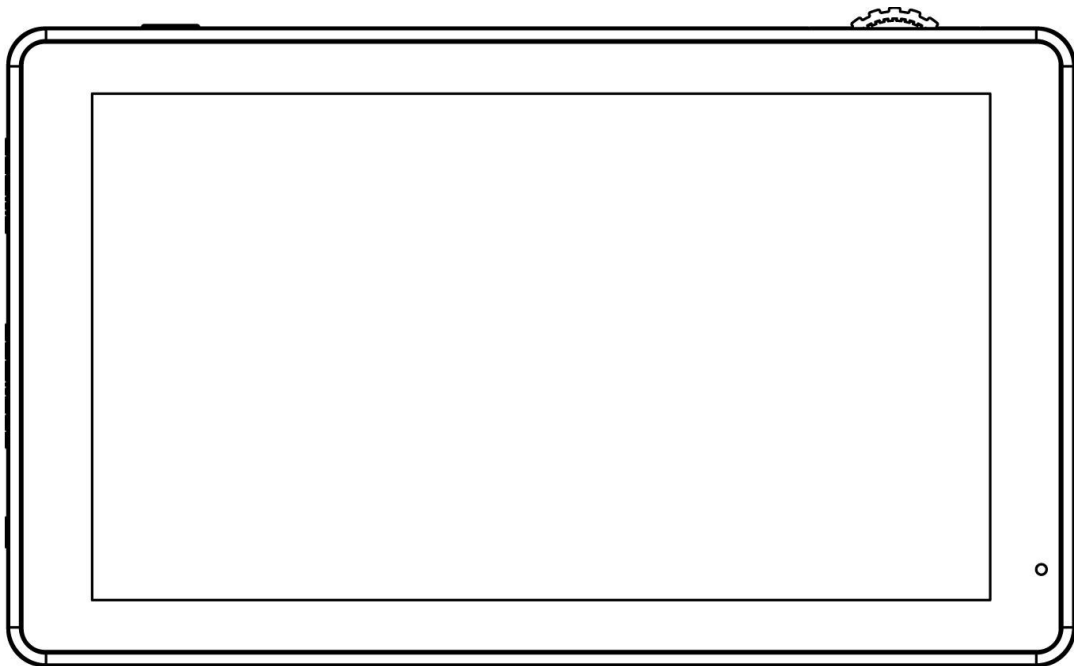


# **5.5" Ultra-bright Field Monitor**

F970 Install and Power Kit



## **User Manual**

## **Product Overview**

Thank you for using our 5.5-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. 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

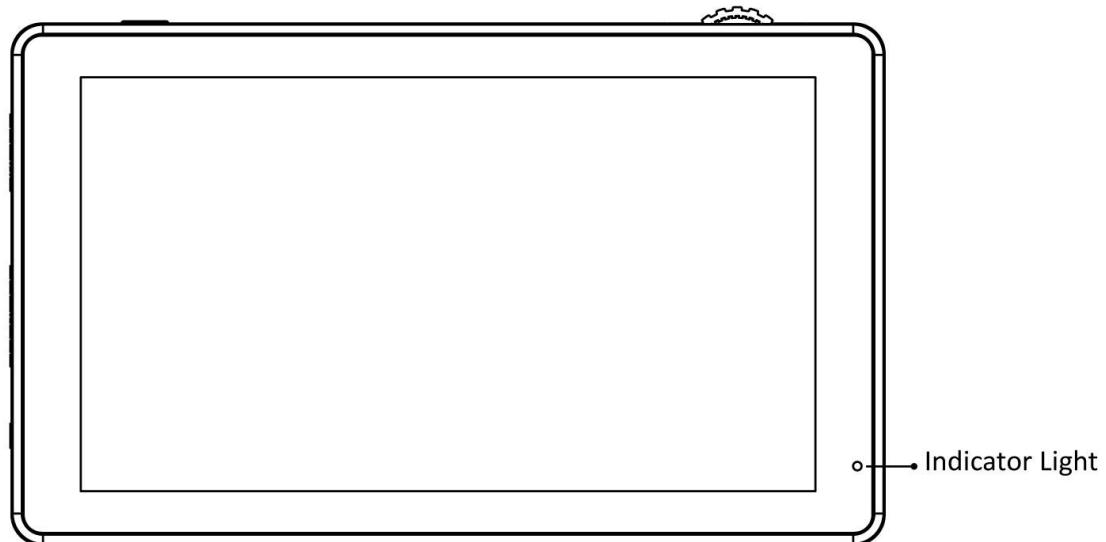
- ✎ 1920x1080 full HD IPS screen
- ✎ Touch screen menu operation, improve shooting efficiency
- ✎ Ultra-bright 3000nit, clearly visible in the sun
- ✎ Light sensor auto dimming
- ✎ Support HDR monitoring, what you see is what you get
- ✎ Support 3D LUT Log to REC.709 and user 3D LUT upload
- ✎ Sony F970 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

<b>1. Product Description</b>	<b>4</b>
1.1 Front Panel Instruction	4
1.2 Rear Panel Instruction	4
1.3 Top Button Instruction	5
1.4 Bottom Port Instruction	6
1.5 Left Port Instruction	6
1.6 Power Supply Way	7
1.7 Sony F970 Install and Power Kit	7
1.8 Installation Way	10
<b>2. Menu Operation Instruction</b>	<b>10</b>
<b>3. Menu Function Instruction</b>	<b>12</b>
<b>4. Support Formats</b>	<b>17</b>
<b>5. Technical Parameters</b>	<b>17</b>
<b>6. Trouble Shooting</b>	<b>18</b>

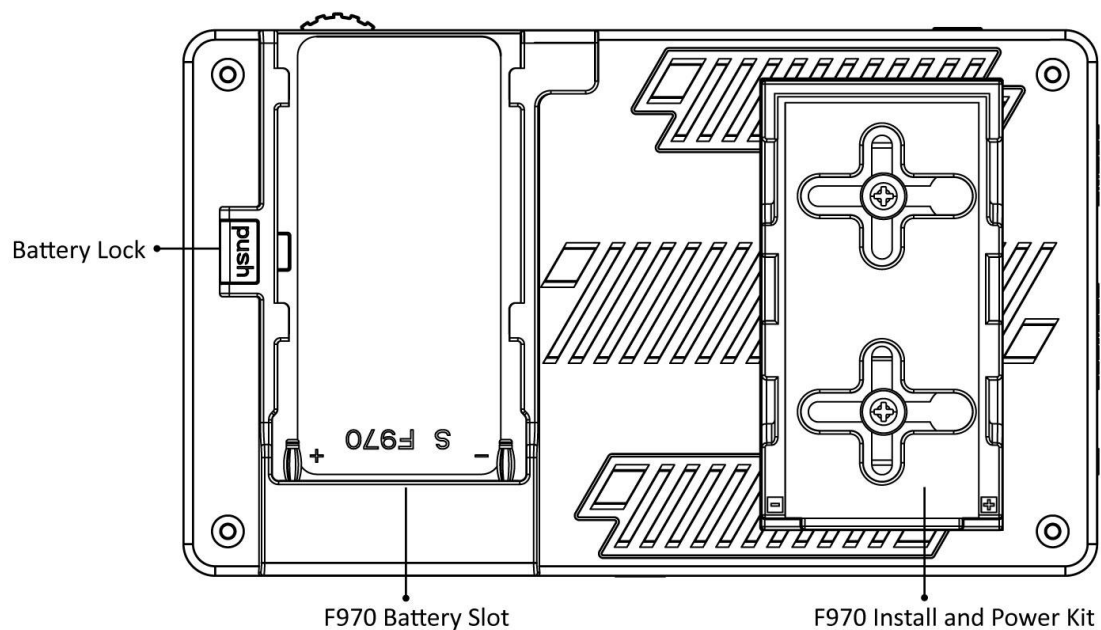
# 1. Product Description

## 1.1 Front Panel Instruction



**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.

## 1.2 Rear Panel Instruction

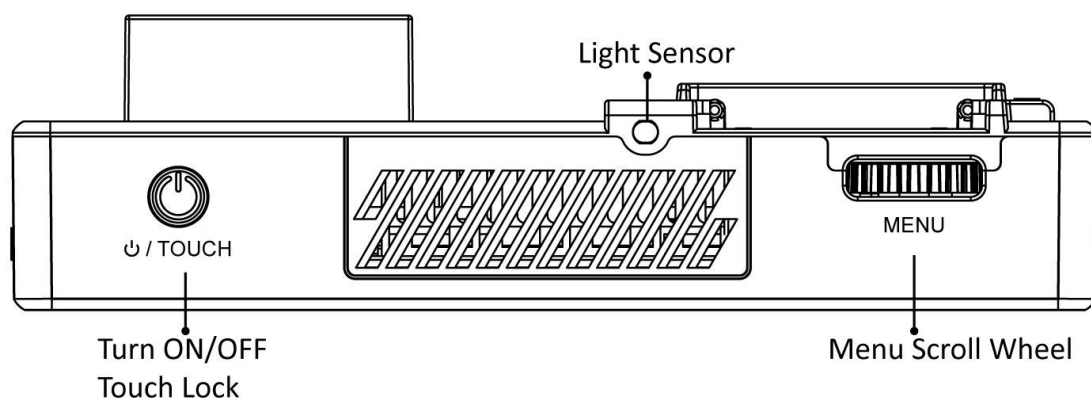


**Battery Lock:** The PUSH lock will lock after the battery installed, please press PUSH firstly before remove the battery.


**F970 Battery Slot:** It is applicable to install NP-F series of batteries.

**F970 Install and Power 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: **1.7 Sony F970 Install and Power Kit**)

### 1.3 Top Button Instruction



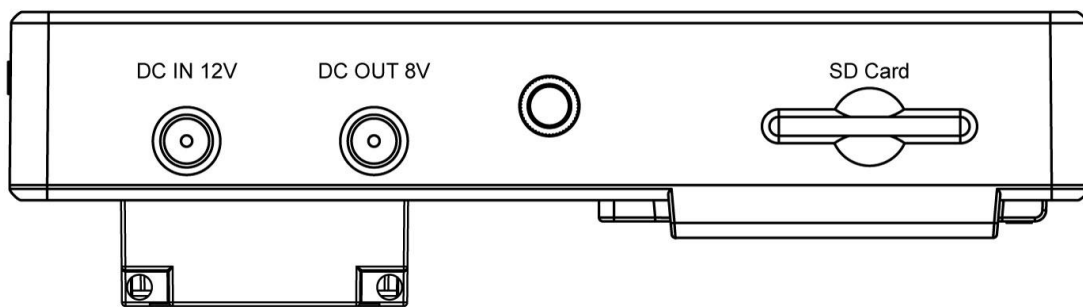
**⏻ / TOUCH** : Long press to turn on and off the power; short press to turn on and off the screen touch function

**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.

**MENU:** Long press to open the main menu and short press to open the shortcut menu. Rotate the wheel to select a menu item, press it again to open the corresponding menu function.

(The details see: **2. Menu Operation Instruction**)

## 1.4 Bottom Port Instruction



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

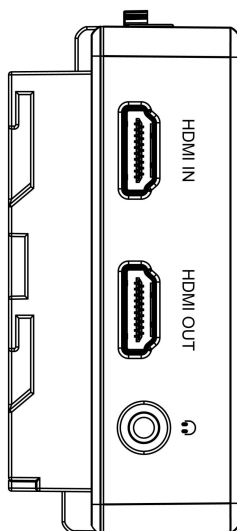
**DC OUT 8V:** DC power output, polarity as the output power



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

**SD Card:** SD card slot, 3DLUT upload via SD card and for firmware upgrade

## 1.5 Left Port Instruction



**HDMI IN:** HDMI signal input, up to 4K@30Hz

**HDMI OUT:** HDMI signal output, up to 4K@30Hz

 : 3.5mm earphone port output


## 1.6 Power Supply Way

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

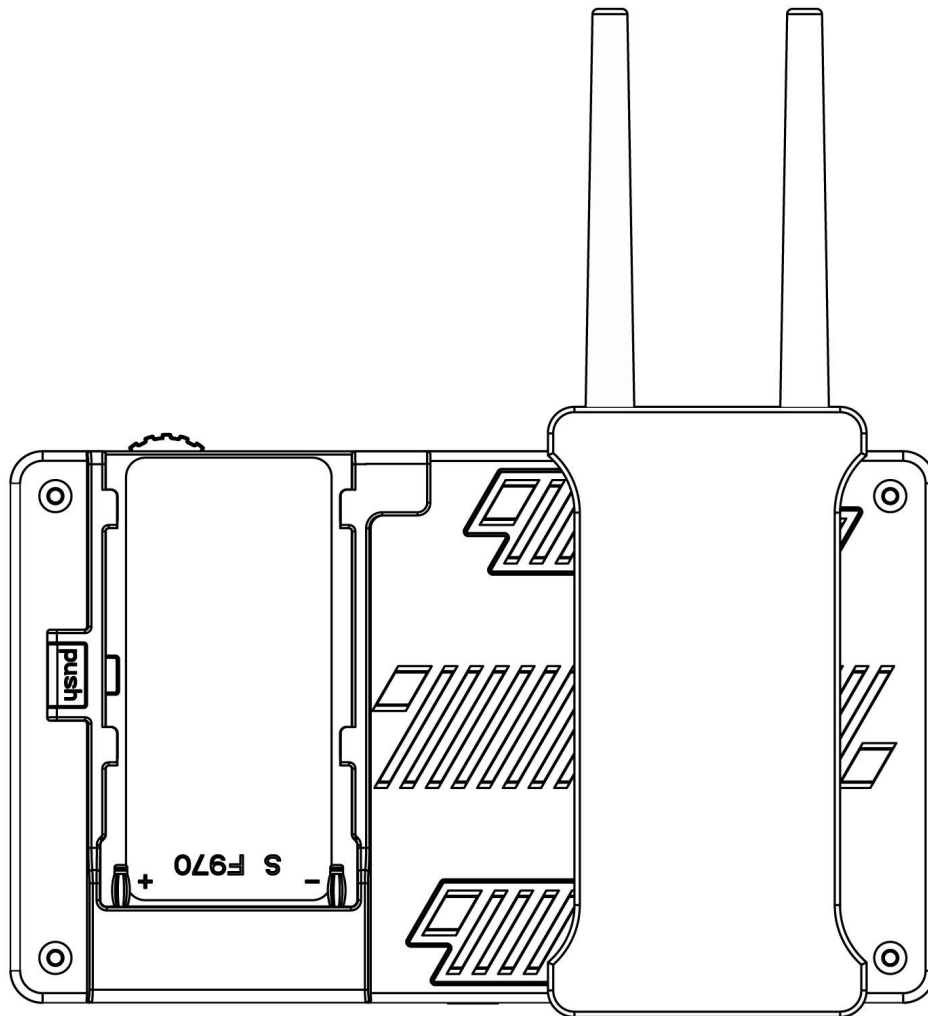
## 1.7 Sony F970 Install and Power Kit

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.**

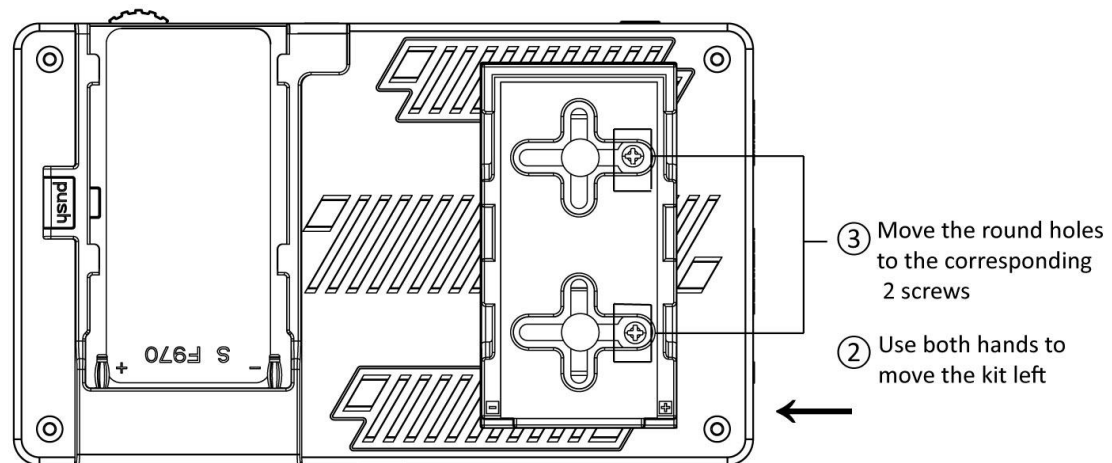
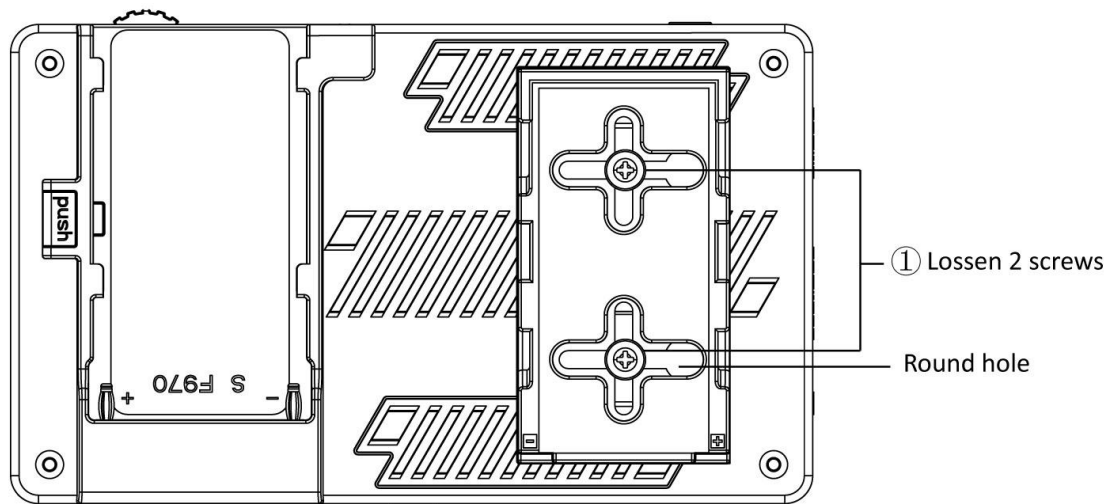


**1) Just move the kit:** Loosen 2 screws, and then adjust up / down / left / right.

**(2) Steps to remove the kit:**

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

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



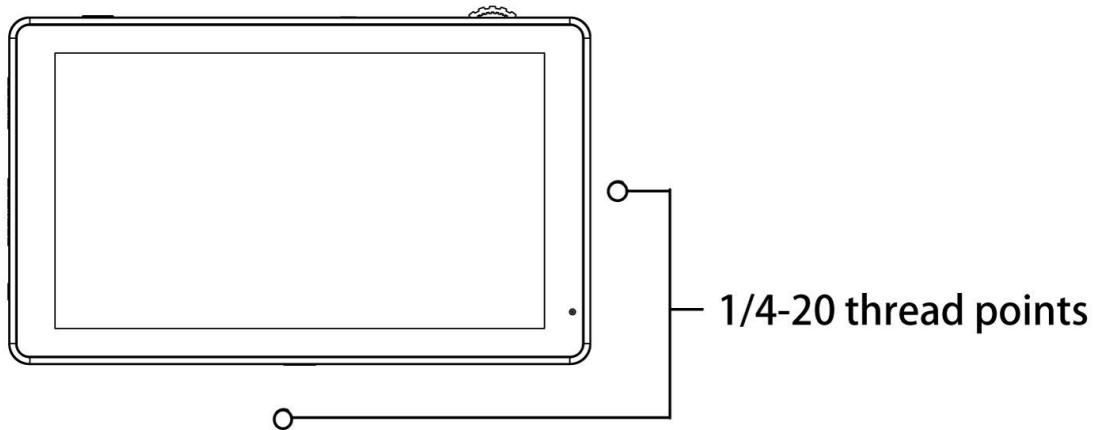
- ④. Then gently lift the kit upwards and carefully disassemble the 2P power cord.
- ⑤. Then remove the 2 screws.

**(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.


## 1.8 Installation Way


### Mount Points

There are (2) 1/4-20 thread points (bottom & right side) can be easily connected to the hot shoe mount, tripod fixed installation.




## 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.

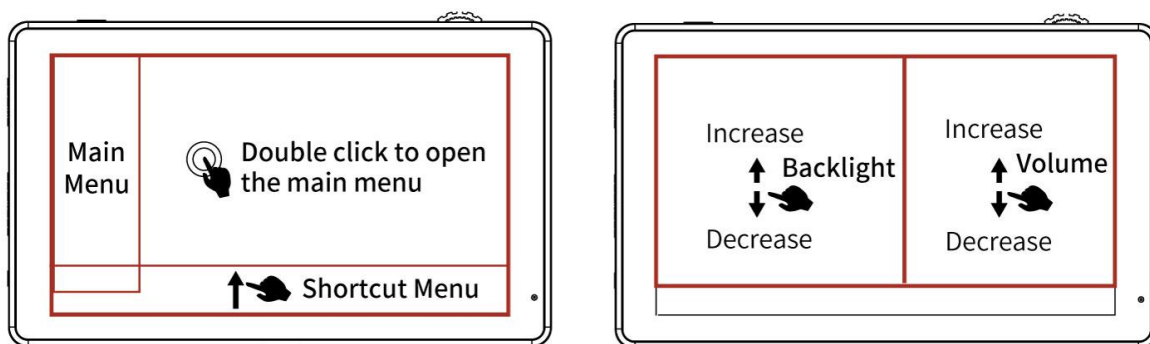
After startup, short press  / TOUCH to select to turn the screen touch function on or off.

### 2.1 Touch screen menu operation (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 the main menu  menu or click the touch screen outside the menu.

- ②. When the menu is not displayed, swipe up from the bottom of the screen to open the shortcut menu, and click the shortcut menu function to open or set the function. Double-click the shortcut menu function, through the menu box "<" or ">" button, you can customize the function settings. Click the touch screen outside the shortcut menu to exit the shortcut menu display.
- 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 (left side of the screen), rotate the wheel to select the secondary menu. After selection, press the wheel to enter the secondary menu, and then rotate the wheel to select the secondary menu function. After selection, press the wheel to

enter the secondary menu function, rotate the wheel to adjust the parameters. After the adjustment, press the wheel to confirm and exit the secondary menu function, rotate the wheel to enter the next adjustment. When finished, long press the MENU wheel to exit the main menu.

- 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. When finished, long press the MENU wheel to exit the shortcut menu.

### 3. Menu Function Instruction



<b>All Waves</b>	<b>OFF, ON</b> After turning on, waveform, vector, histogram and embedded audio will be shown.
<b>Parade</b>	<b>OFF, RGB, YUV, Y</b> 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.
<b>Vector</b>	<b>OFF, ON</b> Shows how saturated the image is and where the pixels in the image land on the color spectrum.
<b>Histogram</b>	<b>OFF, ON</b>

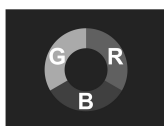
<b>Focus Assist</b>	<b>OFF, ON</b> After the Focus Assist is turned on, the <b>Focus Level (1~10)</b> and <b>Focus Color (yellow, red, green, blue, white)</b> can be adjusted.
<b>Audio Meter</b>	<b>OFF, ON</b>
<b>Zebra</b>	<b>OFF, ON</b> After the Zebra is turned on, the <b>Zebra Value (1%~100%)</b> can be adjusted.
<b>Monochrome</b>	<b>OFF, gray, red, green, blue</b>
<b>False Color</b>	<b>OFF, type 1, type2</b>
<b>Return</b> ←	Back to the previous OSD menu




<b>Nine Grid</b>	<b>OFF, ON</b>
<b>Safety Marker</b>	<b>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</b>
<b>Center Marker</b>	<b>OFF, ON</b>
<b>Marker Mat</b>	<b>OFF, 16:9, 16:10, 4:3, 1.85:1, 2.35:1, 2.41:1, 1.9:1, 5:4, 1:1.9</b> After the Marker Mat is turned on, the <b>Marker Mat Alpha (0%, 25%, 50%, 75%)</b> can be adjusted.
<b>Marker Color</b>	<b>yellow, red, green, blue, white, black</b>
<b>Return</b> ←	Back to the previous OSD menu



<b>Scan Mode</b>	<b>Under Scan, Over Scan</b>
<b>Video Aspect</b>	<b>auto, 16:9, 16:10, 4:3, 5:4, 1.85:1, 2.35:1, stretch, user</b> Under the “user”, you can customize the <b>Video Width (100% ~ 200%)</b> , <b>Video Height (100% ~ 200%)</b> .
<b>Anamorphic Mode</b>	<b>OFF, 1.25x, 1.33x, 1.5x, 1.6x, 1.8x, 2.0x, 2.0x mag</b>
<b>Auto Mirror</b>	<b>OFF, ON</b> After turning on, the image will automatically adjust upside down.
<b>Flip H</b>	<b>OFF, ON</b>
<b>Flip V</b>	<b>OFF, ON</b>
<b>Zoom Times</b>	<b>OFF, 100%~500%</b>
<b>Freeze</b>	<b>OFF, ON</b>
<b>Pixel to Pixel</b>	<b>OFF, ON</b>
<b>Return</b> ←	Back to the previous OSD menu




<b>HDR</b>	<b>OFF、HLG 2020、HLG 709、HLG P3</b>
<b>Lut Switch</b>	<b>OFF, ON</b> After the LUT Switch is turned on, you can use the <b>Lut (SLOG2, SLOG3, LOGC, VLOG)</b> .
<b>Lut Import (SD)</b>	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

	<p>LUT file. (up to import 50 LUTs)</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>
<b>Colortemp</b>	<p><b>5600K, 6500K, 9300K, user</b></p> <p>Under the “<b>user</b>”, the <b>red</b>, <b>green</b>, and <b>blue</b> values of the image can be adjusted.</p>
<b>Backlight Mode</b>	<p>auto, manual</p> <p>when selecting <b>auto</b> mode, the device will adjusting the backlight automatically according to the around environment</p>
<b>Backlight</b>	<b>0~100</b>
<b>Brightness</b>	<b>0~100</b>
<b>Contrast</b>	<b>0~100</b>
<b>Saturation</b>	<b>0~100</b>
<b>Hue</b>	<b>0~100</b>
<b>Sharpness</b>	<b>0~100</b>
<b>Return</b> 	Back to the previous OSD menu




<b>Wheel</b>	<p><b>Backlight, Volume</b></p> <p>After selecting the wheel option, you can click the “&lt;” or “&gt;” 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).</p>
<b>Language</b>	中文, 繁體中文, 日本語, <b>Deutsch, Français,</b>



	<b>Italiano, Español, 한국, Русский, English</b>
<b>Transparency</b>	<b>OFF, low, middle, high</b>
<b>OSD Time</b>	<b>5s, 10s, 15s, 20s, 25s, always</b>
<b>Volume</b>	<b>0~100</b>
<b>Mute</b>	<b>OFF, ON</b>
<b>Fan Speed</b>	<b>0~100%</b> When the backlight value is 30~50, the fan speed range is 50%~100%; the backlight value is 50~80, the fan speed range is 70%~100%
<b>Reset</b>	<b>OFF, ON</b> After selecting the reset option, you can click the “<” or “>” key in the reset option or rotate the wheel to restore the factory settings.
<b>Firmware Update</b>	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. <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.
<b>Return</b> 	Back to the previous OSD menu



	Exit the menu
---	---------------

## 4. Support Formats

<b>HDMI Input/ Output Support Format</b>	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 (30/29.97/25/24/23.98)
--	---

## 5. Technical Parameters

<b>Panel Size</b>	5.5" touch screen
<b>Resolution</b>	1920 x 1080 pixels
<b>Dot Pitch</b>	0.069(L) x 0.069(W) (mm)
<b>Aspect Ratio</b>	16:9
<b>Brightness</b>	3000cd/m <sup>2</sup>
<b>Contrast</b>	1000:1
<b>Viewing Angle</b>	80°/80°(L/R) 80°/80°(U/D)
<b>Backlight</b>	LED
<b>Input</b>	HDMI
<b>Output</b>	HDMI
<b>Audio</b>	3.5mm Stereo Headphone
<b>Power Out</b>	DC OUT 8V, Barrel (5.5mm outer, 2.1mm inner; Power DSLR or mirrorless camera)
<b>Input Voltage</b>	7~24V
<b>Power Consumption</b>	≤20W
<b>Unit Size</b>	142Lx86Hx28D (mm)
<b>Unit Weight</b>	270g
<b>Mount Points</b>	(2) ¼-20 thread points (right, bottom)
<b>Working Temperature</b>	-20℃~70℃
<b>Storage Temperature</b>	-30℃~80℃

## **6. Trouble Shooting**

### **6.1 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.

### **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.