

# Sony FS5

Quick Start Guide

V.4 2020

# Contents

- Basic Operation, p.6
- Recording Formats, p.14
- Audio Controls, p.26
- Auto Exposure Controls, p.33
- Focus Controls, p.39
- About the Lens, p.42
- Slow Motion Recording, p.46
- Manual Exposure Controls, p.54
- Picture Profiles, p.69
- High Dynamic Range, p.93
- Backup Up Your Media, p.110

This is a professional HD and 4K camera with broadcast quality codecs. However, it is recommended that you shoot in HD.



# Sony FS5 Kit



Camera and Lens



Batteries and Chargers  
There are two BPU 60 and  
one BPU 30 battery.



Condenser Microphone

# Important:

- The whole kit (camera, lens, microphone, batteries, and SD cards) is worth about \$9000.
- The camera is not waterproof. It must be protected from rain and snow.
- When shooting in cold weather, keep the camera in the bag for (at least) 30 minutes when you come indoors. This will avoid condensation on the camera and electronics.

# Sony FS5

Quick Start Guide

Basic Operation

# Power Button



# Using the LCD or the Viewfinder



- By default, the viewfinder is off when the LCD is on.
- The power switch for the LCD is on the top of the LCD.
- If you do not see an image in the LCD when the camera turns on, the battery might be dead or the LCD might be off!



# Switching Between LCD and Viewfinder

- Menu/ Display Set/ VF/LCD Panel/
- You have two choices in this menu setting:
  - 1. LCD Panel: this turns off the viewfinder (eyepiece)
  - 2. AUTO: this will turn off the LCD when you put your eye up to the viewfinder. You may accidentally turn off the LCD using this setting hence the first choice.

# SD Card Slots

2 X 128 GB class 10 SDXC cards (95 MB/s)



- XAVC HD 1080 50 Mbps 280 mins. per card
- 4K QFHD 100 Mbps 150 mins. per card

# Slot Select Button:

to determine which card to record to



# Making Menu Selections:

Menu button and SEL/SET wheel



# Menu: first important settings:

- Go to **System Menu/ Media Format** and format both SD cards – this will erase all data from the previous user
- Go to **System Menu/Initialize to** – this sets all menu items back to the factory presets – except for the Picture Profiles!



# Sony FS5

Recording Formats

# HD Frame Rates:

- Progressive NTSC:
  - 24p (23.98 fps), 30p (29.97 fps) or 60p (59.94 fps)
- Interlaced NTSC:
  - 60i (60 fields or 29.97 fps interlaced)
  
- Progressive PAL: 25p, 50p
- Interlaced PAL: 50i (50 fields or 25 fps interlaced)

# Choosing a Frame Rate

- NEVER shoot interlaced frame rates. All display equipment is now progressive.
- NEVER shoot PAL frame rates unless you are planning to show the video exclusively on European or Asian video display technology.



# Common Notation for NTSC Video Formats

- vertical resolution/frame rate/scan type
- 1080 60p = 1920 x 1080 59.94 fps progressive
- 1080 24p = 1920 x 1080 23.976 fps progressive
- 1080 30p = 1920 x 1080 29.97 fps progressive
- 1080 60i = 1920 x 1080 29.9 fps, 60 interlaced fields (AVOID THIS)
- 2160 30p = 3840x2160 29.97 fps progressive
- 2160 24p = 3840x2160 23.976 fps progressive

# Sony FS5: Three Recording Codecs

XAVC HD, XAVC QFHD 4K, AVCHD

- XAVC HD 4:2:2 MPEG 4 Long Profile (10 bit)
- HD 1920x1080 60p, 30p, 24p at 50 mbps
- Slow motion HD in 1920x1080 up to 480p
- Slow motion HD in 1280x720 up to 960p
  
- XAVC QFHD 4K UHD 3840x2160
- 4:2:0 MPEG 4 Long Profile (8 Bit)
- 4K UHD 30p,24p at 100 mbps
  
- AVCHD- lower quality HD format (DON'T USE THIS)

# Three criteria for choosing a recording format:

- 1. a NTSC frame rate
- 2. a progressive frame rate: 24p for slower motion or 30p for faster motion (60p is for shooting slow motion, it is not a standard video speed)
- 3. the best quality codec: XAVC HD for HD video
- 4. the highest bit rate of that codec: 50 mbps for XAVC HD, 100 mbps for 4K QFHD

# 4K video is not recommended.

- You may assume that 4K video is the best quality recording format. This is a false assumption.
- 4K QFHD is a larger but lower quality image than XAVC HD. It has about half of the color information of XAVC HD, making it much harder to color correct. It is also more prone to image noise at higher ISOs.

# Reasons not to shoot in 4K

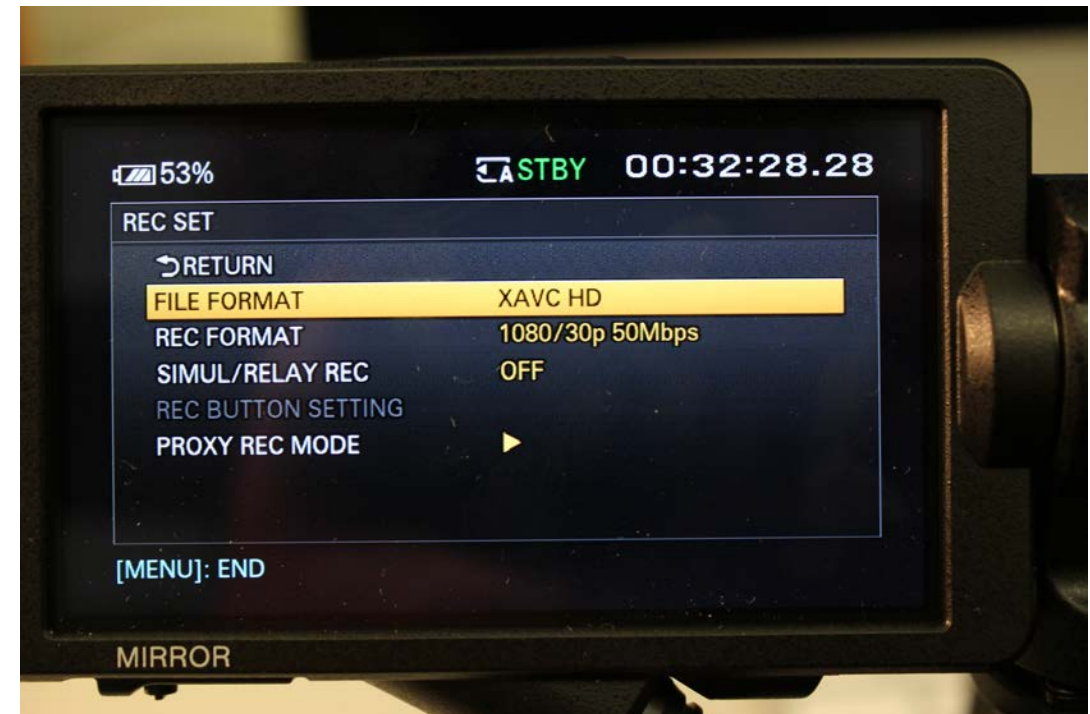
- Currently, there are no 4K displays or projectors in the CDA depot.
- In your classes and in Concordia galleries, all video is currently being displayed at an HD size: 1920x 1080.
- 4K is harder to edit. Computers work harder to edit 4K XAVC video because it is highly compressed.

# Reasons to shoot in 4K

- Shoot 4K video if you have 4K video distribution in mind: a 4K DCP for film festivals, for example, or a 4K video split across two HD projectors.
- Next year the CDA will purchase a 4K RAW upgrade for one camera, then 4K image quality from the camera will improve and (if you shoot in 4K Pro Res 422) editing will be easier.

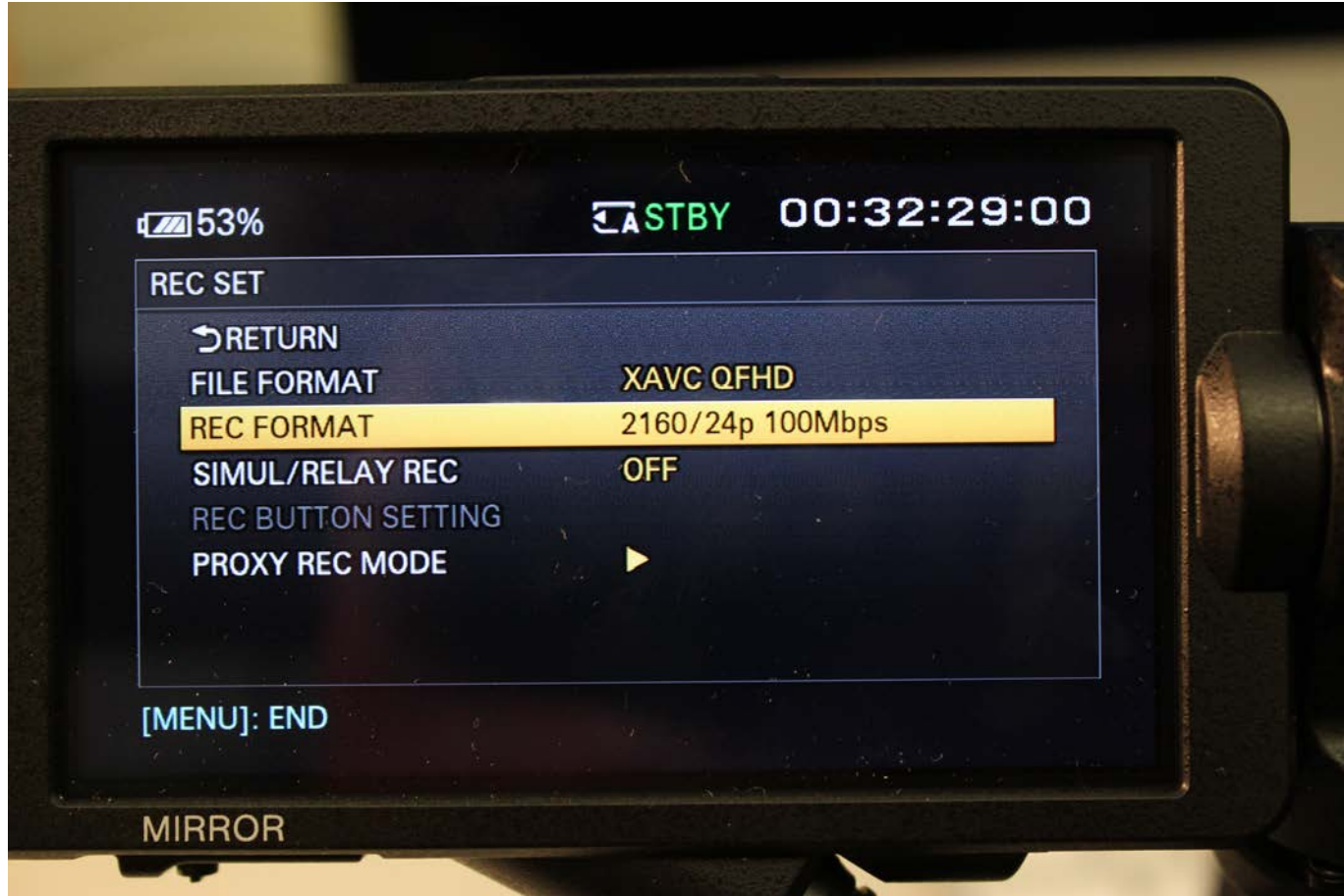
# Menu: Choosing a Recording Format

- Rec/Out Set Menu/ Rec Set
- Choose the 50Mbps option for XAVC HD



# Menu: Choosing a Recording Format

- Choose the 100Mbps option for 4K UHD





# Menu: Card Recording Options

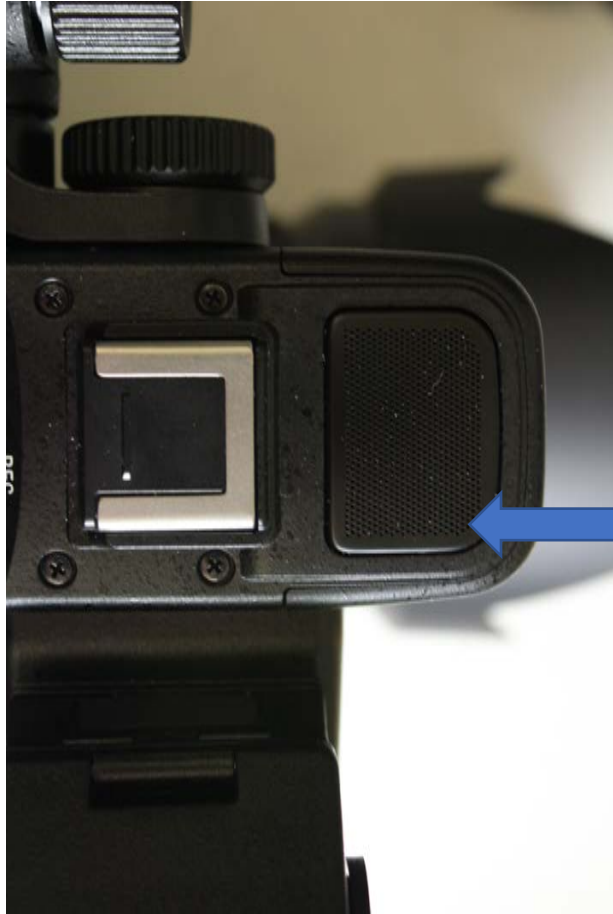
- Relay Rec will allow you to record between card A and B seamlessly (without gaps)
- Simultaneously Rec will record to both cards at once or you can assign different record buttons on the camera to each card



# Sony FS5

Audio Controls

# Audio Inputs



The camera has a built-in stereo microphone on the handle.

It also has two XLR inputs and a hot shoe. Use the condenser microphone included in the camera kit (side pocket of the bag).

The built-in microphone. It will pick up room noise.

# Attaching the Microphone

- The condenser microphone attaches to XLR INPUT 2. Choose the setting MIC +48V
- There is a clip for the cable underneath the XLR input



# Second XLR Input (Input 1)



If you have other microphones, the second XLR input is on the back of the camera behind the hand grip.

You may have to move the grip in order to set the LINE/MIC level for the input.



This button adjusts the grip position.

# Menu: Choosing Audio Input

When the external condenser microphone is plugged in choose:

Audio Set Menu/ CH2 Input Select/Input 2.

CH1 Input Select can remain on Internal Mic if there is no other microphone— this is the stereo microphone on the handle. You don't have to use this channel.



# Audio Controls- Auto or Manual



Flip down the little door to adjust the audio volume levels manually.

The AUTO level should be sufficient however.

# Headphone Output



Headphone level is controlled in the Audio Set menu.



# Sony FS5

Auto Exposure Controls

# FULL AUTO



- Although the camera has many controls, you can operate it in FULL AUTO mode with AUTO exposure, AUTO white balance and AUTO focus.

# Full Auto Exposure: Full Auto Button



Toggle this button to go from Full Manual Exposure to Auto Exposure.

FULL AUTO will tend to adjust the ISO and IRIS settings but keep the SHUTTER setting constant. Normally the shutter should be kept at double the frame rate.

FULL AUTO also adjusts white balance automatically but slowly.

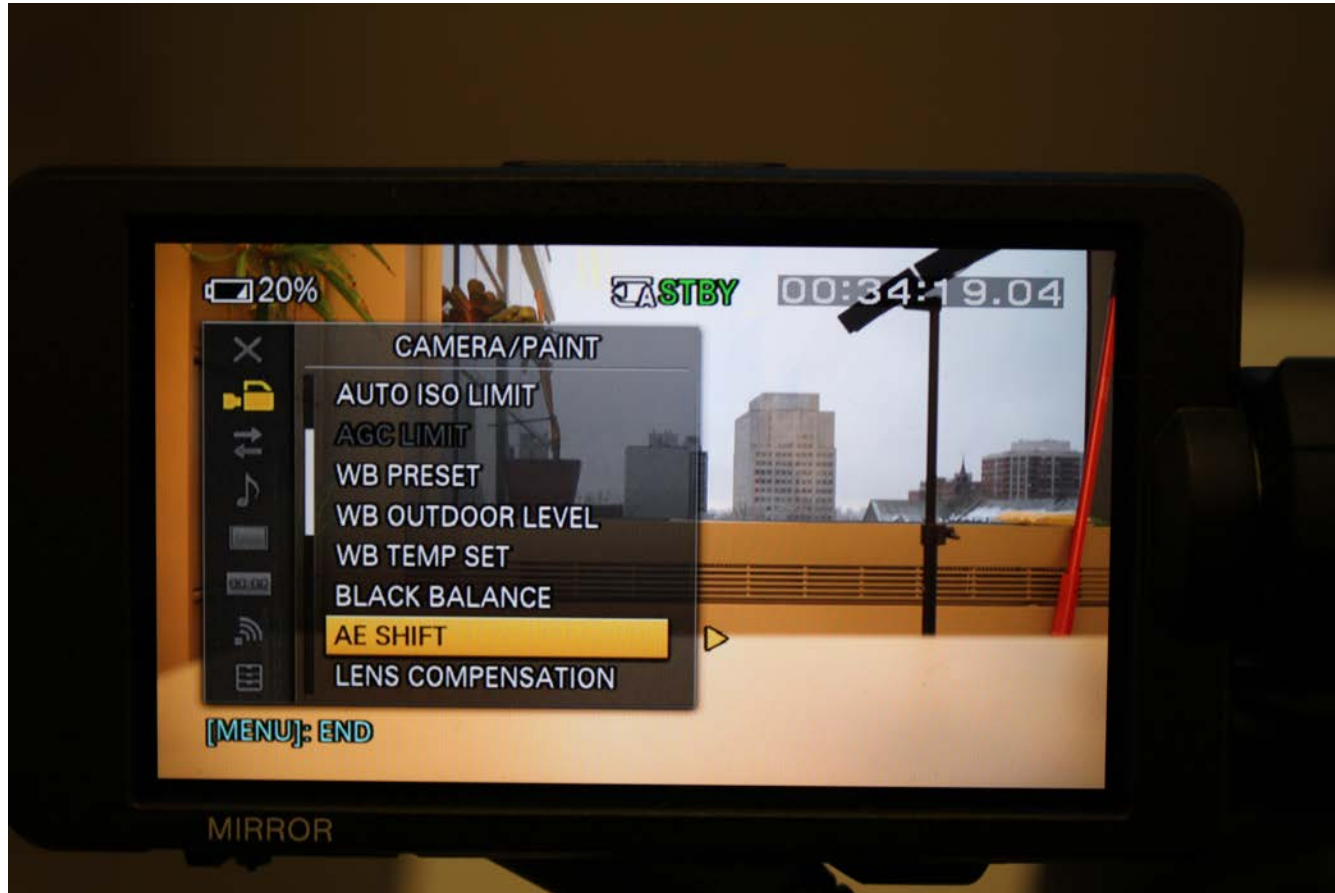
# Full Auto exposure in Display



1/60<sup>th</sup> of a second is the correct shutter speed for 30p video.

- Notice the “A” symbol next to the IRIS, ISO and Shutter speed in the display.
- Keep an eye on these settings when in FULL AUTO mode
- If your ISO goes above 3200, you may have noise in the image. Don't confuse 3200 ISO with 32000 ISO!

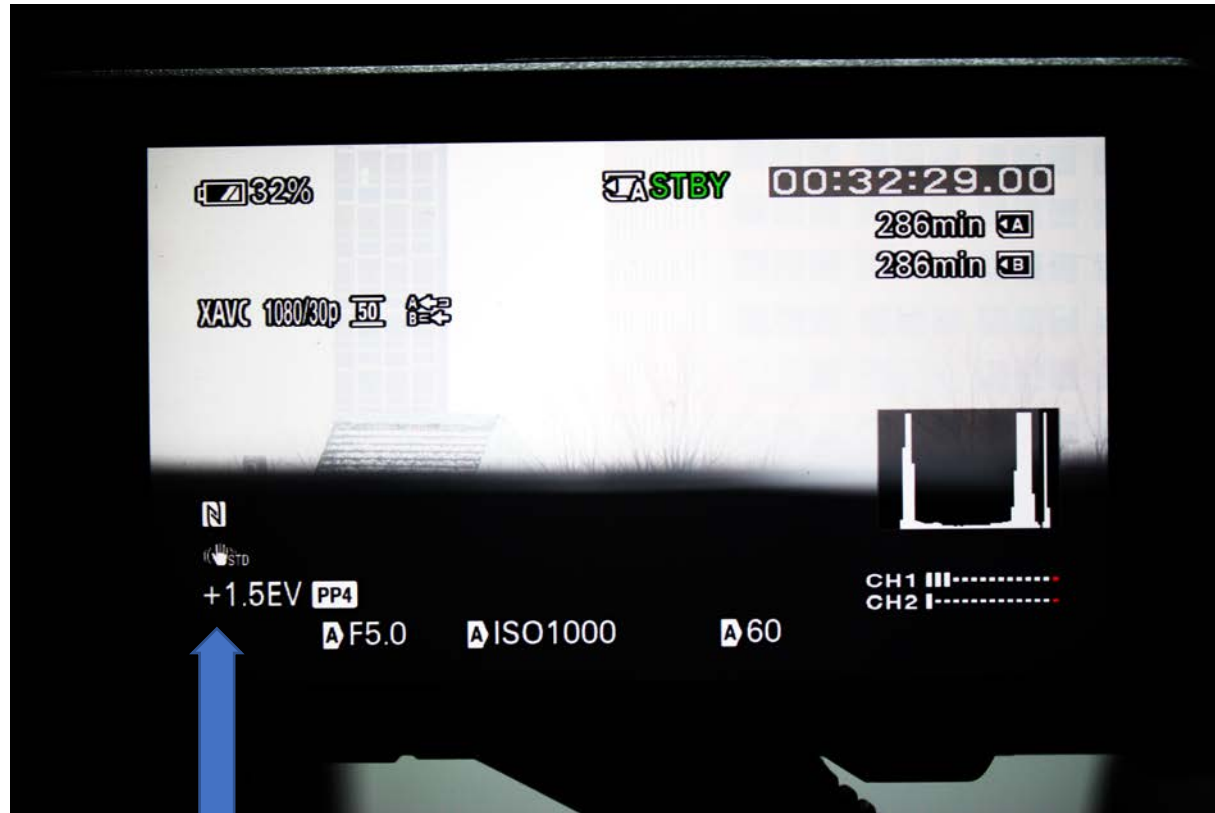
# AE Shift



The AE SHIFT menu item controls automatic exposure compensation. Every shot can be deliberately under or overexposed by the camera.

This is most useful when used with SLOG Picture Profiles (more on that later).

# AE Shift



AE SHIFT level indicator

If you are shooting in auto exposure but **not** using a SLOG picture profile then there should be no AE Shift ( 0 EV). Check this in the LCD display or menu setting.

If you are shooting in a SLOG 2 or SLOG 3 picture profile with auto exposure, then the AE SHIFT should be set to 1.5 EV. There is detailed information on Picture Profiles later in this guide.

# Sony FS5

Focus Controls

# Manual Focus:



Auto/Manual Focus Toggle on Camera Side



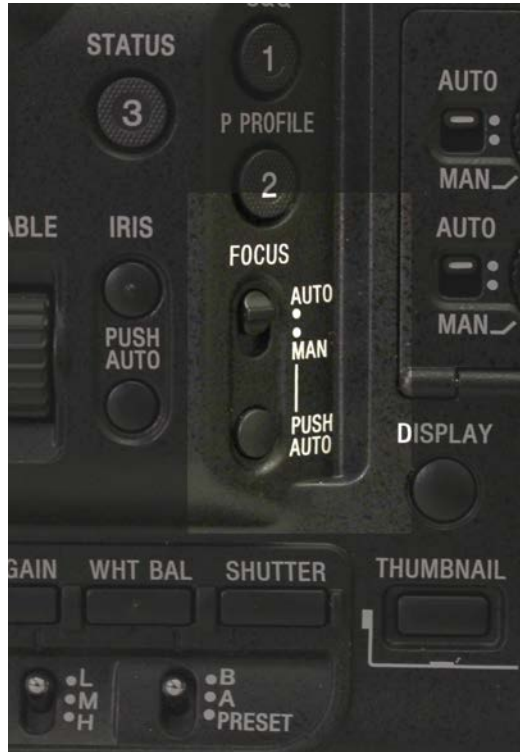
Focus Magnification button on Handle



Control Focus with the smaller width ring.



# Auto Focus:



For continuous Auto Focus, move the switch to AUTO

In Manual Focus, you can get an auto focus momentarily by pressing the PUSH AUTO button below.

Focus Peaking is available if you need it, in the DISPLAY SET/PEAKING menu.

# Sony FS5

About the Lens

# Sony E PZ 18-105mm f/4 G OSS Lens



This is the kit lens.

Other lenses will require a Sony E Mount adapter.

# This is a varifocal lens.

- Focus will shift as you zoom so when are manually focusing you may lose focus while zooming.
- This will often occur if you start on a wide angle and then zoom into your subject. In this case, focus first completely zoomed into the subject and then zoom out to start the shot.
- Remember that a smaller aperture opening (larger aperture number) will give you a greater depth of field.
- A wide focal length will also give you a greater depth of field.
- Use focus peaking to confirm what is in focus.

# Steady Shot (Stabilization)



- This is for lenses that support Steady Shot (like the Sony E Mount lens on the camera).
- Keep Steady Shot on Normal
- Turn off Steady Shot when the camera is on a tripod
- CAMERA/PAINT MENU /STEADYSHOT

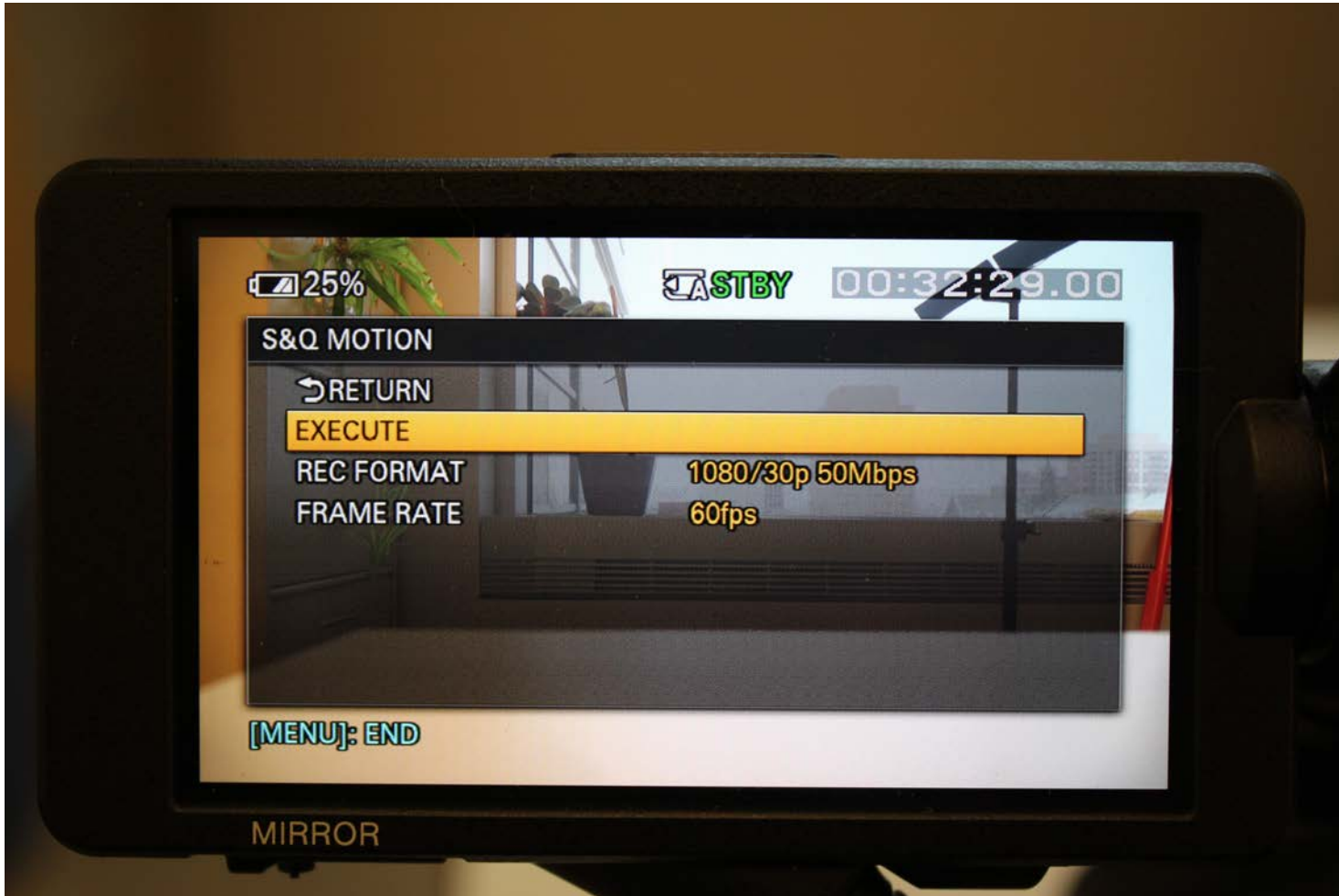
# Sony FS5

Slow Motion Recording

# Slow Motion Recording

- The camera has two possible slow motion speeds: a S&Q motion setting and a Super Slow Motion setting.
- In each of these settings, there is a REC FORMAT, the recording format that determines how the clip will be interpreted by editing software like Premiere, and a FRAME RATE, the actual frame rate that the camera is shooting in.
- When shooting slow motion, the REC FORMAT will always be fewer frames per second than the FRAME RATE.
- These settings can be made in Menu/ Camera/Paint/ Slow&Quick
- S&Q settings can go up to 60 fps
- Super Slow Motion settings can go up to 960 fps

# Slow and Quick (slow motion)



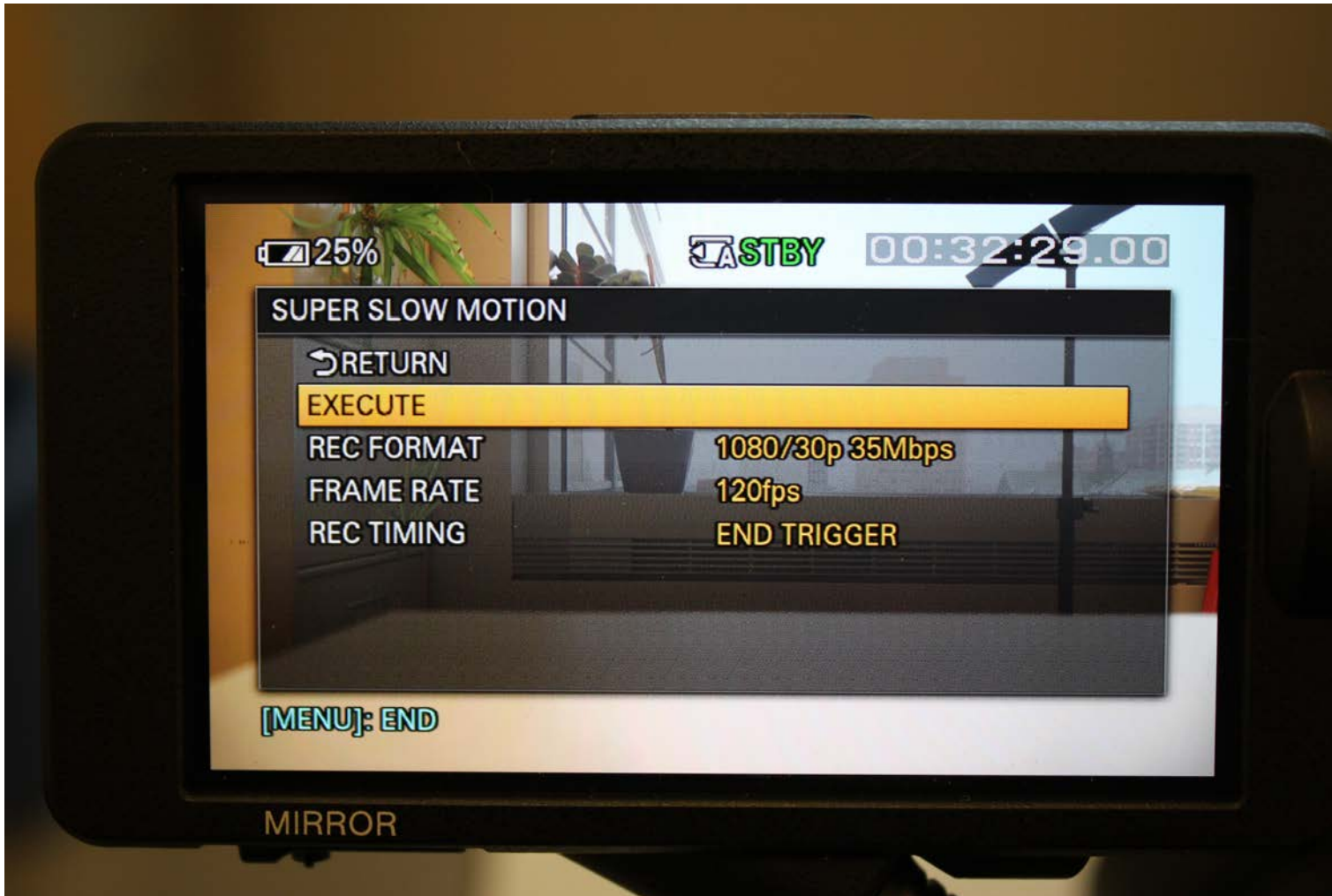
Here the S&Q frame rate is 60 fps and the recording format is 1080 30p.

The camera will shoot at 60 frames per second.

But the file will appear in Premiere as 1080 30p and play back on a 1080 30p sequence at 50 percent speed.



# Super Slow Motion



Here the super slow motion frame rate is 120 fps and the REC FORMAT is 1080 30p.

This means that the file will appear in Premiere and play back on a 1080 30p sequence at 25 percent speed.

# Slow and Quick Shooting



Press the S&Q button to toggle between the normal frame rate, the slow motion frame rate and super slow motion frame rate.

The frame rate will appear in the LCD display.

You cannot record sound in S&Q mode.

# Adjust your shutter speed accordingly

- The higher your frame rate, the higher the shutter speed that will be required to avoid motion blur.
- Remember that the rule of thumb for shutter speed is double the frame rate
- At 60 fps you need a shutter speed of 1/125th of a second
- At 120 fps: 1/250<sup>th</sup> of a second
- At 240 fps: 1/500<sup>th</sup> of a second
- At 480 fps: 1/1000<sup>th</sup> of a second
- These are not perfect ratios, but don't worry.
- The higher the shutter speed; the greater amount of light you will need.

# Super Slow Motion Trigger



You must set the Rec Timing for super slow motion frame rates (frame rates above 60p).

It is not possible to shoot at High Frame Rates for long durations.

Set the REC TIMING menu item for when to trigger the recording. START TRIGGER begins recording once you press the record button.

# Recording Times for Slow Motion

- The recording times for really high frame rates are limited.
- The amount of time you can record in slow motion depends on the amount of space on the SD card. Ideally, shoot with an empty SD card.
- For example, with the REC FORMAT at 1080 30p and the FRAME RATE at 240 fps you will get about one minute of recording time.

# Sony FS5

Manual Exposure Controls

# Manual Exposure Settings

- Manual exposure relies on the following things:
- White Balance
- Iris
- Shutter Speed
- ISO
- And possibly ND filter settings

# Manual White Balance



The camera will White Balance in FULL AUTO Mode but Manual White Balance is preferable. The WHT BAL button toggles between manual and auto white balance.

To do a manual white balance, set the WHIT BAL switch on the side of the camera to either A or B (you can store two manual WB settings).

Point the camera at a white card with light falling on it.  
Press the WB SET button on the front of the camera.



The Preset Switch is controlled by the Camera Menu: CAMERA PAINT/WB PRESET. There are indoor/outdoor and color temperature presets.

Manual White Balance does not work in SLOG. The white balance is set in the SLOG Picture Profile settings.



# White Balance Menu Settings



On the WB toggle switch on the side of the camera, the last setting PRESET is determined by the WB TEMP SET in the CAMERA/PAINT menu.

# Manual Exposure



- In complete manual exposure there is no “A” Symbol next to ISO, IRIS or SHUTTER.
- The ISO, WB and SHUTTER buttons will toggle between AUTO and Manual.
- Always keep the Shutter on Manual and at twice the frame rate, unless you want a motion effect.

# ISO/Gain Settings



The ISO/Gain switches can be set to control either ISO or GAIN presets.

There are three presets (L, M and H) set in the Camera/Paint menu under ISO/GAIN SEL. So you can have three GAIN or three ISO settings to choose from.

# ISO or GAIN?

- If you are not shooting with SLOG Picture Profiles (PP7 to PP9) then use GAIN settings as your presets.
- 0dB gain is the native ISO of the camera. This will ensure that there is no noise in the image. If you need more light sensitivity, increase to the minimum amount of GAIN. Start with 3 dB.
- If you are shooting with a SLOG Picture Profile, then use ISO settings as your presets. 3200 ISO will give you the maximum dynamic range of the camera, and (when properly exposed) no visible noise.
- You may also wish to use ISO settings if you are judging exposure with a handheld light meter.

# Manual IRIS adjustments



Switch to IRIS



There are two wheels to adjust the IRIS.

To use the wheel on side of the camera, select the IRIS switch next to the wheel.

Or use the wheel on the hand grip.

# Histogram

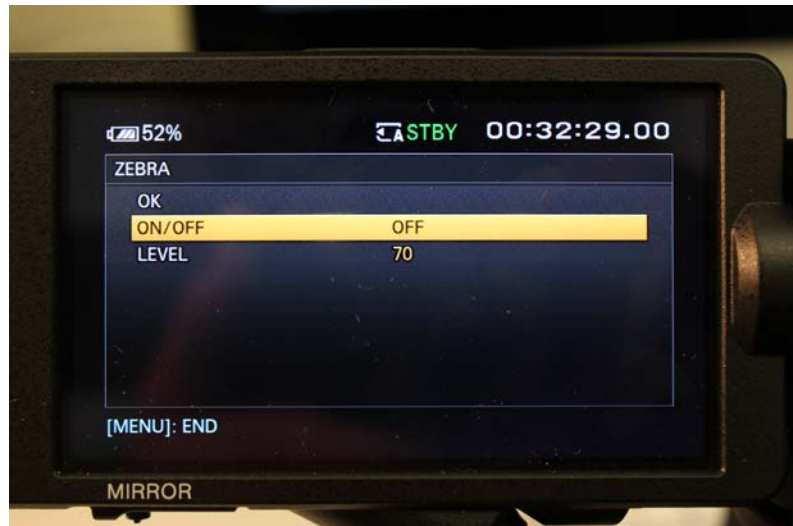


- Keep the Histogram in the Display to judge overall contrast and whether areas are over or underexposed.
- Display Set Menu/ HISTOGRAM
- In a studio situation, you may plug in an external waveform monitor to judge exposure more accurately.

# Zebra Stripes

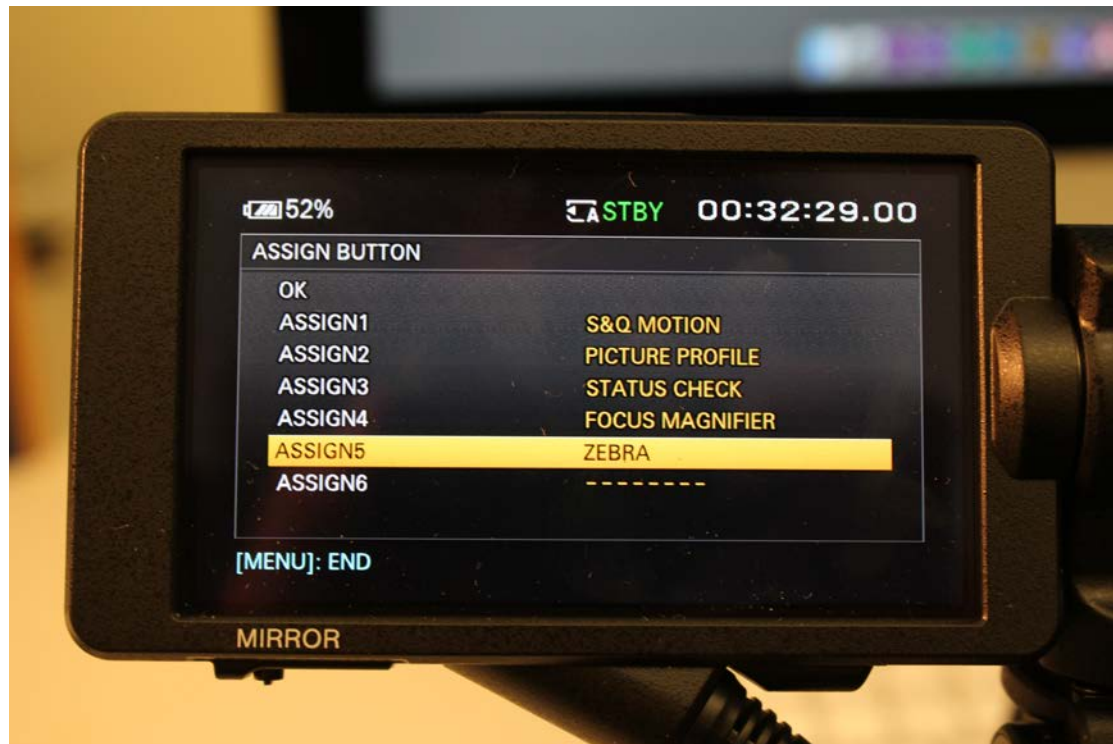


- Zebra Stripes are useful but distracting.
- Assign a Zebra Stripe level to judge overexposure (a level of 100 IRE) or at another level to determine exposure for a specific feature (like flesh tone highlights at 70 IRE).
- Display Set Menu/ ZEBRA



# Assigning Zebra Stripes to a Button

- It helps to assign Zebra Stripes to a button on the camera (button 5 on the Handle) so they can be easily toggled ON and OFF



## System Menu/Assign Button

Note that there are two zebra stripe level settings. When you press the assigned zebra stripe button then you will be selecting the first, then the second setting and then back to the first setting again. It may help to set both settings to the same level.



# ND filter



ND Filters cut light (make the image darker).

By default the ND filter knob should always be in the CLEAR position.

# Using ND filter Presets



The ND filter knob functions like a normal ND preset toggle switch when the switch below is set to PRESET.

You can set three ND levels in the CAMERA/PAINT menu.

# Using the Variable ND filter



Switch to Variable

Switch to ND

Move the ND filter knob to the highest (darkest) preset, turn the switch below to VARIABLE and then turn the switch below that to ND. The wheel will then adjust the ND level variably.

The variable ND is useful if you want to maintain a consistent f stop (IRIS) in variable light conditions. It is a simple way to adjust exposure without affecting depth of field.

# Manual Shutter Control



Press the SHUTTER button to toggle between manual and auto shutter. In manual, move the SEL/SET wheel to adjust shutter speed and then press the SEL/SET wheel to maintain that speed.

If the shutter speed falls below twice the frame rate, you will have motion blur.

The faster the shutter speed the more staccato-like the motion.

Don't adjust shutter unless you want a motion effect. Keep it at twice the frame rate.

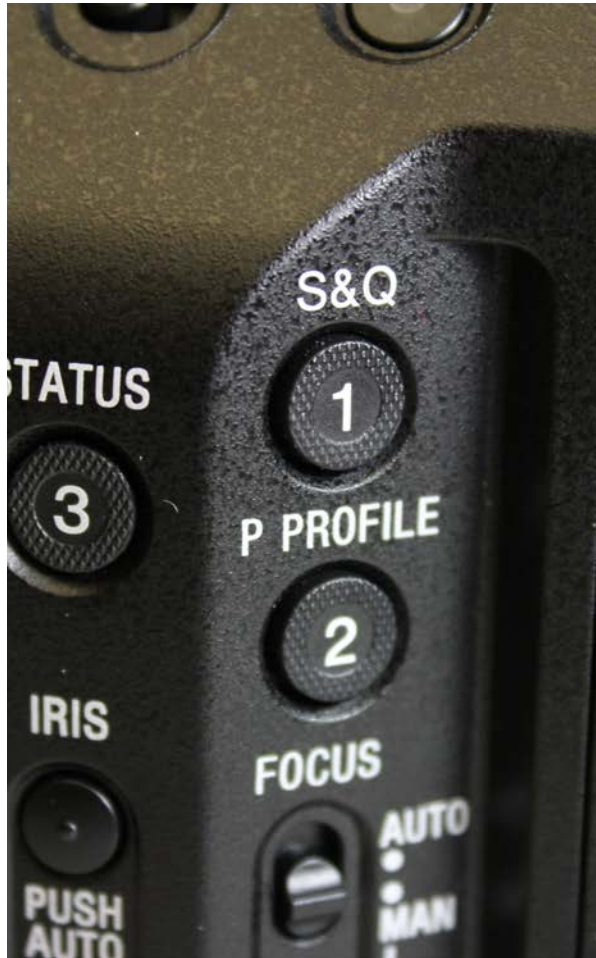
# Sony FS5

Picture Profiles

# Working with the default Picture Profiles

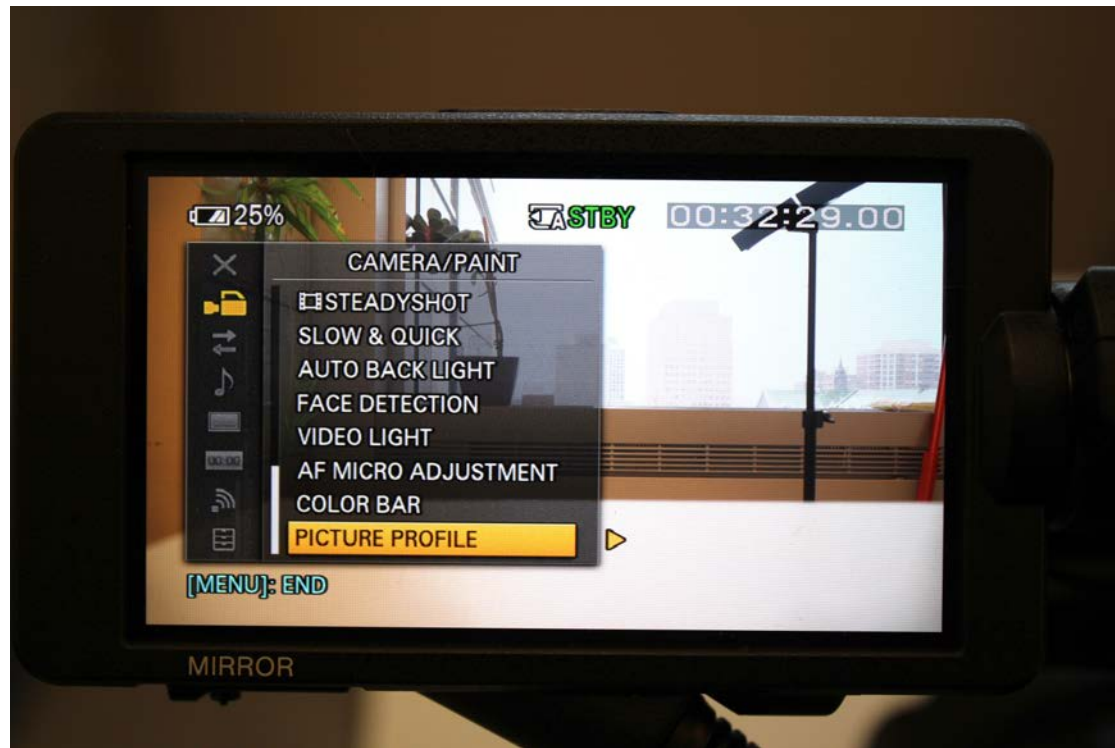
- This guide refers to the default settings in each Picture Profile.
- Unfortunately **System Menu/Initialize** does not reset the Picture Profiles.
- Each Picture Profile can be adjusted manually, therefore it is wise to reset each Picture Profile in the Picture Profile settings before using it, This will set the Profile back to the factory settings discussed here.
- If you are more familiar with the Profiles, and gamma and gamut, you may wish to adjust them to suit your tastes.

# Picture Profiles



- Picture Profiles determine the look of the image: they are presets that determine image contrast, color and dynamic range. They are similar to Picture Styles in a Canon DSLR camera, but more complex.
- The Picture Profiles may be OFF. You do not have to choose one.
- There are nine to choose from.
- There is a button on the camera that takes you directly to the Picture Profile choices.

# Selecting Picture Profiles in the Camera Paint Menu





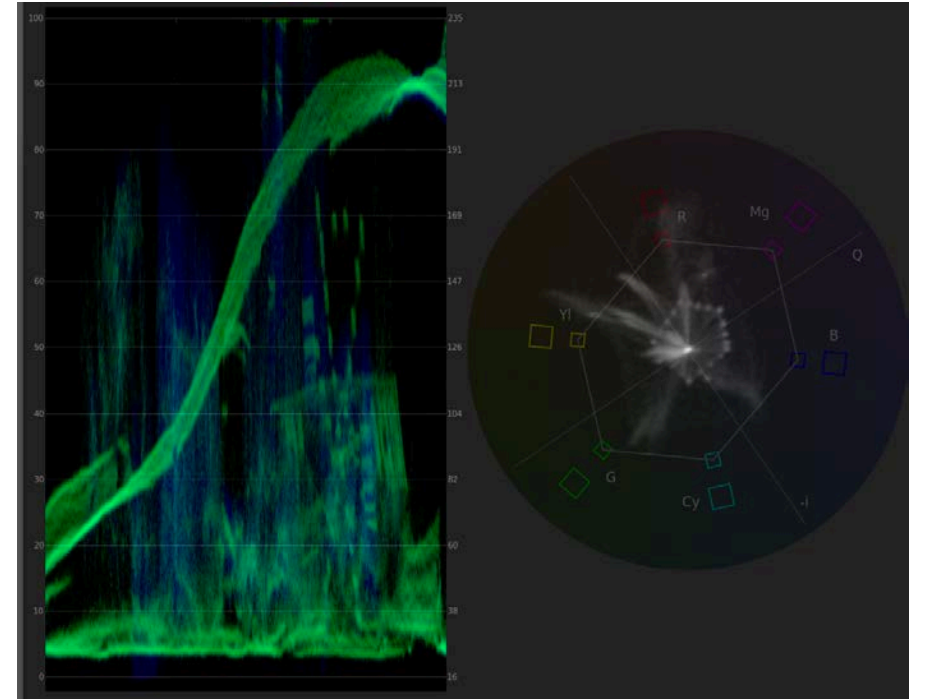
# Dynamic Range

- The most obvious difference between the Picture Profiles is the increase in the dynamic range of the camera.
- Dynamic Range refers to the range of luminance that the camera can capture. The greater the dynamic range; the more details you will see in the highlights of your image.
- Standard Gamma Profiles can capture 5 to 6 stops of light.
- SLOG Profiles may capture up to 13 stops of light.
- Cinegamma Profiles capture somewhere in between those two!
- The following images (unless otherwise noted) are taken straight from the camera.

# Picture Profiles 1 (PP1)

- This is the standard look of the camera.
- This is fine to use if you are not shooting in a high contrast situation or you don't want details in the highlights.
- If you expose correctly, the image will require very little correction in post production.
- Expose a white card at 100 percent IRE.
- Expose a grey card at 50 or 45 percent.

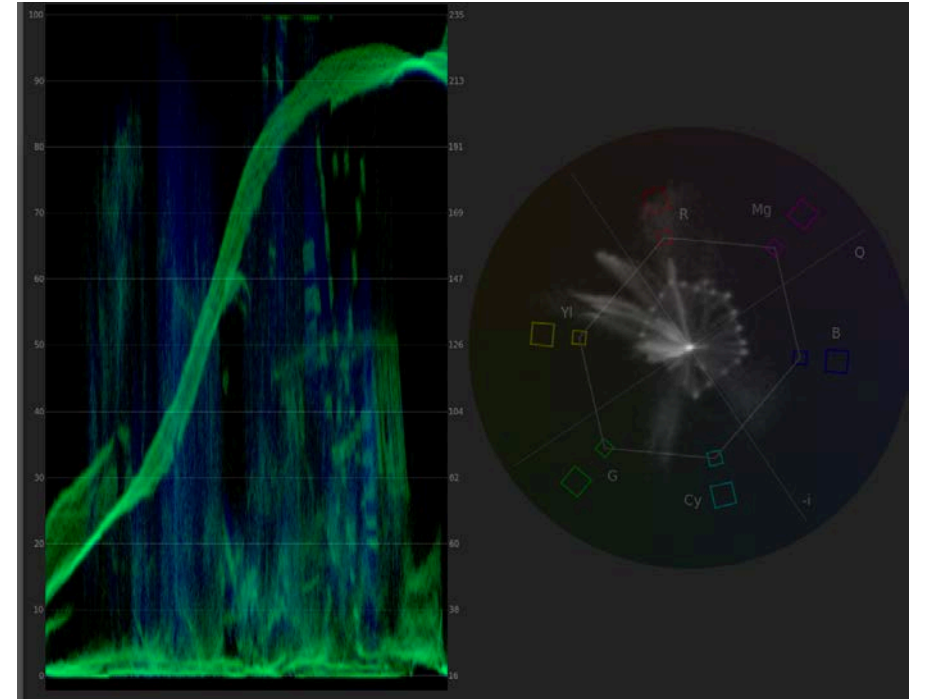
# PP 01



# Picture Profile 02 (PP2)

- This creates very contrasty images by losing information in the shadows. The colors are more saturated than PP01. The only reason to use PP01 would be to mimic the look of certain DSLR cameras that have about 3 stops of dynamic range.
- However, it is a lot easier to manipulate a more dynamic image in post production than to rely on an in-camera effect.
- Avoid this profile.

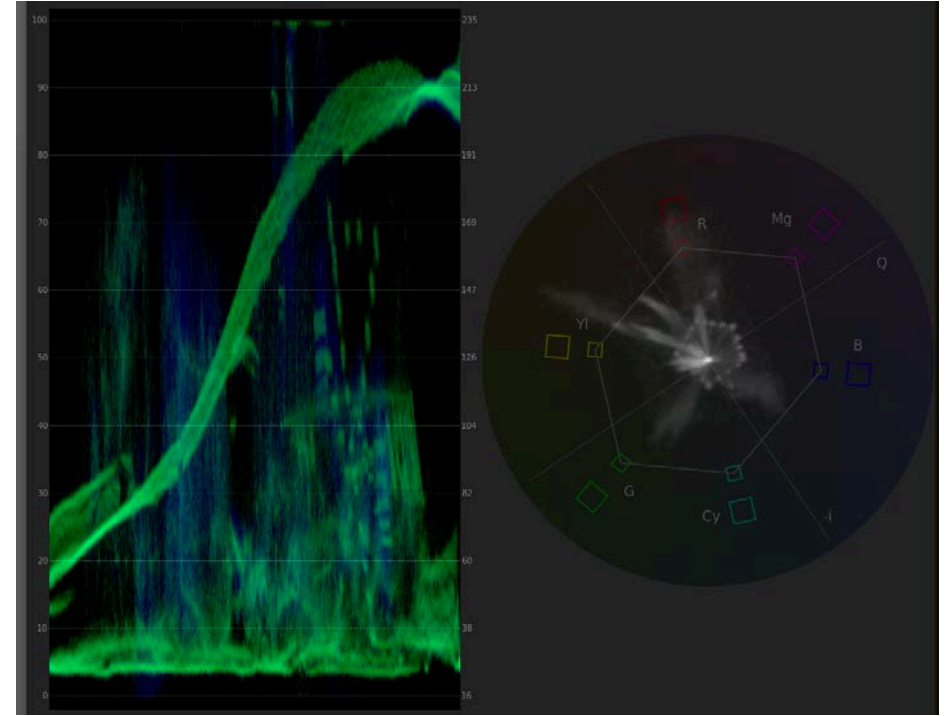
# PP 02



# Picture Profiles 3 (PP3)

- Like PP1, PP3 is a standard HD gamma (REC.709) preset that, when properly exposed, will require very little correction in post production.
- The image will have slightly less contrast than PP01.
- Expose a white card at 100 percent IRE.
- Expose a grey card at 50 or 45 percent.

# PP 03

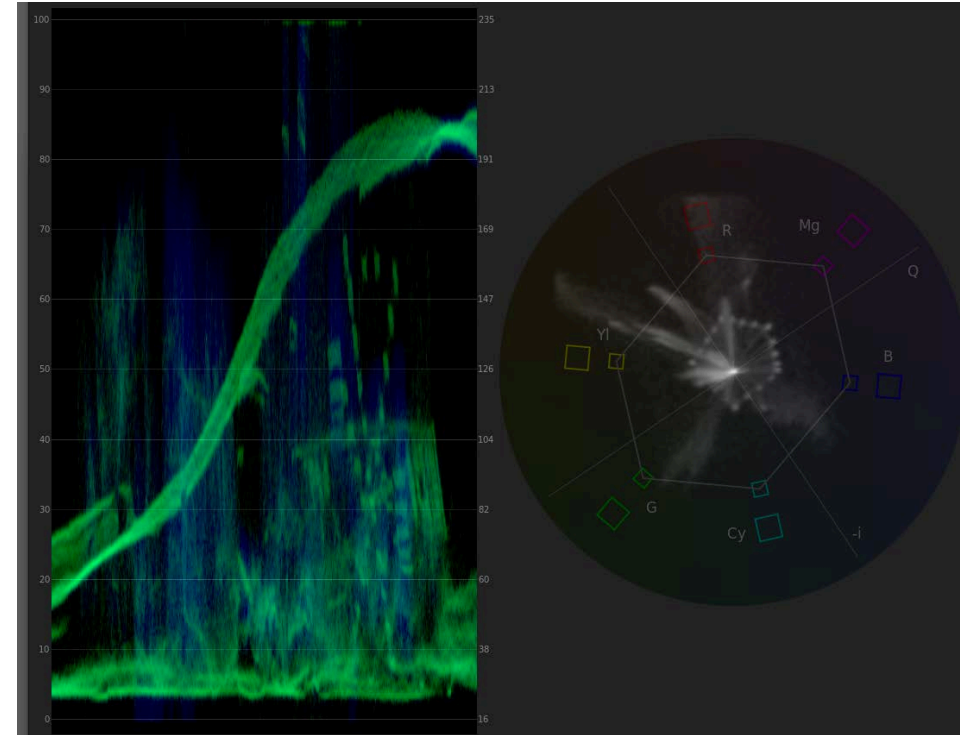


# Picture Profiles 4 (PP4)

- This is like PP 03 but the colors are more saturated.
- I recommend PP3 and PP4 as good default profiles to use if you are using the camera for the first time or are new to video production.
- Expose a white card at 100 percent IRE.
- Expose a grey card at 50 or 45 percent.



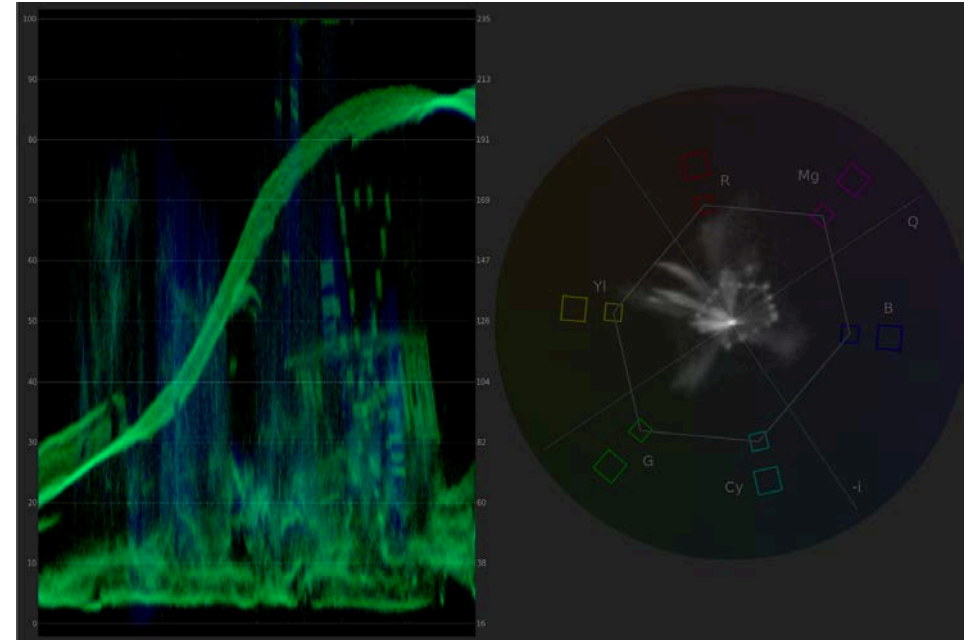
# PP 04



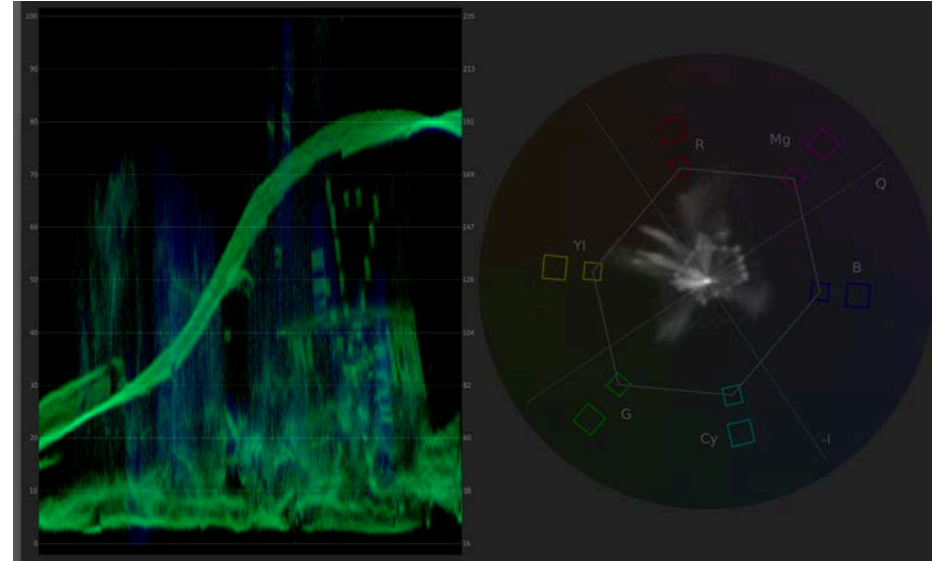
# Picture Profiles 5 and 6 (PP5 and PP6)

- These are Cinegamma profiles that provide a greater dynamic range than the standard gamma profiles of PP3 and PP4 but require very little correction in post production compared to SLOG profiles.
- The colors will be quite a bit less saturated than the standard gamma images but there can be much more detail in the shadow and highlight areas of the image.
- It is easier to judge exposure in these profiles than in SLOG profiles where the image looks washed out in the viewfinder.
- The only difference between PP5 and PP6 is that PP6 will prevent the highlights from going beyond 100 IRE, making the image slightly darker.
- Expose a white card at 95 to 100 percent IRE (a little bit underexposed).
- Expose a grey card at 40 to 45 percent IRE (a little bit underexposed).

# PP 05



# PP 06



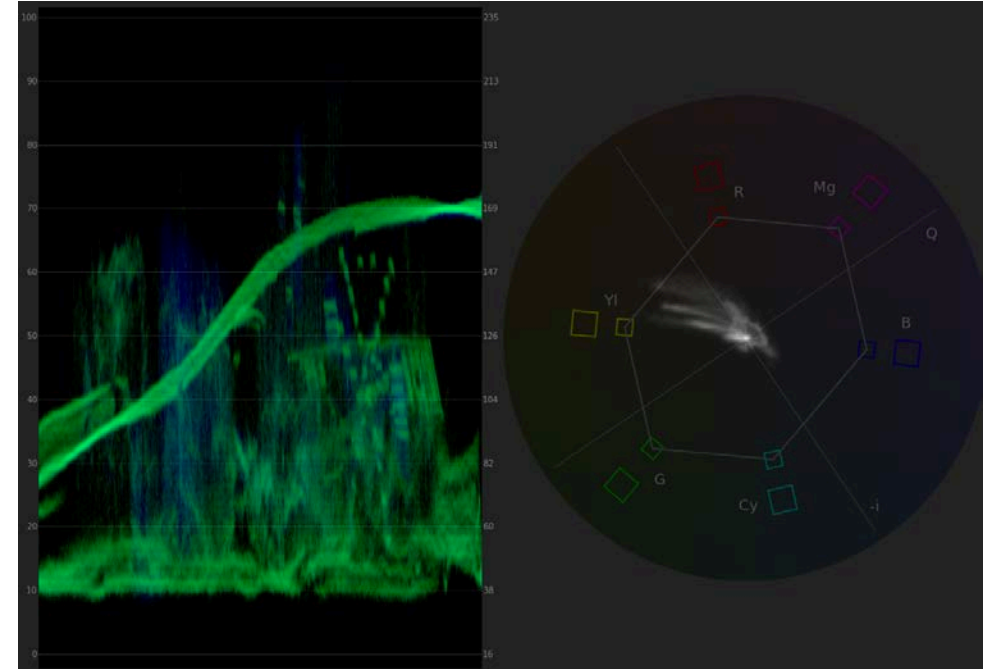
# Picture Profiles 7,8 and 9 (PP7, PP8, PP9)

- These are high dynamic range profiles that use SLOG gamma.
- These profiles use logarithmic sampling of light instead of linear sampling.
- SLOG profiles are for shooting in high contrast situations (outside on a bright day for example).
- The image will look low contrast (washed out) in the viewfinder or LCD panel. That is how it will actually appear. Do not use gamma assist on the LCD panel to correct it or you risk overexposing your image.
- Images shot with SLOG profiles must be “normalized” or corrected in post production.
- Once the contrast is corrected, the color saturation appears normal.

# SLOG 2 and SLOG 3

- PP7 uses SLOG 2
- PP8 and PP9 use SLOG 3
- SLOG 2 is easier to look at in the LCD monitor (it has more contrast).
- SLOG 3 looks very washed out in the monitor so it is harder to judge exposure.
- You have more flexibility when correcting SLOG 3 in post production.
- The next section provides detailed information on exposing SLOG.

# PP 07 SLOG 2

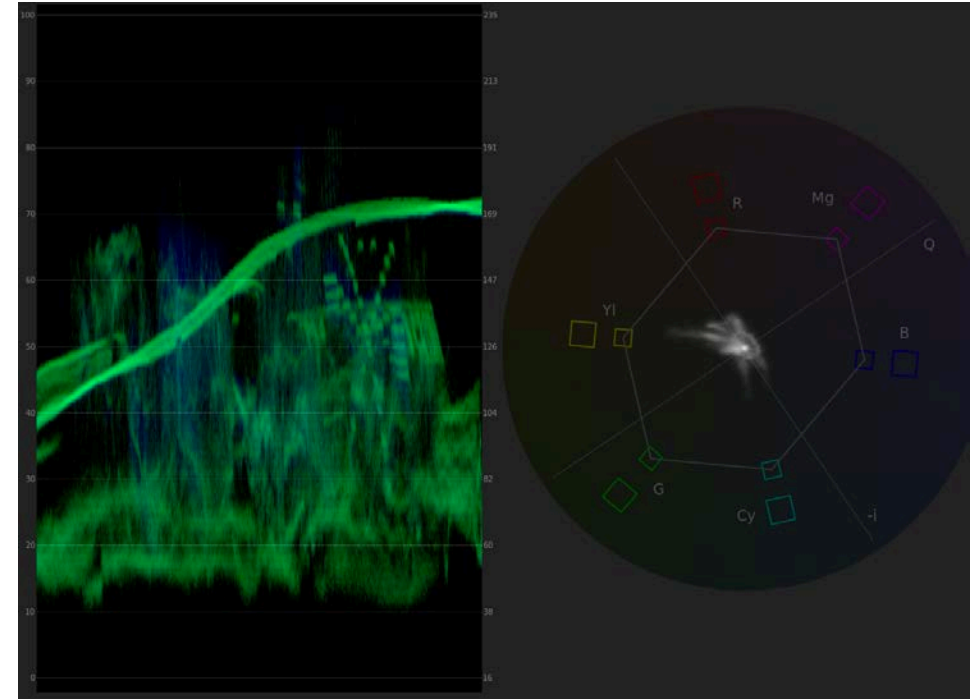


# PP07 SLOG 2 Corrected





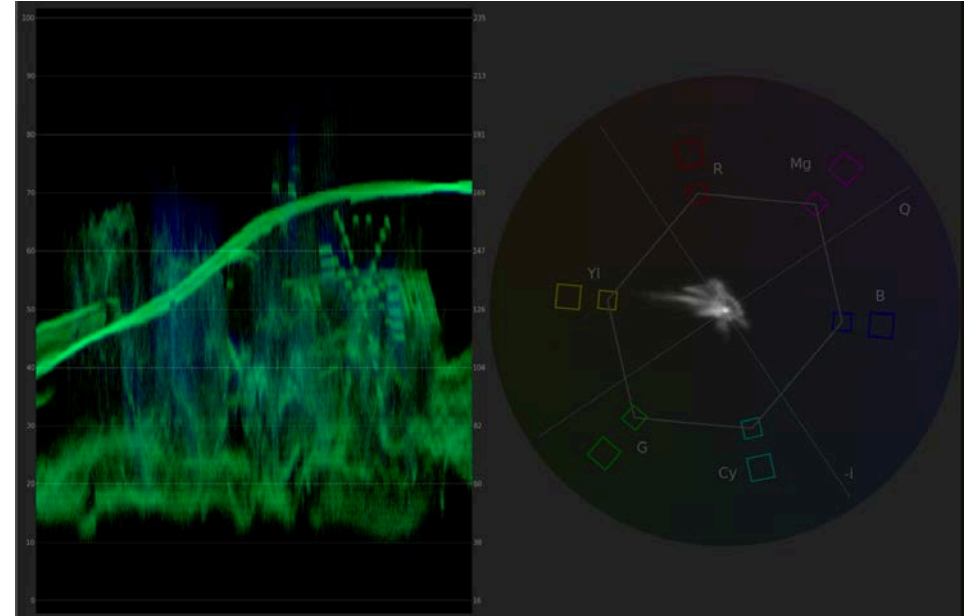
# PP 08 SLOG 3



# PP08 SLOG 3 Corrected



# PP 09 SLOG 3



# PP09 SLOG 3 Corrected



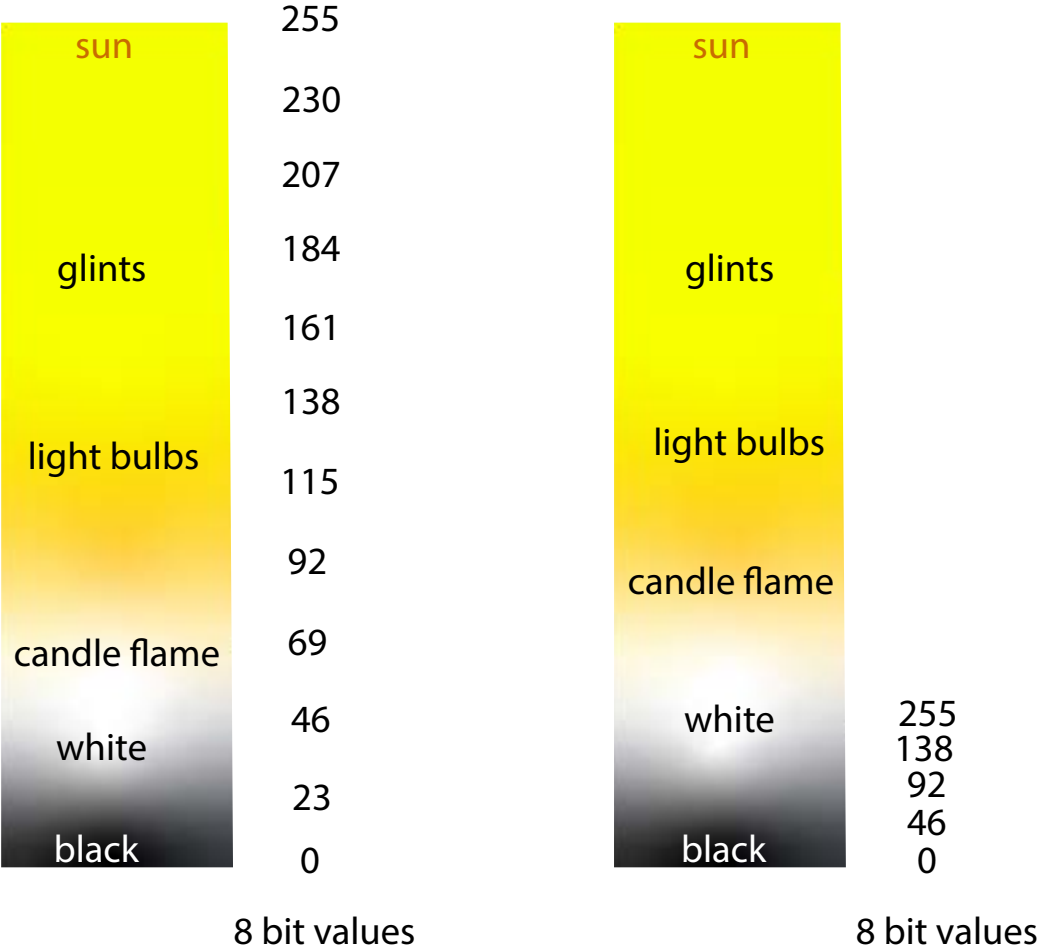
# Sony FS5

High Dynamic Range (SLOG)

# Why High Dynamic Range?

- Shooting in High Dynamic range solves one persistent difficulty of video imaging since it's creation: how to maintain image detail in the shadows and highlights simultaneously.
- Although it can be more complicated to expose correctly, High Dynamic Range video is useful for situations of high contrast.
- High Dynamic range video uses logarithmic sampling. Sony calls their version of this: SLog.

# Exposure Using Linear Sampling



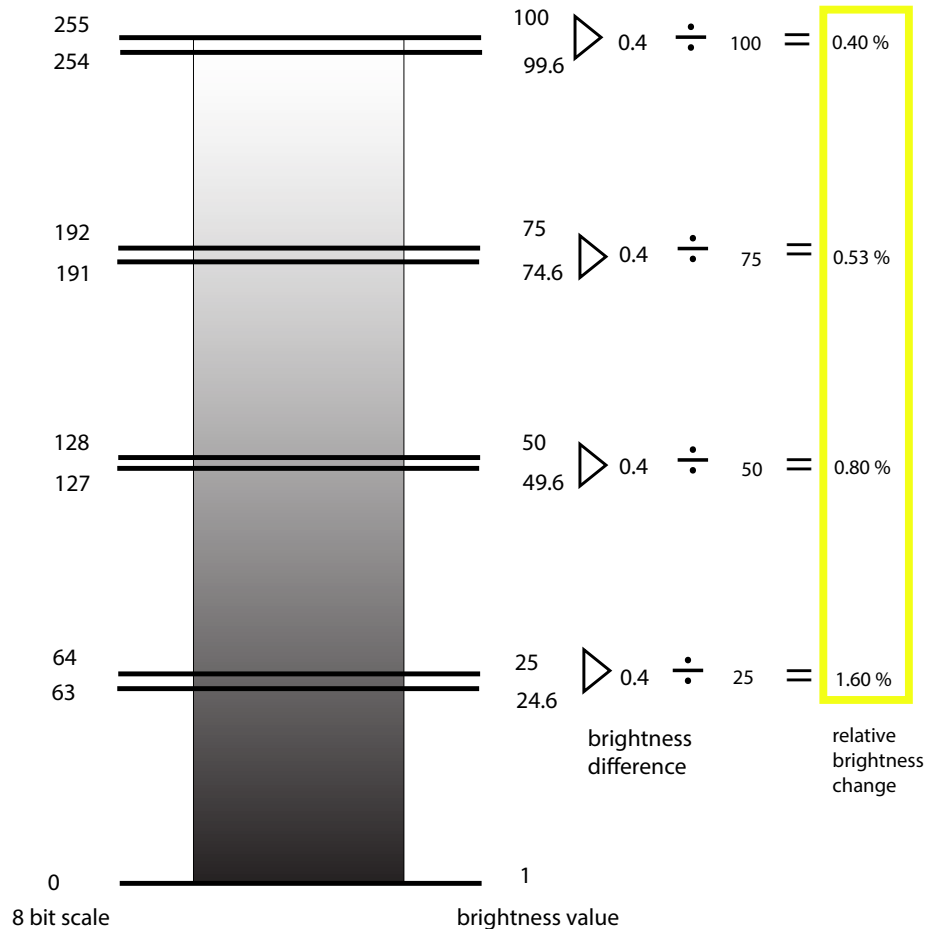
Linear sampling does not provide enough detail to reproduce the luminance range that the eye can perceive. In the diagram on the left, the jumps between steps in the 256 value 8 bit scale are extreme.

The solution is on the right diagram. A video camera discards almost all the highlight information.

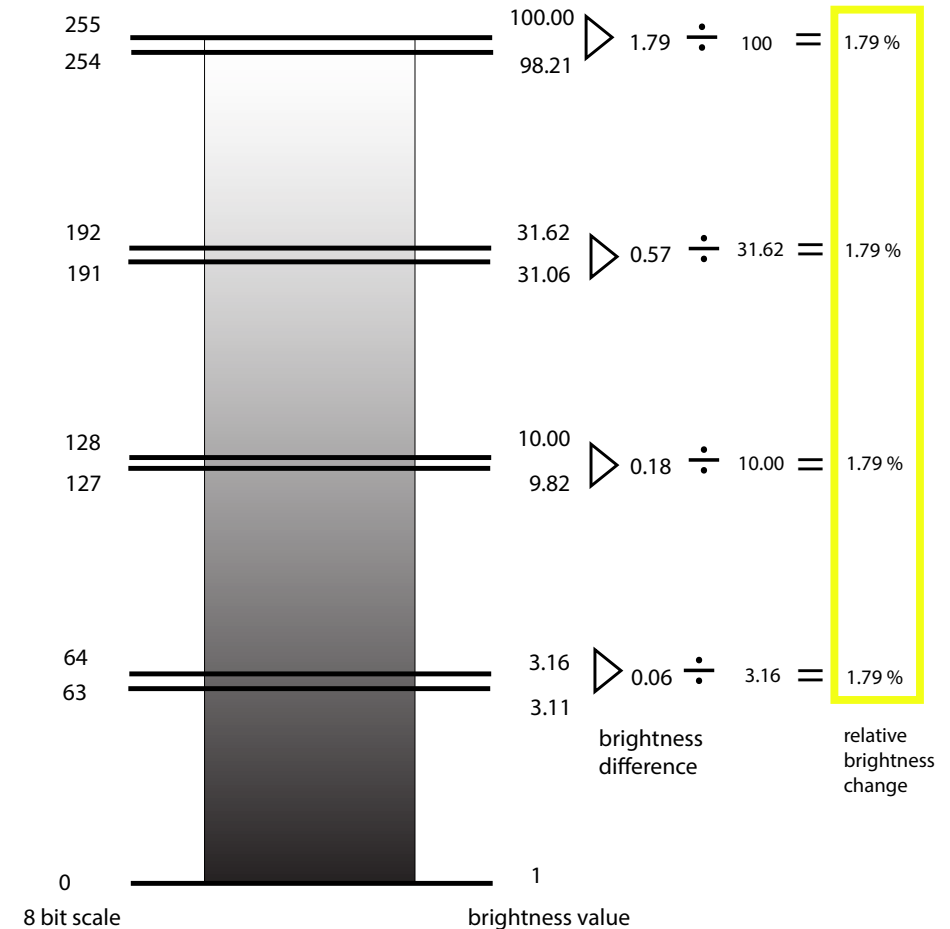
Any video camera that cannot shoot in high dynamic range, discards this information.

Log sampling varies the luminance distance between samples. There are greater jumps between samples in the highlight areas where we perceive less variation so the relative (perceived) brightness remains consistent.

### Linear Sampling: mathematically consistent

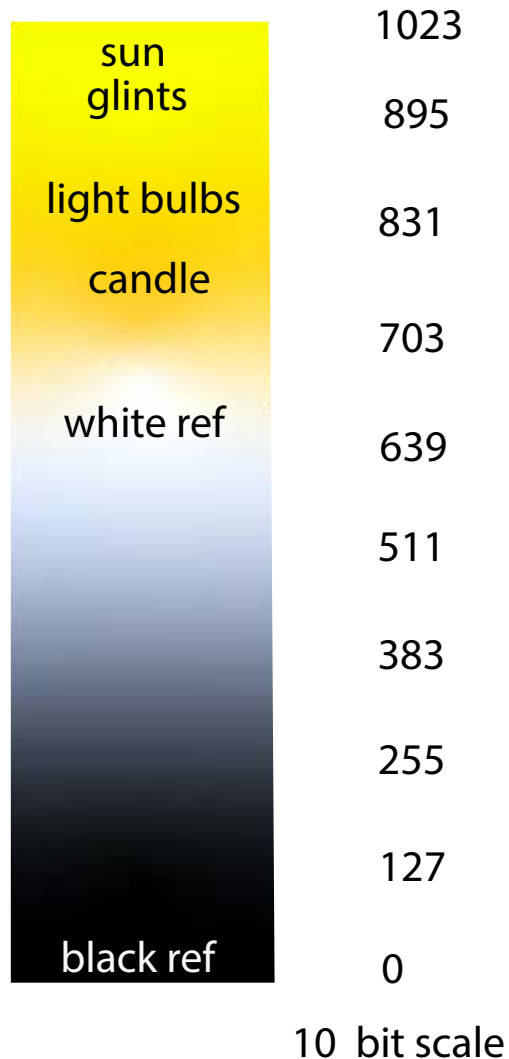


### Log Sampling: perceptually consistent





# Exposure Using Log Sampling



Log sampling is capable of reproducing the entire perceived range of luminance. The shadows and mid-tones are sampled more than highlights, but the highlights are there!

High dynamic range cameras also use a higher bit rate codec. In this chart we have 10 bit sampling (1024 variations).

The Sony FS5 uses 10 bits in HD only.

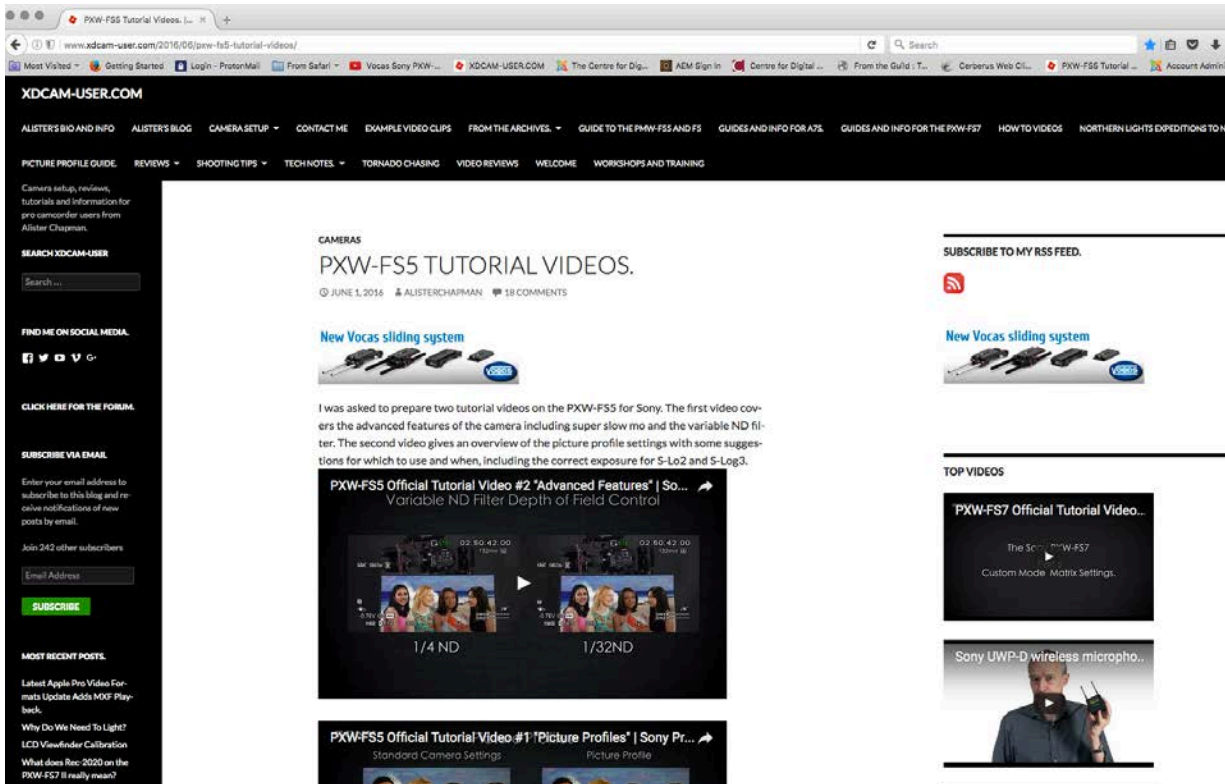
# What is Image Noise?

- Image noise occurs when there are not enough samples to accurately reproduce the variations of light and color.
- We get noise in the shadow areas of the image when shooting because reproducing low light requires a high sampling rate.
- One solution to eliminate noise is to eliminate this shadow area from our sample range.
- Push the image information up into the lower mids and highlights in the histogram where the sampling rate is more sufficient for a greater amount of light.

# SLOG exposure

- Keep your picture information in the mid and highlight area.
- You never want to be in the situation of having to raise your shadow areas in post production- this creates noise.
- You always want to lower the mids and highlights in post production when “normalizing” the shot (making the contrast seem correct on a computer display).

<http://www.xdcam-user.com/2016/06/pxw-fs5-tutorial-videos/>



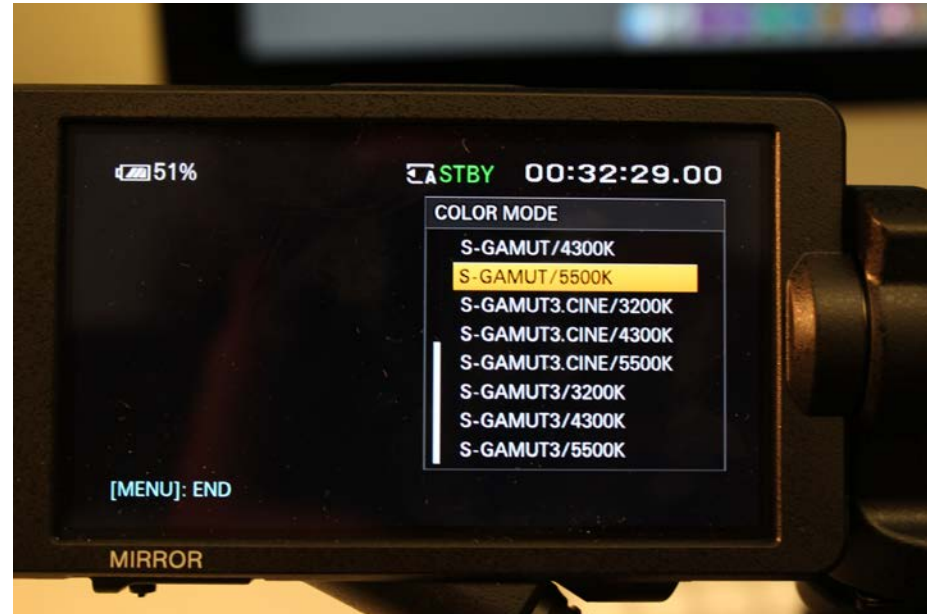
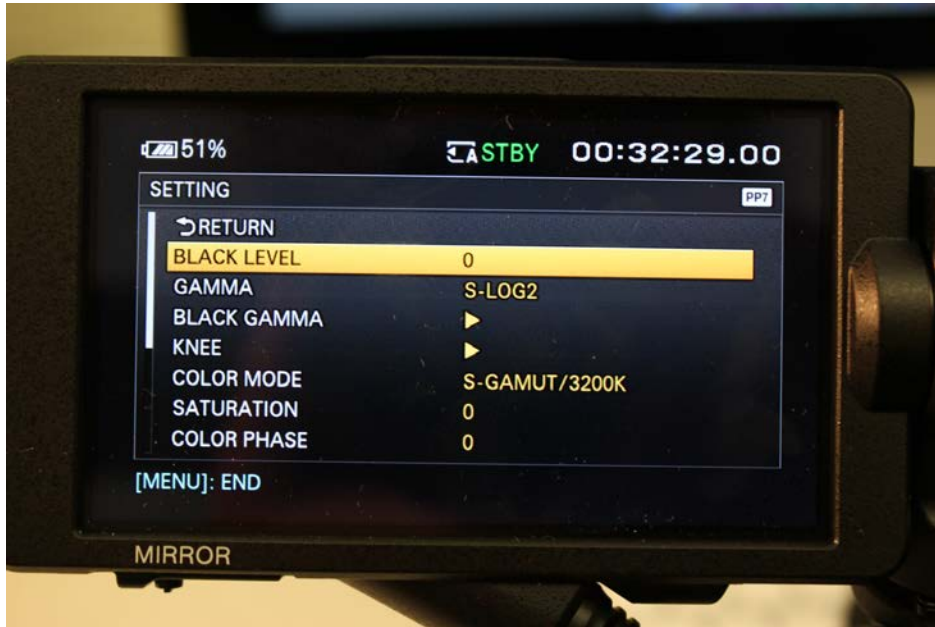
The website of Alister Chapman, cinematographer, has two videos on the FS5 with information on how to shoot with SLOG picture profiles. I recommend this site.

The following recommendations are based on Mr.Chapman's but adjusted with my own experience.

# When to use SLOG

- When you have a situation with shadows and bright highlights and you want to preserve this dynamic range, shoot in SLOG.
- Do not use SLOG Picture Profiles when there are no highlights.
- If the situation is dark, shadows and mids only, shoot with standard REC.709 picture profiles like PP3 or PP4.
- SLOG has twice the dynamic range of Rec.709 Gamut but it favors highlight information.
- It is much easier to shoot in SLOG with the FS5 in HD 1080p than 4K.
- This is because HD is a 10 bit 4.2.2 image and 4K is an 8 Bit 4.2.0 image

# SLOG: White Balance



- When shooting in SLOG, the white balance must be set in the Picture Profile settings/COLOR MODE
- Set the correct color temperature for the correct S-GAMUT setting
- For SLOG 2 use a S-Gamut setting plus temp. for SLOG 3 use a S-Gamut3.Cine setting plus temp.

# Common Color Temperature Settings

- LCD Monitor: 6500K
- Daylight: 5500 K
- Florescent Indoor: 4300K
- Tungsten Indoor Light or a Street at Night: 3200K
- Incandescent Indoor Light: 2500K

# SLOG: Gamma Display Assist



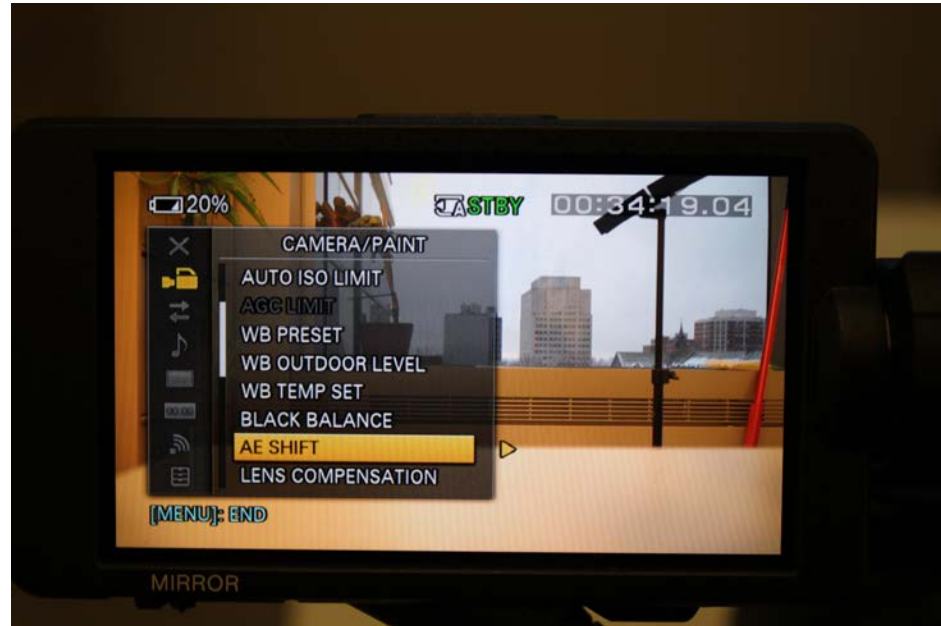
- Sony has provided a Gamma Display Assist to normalize the LCD image when shooting in SLOG
- Don't use it. Turn it off.
- Because you are overexposing, the image in the LCD will look washed out.
- Use the Histogram and the Zebra Stripes to judge exposure.
- The FS5 cannot import LUTs.



# SLOG and ISO settings

- The higher ISO, the more the dynamic range is reduced.
- ISO 3200 in SLOG gives you the maximum dynamic range.
- Changing ISO to AUTO will cause it to change so keep exposure on manual at 3200 ISO if possible.

# Shooting SLOG: Autoexposure



You must overexpose for SLOG shooting. Ideally you will have no important information in the shadow areas of your image.

The easiest way to overexpose properly is to use Auto IRIS and set the AE shift to 1.5 EV. This will overexpose the image by 1.5 stops.

You cannot use FULL AUTO when shooting SLOG. Use manual exposure control but AUTO IRIS.

# SLOG: Zebra Stripes



- If you want to manually expose using SLOG consider using the Zebra Stripes as a reference.
- Set the Zebra Level to 70
- Use this as a reference for flesh tone highlights.

# SLOG: Manual Exposure

- Use the histogram when exposing SLOG
- Push all the information into the mids and highlights on the histogram.
- Keep all important information above 30 IRE (one third of the way up on your histogram).
- Think that all your image information will be shifted towards the shadow areas later on. So you must leave some room.
- You can overexpose by 1.5 to 2.5 stops: Grey card at 60 to 65 IRE.
- At 3 stops of overexposure you lose too much color information.

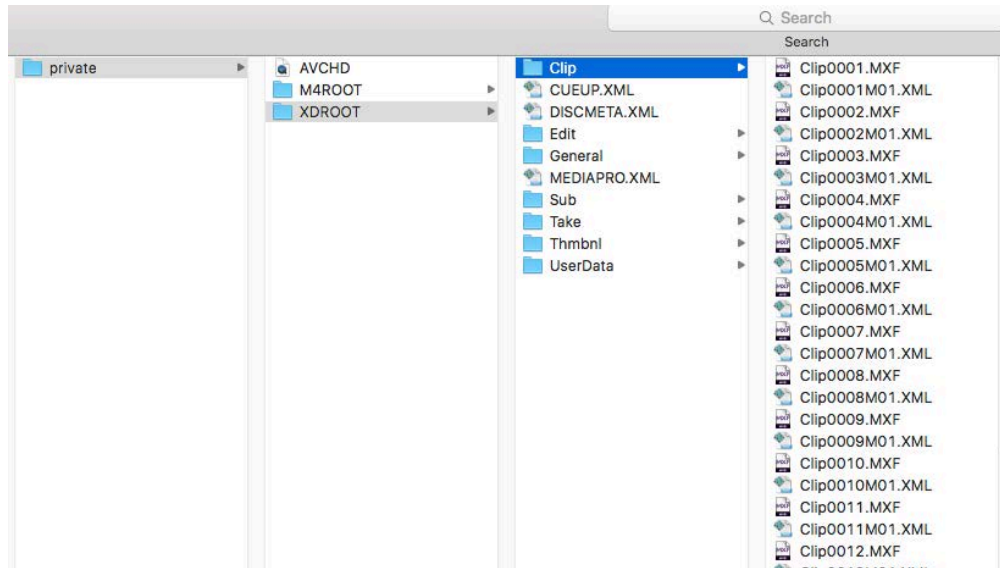
# S LOG and Overexposure

- You never want to underexpose with SLOG but you can overexpose.
- Generally the overexposed highlights will blow out more gradually than in Rec.709. You may want this effect.
- You will be able to recover some detail in slightly overexposed areas.

# Sony FS5

Backing Up Your Media

# Copying Data from the SD Cards



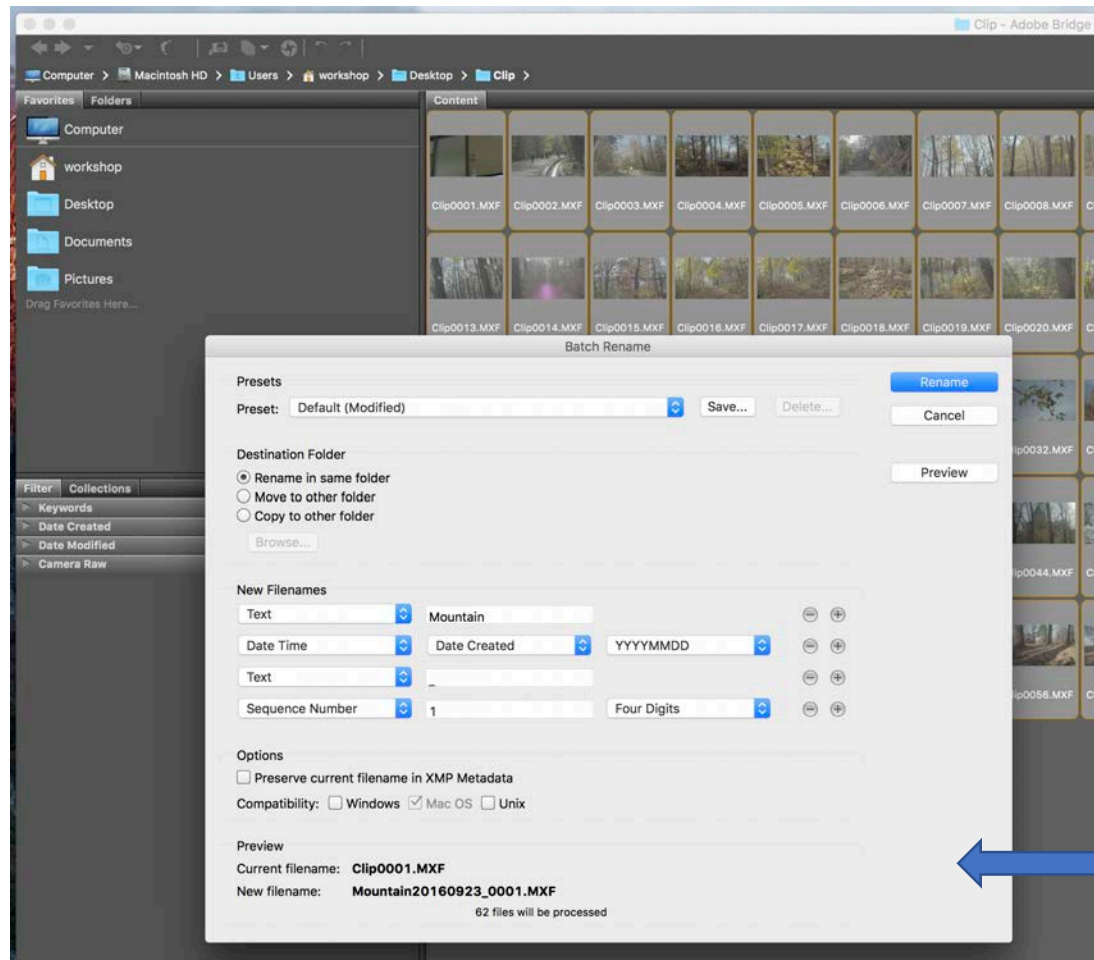
If you shot with the XAVC codec as suggested your clips will be in the XDROOT/Clip folder. The clips are in a MXF container.

XAVC clips play back natively in Adobe Premiere, you do not need to change the codec or container. 4K clips are of course more difficult to play back at full resolution.

Back up the MXF files to your hard drive and then batch rename the clips (see next slide).

Please erase the media from the SD cards using the camera menu when you are finished.

# Batch Renaming Video Files



- The FS5 does not support custom file names.
- This can create a problem with duplicated file names if you shoot on multiple occasions with the camera.
- Duplicate file names will cause problems in Adobe Premiere if your video files go offline.
- Always rename the MXF files using Adobe Bridge: Tools/Batch Rename.
- You can also use Bridge to batch delete the XML files before batch renaming the MXF files.
- Always batch rename the MXF files before you import into Premiere.

Batch Rename Box in Adobe Bridge



Thank you for reading this guide!

