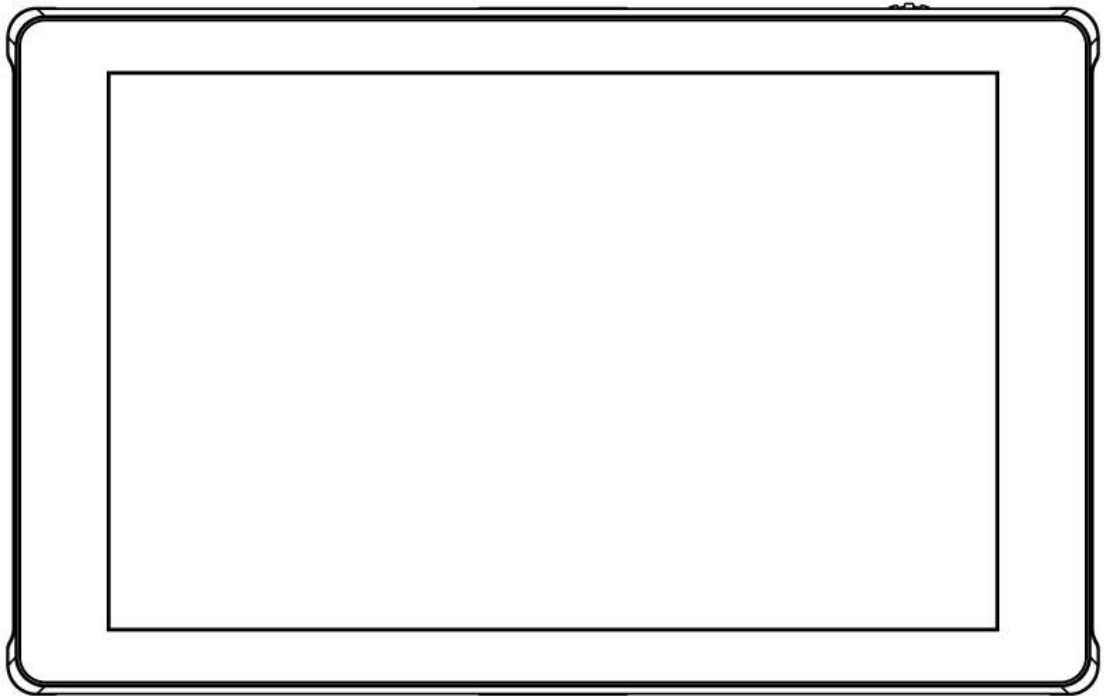


# **7" High Bright Camera Monitor**



## **User Manual**

## Foreword

Thank you for purchasing our 7-inch high bright camera monitor. Please read this manual carefully before using the unit. Have a great experience!

## Caution

- Please avoid the heavy impact and drop onto the ground when move the product.
- The screen of this product is made of glass. Please do not drop the screen towards the ground. Keep away from injury if the screen is broken.
- Keep the product away from the heat source, and avoid the prolonged exposures to the sun as the LCD screen will be damaged.
- To avoid damaging the product, please do not take apart or repair the unit by yourself without the adjustable components in the unit.
- In order to better maintain the LCD screen and protect the cover, please follow the following ways to avoid damages.
  1. Please refrain from using the hard objects to hit the screen.
  2. Please do not force to wipe the screen.
  3. Please do not use the chemical solutions to clean the screen.
  4. Please do not spray any detergent on the screen.
  5. Please do not write on the screen directly.
  6. Please do not stick on the screen.
  7. Please simply wipe with a clean soft cloth and make sure no water on the screen.

## Key Features

- 7-inch full HD IPS screen.viewing details with confidence
- Touch screen menu operation, improve shooting efficiency

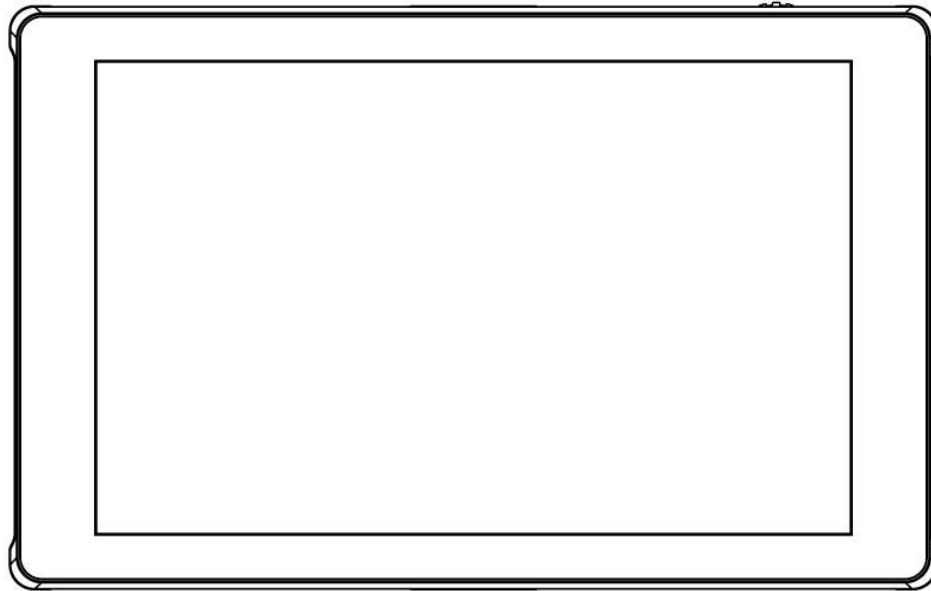
- Sony F970 external install and power kit design can be used to install and supply power to external equipment, easy to install and disassemble, simplify your photography equipment.
- Supports 3D LUT Log to REC.709 and user 3D LUT upload (up to 32).
- 4-group user switching, quickly access the already set menu
- Waveform, Vector, Histogram and audio meter can moveable horizontally and vertically
- HDR monitoring, what you see is what you get
- DC 8V power out to power your DSLR camera or mirrorless camera
- Stereo Earphone output

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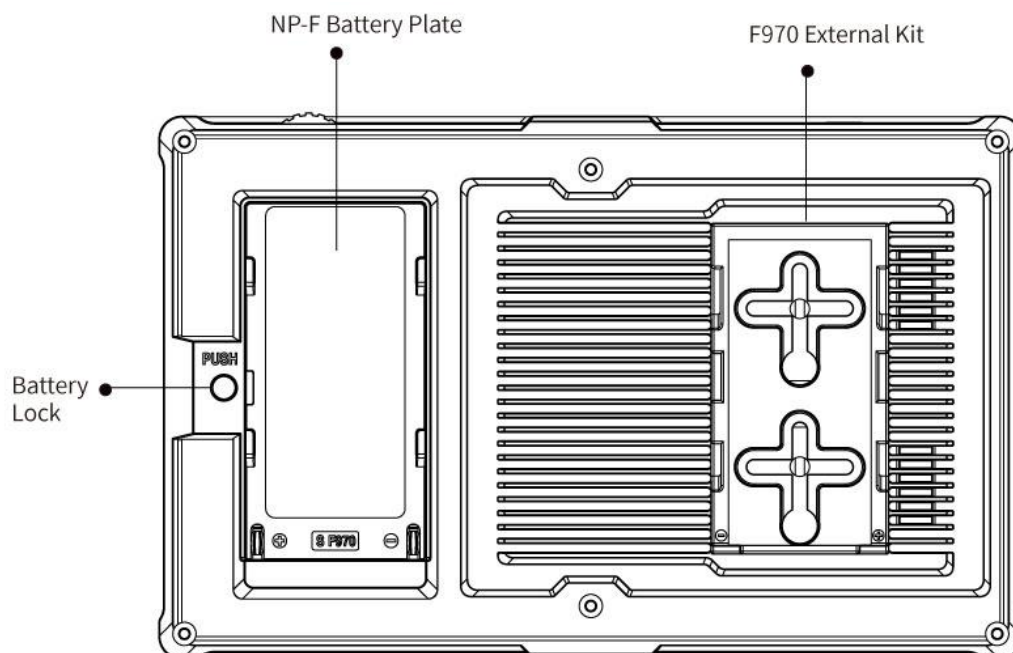
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# 1. Product Description

## 1.1 Front Panel Instruction



## 1.2 Rear Panel Instruction

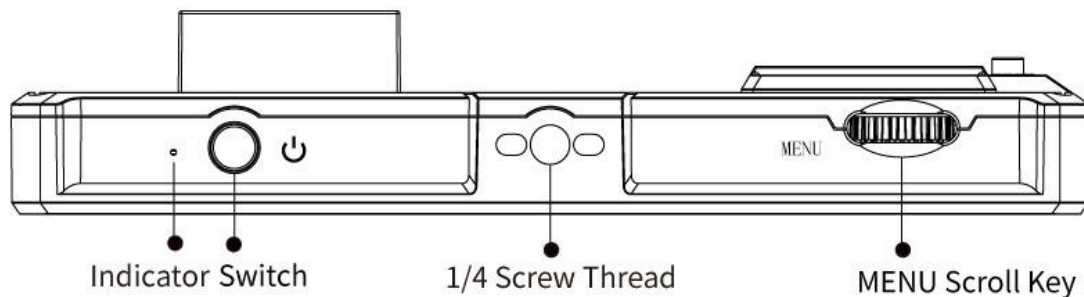


**Battery Lock:** The battery lock will lock after the battery installed, please press the lock button firstly before remove the battery.

**NP-F Battery Slot:** It is applicable to install NP-F series of batteries.

**F970 External Kit:** Installing the external equipment, like wireless transmitter, LED light, video converter and others which can be powered by Sony F970 battery. (The details see: **1.8 Sony F970 Install and Power Kit**)

### 1.3 Top Instruction



**Indicator:** After connecting the power, the indicator light is on (red).  
after the monitor turning on, it turns yellow. After the  
signal is connected, it turns green.

**Switch:** Long press turn on/off power

Short press open/close touch function

**1/4 Screw Thread:** can be easily connected to the hot shoe mount,  
tripod fixed installation.

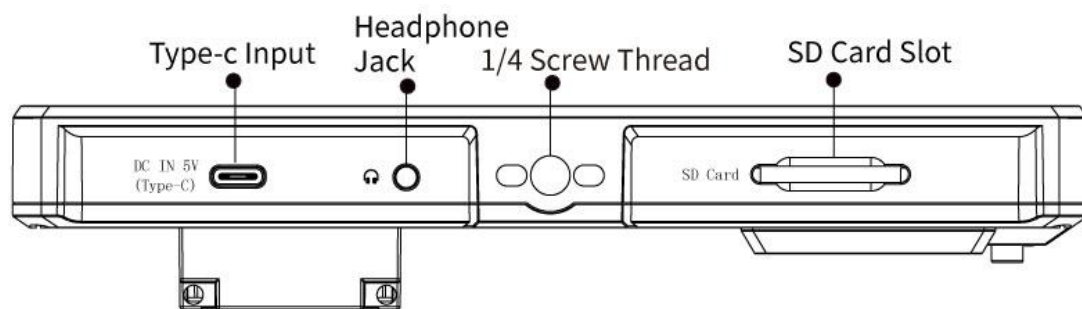
**MENU Scroll Key:** Rotate to adjust the volume or backlight when  
menu without display;

Press to open the main menu, rotate the wheel to select

menu item, press it again to open the corresponding menu function.

(See details: **2. Menu Operation Instruction**)

## 1.4 Bottom Ports Instruction



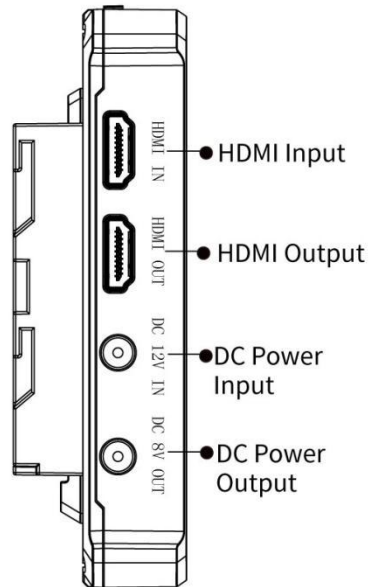
**Type-c Input:** Type-c 5V power input (Note: This port can be connected to the power bank and is not used for data transmission; it is only used for local power supply and cannot provide loop-out power.

**Headphone Jack:** 3.5mm earphone port output

**1/4 Screw Thread:** can be easily connected to the hot shoe mount, tripod fixed installation.

**SD Card Slot:** Firmware update/LUT file import

## 1.5 Left Side Instruction



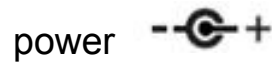
**HDMI Input:** V2.0, HDMI signal input, up to 4K@60Hz.

**HDMI Output:** V2.0, HDMI signal output, up to 4K@60Hz.

**DC Power Input:** DC power input, polarity as the input power



**DC Power Output:** DC8V power output , polarity as the output

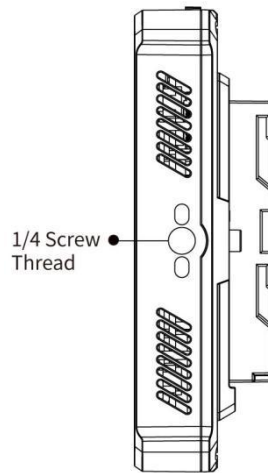


(suitable for DC5.5\*2.1mm power plug),can power to your camera with a separately available DC coupler via adaptor (NP-FW50 Sony & LP-E6 Canon&DMW-BLF19 Panasonic).

More adapters coming soon.

## 1.6 Right Side Instruction





**1/4 Screw Thread:** can be easily connected to the hot shoe mount, tripod fixed installation.

## 1.7 Power Supply Way

(1) The left side of the monitor has a DC 12V input power port (5.5mm outer, 2.1mm inner) and supports 7 ~ 24V wide voltage Suitable for use 1.5A/2A power adapter (the power adapter needs to be purchased separately).

When using external adapter input: two power output interfaces (DC OUT 8V interface and external install and power kit) can be connected to other devices. When powering other equipment, it is recommended to equip at least 3A power adapter.

(2) The bottom of the monitor has a Type-C 5V input power port.

This port can be connected to the power bank for power supply and is not used for data transmission; it is recommended to be used only for local power supply, and it is not recommended to connect other devices to provide loop-out power.

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

- **Sony F970 battery plate for battery of Sony DV:**

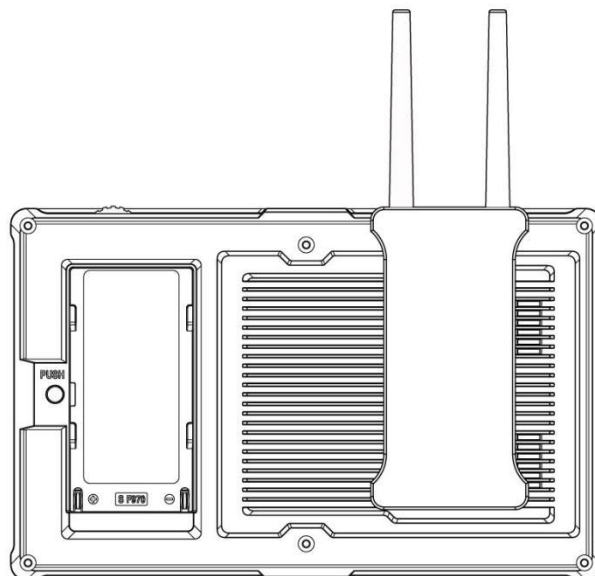
Sony F970 F960 F950 F930 F770 F750 F730 F570 F550 F530 series.

When using battery power supply: two power output interfaces (DC OUT 8V interface and external install and power kit) can be connected to other device. When powering other device, it is recommended to choose a battery with a larger capacity, so the longer the use time.

**Remark: Please take off the battery from the monitor if you don't use the monitor in a long time.**

## **1.8 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.



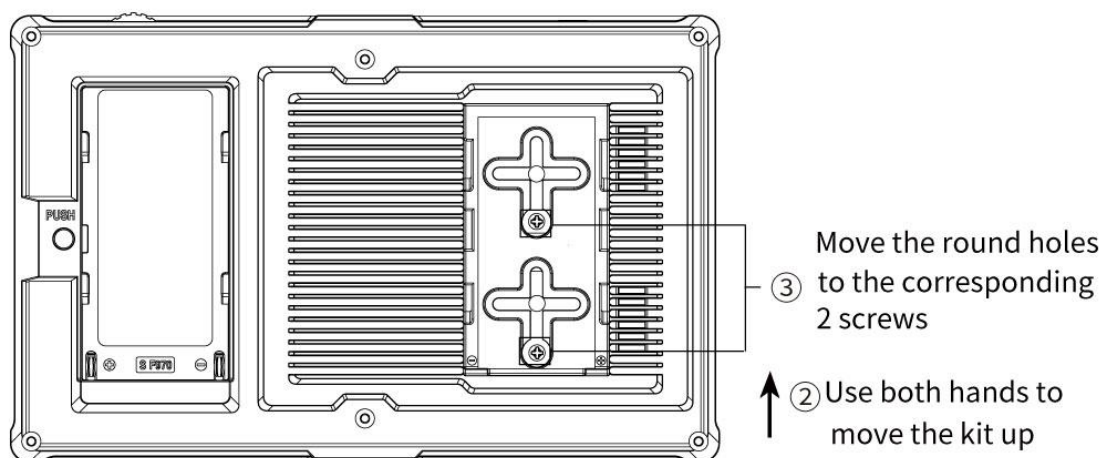
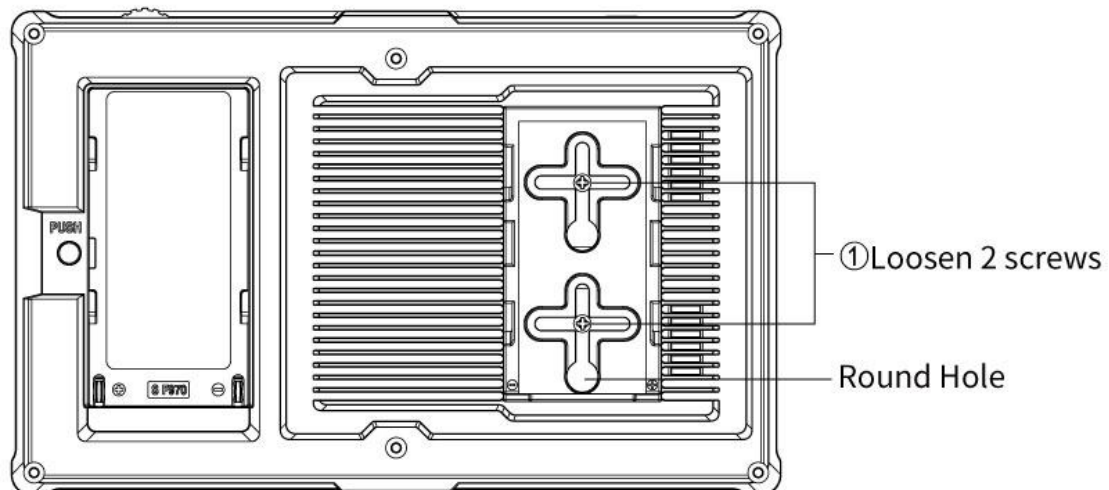
The kit has two cross grooves, you can adjust the position of the external device by loosening 2 screws up and down / left or right, or install the kit upside down. When you don't need the kit, you can loosen the screws and remove the kit.

**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) 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.

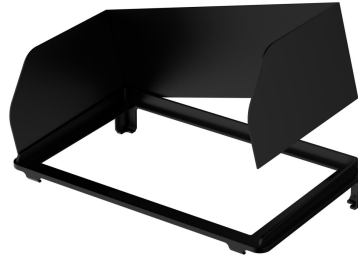


- ④. Then gently lift the kit upwards and carefully disassemble the 2P power cord.
- ⑤. Then remove the 2 screws

## 1.9 Installation of Sunshade



① Sunshade



② Sunshade Frame



③ Fixed Frame






④ Sunshade Application

First lock the Sunshade Frame ② with the monitor tight ③.

Open the sunshade ①, and match the sticker on the sunshade inside to the marked part of the sunshade frame ②, smooth and press 3 sides on the sunshade, and then complete the sunshade installation ④.

## 2. Menu Operation Instruction

After the monitor is properly connected to the power supply, the  button display (red indicating). Then the monitor will turn on automatically, the indicator light turns yellow, and after the HDMI signal is input, the indicator light turns green. When Press  button

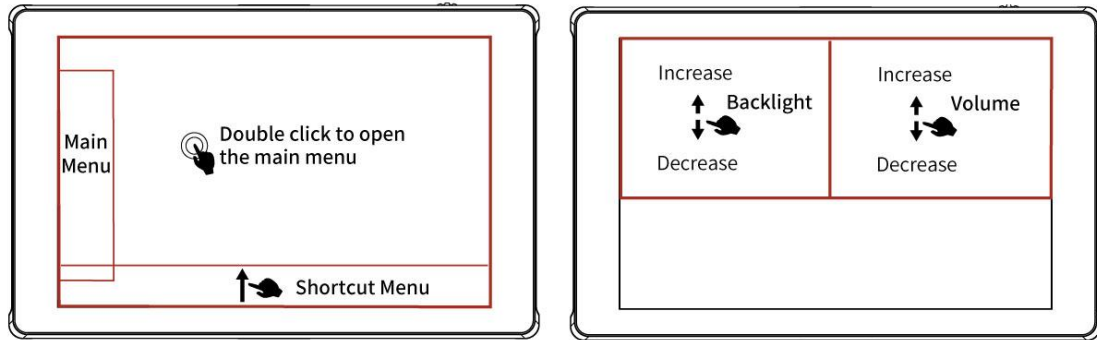
to shut down the monitor but the power still connected, please press  button manually to turn on .

After startup, short press  button 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 and click directly to select or set. Click the touch screen to exit the menu.
- ② When the menu is not displayed, swipe up from the bottom of the screen to open the shortcut menu, swipe left or right select the needed function and click on the corresponding menu box to turn on or turn off the corresponding function. (remark: the shortcut menu can't set the detail function or parameters, you can set on main menu)
- 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.

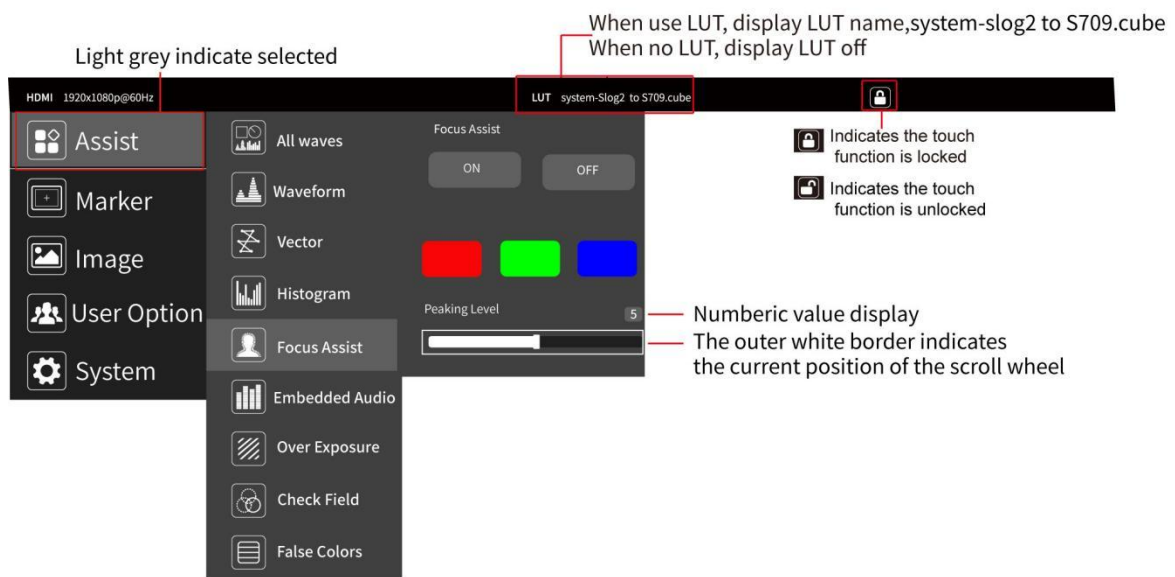
**Figure:**



## 2.2 Button Menu Operation

- ①. When the menu is not displayed, directly rotate the wheel to backlight or volume adjustment. You can set the left and right buttons in the **Left Right Key Set**  of menu **User Option** .
- ②. Press “**MENU**” scroll wheel button to enter OSD main menu, and scroll the wheel to go through the secondary menu function.
- ③. Press the "MENU" wheel key to enter the secondary menu, scroll the wheel to select the function and then press "MENU" to confirm.
- ④. Scroll the wheel to adjust the parameters value.
- ⑤. Long press MENU wheel button to exit the menu.



## 3. MENU Interface Instruction








## 4. Menu Function Instruction





### Assist

 <p><b>All Waves</b></p>	<p><b>On, Off</b></p> <p>After turning on, waveform, vector, histogram and embedded audio will be shown.</p>
 <p><b>Waveform</b></p>	<p><b>On, Off</b></p> <p><b>Mode : RGB、YUV、Y</b></p> <p><b>Waves Trans. : Off, 25%, 50%, 75%</b></p> <p><b>Position X: 0~100</b> (moving the waveform horizontally)</p> <p><b>Position Y: 0~100</b> (moving the waveform vertically )</p> <p>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 waveform feature also checks the evenness of the lighting when</p>



	lighting a chromakey or background.
 <p><b>Vector</b></p>	<p><b>On, Off</b></p> <p><b>Position X: 0~100</b> (moving the Vector horizontally)</p> <p><b>Position Y: 0~100</b> (moving the Vector vertically )</p> <p>shows how saturated the image is and where the pixels in the image land on the color spectrum.</p>
 <p><b>Histogram</b></p>	<p><b>On, Off</b></p> <p><b>Mode: RGB1、RGB2、 Y</b></p> <p><b>Position X: 0~100</b> (moving the histogram horizontally)</p> <p><b>Position Y: 0~100</b> (moving the histogram vertically )</p> <p>RGB Histogram: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</p> <p>Y Histogram: A quantitative tool to check the picture brightness, display different color for different brightness.</p>
 <p><b>Focus Assist</b></p>	<p><b>On, Off</b></p> <p><b>Color :</b> ( Red, Green, Blue )</p> <p><b>Peaking Level : you can adjust the peaking level after turning on ( 1 ~ 10 )</b></p> <p>It highlights the areas that are in focus so you are able to quickly focus the camera and not miss crucial shots.</p>
 <p><b>Embedded Audio</b></p>	<p><b>On, Off</b></p> <p><b>Position X: 0~100</b> (moving the audio level horizontally)</p> <p><b>Position Y: 0~100</b> (moving the audio level vertically )</p> <p>The Audio Level Meters provide numerical indicators and headroom levels.</p>
	<p><b>On, Off</b></p> <p><b>Exposure Level : you can adjust the exposure level after</b></p>





<b>Over Exposure</b>	<b>turning on ( 10~100 )</b>  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.
 <b>Check Field</b>	<b>On, Off</b> <b>Mode : Red, Green, Blue, Mono</b>  When enabled, hue and saturation adjusted quickly and accurately
 <b>False Colors</b>	<b>On, Off</b> <b>Mode: Normal, ARRI</b>  An image that depicts an object in colors that differ from those a photograph (a true color image) would show.








## Marker



 <b>Grid</b>	<b>On, Off</b> <b>Mode: 2x2,3x3,4x4,5x5,6x6,7x7,8x8,9x9, Custom</b> <b>Rows: 2~9</b> <b>Columns: 2~9</b>  When selecting <b>Custom</b> , you can custom the rows and columns of the grid  <b>Color: Red, Green, Blue, Black, White, Gray</b>  The area of the picture can be divided into 4, 9, 16, 25, 36, 49, 64, 81 equal grids.
 <b>Safe Frames</b>	<b>On, Off</b> <b>Mode: 80%, 85%, 90%, 93%, 96%, 2.35:1</b> <b>Color: Red, Green, Blue, Black, White, Gray</b>

 <b>Center Marker</b>	<b>On, Off</b> <b>Color : Red, Green, Blue, Black, White, Gray</b>
 <b>Ratio Marker</b>	<b>On, Off</b> <b>Mode: 4:3、 13:9、 14:9、 15:9、 16:9、 1.85:1、 2.35:1</b> <b>Color: Red, Green, Blue, Black, White, Gray</b> <b>Modified Mark : 0~5</b>





## Image




 <b>Scan Mode</b>	<b>Under Scan, Over Scan</b>
 <b>Aspect Ratio</b>	<b>Auto, 16:9, 16:10, 4:3, 5:4, 1.85:1, 2.35:1, Full Screen</b> Provides a wide variety of aspect ratio to match different camera anamorphic lenses.
 <b>Anamorphic</b>	<b>On, Off</b> <b>Mode: 1.33X, 1.6X, 2.0X, 2.0X MAG, User</b> Under the <b>User</b> , can be customized (1.20X~2.00X) Allows you to use anamorphic lenses or adapters and see the image unsqueezed, even if your camera does not de-squeeze in camera.
 <b>Image Flip</b>	<b>On, Off</b> <b>Mode: H Flip, V Flip, H_V Flip</b>
 	<b>On, Off</b> <b>Mode: 2X、 4X、 9X、 16X、 User</b>

<b>Zoom Mode</b>	Under the <b>User</b> , can be customized (100%~200%) It is HD signal in any part, an amplification for high quality close-up.
 <b>Image Freeze</b>	<b>On, Off</b>
 <b>P2P</b>	<b>On, Off</b> Enable the filmmaker to check the image from the 1:1 signal source without scaling. This feature is essential for capturing optimum detail.









## User Option

 <b>LUT</b>	<b>On, Off</b> After the LUT Switch is turned on, you can use the <b>Lut (SLOG2, SLOG3, LOGC, VLOG)</b> . 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 <b>Lut Import: Confirm</b> <b>Lut Table</b> Show the 4 built-in Lut and the custom load Lut (up to 32)
 <b>HDR</b>	<b>On, Off</b> <b>Mode: HLG1, HLG2, HLG3</b> HDR can provide more dynamic range and the details of image, it is better to reflect the visual effects in the real

	environment.
 <b>Display Adjustment</b>	<p><b>Backlight: 0~100</b> Adjust the screen brightness</p> <p><b>Brightness: 0~100</b> Adjust the image brightness</p> <p><b>Contrast: 0~100</b> 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.</p> <p><b>Saturation: 0~100</b> Adjustment of color concentration</p> <p><b>Tint: 0~100</b></p>
 <b>Color Adjustment</b>	<p><b>Color Temp.: 5600K, 6500K, 9300K, User</b> Under the <b>User</b>, the red, green and blue of the image can be adjusted (0~255), made the colors of the image achieve your favorite.</p>
 <b>Left Right Key Set</b>	<p><b>Volume, Backlight</b></p>



## System

 <b>User Switch</b>	<b>User Switch: 1~4</b> you can save the set menu as 1-4 and can be called directly next time
 <b>Language</b>	English、简体中文、Español、Português、Français、Nederlands、Deutsch、日本語、繁體中文、한국어로、 <b>русский язык</b>
 <b>OSD Option</b>	<b>OSD Time: Off, 15Sec, 30Sec, 45Sec</b> Select the display time of the menu on the screen <b>OSD Trans: Off, 25%, 50%, 75%</b> Adjust the transparency of the menu picture background on the screen <b>No Signal: Red, Green, Blue, Black, White, Gray</b> Can be change the background color of screen when no signal
 <b>Volume</b>	<b>On, Off</b> 0~100 Adjusting the speaker volume
 <b>Reset</b>	After click <b>Confirm</b> , the system back to original setting
 <b>Firmware Update</b>	<b>Firmware Version</b> (display the version number) <b>Firmware Update</b> <b>Confirm</b> How to upgrade? 1. SD card format  Support FAT32 or NTFS. For MAC system, the SD card should be formatted in MS-DOS (FAT)  2. After copying the update file to the SD card and inserting it into

	<p>the SD card slot, click <b>Confirm</b> to update.</p> <p>3. The monitor will turn off automatically after finishing, please turn on manually</p> <p>4. Check the firmware version whether the latest one</p> <p><b>Note:</b> 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.</p>
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## 5. How to Load LUT

### 5.1 SD card format

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

### 5.2 Max Files Limit Maximum 32 Lut files

### 5.3 File requirements

- The LUT file format suffix should be **.cube**
- Single file not exceeded to 7.9Mb
- Support LUT-3D-Size 16,17,32,33,64,65

**Remark:** LUT file name must be English or Arabic numerals

### 5.4 Steps for loading

#### 5.5.1 Make sure the SD card correctly insert

#### 5.5.2 Enter main menu “**User Option**”--**LUT**--**Lut Import** -- **Confirm** 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 32.

### PS: How to clear up the imported LUTs?

Insert a empty SD card to the monitor, enter main menu --LUT--Lut Import -- Confirm, the imported LUTs will be clear up.

## 6. Technical Parameters

<b>Panel Size</b>	7-inch (touch)
<b>Resolution</b>	1920 × 1200pixels
<b>Dot Pitch</b>	0.07875 (H) × 0.07875 (W) mm
<b>Color Display</b>	16.7M (8bit)
<b>Aspect Ratio</b>	16:10
<b>Brightness</b>	1200cd/m <sup>2</sup>
<b>Contrast</b>	1200:1
<b>Viewing Angle</b>	80°/80°(L/R) 80°/80°(U/D)
<b>Backlight</b>	LED
<b>Response Time</b>	Ton+Toff=25ms
<b>Adjustable Backlight</b>	Yes
<b>Input</b>	HDMI 2.0
<b>Output</b>	HDMI 2.0
<b>Other Interface</b>	SD Slot

<b>Audio</b>	3.5mm stereo headphone jack
<b>Power In</b>	DC IN 12V DC IN 5V (Type-C) Note: please use 5V/2A or more than 2A Type-C power supply
<b>Power Out</b>	DC OUT 8V (can be power for DSLR or mirrorless camera)
<b>HDMI Input/ Output Support Format</b>	480i/576i/480p/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) 3840×2160p (60/50/30/29.97/25/24/23.98) 4096×2160p (60/50/30/29.97/25/24/23.98)
<b>Power Input Voltage</b>	7~24V
<b>Power Consumption</b>	≦ 15W
<b>Unit Size (mm)</b>	186*117*21 (mm)
<b>Unit Weight</b>	389g
<b>Mount Points</b>	1/4-20 thread points (right, top, bottom)
<b>Working Temperature</b>	-20℃~50℃
<b>Storage Temperature</b>	-30℃~60℃

## 7. Trouble Shooting

### 7.1 Only black and white or monochrome picture:

- ① please check saturation, brightness & contrast adjustment.
- ② Please check "Check Field" 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**

Check if Volume control do not open, press the volume button, and try to increase 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.