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[www.fdtimes.com](http://www.fdtimes.com)

Mar 2023

Issue 119

# FILM DIGITAL TIMES

Art, Technique and Technology in Motion Picture Production Worldwide





# EL Zone on SmallHD Cine 24 Monitor



SmallHD Cine 24 connected to an ALEXA 35.

EL Zone has been added to PageOS 5 on all current SmallHD monitors. It is also available as a free software update if you're using an earlier version. EL Zone was conceived by Ed Lachman, ASC and developed for SmallHD monitors by Creative Solutions.

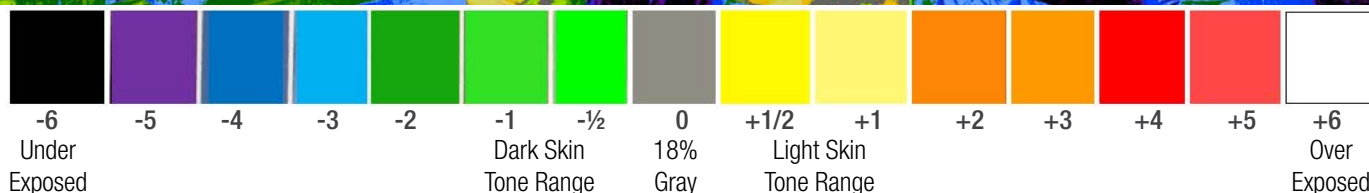
Note that Ed's original reference chart, as seen on his monitor, *below*, had the over-exposed colors on the left. The reference chart is now updated to a more intuitive left-to-right scale that's

easy to remember:

Cool = under-exposed on the left.

Warmer = over-exposed, hot, on the right.

EL Zone is like a spotmeter in your monitor. Each stop of exposure is represented by a color. Areas of the scene over-exposed by 6 or more stops are shown in white. 18% gray is normal-neutral. Black is under-exposed by 6 or more stops.





# How to use EL Zone in SmallHD PageOS 5



Above: EL Zone being tested at SmallHD in Cary, NC. RED V-RAPTOR's SDI output is connected to a SmallHD Cine 13 with EL Zone enabled.

At right: Cine 13 Color Pipe setup menu.

EL Zone is as intuitive as a rainbow. It lets you easily see exposure zones on a monitor without having to translate IRE values into useful T-stops. The reference chart that correlates colors to T-stops can be repositioned on-screen.

## Setting up EL Zone on a SmallHD Monitor

We need to start by creating a color pipe.

- Go to: SETTINGS > COLOR PIPE.

The Color Pipe should match the camera's Log setting.

Here are suggestions for the RED V-RAPTOR:

Settings> Color Pipe > NEW

- Input Type=LOG
- Camera=RED (options)
- Color Space=RWG RGB
- Curve=RED Log3G10
- Range=SDI Full Display=Do Not Convert
- Assign Color Pipe to Input you are using

Then you can activate the Exposure Tool and use EL Zone — described next.



# SmallHD Cine 7 Pages for EL Zone Exposure, Look and Log



SmallHD Cine 7 with EL Zone active. Exposure is set for camera right side of face (18% gray).



View the scene with LUT applied by swiping left or right to a different page.



Log view displayed by swiping to a different page.

EL Zone is intended to be used with a Log signal. It will still work with a LUT applied to the video, but may not be accurate.

Currently, there are RED, ARRI, Sony, Panasonic and Canon profiles.

Let's connect a Sony camera to a SmallHD Cine 7 Monitor.

## Activating EL Zone on a SmallHD Monitor:

As described on the previous page, the Color Pipe should match the camera's Log setting.

In the example at top left, we are in Sony S-LOG3.

Let's assign EL Zone to the EXPOSE Page on the SmallHD Cine 7 Monitor:

1. ADD NEW TOOL
2. Choose the EXPOSE Page.
3. Select EXPOSURE ASSIST and ADD TO THIS PAGE.
4. ENABLE.
5. Select STYLE > EL ZONE
6. GUIDE LOCATION lets you position the EL Zone reference chart on screen.

PageOS 5 and EL Zone become indispensable when you slide back and forth between pages.

With a swipe of your fingers on the SmallHD touchscreen, you can quickly view:

- exposure with EL Zone,
- the LUT-applied look,
- the Log image.

Larger SmallHD monitors have navigation /keyboard keys.

By swiping or navigating between screens, you're looking at the LUT applied by SmallHD monitor tools, not applied to the camera's monitor output.



# SIGMA fp L and fp: first mirrorless cameras with EL Zone



## EL Zone

SIGMA fp L and fp are the first mirrorless cameras to get EL Zone. With new firmware updates, your SIGMA fp L (61 MP) or SIGMA fp (24.6 MP) camera is now a spotmeter and exposure tool, in addition to being a versatile DP/Director's Finder, smallest Full Frame cine camera and mirrorless still camera.

To activate EL Zone for the SIGMA fp L and fp, select: MENU > SHOOT (Page 5) > False Color > Style > EL ZONE.

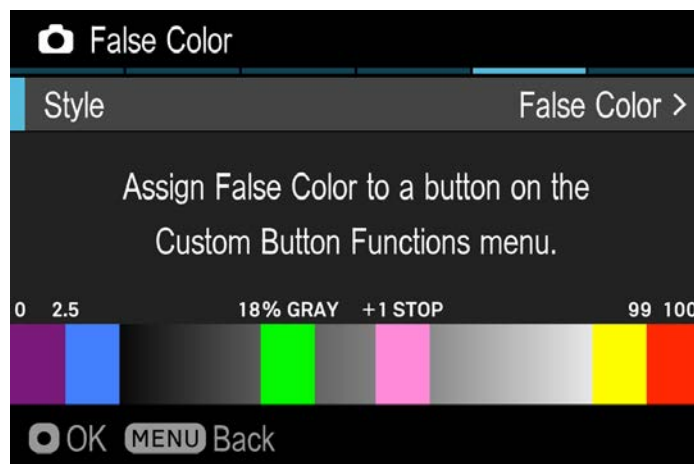
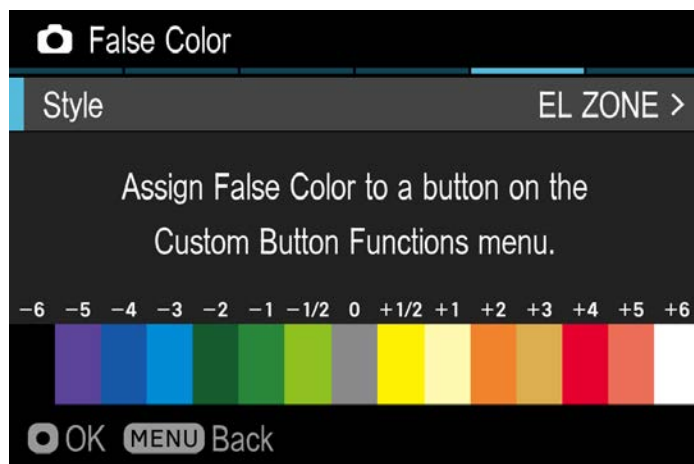
The menu (*below left*) shows how easy it is to see exposure values in actual, logical T-stops with EL Zone, compared to traditional "False Color" IRE values (*lower right*).

Of course, EL Zone lets you put exposure where you want it. Gordon Willis, ASC, would not have exposed Marlon Brando's *Godfather* under-exposed face at default Kodak 18% gray.

Takuma Wakamatsu, SIGMA Product Manager, said, "EL ZONE is based on an evaluation of the actual recorded signal. It displays the exposure status of any part of the frame in a color-coded manner, allowing you to evaluate highlights, shadows, see where details may be lost and where to set your lens aperture."

EL Zone developer Ed Lachman, ASC said, "I found false color and waveform monitors much too general. They are based on IRE values that originally measured analog composite video signals as percentages of voltage, aren't consistent with T-stop values on lenses or light meters, and are not the same from one manufacturer to another."

"I'm happy that SIGMA fp L and fp are the first mirrorless cameras to incorporate EL Zone."



# SIGMA fp L and fp EL Zone

EL Zone for SIGMA fp series cameras works with CINE RAW (CinemaDNG) or H.264 MOV or STILLS (DNG or JPEG). The values and accuracy are consistent. SIGMA suggests that RAW is the best for the fp series as it doesn't have a LOG function. For external monitoring, SIGMA suggests the camera color MODE to be turned "OFF" for monitoring on an external display.



CinemaDNG UHD 8-bit (internal recording, 12-bit external)



MOV UHD All-I (internal recording)



DNG 14-bit Still



JPEG Fine Still

## Firmware Updates for SIGMA fp L and fp

SIGMA fp L camera firmware update Version 3.00 and SIGMA fp camera firmware update Version 5.00 provide major additions:

- As discussed on the previous page, EL ZONE has been added to the camera's False Color menu and function. It displays the exposure status of any part of the frame in a color-coded manner, covering up to 6 stops of under-exposure, 18% gray, and up to 6 stops of over-exposure. It is like a spotmeter in your viewfinder or monitor, calibrated in accurate T-stops.
- WARM GOLD is a new color mode for the camera. It creates a mellow atmosphere with subdued tones and warm colors.
- FOCUS FRAME ONLY has been added to the information display menu in the (Display) mode setting. MENU > SYSTEM (Page 2) > [ ] (Display) Mode Settings. This is only available in STILL mode or when CINE mode is set to STILL-like.
- To set CINE mode to STILL-like: MENU > SYSTEM (Page 2) > STILL / CINE Link Settings > Shooting Style > STILL-like. Among other things, Still-like shows shutter speed as a fraction, even if you are in CINE mode; CINE style displays shut-

ter angle, timecode, etc. I would suggest staying in CINE style.

- The camera can now be switched off even during long exposures.
- The camera is now compatible with a 4TB external SSD.
- Open Gate Anamorphic De-squeeze Viewing (1.25x, 1.3x, 1.5x, 1.65x, 1.8x, 2x) for ARRI ALEXA LF / ALEXA Mini LF is now available in Director's Finder mode. MENU > SHOOT (Page 5) > Director's Viewfinder (CINE) > Brand: ARRI > Model: ALEXA LF / ALEXA Mini LF > Settings: Open Gate > select de-squeeze factor.)
- Atomos Cloud will be supported upon updating firmware of Atomos devices and announcement from Atomos about compatible devices and the release date of the firmware.

To update the SIGMA fp L and fp camera firmware, go to:

### SIGMA fp L Ver. 3.00

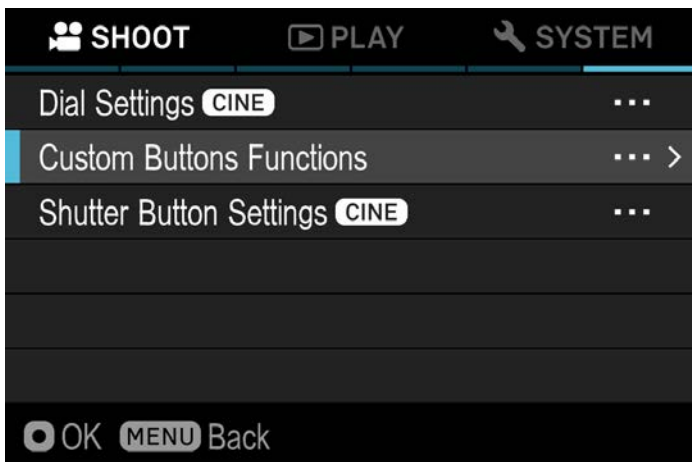
[sigma-global.com/en/cameras/fpl/?tab=support&local=firmware](https://sigma-global.com/en/cameras/fpl/?tab=support&local=firmware)

### SIGMA fp Ver. 5.00

[sigma-global.com/en/cameras/fp/?tab=support&local=firmware](https://sigma-global.com/en/cameras/fp/?tab=support&local=firmware)

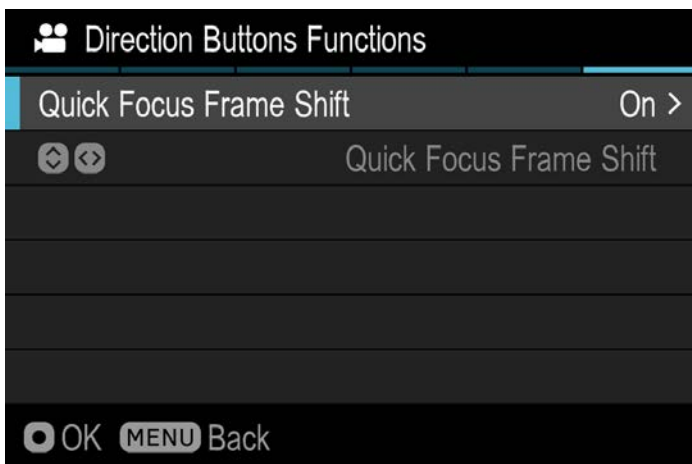


# Suggested SIGMA fp L Settings

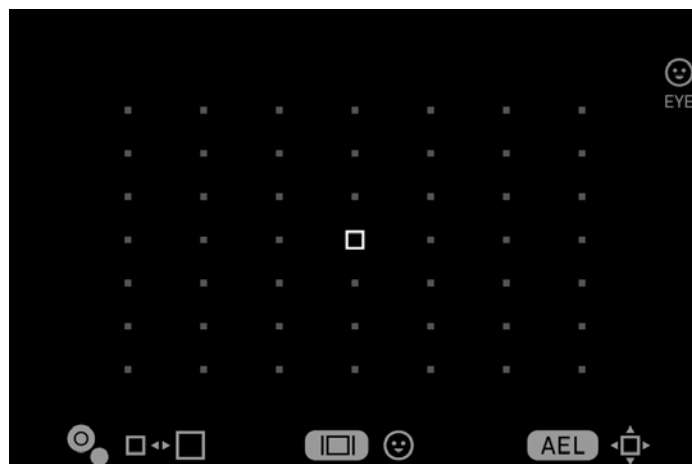


I like to assign fp L buttons as follows. MENU > SHOOT Page 6 > Customs Buttons Settings:

- Assign AEL button to LV Magnification to enlarge viewfinder image for manual focus checking.
- Assign 4-way rear dial's direction buttons to move the auto-focus spot position (called Quick Focus Frame Shift).
- Assign TONE button to Screenshot and COLOR button to False Color, which we have already set to EL Zone.
- MODE stays in default setting for Manual, Shutter Priority, Aperture Priority, or Program Exposure.



Quick Focus Frame Shift (auto focus "joystick" control) is set.



This is what Quick Focus Frame Shift (spot focus) looks like in viewfinder.

Rear view of SIGMA fp L.

You can set up to 5 frame-lines. 3 of them have totally customizable aspect ratios.

Here, we have set up an extreme example of 5 frame-lines displayed concurrently.

Three are pre-determined: 1.33:1, 1.85:1 and 2.39:1. Two are user-definable, which is super helpful.



Display

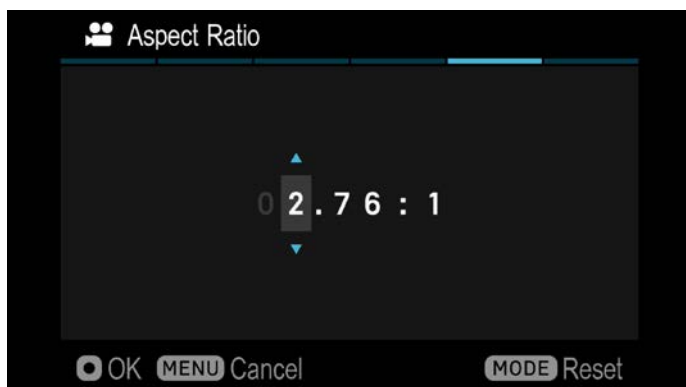
EL Zone

4-way  
"joystick"

Select (OK) Button:  
There's one tricky thing—if you want a Screenshot of your EL Zone display, you have to press the COLOR button, followed by the DISPLAY button and then the Select (OK) Button. Nimble fingers are needed.

# SIGMA fp L: Unlimited Framelines

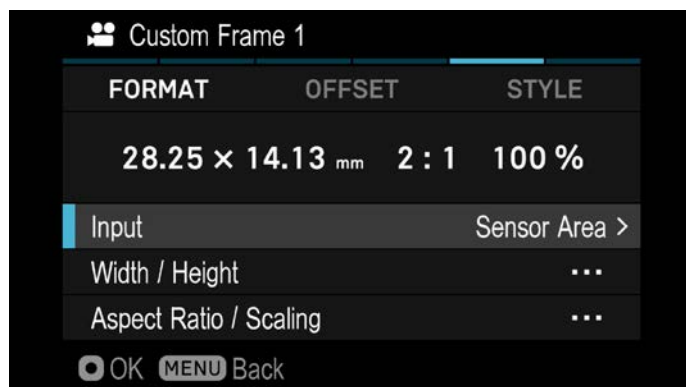
The SIGMA fp L and fp cameras have user-defined framelines and aspect ratios. The menu screen is intuitive, elegant and simple. Enter any aspect ratio and image size you want. Multiple frame lines, colors, styles and shading abound.



1. Direct numerical entry of any aspect ratio.

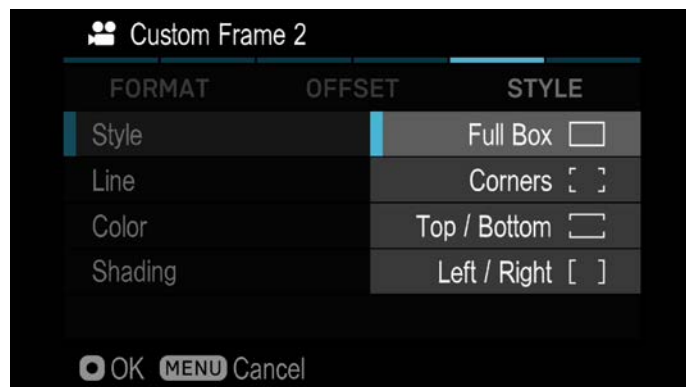
It works in familiar film-style ratios of xx.yy : 1

You can also enter the aspect ratio as a whole number head-scratcher such as 22:8 (2.75:1 — almost 2.76:1 Ultra Panavision 70, as in *Ben-Hur* and *The Hateful Eight*.)



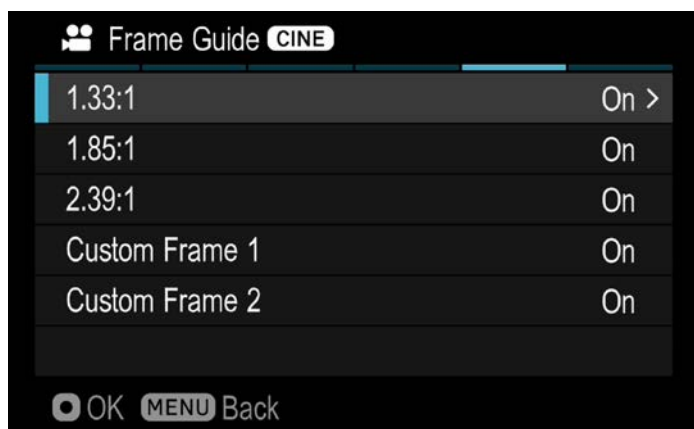
2. Or, enter an aspect ratio as defined by the actual sensor area in mm.

In this example, we want to use the fp L finder to scout a scene to be shot with an ALEXA SXT with an aspect ratio of 2:1. We know the ALEXA's sensor is 28.25 mm wide. So the height will be 14.13 mm. Navigate to STYLE for frameline color and width. OFFSET repositions the framelines.



3. The Custom Frame STYLE menu offers choices of:

- Frameline appearance (Full Box, Corners, Top-Bottom, Left-Right)
- Frameline thickness
- Frameline color
- Shading (masks outside picture area)



5. Turn the framelines on and off here. For example, you may want to compose for 2.39:1 for theatrical release and 2:1 for Netflix.

## fp L DP/Director's Finder



6. SIGMA fp L and fp are amazing DP/ Director's Finders. Paired with the HENRI finder system from Leitz, you get a beautiful birchbark handle, L to LPL mount (optional LPL to PL adapter), carbon fiber rods, a lens support, Arca Swiss baseplate, and start/ stop switch.



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