

7" Daylight Viewable Field Monitor

F970 Install and Power Kit



User Manual

Product Overview

Thank you for using our 7 inch ultra bright touch screen monitor. This monitor has HDMI input and output, auxiliary power output, touch screen menu operation, HDR monitoring and support user 3D LUT upload and other features. Advanced features include Parade, Vector, Histogram, Audio Meter, Focus Assist, False Color, Zebra Exposure, Pixel to Pixel, Center Marker, Safety Marker, Marker Mat, Monochrome, Image Freeze, Zoom, Anamorphic etc. It is an ideal, portable and lightweight viewfinder and video monitor.

A Sony F970 external install and power kit design is added to the back of the monitor. The external kit can be used to install and install the external equipment, like wireless transmitter, LED light, video converter and others which can be powered by Sony F970 battery. The monitor is equipped with a battery plate; you can use the power adapter supply or use the external battery for power supply.



To insure the best use of the unit, please read the user's manual carefully

CAUTION

1. Please avoid the heavy impact and drop onto the ground when move the product.
2. The screen of this product is made of glass.Keep away from injury if the screen is broken.
3. Keep the product away from the heat source, and avoid the prolonged exposures to the sun as the LCD screen will be damaged.

4. Please do NOT use chemical solutions to clean this product.

Please wipe the monitor with a clean soft cloth to maintain the brightness of the surface.

5. No adjustable components are in the monitor. Please do not take apart or repair the unit by yourself, to avoid the damage of the product.

Features

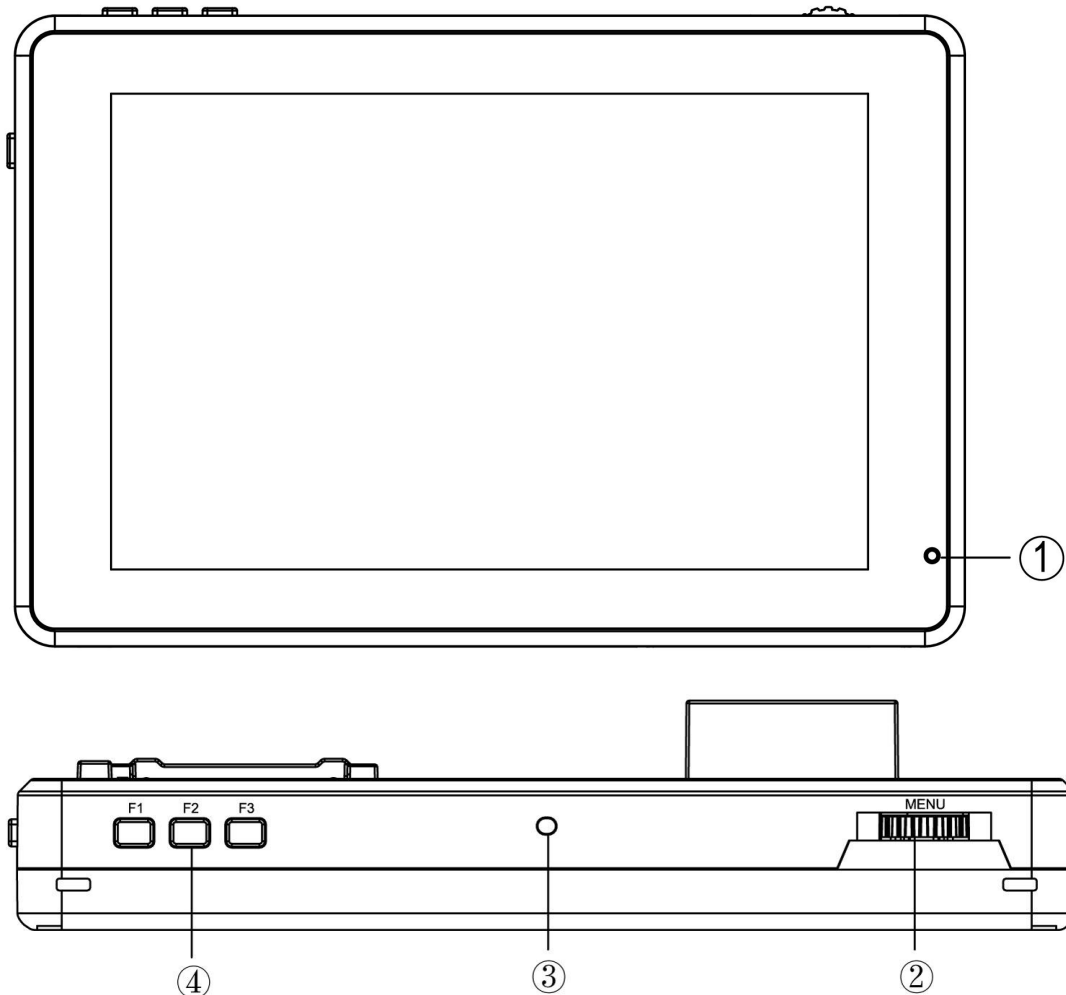
- Touch screen menu operation
- Support HDR monitoring
- Support 3D LUT Log to REC.709 and user 3D LUT upload
- 1920x1200 full HD IPS screen
- 2200nits Daylight Viewable (Light Sensor)
- Sony F970 external install and power kit design can be used to install and supply power to external equipment, easy to install and disassemble, simplify your photography equipment.
- With Waveform, Vectorscope, RGB Histogram, Focus Assist, Monochrome etc. functions, can help you accurately exposure and focus every shot.
- Stereo Earphone output
- DC 8V power out to power your DSLR camera or mirrorless camera


CONTENTS

1. Product Description	4
1.1 Front+Top Instruction	4
1.2 Rear+Bottom+Side Instruction	5
1.3 Power Supply Way	6
1.4 Sony F970 Install and Power Kit	7
1.5 Mount Points	9
2. Menu Operation Instruction	10
3. Menu Function Instruction	12
4. How to Load LUT	17
5. Support Formats	18
6. Technical Parameters	19
7. Trouble Shooting	19


1. Product Description

1.1 Front+Top Instruction



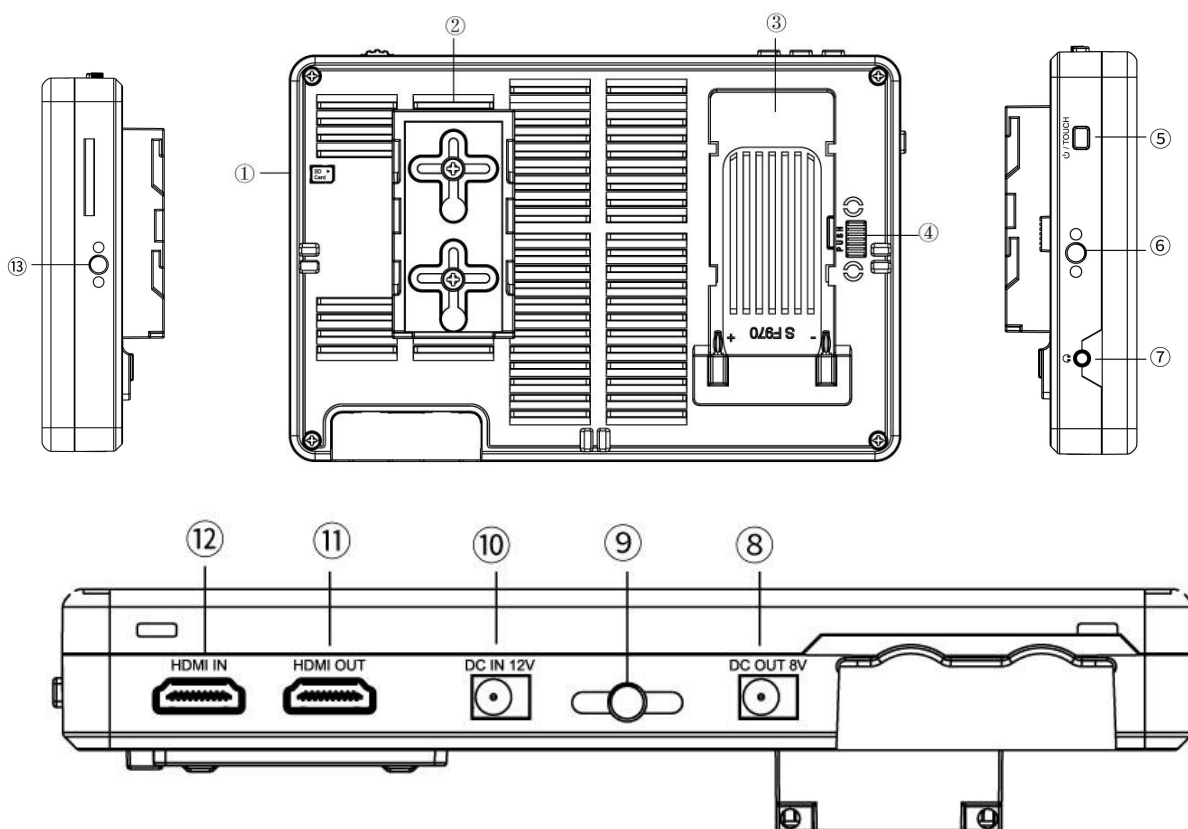
①. **Indicator Light:** After connecting the power, the indicator light is on (red). Long Press  / TOUCH button to turn on the monitor, it turns yellow. After the signal is connected, it turns green.

②. **MENU:** See details: **2.2 MENU Wheel Menu Operation** in **2. Menu Operation Instruction.**

③. **Light Sensor:** The backlight mode under the icon  is set to Auto, and the brightness of the backlight can be adjusted automatically by the light sensor.

④. **F1 ~ F3:** Custom function buttons

1.2 Rear+Bottom+Side Instruction



①. SD Card Slot 3D-LUT upload via SD card and for firmware upgrade	⑧. DC OUT 8V Power Output Connect the optional dummy battery cable to power camera.
②. F970 Install and Power Kit	⑨. 1/4" Screw Thread
③. F970 Battery Plate	⑩. DC 12V Power Input
④. Battery Lock Press it before remove the battery	⑪. HDMI Signal Output
⑤. Power / Touch Function Button Long press to turn on / off; short press to turn on / off the screen touch function.	⑫. HDMI Signal Input
⑥. 1/4" Screw Thread	⑬. 1/4" Screw Thread
⑦. 3.5mm Headphone Jack	

1.3 Power Supply Way


(1) The rear cover of the monitor is equipped with a F970 battery plate, which is applicable to F970 series of batteries.


Sony F970 battery plate for battery of Sony DV:

Sony F970 F960 F950 F930 F770 F750 F730 F570 F550 F530 series

Remark: It is recommended to use standard original F970 batteries.

Different specifications of the battery have different capability. The working time for the monitor will be different. Higher capability (working time) will be longer. Please take off the battery from the monitor if you don't use the monitor in a long time.

(2) **DC IN 12V:** DC power input, polarity as the input power  , Barrel (5.5mm outer, 2.1mm inner) at the bottom of the monitor, DC 7~24V Input.

(3) **DC OUT 8V:** DC power output interface, polarity as the output power 

Barrel output for powering your camera with a separately available DC coupler via adaptor (NP-FW50 Sony & LP-E6 Canon&DMW-BLF19 Panasonic). More adapters coming soon.

1.4 Sony F970 Install and Power Kit

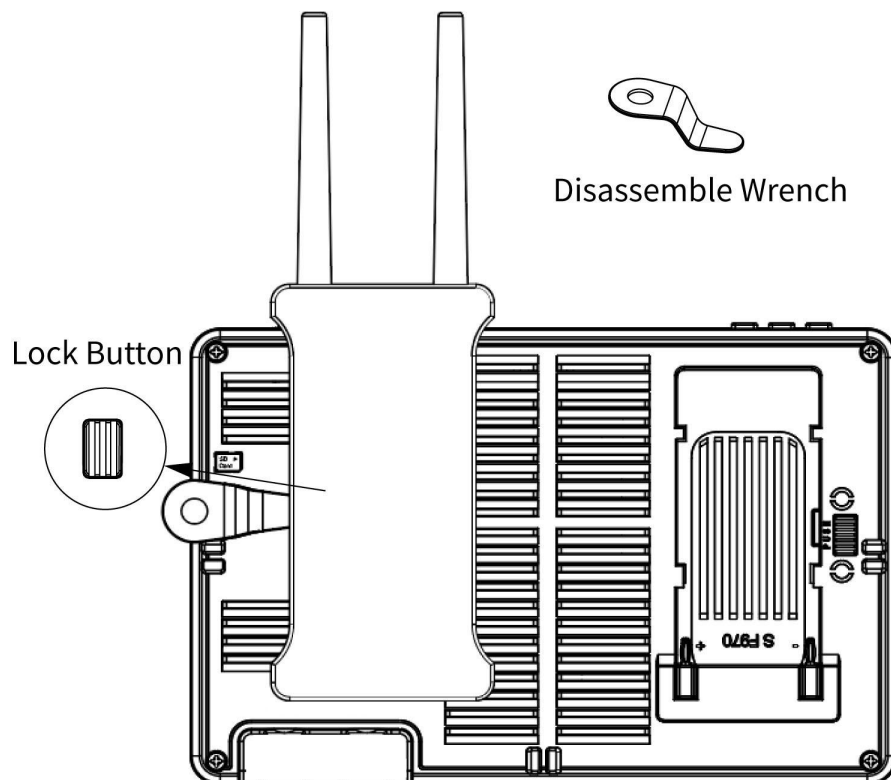
A Sony F970 external install and power kit design is added to the back of the monitor. The external kit can be used to install and install the external equipment, like wireless transmitter, LED light, video converter and others which can be powered by Sony F970 battery.

The kit has two cross grooves, you can adjust the position of the external device by loosening 2 screws up and down / left or right, or install the kit upside down. When you don't need the kit, you can loosen the screws and remove the kit.

Note: Before disassembling the kit, make sure that the monitor is turned off, and then remove the battery or power adapter.

(1) Just move the kit: Loosen 2 screws, and then adjust up / down / left / right.

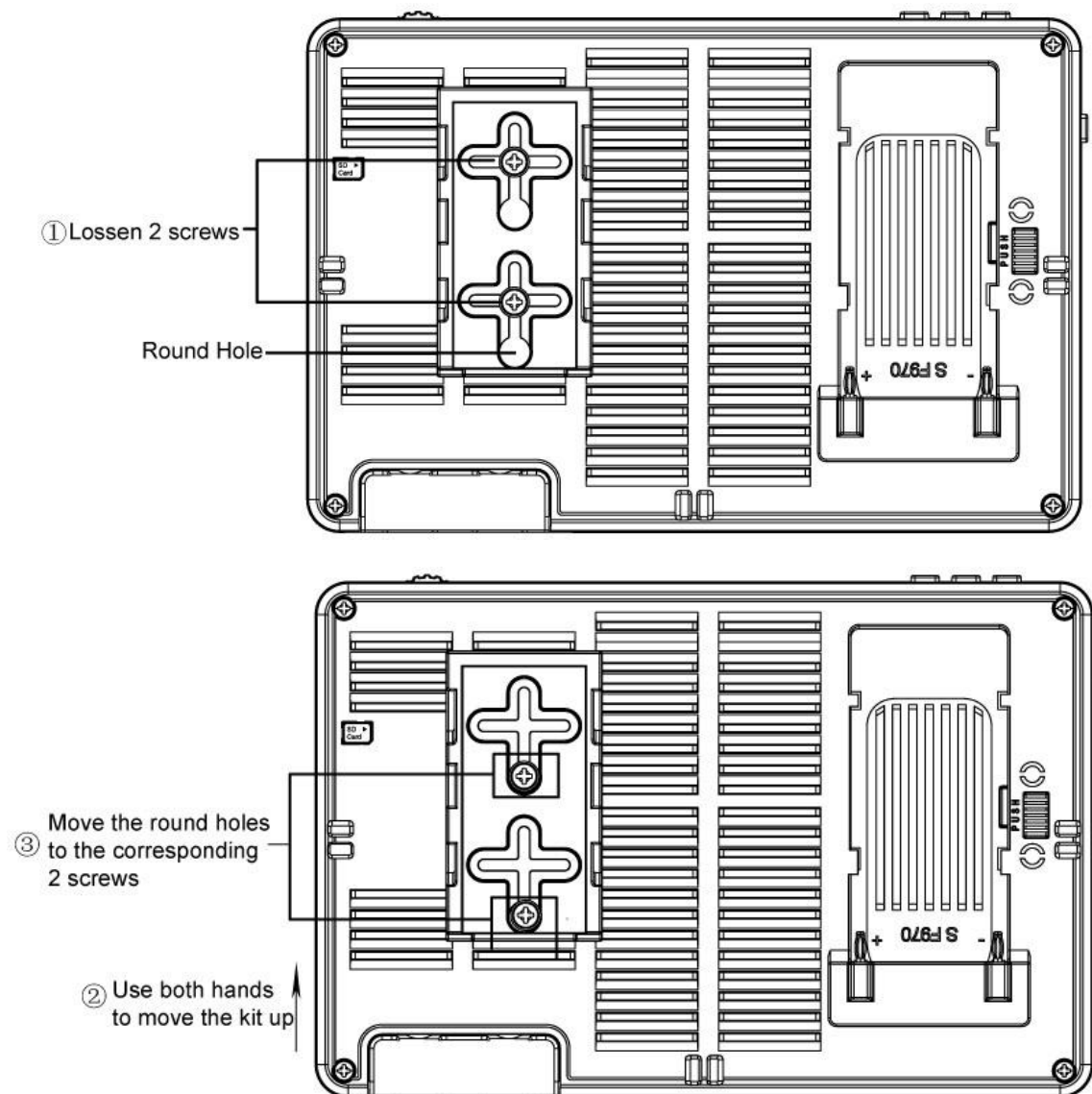
(2) Remove the external device: After the plug-in device is installed on the kit, if your plug-in device has a locking button, and it is more difficult to press it to remove it by hand, then you can use our assisting tool to disassemble.



(3) Steps to remove the kit:

- ①. Loosen the 2 screws.
- ②. Use both hands to move the kit up.
- ③. Move the round holes to the corresponding 2 screws.

(You can also install the kit upside down.)



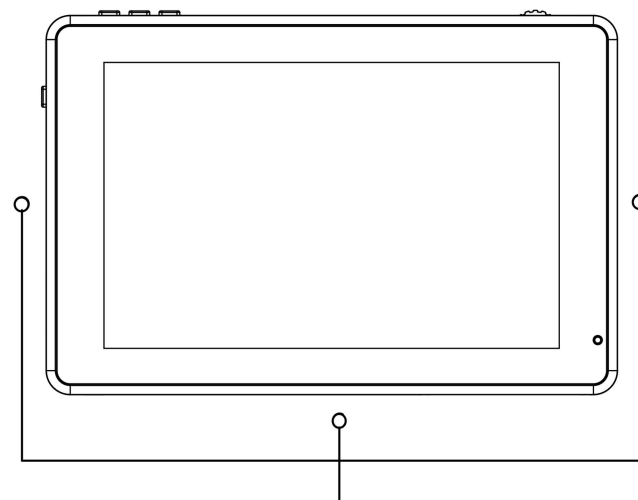
- ④. Then gently lift the kit upwards and carefully disassemble the 2P power cord.
- ⑤. Then remove the 2 screws.

(4) Install back to the kit: first screw the 2 screws back to the screw hole used to install the kit on the back of the monitor, install the 2P power cable to the cutout, then align the

round hole of the kit with the screw, and then push the kit to the screw at the center of the kit cross, then tighten the screws.

1.5 Mount Points

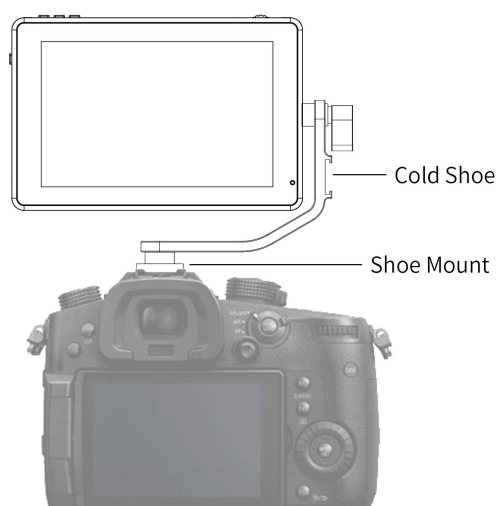
There are (3) $\frac{1}{4}$ -20 thread points (bottom, right & left) can be easily connected to the hot shoe mount, tripod fixed installation.




(3) $\frac{1}{4}$ -20 thread points


Tilt Arm Mounting

The monitor secures to your camera using the included Tilt Arm via shoe mount or $\frac{1}{4}$ "-20 thread. The Tilt Arm enables 360° of tilt for convenient monitoring at nearly any angle. A cold shoe on the Tilt Arm lets you secure equipment (like a microphone, LED light, or wireless receiver) that would otherwise be displaced from the camera's accessory shoe.




2. Menu Operation Instruction

After the monitor is properly connected to the power supply, the indicator light is on (red). Long press  / TOUCH button to turn on the monitor, the indicator light turns yellow. After the signal is connected, the indicator light turns green.

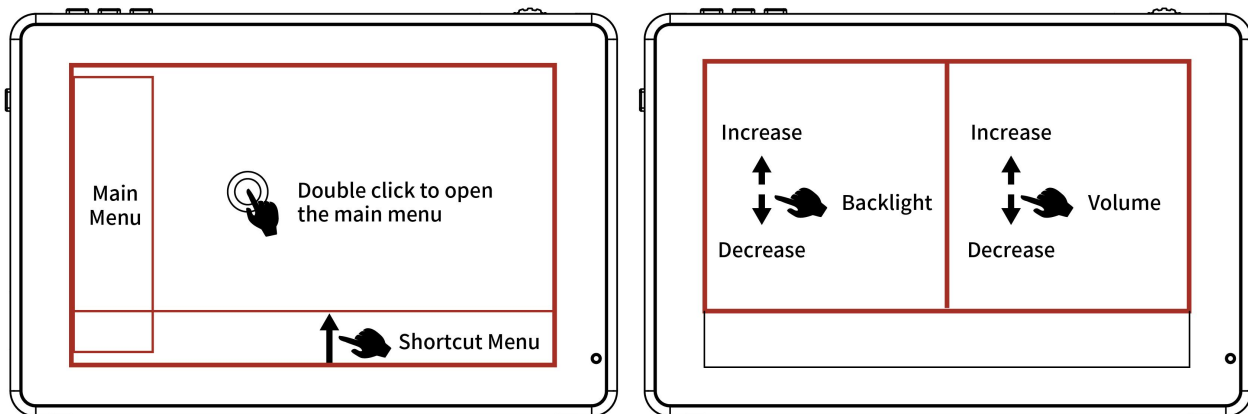
After startup, short press  / TOUCH to select to turn the screen touch function on or off.

2.1 Touch Screen Menu Operation (turn on the screen touch function)


- ①. Double-click on the screen to open the main menu (show on the left side of the screen) and click on the corresponding menu to display the secondary menu. You can enter the corresponding function option to select or set with the "<" or ">" key of the option. Exit the menu and press  key of the main menu or click the touch screen.
- ②. When the menu is not displayed, swipe up from the bottom of the screen to open the shortcut menu, and click on the corresponding menu box to open or set the corresponding function.

- ③. When the menu is not displayed, on the left side of the screen (1/2 split screen), you can directly adjust the brightness of the screen backlight; on the right side of the screen (1/2 split screen), you can directly adjust the volume.

Figure:



2.2 MENU Wheel Menu Operation

- ①. When the menu is not displayed, directly rotate the wheel to backlight or volume adjustment. The wheel option can be set to backlight or volume in the menu .
- ②. Long press the MENU wheel to open the main menu (on the left side of the screen). Rotate the wheel to select the secondary function menu. After selecting it, press the wheel, then rotate the wheel to select or set the option function.
- ③. Short press the MENU wheel to open the shortcut menu (below the screen), rotate the wheel to select the shortcut menu option, press the wheel to directly turn on/off the function, if you press the parameter selection, repeat the above operation. The shortcut menu will automatically exit after about 5 seconds without operation.

3. Menu Function Instruction




All Waves	OFF, ON After turning on, waveform, vector, histogram and embedded audio will be shown.
Parade	OFF, RGB, YUV, Y This essential feature assists with the calibration of professional video cameras. It shows the overall brightness of the image assisting the video professional in correcting exposure. The parade feature also checks the evenness of the lighting when lighting a chromakey or background.
Vector	OFF, ON Shows how saturated the image is and where the pixels in the image land on the color spectrum.
Y Histogram	OFF, ON A quantitative tool to check the picture brightness, display different color for different brightness
RGB Histogram	OFF, ON It can display the graphic of color tone distribution, can intuitively display the exposure status of the image, and display overlapping histograms in red, green, and blue channels
Focus Assist	OFF, ON The focus level and focus color items are displayed after the focus assist is turned on. It highlights the areas that are in focus so you are able to

	quickly focus the camera and not miss crucial shots.
Focus Level	1~10
Focus Color	yellow, red, green, blue, white
Audio Meter	OFF, ON Display an audio diagram after enabled to help you understand the audio status being used
Zebra	OFF, ON The zebra value item is displayed only after the zebra is turned on. Areas of the image over a certain threshold are filled with a striped pattern to dramatically highlight areas where too much light is falling on the image sensor.
Zebra Value	1%~100%
Monochrome	OFF, gray, red, green, blue When enabled, hue and saturation adjusted quickly and accurately
False Color	OFF, type 1, type2 An image that depicts an object in colors that differ from those a photograph (a true color image) would show.
Return ←	Back to the previous OSD menu



Nine Grid	OFF, ON The area of the picture is divided into nine equal grids
Safety Marker	OFF, 70%, 80%, 90%, 16:9, 16:10, 4:3, 5:4, 1:1, 1.91:1.1, 4:5, 9:16, 1.85:1, 2.35:1

Center Marker	OFF, ON
Marker Mat	OFF, 16:9, 16:10, 4:3, 1.85:1, 2.35:1, 2.41:1, 1.9:1, 5:4, 1:1.9 The Marker Mat Alpha item is displayed after the Marker Mat is turned on.
Marker Mat Alpha	0%, 25%, 50%, 75%
Marker Color	yellow, red, green, blue, white, black
Return 	Back to the previous OSD menu




Scan Mode	Under Scan, Over Scan
Video Aspect	auto, 16:9, 16:10, 4:3, 5:4, 1.85:1, 2.35:1, Stretch, user Under the user , you can customize the Video Width (100% ~ 200%), Video Height (100% ~ 200%)
Anamorphic Mode	OFF, 1.25x, 1.33x, 1.5x, 1.6x, 1.8x, 2.0x, 2.0x mag Allows you to use anamorphic lenses or adapters and see the image unsqueezed, even if your camera does not de-squeeze in camera.
Auto Mirror	OFF, ON After turning on, the image will automatically adjust upside down.
Flip H	OFF, ON When turning off the Auto Mirror, you can open or close Flip H
Flip V	OFF, ON When turning off the Auto Mirror, you can open or close Flip V
Zoom Times	OFF, 100%~300%


	It is HD signal in any part, an amplification for high quality close-up.
Freeze	OFF, ON
Pixel to Pixel	OFF, ON Enable the filmmaker to check the image from the 1:1 signal source without scaling. This feature is essential for capturing optimum detail.
Return ←	Back to the previous OSD menu

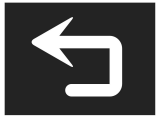


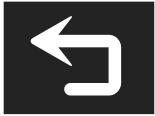
HDR	OFF, HLG 2020, HLG 709, HLG P3 HDR can provide more dynamic range and the details of image, it is better to reflect the visual effects in the real environment.
Lut Switch	OFF, ON The Lut item is displayed after the Lut Switch is turned on. LUT is a table for quickly looking up and output specific color data. By loading different 3D-LUT tables, it can quickly recombine color tone to form different color styles
Lut	SLOG2, SLOG3, LOGC, VLOG
Lut Import (SD)	After copying the 3D LUT file to the SD card and inserting it into the SD card slot, you can click the “<” or “>” key in the Lut (SD) option, or rotate the wheel to import the 3D LUT file. Note: the chip should be faced up when inserting the SD card, and press it after inserting to ensure that the SD card is fully inserted.

Colortemp	5600K, 6500K, 9300K, user Under the “user” item, the red, green, and blue values of the image can be adjusted, made the colors of the image achieve your favorite
Backlight	1~100 Adjust the screen brightness
Brightness	0~100 Adjust the image brightness
Contrast	0~100 Adjustment of the ratio between the brightest and darkest parts of the image . When adjusting, pay attention to the sense of hierarchy in the image. If the proportion is too large or too small, it can cause the image to lose its colorful appearance.
Saturation	0~100 Adjustment of color concentration
Hue	0~100 It is the most accurate standard for distinguishing various different colors. Determine what a certain color is actually color via the color appearance
Sharpness	0~100 An index that reflects the clarity of image planes and the sharpness of image edges
Return 	Back to the previous OSD menu



Wheel	Backlight, Volume After selecting the wheel option, you can click the “<” or “>” button in the wheel option, or rotate the wheel to select one of the shortcut keys to set it to the rotary wheel adjustment (when the menu is not displayed).
F1~F3	Parade, Vector, All Waves, False Color, Monochrome, Safety Marker, Nine Grid, Center Marker, Marker Mat, Scan Mode, Video Aspect, Anamorphic Mode, Freeze, Pixel to Pixel, Zebra, Lut Switch, Mute, Focus Assist
Language	English, 中文, 繁體中文, 日本語, Deutsch, Français, Italiano, Español, 한국, Русский, Português
Transparency	OFF, low, middle, high Adjust the transparency of the menu picture background on the screen
OSD Time	5s, 10s, 15s, 20s, 25s, always Select the display time of the menu on the screen
Mute	OFF, ON
Save Config(SD)	User custom menu saving After inserting SD card, click the “<” or “>” key to save the current configuration
Load Config(SD)	After inserting SD card, click the “<” or “>” key to load the saved configuration
Firmware Update	After copying the update file to the SD card and inserting it into the SD card slot, you can click the “<” or “>” key in the firmware update option or rotate the wheel to update. Note: the chip should be faced up when inserting the SD card, and press it after inserting to ensure that the SD card is fully inserted.
Return 	Back to the previous OSD menu



	Exit the menu
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4. How to Load LUT

4.1 SD card format

Support FAT32 or NTFS. For MAC system, the SD card should be formatted in MS-DOS (FAT)

4.2 Max Files Limit Maximum 50 Lut files

4.3 File requirements

- The LUT file format suffix should be **.cube**
- Single file not exceeded to 7.9Mb
- Support LUT-3D-Size 17,32,33,64,65

Remark: LUT file name must be English or Arabic numerals

4.4 Steps for loading

4.4.1 Make sure the SD card correctly insert

4.4.2 Enter main menu --Lut Import (SD)-- click "<" or ">" to load

the monitor will auto detect the SD card

A. There is no SD Card, the screen will show failed,can try once more,if not work, restart the monitor and try again

B. There is SD Card, the monitor will erase the exits user's lut fill and show "Initializing" , If there is no valid lut file in SD card, the lut will not load.The monitor will show "clean up"

C. If there is valid lut file in SD card, the monitor will load lut files and show “[n] name. The [n] shows the quantity number. The “name” should in lut files’ name. If load successful, the screen will show “complete[n]”. [n] Stands for the quantity number for lut files should under 50.

5. Support Formats

HDMI Input/ Output Support Format	480i/480p/576i/576p 720p (60/59.94/50/30/29.97/25/24/23.98) 1080i (60/59.94/50) 1080p (60/59.94/50/30/29.97/25/24/23.98) 3840x2160p (30/29.97/25/24/23.98) 4096x2160p (24Hz)
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6. Technical Parameters

Panel Size	7" touch screen
Resolution	1920 × 1200 pixels
Dot Pitch	0.07875 (H) x 0.07875 (W) (mm)
Aspect Ratio	16:10
Brightness	2200cd/m ² (Light Sensor)
Contrast	1200:1
Viewing Angle	80°/80°(L/R) 80°/80°(U/D)
Backlight	LED
Input	HDMI
Output	HDMI
Audio	3.5mm Stereo Headphone
Power Input	DC IN 12V
Power Out	DC OUT 8V

Power Consumption	≦ 16W
Unit Size	190Lx126Hx27D (mm)
Unit Weight	450g
Mount Points	(3) ¼-20 thread points (left, right, bottom)
Working Temperature	-20℃～50℃
Storage Temperature	-30℃～60℃

7. Trouble Shooting

7.1 Only black and white or monochrome picture:

- ① please check saturation, brightness & contrast adjustment.
- ② Please check "Monochrome" is in black, white or monochrome image or other condition.

7.2 NO Image after put on the power

- ① Check if signal cable connecting is in good condition.
- ② Check signal cable connecting, and make sure to use the standard adapter to connect the monitor. If power is supplied by battery, please check if the battery is fully charged.

7.3 Earphone No sound

Please confirm whether the volume control is turned on, and adjust the volume.

■ If there are still other problems, please contact with our related technologists.

★ As we are improving product features and product performance, so if there is any change on the specification without prior notice.

