# 7” Daylight Viewable Touch Monitor

HDMI2.0|3D LUT|HDR


# 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. The monitor is equipped with dual battery plates; 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.

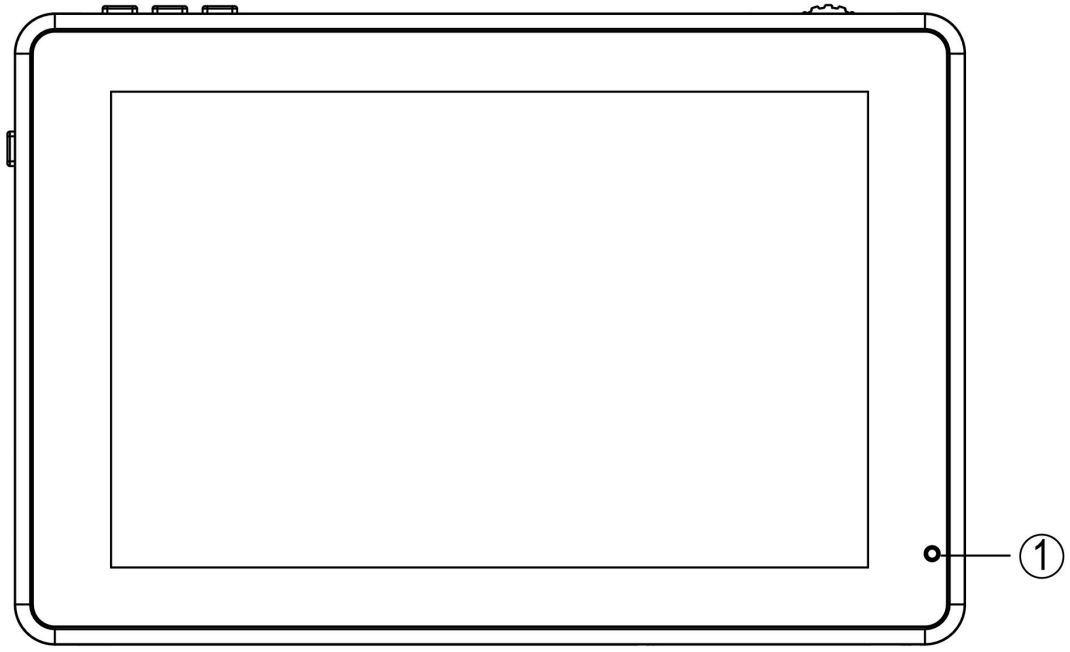
# Features

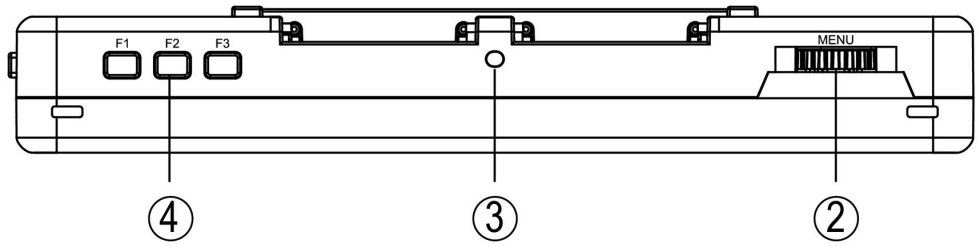
- Touch screen menu operation
- Support HDR monitoring
- Support 3D LUT Log to REC.709 and user 3D LUT upload
- 1920x1200 full HD IPS screen
- 2200nits Daylight Viewable (Light Sensor)
- All Waves display, Parade, Vector, RGB Histogram functions
- Histogram is a quantitative tool to inspect the image brightness, to guide the exposure control
- Focus Assist (red, green, blue, white, yellow five peaking colors optional)
- Audio Meter
- Zebra and False Color function, convenient to guide the using light when shooting and the post production
- Monochrome (gray, red, green, blue)
- Image Zoom-in function
- Anamorphic Mode
- Image Flip H and Flip V
- Image Freeze
- Pixel to Pixel
- Marker Mat, Center Marker and Safety Marker
- Brightness, Contrast, Sharpness, Hue, Saturation and Color Temp Adjustment.
- Stereo Earphone output
- DC 8.4V power out to power your DSLR camera or mirrorless camera

# CONTENTS

# 1. Product Profile

## 1.1 Button Instruction




①**. Indicator Light:** After connecting the power, the indicator light is on (red). It turns yellow after the monitor turning on. After the signal is connected, it turns green.

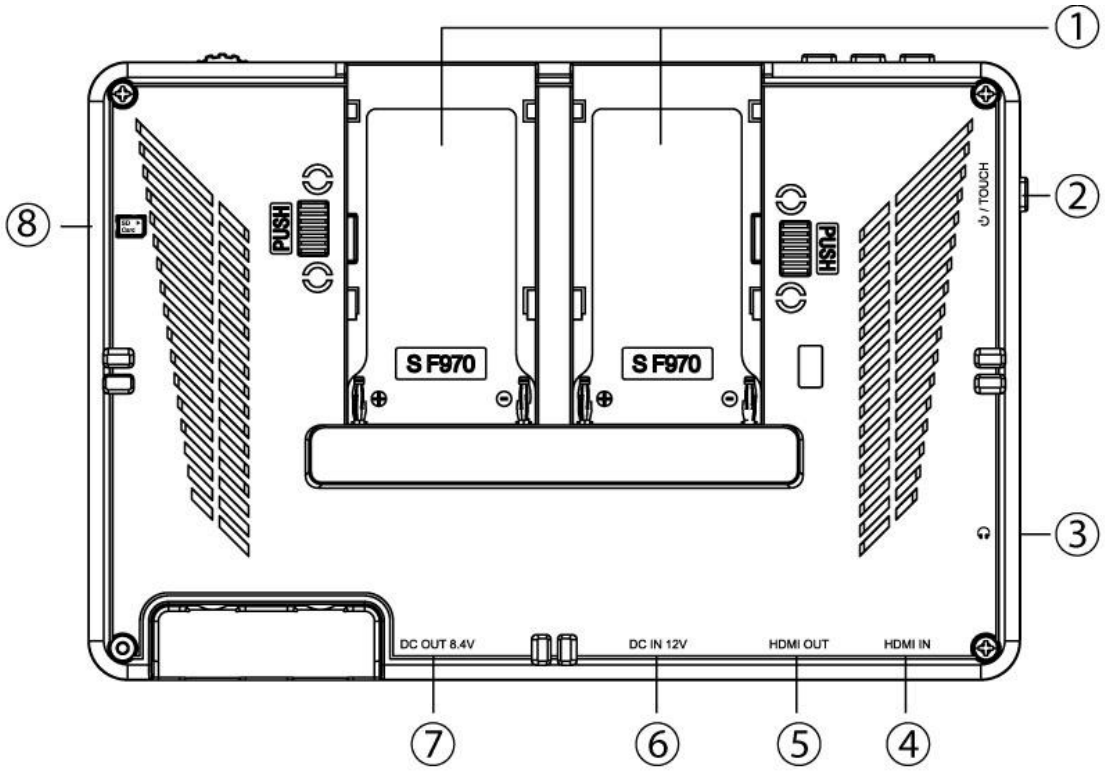
②**. MENU:** See details: **3.1 MENU Wheel Menu Operation in 3. Menu Operation Instruction.**

③**. Light Sensor:** Set the backlight to Auto via **User--Options--**

**Display Adjustment--Backlight,** the backlight can be adjusted automatically by the light sensor.

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

## 1.2 Port Instruction




①. Dual F970 Battery Plates

②. Power / Touch Function Button

Long press to turn on / off; short press to turn on / off the screen touch function.

③. 3.5mm Headphone Jack

④. HDMI IN

⑤. HDMI OUT

⑥. DC 12V Power Input

⑦. DC OUT 8.4V Power Output

Connect the optional dummy battery cable to power camera.

⑧. SD Card Slot

3DLUT upload via SD card and for firmware upgrade

## 1.3 Power Supply Way

(1) The rear cover of the monitor is equipped with dual NP-F battery slot, which is applicable to NP-F series of batteries.

**Sony NP-F battery slot 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.**

**●Battery switching instruction**

- When the battery/batteries is/are placed in the battery slot(s), battery icon will appear on the upper right of the screen.
- **White battery icon**: working; Gray battery icon: not working.
- **Manually switching**: Tap the gray battery icon and it will be switched to a working state, and it will be turned white.
- **Automatically switching:** Automatically switch to another charged battery when one battery is exhausted.

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

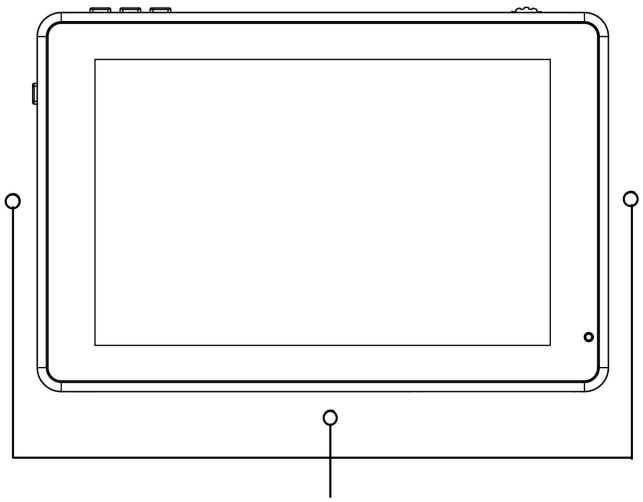
monitor, DC 7~24V Input.

(3) **DC OUT 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.

## 1.4 Mount Points

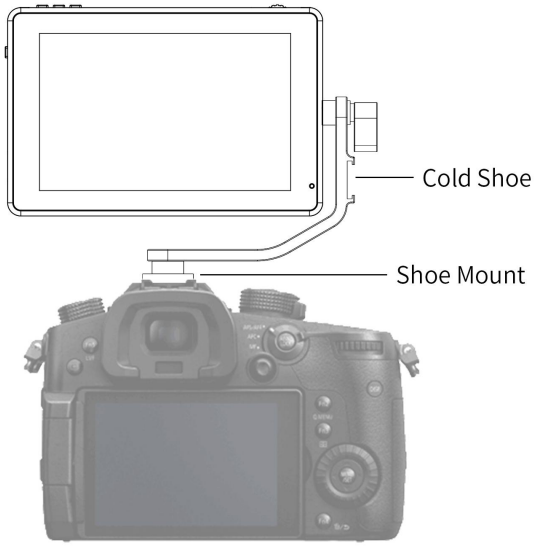
There are (3) ¼-20 thread points (bottom, right & left) can be easily connected to the hot shoe mount, tripod fixed installation.



(3) ¼–20 thread points

### 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 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). The monitor default to turn on automatically, the indicator turns Yellow, and then input HDMI signal, the indicator will turn Green.

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

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

**There are two ways to set the touch function**

- Short press ⏻ / TOUCH to turn the screen touch function on or off.
- You can set any of the top F1~F3 of the monitor as the touch

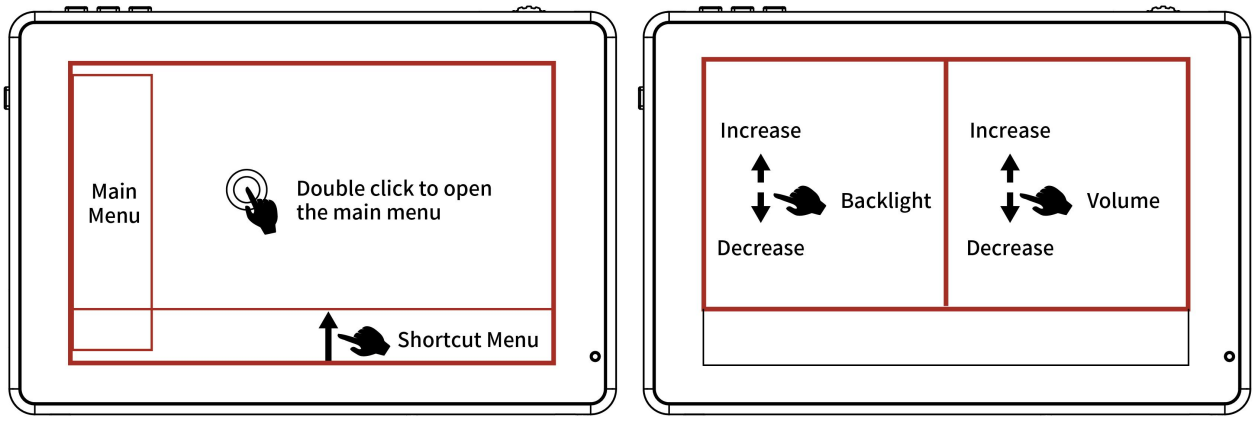
switch, enter the menu - **User Options - Shortcut Key - F1/F2/F3- Touch Switch,** and directly press the F shortcut key to turn on or off the touch function after setting.

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.

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:**



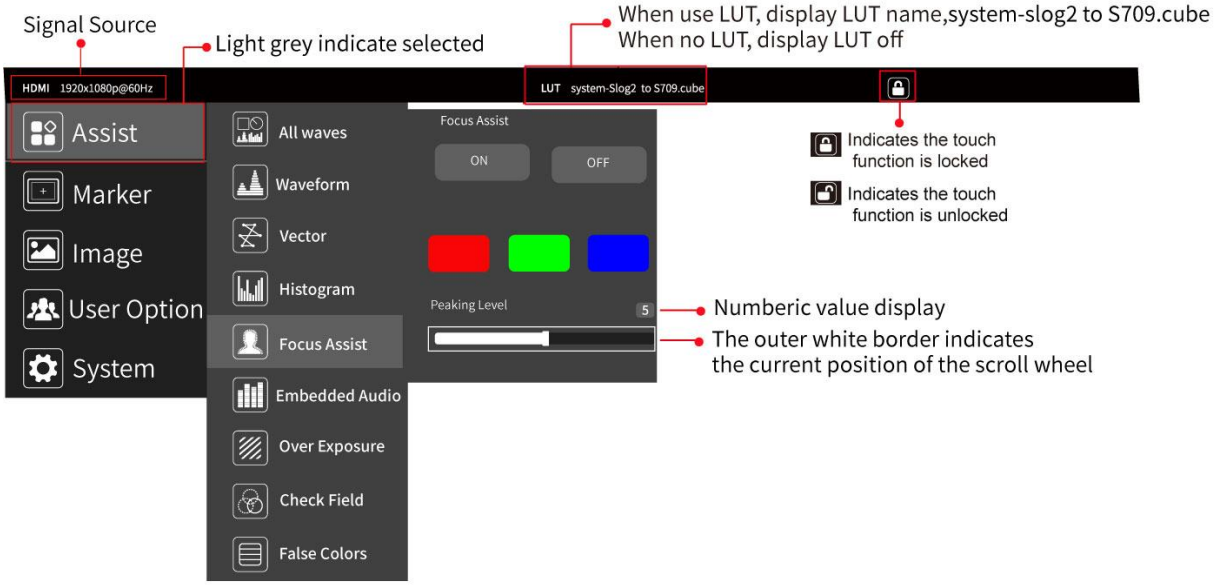
## 2.2 MENU Wheel Menu Operation

①. When the menu is not displayed, directly rotate menu knob to adjust the volume or backlight. You can set in the **Left Right Key Set of menu User Option**

②. Gently 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. Long press the MENU wheel to return or exit the menu

## 2.3 MENU Interface




# 3. Menu Function Instruction

## Assist

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

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

## Marker

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

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

## Image

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|  <br>**Scan Mode** | **Under Scan, Over Scan** |
|  <br>**Aspect Ratio** | **Auto, 16:9, 16:10, 4:3, 5:4, 1.85:1, 2.35:1, Full Screen**<br>Provides a wide variety of aspect ratio to match different camera anamorphic lenses. |
|  <br>**Anamorphic** | **On, Off**<br>**Mode：1.33X, 1.6X, 2.0X, 2.0X MAG, User**<br>Under the **User**, can be customized（1.20X～2.00X） |

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| | 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** | **Auto, Manual** (when select Manual, you can set below options)<br>**On, Off**<br>**Mode: H Flip, V Flip, H_V Flip** |
|  **Zoom Mode** | **On, Off**<br>**Mode：2X、4X、9X、16X、User**<br>Under the **User**, can be customized（100%~200%）<br>It is HD signal in any part, an amplification for high quality close-up. |
|  **Image Freeze** | **On, Off** |
|  **P2P** | **On, Off**<br>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

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

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| | 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 |
|  <br>**HDR** | **On, Off**<br>**Mode: HLG1, HLG2, HLG3**<br>HDR can provide more dynamic range and the details of image, it is better to reflect the visual effects in the real environment. |
|  <br>**Display Adjustment** | **Backlight：Auto, Manual**<br>When select Auto, the backlight will adjust automatically according to the around environment.<br>Adjust the screen brightness (**0~100), default to 60**<br>**Brightness：0~100, default to 50**<br>Adjust the image brightness<br>**Contrast：0~100, default to 50**<br>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.<br>**Saturation：0~100, default to 50**<br>Adjustment of color concentration<br>**Tint：0~100, default to 50** |
|  <br>**Color Adjustment** | **Display Range: Auto, Limit, Full**<br>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 |

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| | 255, where 0 signifies black and 255 indicates white, and intermediate numbers indicate varying grayscale levels.)<br>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.<br>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.<br><br>**Color Temp.：5600K, 6500K, 9300K, User**<br>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. |
|  <br>**Shortcut Key** | All Waves, Waveform, Vector, Histogram, Embedded Audio, Center Marker, Safe Frames, Grid, Focus Assist, False Colors, Zebra Pattern, Anamorphic, Image Freeze, Check Field, Zoom Mode, Image Flip, Aspect Ratio, Ratio Marker, LUT, Touch Switch<br>Set the function for F1~F3 key which on the top of the monitor for example, choose "Histogram" in F1, exit the menu after selection, and press the F1 key directly to quickly call up the histogram.<br>Same setting for F2~F3 |
|  <br>**Left Right Key Set** | **Volume, Backlight** |

## System

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| **User Switch** | **User Switch: 1~4**<br>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**<br>Select the display time of the menu on the screen<br>**OSD Trans: Off, 25%, 50%, 75%**<br>Adjust the transparency of the menu picture background on the screen<br>**No Signal: Red, Green, Blue, Black, White, Gray**<br>Can be change the background color of screen when no signal |
| **EDID Settings** | **EDID Settings: 2.0, 1.4**<br>Compatible with resolution of different camera/device<br>Default to 2.0 (if set 1.4 manually, then input 4K60 signal, you need to set to 2.0 again) |
| **Volume** | **On, Off**<br>0~100<br>Adjusting the speaker volume |
| **Power Settings** | **Power on: Auto, Manual**<br>Default to Auto. If set Manual, please press power key to turn on after the power plug in. |
| | Select **Reset** and press MENU button **Confirm**, the system back |

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| **Reset** | to original setting. |
|  **Firmware Update** | **Firmware Version** (display the version number)<br>**Firmware Update**<br>**Confirm** |

# 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 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 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 **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.

## 5. Support Formats

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|---|---|
| **HDMI Input/ Output Support Format** | 480i/576i/480p/576p<br>720p (60/59.94/50/30/29.97/25/24/23.98)<br>1080i (60/59.94/50)<br>1080p (60/59.94/50/30/29.97/25/24/23.98)<br>3840×2160p (60/50/30/29.97/25/24/23.98)<br>4096×2160p (60/50/30/29.97/25/24/23.98) |

## 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, DC OUT 8.4V |
| **Audio** | 3.5mm Stereo Headphone |
| **Power Input Voltage** | 7～24V |
| **Power Consumption** | ≦16W |
| **Unit Size** | 190Lx126Hx27D (mm) |
| **Unit Weight** | 460g |
| **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

① 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