6″ Touchscreen Monitor

F970 Install and Power Kit

User Manual

Foreword

Thank you for purchasing our 6-inch Full HD touch screen 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.
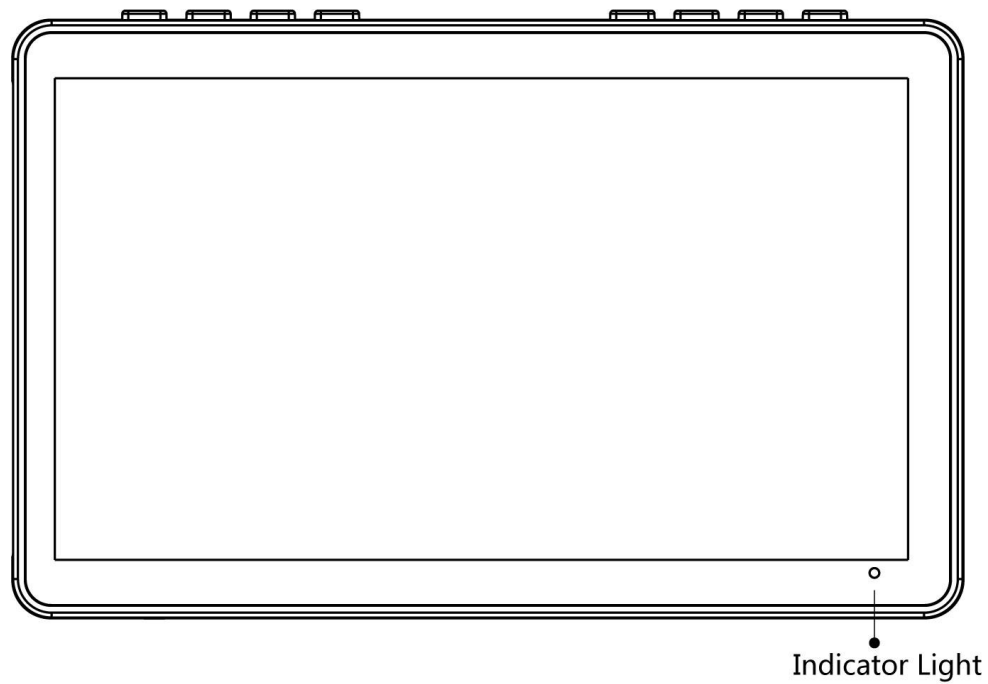
Key Features

➢ 6-inch 1920x1080 full HD IPS screen

➢ Touch screen and intuitive button operation, meet different needs.

➢ Supports 3D LUT Log to REC.709 and user 3D LUT upload (up to 32).

➢ Dynamic HDR monitoring, what you see is what you get

➢ 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, Vector scope, RGB Histogram, Focus Assist, Monochrome etc. functions, can help you accurately exposure and focus every shot.

➢ Multiple power supply modes, DC IN 12V, Type-C 5V and NP-F battery slot.

➢ Stereo Earphone output

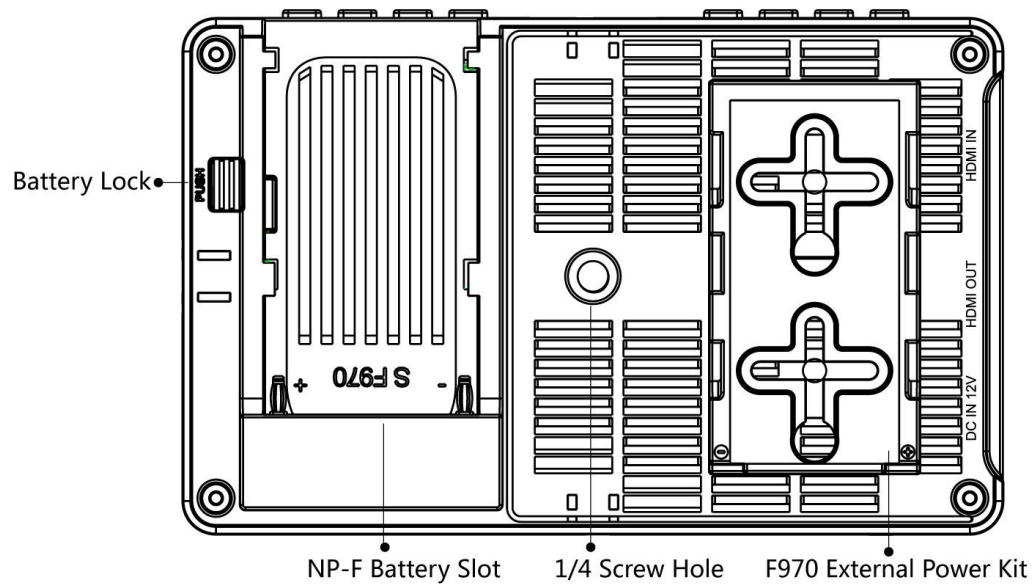➢ DC 8.4V power out to power your DSLR camera or mirrorless camera.

CONTENTS

1. Product Description

● Front Panel

Indicator Light

● Back Panel

Battery Lock

PUSH

S F970

DC IN 12V   HDMI OUT   HDMI IN

NP-F Battery Slot   1/4 Screw Hole   F970 External Power Kit

1.1 Button Instruction

1/4 Screw Thread

Button	Function when OSD is not displayed	Function when OSD is displayed
F1	Custom button F1	/
F2	Custom button F2	/
F3	Custom button F3	/
TOUCH	Touch function ON/OFF	/
MENU	Display OSD Main menu	Confirm Button
∨	Decrease the volume or backlight	Select next menu item; Decrease or adjust value of selected parameter
∧	Increase the volume or backlight	Select previous menu item; Increase or adjust value of selected parameter
EXIT/⏻	Power On/Off button; Return/Exit Menu	

1.2 Port Instruction (Bottom)

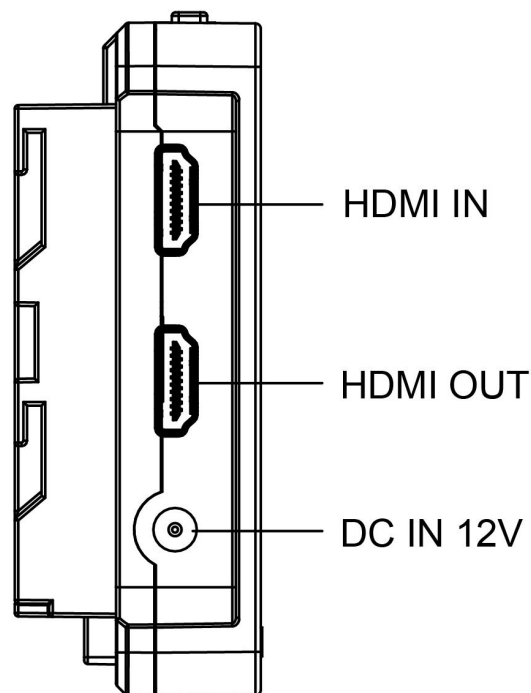DC OUT 8.4V   DC IN 5V (Type-C)

DC OUT 8.4V: 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.

🎧 **:** 3.5mm earphone port output

DC IN 5V (Type-C): Type-C power input. It is recommended to be

used for local power supply only. It is not recommended to connect

other devices to provide loop-out power.

1.3 Port Instruction (Left)

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

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

DC IN 12V: DC power input, polarity as the input power

1.4 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.

It is recommended to use standard original F970 battery.

When using battery power supply: two power output interfaces (DC OUT 8.4V 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.

(2) 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. The DC power adapter needs to be purchased separately.

When using external adapter input: two power output interfaces (DC OUT 8.4V 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.

(3) 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.

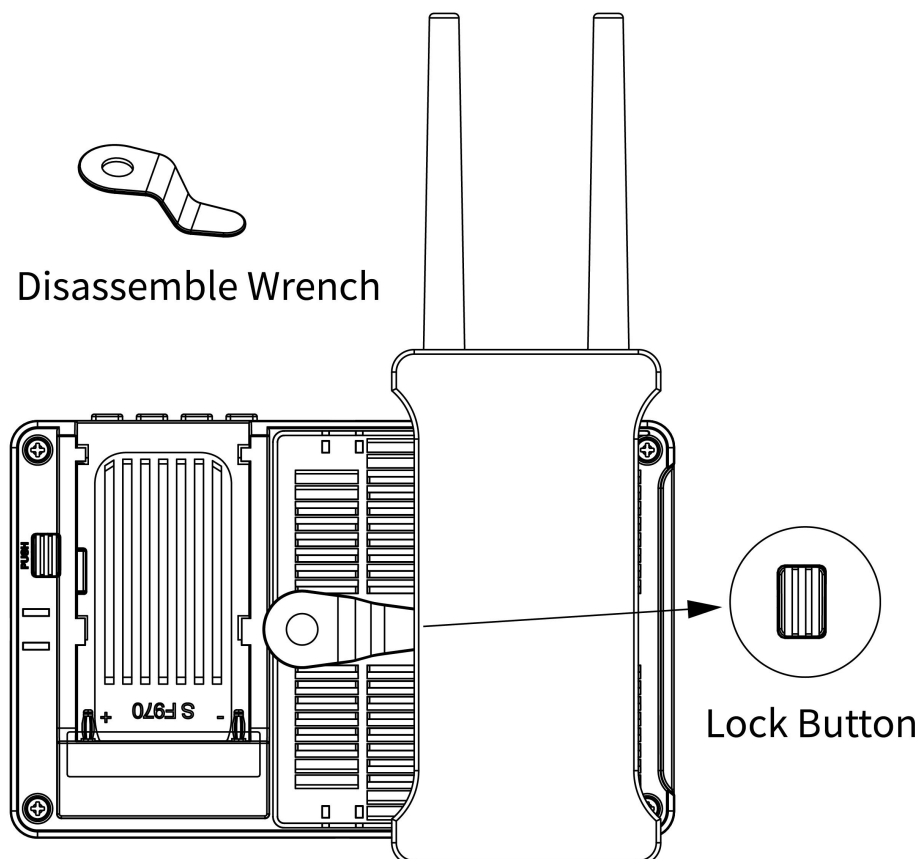## 1.5 Sony F970 Install and Power Kit

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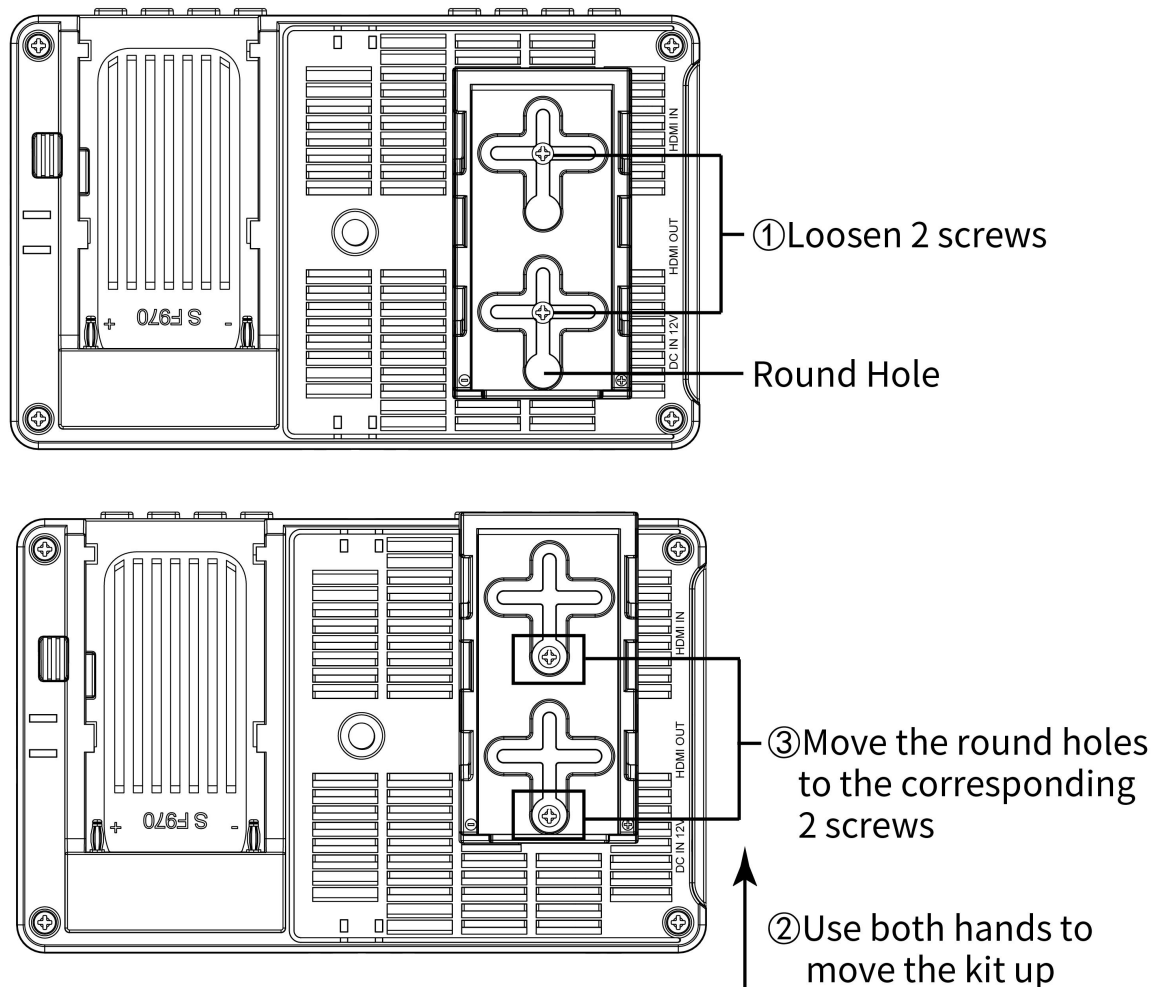
(2) Remove the external device: After the plug-in device is installed on the kit, if your plug-in device has a locking button, and it is more difficult to press it to remove it by hand, then you can use our assisting tool to disassemble.

Disassemble Wrench

Lock Button

(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.
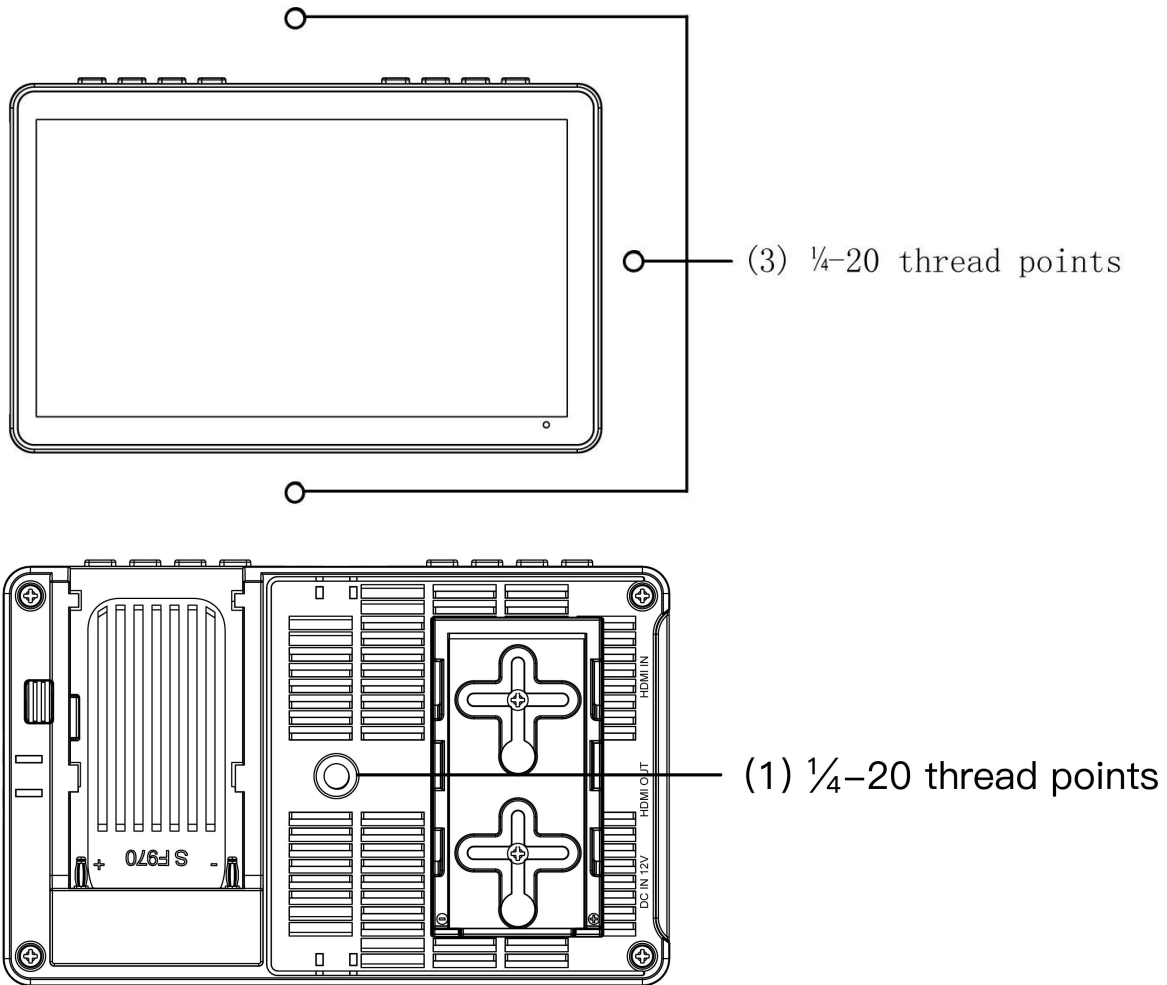
   (You can also install the kit upside down.)

①Loosen 2 screws

Round Hole

③Move the round holes to the corresponding 2 screws

②Use both hands to move the kit up

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.
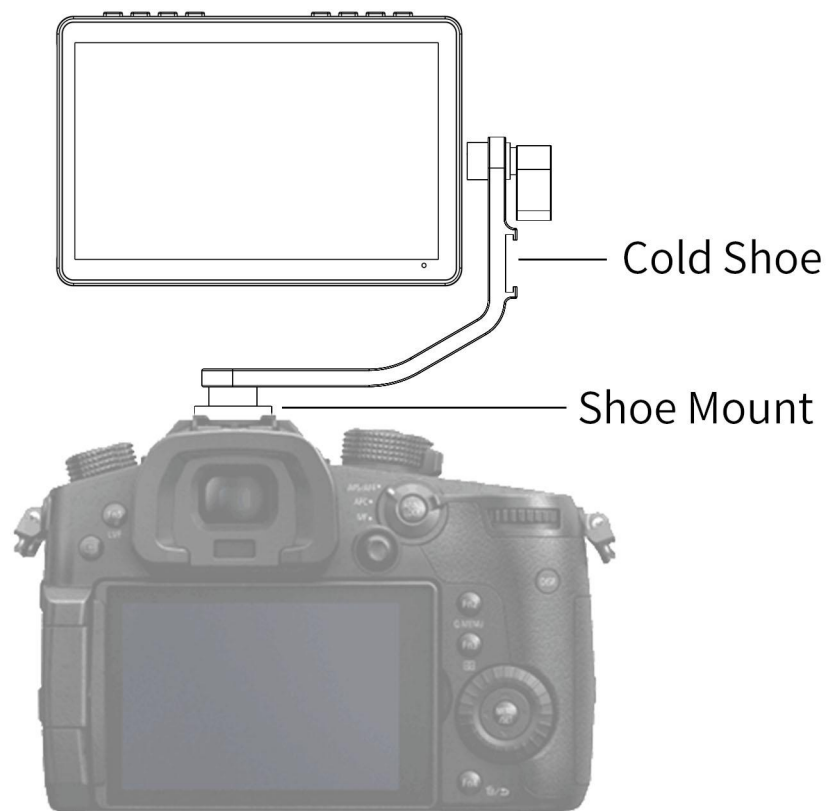
1.6 Mount Points

(1) ¼-20 Thread Points

There are (4) ¼-20 thread points (top, bottom, right side & Back center) can be easily connected to the hot shoe mount, tripod fixed installation.

(3) ¼-20 thread points
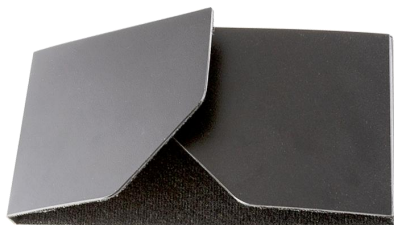
(1) ¼-20 thread points

(2) Tilt Arm Mounting

The monitor secures to your camera using the included Tilt Arm via shoe mount or 1/4"-20 thread. The Tilt Arm enables 180° 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.

Cold Shoe

Shoe Mount

1.7 Sunshade

① **Sunshade**

② **Sunshade Frame**

③ **Fixed Frame**

④ **Sunshade Application**

First lock the Sunshade Frame ②with 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.
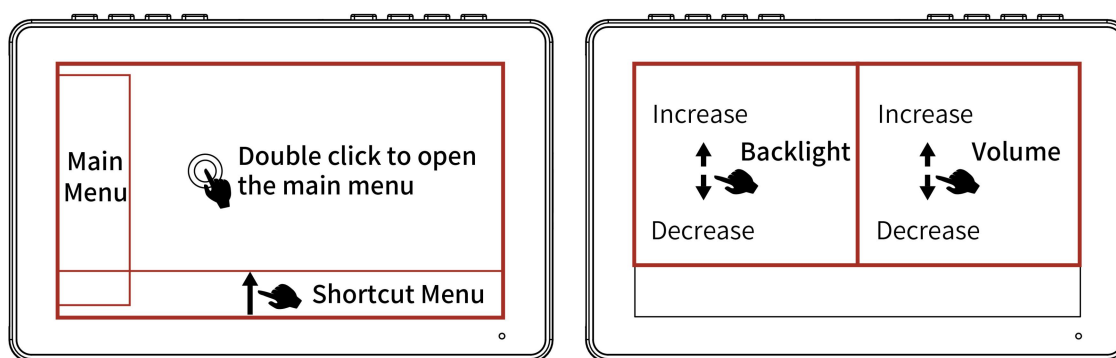
2. Menu Operation Instruction

After correctly connect to the power supply (red indicator),the monitor default to turn on automatically, the indicator turns Yellow, and then input HDMI signal, the indicator will turn Green from Yellow.

You can also set the power to Manually in menu System--Power setting. After setting, you need to long press EXIT/⏻ to turn on the monitor when plug the power supply.

(1). Touch screen menu operation (default touch screen is on)

①．Double-click on the screen to open the main menu (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. To exit the menu, click outside the menu to exit.

②. Swipe up from the bottom of the screen to open the shortcut menu and click on the corresponding menu to open or set the corresponding function. Double-click the shortcut menu function and select the function setting with the "<" or ">" key.

③．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) Button Menu Operation

①. When the menu is not displayed, directly press the "∨" or "∧"button to adjust the volume or backlight. You can set in the **Left Right Key Set** 🔲 of menu User Option 👥

②. Press "**MENU**" button to enter OSD main menu, press "∨"or "∧"button to select.

③. Press "MENU" button to enter secondary menu, then press "∨"or "∧"button to select items, after selected press MENU button to confirm and enter function menu, press "∨"or "∧"button to select the corresponding function or adjust the parameters，press MENU to confirm finally.

④. Press EXIT/⏻ button to return / exit the menu

3. Menu Function Instruction

Assist

All Waves	**On, Off** After turning on, waveform, vector, histogram and embedded audio will be shown.
Waveform	**On, Off** **Mode : RGB、YUV、Y** **Position X: 0~100** (moving the waveform horizontally) **Position Y: 0~100** (moving the waveform vertically) **Waves Trans. : Off, 25%, 50%, 75%** 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 lighting a chromakey or background.
Vector	**On, Off** **Position X: 0~100** (moving the Vector horizontally) **Position Y: 0~100** (moving the Vector vertically) shows how saturated the image is and where the pixels in the image land on the color spectrum.
Histogram	**On, Off** **Mode：RGB1、RGB2、Y** **Position X: 0~100** (moving the histogram horizontally) **Position Y: 0~100** (moving the histogram vertically) 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 Y Histogram: A quantitative tool to check the picture brightness, display different color for different brightness.
	On, Off **Color :** （Red, Green, Blue ）

Focus Assist	**Peaking Level : you can adjust the peaking level after turning on (1～10)**
	It highlights the areas that are in focus so you are able to quickly focus the camera and not miss crucial shots.
 Embedded Audio	**On, Off** **Position X: 0~100** (moving the audio level horizontally) **Position Y: 0~100** (moving the audio level vertically) The Audio Level Meters provide numerical indicators and headroom levels.
 Over Exposure	**On, Off** **Exposure Level : you can adjust the exposure level after turning on** (10~100) 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.
 Check Field	**On, Off** **Mode : Red, Green, Blue, Mono** When enabled, hue and saturation adjusted quickly and accurately
 False Colors	**On, Off** **Mode: Normal, ARRI** An image that depicts an object in colors that differ from those a photograph (a true color image) would show.

 Marker

  Grid	**On, Off** **Mode: 2x2,3x3,4x4,5x5,6x6,7x7,8x8,9x9, Custom**

		Rows: 2~9
		Rows: 2~9
		Columns: 2~9
		When selecting **Custom**, you can custom the rows and columns of the grid
		Color: Red, Green, Blue, Black, White, Gray
		The area of the picture can be divided into 4, 9, 16, 25, 36, 49, 64, 81 equal grids.
Safe Frames		**On, Off** **Mode: 80%, 85%, 90%, 93%, 96%, 2.35:1, 9:16** **Color: Red, Green, Blue, Black, White, Gray**
Center Marker		**On, Off** **Color : Red, Green, Blue, Black, White, Gray**
Ratio Marker		**On, Off** **Mode: 4:3、13:9、14:9、15:9、16:9、1.85:1、2.35:1, 9:16** **Color: Red, Green, Blue, Black, White, Gray** **Modified Mark : 0~5**

Image

Scan Mode	**Under Scan, Over Scan**
Aspect Ratio	**Auto, 16:9, 16:10, 4:3, 5:4, 1.85:1, 2.35:1, Full Screen** Provides a wide variety of aspect ratio to match different camera anamorphic lenses.
	On, Off

Anamorphic	**Mode：1.33X, 1.6X, 2.0X, 2.0X MAG, User** Under the **User**, 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.
Image Flip	**On, Off** **Mode: H Flip, V Flip, H_V Flip**
Zoom Mode	**On, Off** **Mode：2X、4X、9X、16X、User** Under the **User**, can be customized（100%~200%） It is HD signal in any part, an amplification for high quality close-up.
Image Freeze	**On, Off**
P2P	**On, Off** 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

LUT	**On, Off** After the LUT Switch is turned on, you can use the **Lut** **(SLOG2, SLOG3, LOGC, VLOG)**. **Lut Import：Confirm** **Lut Table** Show the 4 built-in Lut and the custom load Lut (up to 32）

	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
HDR	**On, Off** **Mode: HLG1, HLG2, HLG3** HDR can provide more dynamic range and the details of image, it is better to reflect the visual effects in the real environment.
Display Adjustment	**Backlight：0~100** 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 **Tint：0~100**
Color Adjustment	**Display Range: Auto, Limit, Full** This feature allows for the selection of a grayscale range. The Limited grayscale range is 16-235, and the Full grayscale range is 0-255. (Grayscale represents changes in image brightness, using varying gray levels to depict brightness in different image areas. In grayscale, brightness increases from black to white, typically denoted by a numerical range from 0 to 255, where 0 signifies black and 255 indicates white, and intermediate numbers indicate varying grayscale levels.)

	1. If the dark part of the picture lost, the details cannot be seen clearly. For example, the input signal is in the range of 0-255, but the monitor is set Auto or Limit, the brightness of 0-15 and 236-255 is removed, resulting the dark part details unclear. You can set to Full. 2. If the picture is gray, the black part turned gray. For example, the input signal is in the range of 16-235, but the monitor is set Full , resulting the black part turn gray. At this time,you can set to Auto or Limit. **Color Temp.：5600K, 6500K, 9300K, User** Under the **User**, the red, green and blue of the image can be adjusted (0~255), made the colors of the image achieve your favorite.
F **Shortcut Key**	All Waves, Waveform, Vector, Histogram, Embedded Audio, Center Marker, Safe Frames, Grid, Focus Assist, False Colors, Over Exposure, Anamorphic, Image Freeze, Check Field, Zoom Mode, Image Flip, Aspect Ratio, Ratio Marker To set the 3 shortcut custom button F1~F3 on the panel e.g.: enter the main menu, choose User Option -- **F** shortcut key-- F1 to show pop-up function items, select one of them, such as All Waves. The cursor will be changed to gray color after selected. Directly press F1 button of monitor panel to open All Waves Same setting for F2~F3
Left Right Key Set	**Volume, Backlight**

⚙ System

User Switch	**User Switch: 1~4** you can save the set menu as 1-4 and can be called directly next time
Language	English, 简体中文, Español, Português, Français, Nederlands、Deutsch, 日本語, 繁體中文, 한국어로, **русский язык,** Italiano
OSD Option	**OSD Time：Off, 15Sec, 30Sec, 45Sec** Select the display time of the menu on the screen **OSD Trans: Off, 25%, 50%, 75%** Adjust the transparency of the menu picture background on the screen **No Signal: Red, Green, Blue, Black, White, Gray** Can be change the background color of screen when no signal
EDID Settings	**EDID Settings: 2.0, 1.4** Compatible with resolution of different camera/device Default to 2.0 (if set 1.4 manually, then input 4K60 signal, you need to set to 2.0 again)
Volume	**On, Off** 0~100 Adjusting the speaker volume
Power Settings	**Power on: Auto, Manual** Default to Auto. If set Manual, please press EXIT/⏻ key to turn on after the power plug in.
Reset	Select **Reset** and press MENU button **Confirm**, the system back to original setting.

	Firmware Version (display the version number)
 Firmware Update	**Firmware Update** **Confirm** How to upgrade? 1. USB flash driver format Support FAT32 2. After copying the update file to USB flash driver insert to Type-C to USB adapter and connect with the TYPE-C interface of monitor , press MENU key **Confirm** to update. 3. The monitor will turn off automatically after finishing, please turn on manually 4. Check the firmware version whether the latest one

4. How to Load LUT

4.1 USB flash driver format FAT32

4.2 Max Files Limit Maximum 32 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 16,17,32,33,64,65

Remark: LUT file name must be English or Arabic numerals

4.4 Steps for loading

4.4.1 Make sure USB flash driver insert to Type-C to USB adapter and connect with the TYPE-C interface of monitor

4.4.2 Enter main menu --LUT--**Lut Import -- click Confirm** to load

the monitor will auto detect the USB flash driver

If there is valid lut file in USB flash driver, 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 USB flash driver to the monitor, enter main menu
--**LUT**--**Lut Import -- click Confirm,** the imported LUTs will be clear up.

5. Technical Parameters

Panel Size	6" touch screen
Resolution	1920 × 1080 pixels
Dot Pitch	0.069 (H) × 0.069 (V) mm
Pixel Density	367PPI
Aspect Ratio	16:9
Brightness	450cd/m^2
Contrast	1000:1
Viewing Angle	80°/80°(L/R) 80°/80°(U/D)
Backlight	LED
Adjustable	Yes
Input	HDMI
Output	HDMI, 3.5mm stereo headphone jack
Power In	DC IN 12V, Barrel (5.5mm outer, 2.1mm inner) DC IN 5V (Type-C) Note: please use 5V/2A or more than 2A
Power Out	DC OUT 8.4V, Barrel (5.5mm outer, 2.1mm

HDMI Input/ Output Support Format	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)
Power Input	7～24V
Power	≦8W
Unit Size (mm)	148Lx93Hx21.75D (mm)
Unit Weight	245g (with F970 external install and power
Mount Points	¼-20 thread points
Working	-20℃～50℃
Storage	-30℃～60℃

6. Trouble Shooting

6.1 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.

6.2 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.

6.3 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.