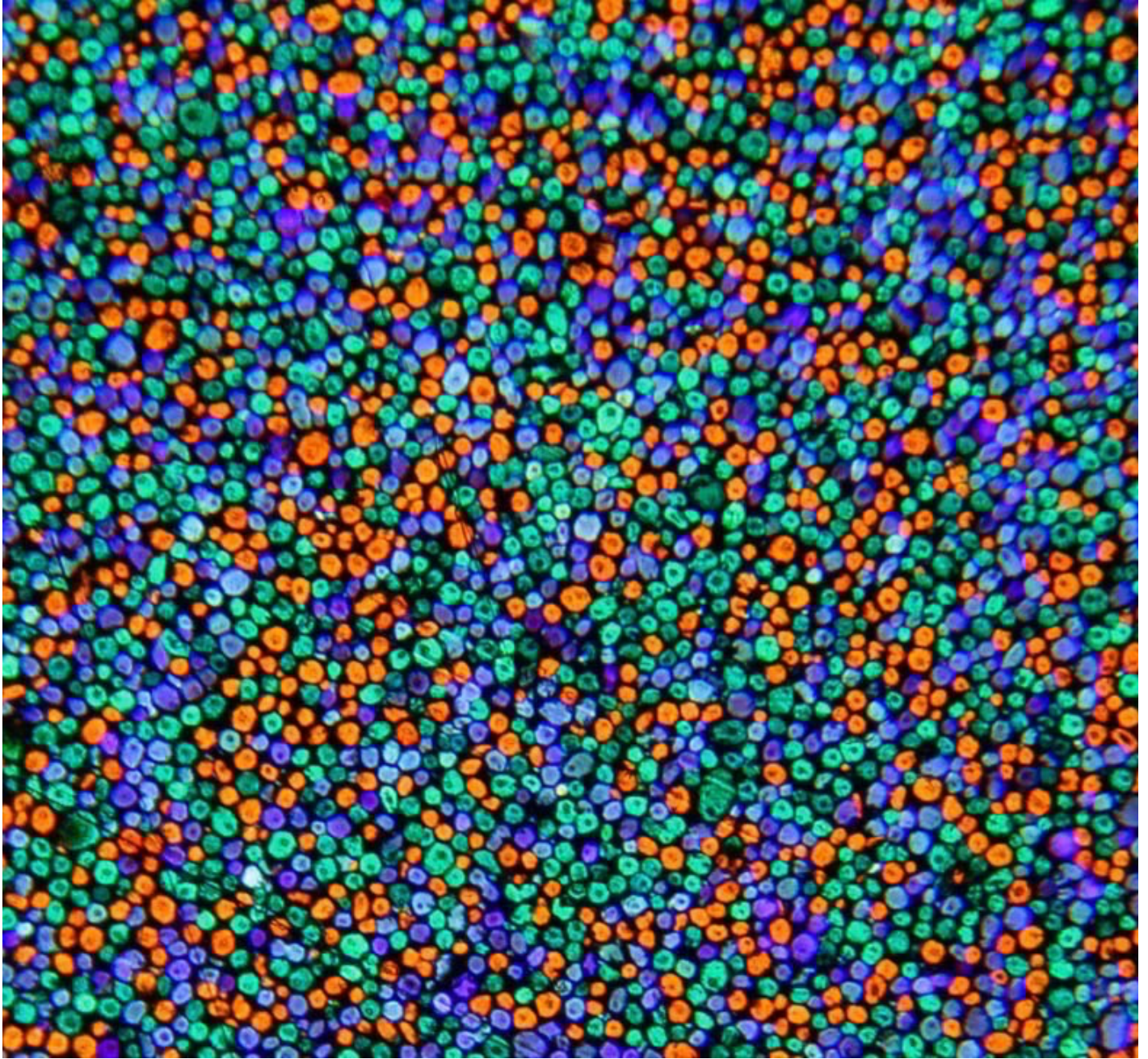
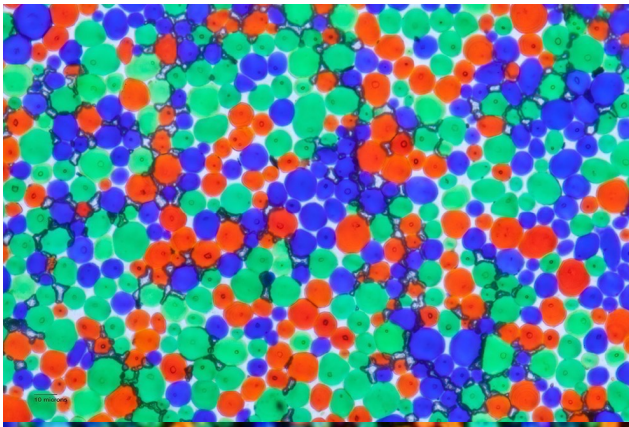
In designing the X-Trans sensor, the Fuji engineers went outside the box and looked back as much as they looked forward. Their goal was to adopt the legacy and artistic heritage of film photography, which is anything but regular. Anyone who has shot film knows that the medium produced very “representational” and often very “irregular” images.

After all, there is nothing regular about film. It’s just a pile of silver halide crystals mixed up in a liquid emulsion, poured onto an acetate base and cut into strips. These crystals are the actual “grain” you see when you enlarge a negative or slide, and if you look closely, you can see that film grain is about as random as you can get. It’s in no way uniform with regards to its size, shape or placement in the emulsion.

As much as Kodak, Fuji, Agfa, Ilford and every other film manufacturer tried to create a consistent product, it was simply impossible to arrange these little grainy crystals into any kind of regular rows of red, green and blue.

Below we see two close up views of the grain structure found in [Autochrome Lumière film](#), which was first produced in the early 1900s. It’s striking to note how close the first image looks to the pattern found on Fujifilm’s X-Trans sensor. Again, this is no accident, and it clearly illustrates where Fuji is coming from and what they’re trying to do.





Now let's look at a closeup of Kodak T-MAX 3200, one of their later, modern black and white films, which was sold until late 2012. Below that, two images I shot with the X-T2 at ISO 12,800, which, to my eyes, closely replicates the grain size of T-MAX 3200 film.



You can see just how similar the modern Fujifilm images look when compared to the Kodak film image. Again, this is no coincidence, it's the result of a very carefully crafted sensor design and the algorithms Fuji has programmed into their on-board image processors.



*Closeup Kodak T-Max 3200 – Photo by Robert Boyer*

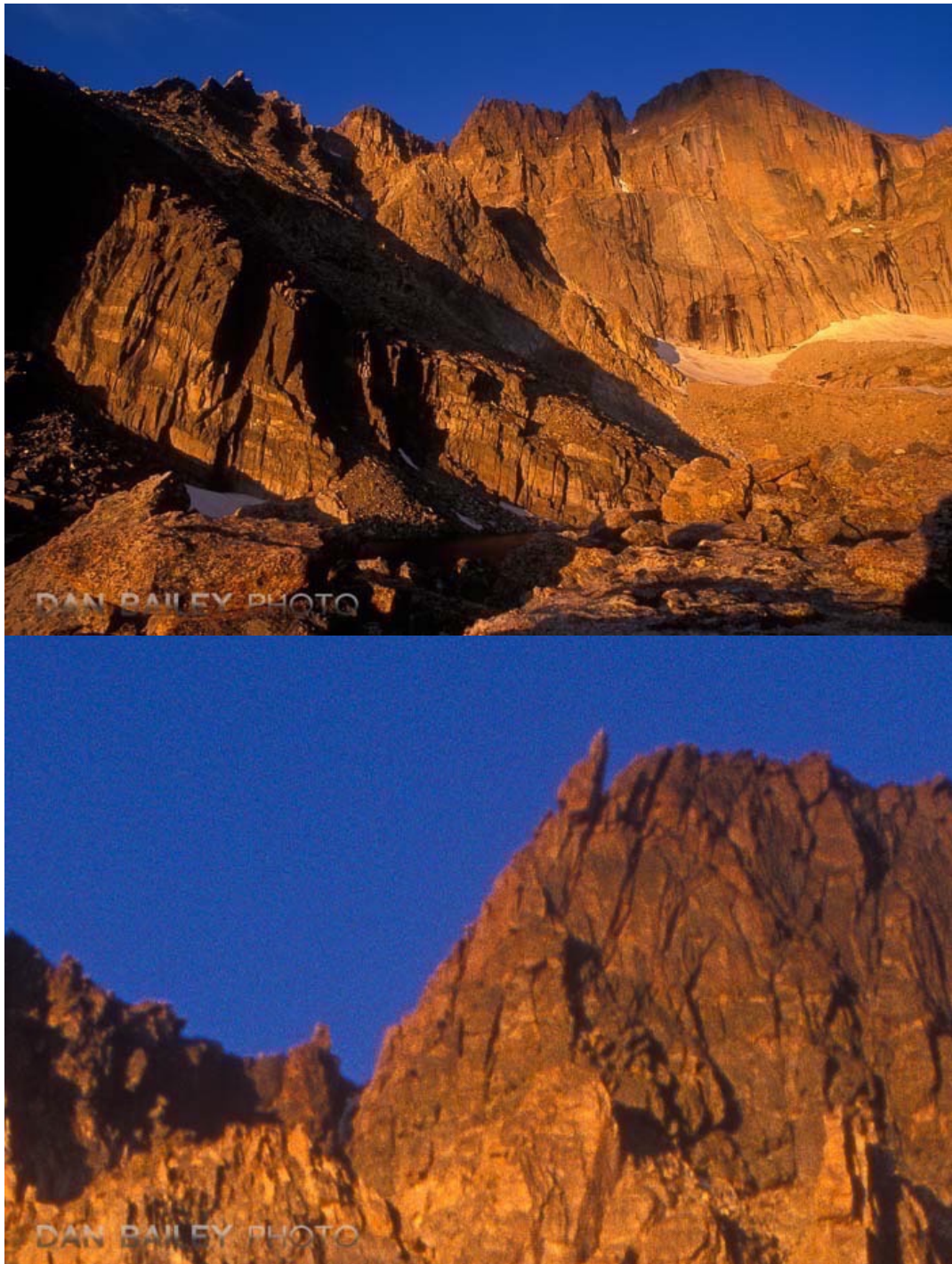


*Fujifilm X-T2 ISO 12800*



*Fujifilm X-T2 ISO 12800*

Here are a couple of color examples as well. The first photo of Long's Peak at sunrise was shot back the late 90s on 35mm Velvia slide film and scanned. In the enlarged version, you can see the pronounced film grain in the sky.



And here's an X-T1 image shot earlier this year. Again, in the enlarged version, you can see the "grain-like" quality of the digital noise in the sky.







Another feature the Fuji cameras offer are their carefully crafted film simulations. Where most cameras give you the option to shoot JPEGs in other modes like “Vivid,” “Neutral,” and “Monochrome,” The X Series cameras have imported the color profiles of some of their classic color slide films into the image processing software in their cameras; films like Velvia, Provia and Astia, as well as some of their professional color and black and white films, like ACROS.

Having shot many of these films back in the day, I love having these familiar color palettes at my disposal once again.



*The rich bold colors of VELVIA film simulation*



*The muted tonality of "Classic Chrome" film simulation*

With their sensor design and film simulations, it would appear that Fujifilm is striving for something beyond image quality alone. Their mission, as stated by Fujifilm Chairman and CEO Shigetaka Komori in his book, [Innovating Out of Crisis](#), has always been to **"preserve and sustain the culture of photography."**

While this statement could certainly be interpreted in any number of ways, their dedication to combine the traditional heritage of photography with modern technology is clearly evident in the X Series. It would seem that these efforts have paid off, because to my eyes, and to the eyes of other Fuji shooters, their images have a distinct, and very appealing "film-like" quality to them.

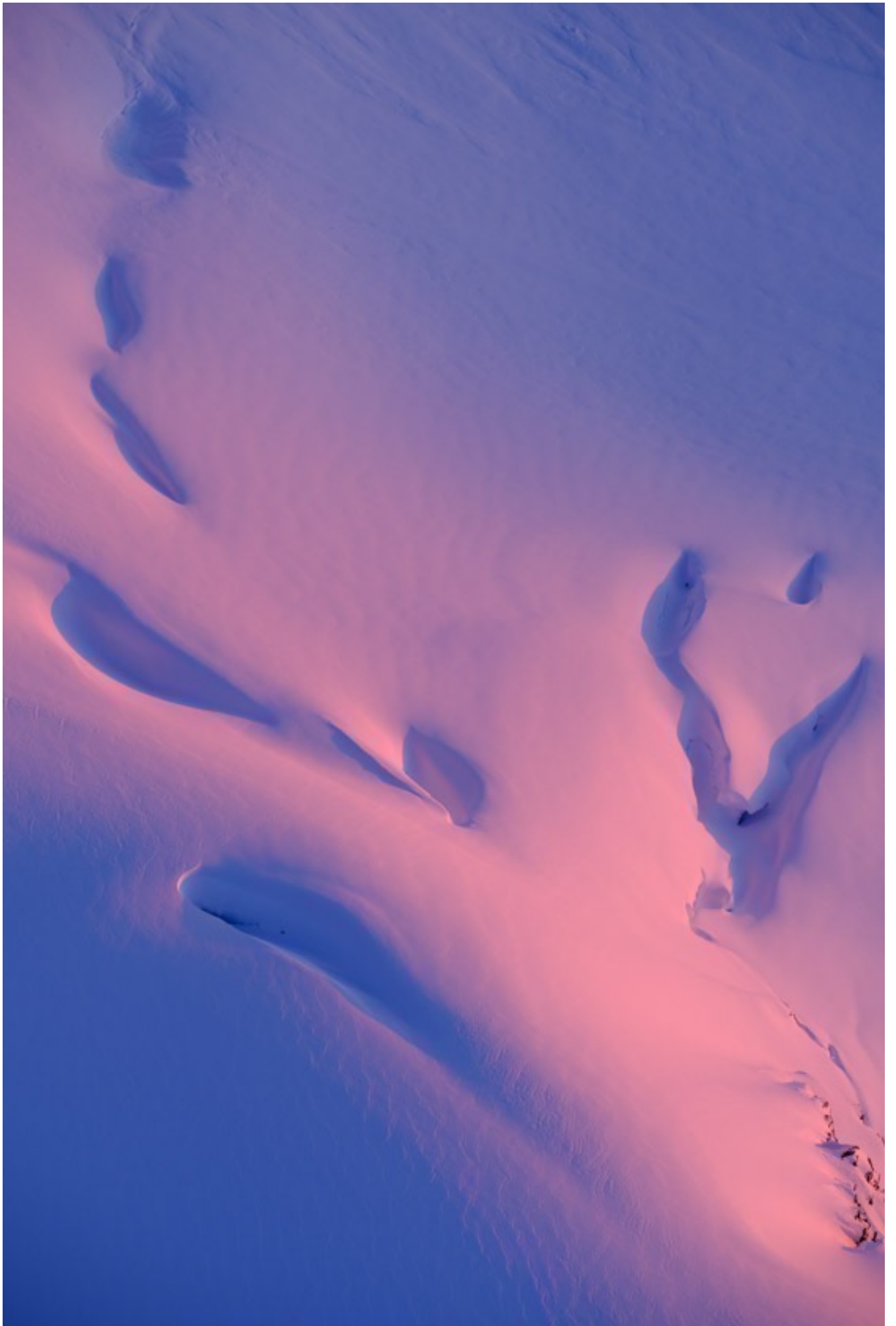
As I said above, this is all very subjective, as is much of photography. After all, we're talking about art and there's no concrete way to prove that the images from one camera or photographer are "better" than any other. We all perceive images a little different and when it comes down to what's right, there is no "right." It's only what we like and what drives us visually or emotionally, based on our own experiences and desires.



As a photographer who came from film, I'm drawn to this blend of technology, craftsmanship and tradition that FUJIFILM has put forward with their cameras. Does it resonate with everyone? Obviously not. People love their Nikons, Canons and Sonys, and that's ok. Differing opinions is what makes the world go around.

At the end of the day, the most important thing in photography is your own creativity and how much you love what comes out of your camera, no matter which camera it is.







# FOCUS CONTROL

The X Series cameras operate with traditional focus operation, where you activate autofocus by pressing the shutter button halfway. However, it's possible to configure them in alternate ways and you can even decouple focus operation from the shutter button and set them up for back button focus.

## THE AF SELECTOR SWITCH

Most models have a little switch on the front left side of the camera (as you're looking through the viewfinder). It has three positions: S, C and M.

- **S stands for AF-S, or Single Autofocus.** This is the mode you'll use when shooting still subjects in Single Shot Mode, where you're taking one picture at a time. Landscapes, flowers, street scenes, etc...

In AF-S Mode, the shutter won't fire until the camera's autofocus system achieves a successful lock on your subject and you see the little AF box turn green. However, if you or your subject move after the boxes turn green, it won't reacquire your subject and your picture will be out of focus.

- **C stands for AF-C, or Continuous Autofocus.** This is the mode you'll use when tracking moving subjects, or if you're moving in relation to your subject matter. It's also the preferred mode to use when shooting Continuous mode, or Burst mode, as it's sometimes called.

In AF-C mode, the autofocus system will continue to track and "hunt" as it constantly tries to keep your subject in focus. The camera will fire whether the subject is in focus or not.

Don't let that deter you, though. It's not uncommon for the camera to miss a shot or two within a burst, but depending on the subject, it's usually able to reacquire the lock and keep going. Keep in mind, how well the camera acquires and retains proper focus is largely determined by which model you have. (I cover this topic even more in-depth in the next section, [Shooting Fast Action](#).)

- **M stands for Manual Focus.** When you flip the switch to M, you put the camera into manual focus. Turn the focus ring on your lens to achieve focus.

Note: These are the default settings, although you can customize the behavior and parameter settings for your AF-S and AF-C Settings in both [RELEASE/FOCUS PRIORITY](#) and the [SHUTTER AE/AF](#) Menu option. On the RED/BLUE MENU cameras, you'll find these customizations under AUTOFOCUS SETTINGS in the **RED MENUS**.

## **\*\*MODELS THAT DON'T HAVE AN AF-SELECTOR SWITCH\*\***

Some models, including X-S10, X-E4 and the new X-H models don't have an AF switch. The X-H2 and X-H2H have a Fn button in that location instead, with the default assignment set to [Focus Mode](#). Press and navigate via the selector to cycle through S, AF-S and AF-C.

For the other models, you need to change your [Focus Mode](#) either in the AF/MF Menu, the Q menu, or assign a Fn button to this command.

## **MANUAL FOCUS AND MANUAL FOCUS OVERRIDE**

All Fuji cameras can be focused manually. Simply switch the Focus Mode Selector on the front of the camera to M and rotate the focus ring on the lens barrel. To help you determine whether your subject is in focus, you also have a set of [MF Assist](#) tools which help you achieve focus more quickly and accurately, much like the fresnel and split screens did back in the days of film cameras.

There's also an extremely useful setting called [AF+MF](#), which lets you perform manual focus override. This can be helpful when the autofocus gets close or confused, due to busy subject matter surrounding your main subject, or if there's not enough contrast for the sensors to determine focus.

Note, if you're using one of the three "clutch" lenses, (14mm f/2.8, 16mm f/1.4 and 23mm f/1.4) you'll need to pull the focus ring back in order to allow for manual focusing. With most cameras, the camera will still perform autofocus even with the ring pulled back.

This is further enhanced by the [FOCUS CHECK](#) option, which allows the cameras to automatically zoom in whenever you turn the manual focus dial.

In addition, those three wide angle clutch lenses also have Depth of Field scales printed right on the top of the lens barrel. (Pull the focus ring back to reveal). This

makes them ideal landscape lenses and allows you to quickly make relatively precise DOF assessments and adjust your focus for Hyperfocal Distance without having to use one of those DOF mobile apps.

Use them in conjunction with the camera's [DEPTH OF FIELD SCALE](#) menu item for even more accurate focus assessments.

## BACK BUTTON FOCUS

Personally, I'm not a back button focus guy. I just don't see the advantage of this method. Either that, or I've just been doing it the other way for so long. However, I know that there are many photographers who prefer to use back button focus, so if you're one of those people, rest assured, the Fuji engineers have your back. At least with most cameras.

There are two different ways you can achieve back button focus on the FUJIFILM cameras. Both methods work with the newer MY MENU cameras, like the X-T3.

**METHOD 1:** The first way is to assign your AF-L/AF-ON button (or any Fn button you wish) to the AF-ON setting. This activates focus as soon as you press the button. (Press and hold DISP/BACK to bring up the Fn Button settings page.)

You'll also want to disable autofocus from the shutter button. In the BUTTON/DIAL SETTINGS Menu, look for [SHUTTER AE/AF](#), and select OFF for either AF-S or AF-C, or both. This will keep the shutter button from focusing when pressed halfway.

With this configuration, you can activate focus with your selected Fn button and use the shutter button to lock your exposure and take the picture.

**METHOD 2:** The other way to achieve back button focus is to go into the [AF+MF Menu](#) and enable [Instant AF Settings](#) to either AF-S or AF-C. Then assign your AF-L button to either AF-ON, AF LOCK ONLY or AF/AE LOCK. Now, if you're in Manual focus mode, you can activate the autofocus by pressing the AF-L/AF-ON button.

This is a workaround for decoupling focus from the shutter button. By putting your camera into Manual focus, your shutter button won't perform focus operations, but the AF-L button will. Since SHUTTER AF is a newer feature only found on the MY MENU cameras, this is the only method you can use for back button focus on RED/BLUE menu cameras, like the X-T1. Most early models don't even have this option.

# VIDEO SHOOTING

Every X Series camera will shoot HD video, and all of the models from the X-Pro 2 on will shoot 4K. The 4<sup>th</sup> and 5<sup>th</sup> generation X Series models can capture 10-bit color (4:2:2), which gives improved clarity and brilliance to your videos, although they can only export 4:2:2 to HDMI. Movies recorded to a memory card are saved at 4:2:0.

To record video, set the DRIVE control/dial to MOVIE mode, and simply press the shutter button to start and stop. Some models also have a dedicated MOVIE REC button, or a Fn button that can be set to MOVIE RECORDING RELEASE, which you can press anytime to start and stop, even when the camera is not set to MOVIE mode.

The X-T4 and X-T5 have a dedicated STILL/MOVIE switch under the Shutter Speed Dial, which allows for an easy and seamless transition between shooting stills and video.

## The MOVIE MENU

All of the current X Series cameras have a dedicated MOVIE menu, which allows you to apply any number of camera settings separate from your regular still shooting options.

On some X Series models, X-H2S, X-H2, X-T4, X-E4 and X-S10, **the MOVIE Menu is separate, and it's only accessible when you put the camera's drive control into MOVIE mode.** This helps keep things a little cleaner, as these models all have six different menus full of "movie-specific" settings and functions you can control.

Some cameras have a menu called MOVIE SETTING, which you'll find inside the regular camera menu. This menu is where you can adjust the options for shooting movies in STILL PHOTOGRAPHY Mode, when using either that dedicated MOVIE REC button, or if you have set one of your Fn Buttons to MOVIE RECORDING RELEASE. The cameras that have this function are the X-H2, X-H2S, X-E4, X-S10 and updated X-T30II.

The X-H2 and X-H2S have a setting called MOVIE SETTING LIST, which will display all of your currently enabled movie settings.

If you have a RED/BLUE menu Fuji, MOVIE SET-UP is inside the **RED MENUS**.



# CREATIVE MOVIE SHOOTING WITH THE X SERIES

In addition to offering a host of settings to control all of your video parameters, all of the X Series camera allow you to apply any number of creative “Image Quality” settings when shooting movies. These settings include things like the Film Simulations, White Balance, Monochromatic Color, etc...

By making use of these options, you can create a wide range of looks, moods and color styles right in-camera, without having to resort to post-production in order to get the look you want, and export fully stylized videos that are ready for sharing or uploading to your favorite video service, just as if you were shooting in-camera JPEGs. You can even shoot movies in black and white, and apply tonal and color adjustments using tools like HIGHLIGHT and SHADOW TONE to your video.

Of course, if you want to do full post-production work on your videos and apply color grading and other effects, you can shoot and export your videos in F-Log, which is a very flat looking color profile that gives you most flexibility for adjustments in post. With the X-H2 and X-H2S, you can even shoot RAW video footage for output to external recording devices.

Either way, the expanded video capabilities on the X Series cameras offer everything you need to make very high quality videos and even shoot full-featured productions, like films, documentaries and music videos.

## PROFESSIONAL AUDIO OPTIONS

In addition to all the creative visual features you can utilize when shooting movies, most X Series cameras allow for expanded audio capabilities as well. You can use external microphones, and with an adapter like the [IK Multimedia iRig PRE 2](#), you can plug a high quality XLR microphone right into the camera’s mic jack. Some models even allow you to plug an external line level audio device into the mic jack, like a keyboard, mixer or even the audio output from your phone, tablet or stereo.

If you have an X-T4 or the new X-H2 and X-H2S models, you can capture immersive 2 and 4 channel audio for recording or streaming by using multichannel adapters like those made by [IK Multimedia](#) and [TASCAM](#). Again, the creative possibilities are as big as your imagination can take you!

# TIPS FOR SHOOTING FAST ACTION



Now that we covered the Focus Control settings, let's put these techniques into practice. There you are, standing out in the wilds with your camera in your hands, photographing things that aren't moving, like flowers, mountains or people standing still.

Suddenly, a flurry of motion catches your eye and you suddenly see a fantastic action scene unfold in front of you. Maybe it's a majestic eagle taking off from its perch and getting ready to fly right past you.

Maybe it's a cheetah bolting across the Serengeti. Maybe it's a mountain biker blazing right towards you along the trail. Or a bright red Formula One car about to race by at high speed. Anything. Sports. Wildlife. Your friend running along the beach. Bank robbers. Bigfoot. Or your friend on his mountain bike.

You bring your camera to your eye, press the shutter and...

... You miss the shot. Or you make one picture that's sort of ok. However, wouldn't you rather have taken multiple shots and hopefully nailed a great one?

**You can shoot fast action with any of the X Series cameras.** They all have highly advanced autofocus systems and high frame rates, but you need to configure them the right way. And you should know how to do it quickly so you won't miss those awesome shots.

**It's actually quite simple, but it requires a very specific workflow. So...**

## **FOLLOW THESE DIRECTIONS**

- **STEP 1 - AF-C:** With your left index finger, reach around to the front of the camera and **flip the AF Selector Switch from S to C**. You don't even have to look; just do it by feel. C is in the middle, so it's just one click. Just to make sure, push the bottom of the little dial towards the lens to make sure it's on S, then pull back one click to C.

This switches the camera to AF-C Mode, or Continuous Autofocus, and it's the mode used for tracking moving subjects and shooting bursts. I also recommend using Zone AF or Wide/Tracking mode.



- **STEP 2 - CH:** Now **reach up to the Drive Dial** on the top left, again with your left hand, and **switch it to CH**. This sets you up for Continuous High, which is 8 frames per second, or an optional 11 fps if you're using the X-T2 with the Vertical Booster Grip set to Boost mode.





If you don't have a Drive Dial, (X-Pro1 and X-Pro2, X100 series, X-E1/2 and X70), **look for the Drive button** on the back of the camera. To go from S to CH, press the Drive button and navigate down one click to Continuous Mode. From there, you can go back and forth between CL and CH.



There. Now you're set. With these two steps, you're ready track your subject and capture multiple shots in high speed.

**However, you may have to do a couple of other things,** depending on your current exposure mode and the current lighting conditions.

- **STEP 3 - FAST SHUTTER SPEED:** In order to shoot fast action, **you'll usually want a fast shutter speed.** (Unless you're doing slow shutter and motion blur shots). This means you'll want at least one of the following, or in some situations, both: **A wide open f/stop, or a high ISO setting.**



If you're shooting in **Aperture Priority**, simply rotate the aperture ring all the way counterclockwise to open up the aperture. This will automatically get your shutter speed as high as possible, based on your current ISO setting.

In **Shutter Priority Mode** simply turn the Shutter Speed dial to a fast speed- usually at least 1/250 sec or higher. If you're using a long lens, you'll want to go at least twice that speed.

In **Manual**, you'll have to set both shutter speed and aperture. I actually prefer [Using T Mode](#) to control my shutter. It's just faster and easier.

In **Program Mode**, the camera will be doing everything, so you won't need to adjust shutter speed or aperture, though you can make a Program Shift adjustment and increase the shutter speed by rotating whichever command dial you have set for [Shutter Speed Operation](#).

- **STEP 4 - ISO:** If you're shooting in bright sunny light, then ISO 200 will work fine for any kind of action shot. However, if your light is anything less, you may have to adjust your ISO, or use AUTO ISO.

If you're using the X-T2, simply reach up and crank the ISO dial to a higher setting. If you have time to think, you can be precise and set it where you want; at least go up a whole stop or two, if not more.

If the action is unfolding in front of your eyes and you don't have time to spare, **just give it a great big spin**. Who cares how high you end up, it looks great at all settings.

Unless it's really dark or if you're shooting totally in the shadows, 800-1600 will probably be adequate. However, don't be afraid to go up to 3200 or higher if you need; the X Series cameras do great at higher ISO settings, especially the new 24MP MY MENU models.

The X-Pro2 and X100 series cameras also have a dedicated ISO dial. Do the same method. On all the other cameras, you can find ISO in the Q MENU, or else you can set ISO to one of your Fn buttons.

## RECAP

I'll go through the workflow again and just list the steps as simply as possible so you can memorize what you're supposed to do.

- 1. Set the AF Selector Switch to AF-C.** You can do this without even looking.
- 2. Set the Drive Dial to CH.**
- 3. Make sure you have the camera set to a fast shutter speed.** This may require you to:
  - 3A. Open the aperture all the way** (A Mode)
  - 3B. Set the camera to a fast shutter speed** (S or M Modes)
  - 3C. Crank the ISO up.** (Only if it's not bright and sunny.)

There you have it. In three, maybe four very simple steps, you can configure the camera for fast action shooting and be ready to capture those killer sports and wildlife images. If you know what you're doing, this switch should take no more than 5 seconds. That's the key to nailing awesome images. You need to be ready.

You should practice this method until it becomes second nature. Pick up your camera, turn it on and run through it a few times. Learn to be fast. Practice until you've got it down pat. Then get outside and shoot some great action photos!

## MORE ACTION PHOTOGRAPHY TIPS

- Don't be afraid to burn lots of frames. Film is cheap. At least that's what we used to say. Digital frames are even cheaper.
- Shoot in CH and fire off short bursts of images as the action unfolds. This will help insure that you get at least some keepers.
- Realize that you may not get every single image sharp, but this isn't your goal. It's not even the goal of pro sports shooters. The goal is to nail one or two really great shots that are sharp, but that also capture a great moment and expression. If you shoot 20 frames but only get one superb, excellent, memorable image, consider that a success.
- Fast action photography is largely lens dependent. All the newer Fuji XF lenses have faster AF motors than the first generation of Fuji glass. That said, the [XF18-135mm weather sealed kit lens](#) has a very fast AF motor. So does the [90mm f/2](#) and the [50mm f/2](#). The two long telephoto lenses, the [XF50-140mm f/2.8](#), the

[XF16-55mm f/2.8](#) and the [XF100-400mm](#) are all excellent action photography lenses.

- Learn how to [anticipate your action scenes](#). This will help you in a big way. Knowing, or having a pretty good idea of what's about to happen will go a long way towards success when shooting fast moving subjects. Seeing something move, then thinking, "*Hey, I think I'll shoot that!*" won't get it done most of the time. Knowing your gear, knowing the potential behavior of your subject matter and being ready will.

- Although we often think telephoto lenses are the ideal action lenses, don't be afraid to try shooting action with wide angle, and even normal lenses. With a shorter lens, you'll have to stand a lot closer, but you can sometimes achieve a more intimate, "*right in the middle of the action*" feel to your shot. They also allow you to shoot with smaller apertures; sometimes a wider depth of field will make a difference.

- If you have an older X Series body or one that doesn't have very fast AF, (X-Pro1, X-E1, X-E2, X70, older X100,) or if you don't have a very fast AF lens, try anticipating where your subject will be and manually prefocus on a specific point. When your subject hits that point, shoot a quick burst. This is how people shot action before the invention autofocus.

- Try using [Face Detection](#) AF. Once it locks on your person, it will track pretty fast. Sometimes this can make a huge difference, especially if they're moving around the frame. Otherwise, use Zone AF.

- PRACTICE, PRACTICE, PRACTICE. In the end, nothing will make you a better action shooter than regular practice with your camera.

- One more thing. You should practice this stuff a lot.







# BRACKETING

In addition to AE Exposure Bracketing, the X Series cameras also allow you to perform ISO, Film Simulation, White Balance or Dynamic Range Bracketing.

Here's to operate the Bracketing menu:

- **BKT SELECT:** Choose from AE BKT, ISO BKT, FILM SIMULATION BKT, WHITE BALANCE BKT, and DYNAMIC RANGE BKT.
- **AE BKT:** You can bracket up to +/- 7 Frames in 1/3 stop increments of up to +/-3 Stops.
- **ISO BKT:** You can bracket up to +/-1 stop in 1/3 stop increments.
- **FILM SIMULATION BKT:** You can choose any three film simulations to bracket. When you press the shutter, the camera will shoot one frame, process the color data and give you three separate images that match your three selections.

This is a really fun option. I often shoot the same scene using multiple film sims, and although I usually do it manually, (using a Fn button), I know photographers who use this method all the time. It's a faster and easier solution.

It's also a much better way to bracket film sims if you're shooting moving subjects, any kind of quickly changing scene or when you have an *"only one chance to nail it"* type of shot. I would encourage you to play around with this setting.



- **WHITE BALANCE BKT:** Similar to bracketing film sims, with this option, you can choose three different white balance settings. Again, nice if you're shooting JPEGs and want to try out different looks for your scene.
- **FOCUS BKT:** This setting allows you to vary the focus on each shot. The menu allows you to set the number of frames, the amount of focus change with each frame

and the time interval between frames. Once you're in this mode, you can go to [DRIVE SETTINGS](#) (or hit the Fn button assigned to this control) to adjust your parameters.

The FOCUS BKT setting is used to create a series of images with incremental focus changes, which you can then later stack together in Photoshop, Lightroom or other dedicated focus stacking software. [See this article for detailed info about how this works.](#)



# MULTIPLE EXPOSURE

The MULTIPLE EXPOSURE option found on the Drive dial/menu allows you shoot two exposures on one frame. This offers yet another fun way to explore your creativity with the camera.

This seldom-used feature can actually be quite fun. Yes, I know, “*serious photographers*” would **NEVER** use this feature, or at least admit they do, but who says photography has to be such a serious activity?

What’s wrong with having a little (or a tremendous amount of) fun? Sometimes I think my mission in life is to dispel this notion with my happy-go-lucky style. If you’ve taken a workshop with me, then you know what I’m talking about.

After all, Fuji and Fun begin with the same letter, right? Having fun with your camera is very important to your sense of well being, your happiness, and your creative process. And it can open up doors for new ideas you might never have thought of.

The options for how you can use this mode are only limited by your imagination. Your imagination is one of the most powerful organs you have in your body, and it’s the catalyst for great ideas, all of which begin with “*what if I try this...*”

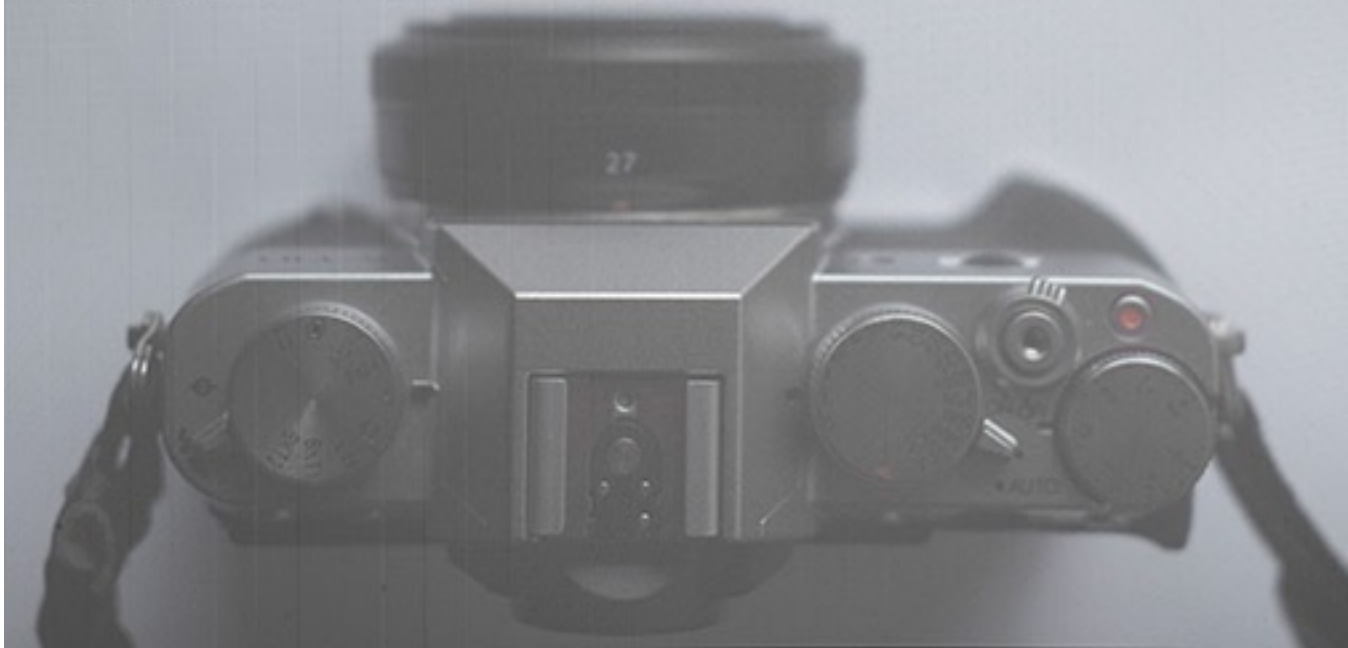
When we think of multiple exposure photography, we often think of superimposing specific elements over a dramatic background, or vice versa. A huge moon over a landscape. A toy looming a cityscape. A dramatic sky over a serene foreground. A front and side profile of your friend in the same image. Endless possibilities.

But what about the practical applications for a multiple exposure image? Using this feature, you could make superimposed images for web pages, presentations, ads, flyers and other types of documents. Capturing it right in the camera would prevent you from having to do it in Photoshop. Hmmm... where have we heard this before?



## HOW TO CREATE A MULTIPLE EXPOSURE

- **STEP 1:** Select the MULTIPLE EXPOSURE option and shoot your first (background) photo. It helps to have an idea of the type of images you want to create before capturing your first frame, although this kind of preplanning isn't necessary. Also, it helps to have open areas in your shot where you can place the subject in your second exposure.
- **STEP 2:** If you like your first frame, hit OK to take your second shot. If you'd like to redo your first shot, hit the Left button to RETRY. If you'd like to save your images as a standalone, non-multiple exposure image, press DISP/BACK.
- **STEP 3:** Compose and take your second shot. Your first image will be superimposed in the viewfinder as a visual guide, so you'll be able to see exactly how the final double exposure will appear.
- **STEP 4:** If you like your final shot, press OK to save the final shot, or select left to redo your second shot.



# PANORAMA



Now this is a feature I love on the X Series cameras and I use it all the time. The PANORAMA setting lets you shoot sweep panos of your scene in two sizes, either M, (normal) or L (extra wide.) All models except the X-Pro2 have Panorama Mode.

I've stitched panorama images together from multiple frames in Photoshop many times over the years. Fortunately, this process has become easier with each new version, however, that still requires more computer time. It's so nice to be able to do this automatically and walk away with a finished image instead of having to wait. (Are you starting to see a regular pattern here?)

Yes, I know the serious photography purists will point out that a stitched pano built from numerous full sized images will ultimately produce a higher resolution image, but how much resolution do you need? How often do you make huge, mural-sized prints of your pano images?

A 9600 x 2150 pixel image from your X-Trans sensor cameras is more than big enough to make a decent sized print. I once had a client use an image from my tiny 12MP X10 to make a 4-foot by 6-foot display print for use in a hospital lobby, and it looked fantastic. Trust me, for most use, an in-camera pano will be more than adequate.

Plus it's fun.



Of course, if you want the highest resolution pano with no distortion, then you're probably better off shooting multiple frames with a view camera like the [ACTUS MINI View Camera for FUJIFILM](#), and then stitching in Photoshop.

To shoot a panorama image using this mode on your X Series camera, simply select PANORAMA mode on your DRIVE dial/menu. Then select left to choose your ANGLE and select left to choose your DIRECTION: either Left to Right, Bottom to Top, Top to Bottom or Right to Left.

Most of us shoot Left to Right Panos. Why? Who knows. We're a left to right culture. That's how we read, and organize everything from bookshelves to your digital photo catalog in Lightroom. Here's a question, do people who read and write in Arabic shoot Right to Left panos?

So, with this in mind, why would you want or need to shoot panos in other directions? Maybe Right to Left just feels more natural for you or it works better for your chosen scene. You don't always know where your pano will end, so if there's a particular feature or subject you want to feature on the right side of your frame, then it makes sense to shoot Right to Left.

What if you want to shoot a vertical pano? You can actually do that! With the right subject matter, this can be a lot fun! Think buildings, interiors, certain landscapes and the sky.

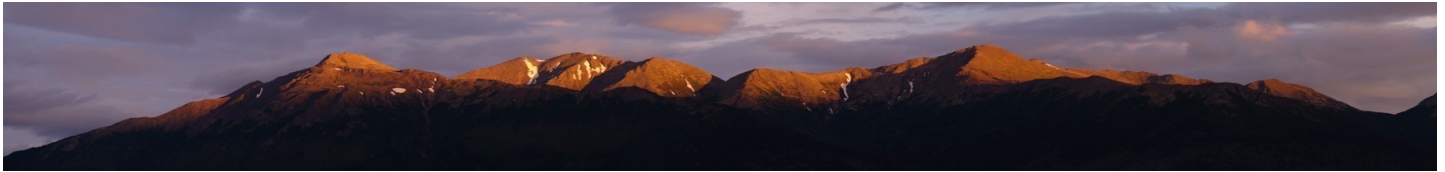
You can also shoot regular horizontal panos, using Bottom to Top direction setting. To do this, you hold the camera vertically while you sweep. This gives you a taller, and thus, higher resolution panorama image. I use this technique a lot.

Here are the images sizes you can get with each size:



**M:**6400 x 1440

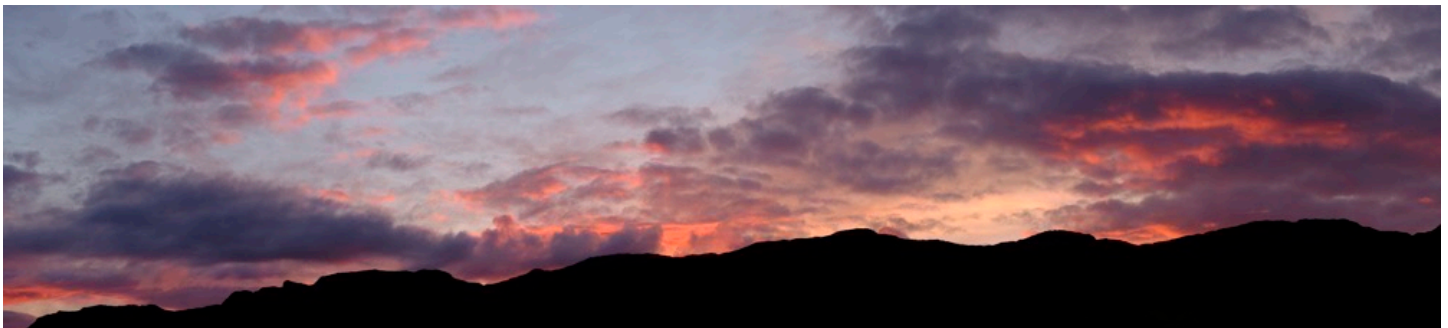
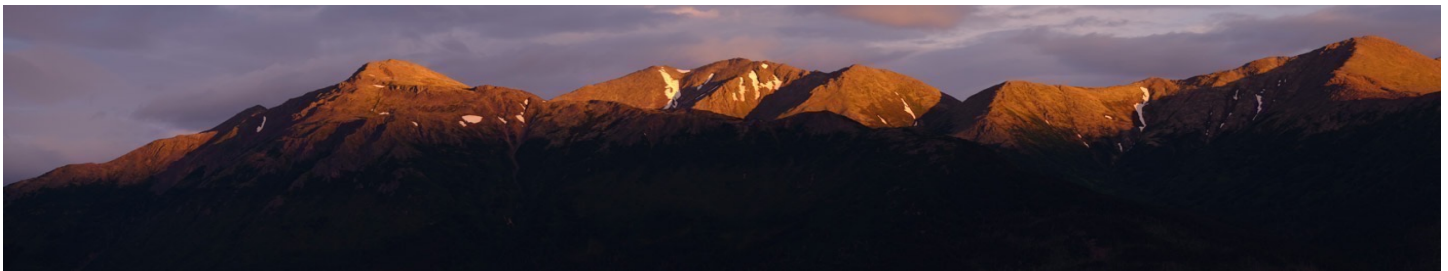
**L:** 9600 x 1440



Holding the camera vertically and shooting with the Top-Bottom/Bottom-Top Direction:

**M:** 6400 x2160

**L:** 9600 x 2160





# ADV FILTERS

Finally, we're at the funnest setting of all- The ADV FILTERS!!! These are things like MINIATURE MODE, DYNAMIC RANGE and PARTIAL COLOR- you know, things that have no real redeeming use other than to add simply joy and creativity to your photography.

And let's just get this out of the way right now: According to the manual, Fuji says that ADV stands for "Advanced," but that's clearly a mistake. It really stands for "Adventure."

As with the previous two settings, serious photography purists might want to look away and skip ahead to the next section. This section is only for people who want to goof off and have fun with their cameras. That said, if you're that serious, you probably need help. I should MAKE you read this section because it sounds like you could use a little fun in your life.

You'll find the ADV FILTER shooting option on your DRIVE dial, or by pressing the DRIVE button and scrolling down to the bottom.

Note: With most cameras, you can only shoot JPEG with the ADV FILTERS and you cannot shoot in CL or CH, it's a one-shot-only function. Also, you cannot track moving subjects. However, with a recent firmware update, you can now shoot in RAW+JPEG with the ADV filters using the X-T2 and X-Pro2.

## CHOOSING YOUR ADV FILTERS

How you select which ADV filter you'd like to use depends on which camera you're using.

- **X-T2/X-T3/X-T4/X-H1:** Turn your Drive dial to ADV. To select a filter, go to [DRIVE SETTINGS](#) in the CAMERA MENU, scroll down to ADV. FILTER SETTING. **Better yet, assign DRIVE SETTINGS to a Fn button** and press that to bring up the ADV. FILTERS menu. By default, the front Fn button on the X-T3, X-2 and X-H1 is already assigned to this option.

- **X-T1:** Hit MENU/OK. The very first thing that comes up in **RED1** is BKT/Adv. SETTING. Select this and scroll to the bottom of the menu to Adv. FILTER SELECT and

hit OK to bring up the options.

- **X-T10/X-T20/X-T30:** Turn the Drive dial to Adv.1 or Adv.2. (You can store your two favorite filters for quick selection using these two settings on your Drive dial.) To assign which filter is assigned to the 1 and 2 settings on your dial, go to Menu **RED5** and select BKT/Adv. SETTING. Scroll down to Adv. FILTER SELECT for buttons 1 and 2, and assign these two whichever two filters you want. The default selections are TOY CAMERA and MINIATURE.

- **X-H2 and X-H2S:** The X-H2 and X-H2S have a setting called FILTER SETTING inside the SHOOTING SETTINGS Menu. This is where you select your Adv. filter. Unfortunately, you cannot assign FILTER SETTING to one of the shortcut Fn controls.

- **Any Camera with a DRIVE button, X-E2 and later:** Hit the DRIVE button and scroll down to ADVANCED FILTER. Hit OK to choose your filter.

Sadly, the X-Pro1, original X100, X-E1 and the X-10/20 don't have the ADV FILTERS. However, the X10/X20/X30 all had them. (Turn to Adv on the Drive dial and hit OK to find the ADV. MODE Menu.)

Here are all of the different filter options you can choose from:

## TOY CAMERA

Retro toy camera effect. Nice, classic old-timey look with a greenish tint and a pronounced vignette. The camera calls it "*Nostalgia Effect.*"







## MINIATURE

If you follow my blog, then you know this is my favorite ADV filter!

The Miniature effect essentially blurs two thirds of the frame, based on the location of your selected focus zone. Whichever part of the frame contains your selected focus point, the other two thirds of the frame are artificially blurred by the camera.

It's called MINIATURE because it fools our eye into thinking we're seeing something very small. The blur effect create a selective, yet extremely shallow depth of field, which tricks our eyes.





When we're looking at (and photographing) things up close, we're used to seeing subjects with a very shallow depth of field. Since we never see distant subjects with a shallow depth of field in real life, this blur effect totally messes with our normal visual perceptions.

Also, we're not used to seeing things that are the same distance from the film plane with different amounts of focus. A tilt-shift lens allows you to shift focus in such a way that two things at the same distance from the camera can have different levels of sharpness and blur.



It can also create an effect whereby two points that are at different distances have the same amount of focus. Miniature mode won't do that. You can only do that with a tilt shift lens, a view camera.

All that being said, I don't use MINIATURE mode to make things look small. I'm in love with the dreamlike quality this effect produces, and I often use it to create ethereal, intimate images that evoke a mood of wonder.











I also love shooting portraits with Miniature mode, because it allows me to

accentuate the shallow depth of field, bokeh effect to the max. These portraits were all shot with the X-T2 and [50mm f/2](#) lens. Depth of field is already quite shallow here, and the special effect makes it even more dramatic.



Mostly, though, I just like to shoot Miniature Mode because it's fun.



**POP COLOR**

This mode creates high-contrast images with saturated colors. Consider it VELVIA on steroids. I've used it a few times to bump up the colors on already vibrant landscapes.



## HIGH-KEY

This gives you overall bright images with higher, softer tones and very low contrast. This mode could be great for shooting portraits or adding a dreamlike quality to already bright subject matter.

## LOW-KEY

This does just the opposite. It creates images with a pronounced dark exposure and higher contrast. I haven't used this mode very much, but looking at it again, the color palette reminds me of a certain type of look I sometimes go for when I purposefully underexposure and increase my SHADOW TONE. It gives dark, gritty, hard edge tones. I guess I should try using this mode more often.

## DYNAMIC TONE

I love the camera's description for this mode! It says *"Create fantasy effect by*



*dynamically-modulated tone reproduction.*" It's really just quick and dirty HDR. (Billy from the FUJIGUYS calls it "cooked mode.")

Not being much of an HDR guy, you'd think I would never use this mode. You'd be surprised though. With the right scene it can look really cool. Actually, it actually looks cool with every scene, but it's easy to get carried away and overdo this effect. Either way, you can have lots of fun with it.







## SOFT FOCUS

Also called “cheesy wedding photo mode.” Just kidding. This setting gives you low contrast look with a very pronounced halo of softness on everything. Great for shooting portraits of pretty girls and photos that have the classic “dreamy flashback” look you see in the movies and on TV.

## PARTIAL COLOR

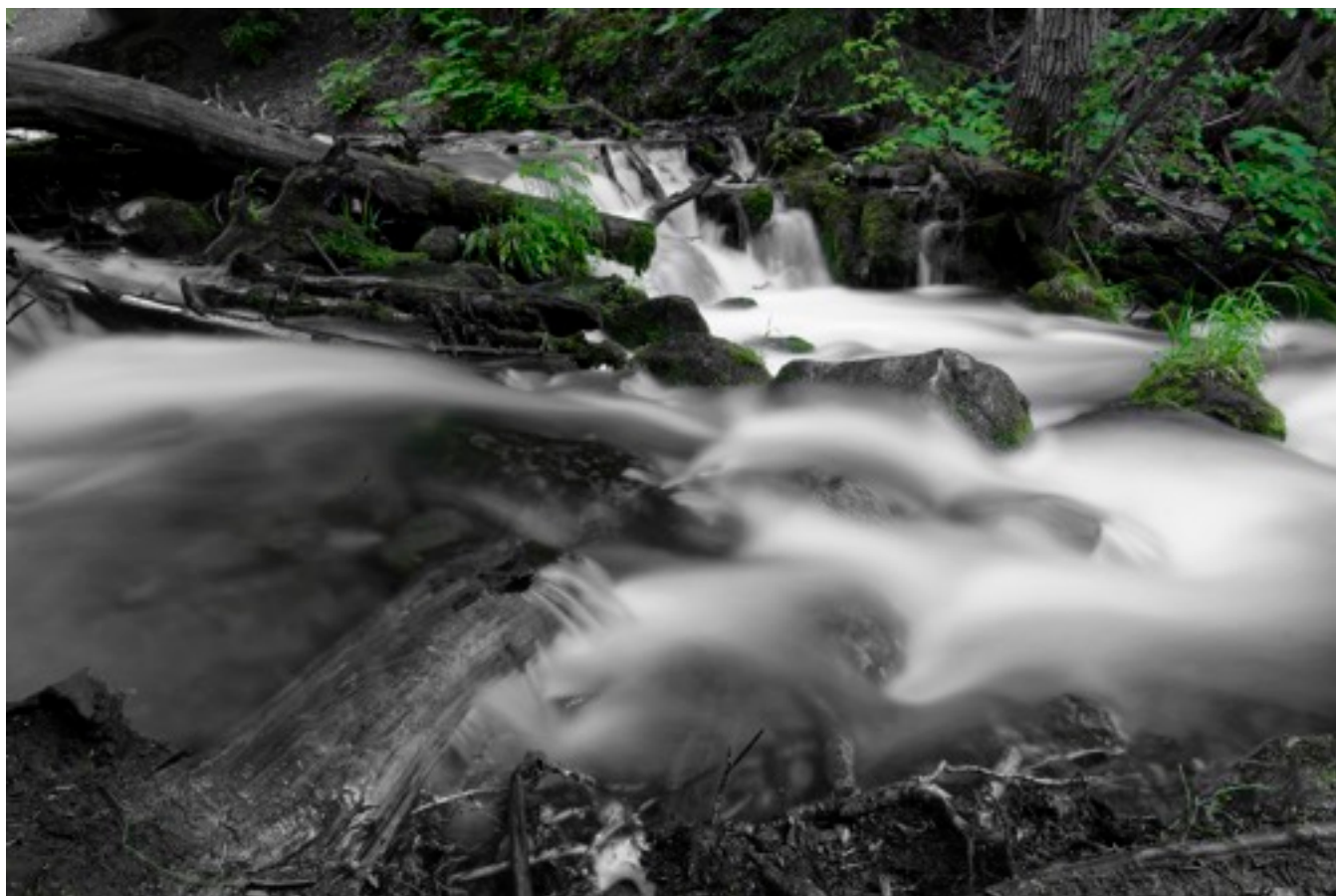
I LOVE The partial color ADV modes! They’re super fun. Basically you get a monochrome image, but anything that matches your chosen color mode is rendered in color. When you want a particular element in your scene to stand out, try using this mode and see what happens. Sometimes it just looks funny, but occasionally, you’ll get something really awesome.



Here are the color choices you get from the PARTIAL COLOR Mode:

- RED
- ORANGE
- YELLOW
- GREEN
- BLUE
- PURPLE

OK. We're done with the really fun stuff, at least for now. Serious photographers, you can resume reading from this point.









# FIRMWARE UPDATES

A large part of FUJIFILM's design philosophy revolves around the notion that when you buy a camera, it should last awhile. This is a refreshing attitude in today's digital world where so many electronic gear become obsolete within a year or two.

Even though they keep releasing new cameras with improved specs, which every business needs to do in order to remain competitive, they are very proactive about keeping their existing cameras relevant. They do this with regular firmware updates.

Since most of the features and functions found on mirrorless cameras are software based, it's possible to upgrade and improve nearly every feature inside the cameras, providing there's enough internal memory and processing power to handle it.

All of the X Series products have received multiple firmware updates, even the older ones. During the past year, every single camera and lens has received at least one update, including the X-Pro1, which was released back in 2012. The X-T2, which has been out for about a year, has seen at least two updates, which have added over 30 new features, performance upgrades and bug fixes to the camera.

A great example of their commitment to supporting older cameras is the X-E2. Released in the fall of 2013, just three months before the X-T1 was announced, the poor X-E2 got totally lost in the excitement of the X-T1, which was followed soon after by the excitement of the X-T10.

However, FUJIFILM kept supporting the X-E2 with regular firmware updates, eventually giving it the same high performance autofocus system that had become standard in the X-T bodies. This gave the X-E2 a brand new life as an affordable rangefinder camera for people who preferred a rangefinder camera over an SLR-style body. In all, the X-E2 has received 42 new features and fixes during its life.

This led to the X-E2S, which is really just an X-E2 with the updated firmware and an "S" painted on the body. Mechanically, they're the exact same camera. In other words, there is absolutely no difference between an original, four-year old X-E2 that's received all the updates and brand new X-E2S you can buy today. Pretty cool, huh?

## YOU SHOULD ALWAYS UPDATE YOUR FIRMWARE

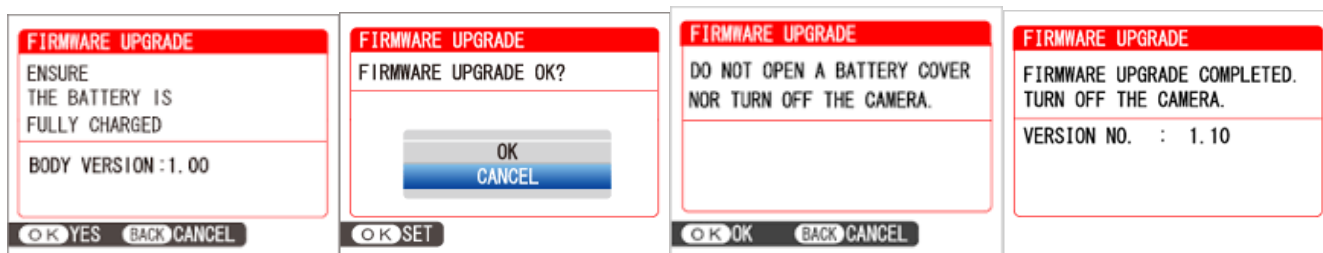
The point of all this is that you should always update the firmware for your Fuji cameras and lenses. Not only will it improve your camera's performance, it will ensure maximum compatibility and performance between the gear when new models are introduced.

[Bookmark this page to see a list of all the current Fuji firmware updates](#) for interchangeable lens cameras and X Series lenses. If you have a fixed lens camera, such as the X100 or X70, [check this page](#).

**The process for updating your firmware is very simple.** Download the firmware to your computer, copy it to an SD card, stick the card in your camera and turn the camera on while pressing and holding down the DISP/BACK button.

Then follow the prompts. In most cases, the update will take about a minute.

If you're updating a lens, download the proper firmware and perform the same steps. Just make sure you put the lens you're trying to update on the camera. Again, hold down the DISP/BACK button, turn the camera on and follow the prompts.



**UPDATING VIA BLUETOOTH:** If you have a Bluetooth equipped Fuji, (X-T4, X-T3, X-T30, X-Pro 3 and X100V, you can update your camera's firmware via Bluetooth using Fujifilm's Camera Remote App.

# TROUBLESHOOTING

I rarely have real problems with my X Series camera, but things do get a little wonky sometimes. More often than not, it's a setting that causes a conflict with some other setting. Certain settings will disable one or more functions and in some cases, will prevent the shutter from firing. At the very least, you'll get a grayed-out menu item, which leaves you stuck wondering what the heck to do.

Here are the most common settings that will disable or cause conflicts with other settings or impend cameras operation in some way. Note, this is not a complete list, so if you're having errors, check this list for possible solutions.

- **Electronic Shutter:** Disables the flash/hot shoe.
- **AF-S Mode:** Will disable Digital Split Image
- **AF-C Mode:** Will sometimes limit your options in the Face Detection Menu. Also, you cannot use [AF+MF](#) in AF-C Mode.
- **AF+MF:** You cannot use Digital Split Image while using AF+MF mode.
- **Manual Focus:** Will disable Face Detection.
- **AF ALL Mode:** If your camera is set to AF ALL mode, you will not be able to select your [Number of Focus Points](#). The camera will default to 91 AF Points.
- **AUTO SWITCH:** Flipping the AUTO switch on the X-T10, X-T20, X-E3 and X-70 automatically overrides a number of your Focus and IMAGE QUALITY settings and SHOOTING options.

**SOUND AND FLASH OFF:** This menu item used to be called SILENT MODE, and it was only found on cameras with a built-in flash, like the X-E1 and X10/20. SILENT MODE also disabled the flash, but very few people actually knew that.

This menu item was later changed to SOUND AND FLASH OFF, and it's still only found on cameras with a built-in flash, like the X-T10/20 and X70. However, it's not always where you think it would be. On the MY MENU cameras, SOUND AND FLASH OFF lives in the USER SETTINGS MENU in the SET UP MENUS. If your flash doesn't work, check this first.



## OTHER ERRORS

Your camera manual has a full troubleshooting section and lists solutions to most of the common problems that shooters face. However, there are a few obvious things not covered in the manual that are not always obvious when they're happening to you. Here are a few of those issues.

Note: If you experience any issues, **make sure the Drive dial is not set to CL/CH, MULTIPLE EXPOSURE or ADV.** I know, it sounds obvious, but in the moment, this is an easy one to miss. Turning the camera off and back on again can also solve certain errors.

- **The EVF is not working:** Make sure there's nothing blocking the little eye sensor at the bottom of the EVF. A piece of lint, a water drop or a snowflake can cover the sensor and cause it to blank out.
- **The autofocus seems to be constantly hunting:** Turn off [Pre-AF](#).





# IMAGE QUALITY

1. [Image Quality Menus](#)
2. [Image Size/Quality](#)
3. [RAW Recording](#)
4. [Select JPEG/HEIF](#)
5. [Film Simulations](#)
6. [B&W ADJ. \(Warm/Cool\)](#)
7. [Monochromatic Color](#)
8. [Grain Effect](#)
9. [Color Chrome Effect](#)
10. [Color Chrome FX Blue](#)
11. [Smooth Skin Effect](#)
12. [Dynamic Range](#)
13. [D Range Priority](#)
14. [Clarity](#)
15. [White Balance](#)
16. [Highlight/Shadow Tone](#)
17. [Tone Curve](#)
18. [Color](#)
19. [Sharpness](#)
20. [Noise Reduction](#)
21. [Clarity](#)
22. [Long Exposure NR](#)
23. [Lens Modulation Optimizer](#)
24. [Color Space](#)
25. [Pixel Mapping](#)
26. [Custom Settings](#)
27. [Auto Update Custom Setting](#)

[BACK to HOME](#)



# IMAGE QUALITY MENU

The first menu on the My Menu cameras is IMAGE QUALITY Settings. This is where you'll find all of the functions that control the look and feel of your images. There's a lot of stuff in the IMAGE QUALITY Menus; almost three pages worth, and most of it's pretty important.

The items you'll probably use most often are things like [Film Simulations](#), [Image Size/Quality](#), [RAW Recording](#), [White Balance](#) and maybe things like [Highlight/Shadow Tone](#) and [Custom Settings](#). Keep in mind that these are all things which are already assigned by default to either a Fn button or a Q Menu slot.

On Red/Blue models, you'll find most of these settings in THE **RED MENU**, as well as in the Q Menu.



# IMAGE SIZE/QUALITY

## IMAGE SIZE

The X Series cameras allow you to shoot in three different aspect ratios, and three different sizes for each. Keep in mind, these only apply to JPEG files. If you're shooting in RAW only, this menu will be grayed out and your file will be full size.

**3:2** aspect ratio has the same proportions as a frame of 35mm film.

**16:9** is similar to the display HD devices.

**1:1** is square.

I usually shoot in **L3:2**, which gives the largest dimensions. However, nothing says you have to shoot in 3:2. There are times when my creative idea and the subject matter called for shooting a widescreen 16:9 image or 1:1 square. Sometimes it's fun to experiment with different aspect ratios.

One advantage of shooting in RAW+JPEG is that you could shoot in a different aspect ratio, like 1:1, without giving up any quality. Your JPEG will be square, but you'll still have a RAW file that contains all of the pixel data from your entire sensor.

I usually recommend shooting the largest size, which is 6000 x 4000 pixels on the 24MP sensor cameras, and 4896 x 3264 on the 16MP sensor models. Memory and card space is cheap, and you'll get the highest quality.

That said, there are times when you might find it advantageous to shoot smaller sizes. If you're on a space budget and you're only showing your photos on a computer, a Small 3MB file will be perfectly adequate. At 3008 x 2000 pixels, this size will still fill most computer screens, and they're suitable for a 5x8 inch print.

However, as I said, memory is cheap and you never know what you'll do with your pictures or if you might get a one-of-a-kind image. What if you shoot a photo of Bigfoot, or Nessie? You'd want that photo to be shot at full res.



# IMAGE QUALITY

All X Series cameras can shoot in both RAW and JPEG formats. Choose **RAW** to record RAW images, **FINE** or **NORMAL** to record **JPEG** images, or select the either the **(RAW)F** or **(RAW)N** settings to save both RAW and JPEG images at the same time. This mode is typical called RAW+JPEG.

**FINE** and **(RAW)F** produce higher-quality JPEG images with lower compression, while **NORMAL** and **(RAW)N** use higher compression algorithms to increase the number of images that can be stored on your memory card, with the tradeoff being slightly lower image quality.

If you shoot JPEG, I recommend using **FINE**. This produces the highest quality images, and although they'll take up more room on the card, memory is cheap. Keep in mind, if you shoot RAW +JPEG, the FINE or NORMAL image quality setting only applies to the JPEG.

## SHOOTING JPEG vs. RAW vs. RAW+JPEG

- **JPEG:** When you shoot in JPEG mode, the camera's image processor reads all of the exposure information that was recorded by the sensor, applies all of our current IMAGE QUALITY settings and distills the file down into an actual image. This is what you see when you play back the image, and it's what gets saved to your memory card.

During the distilling process, the camera makes decisions about what data should be saved and what should be thrown away in order to create an acceptable looking image that fits into a reasonable file size. Some data is inherently lost and can never be recovered, even if you open up your JPEG image in Lightroom, Photoshop or any other software.

This usually isn't a concern, because the FUJIFILM image processors do an amazing job reading the info and producing great looking files in nearly all conditions. However, due to the way the image processor crunches the numbers in order to produce a JPEG, the camera may not be able to save all of your data when shooting scenes which contain extreme highlights and very dark blacks.

The final image may still look fine, but if you open up the file in Photoshop and try to rescue those extreme tones, you will probably end up introducing more noise,

because that info simply doesn't exist anymore.

- **RAW:** If you shoot RAW, the camera doesn't actually store an "image," rather it records all of the exposure information from the sensor as pure data to your memory card. This data also includes any camera settings you had applied at the time. This is a lot of information, which is why RAW files are so large.

At the time of shooting, the camera also processes the file and creates a medium sized JPEG preview that gets embedded with the RAW data. It does this so you can view your image. This is what you see when you look at the back of the camera. You're not actually looking at the RAW file, because that's just data.

Since a RAW file contains all of the original sensor data, you have a much better chance to rescue, recover and manipulate your tones and colors when processing your image in your photo software. In other words, a RAW file has way more latitude than a JPEG image.

Keep in mind, this doesn't automatically mean an image shot in RAW will ultimately produce a better photo. In fact, under most conditions, the Fuji JPEGs look incredible, and since they come straight out of the camera that way, you don't have to spend any time processing your photos.

Since most software imports and saves RAW files with a "flat" color profile, without your chosen film simulation, you'll actually NEED to do some processing just to get back to what they looked like on the back of the camera when you shot them.

By outsourcing your image processing to the camera, you save yourself a lot of time and end up with images, which in many cases, will probably end up looking better than if you tried to process them yourself. And your images won't take up nearly as much space on your card or your computer. (You can always use the built in [RAW CONVERSION](#) option.)

- **RAW+JPEG:** This gives you the best of both worlds. In this mode, the camera saves both the RAW file and the processed JPEG to your memory card. You'll have a JPEG file that will probably look great straight out of the camera and you'll also have the RAW file in case you want to do some more extensive processing on your image.

Another benefit of shooting in this mode is that your film simulation gets saved. As I mentioned above, when you import your RAW files into Lightroom or Photoshop,

Adobe throws away the Fuji Film Simulation and applies its own standard, flat Adobe color profile.

So, if you specifically chose one of the film sims, but you only shot RAW, you'll lose those colors when you import the file into Lightroom. You can reapply them in Lightroom/Photoshop's Camera Calibration Tab, but keep in mind, these aren't the true Fuji film sim color profiles they're Adobe's version of the Fuji film sims. They're good, but they don't match perfectly with the film sims you get in the camera.

However, if you shoot RAW+JPEG, you'll still have a JPEG which looks just like it did when you shot it, and it's ready to go if you want to post, email or share your images, or transfer them to your mobile device. And you'll have the RAW as your "digital negative."

You'll probably find that with most scenes you won't end up needing the RAW file anyway. They'll most likely sit there taking up space on your hard drive. If you're shooting in tricky light, though, or if you're shooting a professional job, you might be really glad you have the RAW file as insurance.

A friend of mine recently shot a wedding with her Fuji, and apparently, the bride hated the colors on all the images. Fortunately, my friend was able to go back to the RAW files and redo the colors

**Most of the time I shoot in straight JPEG mode**, but during those times when I prefer to have a RAW file, **I'll always shoot in RAW+JPEG instead of RAW only.**

# RAW RECORDING

On all new and recent models, you have two options for capturing RAW files. The default setting is **UNCOMPRESSED**, which gives you the RAW file with no compression.

**LOSSLESS COMPRESSED** stores the RAW files with a reversible compression algorithm which gives you a much smaller file with no loss in quality.

Uncompressed files are very large and take up much more room on your card. For example, an uncompressed RAW file from the X-T2 is about 50MB. To compare, a Lossless Compressed file is around 25-35MB in size.

So if Lossless Compressed produces no loss in quality and saves you card space, why do they include an Uncompressed option in the menu? Because a very small number of overly serious pixel peepers who have convinced themselves that it makes a difference would complain and probably not buy the camera if it didn't have this option.

For everyone else, I recommend you set your camera to **LOSSLESS COMPRESSED** and forget about it.

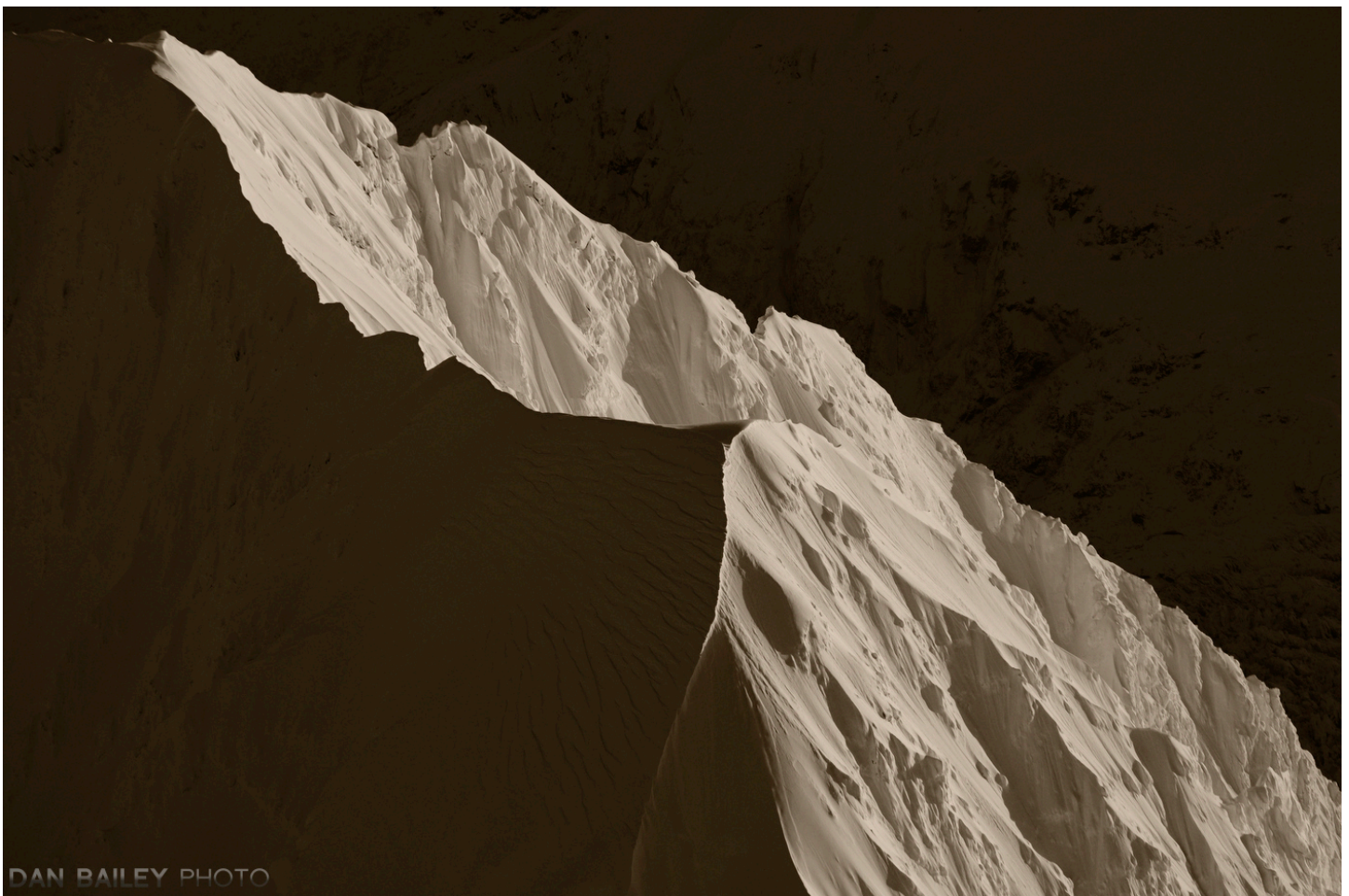




# SELECT JPEG/HEIF

The 5<sup>th</sup> generation models allow you to choose whether your pictures are saved as JPEG or HEIF format images. **JPEG** has long been the industry standard, and it's still used for ADV. Filter Effect pictures, Panorama and photos created in HDR mode.

**HEIF** is the format that's used by your smartphone. It has excellent compression, quality, and smaller file sizes, but it does have limited options for viewing and sharing. Fortunately, these cameras also have a [HEIF To JPEG/TIFF Conversion](#) option in the Playback Menu.



# FILM SIMULATIONS

When designing the X Series, the Fuji engineers decided to incorporate the looks of some of their older films right into the cameras. This was a brilliant move, because if there's one thing that Fuji knows best, it's color; they have an 80+ year history surrounding film and color imaging.

Ask any photographer who has used Fuji Photo Film why they shot it, and they'll tell you it's because of the colors. In short, no one does color like Fuji, which is why this is such an integral feature on the cameras.

I'd even go so far and say that the Fuji Film Simulations are the lifeblood of the X Series cameras. This wonderful collection of six ultra-classic color palettes, and four monochrome styles, (and the new ACROS sim, which comes inside the X-T2, X-Pro2, X100F and X-T20), give you some of the most iconic looks in the history of photography.

Developed over decades and culled to perfection for the X Series, these built-in color presets offer you a diverse and dynamic set of tones with which to craft your artistry.

You should know that **whenever you're shooting on a Fuji camera, you're always using one of the film simulations**. There isn't an option to turn them off. The idea behind the film sims is the same as if you were shooting film.

If you're shooting JPEG, then what you get is what you get. Just like it would be if you had shot a piece of actual film, the image processor fixes that specific color palette onto your file, only it's done by the image processor instead of through chemistry. Even if you're shooting RAW, the corresponding film sim is tagged onto the file, even if your software tosses it on import, which is what Lightroom does. ([You can get it back with this plugin.](#))

Before snapping away, gauge your subject matter and **think about how you want the photo to look**.

Again, what are you going for? Bold and beautiful, subtle and subdued? Rich and powerful, careful and contemplative? Clean and crisp, garish and gritty? You've got it all right there at your fingertips, from the rich drama of VELVIA and the wonderful skin

tones of ASTIA, to the soft, muted colors of ProNeg Low, and the classic journalistic tones of Classic Chrome, as well as a fantastic selection of black and whites modes!

Forget about shooting “flat” which is a common technique for shooting RAW. **Shoot like you want it to look.** Pick a color and run with it. Bring your creativity into the mix right then and there. **Make sure you set your Film Simulation control to one of the Function Buttons so you can access it quickly,** and then experiment.

If you’re shooting quick scenes or if you can’t decide which one you like best, you can always [bracket your film simulations](#). This lets you pick three. It’s up to you. Maybe go one bold, one slightly subdued look and one black and white. Or whatever.

Here’s a detailed rundown of each of the film simulations and what kinds of subjects I typically use them for. However, don’t just rely on my recommendations, **I strongly encourage you to play around** with them.

**Get to know the film sims intimately.** Commit them to memory and make them an integral part of your own shooting experience.



## PROVIA/STANDARD

PROVIA is the default setting. Based on the professional ISO 100 slide film, PROVIA offers a great balance of tonality with average contrast and good color reproduction that's not overly saturated. It's very well suited to a wide range of subject matter. It's the Jack-of-All Film Sims and it will handle just about any kind of light and subject.





## VELVIA/VIVID

In 1991, Fuji Photo Film as they used to be called, unveiled an ISO 50 color reversal (slide) film that shook the world of photo imaging with its wonderfully rich color, highly saturated color palette and inky black shadows. Outdoor photographers loved it and seemingly overnight, VELVIA quickly became the favorite film of landscape, nature, travel and adventure shooters everywhere.



A contraction of the words "Velvet Media," VELVIA stands for vivid. It was my favorite slide film and it's my favorite film simulation because it delivers colors that are larger than life. It's not always accurate or nor is it *true to life*, but for general outdoor photography, it delivers the intended emotion and confidence of your scenes with a bang.

In fact, when designing the original VELVIA color profile, the Fuji color engineers actually added a bit of magenta to the blue tones, which added additional depth and flavor to blue skies in order to make them more "memorable".



The human brain often remembers events, interactions and colors as being more “enhanced” than they really were in real life. That’s just how we work. In fact, if we were to look at a truly accurate photo of a memorable scene, we would think it’s “missing something.” VELVIA plays on this psychological aspect of human memory and helps the photographer to create image that plays strong in the memory of our viewers.







If you love bold colors and rich shadows, then VELVIA is the film sim for you, at least on bright sunny days. Under these conditions, it can't be beat, and it's ideal for just about any kind of outdoor or nature scene with vibrant blue skies, glorious green grass or foliage, and rich red and orange flowers, backpacks, tents, bicycles, jackets... you name it.







However, for as good as it is in the sunshine, VELVIA often looks horrible under overcast skies. It has too much tonality and contrast to handle cloudy skies and dark landscapes. It also doesn't do well with darker skin tones.



## ASTIA/SOFT

ASTIA has a similar color palette to PROVIA, with slightly lower tonality. Based on Fuji's professional ISO100 color reversal portrait and fashion film, ASTIA does great with skin tones and clothing, which makes it ideal for photographing people outside under natural light. That said, it looks great on any kind of subject, inside and out, because it has great color that doesn't block up when the contrast of your scene increases.



For this reason, ASTIA is my preferred film sim on cloudy days when VELVIA is too contrasty. It's one of my favorite film sims, and I find it incredibly useful for a variety of subject matter and lighting conditions.

Don't be misled by the word "SOFT" in the title. While ASTIA is designed to soften skin tones slightly, it actually adds a slight degree of hardness to shadow tones in order to counter that softness and make your photos appear nice and sharp.





# CLASSIC CHROME

Although the Fuji people can't officially call it as such, Classic Chrome was designed to emulate Kodachrome, the most classic of all film stocks. With the lowest saturation of any of the other film sims, Classic Chrome produces softer colors and gives a wonderful muted look to your images.

At first, Classic Chrome might seem a bit boring, especially when compared to VELVIA, but when you realize what it's doing, you'll find that it almost produces a very pleasing, almost monochromatic look, but in color.



The tonality of Classic Chrome is interesting, it's relatively soft in the highlights and harder in the shadows. This makes it quite usable for shooting under overcast skies. Shadows become a bit more rich, but your brights don't blow out so easily. You can use this to your advantage in a wide variety of situations.

When you want your story to be about the subject and not the colors, Classic Chrome is a great choice. Think photojournalism, environmental portraiture or street photography. It's even great for certain landscapes, because when you take away bright color, you force your viewer to concentrate on shape and tone and imagine the



colors that were present. In that sense, it's like VELIVA in reverse.







## PRO Neg. HI and STD.

The two PRO Neg sims are patterned after Fuji's popular NPS 160 print film, which was the go-to choice for wedding and portrait photographers. It's also the oldest film simulation in the bunch. First introduced in 2004 inside the FinePix 700 digital camera, it was created for photographers who craved a digital version of NPS 160. Think soft tones and muted colors. Again, great for photographing people. It comes in two flavors, HI and STD.

PRO Neg. HI has slightly more tonality than STD, which gives it a little more contrast. It's ideal for outside portraits or street photography.



PRO Neg. STD has the lowest tonality of any of the film sims, and it produces images with minimal contrast and soft, muted colors, but with slightly enhanced skin tones. It's designed to give the best results when photographing portraits inside under studio lighting and flash.

I actually love shooting with these two sims, and I use them quite often.





**CLASSIC Neg.**



Fuji's new CLASSIC Neg. film sim was introduced in the X-Pro 3, and it's also used in the X100V, X-S10, X-E4 and X-T4 and all 5<sup>th</sup> Gen models. Built to replicate the look of the old FUJICOLOR SUPERIA color print film introduced in the late 1990s, it's designed to give you the look of consumer color negative film that was so prevalent in the days and decades before digital photography took over.

In a sense, it's designed to look like snapshots of old.



With CLASSIC Neg., Fujifilm digs into its 85 year history with film and color, and gives us a unique, but familiar look. This new film sim taps into our color memories with a bold and unique expression that plays nicely with the already rich set of color choices we have on the X Series.

The color palette of CLASSIC Neg. is interesting. It has a similar, strong tonality to CLASSIC CHROME, but with slightly richer "Fuji-style" colors that you see in the PRO Neg. film sims. The effect is a slightly muted, but high contrast look that, again, is reminiscent of the matte finish prints that so many of us grew up on.





This gives it a very representational look, and I find it to be a highly versatile film sim. It seems to work with just about every kind of subject and it produces a very cool and timeless look that holds a great deal of style. CLASSIC Neg. is a great addition to the X100 series, and I'm sure that it will quickly become a favorite for many shooters.

I absolutely love CLASSIC Neg., and it's already one of my own favorite film sims. In my mind, the addition of CLASSIC Neg. might just be the strongest reason to upgrade.





**NOSTALGIC Neg.**



Coming over from the GFX, NOSTALGIC Neg. is the first new film simulation to be introduced in the 5<sup>th</sup> generation models. It's inspired by classic color prints and photo albums of the 1970s.

NOSTALGIC Neg. has rich colors in the shadows and a softer tonality through the midtones and highlights. With a somewhat similar palette to CLASSIC Neg., it has warmer hues, more vibrant reds, and slightly less contrast that gives you more shadow details.





# ETERNA/CINEMA

ETERNA is based on Fujifilm's motion picture film of the same name, which was first introduced in 2004. With a very muted palette, it's designed to give a "cinematic look" when shooting video. It has a very soft tonality and a specifically engineered color balance to compliment the differences in how we respond visually to film as opposed to still images.

Where photographs must deliver an entire message within a single, two dimensional, motionless space, movies and video are able to compliment the visual aspect of the story with camera and subject movements and the added dimension of sound.

For this reason, the visual impact of the space doesn't need to be so prominent like it does in an image. The same amount of color that works in a photograph might overwhelm or overshadow the other elements in a motion picture.

ETERNA delivers color with very low saturation a wide dynamic range, similar to the look of Pro Neg. STD. The low contrast levels also make it a perfect base if you intend to do further color grading on your project.

You can certainly shoot still images on ETERNA, treating it like an even softer Pro Neg. STD. It might be a good solution for portraits, editorial or when you want to present the subject with a soft look. In addition, the low tonality can work well for images printed on matte paper.





PROVIA Film Sim



ETERNA Film Sim

**ETERNA BLEACH BYPASS**



With the X-T4, Fujifilm introduced a new Film Simulation called ETERNA BLEACH BYPASS. This all new color palette creates a high-contrast look with very low color saturation. It's designed to reproduce the developing technique of skipping the bleaching step, which was sometimes used by photographers in the days of analog film, and in Nik Software's Bleach Bypass filter, found in their Color Efex collection

With its edgy, bleached look, ETERNA BLEACH BYPASS film sim adds a new level of style and cinematic drama to your photos. Its specially tuned recipe accentuates details and contrast in the darker tones, but reduces contrast and overall tonality in the lighter tones of your image. It's akin to shooting monochrome in color. In Fuji's own words, this new film simulation

*“delivers hard, serious images that—apart from being in colour—resemble black-and-white photographs.”*

Think ETERNA with increased SHADOW TONE and a decrease in the COLOR setting. Of course, the exact recipe is not that simple, but this will at least give you an idea of what it looks like and how you might try to achieve a similar look if you don't have an X-T4.

As of this writing, the only cameras to feature the new ETERNA BLEACH BYPASS Film Simulation are the X-T4, X-S10, X-E4, and the new 5<sup>th</sup> gen models







# ACROS

First introduced inside the X-Pro2, ACROS is a black and white film simulation with an exceptional level of tonality and a very complex grain structure. It requires a higher degree of processing than regular Monochrome sims, so it's only found on the "My Menu" models.

With a tonality curve that's capable of holding detail in both bright whites and dark shadows, ACROS produces an exceptional level of depth and tonal gradation across the entire image.

It also produces a wonderful, characteristic level of grain that very closely mimics actual film grain. Just like you would see in a black and white print, ACROS has more grain in the darker areas and almost none in the highlights, and it increases in strength as you move up the ISO dial.



At ISO 3200, ACROS looks incredible, with superb tonality and gorgeous, film like grain. At ISO 12800, images still hold up with a surprising amount of detail, and the grain looks just like what you'd see on a print made from Kodak T-MAX 3200.



I absolutely love ACROS. You will too. If you have a newer Fuji, definitely shoot in ACROS mode and don't be afraid to shoot it any ISO setting. I'll often shoot ISO 3200 in broad daylight, just so I can get that awesome looking grain. Remember, photography is all about representation and a little bit, or a lot of grain never hurt anyone.







(ISO 3200 cropped to 100%)

You can also use ACROS with the three color filter settings. Yellow (**Ye**) filter deepens purples and blues, the Red (**R**) filter deepens blues and greens, which increases contrast and darkens skies, making it great for shooting dramatic landscapes. The Green (**G**) filter deepens reds and browns, including skin tones, which makes it a good choice for portraits.



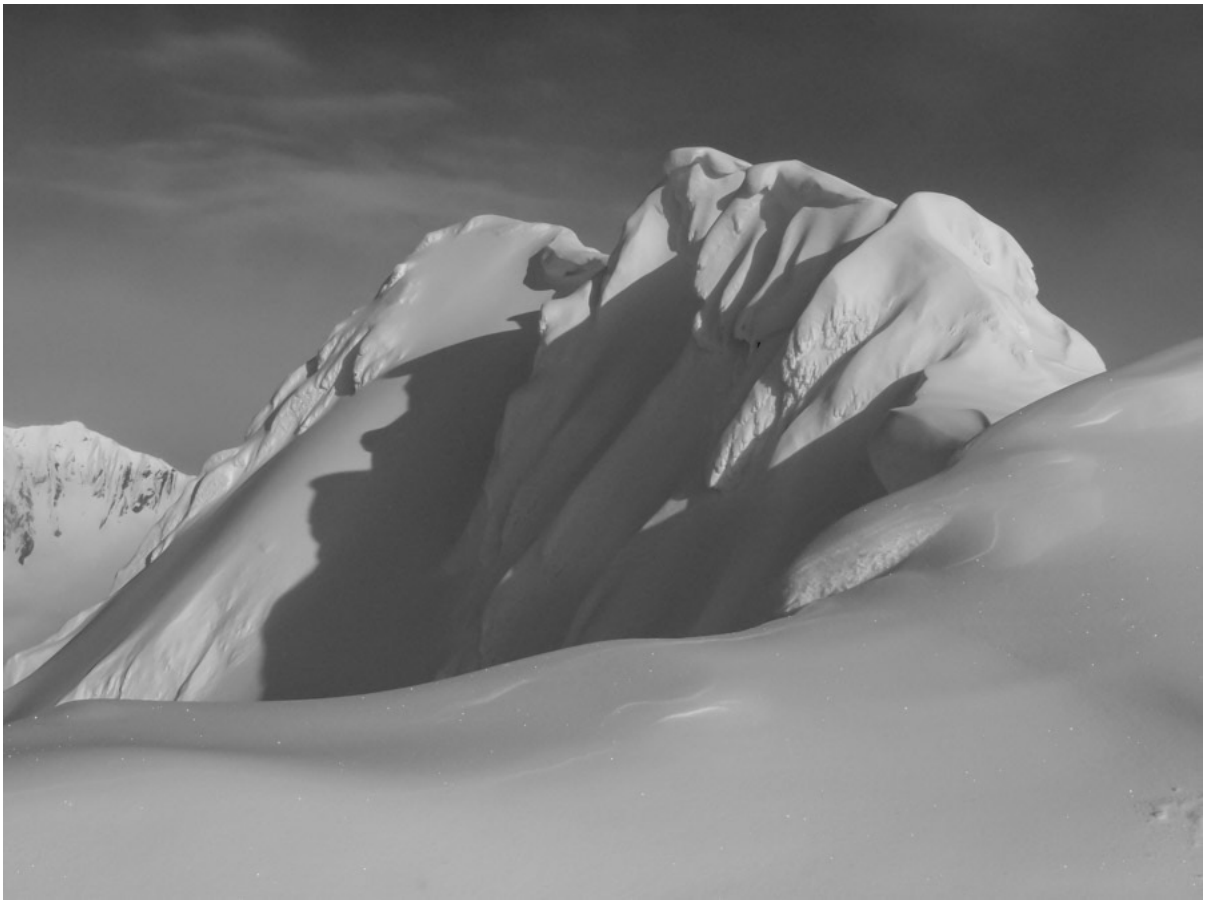
# MONOCHROME

Monochrome is the default black and white film simulation and it's found on all the X Series cameras. Before I had the X-T2, I shot in regular Monochrome all the time and I loved it. If your camera doesn't have ACROS, then this will be your choice for BW photography.

Don't worry about what you might be missing if you don't have ACROS, Monochrome is a gorgeous looking film sim and I guarantee you'll have fun with it. You can even apply the same **Ye**, **R** and **G** color filter settings.









## SEPIA

Self explanatory. Old timey. Black and white, only warmer, with a pronounced brownish yellow tint. Just like really old pictures.

You won't use it very often, but in the right situation, it can be fun.





## B&W ADJ. (WARM/COOL)

Found only on the new X-T3 and X-T30, the B&W ADJ. Menu lets you customize your black and white film simulations by adding a warm or cool tint to your ACROS or MONOCHROME photos.

By scrolling either up or down on the color bar indicator, you can adjust the amount tint applied to your images with 9 steps of adjustments in either the yellow or blue spectrum.

This is yet another way to add additional style to your images right inside the camera, without needing resort to further processing. It's another tool in your creative bag of tricks that lets you explore your creativity right there in the moment.

If you're shooting in JPEG, the new color tint will be permanently fixed into your image. With RAW, it's the same as with the other film simulations: The color profile is tagged the file, but if you open the image in external processor like Photoshop or Luminar, your software will discard the Fuji film sim profile and display the image with the default color profile. Your BW tint will be gone.

















# MONOCHROMATIC COLOR

If you have an X-PRO 3, XT-4/5, X-S10, X-H2, X-H2S or X100V, you'll have this instead of the [B&W ADJ. \(Warm/Cool\)](#) setting. It gives you even more creative control by allowing you to not only push the image towards the warm and cool side, you can also push it towards the green or magenta side as well.

Instead of a single "Up/Down" option for WARM/COOL adjustments, you now have a full "white balance" graph that lets you adjust the X-Axis (warm/cool) and Y-Axis (magenta/green) in any combination you want. This allows you to further customize your monochrome images in a much wider array of tones and color shifts, and your changes are shown as value. For examples, five clicks up and two clicks right will be shown as WC+5 MG-2.

When you see various examples together, the color shift stands out like a sore thumb. However, when you view a shifted image on its own, the effect appears much more subtle and intriguing, and it lets you add a high degree of style to photographs that you shoot in any of the Monochrome film simulations.



*ACROS with WC -6 (WARM/COOL) and MG +2 (MAGENTA GREEN)*



*ACROS with WC -6 and MG +9*



*ACROS with WC +3 and MG -6*





*ACROS with WC -7 and MG -2*



*ACROS with WC +8 and MG -7*





*ACROS with WC +3 and MG -2*



# GRAIN EFFECT

This setting adds a “film grain” effect to your photos. It has three options, **STRONG, WEAK** and **OFF**.

I realize that some (serious) photographers will hate this setting, but it can be fun. Remember how I keep saying that good photography is representational? For many of us, our memory of the symbolic nature of photography is closely tied to a certain legacy of grain that was often present in our pictures.

Even if you weren’t shooting back in the film days, you may still be intrigued by the look of old photographs, which hold a certain type of visual power when compared to the perfect, high resolution images of today.

As I said, above, **a little grain never hurt anyone**, and in some cases, it might even add a special something to the occasional photo that might appeal to you.

That’s where this setting comes in.

Ok, I know what you’re thinking? Can’t I just get grain by cranking up the ISO dial?

Yes, you can. That works, and it works exceedingly well with ACROS at high ISO settings. However, high ISO at color never looks quite as good, and the GRAIN setting will add a more defined grain overlay that looks more like film than high ISO images in color.

Also, if you apply GRAIN at low ISO settings, your details will hold up a little better than they would at very high ISO settings. For example, at ISO 200, your details will be nice and crisp, with an overlay of smooth grain, while at ISO 6400 and 12800 details won’t be quite as strong, and the grain (noise) will be a little bit mushier.

So that’s GRAIN. Use it or don’t. You might like it, you might not, but if you want it, you know where to find it.





# COLOR CHROME EFFECT

First introduced in the GFX system, COLOR CHROME EFFECT replicates the look of Fuji's *fortia* film, which was a brand of slide film from the early 2000s. *Fortia* was touted as having even more contrast and vibrancy than Velvia. Essentially, the film increased the tonality without over-saturating the colors.

You can apply COLOR CHROME EFFECT to any of the color film simulations, with either a STRONG or WEAK setting. The effect adds a bit more richness to your images, although it's very subtle. It can be hard to see when you're shooting, but when you compare images side-by-side, you can definitely see the bump in tonally.



Velvia with COLOR CHROME EFFECT - OFF



Velvia with COLOR CHROME EFFECT - STRONG

## COLOR CHROME FX BLUE



Found on the X-Pro 3, X-T4, X-S10, X100V and 5<sup>th</sup> Gen models, this adds a different take on Fuji's existing [Color Chrome Effect](#) which boosts the tones in your images to produce deeper colors and gradation in subjects that already have a high degree of saturation.

COLOR CHROME FX BLUE only boosts the blue colors of your scene, and you can apply it with a STRONG, WEAK or OFF setting. The effect is like using a polarizing filter on skies, and it also deepens shadows as well. I find that it adds a really nice touch to certain imagery, and I especially love using it with the CLASSIC Neg. sim. It's subtle, but it's there.



*COLOR CHROME FX BLUE - STRONG*





*COLOR CHROME FX BLUE - OFF*



*COLOR CHROME FX BLUE - STRONG*

# SMOOTH SKIN EFFECT

Brand new and exclusive for the X-H2, this setting allows the camera's image processing engine to create smoother skin complexions when shooting portraits in JPEG or HIEF mode. Like the GRAIN EFFECT, you have three choices: **STRONG**, **WEAK** and **OFF**.

## DYNAMIC RANGE (DR)

The Dynamic Range setting allows you to control contrast when shooting JPEGs. X Series cameras feature four settings: Auto, 100%, 200% and 400%.

The lower values increase contrast when shooting in low contrast situations, while higher values rescue certain amounts of highlight and shadow detail when photographing high-contrast scenes.

Higher values are recommended for scenes that include both sunlight and shadowed areas, high-contrast scenes like sunlight on water, brightly-lit autumn foliage, portraits taken against a blue sky, and for white objects or people wearing white; note, however, slight mottling may appear in pictures taken at higher values.

### How does this work?

It's all pixel wrangling magic done inside the camera's processor. When you shoot at the higher DR settings of 200 and 400, the camera underexposes the scene, then selectively brightens the darker regions of your image. The algorithms allow you to retain shadows without blowing out the highlights.

However due to the way this setting functions, 200% only works at ISO 400 and above and 400% only works at ISO 800 and above. In AUTO, the camera automatically selects either 100% or 200%. 400% can only be set manually.

### So, which setting should you use?

Good question. This is a setting I've never worried about on the X Series cameras. I've always kept mine on either 100%, which is essentially **OFF**, or on **AUTO** and forgotten about it. Honestly, If you were to ask me right now where mine is set, I

probably wouldn't remember. That said, it does work well, so you should experiment and see what it does.

That said, if you're happy with the way your Fuji JPEGs look, you might leave it at **AUTO**. However, if you're curious about how this works, then go ahead and try out the different settings and see how they affect your images. If you're not really into doing careful experiments on a wide variety of scenes and subject matter, then just leave it at Auto. Or on 100%. I promise you, you'll still get great images.

## D RANGE PRIORITY

This setting is designed to reduce contrast in high-contrast scenes by automatically adjusting your HIGHLIGHT/SHADOW Tone and DYNAMIC RANGE.

- **AUTO:** Contrast is automatically adjusted based on your current lighting conditions
- **STRONG:** Dramatically reduces contrast in your scene. This setting would ideally be used to control the tones in very high contrast scenes. It's only available at ISO settings 800 (640 on the X-T3/4) and higher.
- **WEAK:** Adjusts overall contrast by a small amount. You probably won't see much difference between WEAK and AUTO. It's only available at ISO settings 400 (320 on the X-T3) and higher.
- **OFF:** Contrast reduction is turned off.

Note, that when any of the D RANGE PRIORITY settings are engaged, the DYNAMIC RANGE, HIGHLIGHT TONE and SHADOW TONE menu items are automatically disabled and are grayed out with a "DR-P" symbol. If you wish to make manual controls to any of these settings, D RANGE PRIORITY will need to be set to OFF.



# WHITE BALANCE

Every light source has a different color temperature based on the Kelvin scale. 5,000 degrees K is considered white light, which is what we see in pure daylight and with electronic flash. Higher temperatures lie in the blue spectrum, while lower temps signify warmer colors. For example, the light from an orange sunset might be around 2,900 degrees Kelvin.

In addition, certain types of artificial lighting add specific color casts. Many fluorescent lights have a green cast, while sodium vapor lamps emit a distinct yellow color. Incandescent lights are orange.

We don't notice this so much with our eyes, our brains automatically make this correction. This is an evolutionary process which helps us see and determine accurate colors in our surroundings, no matter what kind of light we're in.

Digital sensors don't make this compensation, so the camera's brain takes up the task in order to make the scene look "natural." Most cameras, including the X Series models have a variety of White Balance Presets, as well as Auto WB and they also have a manual adjustment.

Here's a list of all the WB settings you'll find on your Fuji. Remember, if you're shooting JPEG, then your chosen WB will be written permanently into the file. If you're shooting RAW, the WB will be tagged, and you can always change it in your photo software.

- **AUTO WB:** The Auto setting adjusts White Balance automatically, and it usually does a great job with most scenes. This is pretty remarkable when you think about it.

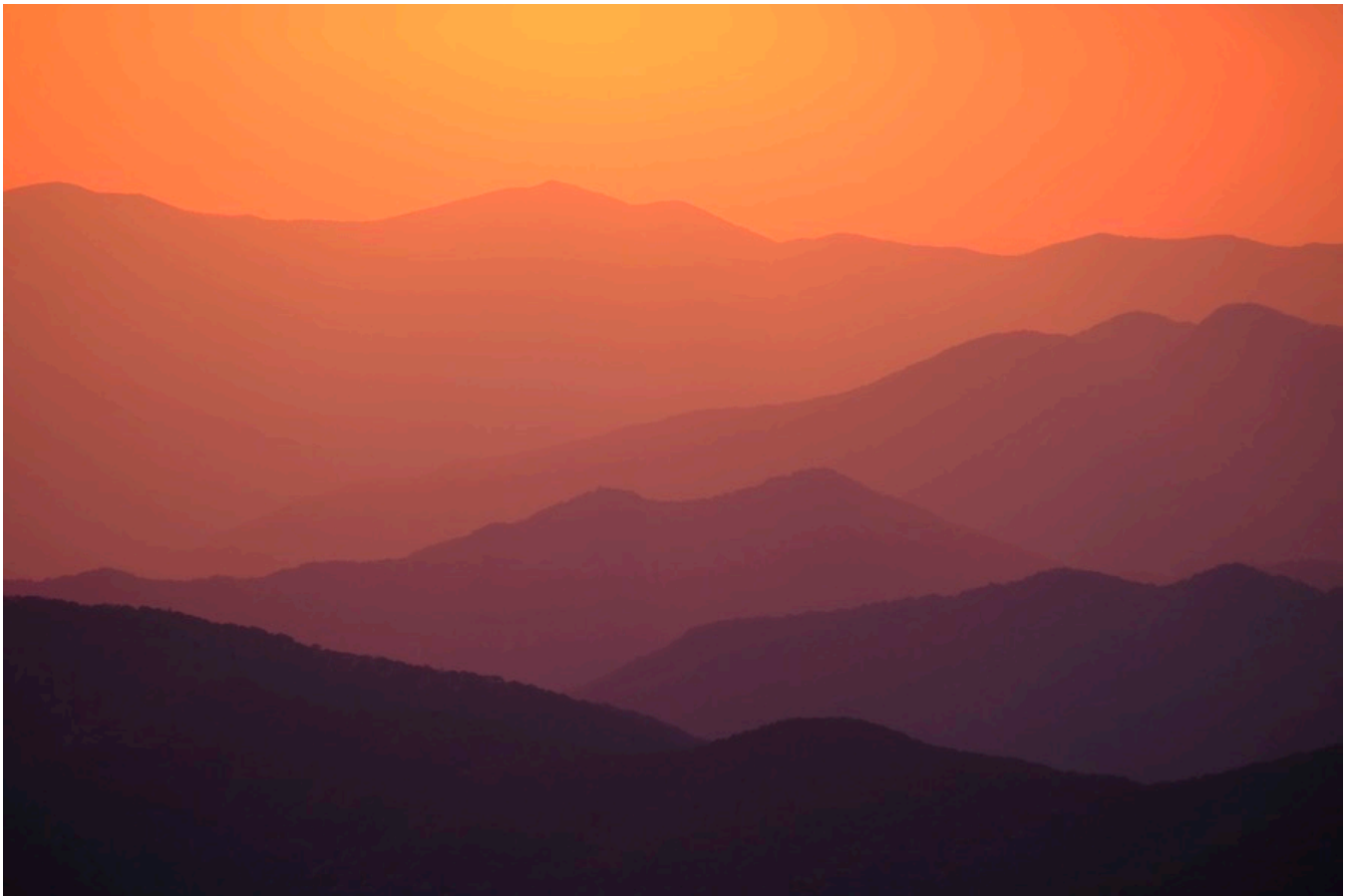
Let's say you're shooting a gorgeous sunset scene with rich orange light. Technically, the white balance of this kind of scene would be fairly warm, but if the camera corrected for this warmth, it wouldn't look right, because you want to preserve that nice orange light for your picture. **In Auto mode, the cameras WB light meter and algorithms keep the scene looking normal.**

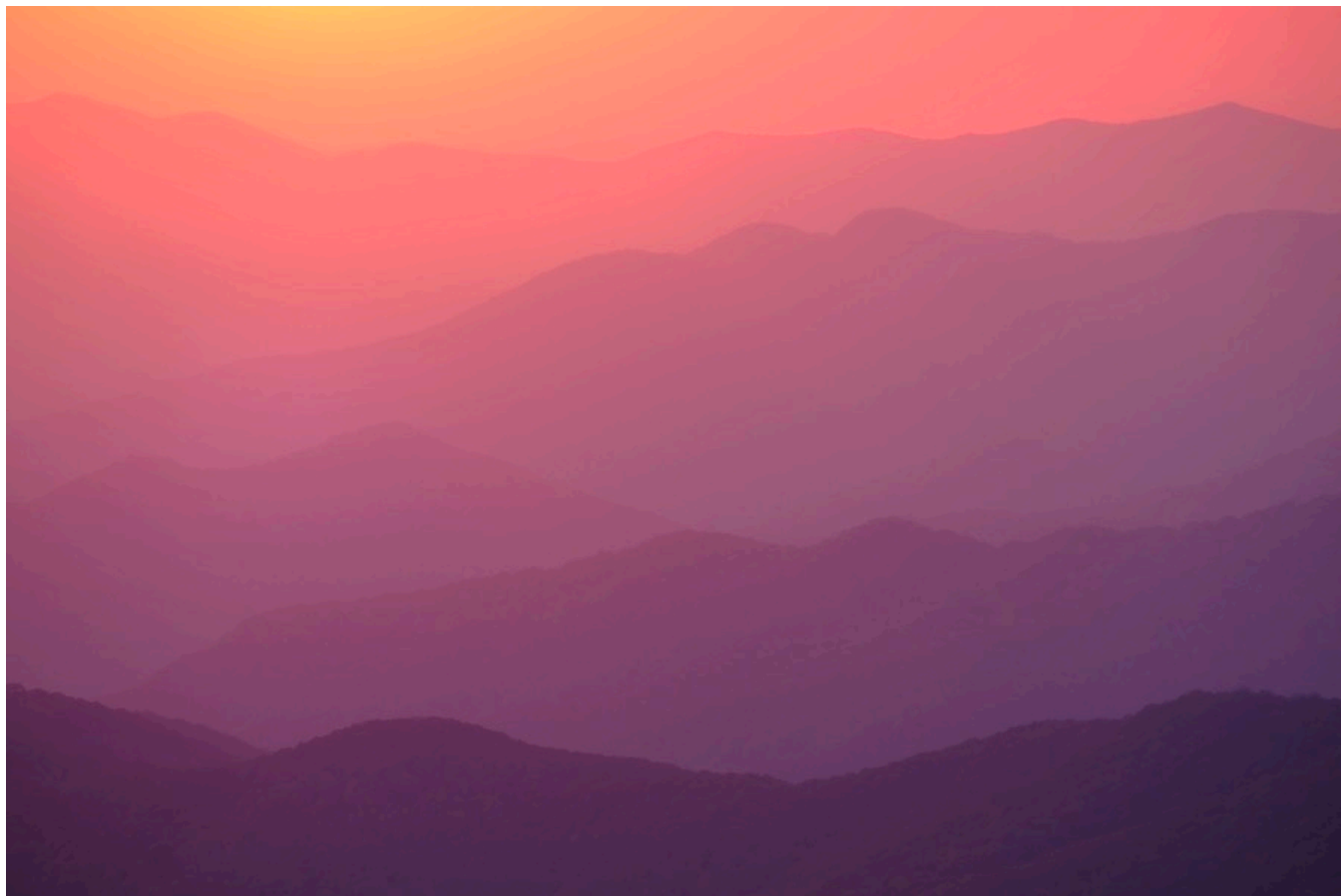
Sometimes the WB will make slight adjustments on the fly, even when the light doesn't change. I've seen this happen at sunset. If this happens, **don't worry about**

**what's *right*, worry about what looks good in your viewfinder.** I've shot sunset scenes where the WB changes with slight camera movements.

In these cases, I'll just shift the camera around until I get the look I want, then lock my exposure by pressing the shutter halfway down and recomposing.

One of my favorite images from the Great Smoky Mountains happened like this. You can see the slightly different looks in these two images below. Merely shifting the cameras slightly caused the WB to shift enough to alter the look of the shots and give the second one a very different look.





For any WB setting, including AUTO, **you can adjust the color balance by simply hitting the OK.** This will bring up the WB SHIFT color grid, where you can move the cursor with either the joystick or the THUMB PAD buttons to shift along the Red, Green and Blue axis and fine tune your scene to any color you wish.

Once you have a look you want, hit OK again.

**Note: It will keep this WB until you change it back.** If your pictures ever have a strange color cast, this usually the culprit. Check and see if you have an altered WB setting.

**I keep my cameras on Auto WB most of the time** and I'm usually happy with the results.

- **CUSTOM 1, 2 & 3:** All the X Series cameras give you the option to store three custom WB settings. Select the slot you want and hit **OK** (Or press the joystick.) This will give you the option shoot a photo and automatically set a new white balance to match the ambient light of your current scene.

After you shoot the photo, it will say **"Completed!"** You can either hit **OK** to accept



the new WB, or hit **BACK** to cancel. Instead of shooting a photo, you can press **OK** again to bring up the RGB WB SHIFT option. Set the color you want, then hit OK again and it will save to that slot.

This is a great option if you find yourself wishing the camera would render a certain scene or lighting type a little bit differently. Perhaps you find shaded scenes to be a little bit blue, or night scenes to be too green, or if you want a tiny bit of magenta in your scenes to give them extra life. (Remember what I said above? The actual color recipe of VELVIA has a little bit of extra magenta in there to help enhance the blues.) Or maybe you often shoot under a specific kind of artificial lighting; you could save a custom WB to correct for that.

You could use one of the other WB settings, like SHADE or CLOUDY WB, or you could tweak to your exact desires and save as a custom preset. I've occasionally used this option to create a slightly warmer WB for shaded scenes.

- **K MODE:** In this setting you can choose your own specific color temperature, as measured in degrees Kelvin. If your lighting is exceptionally cool, the higher degree settings add warmth to correct for the blue. Likewise, if your scene is exceptionally warm, the lower settings will cool the scene off.

Let's say you're shooting a portrait under artificial lighting and AUTO isn't quite getting there. You could use the K setting and dial in the exact color temperature in order to get the skin tones you want. Don't be afraid to get creative with this setting. If you want a warmer or cooler picture, even though it might not look accurate, you can adjust the K scale to your liking.

- **DAYLIGHT:** This setting is balanced for normal daylight scenes. I know photographers who prefer this over AUTO for shooting in bright, sunny scenes. They're usually very close. In certain types of light, AUTO will look a tiny bit different. For example, under overcast light, it adds a tiny bit of magenta.

I'd experiment with this one and see what you prefer.

- **SHADE:** Shaded scenes have a distinct blue color cast, so this setting will add yellow in order to warm up the scene to normal daylight colors. I definitely use the SHADE setting when I'm shooting in the shadows or under overcast light and AUTO isn't quite getting me there.

Here's a scene shot with AUTO WB. The second version is SHADE. Side by side, they look dramatically different, with the first having a distinct blue cast. The second one almost looks brownish.

However, if you were to view them separately, the second one would actually appear to have a much more neutral color cast. See what I mean? Color can be deceiving, especially when you compare them next to each other.



- **FLUORESCENT LIGHT 1, 2 & 3:** Fluorescent light is not standard; there are many different color casts, depending on the bulb type. This setting corrects for the three most common types of color casts that Fluorescent light typically emits.

- **INCANDESCENT:** This corrects for the overly warm cast of regular light bulbs. You would also use this setting if you're doing the Joe McNally trick where you shoot with an orange CTO gel on the flash while using Incandescent WB.

This makes the entire scene dark, blueish and moody, while the WB will cancel out the orange of the flash and make your flash-lit subjects look normal.

It's a pretty cool effect. Here's how it looks. The first one is with normal Daylight/ Auto WB, and the second is Incandescent.



You can have a lot of fun with a flash and a CTO Gel. I talk about this more in my [Going Fast With Light eBook](#), and you can read how Joe does it in his awesome book [The Hot Shoe Diaries](#).

- **UNDERWATER:** This one is self explanatory. It reduces the overly blue cast you'll typically find down in the depths. I've never used it. Mostly because I spend very little (no) time underwater with my Fuji cameras. However, if you have an underwater housing, this is the WB you'd want to use.

## WHITE BALANCE IN USE

By default, WB is assigned to the right THUMB PAD button on the X-T2 and X-Pro2. (It's right "flick" on the X-E3.) All cameras have WB in the Q Menu, and you can [assign it to a Fn Button](#).

I like having it set to a Fn button, because it allows for lighting quick adjustments in the field. As I said above, I keep my camera on AUTO WB, and if I need to make corrections, it's right there at my fingertips, or rather my thumb tip.

Remember, you can always set WB to any Fn button by holding down the DISP/



BACK button and choosing from the menu. If you don't want to spare a Fn button, then get to know where WB is located in your Q MENU. (Remember, you can customize your Q MENU by holding down the Q MENU button.)

I'll stress again, unless you're shooting a commercial job where colors have to be 100% accurate across the entire job, then there is no perfect WB. It can be whatever you want, depending on how your pictures look. If you prefer a little bit of magenta or blue in your photos, then that's your decision. If you like to warm up your shade shots more than normal, then that's fine too.

I'll say it again, photography is all about fun. There is no perfect. There is only you and your creative ideas.

Don't be afraid to experiment and even make drastic changes if you like the way it looks. You could shift your scene with a heavy yellow/orange cast to make them look like old prints. If you want to make pictures that resemble old slides, you could give them a slight green or blue shift.

When shooting a recent bike race, I decided to use a custom white balance, just to shake things up and go for a different look. Pulling up the WB menu, I hit OK and then went five or six clicks down and right on the graph, which gave me a sort of "bronze" hue to my photos.









# HIGHLIGHT / SHADOW TONE

You already know how good the X Series JPEGs look straight out of camera, right? This is one of the things we love about the Fuji cameras. You can choose your desired film simulation, adjust your exposure, check the LCD screen, and pretty much be assured that you'll get a great looking photo with wonderfully rich colors and a high degree of tonal depth. The in-camera image processor does such a killer job with most scenes, **you can get by with shooting JPEG in a wide variety of lighting conditions.**

But what about when you're shooting in really tricky light? You could shoot RAW. The Fuji RAW files contain an enormous amount of information, but shooting RAW means you have to spend time processing your photos later, at a time when you're removed from the experiences you were having when you took the original shot.

This isn't a bad thing, but there's something nice about being able to pick a film look you like, snap the photo and walk away with a great shot.

If only there was a way you could deal with tricky light when shooting in JPEG mode...

Thankfully, there is.

You could use the HIGHLIGHT and SHADOW TONE controls found in the Q MENU. (They're notated as **H TONE** and **S TONE**). Many Fuji shooters I talk to have never messed with these controls, but they're quite useful.

With Highlight and Shadow Tone, you can increase or decrease your lights and darks, just like if you had post processing capabilities built right into the camera. Instead of sliders, though, you control them with the command dial. And instead of tweaking after you have taken the shot, you can make your changes beforehand, and view the results in the viewfinder or LCD.



The adjustments with these controls go from +4 to -2, with "+" adding contrast, and "-" reducing contrast. This gives you a convenient way to rescue your really bright tones, and either open up the shadows a little bit, or make them even darker.

Here's a basic primer on how to use these controls. I talk more in depth about how I use them in the [Shooting Like Film](#) section.

## HIGHLIGHT TONE

Highlights are tricky. Unlike shadows, you don't usually want too many of them in your photos. Most of us base our entire exposure calculations on trying to preserve the highlights, because once you blow them out and send them tumbling over the right edge of the histogram, you can't get them back.

It's the same with shadows, but we usually don't care. As I often like to say, [shadows are your best friend in photography](#). Shadows represent mystery and they often works as dramatic shapes in your photos.

Conversely, blown highlights usually don't do anything for us. We hate to see large areas of blown out sky or water in a photo, that just looks yucky, so we try so hard to get rid of them, or at least wrangle them under control. Using the HIGHLIGHT TONE control allows you to tone down the super bright areas in your photo.

If your highlights are totally blown, you won't be able to rescue them completely, but you can still dial them down a bit to make them less intrusive.

With this in mid, the HIGHLIGHT TONE control probably isn't quite as useful as the SHADOW TONE control, but it can still be a valuable and viable option if you're

shooting JPEGs and are faced with an exceedingly high level of contrast.



(HIGHLIGHT TONE SET TO 0)



(HIGHLIGHT TONE SET TO -2)

## SHADOW TONE

SHADOW TONE can be used a number of ways. As you saw above, I'll often use this control to tweak my chosen film sim and adjust my contrast levels.



I'll also use it to bring up those darker tones and alleviate contrast problems. It's great for this. Here's an example:

Let's say you want to increase the level of your blacks for more drama and harder contrast. Go a couple notches in the "+" side and you'll watch your shadows get darker. What if you already have a high contrast scene and you'd like to show a little more depth and detail in the shadows? Pull back to -2 on the Shadow Tone control and you'll open up your image.



(SHADOW TONE SET TO 0)



(SHADOW TONE SET TO -2)



(SHADOW TONE SET TO +2)



(SHADOW TONE SET TO +4)

Here's another example, a forest scene shot under bright skies. This kind of scene normally presents problems with contrast and it's the kind of situation when you'd often revert to shooting RAW.

The first image was shot straight with the VELVIA film sim, which already has a higher level of contrast. For the second image, I opened up the shadows by adjusting the Shadow Tone to -2. Suddenly, I have more depth, without sacrificing any of the highlights.

It's as simple as that. And the nice thing is that there's no price to pay; you hardly see any noise or grain increase, especially at lower ISO settings. It's essentially a free bump in your shadows.

See the image examples below:





(SHADOW TONE SET TO 0)



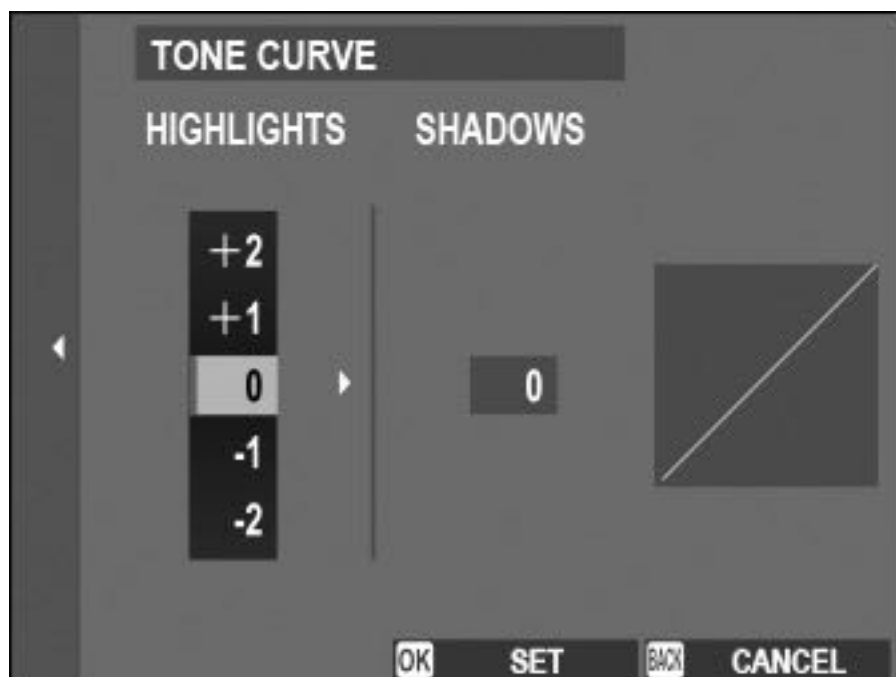
(SHADOW TONE SET TO -2)



# TONE CURVE

The most recent X Series models don't have separate Highlight/Shadow Tone menu items. Going forward, Fujifilm has combined them into one setting. Here, you can adjust your Highlights and Shadows with the standard +4 to -2 configuration in one place, and at the same time, you can see the effect of your changes on a tone curve graph, similar to what you might see when adjusting curves in Photoshop.

As with all of other models, you can still adjust either your Highlight or Shadow tones in the Q Menu as well.



# COLOR

The **COLOR** control works just like the [Highlight/Shadow Tone](#) controls, although you have two additional values (-4 to +4). Adjustments on the “plus” side increase color saturation and contrast, while “minus” adjustments do the opposite.

The nice thing is that the effects are pretty subtle; way more so than what you’ll get by going +4 on the shadows. Nothing you do here will be too obvious to anyone, and chance are, your viewer probably won’t even notice.

Again, this only works on your JPEGs; it won’t affect the look of your RAW files, except for what you see in the JPEG preview on the back of the camera.



(VELVIA with COLOR SET TO +4)

## When would you use this control?

That’s a good question and my best answer is that **it’s entirely up to you**. The way I see this setting it’s that it’s less about fine tuning your exposure and more about providing you with additional creative options. Given that it doesn’t paint in broad strokes, it can actually be a very useful effect.



I use it to “color grade” my film simulations. Sometimes I’ll bump up the vibrancy of certain scenes in order to make it pop even more, other times I’ll use it to detune the colors and create a more subtle and subdued palette. You could make your VELVIA shot even more vibrant, or you could dial down your Classic Chrome or ProNeg images and make them even softer.



(CLASSIC CHROME with COLOR SET to -2)

Perhaps you really want the VELVIA look, but your reds are just a little too hot and they’re blowing out the histogram. You could use this control to pull them back into a more earthly gamut range.

Again, you could easily make these adjustments on the computer, but the beauty of the X Series is that you can get gorgeous looking images right out of the camera. These on-board controls give you that much more flexibility for refining and creating the exact look you want based on your subject matter, creative ideas and mood in that particular moment.

# SHARPNESS

The last control in this category, SHARPNESS adjusts the overall sharpness of your JPEGs with an adjustment range of +4 to -4. Although the image processor on your Fuji will already apply some sharpening to the file, this control lets you refine how crisp and tight your images look.

Like the other three adjustments, you'll probably keep this on the default setting most of the time. You may never end up using it, but if you ever want to add an extra level of grit, contrast or softness to your pictures, you know that it's there.

Maybe you'd want to use a softer setting when shooting certain low contrast portraits. For action, street and other subjects, where you may want a slightly harder edge, you could bump up this setting a little bit, or a lot!

Again, it's all about choice. **How do you want YOUR pictures to look?** There's no right answer, and there's no right setting. Some of the best photographs in the world have technical qualities that would certainly open the flood gates of negative comments on certain camera forums.

If you capture a compelling subject in great light and freeze the right moment, who cares if you make some slight tweaks to the tones, colors or sharpness of the image. If you like the results, then that's all that matters. The reality is that nearly all great photos have been tweaked, at least a little bit.

You can save your HIGHLIGHT, SHADOW, COLOR and SHARPNESS adjustments as a preset in the [SAVE/EDIT CUSTOM SETTINGS](#) menu option. With the X-T2 and X-Pro2, you can even rename them, so if you come up with a fun combination that speaks to your style, you can give it a special designation and set it up for quick recall in the Q MENU.

# NOISE REDUCTION (HIGH ISO NR)

This control reduces digital noise in pictures taken at high ISO settings. The adjustment goes from +4 to -4, with 0 being the default. Plus gives you more noise reduction and minus gives less.

In other words, a setting of +4 will give you smoother pictures with less grain, but with a slight loss in sharpness. They'll be a tiny bit softer. A -4 setting will give you more grain, but your picture will be sharper. On the X-T4, this setting is called HIGH ISO NR.

This is totally a preference setting. It depends what you're going for. I usually just leave it at the default setting. A little grain never hurt anyone, but then again, neither does a slight softening effect.

If you're shooting brides at ISO 12800, you probably want to go a little bit plus on the NOISE REDUCTION. Conversely, if you're shooting gritty street scenes, you might want to drop into minus territory. Or leave it at 0 and forget about it.





# CLARITY

The CLARITY adjustment setting is similar to the Highlight and Shadow Tone and Color controls, it works much like the CLARITY slider in Lightroom. It's found on all of the current 4<sup>th</sup> and 5<sup>th</sup> Gen models, except for the X-T3 and X-T30.

This control lets you render your subject with added contrast and definition at the edges, or reduce and create softer looking scenes. Adjustment levels run in steps from -5 to +5. Portrait shooters will love having the option to make "minus" clarity adjustments, while street and action shooters might like to add clarity to their scenes.

Here's what the new CLARITY effect looks like in action.



*Normal - No Clarity Adj.*





*Using a -5 CLARITY setting*



*Using a +5 CLARITY setting*





CLASSIC NEG., with +2 SHADOW TONE, +4 COLOR, AND +5 CLARITY



CLASSIC NEG., with -2 SHADOW TONE, +4 COLOR, AND -3 CLARITY



# LONG EXPOSURE NR

This camera setting reduces mottling-type noise in long exposures. It works by secretly taking a second exposure with the shutter closed, then comparing the two frames and subtracting the noise on the secret frame from your original shot. This helps to optimize the noise from the real exposure.

The result is that using this setting **ON** almost always produces higher quality images. Sometimes the difference is quite dramatic.

In order for this to work, the camera takes twice as long to process your image after the shutter closes. It doesn't work for every long exposure time, depending on your camera and aperture setting, LONG EXPOSURE NR seems to kick in on exposures of about one minute and longer, although using smaller apertures like f/16 seem to kick it in with shorter exposure times.

However, no one really knows for sure. Only the Fuji engineers know exactly what's going on under the hood and they're not talking. Maybe I can try to bribe them...

So, to recap, it will take twice as long to take long exposure pictures with this setting **ON**, but your pictures will look a whole lot better. If you don't like waiting, then bring along a book or a few beers to keep you busy while you're shooting long exposure pictures.



# LENS MODULATION OPTIMIZER

Since the FUJIFILM cameras and sensors are designed in conjunction with the lenses, they're built for optimum performance when used on the X Series cameras. However, due to limitations of glass and optics, even with the highest quality lenses, there's always a certain (very small) degree of imperfections that can occur.

The LENS MODULATION OPTIMIZER uses software inside the camera to adjust and correct for certain types of diffraction and a slight loss of edge sharpness when the camera converts the RAW data into JPEG image.

**For this reason, you should always leave this setting ON.** If you shoot RAW, you can also apply or disable LMO when doing your RAW Conversions in-camera. This is an easy way to compare and see what the LMO actually does to your image. In some cases, the effects will be very subtle, while in others you'll clearly see what's being changed.

## COLOR SPACE

Color Space in photography is a measure of the range of colors present or available in a particular device or medium. Since different mediums and even different electronic devices reproduce color in unique ways, a series of standard color spaces were designed to achieve close color matching between cameras, computers, monitors and different kinds of paper.

In digital photography, the two most common color spaces are sRGB and Adobe RGB. Most electronic devices use sRGB color space, while Adobe RGB is the standard color space for commercial printing.

While Adobe RGB has a wider gamut of colors than sRGB, most displays and devices can't reproduce all of the colors it contains. For practical purposes, this means when you upload an Adobe RGB image to the web, the colors might look a little different from your original image.

If you shoot sRGB, your uploaded images will look just like the originals. However, if you print your images, you may find that you lose some of your color brilliance.

The easy answer is that if you're mostly shooting for the web and mostly display

your images on electronic devices, then go ahead and shoot in sRGB. This is the preferred setting for general use in most situations.

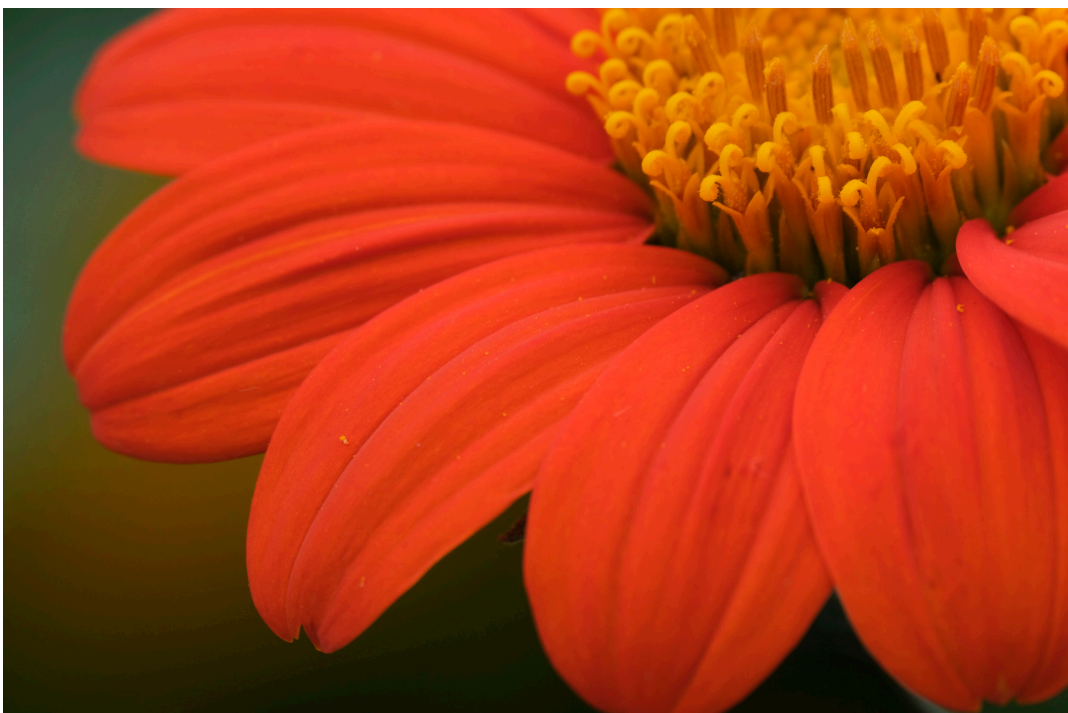
If you shoot professionally, or if you tend to print your work, then I recommend shooting in Adobe RGB. You'll have the most amount of color information and you can always convert your images to sRGB before you upload them to the web. You can even do this conversion in the [RAW CONVERSION](#) option when playing back RAW files.

## PIXEL MAPPING

The newer FUJIFILM cameras have this setting and it's used to combat the occasional "Hot Pixel." If you start to notice white spots in your viewfinder or on your picture, it could mean that one of the pixels on the sensor is malfunctioning.

Running The PIXEL MAPPING function might solve your problem. Basically, takes a dark exposure and then re-calibrates the output of each pixel.

This is pretty rare, so you may find that you never have to use it. I've never had any hot pixels on any of my Fuji cameras. However, if you find one, now you know how to fix it.





# CUSTOM SETTINGS

All X Series cameras have seven slots where you can assign and recall custom shooting presets. By default, they're called C1-7, and they can either be selected in the menu, or as the top left item in the Q MENU. On the X-H2 and X-H2S, you can also access your C1-7 settings on the camera's Mode Dial.

Whenever you turn the camera on, the camera will retain all of the settings you had previously set before you turned it off. (Except for self timer; this will always revert to OFF.)

In the Q Menu, whatever custom Setting you currently have or had selected will be called BASE. On some cameras, it will be called BASE, plus your C settings, number. i.e., BASE/C1. Note, any changes you make to your BASE setting will not affect the original custom bank you have set, or the default banks if you haven't changed any of them.

For example, if you're shooting in C2, (let's say it's set to VELVIA with no adjustments), and you adjust your Shadow Tone to +3, your current bank will now be called BASE/C2, or just BASE.

If you turn the camera off and back on again, it will default to BASE/C2 and your settings will be VELVIA with Shadow Tone +3. However, if you scroll away from BASE, you'll start at C1 again move up through the banks. When you reach C2, it will still be VELVIA, because that was your default C2 settings, however the Shadow Tone will be set to 0.

If you keep scrolling, you'll eventually get back to BASE, or BASE/C2, which will have remain unchanged from VELVIA and ST+3. So, any changes you make to the IMAGE QUALITY settings will remain set in your BASE setting until you change them again. In that way, just think of BASE as your current settings.

## EDIT/SAVE CUSTOM SETTINGS

What if you want to change your custom settings? Using this menu item, you can do exactly that and design your own custom banks for C1-7.



(MY "DARK & DIRTY" Preset" - CLASSIC CHROME, w/ S.TONE TO -2, COLOR-2, SHARPNESS-2))

To change any one of the C1-7 banks, press **MENU/OK** in shooting mode to display the shooting menu. Select the **IMAGE QUALITY SETTING** tab, then scroll down, highlight **EDIT/SAVE CUSTOM SETTING** and press **MENU/OK**.

Then, choose any one of your seven banks and either scroll right or hit **OK** again. You can now adjust any of the following settings by selecting that setting, clicking right or hitting **OK**, and then adjusting the values as desired. Here are your choices:

- **DYNAMIC RANGE**
- **FILM SIMULATION**
- **GRAIN EFFECT**
- **WHITEBALANCE**
- **HIGHLIGHT TONE**
- **SHADOW TONE**
- **COLOR**
- **SHARPNESS**
- **NOISE REDUCTION**

When you're done with each setting, hit **OK**, then go back and adjust the next one,

etc... Or, if you've already made some adjustments to your image quality settings and you'd like to save those to the bank, then hit **SAVE CURRENT SETTINGS** at the top of the menu. This will write all of your current camera settings to that bank.

Either way, when you're finished, hit **BACK** button to confirm your save and hit **OK**. I'll repeat: Make sure you hit **BACK** and select **OK**, then hit the **OK** button.



## EDIT CUSTOM NAME

It's fun to tweak the image quality settings like HIGHLIGHT and SHADOW TONE, COLOR, WHITE BALANCE, SHARPNESS and NOISE REDUCTION to suit different subject matter and shooting styles. Combining these settings with different film simulations can give you some very unique and personal looks to your imagery.

With some X Series models, you can now name your custom settings and make them even more personal, or at least more identifiable than Custom 1, Custom 2, Custom 3, Custom 4, etc... They can match your current mood, your subject matter or whatever.

Maybe you'll call them things like GRIT, AIR, DENSE, MUSH, COOL, CLASSY, BREEZE, VIBRANT, YUMMY, GORILLA, SO LONG, TAKE OUT THE TRASH, SHOW



ME THE MONEY, VSCO, BBDO or WICKED COOL PRESET.

Or perhaps you'll come up with even cooler names. You have 25 character spaces to work with, so have fun. This setting is X-T2/3/4, X-H1/2 and X-Pro2/3 and X100V only.



## AUTO UPDATE CUSTOM SETTING

The X-H2 and X-H2S let you choose whether changes to your saved custom settings are automatically applied.

**ENABLE:** Changes to Custom Setting banks **C1-7** apply automatically.

**DISABLE:** Changes you make to our custom settings do not apply automatically. You must apply them manually in the [Edit/Save Custom Setting](#) Menu.

# FOCUS MENUS & AF/MF SETTINGS

1. [Focus System](#)
2. [Focus Area](#)
3. [Focus Mode](#)
4. [AF-C Custom Settings](#)
5. [Store AF Mode by Orientation](#)
6. [Wrap Focus Point](#)
7. [AF Point Display](#)
8. [Number of Focus Points](#)
9. [Pre-AF](#)
10. [AF Illuminator](#)
11. [Face Detection](#)
12. [Subject Detection Setting](#)
13. [AF+MF](#)
14. [MF Assist](#)
15. [Focus Check](#)
16. [Interlock Spot AE & Focus Area](#)
17. [Instant AF Settings](#)
18. [Depth of Field Scale](#)
19. [Release/Focus Priority](#)
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# FOCUS SYSTEM

The FUJIFILM cameras use a specially designed hybrid autofocus that incorporates both contrast and phase detection sensors, as well as intelligent, predictive algorithms. The result is an extremely capable system that offers a high degree of speed and accuracy. They can even be set up to function with [back button focus](#).

Nearly all of the Fuji cameras acquire subjects quickly and are able to track moving subjects and shoot fast action, even at high frame rates. They also have great Face Detection systems that let you shoot portraits and scenes with people without having to move the little focus zone around.



The 4<sup>th</sup> and 5<sup>th</sup> Gen X Series cameras have incredibly fast performance. With an increased number of phase detect pixels that cover 100% of the frame, faster processors, custom AF settings and new algorithms, these cameras are now in the same category as some of the highest end DSLR cameras when it comes to autofocus.

I'm utterly amazed at how fast and accurate the focus is on the modern Fujis, even when tracking quick subjects when using long lenses. Having used many cameras in my 25+ career, I can say with confidence that the X-T4 has the best AF system of any



camera I've ever owned. It has kept up and done everything I've asked of it... and with the new sensor and [Subject Detection Setting](#), the new 5<sup>th</sup> gen cameras are even faster and more precise!

That said, even the previous generation X Series cameras outperform many comparably priced DSLRs in this area. While they aren't as fast as the newer models, these cameras are still quite fast and are perfectly suitable for shooting a wide variety of action and fast moving subjects.



The original X Series camera, like the X-Pro1, X-E1, X-E2 and X100 were built before Fujifilm really started ramping up their focus technology, so these models aren't nearly as fast when it comes to AF performance. However, with good technique and practice, you can still get good action shots with an older Fuji. The shot below is from an X70.



The X Series cameras also have some great [manual focus features](#), like [AF+MF](#), Focus Peaking, [Focus Check](#), a [Depth of Field Scale](#) and a special [Dual Display Setting](#).

On the RED/BLUE menu cameras, most of the options covered below will be found in AUTOFOCUS SETTINGS, which you'll find in the **RED MENUS**.

One final note: Autofocus is a very challenging technique to master. The Fuji cameras are defiantly capable machines, but you have to know how to use them. Regardless of what Fuji you use, check out my video tutorial, [10 Essential Autofocus Tips for Shooting Sports and Fast Action](#).

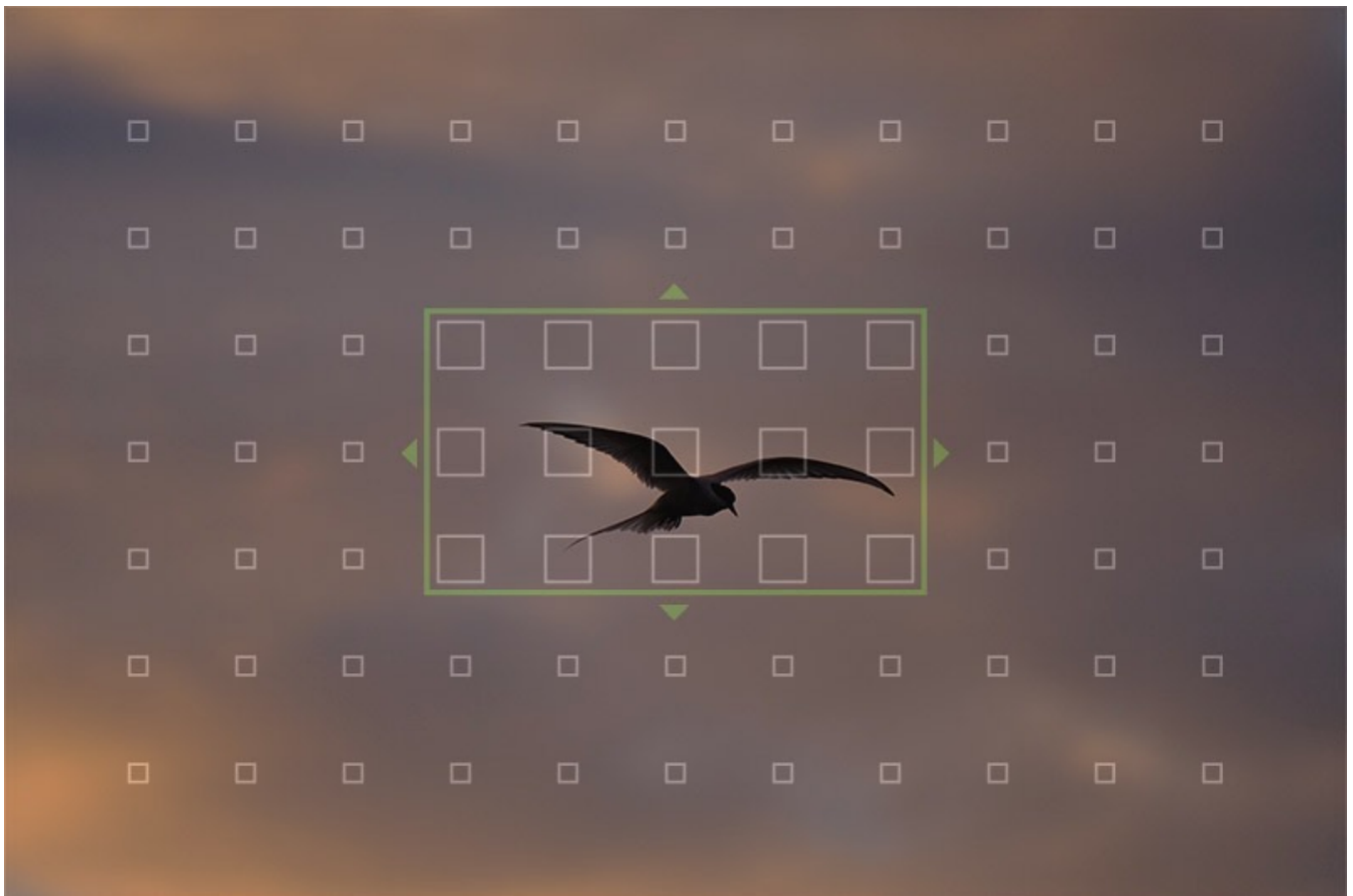
# FOCUS AREA

This item lets you select your FOCUS AREA, although you should NEVER use this menu item to select your FOCUS AREA.

Simply pressing the AF Joystick brings up the green AF box, and then you move it around the frame with the joystick as needed. (On RED/BLE models, default, FOCUS AREA is already assigned to your bottom THUMB PAD button).

If you're using autofocus, chances are you need to act quickly, so you might as well make this action as quick as possible.

The X-T5 has a brand new feature called **WRAP FOCUS POINT**. This allows you to choose whether your green focus box is bound by the edges of the frame when you move it with the AF Joystick, or if you can "wrap" it continuously from one edge to the other.



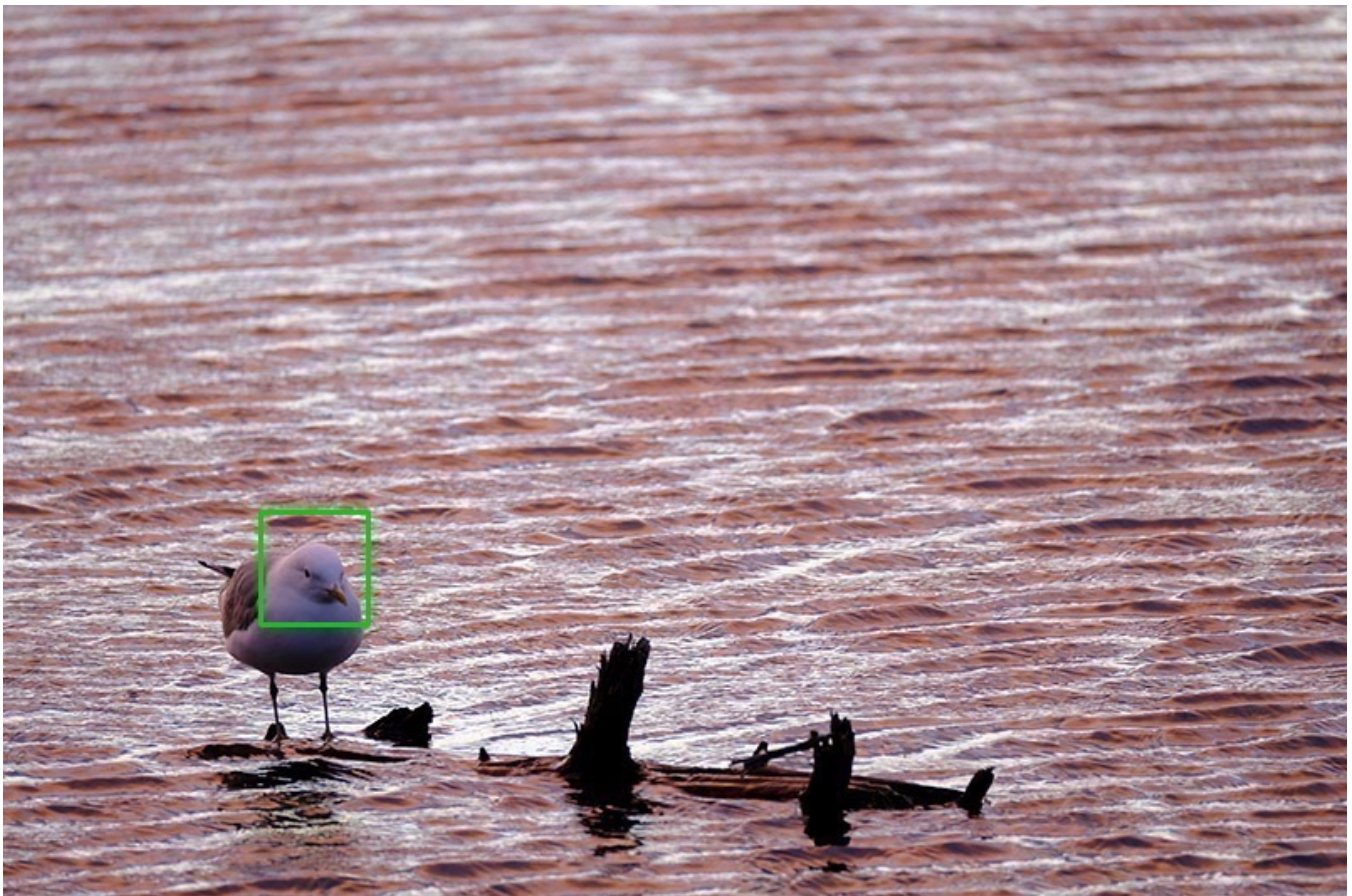


# AF MODE

The X Series cameras have three focus modes: SINGLE AF, ZONE AF and WIDE/ TRACKING. These give you three distinct tools to let you frame and track your subject with precise accurate, speed and effective ergonomics. (1<sup>st</sup> Generation X Series cameras don't have all 3 modes.) All recent models have a fourth setting called AF ALL, which allows for seamless transition between these three modes.

To select/move your focus points, activate your FOCUS AREA. (Press the "Down" button on the THUMB PAD or press the AF Joystick.) Once you see the green AF box, you can move it around using the directional buttons or the AF Joystick. With Touchscreen models, you can tap the corresponding area of the screen to select your focus point.

## SINGLE AF



SINGLE AF is simple; it's one point that you select from any one of the AF points in your viewfinder, using the focus point selector on the back of the camera.

Older models have a 77-AF point grid; with the newest models, you can choose either 425 or 117 AF points.



You can use Single AF mode in either AF-S, if you're shooting still subjects, or in AF-C, if you're tracking moving subjects that remain in a relative position within the frame, i.e., straight towards or away from you. When using it with still subjects, place the AF box on your subject and adjust the size of the box to match your subject via the rear command dial.



When shooting Single AF in AF-C mode in Continuous High, you have a 117-point Phase Detect array that covers 100% of the frame. (On older models, like X-T1, your focus grid is limited to the 3x5 area in the center of the frame.)

The beauty of SINGLE AF is that you can select a focus point in any area of the frame, even out at the extreme edges. Most DSLR cameras limit your focus selection to the central area of the frame, but the Fujis let you focus anywhere. This gives you the ultimate freedom with which to compose your imagery.

Again, when focusing, as long as you have the little green focus box showing in the viewfinder, **you change the size of the selected point via the rear command dial and the position the selected point within your frame via the directional THUMB PAD buttons, or with the AF JOYSTICK.**

Touch-screen enabled Fuji users can also select the AF point position by **tapping a specific area of the LCD screen.** This method works extremely well and once you get used to this gesture, it can be even faster than using the joystick.

I use SINGLE AF mode when I need to be very precise and ensure that the camera is focusing on the right piece of subject matter. An example would be when focusing on something relatively small inside the frame or a subject that lacks a significant amount of contrast compared to the rest of the scene.



In AF-C mode, I might use this mode if I'm sure that my subject won't move too much from side to side within the frame. However, if I'm using SINGLE AF, I'm usually using AF-S Mode.

## ZONE AF



Instead of using a single AF point, ZONE AF gives you a group of points. You can change the size and shape of the group to match the size and position of your subject matter within the frame.

Your options are a 3x3, 5x5 or a 7x7 that covers nearly 40% of the frame, which allows you to track moving subjects all the way across the frame. **(Note, in ZONE AF, you're always limited to the 117 AF Point grid; you can't use the 425 AF point option.)**

**Once you select the size of your focus zone, you can move the entire grid around the frame via the focus point selector.** The advantage of using Zone AF is that the camera will automatically choose which AF point or points to use when

focusing on your subject, even if your subject is moving. It works in both AF-S mode, for still or slowly moving subjects, and AF-C mode for subjects that move more quickly.

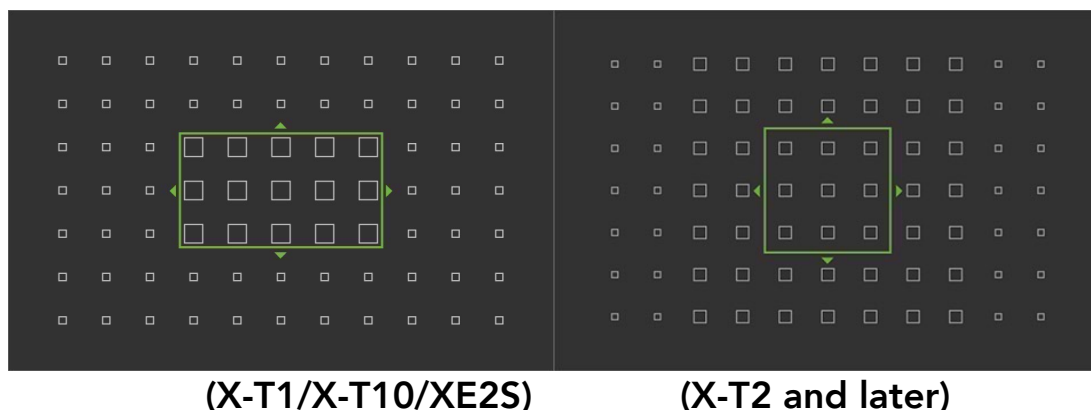
**ZONE AF is my preferred setting** and I'll use it with both AF-S and AF-C modes. With AF-S Mode, I'll use it to focus on **stationary or slowly moving subjects that are hard to pinpoint with SINGLE AF**.

In AF-C Mode, I'll use ZONE AF to track any kind of motion and subjects that move quickly around different areas of the frame. It's the ideal mode for shooting any kind of action: Birds, bikes, runners, motorcycles, skiers, golden retrievers and hyperactive children/grandchildren.



With AF-C I keep my cameras set to ZONE AF so that when I turn them on, I'm ready to shoot anything. ZONE AF is the most versatile AF mode because you don't have to be as precise when you initially select your focus point, and it will continue to track subjects as they move across different AF points through the zone.

As with SINGLE AF, when shooting in Continuous High, your zone is limited to the Phase Detect pixel grid in the central area of your viewfinder:



(X-T1/X-T10/XE2S)

(X-T2 and later)

When using ZONE AF, I'll set the size of my zone based on where is my subject in

the frame, how likely is it to move across the frame, how large is my subject, and are there other things in the frame that might be accidentally grabbed by a large zone.

## WIDE/TRACKING AF



This mode basically drops the AF system into Full Auto. It's great for complicated scenes, unpredictable subject matter or when you're shooting multiple moving subjects. If you're unsure about which focus point to set or if you'd rather not worry about AF and just shoot, Wide Tracking usually does a very good job.

Wide/Tracking works in both AF-S and AF-C mode. On Fuji cameras that have Full Auto mode, like the X-T10/20/30, X-S10 and X70, when you flip that switch, the camera automatically defaults to Wide/Tracking.

I'll use this setting when I'm confident the camera can handle my focus duties. If there are people in the frame, or if things aren't moving very fast or erratically, or if my subject is clear, unobstructed or not competing in space with other things that might detract my focus system. So, not very often, but when I want to outsource my focus duties, it's there if I need it.





## AF ALL (X-T2 and later)

All models X-T2 and later have a fourth setting called AF ALL. This setting simply lets you scroll seamlessly through all of the different sizes of your AF Point, and through all of the three main focus modes.

When you have a green focus box selected in AF ALL mode, simply turn the rear command dial and you'll see it change in size. When it reaches the last available size in that mode, the camera will automatically jump to the next AF Mode. After WIDE/TRACKING, it will switch back to SINGLE AF with the smallest point.

This is great if you're dealing with a variety of subject types, relative sizes, and movements.

Let's say you're shooting a person standing still and you've got them locked on with SINGLE AF. If they start moving, or taking up more space in the frame, you don't have to use the Fn button to switch between modes, just keep turning the rear command dial. Even though changing modes via the Fn buttons requires only two or three presses, AF All gives you that seamless transition, which makes your shooting workflow even faster.



# AF-C CUSTOM SETTINGS

With the development and introduction of the X-T2, FUJIFILM brought mirrorless cameras into the realm of performance previously ruled by DSLRs.

One of the main advancements of the camera was a fast, highly predictive 325-point autofocus system that's able to track moving subjects with a high level of speed and accuracy. With the latest models, the system is even more capable.

AF is further enhanced by the AF-C CUSTOM SETTINGS menu, which gives you five autofocus presets, as well as the ability to adjust three different AF parameters and save your own custom configuration to the 6th slot.

As an action and sports photographer, I find this to be incredibly useful tool, and one that clearly demonstrates FUJIFILM's dedication to make very high performance cameras that are suitable for handling the fastest action and sports shooting tasks.

AF-C Custom Settings are used in all of the new Fujis, although some models only contain the 5 standard presets; you can't customize and save your own configurations like you can on the higher end models.

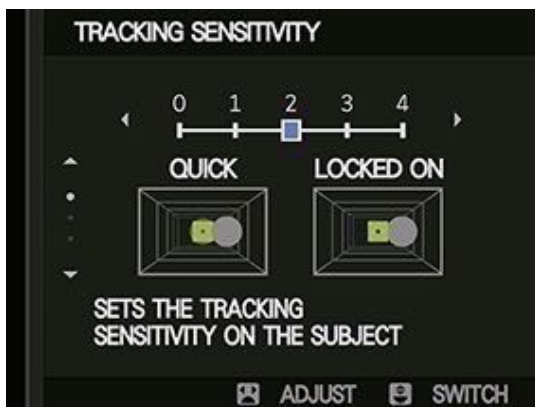
I've experimented with the AF-C Custom Settings quite a bit, and I've been highly impressed with how well the system works. Each setting has a distinct performance behavior, which helps the camera lock and stay locked onto subjects with a variety of movement types.

First a primer on how the system works. It can be a little bit confusing at first, so I'll try to explain it in straightforward terms. [Also, watch this video tutorial.](#)

## AF-C CUSTOM PARAMETERS

There are three separate AF parameters which determine how the camera behaves with regards to acquiring subjects, tracking movement across the frame and handing off the subject to the next AF zone.

- **Tracking Sensitivity**

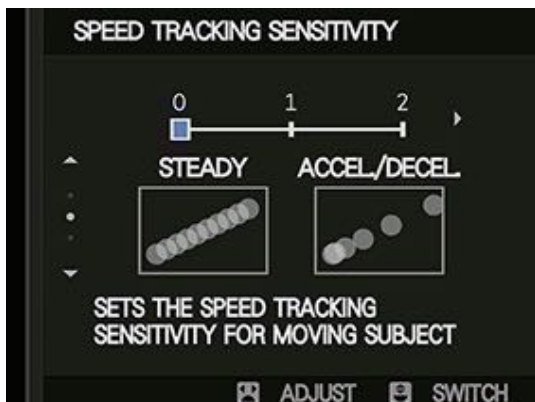


**Tracking Sensitivity determines how quickly the camera should switch to a different AF zone if the subject disappears for a brief period of time.** For example, if the subject passes behind a tree, if something else passes in front of your main subject, or if it momentarily leaves the frame.

A setting of 0 tells the camera to immediately switch to a different zone to try and reacquire the subject. Settings 1-4 progressively lengthen the time the system will remain locked on the current zone.

You might use setting 0 when the subject is moving extremely fast around the frame, and one of the higher settings when your subject disappears behind another object, but you know it will soon reappear.

- **Speed Tracking Sensitivity**



**Speed Tracking Sensitivity sets the camera's tracking characteristics based on whether the subject is moving at a constant speed or if it's changing speeds.**

This is an important parameter, because the AF tracking system weighs heavily on predictive algorithms that tell the camera where the subject is likely to appear.



In addition, there's a slight lag between when the subject is locked in focus and when you actually press the shutter, so the camera has to compensate for this.

Setting 0 is for subjects that move at a steady speed, while setting 2 is for subjects that have more erratic speeds, or are accelerating or decelerating. Setting 1 offers a balance for subjects that move with a combination of speeds. 0 might be good when shooting things like road biking and flying birds, while 2 might be useful when shooting sports like soccer, or when photographing toddlers.

## • Zone Area Switching



**Zone Area Switching is only available if you're using Zone AF and it lets you control which part of your selected focus zone should be given focusing priority.**

CENTER keeps your point of focus in the middle of the zone, where FRONT tells the camera to focus on a subject inside the zone that's closest to the camera during times when your main subject disappears from the frame.

AUTO continues to track the subject, or part of the subject you first focused on.

In shooting situations, using CENTER would be great for tracking a moving subject that temporarily passes behind other things in the frame, like another bike rider or an animal that passes behind a tree. FRONT is ideal for subjects that appear suddenly, or when you don't know exactly where they will enter the frame. AUTO is the default mode for a variety of subjects and action.

## AF-C CUSTOM PRESETS

To make the system much easier to use in real life situations, Fuji has included five AF-C Custom Presets that cover a wide array of subjects and different types of motion. Each type shows you the specific parameter settings used. You can also modify these parameters in order to create your own custom setting and store it in Bank 6.

## 1. MULTI-PURPOSE



Multi-Purpose is the default AF-C setting. With Tracking Sensitivity set in the middle, Speed Tracking at 0, and Zone Area Switching at AUTO, **this is great for a wide variety of action, especially when your subjects are moving at a constant speed.**

As shown in the example photo, you might use this for shooting races, animals that are moving at a regular rate of speed, or if there's a chance your subject might temporarily disappear.

When I first got the X-T2, I just kept it on this setting for a while until I started learning more about how the system works. It does have limitations with certain types of action, and if you find that you're having trouble tracking subjects or getting sharp focus, switch to a different mode and see if that helps.



## 2. IGNORING OBSTACLES



**Ignoring Obstacles preset is ideal when your subjects are temporarily going outside of the frame (or your selected focus zone), or when they're moving behind things like trees and other subject matter.**

With a slightly higher Tracking Sensitivity, it will wait a little bit longer before switching to a different zone. With Zone Area Switching set to CENTER, it will keep the focus set to the middle of the zone and it won't grab a stray object at the edge of



the zone.

If I'm finding that I'm not getting sharp focus on my subjects, I'll often switch to this mode. For the types of subjects I usually photograph, **I find this setting to be one of my two favorite settings.**

It keeps tracking and doesn't hand off focus too quickly to another zone, which allows you some pretty tight tolerances and creativity when it comes to retaining a good lock on your main subject, even when it's fighting for space in the frame or looking through a field of subject matter that you want to be out of focus.

I often like to place my sharp subject pretty far back in the frame behind other subject elements, and this mode helps you maintain your lock in this type of situation.

Examples might be a cyclist who's coming up behind another racer, or keeping the lock when they're in a large pack, shooting action in a tight forest, or photographing wildlife out in busy, wilderness settings. Like cheetahs.





### 3. ACCELERATING / DECELERATING SUBJECTS



With Speed Tracking Sensitivity set to 2 and Zone Area Switching set to AUTO, **this is an ideal mode when photographing subjects with erratic motion and a high degree of change in their speed.**

It will keep the point of focus on the front of the frame (closest to the camera) and use predictive algorithms that are geared towards irregular motion. This makes it an ideal choice for shooting certain types of sports and wildlife where your subject is

speeding up and slowing down on a regular basis.

I haven't used this setting much. That's not to say that it's not a great mode for shooting certain types of subjects, I just haven't found the right subjects to test it on. Fuji specifies this setting to be highly effective when using high-speed tracking with their LM lenses that use the Linear AF Motor, like the 90mm, 50-140, 100-400, 16-55, 55-200, 18-55 and 18-135, 70-300 and 150-600.



## 4. SUDDENLY APPEARING SUBJECTS



**This is my other favorite AF-C Custom Preset.** With Tracking Sensitivity at the lowest setting and Zone Area Switching to FRONT, this sets the camera up so that **it**



**can focus instantly on subject matter that enters the frame quickly.**

Focus priority is set to the closest object in the frame and the low Tracking Sensitivity allows it to immediately switch to the right zone.

**This is an extremely useful and highly effective setting for a variety of action, sports and wildlife photography.** It allows you to compose your desired scene and then quickly acquire subjects as they appear inside the frame.

If you're having a hard time acquiring and achieving a good lock on your subject matter, and it's not an "obstacle issue," try this mode. For best results, you'll want to select the AF Zone that's closest to where you think the subject will enter your frame.



## **5. ERRATICALLY MOVING SUBJECTS**



With increased Tracking Sensitivity, this keeps the camera locked onto your subject, while a Speed Tracking Sensitivity of 2 causes the AF system to use predictive algorithms that are **suited for irregularly moving subjects**.

Zone Area Switching to AUTO means that it will acquire and hold your lock right where you set it, even if it's not the closest thing to the camera, or even if it goes in and out of the focus zone.

This is obviously the best mode for shooting **highly erratic motion and sports with quickly changing speeds and directions**, like soccer, lacrosse, football. And toddlers, children and grandchildren.

I imagine this would be a good setting to use for photographing birds that fly with quick, darting motions or other wildlife that has "skittish" or hyperactive movement tendencies.



## 6. CUSTOM



The Custom Bank allows you to tweak a setting or manually adjust the three AF parameters and save them as a custom preset.

In other words, you can optimize your AF-C Custom Settings for the type of movement your subject displays and then have it ready to bring up at a moment's notice.

Let's say you like to shoot a sport or subject that's passing behind some obstacles,



and you want a slightly higher Tracking Sensitivity so that it holds focus for as long as possible. Or maybe you're shooting a wide variety of action, but you want the camera to grab subjects a little more quickly. You could decrease the Tracking Sensitivity.

How about quickly appearing subjects that have highly irregular motion? You might want to use the Speed Tracking Sensitivity to 2, or set the Zone Area Switching to AUTO. Perhaps you find yourself shooting a specific type of subject quite often. You can play around with the settings until you find the optimum combination and then save it for future use.

Either way, the AF-C Custom Settings menu is a very powerful tool that can help you increase the performance of your camera and tweak the camera to fit your shooting style.

Bottom line, the modern X Series cameras have amazingly powerful AF systems, but if you're having trouble with your autofocus or are having a hard time getting perfectly sharp photos, this is the first place you should go. You may find that switching to a different preset will make a huge difference.

# STORE AF MODE BY ORIENTATION

The camera automatically knows whether you're holding it horizontally or vertically, and there are a number of menu items that take advantage of this feature. Added in a recent firmware update, STORE AF MODE BY ORIENTATION is one of the most useful settings in the entire focus menu, and it's certainly one of my favorite settings.

In the default **OFF** mode, the same AF MODE and AF AREA position is used no matter if you're shooting in horizontal or vertical orientation. For example, let's say you're shooting horizontally and you select your AF Point to cover the upper right corner of the frame. If you turn the camera vertically, the same point will be selected, but it will now appear in the upper left corner of your vertical frame.

If you were shooting and trying to focus on a subject placed on the right side of your frame, and alternating between capturing horizontal and vertical shots, you would have to move your focus point across the frame each time you moved the camera.

Of course, it takes time to move your AF point, and if you're shooting a fast breaking subject, or if you're going back and forth between horizontal and vertical, it can become a real pain to keep moving the focus points back and forth each time you rotate the camera.

That's where this feature comes in so handy. By switching this menu item to **FOCUS AREA ONLY**, the camera will remember where you placed your focus point and store the location separately for each orientation. When you rotate the camera, you will only have to set the new AF point location once. Then, when you turn the camera back, it will automatically recall and you won't have to reselect your focus point.

With this parameter set to **ON**, the camera will not only store and recall the location of your focus area, **it will store your AF MODE as well**. This means you can select a different area in the frame, AND you can use a different focus mode for horizontal and vertical. Maybe you're using single point AF for your horizontal compositions and Zone or Wide/Tracking for your verticals.







For maximum control, **I leave this ON all the time.** I can't think of any shooting situation where I would need to turn it off.

I was extremely pleased when they added this setting and I make use of it all the time. It's a highly useful feature for shooting sports and action, portraits, or any subject when you're shooting quickly and varying between horizontals and verticals.

## WRAP FOCUS POINT

This new setting, only found on the X-T5, allows you to choose whether your green focus box is bound by the edges of the frame when you move it with the AF Joystick, or if you can "wrap" it continuously back around from one edge to the other. This feature operates in both still and movie mode.

# AF POINT DISPLAY

The setting allows you to choose whether you see the individual focus frames inside your viewfinder when you're using AF ZONE or WIDE/TRACKING focus mode. The frames appear as a translucent grid, and it lets you know where your focus frames are located inside your viewfinder.

This could help you compose your images, since you'll be able to see the exact dimensions and points of your AF Zone. It's certainly not obtrusive, but if you prefer a clear, bright viewfinder with no grids or guide lines, you'll probably want to leave this off.

That said, if you're new to the X Series, you might find it helpful to see the grid, especially when shooting moving subjects, or if you find yourself using different size zones.

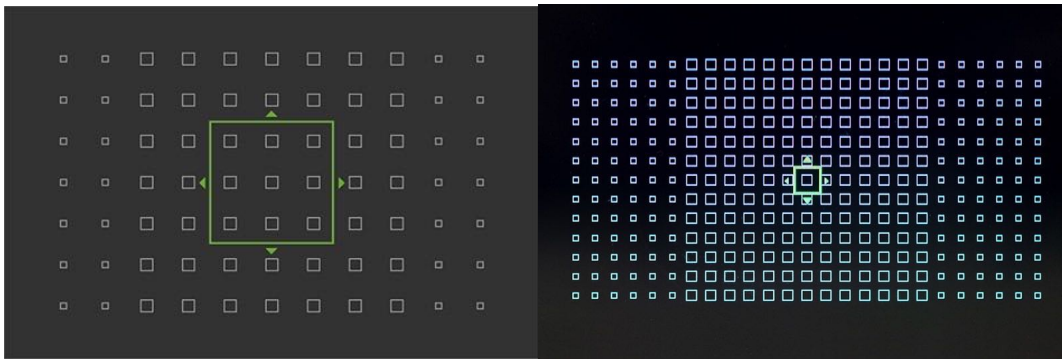
## NUMBER OF FOCUS POINTS

As I mentioned in the [Focus Mode](#) Section, the latest generation of X Series cameras have two options for selectable focus points when using SINGLE AF; either 117 points (9x13 grid) or 425 AF points (17x25 grid).

425 points is great for very precise focusing of still subjects. I'll use this setting if I'm shooting flowers, macro, foliage, and other highly detailed subject matter, close or far, where critical and accurate focus is a must. The downside to this option is that it's a bit slower to move the AF point around the 425 point grid, since you have more points to cross.

In many cases, you may find the 117 point grid to be perfectly adequate for your needs. Remember, you're always in the 117 point grid when using ZONE AF or WIDE/TRACKING so if you usually use one of these settings, it might not even be an issue. Perhaps you'll keep it on 117 all the time.

However, for the most accurate, pinpoint focusing performance when shooting still subjects, I recommend keeping the camera set to 425 points.



## PRE AF

Turning PRE-AF to **ON**, activates full-time, non-stop autofocus. The camera will continually adjust focus even when the shutter button is not pressed halfway. As you can imagine, this setting dramatically increases the drain on the battery, since the AF motor is in constant motion.

Theoretically, this mode could increase autofocus performance, I have not found that it really makes any difference. Given that it reduces battery life, **I recommend leaving this setting OFF.**

## AF ILLUMINATOR

With this setting **ON**, the camera will automatically turn on the AF ILLUMINATOR when you're trying to focus in the dark. The LED light will help create additional contrast on your subject, which may increase the camera's focusing capabilities in very low light.

Keep in mind, the light has limited range, so it won't work with distant subjects. Also, you probably don't want the light to activate if you're shooting clandestinely, or in places where the light would interrupt your subjects. In cases like this you're probably better off trying to use manual focus anyway.

I leave my cameras set to **ON**, because I rarely shoot in these types of situations.



# FACE DETECTION

Face Detection on the X Series cameras works extremely well and I usually leave it on all the time. (X-Pro1, X-E1 and X100 do not have FD.) You can set it to one of five options.

- **Face On/Eye Off:** Face Detection Only
- **Face On/Eye Auto:** The camera locks focus on one of the eyes
- **Face On/Right Eye Priority:** The camera focuses on the right eye, if it's visible
- **Face On/Left Eye Priority:** The camera focuses on the left eye, if it's visible
- **Face Off/Eye Off:** Face Detection Off

I usually leave my cameras set to **Face On/Eye Auto**. I'm often photographing people, and this setting allows the camera to quickly acquire them, which saves me from having to manually move the focus point around the frame for each shot.

However, there are times when I don't necessarily want it to grab people in my frame. For this reason, I have Face Detection set to one of my Fn buttons. The default X-T2 setting is the Fn button on the top deck of the camera.

Note: On some models, Eye Detection doesn't work in AF-C mode, and on models, Face Detection doesn't work in Continuous High.

If you like to photograph people, I highly recommend leaving Face Detection on and experiment with the different eye settings.



# SUBJECT DETECTION SETTING

The new 5<sup>th</sup> generation X Series models have a powerful new Subject Detection Autofocus feature that automatically detects a wide range of subjects. This helps the camera acquire and track moving subjects with a higher degree of speed and accuracy.

In this menu, you can chose whether the camera prioritizes subjects of a certain type when analyzing the scene, or if it uses the standard AF-C algorithms. When combined with AF-C Custom Settings, Subject Detection determines what the camera “Looks” for as it’s trying to recognize subject matter, and the AF-C Custom Settings determines how the AF system responds when it’s actually acquiring and tracking.

**SUBJECT DETECTION ON:** Choose one of the subject types below to enable:

- **ANIMAL:** The camera detects & tracks focus on dogs, cats, & similar creatures
- **BIRD:** The camera detects and tracks focus on birds. This is for you, BIF peeps!
- **AUTOMOBILE:** Looks for the body & front end of cars. Think motorsports.
- **MOTORCYCLE & BIKE:** Looks for people riding bikes and motorcycles.
- **AIRPLANE:** The camera looks and specifically detect airplanes.
- **TRAIN:** The camera looks for the shape of trains.

**OFF:** Subject Detection is off. The camera will track using the default AF system.

When this setting is enabled and a subjects is found, the camera will mark it with a white frame. If the camera detects multiple subjects of the same type, then it will automatically choose one to track. However you can change to a different subject by tapping the display to reposition the focus are, or by using the Focus Joystick, if the camera is set to WIDE. If the subject temporarily leave the frame, the camera will wait a set amount of time for its return.

NOTE: When Subject Detection is **ON**, [Face/Eye Detection](#) is automatically disabled.



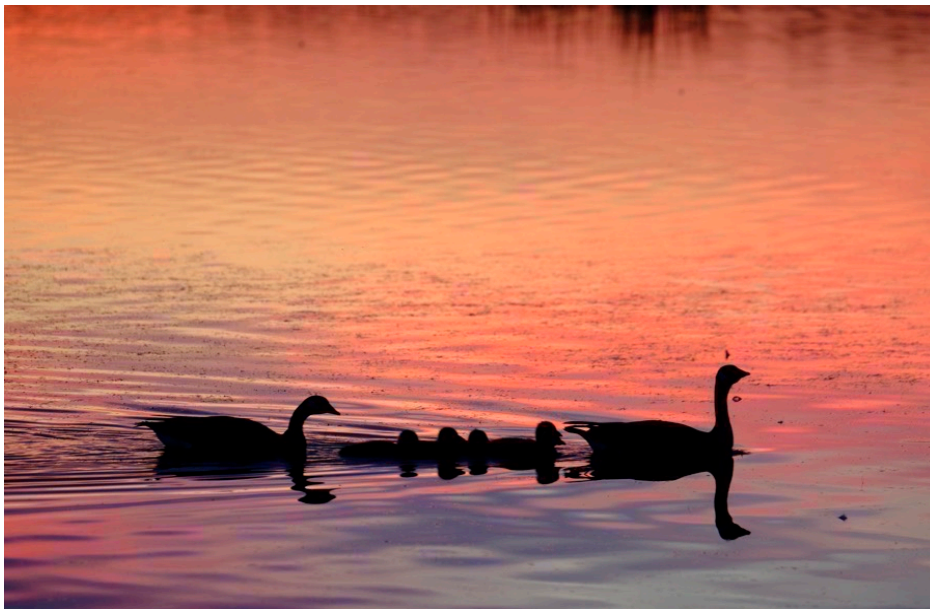
# AF+MF

AF+MF is an extremely powerful and useful feature. With this setting **ON**, you gain a huge perk when focusing: If you keep the shutter pressed halfway down with your finger after autofocus, you can then manually fine tune your focus by turning the focus ring.

As good as modern AF systems are, they can be fooled. Say you're trying to photograph a subject situated within dense foliage, like a bird or flower. The camera's AF system might grab the branches in front of your subject, but that's not what you want. With the AF+MF option, you can get 90% there with the AF, then go the last 10% by focusing manually.

If you also have the [FOCUS CHECK](#) feature set to ON, when you're using Single AF and AF-S, and you do the above action, the viewfinder will also zoom in to your selected focus area. This helps you even more when trying to focus critically. By rotating the rear command dial, you can change the zoom ratio from 6x to 2.5x. (Read more about [FOCUS CHECK](#) here.)

Here's an example: In this shot below, the autofocus system was fooled and it actually grabbed the rippled water just behind the rear duck. This makes the ducks out of focus, which is clearly not what I want. With AF+MF on, I could have grabbed the focus ring and dialed it back just a bit until the FOCUS PEAKING highlights landed on the ducks. **I recommend keeping this AF+MF mode ON all the time.**



# MF ASSIST

In addition to the robust autofocus system, the X Series camera also have a full-featured manual focus system. Some photographers prefer using manual focus because they feel more in control, or because it feels more intuitive.

All of the cameras have bright viewfinders, which helps you focus more easily. Turn [PREVIEW PIC. EFFECT](#) OFF and you might even forget that you're actually looking through a tiny TV screen instead of a ground glass pentaprism.

Also, with the right adaptor, you can even use old manual focus lenses from other camera systems with excellent results. Even though I sold all of my Nikon DSLR gear, I kept my old manual 105mm f/2.5 and 50mm f/1.8 lenses and bought a Nikon to Fuji adaptor.

The three most popular brands are Metabones, Novaflex and Fotodiox. They all seem to work, but based on user reviews, the Novaflex adaptors appear to offer the highest quality and performance.

A friend of mine has an old Canon FD 200mm f/4 he uses on his X-T1. Not only is it incredibly sharp, it's quite small for a 200mm lens. Effectively, this gives him a manual focus lens 300mm f/4 that's very compact and a lot of fun to use.

It can be hard to focus manually since we don't have the fresnel/split image focusing screens that were used in old SLR cameras. Thankfully, mirrorless technology allows for some very useful tools that help you in this area. The Fuji X Series cameras have three MF Assist options: Normal, Digital Split Image and Focus Peak Highlight, and the Focus Assist Button/Menu option.

Whether you're shooting low contrast subjects that are difficult to acquire or track, if you feel more "in control," or if you simply like using manual focus because it's fun and it reminds you of your "old" camera, you should get to know these settings.

Note, they also apply if you're using the AF+MF feature outlined in the previous section.

## **NORMAL**

This is the default mode. It's simply manual focus through the viewfinder, as if you were using a standard bright SLR screen. This is the most basic focusing mode, because what you see is what you get. If you need help focusing, you can always crank up the brightness level in your EVF or LCD, or Turn [PREVIEW PIC. EFFECT](#) OFF

## **DIGITAL SPLIT IMAGE**

With a nod back to the old split image screens found on most SLR cameras, this mode displays a small black and white or color split image over the phase detect array in the middle of your viewfinder. This makes it very easy to determine exactly when your subject is in focus. It even replicates the classic fresnel effect when you're getting close.

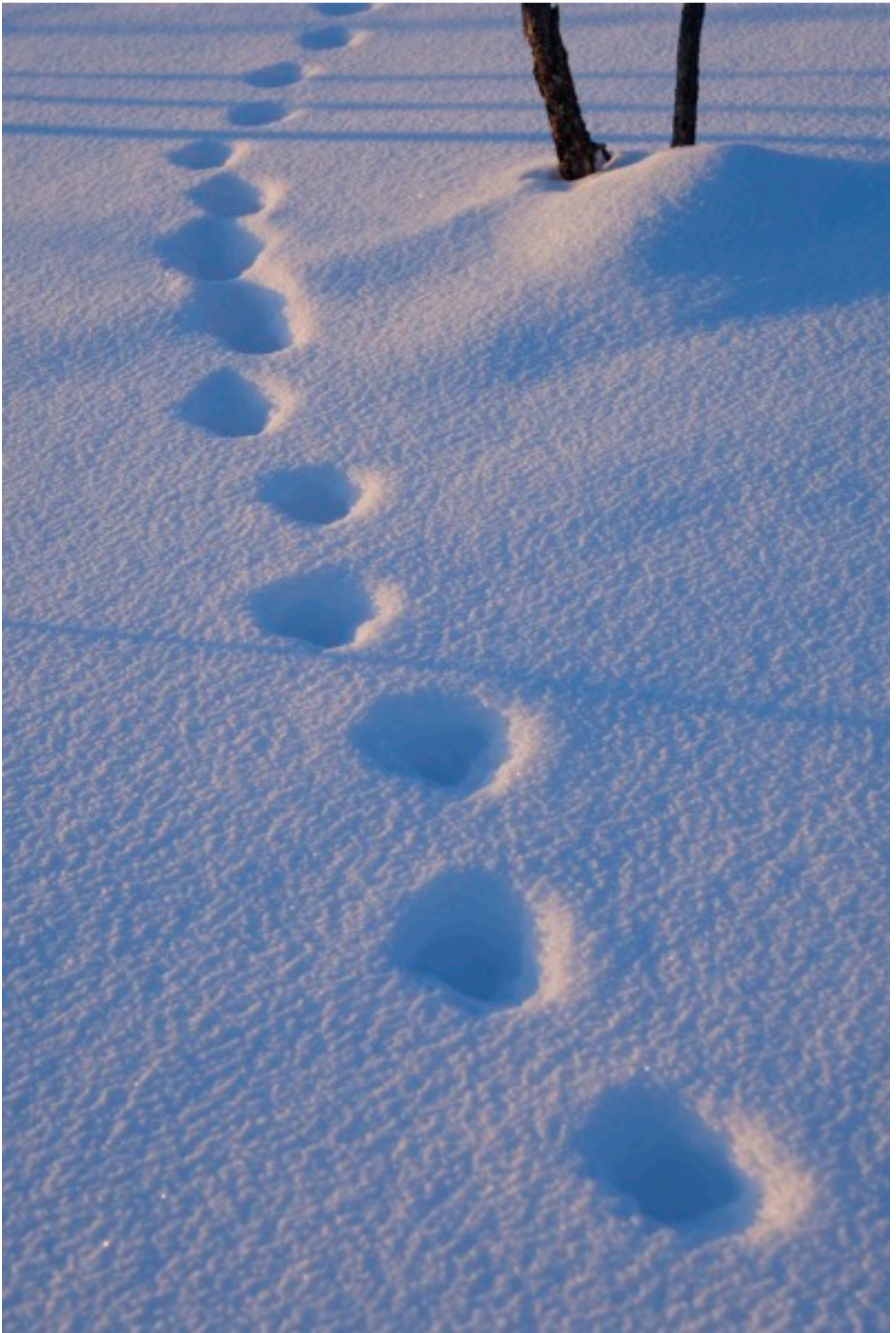
## **FOCUS PEAK HIGHLIGHT**

Autofocus systems work by detecting edge contrast on your subject matter. When the greatest amount of contrast is detected, the camera determines that the subject is in focus.

FOCUS PEAK HIGHLIGHT essentially does the same thing for manual focus. It creates a highlight of clearly visible pixels around your edges that adjust in intensity depending on how close you are to achieving sharp focus. You can change the color of the peaking highlights, with your choices being white, red and blue

Being the most "digital" of the three modes, FOCUS PEAK HIGHLIGHT is an acquired taste with some photographers, but it's worth using. While it may be a little distracting at first, once you get used to it, you'll see that it works extremely well when you need to focus quickly, and it's very effective in low light situations. I often use this mode when trying to focus in dim conditions, and I find the colored modes tend to stand out a little better than white. I usually go with the RED HIGH setting.





# FOCUS CHECK

Whenever you're focusing manually, you can press the rear command dial, (or the FOCUS ASSIST button on the X-T1), and the camera will zoom in to give you a closer look at your subject in order to help you achieve sharp focus.

There's also a menu item called FOCUS CHECK. With this option turned **ON**, the viewfinder/LCD will automatically zoom in on the selected focus area when you grab and rotate the focus in manual focus mode. (On the older Fuji cameras, FOCUS CHECK is found in the SCREEN SET-UP menu inside one of the [BLUE SETUP MENUS](#).)

As I mentioned in the previous section, the FOCUS CHECK feature also works in conjunction with the AF+MF settings when shooting in AF-S autofocus mode. Again, I usually keep my MF ASSIST menu set to FOCUS PEAK HIGHLIGHT (RED HIGH). This gives me the easiest and fastest way to gauge my focus.

Although I consider the AF+MF setting to be an essential feature, FOCUS CHECK can be a mixed bag. Sometimes it works perfectly, and it's exactly what you need to achieve precise focus. Other times, you may find it distracting, because suddenly you're not seeing the entire frame.

If you have a My Menu camera, you might consider putting FOCUS CHECK in your MY MENU, or assigning it to a Fn button so you can turn it on and off quickly as needed.

## INTERLOCK SPOT AE & FOCUS AREA

This is pretty straightforward. When you turn this feature **ON**, your exposure meter becomes tied to your selected focus zone if you're using SINGLE AF mode, and the Spot Meter is selected as your current metering option.

To me, this is a no brainer. If you're using the Spot Meter, there's a pretty good chance you'll want to base your meter reading on your selected focus point. For this reason **I keep this setting ON at all times.**

# INSTANT AF SETTINGS

There are a few different ways to configure the FUJIFILM cameras for Back Button Focus; this is one of them.

If your AF-L Button is set to **AF LOCK** or **AF/AE LOCK** and the camera is set to Manual Focus, pressing this button will activate autofocus. Using the INSTANT AF SETTINGS, you can Choose whether the camera focuses using Single AF (**AF-S**) or Continuous AF (**AF-C**) when the **AF-L** button is pressed in manual focus mode.

I'm not a back button focus guy, so I don't use this setting. In fact, I find it quite useful to assign the AF-L button to operate any number of other functions.

## DEPTH OF FIELD SCALE

The XF14mm f/2.8, 16mm f/1.4 and the 23mm f/1.4 lenses all have DOF scales on the front of the lens barrel. If you don't have one of these lenses, then you can use the electronic DEPTH OF FIELD SCALE found in the AF+MF menu.

There are two options, and as the manual states, **FILM FORMAT BASIS** is the recommended choice for assessing depth of field for pictures that will be viewed as prints. If you intend to view your images at high resolutions on electronic displays, then you should use **PIXEL BASIS**.

The science behind this is actually quite impressive. It's based on the difference in how we perceive sharpness between the perfectly sized/spaced pixels found on electronic displays and the liquid ink dots that spread when they're dropped onto paper.

Even though ink on paper is technically "more blurry," when we stand back and look at a print, this slightly softer look actually fools us into thinking that we see a greater level of sharpness than actually exists in the print. (This effect is slightly enhanced with a print that was made from an image originally shot on film.)

The result is that the **FILM FORMAT BASIS** DOF scale indicates a much wider depth of field than the **PIXEL BASIS** scale.

I wouldn't worry too much about this setting, though. Just keep it on **PIXEL BASIS**



and forget about it. Pretend it's not even there. The reality is that even though we might print a few of our images, we see all of our images on the screen. I don't think it makes much of a difference, but then again, I'm not an intense pixel peeper.

Thanks to Michael Bulbenko for explaining this one to me.

## RELEASE/FOCUS PRIORITY

This setting controls how the camera operates in **AF-S** and **AF-C**.

In **RELEASE PRIORITY**, the camera will shoot whether the scene is locked in focus or not, whereas in **FOCUS PRIORITY**, the shutter will not fire unless the camera has achieved focus.

Using this menu item, you can assign a separate setting for both **AF-S** and **AF-C**, you could swap them, or assign the same setting to both.

For all the years I've been using cameras, AF-S has always been set to FOCUS PRIORITY, and AF-C has always been assigned to RELEASE PRIORITY. I see no reason to change this, and so I recommend you leave these at the default settings.

## AF RANGE LIMITER

Found only on the X-Pro 3, X-T4, X-S10, X100V and 5<sup>th</sup> Gen models this feature lets you manually limit the range of available focus distance on your lens. By limiting the range, you increase AF performance and speed, because if the lens gets confused, it won't travel as far as it tries to reacquire the subject. This can be very useful if you're shooting a scene and focusing on two different subjects, or when shooting within a specific range of distances. You have four settings:

**OFF:** Focus Limiting is disabled. Use this for general photography and when you're shooting a variety of subjects at different distances.

**CUSTOM:** You can limit your focus range and define a specific minimum and maximum distance. To set, press SET, and either turn the focus ring manually, or tap the screen to focus on your "A" (close) distance. When the camera is locked on, press OK. Then set your "B" (far) distance and press the DISP/BACK Button. Don't accidentally hit OK again, or you'll start over back to A.

Once your focus range is selected, the next time you return to this menu, you can either hit OK to activate the currently selected range, or hit SET again to change.

**PRESET 1/2:** You can select from two different distance ranges. PRESET 1 is 2.0 meters to infinity, PRESET 2 is 5.0 meters to infinity.

## CORRECTED AF FRAME

This setting is found on the higher end rangefinder cameras, the X-Pro and X100 models. When you turn this setting **ON**, a second focus frame is added to the optical viewfinder display. This second frame is used for focusing at very close distances of about 1.6 feet (50 cm). This compensates for the difference in viewpoint between the optical viewfinder and the lens.





# TOUCH SCREEN MODE

The X-E3, X-H1 and X-T3 all have touch screen operation. Using this menu setting, you can choose the shooting and focus operations that are performed via the touch screen LCD. You can also select your desired mode by tapping the “touch icon” on the top right corner of the LCD screen.



**TOUCH SHOOTING:** Tap your subject to automatically focus and release the shutter. If your camera is set to either CH or CL, the shutter will continue to fire as long as you keep your finger on the screen.



**AF:** Tap once to select a focus point. If your camera is set to AF-S, focus will lock on the subject. In AF-C mode, the camera will focus and begin to track the subject if it moves. To stop the camera from focusing, simply tap the green AF OFF icon on the top right of the screen.



**AREA:** Tap the screen or drag your finger around the screen to select a point or area where you want the focus frame to be. Using the “drag” option allows you to select and change your focus area with lightning speed across the frame. I recommend trying this option



**OFF:** Touch controls off. Tapping or touching the screen has no effect in shooting mode.



# SHOOTING SETTINGS

1. [Shooting Options](#)
2. [Scene Position](#)
3. [Drive Settings](#)
4. [Sports Finder Mode](#)
5. [PRE-SHOT ES](#)
6. [Self Timer](#)
7. [Interval Timer Shooting](#)
8. [AE BK Setting](#)
9. [Film Simulation BKT](#)
10. [Multiple Exposure CTRL](#)
11. [Flicker Reduction](#)
12. [Shutter Type](#)
13. [IS Mode](#)
14. [ISO AUTO Setting](#)
15. [Conversion Lens](#)
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17. [ND Filter](#)
18. [Mount Adaptor Settings](#)
19. [Wireless Communication](#)

[BACK To HOME](#)





This menu is where you'll find your shooting and camera options. It's a relatively short list, only eight items. In my mind, the first three are the most important, all of which can easily be assigned to either a Fn button, MY MENU or a Q MENU slot. The fourth item, INTERVAL TIMER SHOOTING is what you use to shoot time lapse.

If you own a RED/BLUE cameras, you'll find most of these options in your **RED MENUS**.




# SCENE POSITION


This menu item is only found on the X-T10/20/30, X-E3/4 and X70, and it's where you select the different SCENE POSITION modes when the AUTO switch is engaged, or when the mode dial is set to SR+ on the X-T200 and X10/20/30. You can read more about [Full Auto Switch & Scene Modes here](#).


(NOTE: The AUTO Switch must be engaged and the Drive dial/menu must be set to S or STILL IMAGE for this mode to work.)


Here are all the different options for shooting in SCENE POSITION MODE.

 **ADVANCED SR AUTO:** Full auto mode. The camera evaluates the light and chooses whatever SCENE mode it thinks is right.

 **PORTRAIT:** For shooting pictures of people, whether they're wearing hats or not.

 **PORTRAIT ENHANCER:** This mode applies special processing to portraits to give the subject a smoother complexion. Use this mode when taking pictures of pretty girls.


 **LANDSCAPE:** For shooting landscapes and urban mountains, also called "buildings."

 **SPORT:** For photographing people (or animals) who are running. Also used for sports or any other type of quickly moving subject matter.

 **NIGHT:** For shooting at night or during twilight when it's getting pretty dark.


 **NIGHT (TRIPOD):** Ideal for using slow shutter speeds when shooting at night on a tripod.

 **FIREWORKS:** Ideal for photographing fireworks or any other subjects that happen to be exploding.

 **SUNSET:** Use this mode when shooting at Magic Hour.


 **SNOW:** Ski resort mode. Also called Snowman Mode.

 **BEACH:** Vacation resort mode. Also called Caribbean Mode.

 **UNDERWATER:** Remember, no X Series camera is waterproof.

 **PARTY:** Woohoo!!! Party time!! Dim rooms, bright lights and mixed drinks.

 **FLOWER:** Make beautiful flowers look even more vivid and beautiful.

 **TEXT:** For taking clear pictures of text or drawings in print. Also known as Espionage Mode.

## DRIVE SETTINGS

DRIVE SETTINGS is one of those menu items that's often overlooked, but it's actually a very important control. It's where you set the parameters for the following drive modes:

- **FRAME RATE for CL AND CH**
- **BRACKETING SETTINGS**
- **ADV MODE FILTER SELECTION**
- **MULTIPLE EXPOSURE** - (Models with DRIVE buttons only.)
- **PANORAMA** - (Models with DRIVE buttons only.)
- **HDR** - (X-T4, X-Pro 3, X100V, X-S10 and 5<sup>th</sup> Gen models only.)

Note that the exact layout of DRIVE SETTINGS varies by cameras.

## MODELS WITH A DRIVE DIAL

DRIVE SETTINGS on the X-T2/3/4 and X-H1 are found in the SHOOTING SETTINGS MENU. Here you can control the following settings, which will become



active when you turn the Drive Dial to the corresponding setting:

- **BKT SETTINGS:** Go **one click right** to adjust your BKT SETTINGS, **two clicks right** to adjust your BKT SELECT. (Choose from AE BKT, ISO BKT, FILM SIMULATION BKT, WHITE BALANCE BKT OR DYNAMIC RANGE BKT. )

- **CH HIGH SPEED BURST:** Choose your desired frame rate, up to 15 fps (mechanical shutter) and up to 40 fps (electronic shutter.) [See this page.](#)

- **CH LOW SPEED BURST:** Choose from 3fps, 4fps or 5fps. (The X-T3 has a max CL rate of 5.7 fps)

- **ADV MODE FILTER SELECTION:** Choose from any of the [ADV Mode Filters](#).

- **HDR:** The latest models have a new **HDR MODE**, in which the camera takes three shots and combines them into a single, high dynamic range photograph. HDR setting options are **AUTO**, **200%**, **400%**, **800%**, **800%+** and **HDR PLUS**. With the **AUTO** and **%** settings, you'll see slight differences in dynamic range, whereas the **800%+/HDR PLUS** settings will produce classic, HDR style photos with an extremely wide dynamic range.

DRIVE SETTINGS can also be assigned to a Fn Button. (By default, its set to the front Fn Button.) Pressing the button will bring up the appropriate menu, **as long as the DRIVE dial is set to either BKT, CH, CL or ADV**. If it's on any other setting, nothing will happen.

## X-T1

On the X-T1, **RED MENU ITEM 1** is BKT/Adv. SETTING. This is where you can select your BRACKETING type and settings, and select your Adv. FILTER type.

You can assign BKT/Adv. SETTING to a Fn Button. Like the X-T2, the default button for this option is the Front Fn Button, and it will only function if the Drive Dial is set to either BKT or ADV. If it's set to any other option, nothing will happen.

By default, the X-T1 has fixed frame rate settings for the CH (8fps) and CL (3fps) settings on the Drive dial, so there is no menu setting to change this.

## X-T10

The X-T/20/30 have a different type of Drive dial which features two BKT settings two Adv settings. You can store a different setting for each one for quick recall.

The X-T10 BKT/Adv. SETTING menu items are found at the top of **RED 5**. This is where you can set the BKT1 and BK1 settings, and Adv FILTER 1 SELECT and Adv 2 FILTER 2 SELECT for the corresponding BKT and Adv settings on the Drive dial.

Like the X-T1, both CH and CL have fixed settings, with 8fps and 3fps, respectively.

## X-T20/30

The X-T20 and X-T30 have the same Drive dial layout as the X-T10, with two BKT and two ADV settings. However, being a MY MENU camera, the X-T20/30 have a DRIVE SETTINGS menu in the SHOOTING MENU. You can also set DRIVE SETTINGS as a Fn button. By default, the Fn button on the top deck is set to this mode.

- **BKT 1 SETTING/BKT 2 SETTING:** Select the BKT type and setting for the 1 BKT 1 and 2 settings on the Drive dial.
- **CH HIGH SPEED BURST:** Select the frame rate used for the **CH** setting. Choose either 8fps, 11fps or 14 fps. (11fps and 14fps are only available when the camera is set to ELECTRONIC SHUTTER).
- **CL LOW SPEED BURST:** Select the frame rate used for the **CL** setting. Choose either 3fps, 4fps or 5fps.
- **Adv FILTER 1 SELECT/Adv FILTER 2 SELECT:** Select the ADV FILTER setting for the ADV 1 and 2 setting on the Drive dial.

## MODELS WITH A DRIVE BUTTON

For all X Series camera that have a dedicated DRIVE button, you select all BRACKETING, CL/CH and ADV FILTER SETTINGS, as well as MULTIPLE EXPOSURE, HDR, PANORAMA and MOVIE MODE by pressing the DRIVE button and scrolling down to the appropriate item in the menu.

**NOTE:** The X-H2 and X-H2S do not allow you to change the ADV FILTER SETTINGS via the DRIVE BUTTON. You must go into the SHOOTING SETTINGS - FILTER SETTING.

On the X-H2, the new PIXEL SHIFT MULTI-SHOT feature is found in this menu.

## FILTER SETTING

**This setting is found on the X-H2 and X-H2S only.** This is where you select your ADV Filter mode settings. On most other models, you select this inside DRIVE SETTINGS.





# SPORTS FINDER MODE

When engaged, this new setting found on the 4<sup>th</sup> and 5<sup>th</sup> gen, creates a 1.25X or 1.29X crop view, depending on the camera. Effectively switching the to a Medium sized image, this allows the camera to shoot in burst mode at very high frame rates, of up to 30 fps (40 fps on the X-H2S).

NOTE: Using higher ES shutter speed settings will automatically put the camera into SPORTS FINDER MODE.

## PRE-SHOT ES

This very powerful setting is designed for shooting fast action and it only works when using the Electronic Shutter and CH mode. It helps compensate for the lag time between when you “see” your ideal shot, and when you actually press the shutter. With extremely fast action, that delay can easily cause you to miss the shot.

By enabling PRE SHOT ES, the camera will lock onto the subject and begin tracking at high speed as soon as you press the shutter halfway down. In addition, **the camera starts recording images into the buffer while you’re still at “half press.”** As long as you keep the shutter halfway down, the camera will continue to refresh so that you always have up to 20 frames stored in the buffer.

Then, when you press the shutter all the way down, the camera will actually write those buffer images onto the memory card, essentially saving those frames that were recorded during the period of “half press.” If you hold the shutter down, it will begin to capture and write new images the card as well.

In effect, PRE SHOT ES allows you to nail the sequence and capture the entire series, including those initial fleeting moments, even if you end up pressing the shutter a little bit late. It’s a little confusing at first, but once you understand how it works, you’ll see that it’s a very useful tool when shooting extremely fast breaking action scenes. It allowed me to capture this shot below while shooting fast action in tight trees with a long lens. (This setting is found on all 4<sup>th</sup> and 5<sup>th</sup> gen models, except the X100V.)



# SELF TIMER

SELF TIMER is obvious. You can either set it to **2 SEC.** or **10 SEC.** Or **OFF.** When you press the shutter, you'll see the little light blink on the front of the camera as it counts down.

This setting is also found in the default Q MENU on all cameras. This means **you should never have to go into the menus to set the self timer.** I'll repeat. Don't ever scroll around the menus looking for your self timer. It's right there in the Q MENU.

Get to know your Q MENU. Like the Fn Buttons, the Q MENU is your friend.





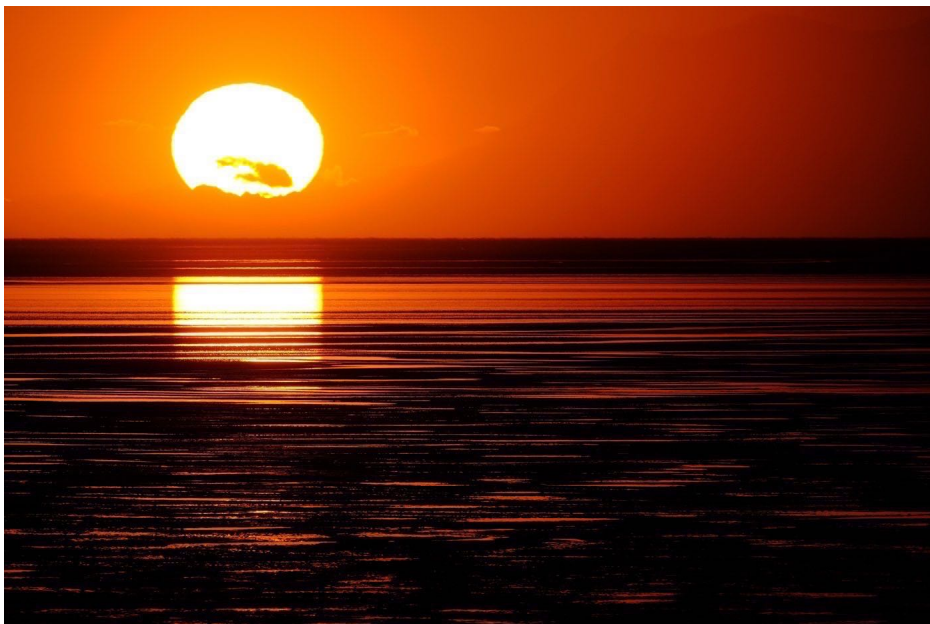
# SHUTTER TYPE

The X Series Cameras are designed with a traditional focal plane MECHANICAL SHUTTER, (MS) just like the ones found on many other cameras ever made in the world.

They also have an ELECTRONIC SHUTTER (ES), which essentially just turns the sensor on and off. This allows for extremely high shutter speeds of up to 1/32,000 second, (1/180,000 sec on the X-H2 and X-T5), and totally silent operation. This is what you'd want to use while shooting at the theater, on a film set or on clandestine photo shoots where secrecy is of the utmost importance. NOTE: You cannot use flash with the ES.

The ES also allows you to shoot with wide open apertures and thus get extremely shallow depths of field in super bright light, which you would normally not be able to do with a regular shutter. I've shot in full sun in snowy landscapes with my 56mm lens at f/1.2 and gotten some interesting effects. I'll also use the ES when shooting straight towards the sun.

In the past, electronic shutter readout speeds were much slower, and so they were not ideal for shooting fast action, (see the airplane picture below.) **However, with the latest generation of sensors, this is no longer an issue.** They're fast enough for shooting action.



(Shot at 1/10,000 sec.)

**(Warning:** please don't burn your retinas, or damage your camera sensor. Never shoot towards the sun at midday, only when the sun is extremely low in the sky.)



**You can choose MS only, ES only or MS+ES.** In MS+ES, the camera will fire the mechanical shutter until the maximum shutter speed on your camera is attained. Above that, it will seamlessly switch to the ES. At the very least, **you should put Shutter Type as one of the items in your MY MENU.** (1<sup>st</sup> Gen models do not have the Electronic Shutter.)

For maximum versatility, you might want to keep your camera set to MS+ES, unless you use flash. NOTE: Having the camera set to ES will disable the hot shoe.



# FRONT CURTAIN ELECTRONIC SHUTTER

All of the new latest X Series models have an additional shutter type, called **EF**, or **ELECTRONIC FRONT CURTAIN**, which is designed to reduce “shutter shake” and reduce blackout time.

When using **EF**, the camera starts the exposure by using the Electronic Shutter, then finishes it by closing the manual shutter. You’ll get less vibration when using slower shutter speeds, and it reduces the lag between when you press the shutter and when the camera actually starts making the exposure.

Here are all of the different shutter options you’ll find on all recent X Series models.

**MS** - Mechanical Shutter, goes up to 1/8000 sec.

**ES** - Electronic Shutter.

**EF-E** - Front Curtain Shutter. Shortest Blackout time. Higher IQ when slower than 1/2000 sec.

**M+E** - Mechanical + Electronic. MS up to 1/8000, then switching to ES above 1/8000.

**EF+M** - Front Curtain + Mechanical. EF until 1/2000, MS above 1/2000.

**EF+M+E** - EF up to 1/2000, MS above 1/2000, ES above 1/8000.

# INTERVAL TIMER SHOOTING

INTERVAL TIMER SHOOTING is how you do Time Lapse photography on the X Series. In this menu, you can set the **SHOOTING INTERVAL**, the **NUMBER OF FRAMES** and the **STARTING TIME**. If you want the camera to keep shooting until your memory cards is full, set the number of frames to **INFINITY**.

Obviously, you’ll want to have your camera on a tripod or a track when shooting intervals. Unfortunately, there is currently no way to export your interval to movie format right inside the camera yet. This is something I’ve been requesting Fuji to add for a while; hopefully they’ll include it in a future firmware update.

For maximum performance when shooting intervals, you should check your battery level and either start with a full charge, use the battery grip or the optional [AC-9V AC power adaptor](#) and [CP-126 DC coupler](#).



NOTE: The display turns off between shots and turns on right before the next shot. You can press the shutter button at any time to turn it back on.

Some models have a setting called INTERVAL TIMER SHOOTING EXPOSURE SMOOTHING. When enabled, it automatically adjusts exposure during interval-timer shooting to prevent it changing dramatically between shots.



# AE BKT SETTING

This setting is found on the 4<sup>th</sup> and 5<sup>th</sup> gen models that don't have a DRIVE Dial and a DRIVE SETTINGS Menu item. When you're using the BKT shooting mode, (Accessible via the DRIVE Button), you can choose between **AE BKT**, **Film Simulation BKT**, **Dynamic Range BKT** and **Focus BKT**, and the AE BKT Setting is where you configure the parameters for Auto-Exposure Bracketing.

**FRAMES/SET SETTINGS:** Here, you choose the number of shots in your bracketing sequence (FRAMES) and also the amount of exposure variation in each of your shots. (STEPS) You can choose to bracket up to 3 frames over, up to 3 frames under, or you can bracket 3, 5, 7 or 9 shots over and under, in 1/3 stop variations, up to 3 full stops both ways.

**1 FRAME/CONTINUOUS:** This gives you the option to fire the shots in your bracketing sequence one frame at a time, or as a continuous burst.

**SEQUENCE SETTING:** You can choose the order in which your shots are taken. You have four options.

NOTE: With X Series models that have a DRIVE Dial on the left side of the top deck, you'll use the [Drive Settings](#) menu (or the DRIVE SETTINGS Fn button) set up these parameters when the DRIVE dial is set to BKT.

## FILM SIMULATION BKT

As with the [AE BK Setting](#), this option allows you to set up the parameters for Film Simulation Bracketing and choose your three different film sims if you don't have a DRIVE DIAL and DRIVE SETTINGS Menu.

## FOCUS BKT SETTING

As with the [AE BK Setting](#), this option is found on the X-Pro 3, X100V, and X-H2/X-H2S, and it's where you set up the parameters for Focus Bracketing. With the other X Series cameras that have Focus Bracketing, you'll set this up by putting the DRIVE Dial to BKT and going into DRIVE Settings (or press the DRIVE Fn button) to set this up.



The FOCUS BKT setting is used to create a series of images with incremental focus changes, which you can then later stack together in Photoshop, Lightroom or other dedicated focus stacking software. [See this article for detailed info about how this works.](#)

You have two choices: MANUAL and AUTO. With AUTO. If you select MANUAL, you will need to set all three parameters. If you choose AUTO, then the camera will set FRAMES and STEP automatically, but you will set your close and far (A and B) focus distances.

## MANUAL

**FRAMES:** This is where you choose the number of shots you'll take anywhere between 1-999.

**STEP:** Set the amount of incremental focus distance change with each shot. You can't set specific distances they're set automatically by the camera for each situation, based on how far away your subject is from the camera.

**INTERVAL:** You can choose the order in which your shots are taken, anywhere from 0-10 seconds.

## AUTO

After selecting your INTERVAL, press OK. You can now select your close and far (A and B) focus points the will determine the range and STEPS for your bracketed series. Follow the onscreen prompts and select your A and B posts, just like you do in the [AF Range Limiter](#) setting. When you're done, press DISP/BACK to exit. You're now ready to take your shot.




# FLICKER REDUCTION

Reduces the occasional “flicker” when shooting under fluorescent lights. On some models, this is called FLICKERLESS S.S. SETTING.

## IS MODE

IS MODE helps reduce blur due to camera shake when shooting handheld at lower shutter speeds. This option is available only with lenses that support Image Stabilization. If you don’t have an OIS capable lens attached, this menu item will be grayed out.

The OIS on the Fuji lenses is outstanding and you’ll be amazed at how low you can hand hold your shots, even with long lenses.

- **CONTINUOUS:** Image stabilization on. This setting will draw more battery power.
- **SHOOTING ONLY:** Image stabilization enabled only when the shutter button is pressed halfway or the shutter is released.
- **OFF:** Image stabilization off. The  icon appears in the display. This is the recommended mode when using a tripod.

## THE X-S10 HAS TWO ADDITIONAL MODES:

- **CONTINUOUS+MOTION:** The same as **CONTINUOUS**. Image stabilization on. If the **+MOTION** option is selected, then the camera will adjust shutter speed accordingly to reduce motion blur when moving objects are detected in the viewfinder.
- **SHOOTING+MOTION:** Same as **SHOOTING ONLY**. Image stabilization enabled only when the shutter button is pressed halfway or the shutter is released, and if the **+MOTION** option is selected, then the camera will adjust shutter speed accordingly to reduce motion blur when moving objects are detected in the viewfinder.

**NOTE:** The **+MOTION** option has no effect when ISO is set to a fixed value, it only works in conjunction with the [ISO AUTO Setting](#).



# ISO AUTO SETTING

When shooting with the FUJIFILM cameras, you can either select ISO manually by turning those nice metal dials, or you can set it to AUTO ISO.

When configuring up your AUTO ISO settings, you select your base sensitivity, maximum sensitivity, and minimum shutter speed for the **A** (AUTO ISO) position on the ISO dial. You can save up to three different settings, which can be Settings for **AUTO1**, **AUTO2**, and **AUTO3**, which can be quickly recalled for different types of lighting conditions or shooting situations.

- **DEFAULT SENSITIVITY** refers to the lowest ISO setting you want the camera to use, providing there's enough light. Your options are 200, all the way up to the max ISO setting for your camera.

- **MAX. SENSITIVITY** is the highest ISO setting you want the camera to use when your ambient light levels drop. Your options are 400, all the way up to the max ISO setting for your camera.

- **MIN. SHUTTER SPEED** refers to the lowest possible shutter speed you want your camera to use if the light drops. Your options are 1/500-1/4 sec. In AUTO, the camera will automatically select a shutter speed base that is roughly equal to the inverse of your current focal length. For example, if you're using a 60mm lens, your camera will choose a speed no lower than 1/60. Keep in mind that the camera may select a shutter speed lower than this speed if your scene will be underexposed at MAX. SENSITIVITY.

**I usually prefer setting my ISO manually.** Mostly because I have that awesome, ISO dial on the top deck of my X-T5. It's easy to reach and I can wrangle that thing around to whatever ISO setting I want in about one-second. A quick spin will take me from 200 all the way up to 3200 or even 12800 and back down to 1600 before anyone will even notice what I'm doing.

Sometimes, when the light is dim and I desperately need a higher shutter speed, I'll just grab it and give it a spin, without even looking at where it stops. I know that my images will look great at just about any speed.

Also, doing it manually gives me maximum control over my shutter speed. This is



nice when shooting action or moving subjects in dim light. In addition, keeping it in manual allows makes it easier to take advantage of the excellent OIS image stabilization on the Fuji lenses and shoot at ridiculously low shutter speeds.

### So, why use ISO AUTO?

**REASON #1:** Because it's easy. You don't have to worry about anything. You just set it and forget it, and let the camera do all the work. One less thing to think about.

**REASON #2:** You don't have an ISO dial on your camera. You could set ISO to a Fn button, but if the light's changing quickly and you're a little bit unsure what you're doing, or you don't want to think about it, Auto ISO can be pretty nice. **Note: You probably don't want to use AUTO ISO when doing flash photography.**

Also, the X-T2 has a new feature whereby you can toggle and spin the front command dial when you're in A mode the ISO dial. You'll find this setting in [ISO DIAL SETTINGS A](#) inside the BUTTON/DIAL SETTING menu.

On Red/Blue models, ISO AUTO SETTING is found in the **RED MENUS**.

## CONVERSION LENS

The X100 and X70 allow the use of the optional [FUJIFILM Conversion Lenses](#). These special lenses screw onto the front of the fixed lens and give you a different focal length.

When using either the WCL-X100 or TCL-X100 conversion lens, select the appropriate **CONVERSION LENS** setting. Chose **WIDE** for the WCL-X100 or **TELE** for the TCL-X100.

(NOTE: The camera selects the correct option automatically when the WCL-X100II or TCL-X100II is used.)

## DIGITAL TELE-CONVERTER

Found on the X100F and X70, the DIGITAL TELE-CONV is one of the settings that can be assigned to the Control Ring. By rotating the ring when you have this function

set, the camera performs a digital zoom function, and lets you shoot with two additional view angles in addition to the native focal length of the lens.

Essentially, its just digital zoom, but the cameras processor optimizes the image for the best reproduction quality. Given the sharpness of the X-Trans sensor and the capabilities of the image processor, you'll find the results to be very good. There will be a slight loss in quality, but you may find the loss negligible for general use. This setting only works when shooting JPEG.

Here are the different view angle options for the X100F and X70. NOTE: These numbers below correspond to the effective focal length when compared to a 35mm film camera.

## **X100F/V**

- 35mm (Native)
- 50mm
- 70mm

## **X70**

- 28mm (Native)
- 35mm
- 50mm

## **ND FILTER**

All X100 models have a 3-stop neutral density (ND) filter built right into the camera. This unique tool automatically reduces exposure by 3 EV, which allows you to use slower shutter speeds and/or wider apertures than would normally be allowed without overexposing your image.

You could use the ND FILTER to blur motion, reduce depth of field and use wider aperture settings when using flash in bright light.

# MULTI EXPOSURE / MULTI EXPOSURE CTRL

This all-new setting, currently found on the most 4<sup>th</sup> and 5<sup>th</sup> gen models allows you to choose how the camera combines images to create a [Multiple Exposure](#). You have four options and with all of these, you can combine up to 9 exposures to create your final shot.

**ADDITIVE:** In the default setting, the camera simply adds the exposures together. Keep in mind, your final composite image will inherently become brighter as you add more exposures. With most scenes, if you're using more than 3 different shots, you may need to reduce your camera exposure to keep things from blowing.

**AVERAGE:** With this option, the camera will automatically optimize the exposure in the final composited image so that nothing becomes too bright. If you want to preserve the background, then this is probably the best choice.

**BRIGHT:** Things start to get a little weird here. In this option, when you shoot each additional exposure, the camera will compare the original image to the new framing and only the brightest pixel that's present in the current framing will be shown in the composited image. Any dark areas in the original frame will be replaced by whatever new subject matter shows up there in the new framing, if that new subject matter is brighter than the original image.

**DARK:** Same as above, but in reverse. When you shoot each additional exposure, the camera will compare the original image to the new framing and only the darkest pixel that's present in the current framing will be shown in the composited image. Any bright areas in the original frame will be replaced by whatever new subject matter shows up there in the new framing, if that new subject matter is darker than it was in the original image.

I know this sounds very confusing, so here's what it looks like in practice. From a creative standpoint, the BRIGHT and DARK settings allow you to create some cool "knockout" and "fill" effects.





*"Bright Mode"*



*"Dark Mode"*

# PIXEL SHIFT MULTI SHOT

This brand new 5<sup>th</sup> Gen setting, only found on the X-T5 and X-H2, allows you to shoot multiple frames of the same subject, which can be combined into an ultra high resolution photo with the maximum amount of sharpness and color accuracy possible. To access this setting on the X-H2, press the DRIVE button and select from the menu.

This mode can only be used with the Electronic Shutter, when shooting in **RAW** as **LOSSLESS COMPRESSED**, in either AF-S or Manual focus mode. For best results, you'll probably want to use a tripod.

Choose an **INTERVAL**. It's recommended to use **SHORTEST**, unless you're using a flash, in which case, set it long enough to allow the flash to recycle between shots. When you press the shutter, the camera will record a series of 20 photos, moving the sensor a half-pixel between each frame.

You can then combine the series of frames into a final high-res RAW file by using [FUJIFILM Pixel Shift Combiner software](#).

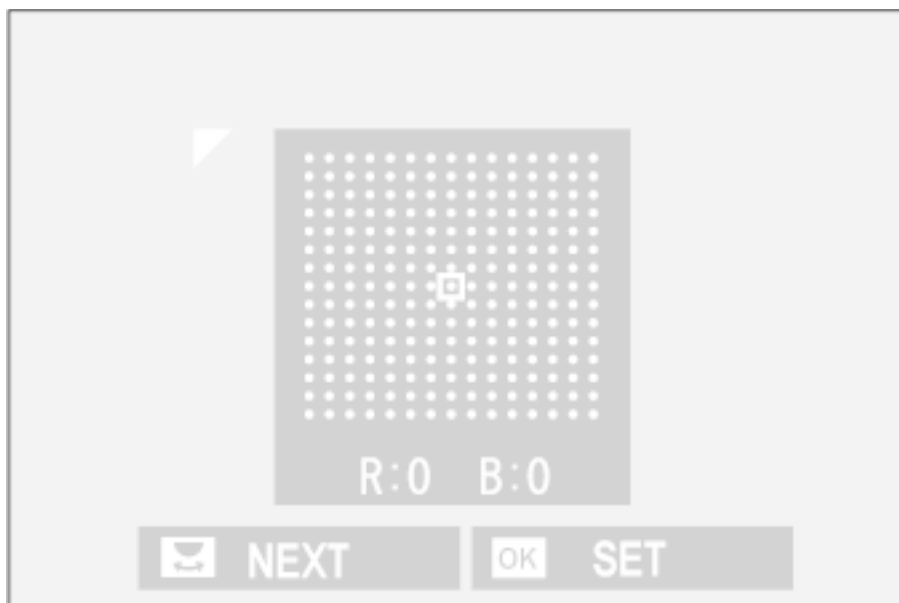
## MOUNT ADAPTOR SETTINGS

Using the [FUJIFILM M Mount Adaptor](#), you can use a wide range of legendary Leica, Voigtlander, Carl Zeiss and Ricoh M Mount lenses on your X Series camera. Use this menu item to adjust settings for M-Mount lenses connected with the Adaptor. (On the X-T4, this item has been moved to the IQ Menu.)

If your lens has a focal length of 21, 24, 28, or 35 mm, choose the matching **FOCAL LENGTH** option, or use option 5 or 6, if your focal length isn't present.

- **DISTORTION CORRECTION:** Select to correct for **BARREL** or **PINCUSHION** distortion. Choose from **STRONG**, **MEDIUM**, or **WEAK**.

- **COLOR SHADING CORRECTION:** Corrects for variations between the center and edges of the frame. Different color corrections be adjusted separately for each corner.



Rotate the Rear command dial to choose a corner and use the selector to adjust shading until there is no visible difference in color between the selected corner and the center of the image. Press the selector left or right to adjust colors on the cyan–red axis, go up or down to adjust the blue–yellow axis. Then select your next corner with the command dial and repeat.

To ensure accuracy, perform your color shading corrections while shooting a blue sky or a solid gray background, paper or gray card.

- **PERIPHERAL ILLUMINATION CORRECTION (also known as Vignetting):** To correct, choose values between –5 and +5; positive values make the corners lighter, negative values make corners darker. Positive correction is recommended when using vintage lenses. Negative correction creates the classic Vignetting effect of images taken with an antique lens or a pinhole camera.

Please note that the above correction settings only work when shooting JPEG.





# WIRELESS COMMUNICATION

This setting allows you to connect your camera to smartphones and tablets running the [FUJIFILM Camera Remote app](#). Once connected, your mobile device can be used to browse the images on the camera, download selected images, control the camera remotely, or upload location data to the camera for geotagging your images.

This function is also found in the PLAYBACK MENU. However, many X Series cameras have a dedicated Wi-fi button or Fn button to which this function is assigned, and which can be accessed when you're playing back images.

With the latest version of the Camera Remote app and all Bluetooth-enabled models, you don't need to use this menu item to connect; the app will automatically find your camera and connect. For older models, assign this to a Fn button or stick it in your MY MENU. That way, when you just shot a super awesome image and can't wait to share it, you don't have to go looking for this item in the menus.







# FLASH SETTINGS

1. [Flash Settings](#)
2. [Flash Function Setting](#)
3. [Red Eye Removal](#)
4. [TTL-Lock Mode](#)
5. [LED Light Settings](#)
6. [Master Setting](#)
7. [CH Setting](#)

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# FLASH SETTINGS

There are a number of dedicated FUJIFILM brand and third party flash units that pair with the X Series cameras, including the [tiny EF-20](#), the [mid range EF-X42](#), the high end [EF-X500](#), and the [wireless radio EF-60](#), which works with the [EF-W1 Wireless Commander](#). In addition, the X-T10/20/30 have on-board pop up flashes, and the X100 and X70 have them built-in, and both the X-T1 and X-T2 came with the tiny EF-X8 flash.

The X Series cameras will also work quite well with variety of other flash units, including Nikon, Canon, and there are great units made by both [Nissin](#) and [Godox](#). I'm using the Fujifilm EF-60 and EF-W1 Wireless Commander.

Most 3<sup>rd</sup> party flashes not specifically designed for Fuji won't TTL or high speed sync. Some Fuji-compatible flashes, like Nissin and Godox will. If you shoot manual flash and you have some old Nikon or Canon speed lights left over from your DSLR days, rest assured, you can still use them with your Fuji. (NOTE: If you want to off-camera TTL with dedicated Fuji flashes, you'll need a Canon compatible sync cord for your TTL pins to line up.)

You can also do off-camera flash with X Series cameras using the [PocketWizard Plus models](#), as well as the [Cactus v.6 triggers](#) and Profoto has their Air Remote TTL-F wireless radio unit, which allows TTL and HSS capabilities with Profoto flash units.

**Note: The X100 and X10/20/30/70 models all use leaf shutters and will do flash sync at any shutter speed.**

For RED/BLUE menu cameras, the only flash settings available are FLASH FUNCTION SETTINGS and TTL-LOCK, both found in one of the **RED MENUS**. You can also access your flash settings in the Q MENU.

The MY MENU cameras have increased flash capabilities and feature a brand new dedicated FLASH SETTINGS MENU. While the exact options available depend on what flash unit you attach to the camera, it's a pretty straightforward process to control your flash from the camera's flash menu.

Basically, if you stick a flash on your Fuji and bring up the FLASH FUNCTION SETTINGS Menu, you'll see pretty quickly what you can control. With a TTL compatible unit, you'll be able to turn the flash on and off, change the flash mode, set

either normal or slow sync, front or rear curtain sync and adjust the flash output compensation, all right from the camera.

With a dedicated Fuji flash, like the EF-X500 and EF-60, you'll have even more options, including wireless remote control, flash commander settings and even high-speed sync.

If you use an X100 and X70, you can either use the Built-in flash or use a flash in the hot shoe. You can turn the Built-in flash ON or OFF in the flash menu.

Here are the items you'll find in the FLASH SETTINGS MENU for most cameras. I'll just cover the basics here. If you want more detailed reading, please refer to the [FUJIFILM External Flash Units page](#).

## FLASH FUNCTION SETTING

This setting lets you select your flash control mode, flash mode, sync mode and flash output power/compensation level. The exact options available are determined by what flash you're using, but it's pretty straightforward.

With a little trial and error, you should be able to figure it out pretty quickly.

- **FLASH CONTROL MODE:** Choose between TTL, Manual, Commander or OFF. Commander mode is when you're using the on-camera flash to control other off-camera remote flash units.

- **FLASH COMPENSATION/OUTPUT:** Adjusts your light output level.

- **FLASH MODE (TTL):** Select a flash mode for TTL control. Options vary with your exposure shooting mode. (P,S,A,M)

- **FLASH AUTO:** Flash fires only as required with light level adjusted according to subject brightness. When you press the shutter halfway down and you see the little "Lightning Bolt" icon will appear in your viewfinder; this indicates that the flash is about to fire.

- **STANDARD:** The flash will fire with every shot, if possible. Flash level is adjusted according to scene brightness. The only way the flash will not fire is if it's not fully



charged when you press the shutter.

- **SLOW SYNC:** This lets you use slow shutter speeds with the flash, which produces that highly appealing, motion blur flash effect. Slow shutter flash is awesome. Try it. I know you'll like it. I use slow shutter sync flash all the time. Most pros do.

- **SYNC:** This controls when the flash will fire.

**FRONT/1<sup>st</sup> CURTAIN** - The flash fires immediately after the shutter opens.

**REAR/2<sup>nd</sup> CURTAIN** - The flash fires right before the shutter closes. In almost every single type of flash shot, this is the preferred and recommended method. It looks especially cool when combined with SLOW SYNC Flash.

**You should always keep your flash settings on REAR CURTAIN.**

## RED EYE REMOVAL

We all know what this does, right? The X Series RED EYE REMOVAL menu has four different options:

- **FLASH+REMOVAL:** A red-eye reduction pre-flash is combined with digital red-eye removal.

- **FLASH:** Red-Eye reduction performed by the flash only.

- **REMOVAL:** Digital red-eye removal performed by the image processor only.

- **OFF:** No red-eye removal.

Note: Digital red-eye reduction is only performed when a face is detected and you're not shooting in RAW.

## TTL-LOCK MODE

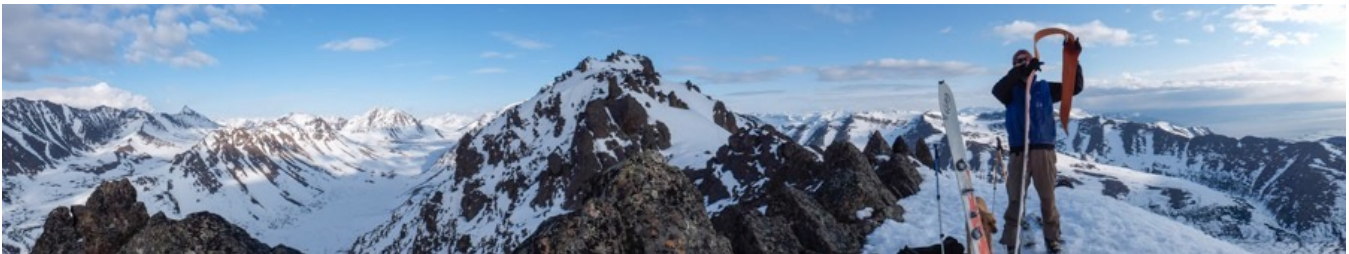
Instead of adjusting flash level with each shot, TTL flash control can be locked for consistent results across a series of photographs.

- **LOCK WITH LAST FLASH:** The lighting value as measured by your most recent photo will be saved and used for subsequent images.

- **LOCK WITH METERING FLASH:** The lighting value metered with the next series of TTL pre-flashes will be used for subsequent photos.

This is a pretty handy setting, as it will keep your lighting levels consistent between shots, and it will probably conserve battery power on your flash. Use TTL-LOCK if your lighting doesn't change.

Note: You can assign TTL-LOCK to a Fn button and use the button to toggle it on or off.



# LED LIGHT SETTINGS

Some flash units have an LED video light. This setting lets you choose whether to use the LED LIGHT as a catch light or an AF-ASSIST ILLUMINATOR. You can also set it to perform both functions or turn it off entirely.

## MASTER SETTING (COMMANDER SETTING)

When using a FUJIFILM flash with wireless optical flash control, you can select a flash group (A, B, or C) for the flash mounted on the camera hot shoe when it functions as a master flash commander. On some models, this is called COMMANDER SETTING.

Or you can choose **OFF** to limit master flash output to a level that does not affect the final picture. This way, it controls the other units, but does not contribute to the light or function as one of the group lights.

## CH SETTING

This is your Channel Setting. When using a FUJIFILM flash with optical wireless flash control, you can select one of four different channels for your flash systems to operate when communicating between the master and the remote units.

Use this setting if you're using multiple lighting systems, or to prevent interference when other compatible flash systems are operating nearby.





# MOVIE SETTINGS

1. [Movie Settings](#)
2. [Movie Mode](#)
3. [File Format](#)
4. [Movie Compression](#)
5. [Full HD High Speed Rec](#)
6. [Movie AF Mode](#)
  1. [Interframe NR](#)
  2. [F-Log Recording](#)
  3. [F-Log/HLG Recording](#)
  4. [Data Level Adjustment](#)
  5. [Peripheral Light Correction](#)
  6. [Focus Area / Movie AF Mode](#)
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8. [HDMI Output Setting](#)
9. [4K/Full HD Movie Output](#)
10. [4K HDMI Standby Quality](#)
11. [IS Mode \(Movie\)](#)
12. [IS Mode Boost](#)
13. [Zebra Setting/Zebra Level](#)
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15. [Tally Light](#)
16. [Movie Optimized Control](#)
17. [Mic Level Adjustment](#)
18. [Mic Jack Setting](#)
19. [Mic Level Limiter](#)
20. [Wind Filter](#)
21. [Low Cut Filter](#)
22. [Headphone Volume](#)
23. [Mic/Remote Release](#)
24. [XLR Mic Adapter Setting](#)

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All of the current and recent X Series models feature expanded video capabilities, wit up to 4K capture. The new 5<sup>th</sup> Gen models can shoot up to 6.2K or 8K as well. In addition, all recent models have a dedicated menu items for shooting video. This allows you to apply any number of camera settings separate from your regular still shooting options.

The X-H2 and X-H2S offer the highest level of video performance, with ultra high speed recording, ultra high resolution and optional cooling fans that allow longer periods of non-stop movie recording. The X-H2 even has a DIGITAL ZOOM option that crops 8k footage down to 26MP size.

If you have a RED/BLUE menu Fuji, you'll find the MOVIE SET-UP Menu in one of the **RED MENUS**.

**NOTE on MOVIE Settings:** Since many of the video settings on the newer X Series models have the exact same function as the I.Q., and AF/MF settings of the same name, I will not list them all again here. If you see a particular setting in your camera's MOVIE SETTINGS Menu that is not listed in this chapter, simply refer to the [IMAGE QUALITY](#) or [AF/MF](#) chapters to read what they do.

If you have specific IQ or AF Settings assigned to Fn buttons, C1-7 slots, or the Q Menu, such as Film Simulation, Highlight/Shadow Tone, White Balance, Focus Mode, etc..., you can apply those when shooting in Movie Mode as well, and they will stay separate. So, if you're shooting stills with the ASTIA film sim, and you switch to shooting video and change to PROVIA, then later switch back to shooting stills, ASTIA will still be the active film sim.

**NOTE on MOVIE Settings Locations:** Some X Series models have a single heading for all of the MOVIE settings, while most of the latest models have multiple headings for the increased number of settings that are included in these cameras.

For example, the X-T3 has a single heading that's five pages deep, where all of the movie settings are located.

To keep things better organized, all of the newest X Series models have a separate MOVIE SETTINGS Menu that is only available when the camera is set to to MOVIE Mode. For example, instead of a singe MOVIE SETTINGS Menu, which contains

everything, the X-T4 has five different Movie Recording menus: IMAGE QUALITY SETTINGS, AF/MF SETTINGS, AUDION SETTINGS and TIME CODE SETTING.

For ease of reference, I've included all of the different movie settings in one list. However you should get to know your camera so that you can easily find where these settings are located. Of course, not all models will have all of these settings.

## **SIMULTANEOUS HDMI OUTPUT to EXTERNAL MONITOR**

The latest models can output video to an HDMI device during recording. This allows you to simultaneously check footage on the camera's LCD/EVF and on an external monitor. The video data can even be recorded onto an external recorder in real time in uncompressed format.

In addition, when shooting 4K movies, you can choose log gamma "F-Log" to record a wider dynamic range than normal video mode. (The 5<sup>th</sup> Gen models also have F-Log2, which offers an even large dynamic range of 13+ stops.)

As I mentioned above, you also have the option of applying the film simulations; like shooting JPEG stills, this really helps you vary your look and add instant style to your motion work. It allows you to get great looking, and very stylized footage right out of the camera without having to do any color grading or video post processing.

[Here's a mountain bike race video I shot earlier this summer with the X-T4.](#) I mostly used the 100-400mm lens, but also featured the 16mm f/2.8 lens, using the CLASSIC Neg. film simulation with a SHADOW TONE adjustments of +2 to increase contrast and give it a muted, hard edge, gritty look.

Rather than try to manually select an AF point, which would have been extremely difficult with some of these clips, I just put the camera on [Movie AF Mode - MULTI](#) and let it acquire subjects on its own.

Even if you don't have one of the higher end models, you can still shoot great looking video and make it as fun as you want it to be.

# MOVIE MODE

All of the X Series cameras can shoot video at a number of sizes and frame rates. In this menu, you choose the **aspect ratio** for your video, an appropriate **frame rate** and your desired **bitrate**. Not all of these setting options will be available on all cameras. If a setting is grayed out, it means your camera doesn't have that particular option available.

On the 5<sup>th</sup> Gen models, you'll find some of these settings inside the MEDIA REC SETTING, as well as [Movie File Type and Compression](#), and specify a destination for your video files. (See Below)

## CHOOSING YOUR ASPECT RATIO

The aspect ratio determines resolution and size of your video. The larger the aspect ratio, the bigger your video will be on the screen, the higher the resolution, and the more room the video files will take up on your memory card and hard drive. Larger video files also require more processing power to play and edit on your computer.

**8K (16:9) 7890 x 4330** (X-H2 only)  
**6.2K (3:2) 6240 x 4160** (X-H2S only)  
**6.2K (16:9) 6420 x 3510** (X-H2 and X-T5 only)  
**DCI 4K (17:9) 4096 x 2160**  
**4K (16:9) 3840 x 2160**  
**Full HD (17:9) 2048 x 1080**  
**Full HD (16:9) 1920 x 1080**  
**HD (16:9) 1280 x 720** (Older X Series models)

## CHOOSING YOUR FRAME RATE

Depending on the camera and your chosen aspect ratio, you can choose from the following worldwide standard motion picture format frame rates:

**60p (59.97p) - Suited for fast paced action and gives crisp resolution and details.**

**50p - Works well for faster motion, when you still want some blur.**

**30p (29.97p) - The standard format for digital home movies of normal scenes.**



**25p** - Similar to 24p, but is based on UK, EU and Australian PAL format.

**24p (23.97p)** - The standard motion picture format. Gives a pleasing, cinematic effect.

## CHOOSING YOUR BITRATE

Bitrate is basically how fast your video information is processed/transferred during playback. It's measured in megabits per second. The higher the bitrate, the higher the quality of your video, but at the cost of larger file sizes.

**720Mbps** (X-H2 and X-H2S only)

**400Mbps** (X-T3/4, X-H2 and X-H2S only)

**360Mbps** (X-H2, X-H2S and X-T5 only)

**200Mbps**

**100Mbps**

**50Mbps**

For shooting things like interviews, vlogs, "Talking Head" YouTube videos or other static or slow moving subjects in bright light, lower bit rates of **50Mbps** and **100Mbps** will be fine, and this will create smaller video files. For fast moving subject or if you're shooting in lower light, **200Mbps** and up will produce higher quality video and lower noise, but your files will be much larger.

The X-H2 and X-H2S can shoot at up to **720Mbps**, which gives astoundingly high level of quality and crispness to the video, even with very fast motion.

## DESTINATION

On 5<sup>th</sup> Gen models, you specify where the camera stores movie files inside the MEDIA REC SETTING menu, either to one card, both cards, or to HDMI. On X-T5, the **X** and **Y** options send footage of Card Slot 1 or 2 respectively, until that card fills. Any additional footage will be recorded to the other card. The **Z** option records footage to both cards at the same time. Or, you can specify that movies are only recorded to **HDMI**.

NOTE: Shooting video, especially very high resolution, requires a great deal of battery power. When shooting 4K, you often get an average of 10 minutes per battery, depending on the camera.

If you intend to shoot a lot of video with the X-T2/3/4 or the new X-H2 series cameras, I highly recommend using the Vertical Battery/Booster Grip, which holds two extra batteries. With a fully loaded grip and one in the camera, you can shoot a max of 30 minutes of video on a single charge, and anywhere from 2-4 hours with the new X-H2 and X-H2S.



# FILE FORMAT / MEDIA REC SETTING

This is where you choose a video codec for movie recording. On the X-H2 and X-H2S, this menu is called MEDIA REC SETTING, and it has a lot more options.

**H.265(HVEC)** gives you higher quality footage with a higher compression ratio. However, video shot with this mode can only be viewed on devices that support H.265(HVEC). This format is only supported on the 4<sup>th</sup> and 5<sup>th</sup> gen X Series cameras.

**H.264** is the most widely-supported video codec and can be viewed on most devices. It's available in two formats: **MOV/LPCM**, which gives high quality picture and sound and **MP4/AAC** which is suitable for movies that will be uploaded to the web.

5<sup>th</sup> Gen X Series models can also support Apple's ProRes video format, **but only when movies are saved to a Type B CFexpress memory card or recording to external HDMI. ProRes video cannot be recorded internally to an SD card.**

**MOV/ProRes 422 HQ:** This high quality format has widespread adoption across the video post-production industry and offers very high quality full-width video with 10-bit 4:2:2 color and virtually lossless reproduction.

**MOV/ProRes 422:** This high quality codec offers nearly all the benefits of 422 HQ, but at a smaller data rate for better streaming and real-time editing performance.

**MOV/ProRes 422LT:** A more highly compressed video codec that produces full resolution video at much smaller files. Ideal when storage capacity is limited.

## ProRes PROXY SETTING

When shooting Movies in ProRes format, you can choose to simultaneously record a duplicate "proxy" version of your video at the same time. You have three options:

**ON (H264):** The camera will record proxy videos in H.264 format.

**ON (ProRes Proxy):** Records videos in the highly compressed ProRes Proxy format

**OFF:** Proxy recording is disabled.



# MOVIE COMPRESSION

This is where you choose a compression ratio for your video footage. This menu is only found on the X-T3 and X-T4. For compression options on the new X-H models, see the [File Format](#) menu.

**ALL-Intra:** Each frame is compressed separately. This results in larger video files, but it's an ideal choice if you intend to further process your movie footage. When shooting in 4K mode, max frame rate is reduced to 29.97P and 25P.

**Long GOP:** This setting gives you a tradeoff between good image quality and high compression. Files are much smaller, which makes this an ideal setting for longer movies.

# FULL HD HIGH SPEED REC

Most newer model X Series cameras allow you to do Full HD movies at high frame rates, which are then played back in **slow motion**. (The X-H2S can record 4K video at high speed.) Footage is recorded at frame rates of 100p, 120p, 200p or 240p, and played back at either 1/2, 1/4 or 1/5 speed. Choose your desired frame rate & play speed and have fun!

[Here's a mountain biking example I shot with the X-T4.](#)

# INTERFRAME NR

On some 4K compatible models, this is called 4K Interframe NR. Choose **ON** or **OFF** to enable Interframe Noise Reduction. I have no experience with this setting, but from what I've read, it's used when shooting video of things that aren't moving. With subject or camera movement, you may experience ghosting.

# F-Log RECORDING

This is found on the X-T3, X-T30, X-Pro 3, X100V, X-E4, X-S10 and X-H1 only. Use this option to apply a soft gamma curve to your movie recordings. This gives you a very low contrast profile that's highly suitable for further processing and color grading.

## F-Log/HLG RECORDING

X-T3/X-T4 and 5<sup>th</sup> Gen models only. Similar to the previous menu item, this setting lets you choose a destination for shooting F-Log/HLG (Hybrid Log-Gamma) movies when the camera is connected to an HDMI device.

Basically, you can choose to save raw footage, footage that's processed with a film simulation, or footage recorded in F-Log/F-Log2/HLG format to both the memory card and to an HDMI device, or save different format to different destination. Depending on the model, you could send straight film simulation footage or an F-log output of your movie to either the memory card to an HDMI device, or send F-Log footage to the card and film sim video to HDMI, etc... The icons in the menu tell you what goes where.

With F-Log/F-Log2 selected, a low contrast color space with a wide gamut is applied to the files. This helps make the most of the X-Trans sensor's great dynamic range and allows for a wider range of color grading and processing options in post. Also, when shooting in this mode, your minimum ISO is ISO 640.

If you're shooting professional or high quality video and intend to post process your files with color grading or other tonal adjustments, you'll probably want to output to F-Log/F-Log2. Visit the FUJIFILM website to [download the necessary LUT file](#) for editing F-Log video.

## DATA LEVEL ADJUSTMENT

This brand new 5<sup>th</sup> gen setting allows you to choose a standard signal range, which is the range of range of values the camera records when shooting movies. You have two choices: **VIDEO RANGE** and **FULL RANGE**.

Essentially, this determines the bit values and grayscale range of your content when viewed on a calibrated display. **FULL RANGE** gives you slightly more information in the extreme whites and blacks, but only if your device is capable of rendering this information.

Unless you're experienced with this terminology, I would recommend leaving the camera set to **VIDEO RANGE**. You'll get great results. If you want to learn more about this aspect of video post production, [I would recommend reading this highly informative article](#).

## PERIPHERAL LIGHT CORRECTION

X-T3, X-T4, X-T30, X-Pro 3, X100V and X-H1 only. With some lenses, you may experience light falloff in the corners. This option lets you correct this. Note, if you're using a non-Fuji lens, or any lens that doesn't transmit data to the camera, you'll have to correct for this in the [Mount Adaptor Settings](#) menu.

## FOCUS AREA

4<sup>th</sup> Gen models only. This lets you select a focus area for shooting video. You can also use the regular method of selecting a focus area by using the AF Joystick. Note, this option is unavailable if the camera is set to **MULTI** in the Movie AF Mode.

## MOVIE AF MODE

You can choose how the camera selects the focus point when shooting video.

- **MULTI:** Automatic AF-point selection. Like WIDE/TRACKING AF, but for video.
- **AREA:** The camera will focus on the subject in your selected focus area.

Which mode you use will depend on your subject type and movement, and how comfortable and adept you are with selecting & moving AF points around the frame.



# FOCUS CHECK LOCK

This option lets you choose whether the focus zoom remain in effect once movie recording beings. It's only found on the newer models.

## HDMI OUPUT SETTING

This is where you adjust settings when recording movies to an HDMI device.

**HDMI OUPUT INFO DISPLAY:** By selecting ON in this setting, your connected HDMI devices will mirror the information in the camera display. Most newer Fuji model have this setting, but on 4<sup>th</sup> Gen models, it's a separate menu item.

**HDMI REC CONTROL:** You can choose whether the camera sends movie "Start" and "Stop" signals to your HDMI device when you press the shutter button. On 4<sup>th</sup> Gen models, this a separate menu item.

**RAW OUTPUT SETTING:** On 5<sup>th</sup> Gen models, you can choose to output movies to an either an ATMOS or Blackmagic Design external recording device via HDMI. With this selected, RAW footage is recorded at maximum resolution, with no in-camera enhancements applied. i.e., FILM SIMULATION.

## 4K/FULL HD MOVIE OUTPUT

This is actually two separate menu settings, one for 4K and one for Full HD. You can chose the destination for 4K and Full HD movies while the camera is connected to an HDMI reorder or other device that supports 4K/Full HD video.

Depending on your camera, you'll have different options for which formats get saved to which output destination. If you look at the menu, it's pretty self explanatory.

You'll either have two options, SD and HDMI, or you'll have a host of detailed output choices. There's also an option that sends 4K to the HDMI port, but not to the memory card. This allows you to send your video files straight to an HDMI recorder.

- **SD:** When shooting in 4K, your movie files are saved to the camera's memory cards in 4K format and to your HDMI device in Full HD format.
- **HDMI:** Your 4K movies are sent to the HDMI device as 4K video. If the SD option has a "dash symbol" by it, then no video files are saved to your memory card. **(Note: The X-Pro2/3 does not have HDMI Output, it only saves 4K vide to the CARD.)**


NOTE: On the new 5<sup>th</sup> Gen models, you specify all movie output destinations in the MEDIA REC SETTING menu.

## 4K HDMI STANDBY QUALITY

X-T3/4 and X-H1 only. This lets you choose whether the connected HDMI output device switches from 4K to Full HD during standby. Switching to Full HD reduces battery drain.

## IS MODE (MOVIE)

The X-T4 and new 5<sup>th</sup> Gen models have an additional IS (Image Stabilization) setting in the main MOVIE SETTINGS menu that allows for dedicated optimization of the IBIS and OIS systems when shooting video.

- **IBIS/OIS:** Enables both the camera's in-body stabilization (IBIS) and optical lens stabilization (OIS). If your current lens does not have OIS, then only IBIS will be used.
- **IBIS/OIS + DIS:** Enables in-body (IBIS), lens (OIS) and digital image stabilization (DIS) to achieve maximum image stabilization when shooting movies.
- **OFF:** Image stabilization off. The hand  icon appears in the display. This is the recommended mode when using a tripod or when mounted on a fixed support.

## IS MODE BOOST

This control, found only on the X-T4 X-S10 and 5<sup>th</sup> Gen models with IBIS, allow for optimized stabilization for performing panning motions when shooting video. an additional IS setting in the main MOVIE SETTINGS menu that allows for dedicated optimization of the IBIS and OIS systems when shooting video. For genera move shooting, keep this setting **ON**, unless you're doing hand-held panning, in which case, turn this setting **OFF**.

## ZEBRA SETTING / ZEBRA LEVEL

ZEBRA SETTING shows highlights that might be overexposed during video shooting. Here, you can choose the direction of the stripes, slating right or left, or you can turn the zebra OFF.

ZEBRA LEVEL allows you to choose the brightness threshold for displaying the Zebra stripes, from 50-100. At 50, the camera is more sensitive, and you'll see the zebra stripes in a broader level of exposure. At 100, they'll only display on the brightest subject matter.

## TIME CODE SETTING

Here, you can adjust the time code display settings for video recording. Time Code is used to sync different video devices, most commonly linking the the video footage with your sound recording/playback device.

**TIME CODE DISPLAY:** Turns the time code display on and off.

**START TIME SETTING:** Select your time code start time.

**MANUAL INPUT:** Choose this option to start the time code manually.

**CURRENT TIME:** Sets the start time to the current time.

**RESET:** Sets the start time to 00:00:00

**COUNT UP SETTING:** Select whether the time code runs continuously or only during recording.



**REC RUN:** Time is only clocked while you're actually recording video.

**FREE RUN:** Time is clocked continuously, whether you're shooting or not.

**DROP FRAME:** At certain frame rates, (59.94 & 27.97) there's a discrepancy between the time code, which is measured in seconds, and the actual recording time, which is measured in fraction of a second. You can choose to enable **DROP FRAME ON** to allow the camera to drop occasional frames as necessary in order to match the time code. You can also turn this **OFF**.

**TIME CODE OUTPUT:** This lets you choose whether time code is set your HDMI devices.

## TALLY LIGHT

Choose whether the Indicator Lamp and/or AF-Assist Light displays during movie recording, and how each light behaves. Each one can be chosen to blink, stay on, or be turned off.

## MOVIE OPTIMIZED CONTROL

This control allows you to disable the camera dials so that you can only adjust movie settings via the touch-screen controls. This allows for silent operation, so you won't hear those noisy clicks when you turn the dials. **NOTE:** On some models, this is called **MOVIE SILENT CONTROL**.

When you turn this setting **ON**, you'll see an additional "Movie Set" icon on the touch-screen. When you tap this, you'll be able to adjust the following parameters via touch control. Simply tap and swipe up, down, right or left on the screen to choose and set your desired controls.

SHUTTER SPEED

APERTURE

EV +/-

ISO

INTERNAL/EXTERNAL MIC LEVEL ADJUSTMENTS

WIND FILTER

HEADPHONES VOLUME

FILM SIMULATION

WHITE BALANCE

## MIC LEVEL ADJUSTMENT (Internal/External)

Here you have control over your internal and external mic levels. You can either set to **AUTO**, **MANUAL** and adjust accordingly, or turn it **OFF** to disable the microphone.

On RED/BLUE cameras, you'll find this in one of the **RED MENUS**.

## MIC JACK SETTING

This is where you specify what type of audio device that is connected to the microphone jack. You can either choose **MIC** for an external microphone, or **LINE**, for an external audio device with a line output, like a keyboard or mixer.

## MIC LEVEL LIMITER

This setting allows you to add an automatic limiter to reduce distortion caused by sudden mic input signals that are too loud. It's either **ON** or **OFF**. It's better to set your [Mic Level Adjustment](#) to a workable level than to rely on this setting, but sometimes loud noises can get through and this option can help.

## WIND FILTER

Wind noise is the bane of videographer who work outside, and by enabling this setting, you can reduce it during movie recording.

# LOW CUT FILTER

This enables a low-cut, or high pass filter that can reduce rumbling, low frequency noises that may occur during recording. It's either **ON** or **OFF**.

# HEADPHONE VOLUME

This allows you adjust the headphone volume level between **1-10**, or mute them entirely with the **0** setting.

# MIC/REMOTE RELEASE

This item lets you specify whether the device connected to the microphone/remote release connector is a microphone or a remote release.





# XLR MIC ADAPTER SETTING

The higher end X Series models allow you to use XLR microphone adapters to expand the capabilities of your audio recording when shooting movies.

## MIC INPUT CHANNEL

This feature allows you to record four-channel quadraphonic sound with the help of the camera's built-in microphone, or two channel stereo sound by using only an XLR mic that's connected via an XLR mic adapters and interfaces like those made by [IK Multimedia](#) and [TASCAM](#).

- **4ch XLR+CAMERA:** Record four-channel sound with the help of the built-in mic.
- **2ch XLR ONLY:** Record two-channel sound using only an external mic that's connected to the XLR Microphone Adapter.

## 4ch AUDIO MONITORING

This allows you to choose the sound source that's output to headphones or other audio monitors during movie recording.

- **XLR:** Monitor sound from external mics connected to the XLR mic adapter.
- **CAMERA:** Monitor the sound from the camera's built-in microphone.

## HDMI 4ch AUDIO OUTPUT

This allows you to choose the source of audio that's sent to the HDMI device.

- **XLR:** Audio from external microphones that are connected to via the XLR mic adapter are output to the HDMI port.
- **CAMERA:** Audio from the camera's built-in microphone is output to the HDMI port.

NOTE: Four-channel audio recording is only available when **MOV/H.264 (HVEC)** or **MOV/H.264 LPCM** is selected in the Movie [File Format](#) menu.

# SET UP MENUS

1. [USER SETTINGS](#)
2. [SOUND SETTING](#)
3. [SCREEN SETTINGS](#)
4. [BUTTON DIAL SETTINGS](#)
5. [POWER MANAGEMENT](#)
6. [SAVE DATA SETUP](#)
7. [CONNECTION SETTINGS](#)

[BACK To HOME](#)



# USER SETTINGS

1. [Format](#)
2. [Date/Time](#)
3. [Time Difference](#)
4. [Language](#)
5. [My Menu Setting](#)
6. [Sensor Cleaning](#)
7. [Battery Age](#)
8. [Reset](#)

[BACK To HOME](#)





# FORMAT

To format a memory card, scroll to this setting, choose your card slot (if applicable) and hit **OK**.

**SHORTCUT:** The MY MENU cameras have a great shortcut that lets you saves you about six button presses.

Press and hold the TRASH button for about 2.5-3 seconds. Then, while holding the button down, press the rear command dial. This will bring you right to the Format option, (or the Card Slot Selection option, if applicable).

**I always recommend formatting your memory cards each time you put a new one in the camera.** This cleans the card off and reduces the chance for card errors. It's just a good habit to get into because it's lets you start fresh every time.

What if you put in a card that was 1/2 full, with room for, say 200 frames, and you shot 200 photos? You'd either have to take that card out and waste half the space, or else you could start doing the "delete image" dance a couple hundred times to get rid of the old images.

Or worse, (this has happened to me), you put an almost full card in and shoot 10 killer images before you realize that forgot to format the card. Maybe you run out of room. What if it's the only card you happened to be carrying at the time?

Yea, you can see where this is going. You don't want to find yourself in this boat. Believe me.

Format your cards.

On RED/BUE cameras, FORMAT is your last item in [BLUE3](#). In other words, it's the very last item in the entire menu. Instead of scrolling all the way down through all of the menus to get there, try hitting MENU and scrolling "up." This will bring you right to SET-UP Menu 3, where FORMAT lives.

# DATE/TIME

Usually, you should only have to set the date and time when you first use a brand new camera, or when installing certain firmware updates. (Not every firmware update forces you to reset the date/time.)



## TIME DIFFERENCE

This option lets you switch the camera clock from your normal HOME time zone to a second time zone, called LOCAL. You specify the difference between your LOCAL time zone and your HOME time when choosing that menu item. This is a good thing to do when traveling, because it adjusts your capture times to reflect the actual time at your destination.

Otherwise, if you shoot photos at noon when you're six time zones ahead, your capture times will show image creation at 6:00AM. You can always change your capture time metadata in programs like Lightroom and Photo Mechanic, but if you use

this option, you won't have to.

One nice feature is that if LOCAL is selected, every time you turn the camera on, the date and time will be displayed in yellow for a few seconds. This is a nice warning to let you know which time zone you're currently using, and it will help you remember to change it back when you get home.

I often forget about this menu item, so maybe writing it down here in this Book will help me remember to use it for my next trip. Now if you'll excuse me, I have to go adjust my capture times for all of my Scotland images. Fortunately, there's a batch command, so it doesn't take very long.

## LANGUAGE

Which language do you want to use for all your Fuji menus? You have 32 choices.

## MY MENU SETTING

The MY MENU is a great new addition to the new menu system. It's one more place where you can store often-used items settings, (you have 16 available slots), and as soon as you put anything in your MY MENU, **that item will be the very first thing to show up when you turn the camera on and hit the MENU/OK Button.**

This is about as fast as you can get. **Put your very favorite setting at the top and it will take only one button press to get there.** That's as fast as any Fn button and its faster than the Q Menu. From there, it's only a quick scroll down to the next few items.

NOTE: If you've been scrolling through or using items in your MY MENU, the next time you access your MY MENU, it will go straight to your last used setting. It will perform this way until you turn the camera off and back on again.

You can add items, remove items and rank items in the MY MENU panel in your USER SETTINGS.

To add, simply hit **ADD ITEMS**, then select from any available item in your entire

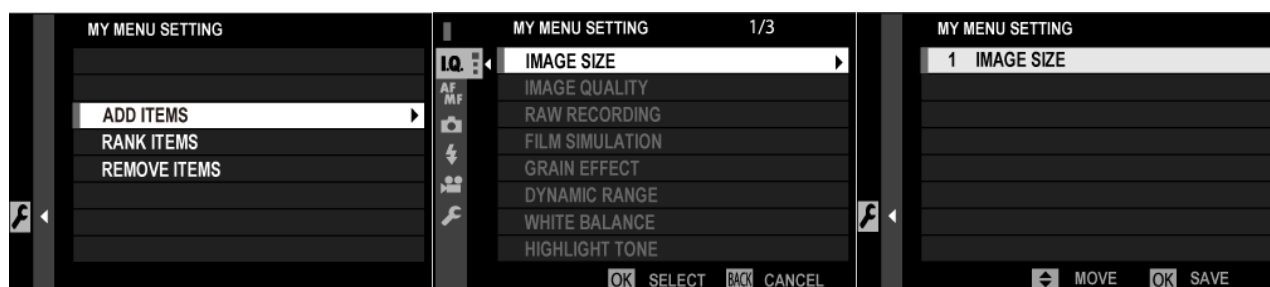


camera menu. (Available items are highlighted in blue, while items currently in your MY MENU appear with a checkmark.)

To reorder, hit **RANK ITEMS**, then choose any of your current MY MENU items and hit **OK**, or hit the “right” button or move the joystick to the right.

It will now be highlighted in yellow and you can use the up or down buttons or the joystick to move it to a new slot. When you’ve done, hit **OK**, or navigate back to the left with the buttons or joystick.

To remove items, simply chose **REMOVE ITEMS**, navigate to the selected item and hit **OK**.



## SENSOR CLEANING

This is where you set your preferences for sensor cleaning. A super secret process of electromagnetism, vibration, sub atomic energy, and tiny gnomes with brushes is activated either when the camera is turned on, turned off, or immediately when you hit the OK button, depending on how you set the options in this menu.

If, after a few rounds of cleaning, the dust proves too troublesome, even for the gnomes, my advice is to use a blower brush. Beyond that, seek professional advice from someone other than me.

Sorry I can't be more help here. I just don't feel like I'm the most qualified guy to tell anyone how to clean their sensor. I tried to clean my Nikon sensor with one of those fancy whirling static brushes one time and ended up with a scratched sensor. It cost me \$700 to replace. Needless to say, I've never touched my sensor since then.

Also, I wouldn't advise blowing on your sensor either. Unless you have a serious case of cottonmouth, you could end up spitting on it. How do I know this? Don't ask...

Like I said, get a blower brush.

## BATTERY AGE

This setting allows you to check the age of your battery. The older the battery, the faster it will lose its charge. If your battery is below the middle mark, you should probably replace it.

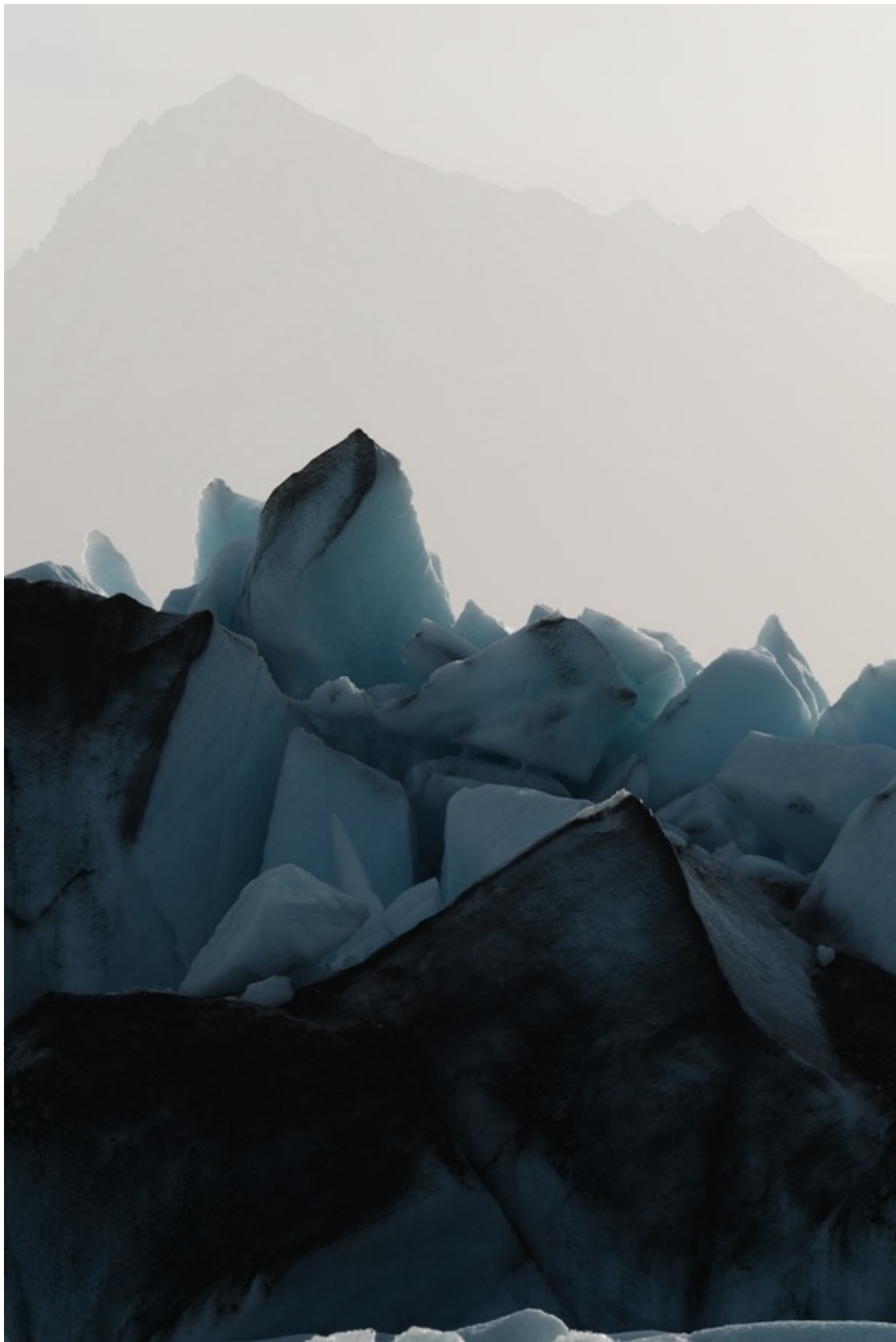
## RESET

This resets all SHOOTING and SETUP menu options to their default settings.

Any custom white balance you have set, as well as custom settings banks created using **EDIT/SAVE CUSTOM SETTING**, **WIRELESS SETTINGS**, and your **DATE/TIME** and **TIME DIFFERENCE** options will not be affected. \*Whew!\*

In six years shooting with the X Series cameras, I've never found the need to use this function.

If you have a Red/Blue model, all of the USER SETTINGS in this section (Except for MY MENU and SENSOR CLEANING) are found in one of the [BLUE MENUS](#).





# SOUND SETTING

1. [AF-Beep Vol.](#)
2. [Self Timer Beep Vol.](#)
3. [Operation Vol.](#)
4. [Headphones Volume](#)
5. [Shutter Volume](#)
6. [Shutter Sound](#)
7. [Playback Volume](#)
8. [4ch Audio Playback](#)

[BACK To HOME](#)



# AF-BEEP VOL.

By default, the camera will make a beep sound when the autofocus successfully acquires focus on your subject and your selected AF Points turn green.

You can select the volume level for this function, or you can turn it off so there is no beep.

Note: On the RED/BLE cameras, your SOUND SET-UP menu is found in the [BLUE MENU](#). You also have a very confusing function called SOUND & FLASH OFF.

This setting **turns all camera sounds off**, and **it disables the hot shoe**. Your flash will not fire if this item is set to ON. You'll probably want to keep SOUND & FLASH OFF, "OFF."



## SELF TIMER BEEP VOL.

Same thing as above, but for Self Timer. You have three volume level options, or you can turn the beep off.

## OPERATION VOL.

This controls sound level for menu navigation. By default, you'll hear "little clicks," when moving through the menus, kind of like typing on an iPhone when you have clicks enabled. You can set three levels, or turn the clicks off.

I have all three of these settings OFF on my cameras. I shoot a lot and can only take so many beeps and clicks before they drive me crazy.

## HEADPHONES VOLUME

Choose the volume level if you're using headphones connected to the [VPB-XT2 power booster grip](#), say if you're shooting and previewing video clips.

It goes from 1-10, or you can choose **OFF** to mute the sound.

## SHUTTER VOLUME Menus

These control the volume of your ELECTRONIC SHUTTER. It doesn't actually make any noise, but you can assign a pretend "shutter sound" to the ES or the EF to make it a little more realistic, or at least a little more noisy.

You can also disable any sound so that your ES or EF is silent. You'd want this option if you're shooting on a movie set or inside a theater, or if you're doing clandestine photography and don't want anyone to know that you're taking pictures.





## SHUTTER SOUND

If you want your Electronic Shutter (ES or EF) to make noise, you have three different sound options.

- **SOUND 1** is a tiny “tick.”
- **SOUND 2** is a slightly deeper “chick.” Actually, it’s more like a “chock,” that sounds kind of like a tiny handclap from an old Roland drum machine.
- **SOUND 3** is a very fast “ca-chick!” It’s supposed to sound like a real shutter firing at about 1/1,000 sec. It’s kind of cute.

I think my favorite is number 2, although I’ve used 1 as well. Maybe you’ll like number 3 best.

## PLAYBACK VOLUME

Set the volume for audio playback of movies and [voice annotations](#)

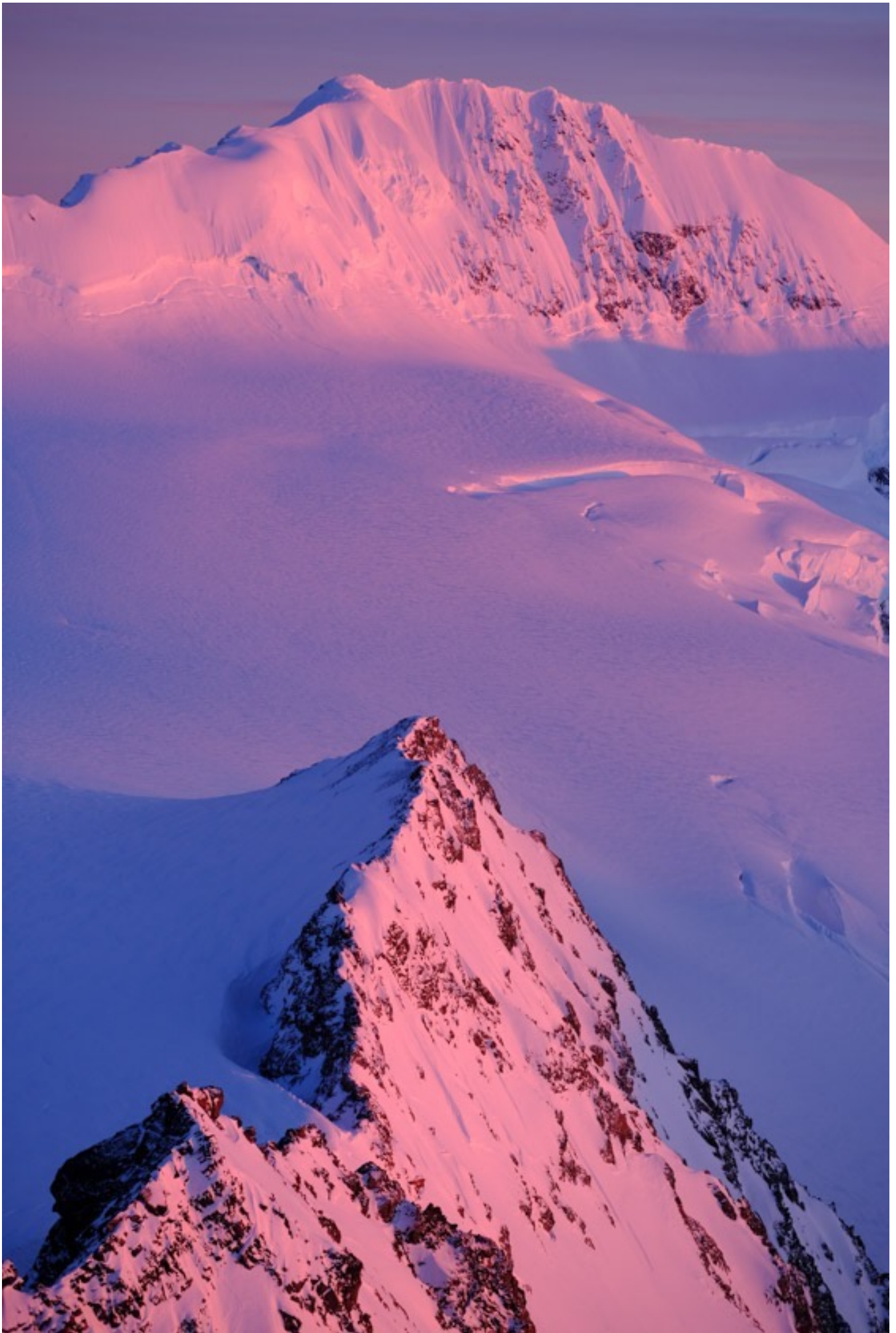
# 4ch AUDIO PLAYBACK

The X-T4, X-T5, X-H2 and X-H2S allow you to adjust the audio settings when viewing movies that have 4 channel audio.

**XLR:** The camera plays audio that was recorded via the external microphone via the XLR microphone adapter.

**CAMERA:** The camera plays back audio that was recorded via the camera's built-in microphone, or external microphones that were connected via the camera's mic jack.



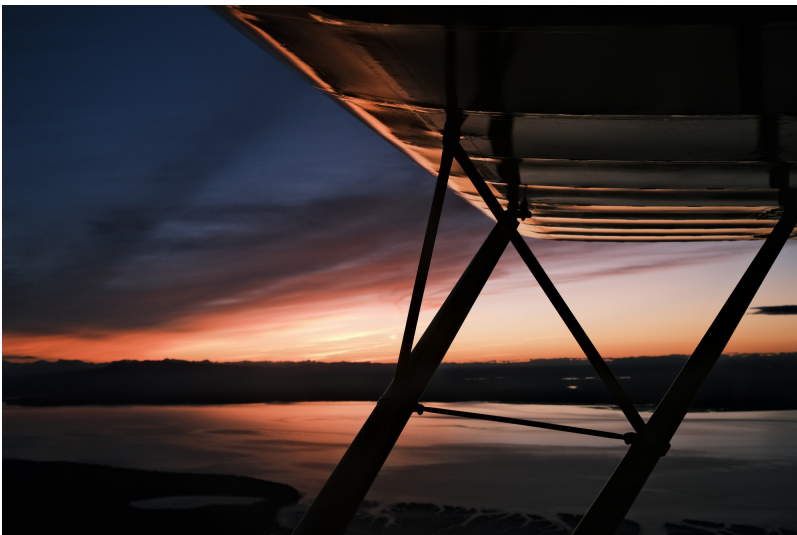




# SCREEN SETTINGS

1. [Screen Settings](#)
2. [View Mode Setting](#)
3. [EVF Brightness](#)
4. [EVF Color](#)
5. [LCD Brightness](#)
6. [LCD Color](#)
7. [Image Display](#)
8. [Auto Rotate Displays](#)
9. [Preview EXP/WB in Manual Mode](#)
10. [Natural Live View Mode/Preview Picture Effect](#)
11. [F-Log View Assist](#)
12. [Framing Guideline](#)
13. [Focus Scale Units](#)
14. [Aperture Unit for Cinema Lens](#)
15. [Dual Display Setting](#)
16. [Autorotate PB](#)
17. [Display Custom Setting](#)
18. [Large Indicators](#)
19. [Large Indicators DISP. Setting](#)
20. [Sub Monitor Setting](#)
21. [Information Contrast Adj.](#)

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I like the SCREEN SETTINGS Menu. In addition to setting brightness and color on your viewfinder and LCD screen and setting up your display with things like framing guidelines, shooting info, histograms, and electronic level, this menu also contains two of my favorite settings: [PREVIEW EXP/WB in MANUAL MODE](#) and [PREVIEW PICTURE EFFECT](#).

On the RED/BLUE cameras, your SCREEN SETTINGS are found at the bottom, in the [BLUE MENUS](#).

## VIEW MODE SETTING / EYE SENSOR SETTING

This is where you adjust the settings for the Eye Sensor and view modes for both the EVF and LCD. Not all cameras have this setting, and on some models, this is called EYE SENSOR SETTING. All X-T and X-H models have a VIEW MODE button on the right side of the EVF housing.

## EVF BRIGHTNESS

Here you can set the brightness level inside your electronic viewfinder.

**MANUAL** lets you choose to choose a value, while **AUTO** automatically selects a brightness level for you. Note: The older X Series models don't have **AUTO**.

I usually leave mine set to Auto, or else at 0.

## EVF COLOR

This adjusts the hue of your electronic viewfinder. Basically, it does a subtle shift in saturation. I've never changed this setting from the default. The X-T3 and X-H1 also have an EVH COLOR ADJUSTMENT menu setting.



## LCD BRIGHTNESS

Same as above, but for the LCD screen.

## LCD COLOR

Same as above, but for the LCD screen. Again, I've never adjusted this. The LCD screen looks just fine to me. Some models also have an LCD COLOR ADJUSTMENT menu setting.



# IMAGE DISPLAY

This setting lets you choose how long images are displayed after capture.

- **CONTINUOUS:** Pictures are displayed on the LCD/EVF until you press the **MENU/OK** button, or until you press the shutter button lightly.

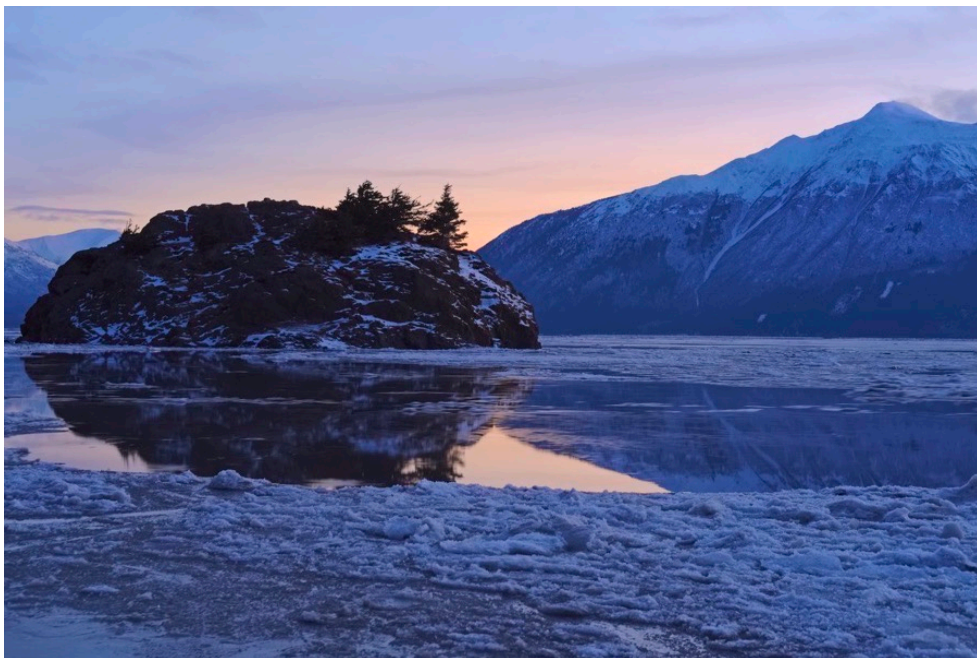
Remember, when reviewing images, **you can zoom to 100% by pressing the rear command dial**, or hitting the FOCUS ASSIST button on the X-T1.

- **1.5 SEC OR 0.5 SEC:** Pictures are displayed for the selected time, or until you press the shutter button again.

- **OFF:** The camera does not display pictures after capture. I keep my cameras set to **OFF**. I don't need to see every frame I shoot. Plus it saves battery power.

# AUTO ROTATE DISPLAYS

If you set this function to **ON**, your shooting info and other indicators will rotate to the correct orientation if you turn the camera vertically. I leave this setting ON at all times.



# PREVIEW EXP/WB in MANUAL MODE

Now we're getting to the good stuff!

Selecting **PREVIEW EXP/WB in MANUAL MODE** enables you to preview exposure and white balance settings and adjustments when shooting in Manual exposure mode. This is the default setting and it's how you normally want the camera to operate.

Remember, one of the huge advantages of shooting with mirrorless cameras is that **you're able to view real time changes to your exposure** in the LCD and EVF, because you're drawing the view directly from the sensor. This means **what you see on the LCD is EXACTLY what you'll get when you take the photo**. In most situations, you'll WANT to see this stuff, because it removes the uncertainty, especially when shooting in tricky light.

Turning this setting **OFF** essentially makes your Fuji act more like a DSLR, where what you see may NOT be what you get. Unless you like the mystery of tricky exposures, you should keep this set to **EXP/WB ON**.



## SO, WHEN MIGHT YOU WANT THIS SETTING TURNED OFF?

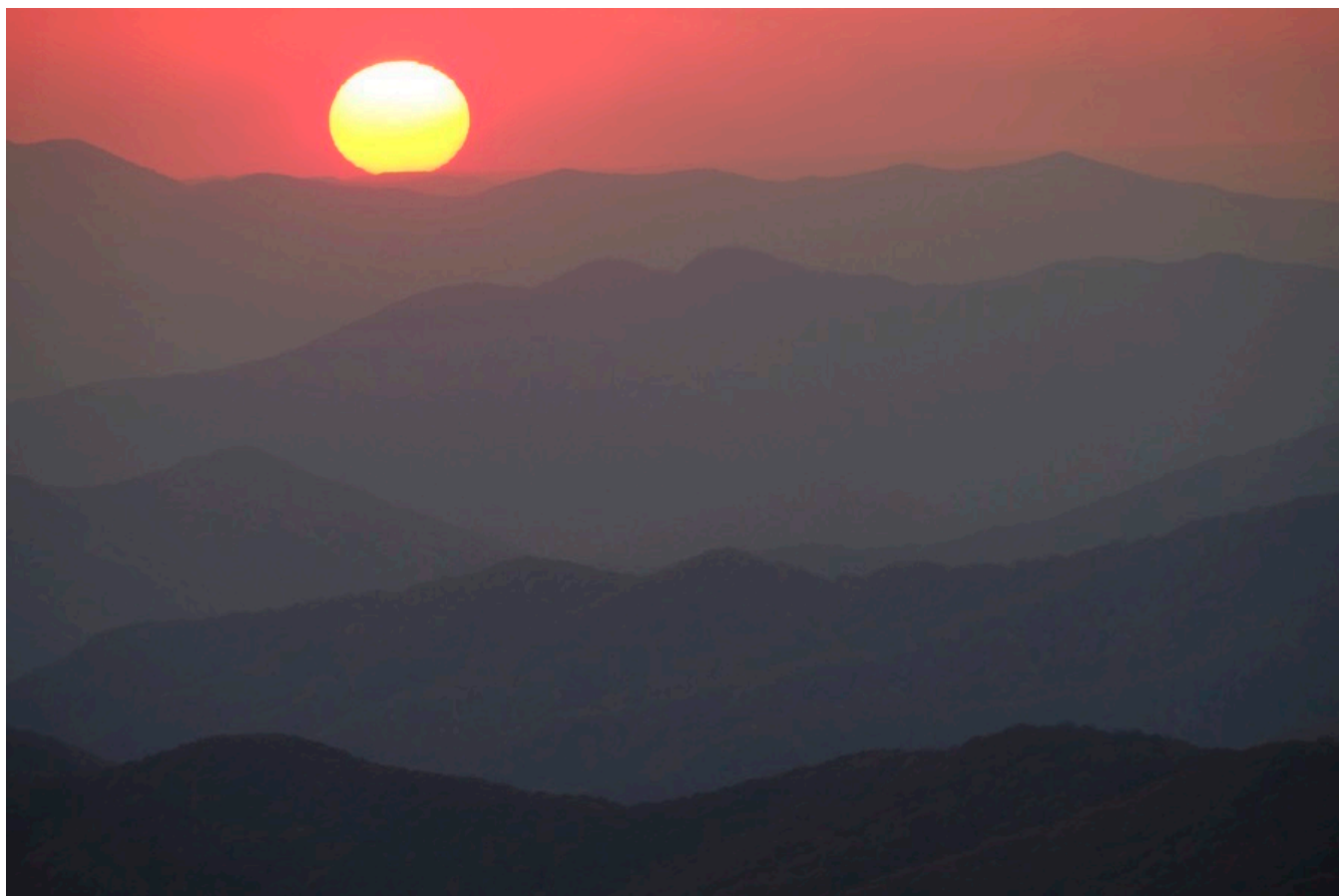
The answer is **when you're shooting with flash**. During these times, you might be using an ambient exposure setting that's simply too dark to see in the viewfinder. Say you're shooting an event in the dark and lighting the scene entirely with flash.

In this case, your exposure settings are something like 1/250 at f/8, which, in a dark room, will be too dark to see anything through your viewfinder.

Turning the setting to **OFF** will give you a normal bright view in your EVF/LCD that's unaffected by exposure changes. This makes it easier to see and compose your subject matter.

In this kind of situation, you could choose to **PREVIEW WB** only, which will show you WB changes, but not exposure changes inside your viewfinder. You might go with this option when shooting under multiple types lights that have different color casts. Or if you're shooting in RAW and plan to tweak your WB settings on the computer.

If you shoot with a flash quite often, I recommend putting this function into your MY MENU, or assigning it to a Fn button for quick access.





# NATURAL LIVE VIEW / PREVIEW PICTURE EFFECT

**NATURAL LIVE VIEW** (formerly called **PREVIEW PIC. EFFECT**) lets you preview the color and effects your film simulation, white balance and other exposure settings right in your viewfinder. The default setting is **ONF**, which gives you the “*what you see is what you get*” benefit, which makes shooting with mirrorless cameras so nice. The result is that you’ll know exactly what your image will look like before you take the shot, because it will look just like what you see in the EVF/LCD.

Turning this setting **ON** turns the display totally neutral and **shows your scene without the effect of the Film Sim or White Balance**. This gives you a much more accurate view of the world in front of your camera, almost as if you were looking through an optical viewfinder.

●●● (On the older X Series models, where this was called PREVIEW PIC. EFFECT, the controls are reversed. **ON** shows film sim effects, while **OFF** shows no effects.) ●●●

With the Film Sim applied, you don’t always see how clear and bright the EVF actually is. Looking through the electronic viewfinder with this setting **ON** is almost like looking through a DSLR pentaprism. It also helps make dark, backlit and other high contrast scenes a little bit easier to see.

This option is extremely useful for situations when you want the most realism in your viewfinder, i.e., when photographing night skies or when shooting in RAW only with the mindset that you’ll do all of your own color editing on the computer.

If you’re not really into the Film Sims, or if you shoot everything in RAW and do all your own processing, you might as well give yourself the full benefit of a nice, bright EVF.

NOTE: Even if you select **ON**, you’ll still see the Film Sim effects if you’re shooting in one of the black and white/monochrome modes, or sepia, or if you’re using one of the ADV filters.



## F-LOG VIEW ASSIST

When you turn this setting on, you can display a tone-corrected preview of your movies when recording or viewing F-Log movies. It's only found on the X-T3/4 and 5<sup>th</sup> Gen models.

## FRAMING GUIDELINES

You can elect to show a framing guideline in your viewfinder and LCD to assist you with compositional decisions.

Your three choices are GRID 9, which helps you shoot according to the "Rule of Thirds," a GRID 24, which is a six by four grid, and HD Framing, which give you crop lines at the top and bottom of the frame that equate to standard HD format.

NOTE: Regardless of which option you select, it won't show until you check the FRAMING GUIDELINE option inside the [DISPLAY CUSTOM SETTING](#) Menu, which is the last item in the SCREEN SETTINGS menu.

# FOCUS SCALE UNITS

You can choose which measurement units are used to display focus distance information inside the viewfinder. Either meters or feet. I'm hoping that in a future firmware update, they'll add [smoots](#) as a third option.

# APERTURE UNIT FOR CINEMA LENS

X-T2, X-T3 and 5<sup>TH</sup> Gen models only. If you're using a FUJINON MKX-series cinema lens, you can use this option to choose whether the camera displays aperture as a T-number, which is used for movie camera lenses and professional cinematographer, or a standard f/-number.

T-numbers factor in actual lens transmission when calculating exposure to compensate for the fact that different lenses can produce slightly different exposure at the same aperture settings.

# DUAL DISPLAY SETTING

This is another great feature. When shooting in Manual Focus, you have an additional viewing option when you press the DISP/BACK button: DUAL DISPLAY Mode

In this mode, the viewfinder shows you a split screen that lets you see both a regular, full view of the scene, as well as the zoomed-in FOCUS ASSIST view at the same time on a smaller, secondary screen, (when using FOCUS PEAKING and DIGITAL SPLIT IMAGE FOCUS). This helps make critical focusing adjustments even easier and more precise.

Adding to this function, most recent models have a special [DUAL DISPLAY SETTING](#), which lets you swap views. You can either see the entire scene on the big screen and the closeup view on the small screen on the right, or the zoomed in view



on the big screen and the overall scene on the smaller one.

DUAL DISPLAY Mode is a pretty cool feature, even if you don't have a newer camera.



## AUTOROTATE PB

Select **ON** to automatically rotate pictures shot in vertical/portrait orientation during playback. Otherwise you have to turn the camera sideways to see your vertical shots right side up.

# DISPLAY CUSTOM SETTING

Another one of my favorite menu items. This lets you choose what you see in your standard display in the EVF/LCD. I just wish it weren't so far down there. It's located at the very bottom of the SCREEN SETUP menu inside the SET-UP menu, which means you have to go a long way to go in order to get there. And you can't add it to your MY MENU either. It's actually faster to go to BUTTON DIAL SETTINGS, click RIGHT, and then scroll up through the bottom of the SCREEN SETTINGS Menu until you find it.

Anyway, once you bring up this menu, you can select all of the display items you wish to show by scrolling down and clicking on our desired options. Once you're done choosing press **DISP/BACK** to save your changes, **then again to exit the menu**. Or just tap the shutter button.

Here's the full list of options with an \* next to the items I currently display on my cameras.

FRAMING GUIDELINE

ELECTRONIC LEVEL \*

FOCUS FRAME \*

AF DISTANCE INDICATOR

MF DISTANCE INDICATOR \*

HISTOGRAM \*

LIVE VIEW HIGHLIGHT ALERT (EVF)

SHOOTING MODE \*

APERTURE/S-SPEED/ISO \*

INFORMATION BACKGROUND \*

Expo. Comp (Digit)

Expo. Comp (Scale) \*

FOCUS MODE \*

PHOTOMETRY \*

SHUTTER TYPE \*

FLASH \*

CONTINUOUS MODE \*

DUAL IS MODE \*

WHITE BALANCE \*

FILM SIMULATION \*

DYNAMIC RANGE \*

BOOST MODE \*

FRAMES REMAINING \*

IMAGE SIZE/QUALITY \*

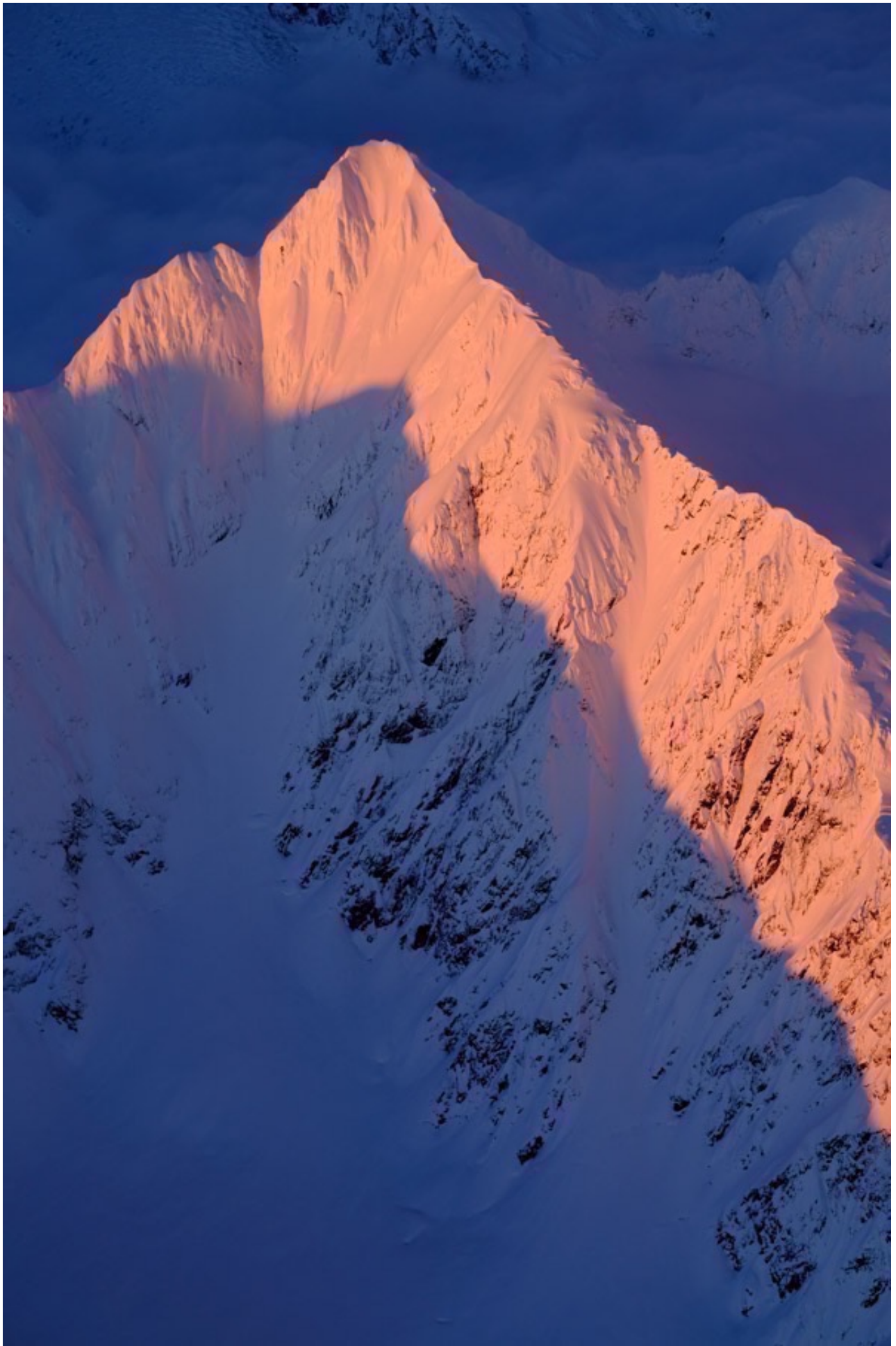
MOVIE MODE & REC. TIME \*

MIC LEVEL \*

BATTERY LEVEL \*

GUIDANCE MESSAGE

FRAMING OUTLINE





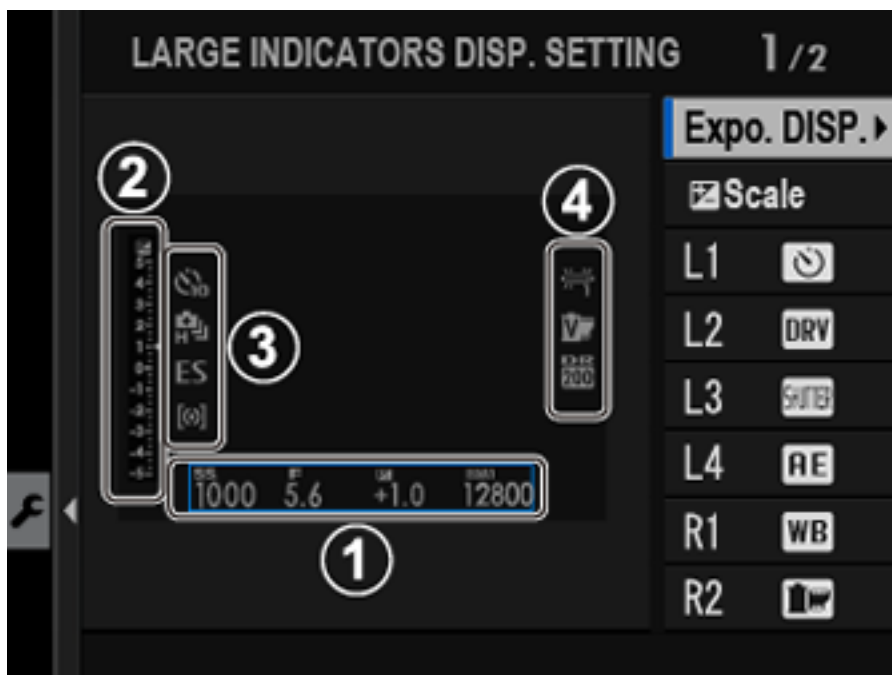
# LARGE INDICATORS MODE (EVF & LCD)

The X Series cameras now allow you the option to use enlarged indicator text to display camera info inside the EVF and LCD. There's a separate menu item for each.

## LARGE INDICATORS DISP. SETTING

Use this setting to choose the indicators that are displayed in your EVF/LCD when LARGE INDICATORS MODE is turned on. There are four locations where the indicators are displayed, as shown by the diagram.

- 1. Expo. DISP.:** Choose which info is displayed at the bottom of the screen.
- 2. +/- Scale:** Choose whether you want the EV+/- graph shown in your display.
- 3. L1, L2, L3, L4:** Choose up to four camera setting icons on the left side of your screen.
- 4. R1, R2, R3, R4:** Choose up to four camera setting icons on the right side of your screen.



## LOCATION INFO

The 5<sup>TH</sup> generation models allow you to display your location info that's

downloaded from a smartphone.

## SUB MONITOR SETTING

X-H models only. Choose which camera settings you want to display in a secondary LCD monitor. Separate displays are available for STILL MODE or MOVIE MODE. Choose your mode, highlight the items you want to show, and hit MENU/OK to select.

NOTE: On the X-Pro 3, this setting is called SUB MONITOR, and you choose what you want to show in the camera's small Sub Monitor on the back of the camera. **CLASSIC** shows your chosen film simulation, WB and ISO. **STANDARD** shows your regular camera settings, with different options for STILL and MOVIE, just like above.

## INFORMATION CONTRAST ADJ.

The latest models allow you to change how the display looks on the LCD and EVF. You have four choices, HIGH and LOW CONTRAST, STANDARD and DARK AMBIENT LIGHTING, which is red text on black. The DARK AMBIENT setting seems like a very good option for night photography and shooting concerts and dimly lit events.

## Q MENU BACKGROUND

Some X Series models give you the option to use either a black or transparent background in the Q Menu. On the X-Pro 3, this is found in BUTTON/DIAL SETTINGS.





# BUTTON DIAL SETTINGS

1. [Button Dial Settings](#)
2. [Focus Lever Setting](#)
3. [Edit/Save Quick Menu](#)
4. [Q Menu Background](#)
5. [Function \(FN\) Setting](#)
6. [Selector Button Settings](#)
7. [Command Dial Setting](#)
8. [SS Operation](#)
9. [ISO Dial Settings H/L](#)
10. [ISO Dial Settings A](#)
11. [SHUTTER AE/AF](#)
12. [Shoot Without Lens](#)
13. [Shoot Without Card](#)
14. [Focus Ring](#)
15. [Control Ring](#)
16. [AE/AF-Lock Mode](#) / [AWB-Lock Mode](#)
18. [Aperture Setting](#)
19. [Touch Screen Setting](#)
20. [Lock](#)

[BACK To HOME](#)



X Series camera operation can be configured in a number of ways, and this menu controls how each button and dial acts, and in some cases, assigns secondary functions to certain controls like the command dials.

For RED/BLUE menu cameras, you'll find most of the button/dial settings in the [BLUE MENUS](#).

## FOCUS LEVER SETTINGS

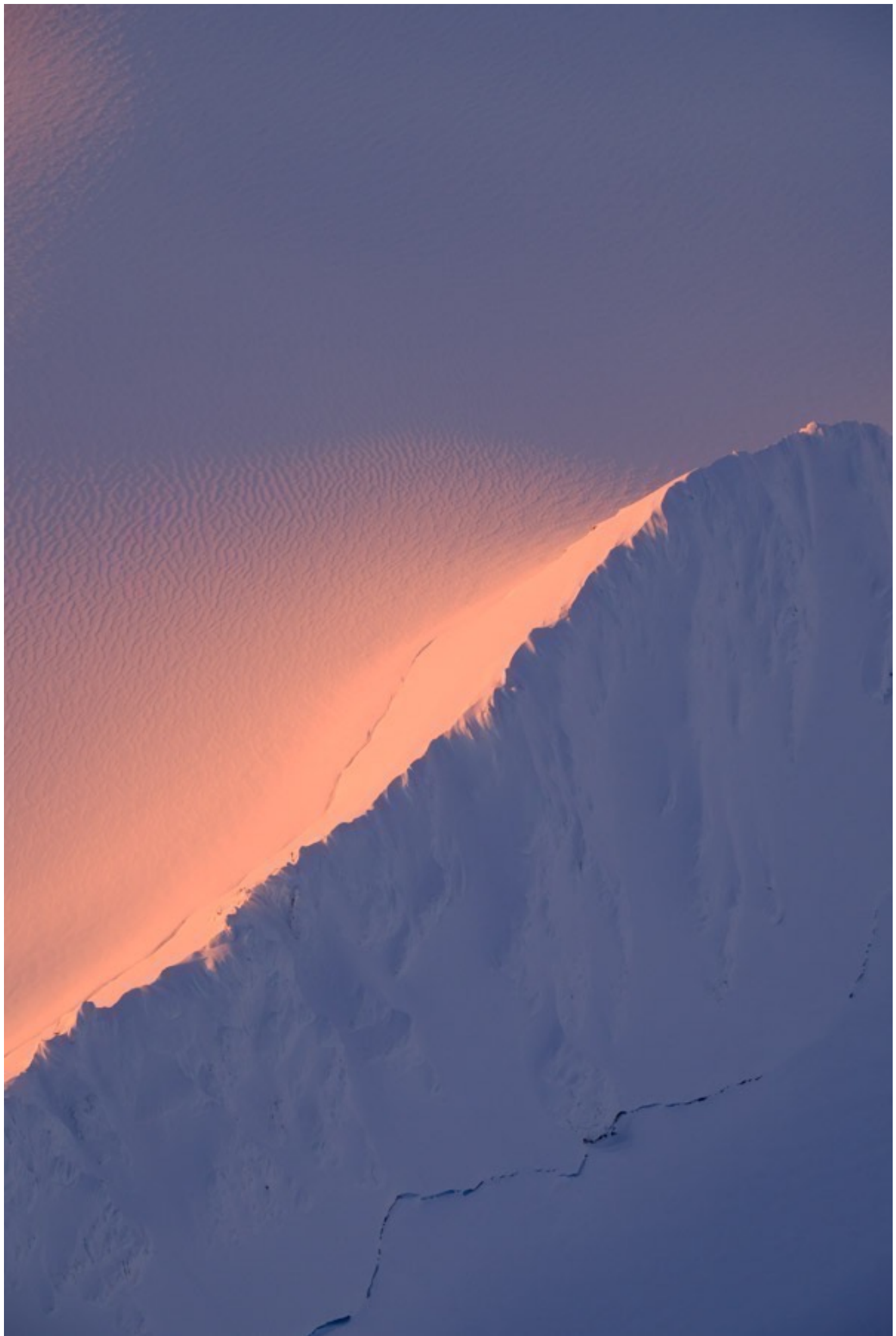
With this function, you can lock the focus lever joystick. To lock the stick, **press and hold the stick for about two-seconds** until you see the menu come up.

Select **LOCK (OFF)** to lock the joystick and prevent it from performing any focus functions. With this set, you will no longer be able to select or move your focus points. The current focus point will remain wherever you left it before you locked the lever. **You can still use the lever to navigate through menus and scroll through your shot photos.**

**To unlock, simply press and hold again, then select ON.** (The middle option unlocks it as well.) Now you're back in business.

If, for some strange reason, you find that the focus lever is stuck and it won't allow you to select or move focus points, it means your lever is locked. Again, just press and hold to bring up the unlock option.

This setting is obviously limited to the X-T3, X-T2, X-H1, X-Pro2, X-E3 and X100F.



# EDIT SAVE QUICK MENU

This is the official menu setting that allows you to configure your Q Menu. However you already know that you can simply press and hold the Q button in order to get there much more quickly. I don't ever want to see you going into the Button Dial menu into order to add a setting to your Q menu. Got it?

At any rate, these are all of the settings you can add to the Q menu. The \* denotes settings the can be saved to your CUSTOM SETTINGS bank as well. On all the current models after the X-T3/30, you can set up two different Q Menu layouts, one for still photography and one for movie mode.

IMAGE SIZE	SELECT CUSTOM SETTING *
IMAGE QUALITY	AF MODE
FILM SIMULATION *	AF-C CUSTOM SETTINGS
B&W ADJ. (WARM/COOL) *	FACE/EYE DETECTION SETTING
GRAIN EFFECT *	MF ASSIST
COLOR CHROME EFFECT *	TOUCH SCREEN MODE
COLOR CHROME FX BLUE *	SELF-TIMER
DYNAMIC RANGE *	PHOTOMETRY
tone CURVE *	SHUTTER TYPE
WHITE BALANCE *	FLICKR REDUCTION
HIGHLIGHT TONE *	FLASH FUNCTION SETTING
SHADOW TONE *	FLASH COMPENSATION
COLOR *	MOVIE MODE
SHARPNESS *	FULL HD HIGH SPEED REC
CLARITY *	MIC LEVEL ADJUSTMENT
NOISE REDUCTION *	EVF/LCD BRIGHTNESS
HIGH ISO NR	EVF/LCD COLOR



# FUNCTION (FN) or FN/AE-L/AF-L BUTTON SETTING

On all newer models, this is called FUNCTION (Fn) SETTING. On some older cameras, its called Fn/AE-L/AF-L BUTTON SETTINGS. This menu item allows you to set up all of your Fn buttons, as well as your AE-L and AF-L Buttons and Lens Fn controls on the X-T5 an X-H2/S models. Again, you know a much faster way to assign your Fn controls, so I don't ever want to catch you skulking around in this dark corner of the camera menu. Press and hold the DISP/BACK button instead.

This menu also allows you to set the Q Button to either access the Q-Menu, assign it as another Fn Button, or disable it entirely, so that you don't accidentally press it when gripping the camera.

If **AF-ON** is assigned to a button, you can activate back-button autofocus by pressing that button instead of keeping the shutter button pressed halfway.

If **MODELING FLASH** is assigned, you can press that FN button to test-fire the flash.

If **TTL-LOCK** is assigned, you can press that button to lock flash output according to the option selected for **FLASH SETTING** > ([TTL-LOCK MODE](#)).



The current X Series models all have over 70 possible Fn settings. Here's a partial list. Refer to your camera for an exact list.

IMAGE SIZE	WIRELESS COMMUNICATION
IMAGE QUALITY	FLASH FUNCTION SETTING
RAW	TTL-LOCK
FILM SIMULATION	MODELING FLASH
GRAIN EFFECT	FULL HD HIGH SPEED REC
COLOR CHROME EFFECT	FIX MOVIE CROP MAGNIFICATION C
COLOR CHROME FX	IS MODE BOOST
BLUE	ZEBRA SETTING
DYNAMIC RANGE	INTERNAL/EXTERNAL MIC LEVEL ADJUSTMENT
D RANGE PRIORITY	MOVIE OPTIMIZED CONTROL
WHITE BALANCE	PREVIEW DEPTH OF FIELD
CLARITY	PREVIEW EXP./WB IN MANUAL MODE
SELECT CUSTOM	NATURAL LIVE VIEW
SETTING	HISTOGRAM
FOCUS AREA	ELECTRONIC LEVEL
FOCUS CHECK	LARGE INDICATORS MODE
AF MODE	F-Log VIEW ASSIST
AF-C CUSTOM SETTINGS	AE LOCK ONLY
FACE SELECT EVF	AF LOCK ONLY
FACE DETECTION ON/	AE/AF LOCK
OFF	AF-ON
AF RANGE LIMITER	AWB LOCK ONLY
FOCUS CHECK LOCK	APERTURE SETTING
DRIVE SETTING	LOCK SETTING
SPORTS FINDER MODE	PERFORMANCE
PRE-SHOT ES	AUTO IMAGE TRANSFER
SELF-TIMER	SELECT PAIRING DESTINATION
PHOTOMETRY	Bluetooth ON/OFF
SHUTTER TYPE	QUICK MENU
FLICKER REDUCTION	PLAYBACK
ISO AUTO SETTING	NONE (control disabled)
IS MODE	
CONVERSION LENS	
ND FILTER	
MULTI EXPOSURE	

# SELECTOR BUTTON SETTINGS

This is an important setting for older cameras that don't have the AF/Selector Joystick. users. On those models, you might want to use the four THUMB PAD buttons as AF AREA selection buttons.

The default setting for the bottom THUMB PAD button is AF AREA, but some photographers prefer to have all four operate as AF AREA buttons. With this in mind, Fuji gives you two options for assigning the four THUMB PAD buttons on the back of the camera.

- **Fn BUTTON:** This opens up all four D-Pad buttons to operate as assignable Fn buttons. In this case, the bottom button will still operate as the AF AREA selector button, although you can change this if you wish. (Not recommended.)

- **FOCUS AREA:** This turns all four D-Pad buttons into Focus Area selection buttons. If you want the fastest, most intuitive method for selecting your AF area, you might consider this option. However, you will lose the ability to assign them as Fn buttons.

## COMMAND DIAL SETTINGS

Here is where you set up how your command dials operate. You can either set it so the front dial controls aperture, shutter speed, EV+/- or ISO, while the rear dial can control shutter speed, aperture, EV+/-, ISO or nothing. The If the EV+/- Dial is set to C, pressing the dial toggles between aperture/shutter speed and EV. If you set the [ISO Dial Settings A](#) to COMMAND, you can toggle ISO, as well. (NOTE: on the X-T4, the ISO dial needs to be set to C in order to control ISO via this dial.)

This is totally up to you. Whatever feels most comfortable, or most familiar. If you recently switched from another system like Nikon or Canon, you may already have a method that you're used to. In that case, you may want to set it up to match for the most seamless transition.

**On all of the X-H models, this setting does something totally different.** These cameras all have fixed functions for the front and rear command dials that vary,

depending on which exposure mode you're using, and this setting allows you to customize and reverse the roles that the two dials control for each of the four modes.

**P:** Reverse the dials use for program shift and EV+/- when in Program mode.

**S:** Reverse the dials used for shutter speed and EV+/- when in Shutter Priority mode.

**A:** Reverse the dials used for aperture and EV+/- when in Aperture Priority mode.

**M:** Reverse the dials used for shutter speed and aperture when in Manual mode.

## SS OPERATION

When shooting in Program mode, you can use the shutter speed dial to fine tune your settings.

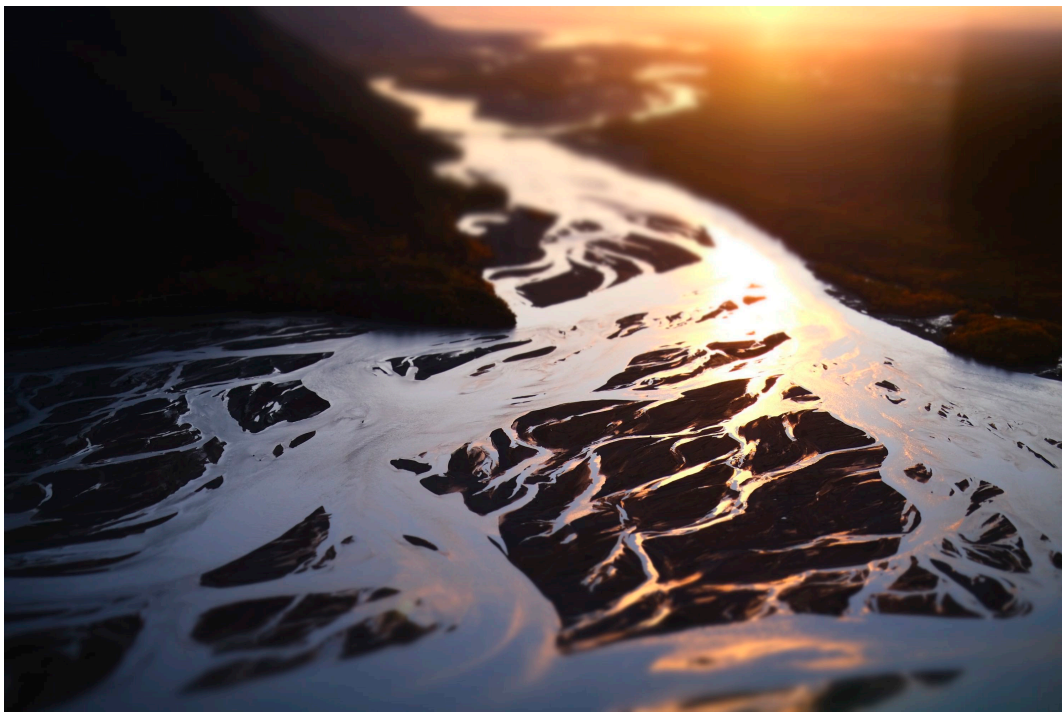
For example, lets say you're in Program mode and you suddenly see an action scene unfolding in front of you; maybe it's a bald eagle about to take off, or a your energetic kids or grandkids running around with a puppy. Putting the camera to your eye, you might notice that the camera has you set for a shutter speed/aperture combination of 1/320 at f/5.6.

You might decide that 1/320 might not be fast enough to freeze the action, especially if you're using a long lens, which requires a higher shutter speed to ensure sharp images.

With this setting **ON**, you can simply grab whatever command dial you have set to control shutter speed and adjust to a more suitable combo, say, 1/1250 at f/2.8. This will freeze the bird for sure. (I prefer to keep SS set to the rear dial.)

You can also turn this setting **OFF**, but given what it can do for you, I don't see why you would want to. **I recommend keeping it ON.**





## ISO DIAL SETTINGS H/L

This setting allows you to set the sensitivity of the H and L settings on the ISO dial. It's found on X-T2 and X-Pro2 only. The X100F has ISO DIAL SETTINGS H only.

For H, you have two choices: 25600 and 51200.  
For L, you have three choices: 100, 125 and 160.

## ISO DIAL SETTINGS A

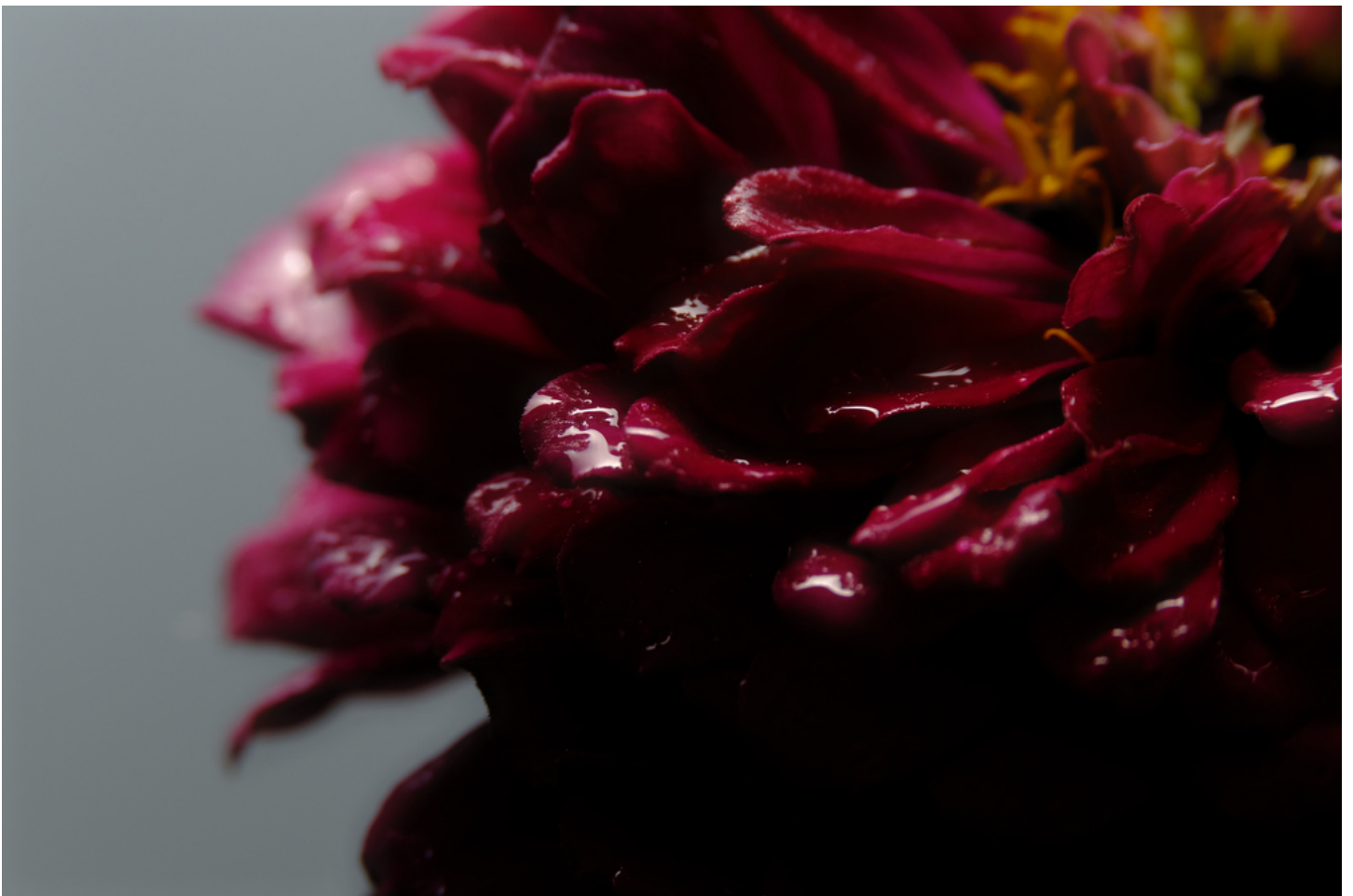
Found on the X-T2 only and added in a recent firmware update, this control determines how you select your ISO when the ISO dial is set to A. In the normal **AUTO** setting, the camera will choose ISO settings automatically, based on your current [Auto ISO Setting](#).

However, if you switch to **COMMAND** and set the ISO dial to A, **you can now adjust ISO with your front command dial**. Press the dial to unlock this feature and rotate to scroll through your entire ISO range. Press again to lock the dial.

NOTE: In Program, Shutter Priority or Manual Mode, **pressing the command dial toggles between adjusting shutter speed and ISO**. If you're shooting in Manual using [T Mode](#), you can adjust shutter speed through the entire range.

I really like this feature because it allows you an even greater amount of efficiency with the camera. With both shutter speed at ISO and at your fingertips, (and the aperture ring in the fingertips of your other hand), you can easily adjust any of your main exposure settings with such ease, and without taking your eye away from the viewfinder.

In my mind, a setting like this clearly demonstrates Fuji's commitment not only to providing you with multiple ways of controlling your camera, but also their commitment to designing the most ergonomically friendly cameras possible.



# SHUTTER AE/SHUTTER AF

This is another interesting setting, which was made even more powerful with one of the recent firmware updates. It's available on the X-T2 and X-T20 only.

Normally, when you press the shutter button halfway down, the camera automatically locks in exposure and focus. Using the SHUTTER AF/AE settings, you can decouple one or both of these functions and even set different operational behavior for both AF-S and AF-C mode.

To clarify, in AF-S mode, the camera focuses when the shutter is pressed halfway and locks focus for as long as you hold the button in this position. In AF-C mode, focus is continually adjusted while the shutter button is pressed halfway.

## SHUTTER AF

Using this setting, you can keep the default **ON** setting for one or both, you can turn them both **OFF** and disable autofocus from the shutter button, or you can set a separate setting for AF-S and AF-C.

For example, if you set AF-S **ON** and AF-C **OFF**, the camera would focus and lock when you press the shutter in AF-S Mode, but if you switch to AF-C mode and press the shutter, no focus operation would occur. (This is how you decouple the shutter button if you use back button focus on the X-T2.)

## SHUTTER AE

Just as with SHUTTER AF, you can assign different operational parameters for how and when the camera locks exposure when you're using AF-S/MF or AF-C mode.

Setting either to **ON** tells the camera to lock exposure when the shutter button is pressed halfway down. Setting one or both to **OFF** tells the camera to continually adjust exposure, even when the shutter button is pressed halfway.

Here's how I see this setting coming in handy in a real life shooting situation.

Let's say you and I are standing next to each other while shooting a peloton of



bikers racing through an area of both sunlight and shadow. Maybe we're out on the Serengeti shooting a dazzle of zebras. We're both shooting in Continuous and using AF-C so we can track their motion and ensure sharp focus.



I'm not a back button focus guy, so I keep AF-C set to **ON** in SHUTTER AF. However, you're a back button focus shooter, so you set AF-C to **OFF** in SHUTTER AF on your X-T2.

You've got your eye on a few key locations where you want to capture the subjects, and they all happen to be in the sunlight, while I'm grabbing shots left and right as they pass through the entire scene. (It sounds like you're a much more selective

shooter than I!)

Since you're not worried about locking exposure in one kind of light and then shooting in another, you keep your AF-C set to **ON** in SHUTTER AE. I, on the other hand, want to make sure my exposure doesn't lock on a sunny patch right before I shoot a burst as they run from sun to shade. To prevent this from happening, I set my AF-C to **OFF** in SHUTTER AE mode.

These settings allow each of us to configure our X-T2s in the way that matches our own shooting styles, which, of course, helps us nail our shots. Great job!

## SHOOT WITHOUT LENS

This setting enables the shutter release when there is no lens attached. Or rather, when there is no lens that contains electronic contacts that talk to your Fuji camera. Like a Lensbaby lens, or if you're using a Nikon, Canon or any other third party lens on your camera with an adaptor.

I've seen people use all kinds of lenses on their Fujis. Last year, I met a portrait photographer in Little Rock who had a little leather bag full of archaic glass from the 70s and 80s; we're talking really obscure lenses made in Russia, Germany and Japan. He used them on his X-T1 with a variety of adaptors and they worked great. His images were awesome and tack sharp.

My friend Josh uses an old manual focus Canon 200mm f/4 FD lens on his X-T1 with excellent results. That lens is razor sharp, very fast and quite small. I've used a couple different Lensbaby lenses on my Fuji and they're a lot of fun.

If you've got an old lens and the right adaptor, just make sure you turn the SHOOT WITHOUT LENS option **ON** or it won't work.

RED/BLUE camera users will find this setting in the **RED Menus**.

# SHOOT WITHOUT CARD

Sometime you just want to test a camera or lens, or try out a new setting, but you don't have a memory card in the camera. (I'll just say right now that **YOU SHOULD ALWAYS KEEP A MEMORY CARD IN THE CAMERA!**)

Should you find yourself sans card, you can turn this function **ON** to enable the shutter release. In the default **OFF** mode, the shutter remains locked.

## FOCUS RING

If you're coming from another camera system where the focus rings turned the other way, and you just can't get used to the direction the Fuji cameras use, or if you just want to swap to the other direction, you can use this setting to set whether your camera focuses near-to-far in clockwise or counterclockwise rotation.

I keep mine at the default setting.

## FOCUS RING OPERATION

This setting lets you choose how the focus ring operates when using manual focus.

**NONLINEAR** focusing changes focusing distance based on how fast you turn the focusing ring. This is the default mode with most X Series lenses, and most digital photography lenses. Also called "Fly-by-wire" focusing, the movement of the focusing ring is measured electronically, and then the elements are moved by the internal motor.

**LINEAR** focusing feels more like you're using an old manual focus lens. Focus distance changes according to how far you turn the ring, regardless of how fast you turn it.

NOTE: The three Fuji "Clutch Lenses," the 14mm f/2.8, the 16mm f/1.4 and the 12mm f/1.4, all have fixed focus ranges, so they already feel somewhat like older manual lenses when using manual focus.

On the new 5<sup>th</sup> Gen models, this is called LENS ZOOM/FOCUS SETTING, and it allows you control the operation of both focus and zoom, and you can set the speed and direction of focus and zoom when using a compatible power zoom lens with Fn button.

**MF CONSTANT SPEED FOCUS (Fn):** Choose rate of focus distance change when adjusted using Fn buttons doing manual focus.

**CONSTANT SPEED ZOOM (Fn):** Choose rate of zoom when adjusting with a Fn button.

**CONSTANT SPEED ZOOM/FOCUS (Fn) OPERATION:** Choose whether the Fn button needs to be passed once or twice to start and stop focus or power zoom. **START/STOP** is press to start and press again to stop. **PRESSING** operates when button is pressed and held, and stops when button is released.

**ZOOM RING ROTATE:** Choose clockwise or counterclockwise for zoom ring rotation.

**ZOOM/FOCUS CONTROL RING:** Choose role played by the zoom/focus control ring on compatible power zoom lenses.

## CONTROL RING

Both the X100F and the X70 feature a [Control Ring](#) on the front of the camera, right in front of the aperture ring. This menu item controls the function of the Control Ring. For each setting, you simply scroll through your options, and once you land on your desired setting, just leave it there. You don't have to select it or do anything else.

Here are your options:

- **DEFAULT:** Changes based on which mode you're currently using.
- **WHITE BALANCE:** Scroll through your different White Balance settings.
- **FILM SIMULATION:** Scroll through your different Film Simulation choices.



- **DIGITAL TELE-CONV:** This gives you different view angles: 35mm, 50mm and 70mm. Essentially, it's just cropping and engaging the image, but there's some image optimizing going on as well. Given the sharpness of the X-Trans sensor and the capabilities of the image processor, you'll find the results to be very good.



## AE/AF-LOCK MODE

This is a very interesting setting, although I would imagine that very few people even know it exists. I'll confess I just learned about it while sitting here writing this book and playing around with my X-T2, although it's found on my models. Keep in mind, you need to have your AE-L/AF-L buttons set to AE LOCK ONLY and AF LOCK ONLY for this to work.

If you set this function to **AE & AF ON WHEN PRESSING**, your exposure and/or focus will lock when you press the **AE-L** or **AF-L** button, and it will hold for as long as you keep pressing the button.

However, if you set the camera to **AE & AF ON/OFF SWITCH**, exposure and/or focus will lock when the **AE-L** or **AF-L** button is pressed and it will remain locked until you press the button again.

I see **SWITCH** mode as being a pretty handy setting. You could set up a Fn button as your AE-LOCK ONLY control, and then meter on your subject. Once you dialed in a good exposure, you could press AE-L to lock it in and then take your finger off the button.

This frees you to compose your scene, concentrate on the subject matter and perform autofocus duties, all the while, not worrying about our exposure, because it's locked in and hands-free. It stays locked, even after you press the shutter once or 100 times. As long as your light doesn't change, you're golden. If the light changes, press the button and take another meter reading, and you'll be golden once again.

Maybe you're shooting a static subject in changing light. You could do the same thing with AF-L instead of AE-L. Press to lock in focus, then constantly monitor exposure as you shoot.

**PRESSING** mode works the same way, only you have to keep holding the button down. Like many other settings, this would come down to preference. Get to know this setting and see if it might work for you.

NOTE: Some models have a menu setting called AWB-LOCK MODE. If you have a FN button set to AWB-LOCK, you can do the same thing with White Balance.

## AWB-LOCK MODE

If you have a FN button assigned to Auto White Balance Lock (AWB LOCK)

## APERTURE SETTING

Most, but not all of the Fuji lenses have aperture rings. Here's how to adjust aperture when your lens has no ring.

Since I own the little pancake 27mm f/2.8 lens, I know firsthand that it can be quite confusing to figure this out in all the shooting modes. In Red/Blue menu cameras this setting is found in one of the **RED Menus**.

**AUTO+MANUAL:** Choose aperture via the front command dial. Rotate past your minimum (largest number) aperture to set the lens to A (Auto Aperture).

**AUTO:** The camera selects aperture automatically. In this mode, the camera functions in **P** (Program) and **S** (Shutter priority) modes only.

**MANUAL:** Choose aperture via the front command dial. In this mode, the camera functions in **A** (Aperture priority) and **M** (Manual exposure) modes only.



# PLAYBACK ISO BUTTON SETTING

Found only on the X-H2 and X-H2S, this setting allows you choose the role for your ISO Button during Playback.

**SMARTPHONE TRANSFER ORDER:** Select pictures for upload to your mobile device.

**FTP TRANSFER ORDER:** Marks current picture for upload to an FTP server.

**FTP PRIORITY TRANSFER ORDER:** Marks picture for priority upload to an FTP server.

**WIRELESS COMMUNICATION:** Enable button for Wireless Communication.

NOTE: **FTP TRANSFER ORDER** and **FTP PRIORITY TRANSFER ORDER** can only be used with the optional [Fujifilm FT-XH file transmitter](#).

AND





# TOUCH SCREEN SETTING

All recent X Series models are touch screen capable, and this setting is where turn your touch screen controls **ON** or **OFF** and control which touch functions are active.

**TOUCH SCREEN SETTING:** Enables the LCD monitor for touch screen shooting.

**DOUBLE TAP SETTING:** Double tap on the LCD to zoom in on subject while shooting.

**T-FN TOUCH FUNCTION:** Enables touch-function swipe gestures.

**PLAYBACK TOUCH SCREEN SETTING:** Enables LCD touch functions during playback.

**EVF TOUCH SCREEN SETTING:** Choose which area of the monitor is used for touch screen operation when your EVF viewfinder is active. This allows for a very precise and individual feel that adapts to the way your hands and fingers naturally operate when you're holding the camera up to your face, or you can set it so that the touch screen is disabled when you're looking through the viewfinder.

NOTE: X-T30 and X-E3 only have **TOUCH SCREEN ON/OFF** and **EVF TOUCH SCREEN SETTING**



# LOCK

You can lock the camera to prevent accidental changes to any of your camera settings, by you or any other person who might inadvertently, or purposefully hit a button and mess up the amazing shot you've got lined up.

## LOCK SETTINGS

**UNLOCK:** The resets your lock functions.

**ALL FUNCTION:** This locks all controls in the Function Settings List, including all of the Fn buttons, the Q menu button, the DISP/BACK button, the focus stick, the rear command dial, and a number of different modes and menu items.

**SELECTED FUNCTION:** This locks only the controls selected in your Function Settings List. After selecting this setting, jump down to FUNCTION SETTING and choose which functions you'd like to lock.

**FUNCTION SELECTION:** This is your list of all the function you can lock. If you choose SELECTED FUNCTION above, you then go here to choose all the functions you wish to lock.

In addition to these menu controls **you can lock the Q Menu and all four D-Pad buttons** by pressing and holding the MENU/OK button for about five-seconds. Press and hold again to unlock.

I can think of any number of scenarios where you'd want to lock one or more functions. I've certainly changed the occasional setting by accident without realizing it until later. It might take some thought as to how you can make the most from this setting, but it might be time well spent.



# POWER MANAGEMENT

1. [Auto Power Off](#)
2. [Performance](#)
3. [Power Management](#)
4. [EVF/LCD Boost Setting](#)
5. [EVF Performance](#)
6. [Auto Power Off Temp.](#)

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# AUTO POWER OFF

One way to increase battery life is to set the camera to turn off after a specified amount of down time. Your choices are 15 sec, 30 sec, 1 min, 2 min and 5 min. If you select **OFF**, the camera will remain on until you turn it off manually. Or until the battery dies.

## PERFORMANCE

Most recent Fuji cameras have two power modes, **NORMAL** and **BOOST**. (On the X-T20, it's **NORMAL** and **HIGH PERFORMANCE**.) Some models have a third setting called **ECONOMY**.

In **ECONOMY** mode, the camera functions with a slightly lower level of AF speed and viewfinder display performance in order to conserve battery life.

In the default **NORMAL** mode, the camera functions with a normal level of AF speed, viewfinder display quality and a viewfinder refresh rate of 60 fps.

In **BOOST** mode, the camera functions with a higher AF speed, and display quality increases with a viewfinder refresh of 100 fps. (120 fps on the X-T4 and XH2/XH2S). As is to be expected, this mode causes faster battery drain.

NOTE: BOOST Mode on the X-T2 is only achieved with the use of the dedicated battery grip. The X-T3, X-T4 and new X-H models also have optional vertical battery grips, but they're designed for extra batter power only and longer video shooting. Even without the grip, these high-end models will still fire at their maximum frame rates, as is the X-T5, which has no grip available.

## POWER MANAGEMENT

Older X Series cameras, (Pre X-T2) have a **POWER MANAGEMENT** setting which controls AF performance, LCD/EVF refresh rate and, of course, battery life.

Some models have a single performance setting (**ON**), while others have two. The

X-Pro2 has three available settings, which are outlined below.

<u>OPTION</u>	<u>AF PERFORMANCE</u>	<u>LCD/EVF QUALITY</u>	<u>BATTERY LIFE</u>
<b>HIGH:</b>	FAST	VERY HIGH	LOW
<b>STANDARD:</b>	FAST	HIGH	NORMAL
<b>ECONOMY:</b>	NORMAL	NORMAL	HIGH



# EVF / LCD BOOST SETTING

X-T4, X-S10 and 5<sup>th</sup>. Gen models only. This setting adjusts the behavior of the LCD/ EVF when you are using BOOST Mode.

**EVF/LCD LOW LIGHT PRIORITY:** The display brightness is automatically adjusted so it's easier to see dimly lit subjects when shooting in low light. In some cases, moving/blurred subjects may cause ghosting.

**EVF/LCD RESOLUTION PRIORITY:** The display resolution is automatically increased to better show details.

**EVF/LCD FRAME RATE PRIORITY:** The refresh rate of the EVF is increased, giving a smoother view of moving subjects.

## EVF PERFORMANCE

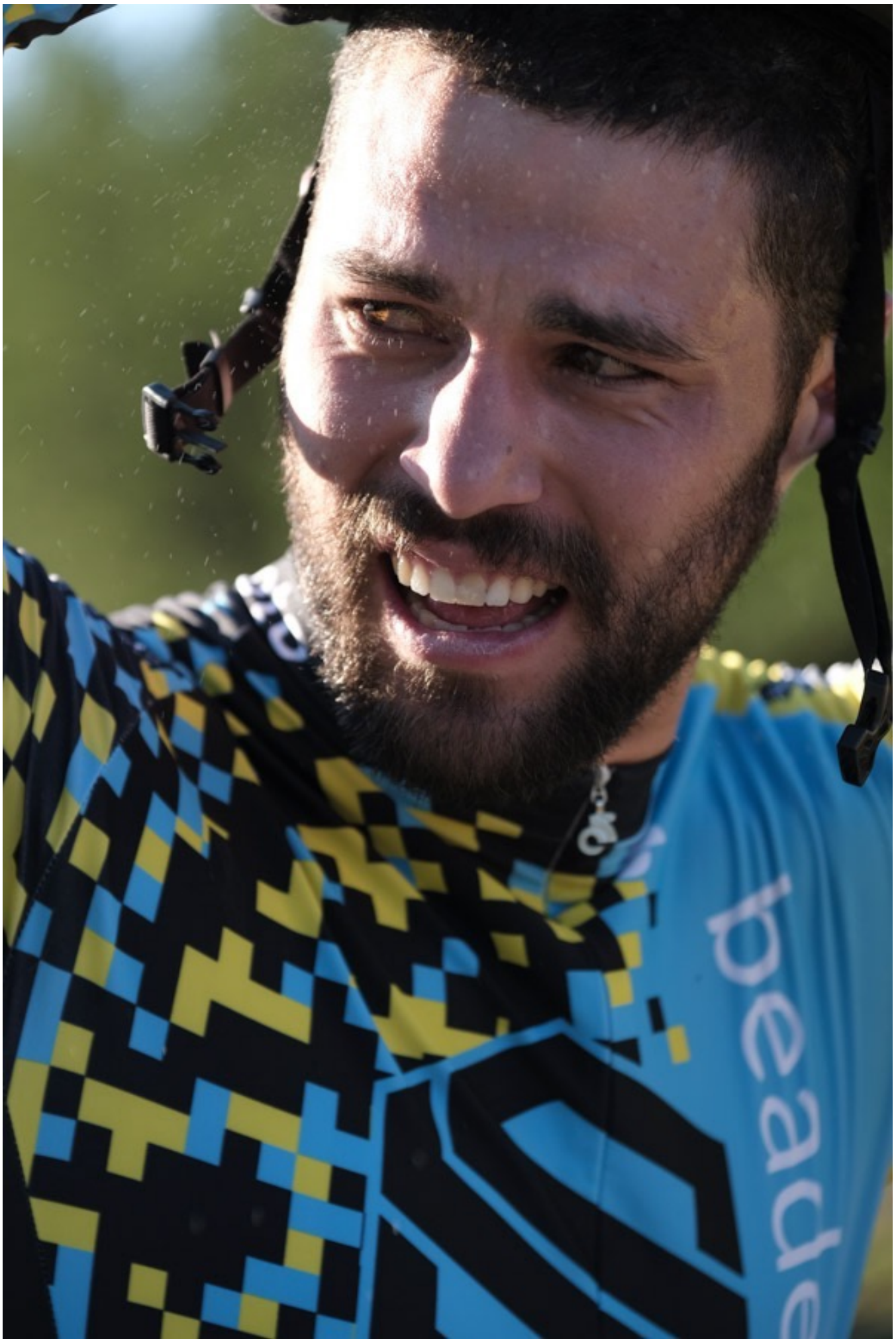
Some models, including X-Pro 3 and X100V, have this setting, which allows you to select whether the electronic viewfinder prioritizes **BRIGHTNESS** or **SMOOTHNESS** in the display. **BRIGHTNESS** is the default setting for use in most situations.

**SMOOTHNESS** minimizes ghosting which may appear in the EVF when shooting moving subjects. And EV

## AUTO POWER OFF TEMP.

On the X-T4 and some 5<sup>th</sup> Gen models, the camera will display a warning message if the operational temperature reaches a certain point, and then, if temperature keeps rising, the camera will shut down automatically. This setting allows you to choose a temperature range which triggers the camera to turn off, either **NORMAL** or **HIGH**.

Keep in mind, when shooting at HIGH temperatures, the camera itself can become quite hot. It is highly advisable to use a tripod or other mount when doing prolonged shooting in these situations.

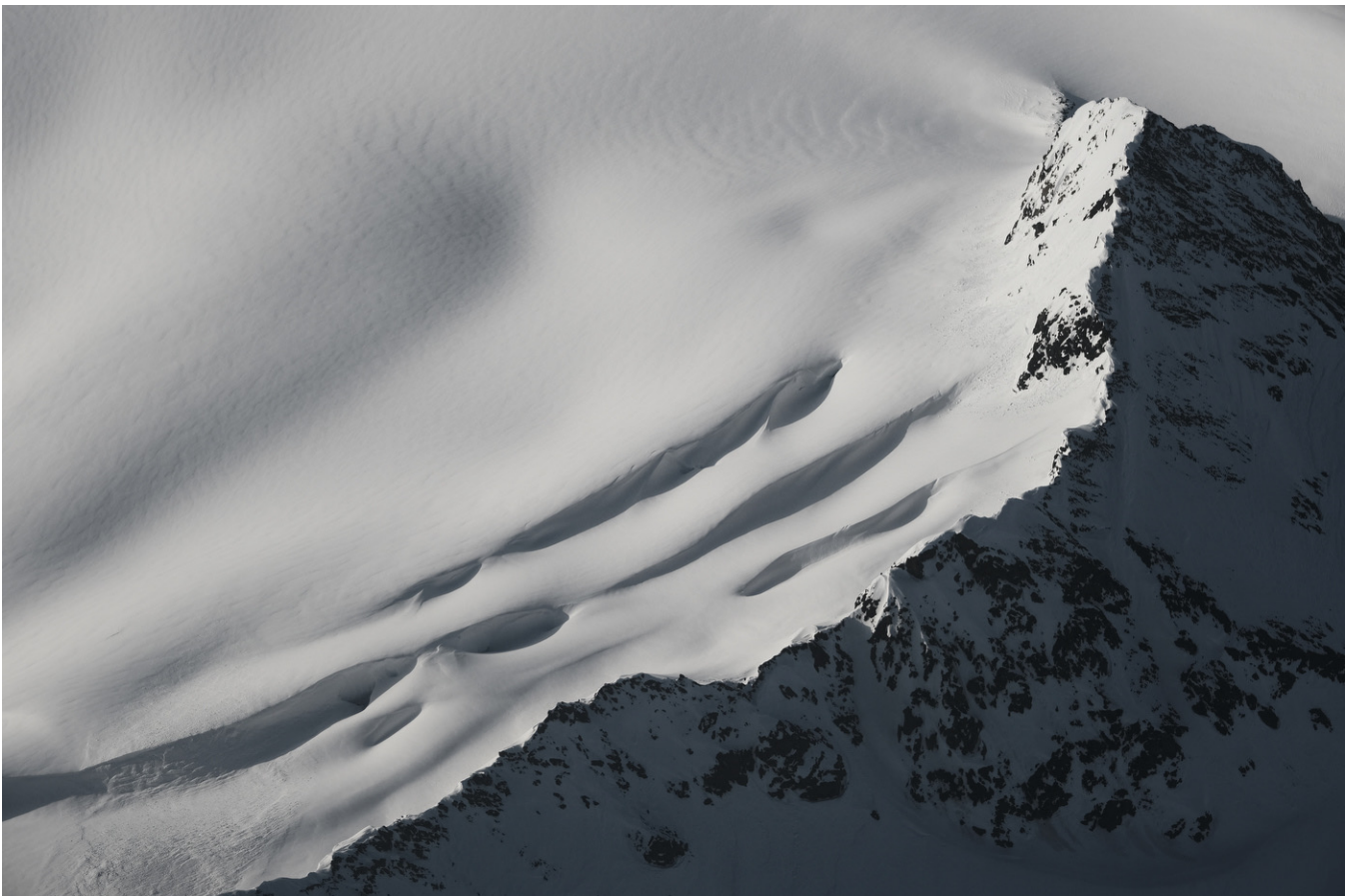




# SAVE DATA SETTING

1. [Frame No.](#)
2. [Save Org Image](#)
3. [Edit File Name](#)
4. [Cart Slot Setting \(Still Image\)](#)
5. [Select Slot Sequential \(Still & Movie\)](#)
6. [Switch Slot](#)
7. [Movie File Destination](#)
8. [Select Folder](#)
9. [Copyright Info](#)
10. [Default Caption](#)

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# FRAME NUMBERING

The X Series cameras use a four digit sequential naming convention. The FRAME NUMBER setting controls whether the file numbering is reset to 0001 when you insert a new memory card.

**SEQUENTIAL** mode continues from the last file number used or the first available file number, whichever is higher. You should probably use this setting to prevent the number of pictures with duplicate file names.

**RENEW** resets the file numbering to 0001 each time you format or insert a new memory card.

Note, if you're using **SEQUENTIAL** mode, eventually, your file numbers will hit 999-9999. When that happens, the shutter button will be disabled. Turn off the camera and insert a formatted memory card before resuming shooting.

## SAVE ORG IMAGE

This option allows you to save unprocessed copies of pictures taken using **RED EYE REMOVAL**. I've never used RED EYE REMOVAL function, so I don't really have anything to add here.

## EDIT FILE NAME

The Fuji cameras attach different file name prefixes to photos taken in sRGB and Adobe RGB mode. sRGB uses four letter prefix, while Adobe RGB uses a three letter prefix containing an underscore at the beginning.

**sRGB Prefix:** DSCF

**Adobe RGB Prefix:** \_DSF

While you can't remove the underscore, you can change the default prefix to any alphanumeric name.

For example, you could change it and get custom file names for your image files.

**SRGB:** DANB0001

**Adobe:** \_DHB0001

I recommend setting your own file names. It helps you quickly identify your own images, or images shot with different cameras. You could do them by country, or by year. The opportunities are endless. Imagine the possibilities. I can hear your little brain wheels turning already...

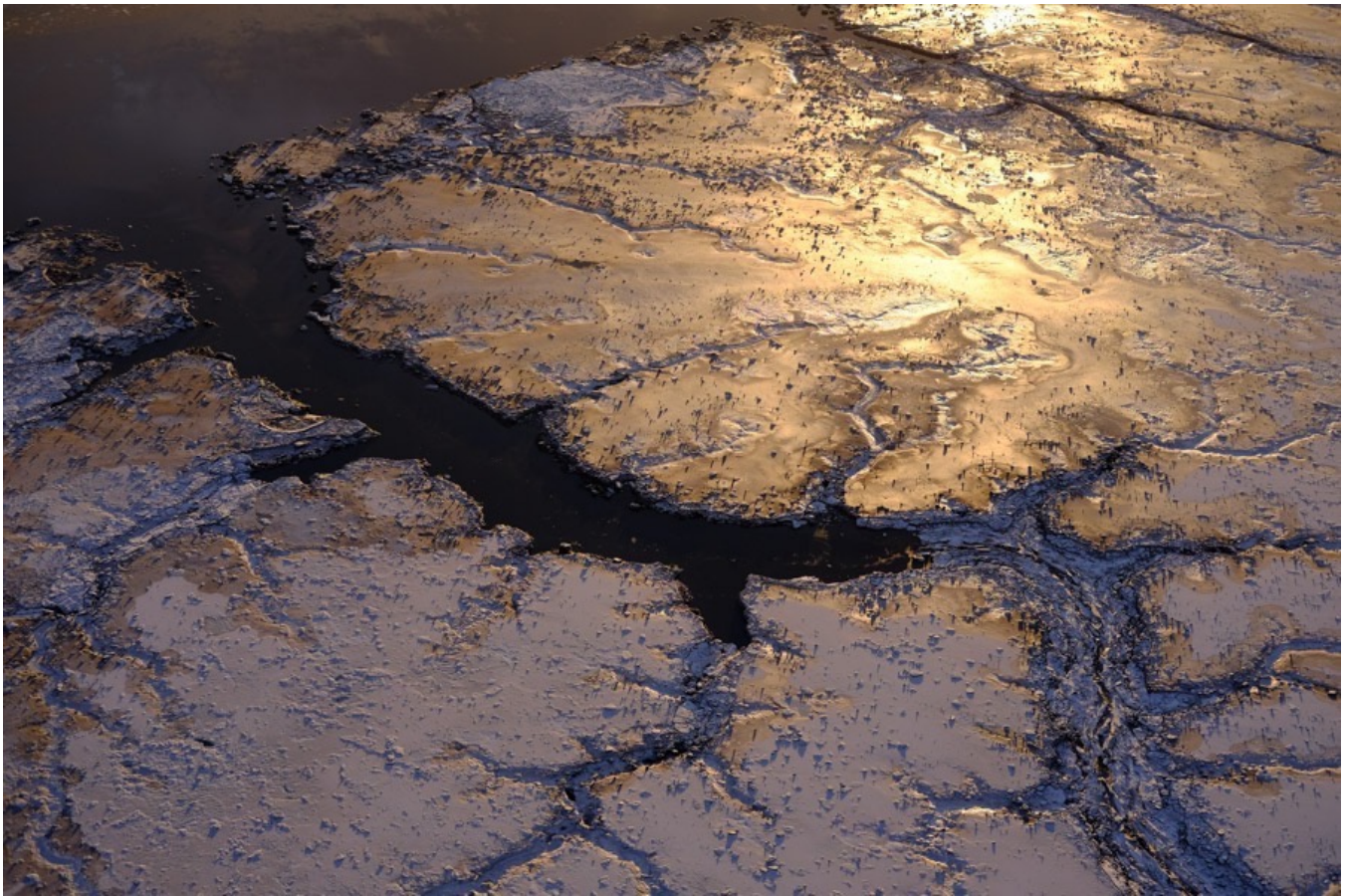
## CARD SLOT SETTING (STILL IMAGE)

If you have a camera with two memory card slots, you have three options for how you store your images.

- **SEQUENTIAL** writes to the first slot, then switches to the second slot when the first card is full.
- **BACKUP** writes the same image to both cards at the same time.
- **RAW/JPEG** works just like SEQUENTIAL, unless you're shooting in RAW+JPEG. In this mode, it stores the RAW on card #1 and the corresponding JPEG on card #2.

One important note: As I cover in the [Playing Back Images](#) section, you can press the rear command dial (or Focus Assist button on the X-T1) to zoom in and check for sharpness at 100%. Shooting RAW only will not allow you to zoom to full size, but JPEG or RAW+JPEG will.

However, in order to view your zoomed images at full size, you must store your RAW and JPEG on the same card. So, using the **RAW/JPEG** setting in this menu will not give you the maximum benefit of this action.



## So which method should you use?

I'm pretty confident in my memory cards, so **I use SEQUENTIAL**. Plus, with a pair of fast 32GB cards, this gives me an enormous amount of storage before I have to change cards.

BACKUP is obviously nice if you need immediate backup, like when you're on assignment, or if you just want duplicate cards for some reason.

RAW/JPEG can be handy when traveling, because you can quickly access and share your JPEGs from the second card without having to deal with or wade through all the RAW files. This is even more critical if you're downloading your cards directly to an iPad or other tablet that has limited storage.

However, there's one thing about RAW/JPEG you should be aware of. RAW files are obviously way bigger than the JPEGs, so you'll fill up card #1 a whole lot faster. When that happens, you won't be able to take any more pictures until you change cards.

This means you'll be writing RAWs to the new card, but you'll continue to write



JPEGs onto the second card, since it wasn't full yet. This creates a situation where your cards are no longer identical. It's no longer a true backup situation, if this was your intended method.

This could be a problem for organization if you like to keep the you cards identical. On the other hand, you'll have fewer JPEG cards.

## SELECT SLOT SEQUENTIAL (STILL & MOVIE)

X-T3 and X-H1 only. It's actually two different menu items that allow you to choose the card that the camera will write to first when you're shooting either still images or video and if you have SEQUENTIAL selected in the previous setting.

For the movie setting, it's simply the slot that's used to store movies. On all other cameras, you use the MOVIE FILE DESTINATION to choose where you store your video files.

## SWITCH SLOT

If you have your cards set to **SEQUENTIAL**, this menu item lets you view the pictures on the other card, providing you're using both memory card slots.

Double clicking on the joystick or holding down the Playback button when playing images does the same thing. Please read the other [Switch Slot](#) page to see some important information about this function works.

## MOVIE FILE DESTINATION

This option lets you decide which card to store your video files. Either Slot 1 or 2. Doesn't matter, unless one of your memory cards is a fast UHS-II card. Then you should use that one.

# SELECT FOLDER

All recent X Series cameras allow you to create and name different folders on your memory card and choose where to store subsequent pictures. This can help you organize and more quickly identify groups of photos when viewing the content of your memory card on the computer.

For example, if you're traveling, you might create a new folder when you cross into a new country or enter a new city. If you're doing big portrait shoot, you could set a folder for each model. You could simply create a folder for each day of shooting or to group together any kind of subject or shooting parameter you can think of.

When transferring photos into Lightroom, you'll be able to see the folder structure in the Import pane and copy each folder individually. While the SELECT FOLDER setting can certainly help you organize your images, don't feel as if you have to do this. It makes things more simple if you don't, because what happens if you cross a border and forget to create a new folder?

Some older models allow you to store up to 999 images in a each folder. All recent models allow you to store up to 9,999 images to a folder.

# COPYRIGHT INFO

You can set your camera to record copyright information into the EXIF data for your images.

The menus here are pretty self explanatory. You can enter both **COPYRIGHT** and **CREATOR** name, if they're different, and you can set it to delete the info as well.

I recommend entering your **COPYRIGHT** info, which is usually your name. It's always a good idea to have your name attached to your image files.

# DEFAULT CAPTION

The new 5<sup>th</sup> Gen models allow you to enter, edit and display a caption to photos and movies.







# CONNECTION SETTINGS

1. [Bluetooth Settings](#)
2. [Network Settings](#)
3. [PC Auto Save](#)
4. [INSTAX Printer Connection Setting](#)
5. [USB Power Supply Setting](#)
6. [General Settings](#)
7. [Connection Mode](#)
8. [Reset Wireless Settings](#)
9. [5th Gen Connection Settings](#)

[BACK To HOME](#)



All current X Series cameras have Bluetooth, which allows you to control the camera and shoot remotely, as well as transfer images to your paired device via Bluetooth by using the [FUJIFILM CAM REMOTE app for iOS and Android.](#)

You can even set it up for automatic transfer of images after you take them. This



allows for a continuous and low power connection between your camera and your device so you don't have to keep connecting to Wi-Fi and opening the app.

The new 5<sup>th</sup> Gen models have all of their connection settings in a separate menu below the "Wrench" menu called **NETWORK/USB SETTING**. On those cameras, you can even set up multiple connection profiles for connection to different wireless devices, and you can use the optional FT-XH File Transmitter to do remote/tethered shooting, control multiple cameras or upload pictures to an FTP server or wireless LAN network.

If you have an older, non-Bluetooth X Series camera, the order and location of these settings will be arranged a little differently, but most features are still available to you. Refer to the [General Settings](#) Menu to read the descriptions of the applicable settings.



# BLUETOOTH SETTINGS

**PAIRING REGISTRATION:** Use this setting to pair your Bluetooth enabled Fuji with your smartphone or tablet. Select this option, then open the FUJIFILM app on your device and tap to connect. When the device is successfully paired, you'll see the Bluetooth icon on your LCD screen. Called CREATE

**SELECT PAIRING DESTINATION:** Choose a connection from a list of devices that have previously been paired to the camera. Select **NO CONNECTION** to exit without pairing.

**DELETE PAIRING REG.** This terminates your Bluetooth pairing and removes the selected device from the **SELECT PAIRING DESTINATION** history.

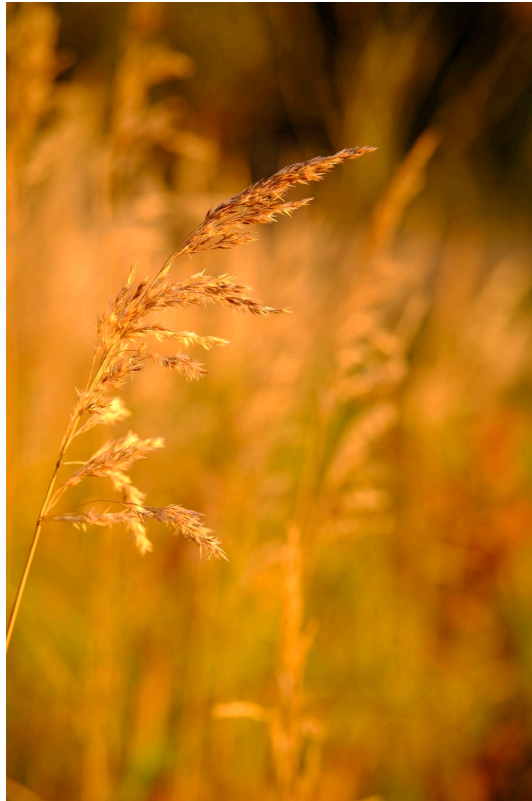
**BLUETOOTH ON/OFF:** With this setting ON, your camera will automatically connect with your paired devices when you turn it on. OFF will prevent it from connecting via Bluetooth.

**AUTO IMAGE TRANSFER:** With this setting ON, photos will be marked for upload, and they'll be instantly transferred to your device as soon as you enter Playback mode (or if you turn the camera off without playing them back. If this is set to **OFF**, images won't be transferred automatically, but you can still select and upload them using the IMAGE TRANSFER ORDER option in the PLAYBACK menu.

**SMARTPHONE SYNC. SETTINGS:** Choose whether to synchronize the camera to the time and/or location provided by your smartphone.

# NETWORK SETTINGS

This item allows for connection to wireless networks. (Not all models have this capability.) I have not tried connecting my camera to my computer, so I can't give you any input on what to do once you've connected. Using the **WIRELESS ACCESS POINT SETTING** option, you can connect automatically, or you can manually configure the connect. **WIRELESS IP ADDRESS SETTING** allows you to view or assign your camera's IP address.





# PC AUTO SAVE

This sets your upload destination when using the PC AUTO SAVE function in the PLAYBACK MENU to save photos to your computer.

Select **SIMPLE SETUP** to connect using WPS, or **MANUAL SETUP** to configure your network settings manually.

# INTAX PRINTER CONNECTION SETTING

This is where you set up your connection to an INSTAX Printer.

## PRINTER NAME and PASSWORD

The first time you use the printer, open this menu and copy the printer name (SSID) to your camera. Hit **OK** and then enter the password. (The default password for INSTAX Printers is "1111".) Or enter your chosen password if you've use a different one to print from your smartphone.

Once you've got this set up, you won't need to come back this menu again. You're ready to print!



# USB POWER SUPPLY SETTING

The newest models have this setting. It allows you to specify whether the camera draws power when connected to a computer or device via USB cable. When set to **ON**, the camera draws power from the device, allowing it to charge the battery. NOTE: The camera cannot draw power from a Lightning cable connection if the connected device is not powered.

# GENERAL SETTINGS

Most recent models have a menu called GENERAL SETTINGS instead of the WIRELESS SETTINGS menu. This is where you'll find the following settings:

**NAME:** Choose a name to identify your camera on wireless networks. There's no real need to change this from the default setting.

**RESIZE IMAGE FOR SMARTPHONE (3M):** The default and recommended setting (**ON**) automatically resizes your images to 3MB for upload to smartphones. Choose **OFF** to upload images at their original size. Resizing applies only to the copy uploaded to the smartphone; the original is not affected.

**GEOTAGGING:** Choose whether location data downloaded from a smartphone are embedded in pictures as they are taken. To Geotag, you'll want this turned **ON**. (On 5<sup>th</sup> Gen models, you'll find this inside the SAVE DATA SETTING MENU)

**LOCATION INFO:** Display the location data last downloaded from a smartphone. To display location data when playing back images, you'll want this turned **ON**.

After you've set this up, any photos you take will be tagged with the current location data that was downloaded from your phone. However, it won't follow you. **If you move to a new location, your location data will be wrong**, unless you connect again and get a new set of coordinates.

**WiFi BUTTON SETTING:** This control lets you assign whether the WiFi button is used for WiFi connection or for Bluetooth pairing. Note, this menu option isn't actually in the BLUETOOTH SETTINGS Menu, it's in the GENERAL SETTINGS Menu on the Bluetooth enabled cameras.







# CONNECTION MODE (TETHERED SHOOTING)

Formerly called PC SHOOT MODE or PC CONNECTION MODE, this is here you adjust settings for tethered shooting, or backup/restore camera settings. Not all cameras have all settings.

This is also where you'll establish connection with your computer to use FUJIFILM X RAW STUDIO RAW conversion software for Mac and Windows. [It's available for free at the FUJIFILM website](#) and is compatible with all current and recent models, and the GFX.

- **USB CARD READER:** Choose this option if you do not intend to use tethered shooting. Shot images will be stored to your memory card. This setting used to be called **OFF**.

- **USB TETHER SHOOTING AUTO:** Tethered shooting mode is selected automatically when the camera is connected to a computer via USB. If no computer is connected, the results are the same as **OFF**. This mode is also used to control your camera from gimbals, drones and other remote USB-devices if you use the X-T3 and later, or to use your X Series camera as a webcam with [FUJIFILM X Webcam Software](#), for things like ZOOM and SKYPE conferences.

- **USB TETHER SHOOTING FIXED:** The camera functions in tethered shooting mode even when not connected to a computer. At default settings, pictures are not saved to the memory card. However, pictures taken while the camera is not connected will be transferred to the computer when it is finally connected.

- **WIRELESS TETHER SHOOTING FIXED:** Choose this option for wireless remote photography and select your network using the [Network Settings](#) menu item.

When shooting tethered, make sure you turn **AUTO POWER OFF** in the **POWER MANAGEMENT** Menu. This will prevent the camera from turning off in the middle of your shoot.

NOTE: Tethered shooting is available with [HS-V5 Software for Windows](#) (available separately), [FUJIFILM X Acquire](#) (available for free download from the FUJIFILM website) or when the [FUJIFILM Tether Shooting Plug-in PRO](#) or Tether Shooting Plug-in (both available separately) is used with Adobe® Photoshop®

- **USB RAW CONV./BACKUP RESTORE:** This setting allows you to use FUJIFILM X RAW STUDIO to perform RAW Conversions directly from the camera. The software uses the image processor inside your camera's processor to perform the conversions instead of your computer's CPU.

It's just like performing RAW conversions inside the camera, and in fact, the interface is basically a reproduction of the in-camera RAW conversion menu. The options are very basic, and although it's not nearly as full featured as programs like Lightroom or Luminar, it does give you 100% accurate reproductions of the Fuji Film Simulation colors like no other software can.

## BACKING UP YOUR CAMERA SETTINGS

The **USB RAW CONV./BACKUP RESTORE** option also allows you backup and restore your X-T2 settings via USB cable using the FUJIFILM X Acquire app. It's a free app for both Mac and Windows. This is a great features, since your settings and MY MENU slots can be erased with some firmware updates, or if you have your camera serviced. This can also be used to copy settings from one camera to another.

## RESET WIRELESS SETTINGS

This lets you restore all of your wireless setting to default parameters.

## 5<sup>th</sup> Gen CONNECTION SETTINGS

As previously noted, the new 5<sup>th</sup> Gen models, including X-H2, X-H2S and X-T5 have a separate menu called **NETWORK/USB SETTING**, which is where you'll find most of the connection settings described above.

Here are the items that appear in the NETWORK/USB SETTING Menu that are not described above.

## CREATE/EDIT CONNECTION SETTING

This is where you pair your camera and establish a connection to your phone/tablet, or other network/USB devices, like USB card readers, webcams, INSTAX printers, or to do tethered shooting or perform **USB RAW CONV/BACKUP RESTORE**. In this menu, you can also create and choose from up to 8 connection profiles to different LAN devices for quick recall/transfer.

## SELECT CONNECTION SETTING

Once you have paired your device and set up your connections, you can choose between the different profiles here, which are the same as found inside the [Connection Mode](#) Menu above.

## AIRPLANE MODE

Select ON to disable the camera's Bluetooth and wireless LAN features.

## BLUETOOTH/SMARTPHONE SETTING

Select the functions as described in the [Bluetooth Settings](#) menu above.

## FTP OPTIONAL SETTING

Adjust settings for FTP upload. To perform FTP upload, you will need to use the optional FT-XH File Transmitter. You can select images for AUTO IMAGE TRANSFER, choose the types of image/movie files that will be uploaded to the FTP server, apply captions to photos and movies during upload, pause or resume FTP upload, or select whether the camera will continue to transfer when powered off, or turn the FT-XH off when all currently marked pictures have been uploaded.

[See this page for information about file transfer using the FT-XH File Transmitter.](#)

## USB POWER SUPPLY/COMM SETTING

This allows you to choose whether USB connections to computers, or other devices, are used for power during data transfer. **AUTO** switches between power deliver and data transfer automatically. **POWER SUPPLY ON/COMM OFF** allows the camera to draw power from the connected device, which reduces drain on the camera battery. However, data transfer is disabled. **POWER SUPPLY ON/COMM ON** allows to the camera to change data with the connected device, but it won't draw power

from that device.

NOTE: The camera cannot draw power from Lightning connections that don't supply power. For connection to these devices, choose **POWER SUPPLY ON/COMM ON** for connection and transfer to un-powered mobile devices.

## INFORMATION

Here, you can view network-related settings. **HARDWARE INFO** shows you camera's network IP information. **FTP TRANSFER ORDER STATUS** displays destination and upload progresses to the FTP server when used with the FT-XH File Transmitter. **ERROR DESCRIPTION** displays errors when the camera is unable to connect to the file transmitter.

## RESET NETWORK/USB SETTING

Reset all network/USB settings to the default values.





# PLAYBACK MENU

1. [Playing Back Images](#)
2. [Switch Slot](#)
3. [RAW Conversion](#)
4. [HEIF To JPEG/TIFF Conversion](#)
5. [Erase](#)
6. [Simultaneous Delete](#)
7. [Crop](#)
8. [Resize](#)
9. [Protect](#)
10. [Image Rotate](#)
11. [Red Eye Removal](#)
12. [Voice Memo Setting](#)
13. [Image Transfer Order](#)
14. [Rating](#)
15. [Copy](#)
16. [Wireless Communication](#)
17. [Slide Show](#)
18. [Photobook Assist](#)
19. [PC Auto Save](#)
20. [Print Order](#)
21. [Instax Printer Print](#)
22. [DISP Aspect](#)

[BACK To HOME](#)



The X Series cameras give you a wide range of options for viewing, storing, editing, processing, annotating , presenting and sharing your shot images. In this section, we'll cover the Playback Menu items, but I'll begin with basic operation of the controls.

## PLAYBACK BUTTON

First things first. The PLAYBACK Button. Press to view your images. How fun is that, right? As I mentioned above, you can even set your camera up with more than one playback button.

I currently have my AE-L button set as a second Play button, which lets me easily view images during times when I'm shooting one-handed, like when riding bikes or shooting while, driving, flying, etc...

Instead of having to reach up with my left hand and use the regular Play button, I can just tap the second button with my thumb. You could make any of the buttons control Playback. You could even have three Play buttons. Or four. Or seven.



## SCROLLING

There are a few ways you can scroll through your shot images. The fastest way is to scroll using the front command dial. You can also use the left and right THUMB PAD buttons or the AF joystick. If you have a touchscreen-enabled Fuji, you can swipe between images to scroll.

**If you want to review multiple images at the same time, simply turn the rear command dial to the left.** One click brings up a grid of nine thumbnails. Two clicks gives you a 100-frame grid. When viewing in either grid mode, you can scroll through all of your thumbnails using any of the scrolling methods described above.

Pressing the OK button or pressing on the joystick will bring up the image in full size view. From there you can either scroll normally or return to the grid by rotating the rear command dial again.

## ZOOMING

When reviewing your shot images, you can press the rear command dial (or the FOCUS ASSIST on the X-T1) to zoom in and check your images for sharpness. Once you tap, the image will zoom to the area where your selected focus zone was located when you shot the photo. Press again and it zooms back out to full size.

You can also zoom in and out by rotating the rear command dial. I recommend using the “press” option, though, it’s a lot faster. Or, double-tap on touchscreen-enabled models.

## ZOOMING RAW IMAGES

You should know that **if you’re shooting RAW only, you won’t be able to get an accurate assessment of sharpness by zooming in.**

This is because the embedded JPEG previews attached to RAW files are only medium sized JPEGs. They’re not full size. (This is true with any camera.) So, even though your images might appear sharp when you zoom in, they might not be quite as sharp as you thought when you download the file and view them on the big screen.

This is one reason why I recommend that if you like to shoot RAW, **you might as well shoot RAW+JPEG** with the **Image Size set to L3:2** and **Image Quality set to (RAW)F**. With a full size JPEG attached to your RAW file, you’ll be able to zoom in and



get an accurate view of sharpness, and you'll also have a JPEG of the image.

This also allows you to share your images much more easily, since they're much smaller and they're already processed with the look you want, at least in part, based on your chosen film simulation and any other camera settings you might have applied. In addition, you can download and share your JPEGs quickly and easily if you're using the FUJIFILM Camera Remote app, as the app won't allow you to download RAW files.

And although you'll still have your RAW files, which obviously contain more dynamic range and allow for greater processing options, you may actually find that in many cases, your JPEGs look totally fine. So much so, that you might decide that having a great looking image right out of the camera is more satisfying than spending time sitting at your computer processing your RAW files.



## USING THE DISP/BACK BUTTON

As I covered earlier, pressing the DISP/BACK button while in Playback mode gives you four different view options

### 1. **STANDARD:** Full size image with shooting data.

**2. FULL: Full size image with no shooting data. Nice and clean!**

**3. INFO: Thumbnail image with comprehensive shooting data.**

**4. FAVORITES: Full size image with date/time, image#, and assignable**

**“Favorites” or star rating.** You can rate the current picture by pressing the selector buttons up or down to assign a star rating from zero to five stars. (On the X100V, press the joystick while in Playback to bring up the Rating/Star option.

During playback, pictures with assigned star ratings will be denoted by small star icons in the upper left corner in the STANDARD view, and in the FAVORITES view.

Unfortunately, these star ratings are written into the file in a proprietary, Fuji-only data format and do not correspond to the normal star rating metadata used by most photo software. They’re for use in the camera only and are not currently exported to third party photography programs.

Yes, this is definitely a bit inconvenient. It would be nice if you could export them to Lightroom, that would certainly make for an easier, faster workflow. However, there is a workaround.

## VIEWING YOUR SHOOTING DATA

When viewing an image in any of the view modes described above (except for FAVORITES view), you can hit “Up” to view all of the shooting data assigned to that image, including film simulation, image size/quality, exposure meter, battery level and other screen effects you’ve turned on in the [DISPLAY CUSTOM SETTINGS](#) menu, (things like framing grid, electronic level, histogram, shooting mode, etc...

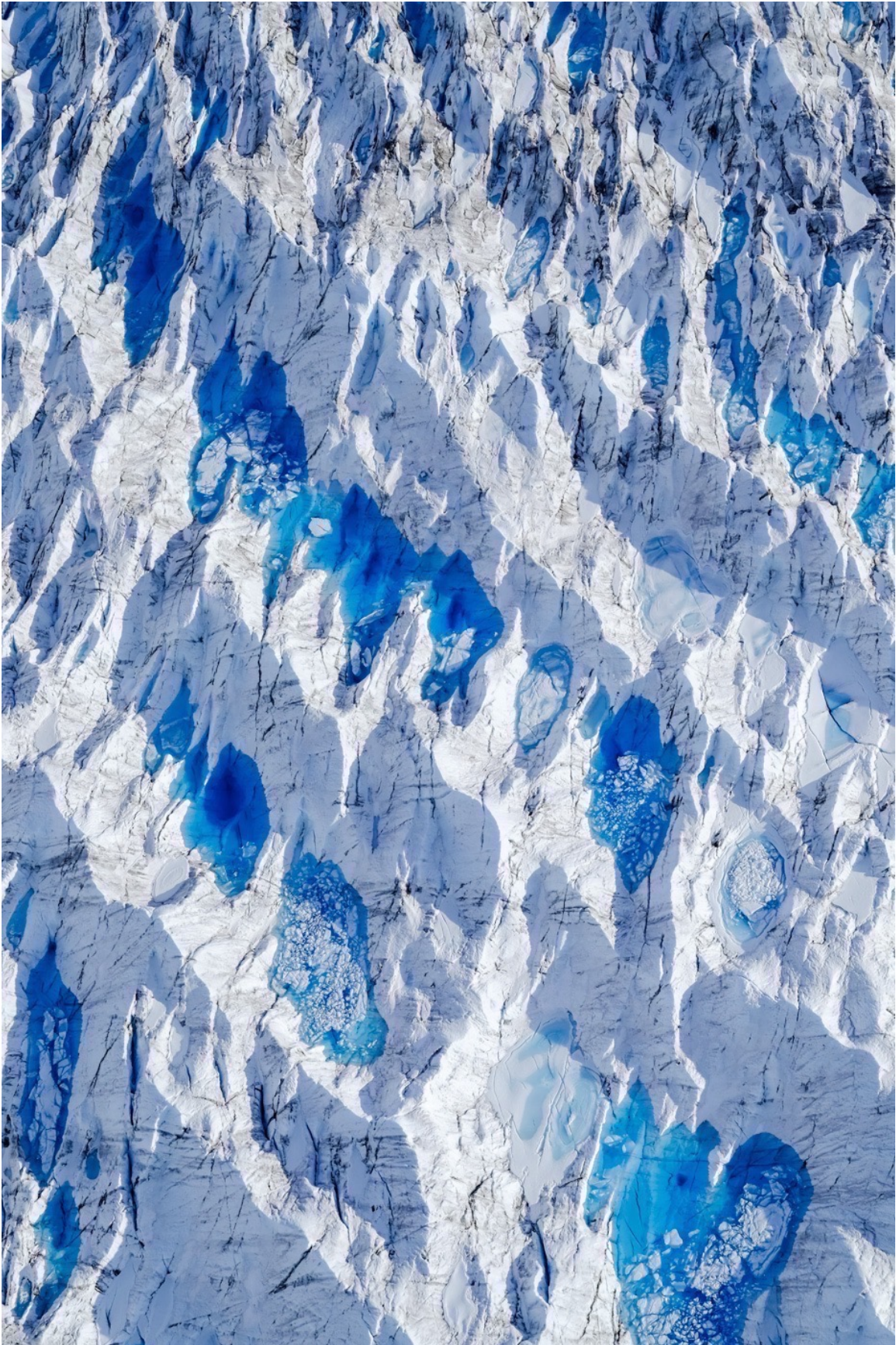
If you hit “Up” one more time, you’ll be able to view all of the EXIF data that’s tagged to the image, including lens, focal length, exposure settings and creator/copyright info, as well as any assigned star rating.

## PLAYING BACK IMAGES FROM OTHER CAMERAS

The FUJIFILM cameras will usually recognize and play back images shot with other Fuji cameras. However there are limitations. Images shot on the 16MP cameras will look fine when viewed on the 24MP sensor cameras, however, if you try to go the other way, the images will be rather blurry, or they won’t play at all.



You can't perform any other PLAYBACK functions on images shot with other cameras, unless they were created using the same type of camera.



# SWITCH SLOT

This menu item lets you switch card slots to view image on the other card. This is for playback only. It will still write according to way you have it set in the [CARD SLOT SETTING](#) menu.

## SHORTCUT

On both of these cameras, pressing the joystick brings you right to the PLAYBACK menu. If you haven't selected anything, you can just double click the joystick to automatically switch to the other card. Or hold down the Playback button.

## SUPER IMPORTANT WARNING!!!

If you've accessed any of the items in the PLAYBACK Menu, pressing the joystick will send you right back to that menu item. The reason that double clicking the joystick switches cards is because SWITCH SLOT is the first item in the menu.

For example, if the last time you were in the playback menu, you made an INSTAX print, then double clicking the joystick will automatically try to connect to your INSTAX printer, and so forth.

This is important because ERASE is also in the PLAYBACK Menu. If for some reason, you left the menu while on the ERASE setting, double clicking the joystick will bring you right to the ERASE menu. Fortunately, it won't automatically erase your image, you'll still have to select the correct ERASE option for this to happen.

So, it's not really that big a deal, but it could be if you weren't paying attention.



# RAW CONVERSION

I once asked a Billy from the FUJI GUYS what program he uses to convert his RAW files. His answer?

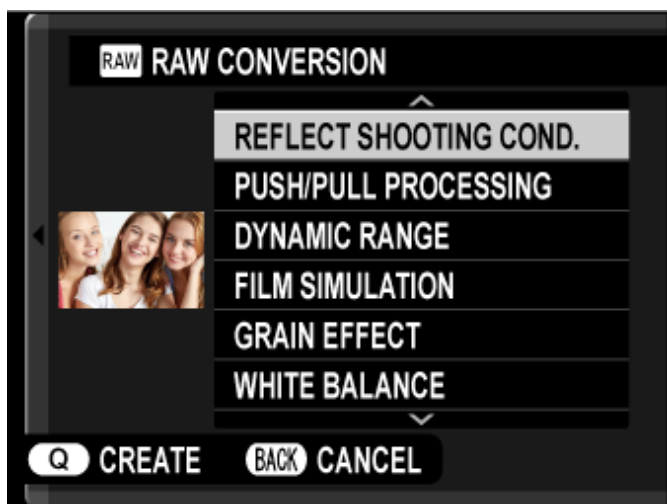
*“The Camera!”*

The X Series cameras feature on-board RAW CONVERSION panel. This tool allows you to convert and save JPEG versions of your RAW files right in the camera. OK, so what’s the difference between this and simply shooting RAW+JPEG?

The real power of this feature lies in your ability to apply any number of different shooting options to the new file. During the conversion, you can adjust exposure, apply a different film simulation or white balance, increase highlight and shadow tone or even apply a different color space.

What if you shot a killer RAW (or RAW+JPEG) photo, using the VELVIA film simulation. You might like how it looks, but maybe you’re curious to see how it might look in black and white, or with a Shade white balance instead of Daylight. Maybe you’d like to add a little bit of grain or increase the shadows.

You can do any one of these things. Or all of them. What if you’d like to see one version as black and white, one with darker shadows and one with grain? You can do as many conversions you want on any RAW file and each one gets saved as a new JPEG image on the end of your memory card.



This is particularly useful for photographers who prefer to shoot in RAW only, but still want to share their work using the FUJIFILM app on their phone. This way, you can

select and process only the RAW files you want instead of having a duplicate JPEG of every single shot you take, which is what you get when you're shooting RAW+JPEG.

To make your conversion, play back your selected image and then press the **OK** button to bring you to the **PLAYBACK MENU**. RAW CONVERSION is the second slot down.

**Even faster, when playing an image back, simply hit the **Q** button to bring up the panel.**

Once you're there, perform your desired adjustments and then hit the **Q** button to preview the new images with your changes. If you like the restyle, hit **Q** again to save the image, or cancel with the **BACK** button. Simple as a bowl full of ice cream.

NOTE: As long as you still have the original RAW file, you can stick it back on a memory card and put it back in the camera. Your Fuji will recognize the file as a valid file type you'll be able to bring it into the RAW CONVERSION menu and process the file again. You may even be able to do this

Here are all of the available settings you can apply:

PUSH/PULL PROCESSING  
DYNAMIC RANGE  
FILM SIMULATION  
GRAIN EFFECT  
WHITE BALANCE  
WB SHIFT  
HIGHLIGHT TONE  
SHADOW TONE  
COLOR  
SHARPNESS  
NOISE REDUCTION  
LENS MODULATION OPTIMIZER  
COLOR SPACE  
CLARITY\*  
HDR\*

(\* X-T4, X-Pro 3, X100V, X-S10 and 5<sup>th</sup> Gen models only)

# HEIF TO JPEG/TIFF CONVERSION

This menu allows you to convert images shot in HIEF format to either JPEG, 8-bit TIFF or 16-bit TIFF files. It's only an option for the 5<sup>th</sup> Gen models.

## ERASE

You can delete photos using the TRASH button on the back of your camera. You can also delete one or more photos by navigating to the **PLAYBACK MENU** and selecting the **ERASE** command.

After hitting **ERASE**, you have three options: Either delete the current photo, delete a group of photos that you manually select or delete all unprotected frames.

Deleted pictures cannot be recovered (you might be able to save them with recovery software.) Don't worry, though. You'll always get a final **"OK?"** confirmation message before any images are erased. And remember, if you ever want to back out, you can simply tap the shutter button or hit the DISP/BACK button.

## SIMULTANEOUS DELETE

The option comes in handy if you're saving duplicate images across both memory cards, like if you're saving RAW files to Card Slot 1 and JPEG or HEIF images to Card Slot 2.

If this setting is **ON**, and you delete a RAW image, it also deletes the accompanying JPEG/HEIF copy from the other card.

If the setting is **OFF**, then deleting a RAW file will not delete the JPEG/HEIF copy from the other slot.

# CROP

Using this option, you can save a cropped copy of any image on the memory card.

Display your desired photo and hit **OK** to bring up the **PLAYBACK MENU**, then select **CROP**. Using the rear command dial and directional buttons, zoom in and around the image to isolate the exact portion of the image you'd like to save.

Hit **OK** to bring up the confirmation option, and hit **OK** again to save the cropped photo as a separate file.

Keep in mind that your cropped photo will always have an aspect ration of 3:2, but the size will be shown as either M or S, depending on how much you zoom in. If, while you're zooming, you see your dialog options turn yellow, your cropped image will be 640, which is suitable for a 4x6 print.





# RESIZE

This setting allows you save a smaller copy of your selected photo. When you hit **RESIZE** in the **PLAYBACK MENU**, you'll be given three options: **M, S and 640**. (This assumes you're shooting IMAGE SIZE L. If you're shooting M or S, you may see different available options.)

Choose your desired size and hit **OK** to save as a separate file.

# PROTECT

You can protect photos from being accidentally deleted from your memory card. Select from one of these options below:

**FRAME:** Protect selected images. Press the selector left or right to view your photos and press **MENU/OK** to lock and unlock specific images, one at a time. When you're done, hit **DISP/BACK**, or tap the shutter button.

**SET ALL:** Protects all pictures on the card.

**RESET ALL:** Removes protection from all pictures on the card.

Protected pictures are displayed with a small "Key" icon at the top of the frame whenever you're viewing pictures in STANDARD mode. Protected pictures cannot be assigned with star ratings, nor can they be rotated or erased.

Note: Formatting your memory card will delete all images, even those you have assign as Protected.

# IMAGE ROTATE

This menu item allows you to rotate your images directly from the **PLAYBACK MENU**. Simply select an image, hit **ROTATE** and follow the prompts.

Note: Protected pictures cannot be rotated.

# RED EYE REMOVAL

This menu item removes red-eye from portraits. The camera looks at the image, and if it detects a face with red-eye, it will process the image and create a copy with reduced red-eye effects. If the camera cannot spot a face, it will give you the “CANNOT DETECT” message.

NOTE: You cannot re-perform RED EYE REMOVAL on a photo you’ve already processed with this setting.

# VOICE MEMO SETTING

This is another cool feature that was added in a recent firmware update. It’s found on the X-T2 and X-Pro2 Only.

Using this menu, you can record a 30-second voice memo to any single image. In the **PLAYBACK** Menu, turn on **VOICE MEMO RECORDING** and hit **OK**. Then back out and go back to your shot images.

While viewing your selected image, press and hold the front command dial until you see the little “red dot” recording light come on. (It takes a few seconds, be patient.) Keep holding the button down and start talking. Or play music, or make sound effects or whatever noise you want. When you’re done, release the front command dial.

Your voice memo is now saved. When you play back the image, you’ll see a little “voice memo” icon over the picture.

To play back your voice memo, simply press the front command dial. (You don’t have to hold it down during playback.) If you want to overwrite your memo, simply press and hold the command dial again and record a new message.

# HOW YOU CAN ACCESS VOICE MEMO IN LIGHTROOM

When you import any file that has a voice memo attached into Lightroom, the

corresponding audio file will also be imported. Here's how to play it back:

1: After you import the file into Lightroom, hit "G" for Grid View and click to select a photo that has a voice memo attached to the file.

2: On the right side of your Lightroom window, open up your "Metadata" tab.

3: Inside the dropdown box, you should see a section that says, "Audio File". Click the little arrow that points to the right where it says "Audio File," and it will play back your recorded voice memo.

## RATING

This allows you to tag your pictures with star ratings. As previously mentioned, these ratings are not read or recognized by third party photo software.

## IMAGE TRANSFER ORDER

This menu setting lets you select JPEG photos for upload to a smartphone or table that's paired to your camera via Bluetooth.

When you select this menu item, you can then highlight photos and hit **OK** to select or deselect them for transfer to your device. In addition, **you can also add images to the transfer queue by pressing Fn Button #1 while reviewing images in Playback mode.** For this to work, go into [General Settings](#) under CONNECTION SETTINGS, and set BUTTON SETTING to PAIRING/TRANSFER ORDER.

Once you're completed your Image Transfer Order, the selected images will be sent to your device as soon as you turn the camera off. The nice thing is that is the transfer happens in the background; you don't need to pull up the app on your mobile device.

## COPY

On the X-T2 and X-Pro2, you can use the **COPY** function to copy images from one card slot to another. Choose one of the following options and press the selector right:

- **SLOT1 to SLOT2:** Copy pictures from the card #1 to card #2.
- **SLOT2 to SLOT1:** Copy pictures from the card #2 to card #1

Then highlight one of the following options and press **MENU/OK**:

- **FRAME:** Copy selected pictures. Scroll left and right to view pictures, using the selector buttons or either command dial, then press **MENU/OK** to copy the current picture.

- **ALL FRAMES:** Copy all photos.

## WIRELESS COMMUNICATION

This setting allows you to connect your camera to smartphones and tablets running the “FUJIFILM Camera Remote” app. Once connected, your mobile device can be used to browse the images on the camera, download selected images, control the camera remotely, or upload location data to the camera for geotagging your images.

I mentioned above, all of the X Series cameras have a dedicated Wi-fi button or a Fn button that has this setting assigned by default.

If you use a Bluetooth-enabled Fuji, you can simply initiate the connection right from the Camera Remote App. Once you’re connected, you can browse and download images, control the camera and shoot photos or movies remotely.

[Click here to download the FUJIFILM Camera Remote app for iOS and Android.](#)

## WI-FI PROBLEMS AND DROPPED CONNECTIONS

If you’re using the camera Wi-fi in an urban area where there are many other active wireless networks all around you, the connection can get a little spotty and it may drop off suddenly. Or the app will just quit.

I’ve had it work just fine in remote mountain areas, and yet sometimes I have the hardest time downloading even a single image at an airport or a downtown coffee



shop. If you experience drop-offs, try moving to a different area away from other Wi-fi signals.

## SLIDE SHOW

This item allows you to view your photos as a slide show. Press **MENU/OK** to start and press the selector right or left to skip ahead or back. Press **MENU/OK** again to stop.



# PHOTOBOOK ASSIST

This is a fun feature! It allows you to create and display collections of images that look like you're flipping through a stack of tiny prints, or turning the pages of an itty bitty photo album. The photos end up a little smaller on the screen, but they have added presentation value, which can be nice.

To create a PHOTOBOOK, select this item in the **PLAYBACK MENU** and then select **NEW BOOK**. You can then scroll through your images and follow the prompts for choosing images for your book and selecting a photo for the cover. If you don't select a photo for the cover, the first images you've selected becomes the default cover images. (Books can contain up to 300 images.)

When you're done hit **OK**, and the new book will be added to your list. You can now go back to the main menu and flip through your book. If you'd like to make changes or delete the book, hit **MENU/OK**.

Unfortunately, you can't change the name of your PHOTOBOOKS, they're stuck being titled BOOK 1, BOOK 2, BOOK 3 and so forth. That would be a nice touch.

If you use [Fuji's MyFinePix Studio Software for Windows](#), you can copy your completed PHOTOBOOKS to your computer. (I've never used the software, so I can't comment on whether it's worth downloading or not.)

## PC AUTO SAVE

PC AUTO SAVE works very much like the Camera Remote app for your phone, except it allows you to send pictures straight from your camera to you computer.

In order for this to work, your computer needs to be running the FUJIFILM PC AutoSave app. It's a free download and they have both a [Mac version](#) and a [Windows Version](#). For more information on how this app works, [visit this page](#).

# PRINT ORDER

This setting allows you create a digital “print order” for DPOF (Digital Print Order Format) compatible printers. This is a format designed for recording print information onto your memory card, including which of the images shot using a digital camera are to be printed and how many copies are required of each print.

Unfortunately, like a lot of technology formats, this one seems to have passed. DPOF format is not used much these days, since most printers are going wireless. However, if you have a printer with an SD card slot, this feature may still work for you.

To start your PRINT ORDER, select this item in the menu, then choose whether you want the recording date printed on your pictures or not, hit **RESET ALL** to erase and start your order again, if you wish, then hit **MENU/OK**.

You can now go through your images to choose which images to print and how many copies (sheets) of each you’d like to print. When you’re done, hit **MENU/OK** again.

Now, all you have to do is insert your memory card into DPOF compatible printer and hit print, and the Print Order information on the card will tell the printer which image to print. It’s as simple as that.

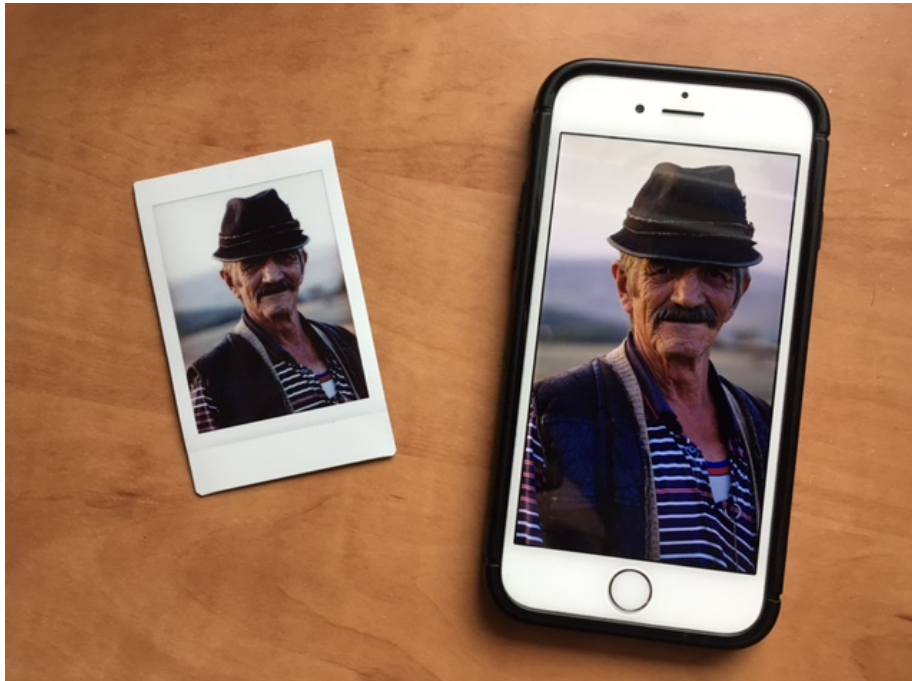
# INSTAX PRINTER PRINT

If you have an INSTAX Share printer, you can print right from the camera. Turn your INSTAX printer on to initiate the wireless connection, and then select this menu item on the camera.

Once it's connected, you can scroll through your frames to find the image you want. Then hit OK to send it to the printer. Once you hit OK, the printing process will begin and you'll have your picture. Just like magic.

I love the INSTAX system! It's really a lot of fun, whether you're printing right from your camera or to your smartphone. The latest generation of the [INSTAX SP-2 Share Printer](#) even has increased image quality and better dynamic range.

There's just something classic about taking a picture and being able to turn it into a tangible, baseball card sized version right before your eyes.

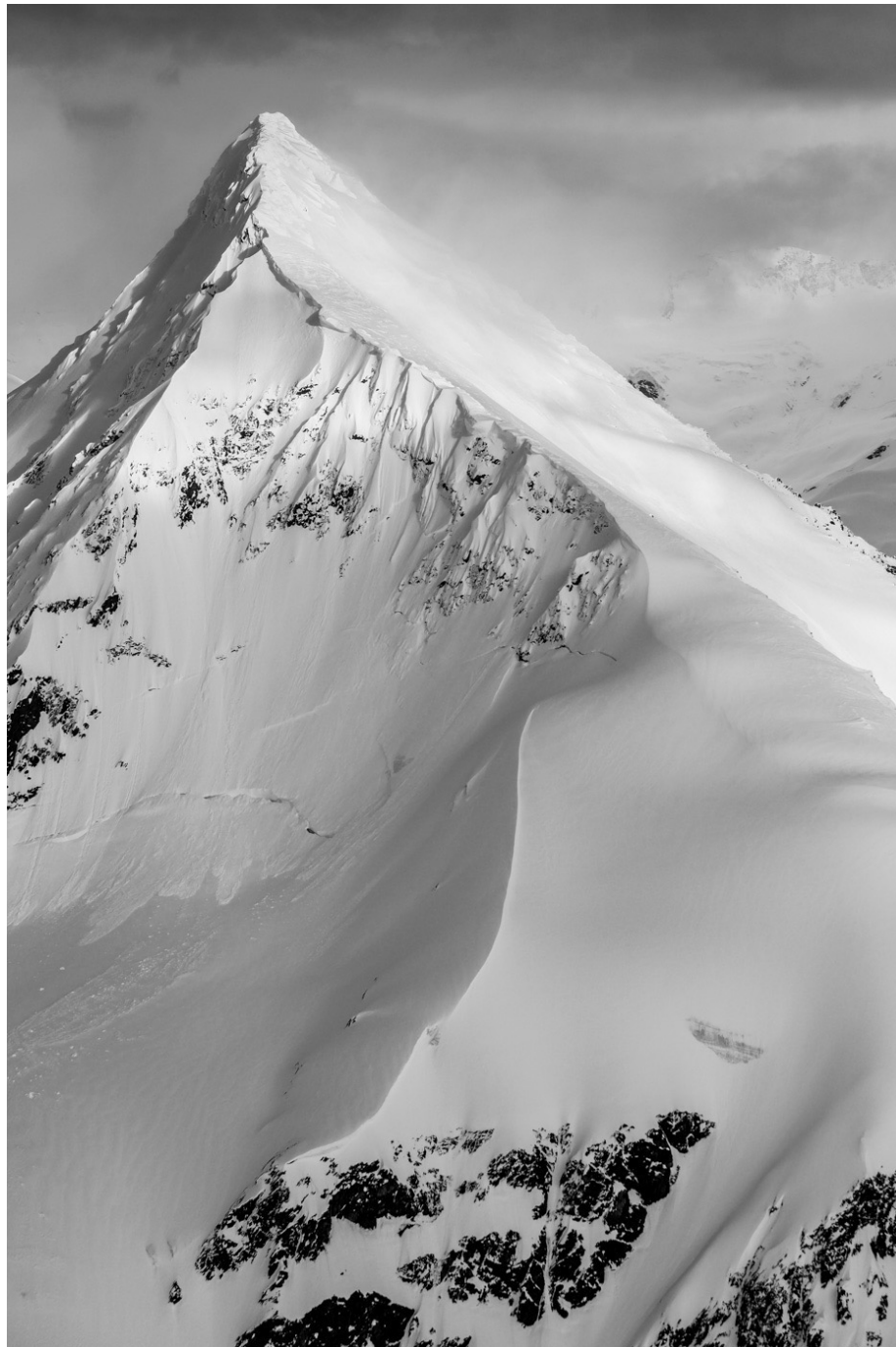




# DISP ASPECT

When connecting your camera to another device using an HDMI cable, this setting lets you choose how High Definition (HD) devices display pictures with an aspect ratio of 3:2.

Choose **16:9** to display the image so that it fills the screen with its top and bottom cropped out, or **3:2** to display the entire image with black bands at either side.



# YOU'RE DONE!!

Congratulations, you made it through the entire book! Thanks for sticking with me through some of the more boring topics. You now know what every single feature, and all the menu items do on your X Series camera. It's time for you to put this incredible bank of knowledge to good use.

I'll say it one last time. Photography isn't about accuracy, it's about look, feel and creativity intention, slash experimentation, and of course, fun. There are no rules, there is only what you show and how you get there. As long as you get the shot you were hoping for, or at least feel good about the images you're getting, and you enjoy the process, then that's all that matters. No one can take that away.

I wish you the best of luck and I hope you find the same kind of personal enjoyment with your photography and your Fuji cameras as I keep having every time I pick it up and head out the door.

Now take your new found camera skills and go have some adventures! I look forwards to seeing some of you out there and meeting you at a future event or workshop.

-Thanks for reading,  
Dan Bailey, July 12, 2017. (Revised November, 2022.)



# ACKNOWLEDGEMENTS

I would like to begin by expressing my gratitude to all of my readers, subscribers, blog followers and everyone who attended my workshops and presentations. Without your continued interest in what I have to say about photography and FUJIFILM gear, there would be no book.

Although I know you have learned from me, please know that I have learned a lot from you too. I learn every time you ask me a question via email, on social media or in person. I often find myself suddenly having to learn things I might not understand as well either, and I have to figure out how to explain a certain topic or technique in an efficient manner so as not to confuse you, or myself, in the process

In that way, your constant engagement as active and enthusiastic readers has continued to drive my knowledge and passion about photography and the Fuji cameras as much as anything else. I can say with full confidence that I'm a better photographer because of you.

For that reason, I would like to dedicate this book to all of you.

I'd also like to thank all the awesome people at FUJIFILM North America, for making such incredible products that have inspired my photography so much, and for being such wonderful friends. It's been such a pleasure to work with all of you as friends and colleagues.

# ABOUT DAN BAILEY

Dan Bailey has been a full time adventure, outdoor and travel photographer since 1996. His immersive, first person style of shooting often places him right alongside his subjects as he documents the unfolding scene and searches for the perfect convergence of light, background and moment.

A longtime user of Fuji Photo Film and unwavering devotee of VELVIA, [Dan first became enamored with the X Series in the fall of 2011](#). He fell in love with the X10, and then bought the X20 when it came out.

Intrigued by the full sized X-Trans sensor, Dan shot with the X-E2 for awhile, while his Nikon saw less and less use each year. He switched to using the X Series full time in the Spring of 2014, and a year later, traded in all his Nikon DSLR gear for more Fuji lens and a second X-T1.

Having used numerous Fuji models, Dan currently shoots with the X-T3/4 and X100V.

This is Dan's seventh eBook. He has written print books: [Outdoor Action and Adventure Photography](#), published by Focal Press, and [Adventure Photography](#), a Falcon Guides title co-published by Backpacker Magazine. [His blog](#) has been rated as one of the Top 100 Photography Blogs on the Planet, and he teaches photography workshops. [You can watch his video tutorials on YouTube](#).

Dan currently lives in Anchorage, Alaska, and he spends his free time exploring gravel bars in his little yellow Cessna, hiking and skiing in the mountains and racing around on his mountain bike.



Visit his website at [danbaileyphoto.com](http://danbaileyphoto.com).