7″ Built-in Battery Field Monitor

User Manual

Foreword

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

Cautions

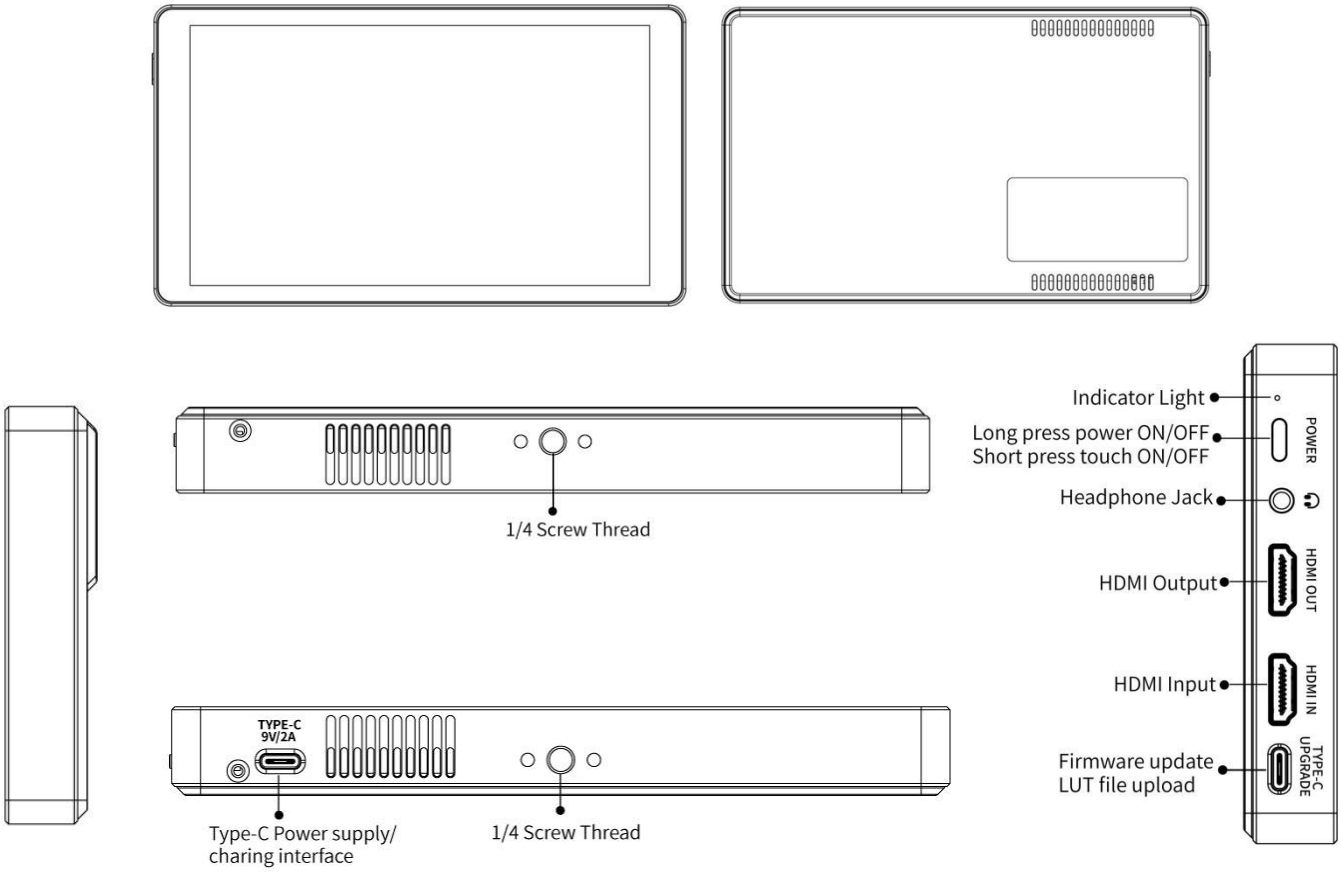
- Please avoid the heavy impact and drop onto the ground when move the product.
- The product built-in battery. Please do not approach sources of fire to prevent explosion hazards.
- The screen of this product is made of glass. Please do not drop the screen towards the ground. Keep away from injury if 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
- Solid and durable aluminium housing
- Built-in 4300mAh/7.4V battery, easy to charge. Running time about 3.5h at 100% brightness full charged
- Full touch screen, easier to setup
- Sharp screenshot + image overlay
- Supports 3D LUT Log to REC.709 and user 3D LUT upload (up to 32).
- 9:16 vertical ratio marker, perfect for Tik tok, Instogram
- 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
- Stereo Earphone output

CONTENTS

1. Product Overview



2. Power Supply Way

The bottom of the monitor has a Type-C 9V/2A input power port This port can provide power to the monitor through the included USB-C to USB-A cable and charger. It can be charged separately or charged while in use. After being fully charged,running for about 3 hours at 100% brightness. The indicator light is red when charging, and turns green when fully charged. Suggest shutting down and charging.

Compatible with the following charging protocols:

PD2.0/3.0 fast charging protocol

Samsung AFC fast charging protocol

HUAWEI FCP fast charging protocol

QC2.0/3.0 fast charging protocol

Note: the voltage of the charger must be 9V； the indicator light turn green means truly full charged

3. Sunshade

The monitor attached a sunshade, it can effectively resist strong light.

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.

4. Menu Operation Instruction

Ensure the monitor is charged, long press POWER key turn on power , and then plug HDMI signal.

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

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

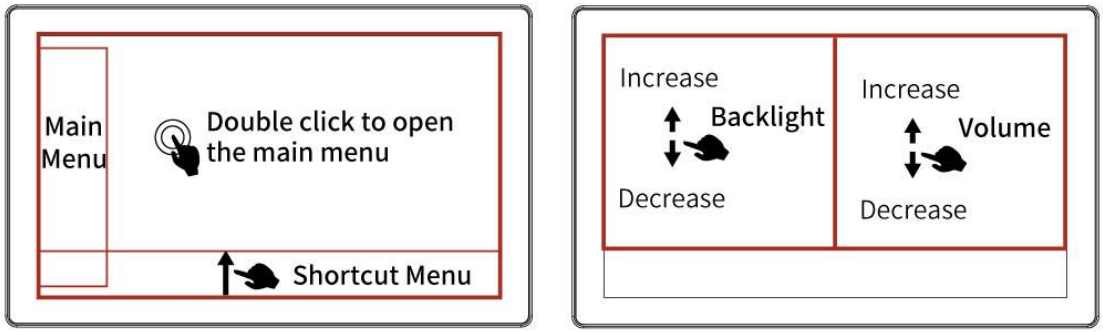
①. Double-click on the screen to open the main menu (show on the left side of the screen) and click on the corresponding menu to display the secondary menu. You can enter the corresponding function option and click directly to select or set. Click the touch screen to exit the menu.

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:



4.2 Screenshot + Image Overlay Instruction

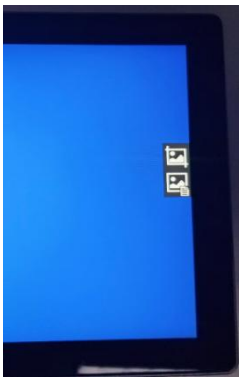
The monitor supports screenshot, image overlay functions. The number of screenshots stored depends on the capacity of USB flash drive.

You can also import the custom images (must be JPG image and the resolution not exceeding 1920x1080)

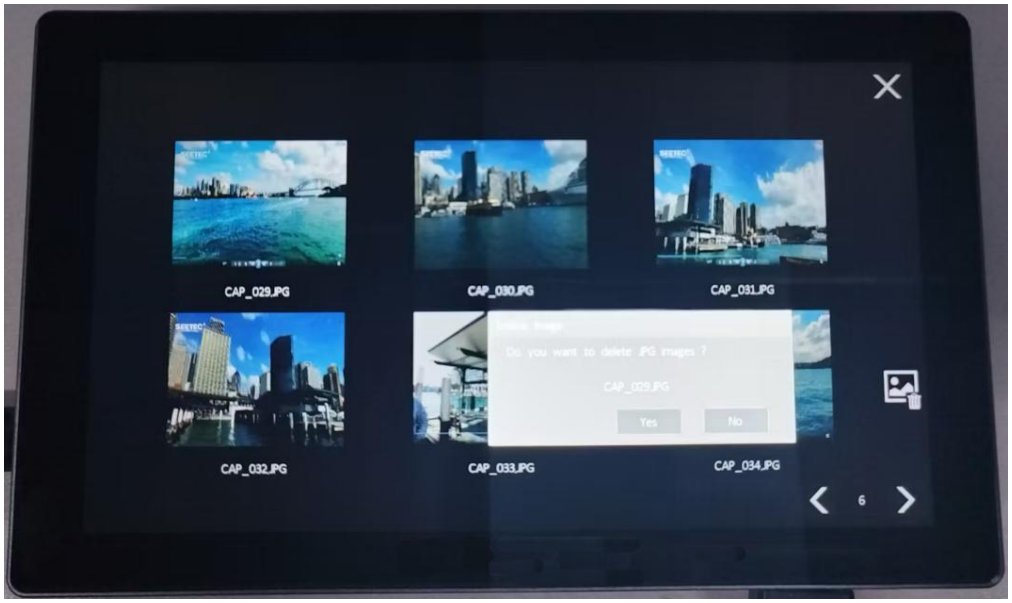
Tip: Please use empty USB flash drive or make sure it without upgrade file. And don’t remove the USB flash drive when using this function.

①. After turning on the monitor, insert the USB flash drive to the USB-A to USB-C adapter and connect to the Type-C port of the monitor, then input the signal.

②. Swipe your finger to the left on the right side of the screen to display the screenshot function menu. Tap any position of the screen can hide the menu.



③. Click the icon  to capture the desired image, then click the icon  to browse all the captured images. Click on the icon < or > to turn pages. If you want to delete an image, firstly click to select the image you want to delete, then click on the icon  and follow the prompt to delete it.

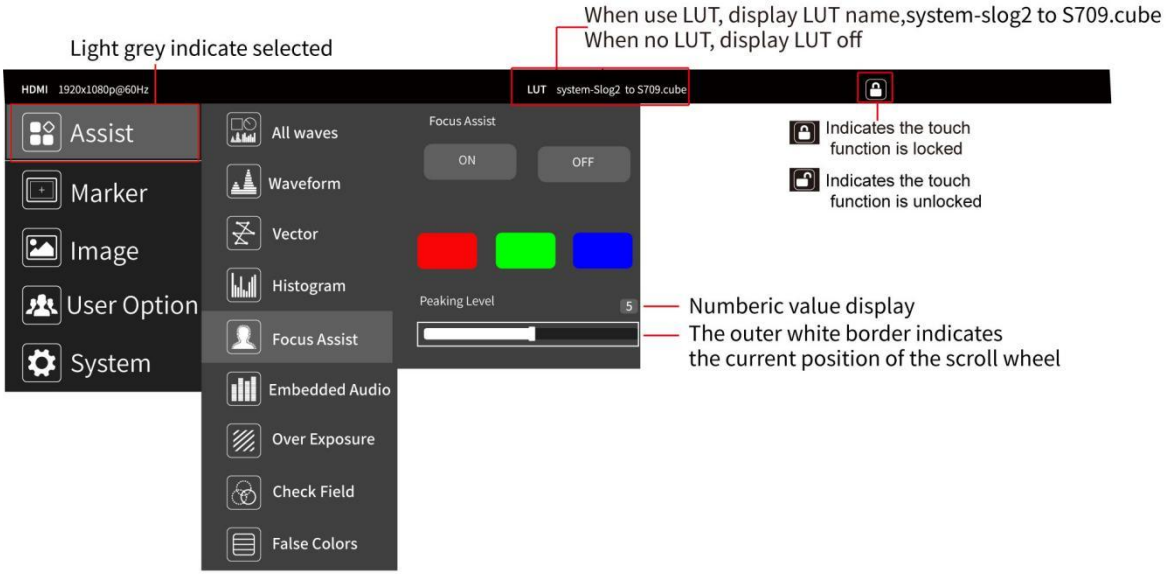


④. Double click the image you want to overlay to complete the overlay, click anywhere on the screen can display the icons of adjusting transparency and turning off the overlay function.

 : click it to close the overlay function

∧/∨: adjust the image transparency（1~10）

5. MENU Interface Instruction



6. 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** **Waves Trans.：Off, 25%, 50%, 75%** **Position X: 0~100** (moving the waveform horizontally) **Position Y: 0~100** (moving the waveform vertically) The waveform is a core tool for professional video production. It converts the brightness and color information of the frame into visual curves, enabling precise control of exposure, white balance and color balance, preventing overexposure, crushed blacks or color casts in the frame, ensuring the signal meets broadcast standards. It is ideal for scenarios with vary light, complex composition or cinematic video. The X-axis of the waveform monitor corresponds to the horizontal position of the frame (left to right), and the Y-axis represents the brightness level of each position, generally defined with black as the 0 line and maximum brightness as the 100 line. Luminance Waveform (Y) Display: A white/gray curve representing the overall brightness distribution of the frame. RGB Component Waveform Display: Independent red, green and blue channel waveform, presented side by side.

	YUV Waveform Separates color and luminance. Y represents the luminance signal, while U and V represent the blue-yellow and red-green chrominance signals respectively.
 **Vector**	**On, Off** **Position X: 0~100** (moving the Vector horizontally) **Position Y: 0~100** (moving the Vector vertically) The vectorscope is a professional tool dedicated to analyzing and monitoring the color information of a frame. It visualizes color saturation (vividness) and hue (tone) via chrominance signals in a circular graph to quantify the color data of the frame, enabling precise judgment for cinematographers and colorists. It serves as a color calibration benchmark for professional scenarios such as film and television production, live streaming, and broadcasting.
 **Histogram**	**On, Off** **Mode：RGB1、RGB2、Y** **Position X: 0~100** (moving the histogram horizontally) **Position Y: 0~100** (moving the histogram vertically) RGB1 Histogram:Displays the brightness distribution of the red, green, and blue channels separately, designed to judge color casts, monochromatic over/underexposure, white balance, and color gradation. RGB2 Histogram:The red, green, and blue channels are overlaid on the same coordinate system, with overlapping areas showing mixed colors Y Histogram: A tool for objectively judging exposure and tonal distribution. Ideal for monitoring overall exposure to prevent clipped highlights and crushed blacks, assisting with precise

	lighting setup and post-production.
 **Focus Assist**	**On, Off** **Color :** (Red, Green, Blue) **Peaking Level : you can adjust the peaking level after turning on (1～10)** Highlights the in-focus areas of the image to help photographers quickly and accurately judge focus position during manual focusing. Especially ideal for fast moving video, portrait, etc.
 **Embedded Audio**	**On, Off** **Position X: 0~100** (moving the audio level horizontally) **Position Y: 0~100** (moving the audio level vertically) A visual audio level indicator tool for monitors that displays sound volume in real time and detects audio clipping (distortion). It resolves issues of being unable to hear audio while monitoring video or inaudible sound in noisy environments, ensuring audio-video synchronization and distortion-free recording. Ideal for live streaming, on-location shooting and filming in noisy settings.
 **Zebra Pattern**	**On, Off** **Threshold Value : you can adjust the exposure level after turning on** (10~100) A real-time exposure assist tool that highlights overexposed areas in the frame with striped patterns for quick identification of blown-out highlights, ensuring accurate exposure, ideal for video shooting, portrait photography and outdoor high-light scenarios.
 **Check Field**	**On, Off** **Mode : Red, Green, Blue, Mono** Eliminate color interference, focus on exposure, focus, contrast and single-channel signal quality, and quickly judge the picture's brightness gradation, edge details and color channel issues.

 **False Colors**	**On, Off** **Mode: Normal, ARRI** False Color is an exposure assist tool that maps the precise brightness value of every pixel in the frame to distinct colors corresponding to different brightness levels. It allows you to instantly check the exact exposure values across the entire frame and clearly visualize the light and shadow distribution of each specific area. Ideal for video shooting, portrait photography and outdoor shooting in complex lighting conditions.

Marker

 **Grids**	**On, Off** **Mode: 2x2,3x3,4x4,5x5,6x6,7x7,8x8,9x9, Custom** **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** A core auxiliary tool for professional shooting, primarily designed for rule-of-thirds composition and horizontal/vertical calibration. It divides the screen into equal grids of 4, 9, 16, 25, 36, 49, 64 or 81 cells for optimized framing, and the number of grid rows and columns is fully customizable.
	**On, Off** **Mode: 80%, 85%, 90%, 93%, 96%, 2.35:1 ,9:16**

Safe Frames	**Color: Red, Green, Blue, Black, White, Gray** Prevent edge cropping of the frame, ensure subtitle/subject remain fully visible, and adapt to different playback devices.
 **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, 1.66:1, 1.85:1, 2.35:1, 9:16,1:1** **Color: Red, Green, Blue, Black, White, Gray** **Modified Mark：0~5** Preview the target aspect ratio in real time, standardize framing, reduce post-production cropping, align shooting with the final footage ratio, and improve framing efficiency and footage precision.

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** Match the shooting frame, eliminate picture distortion, and monitor precise composition to ensure the captured footage is restored without stretching or cropping in its original aspect ratio, adapting to

	various formats and creative requirements.
 **Anamorphic**	**On, Off** **Mode：1.33X, 1.6X, 2.0X, 2.0X MAG, User** Under **User** can be set 0.25X~4.00X Paired with anamorphic lenses, this function restores the horizontally compressed shooting image to the normal aspect ratio on the monitor for real-time framing and proportion checking. It resolves the issue of image squashing and inaccurate framing when shooting with anamorphic lenses.
 **Image Flip**	**On, Off** **Mode: H Flip, V Flip, H_V Flip** This function resolves abnormal screen orientation caused by special monitor mounting angles (e.g.upside-down, side-mounted) or restricted shooting perspectives. It ensures a correct, upright viewing angle for the screen regardless of the monitor's mounting or shooting position, without interfering with monitoring, focusing or framing.
 **Zoom Mode**	**On, Off** **Mode：2X、4X、9X、16X、User** Under the **User**, can be customized（100%~200%） Magnify the central area of the screen for precise focusing, detail inspection and image quality verification.
 **Image Freeze**	**On, Off**
	**On, Off** A display mode that maps the monitor's input signal pixel 1:1 to its

P2P	physical screen pixels, presenting the signal with no stretching, no scaling and no cropping to fully restore the original resolution and fine details of the input signal. It is an essential function for precise focusing, image quality inspection and framing calibration. Note: This function is only available when the input signal resolution ≤ the monitor's physical resolution.

User Option

 **LUT**	**On, Off** After the LUT Switch is turned on, you can use the **Lut (SLOG2, SLOG3, LOGC, VLOG)**. 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 Import：Confirm** **Lut Table** Show the 4 built-in Lut and the custom load Lut (up to 32）
 **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.
	**Backlight：0~100** Adjust the screen brightness

Display Adjustment	**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.

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
Volume	**On, Off** 0~100 Adjusting the speaker volume

 **EDID Settings**	**EDID Settings: 2.0, 1.4** Compatible with resolution of different camera Default to 2.0 (if set 1.4 manually, then input 4K60 signal, you need to set to 2.0 again)
 **Reset**	Select **Reset** and press MENU button **Confirm**, the system back to original setting.
 **Firmware Update**	**Firmware Version** (display the version number) **Firmware Update** **Confirm** How to upgrade? 1. USB flash drive format Support FAT32 2. After copying the update file to USB flash drive insert to Type-C to USB adapter and connect with the TYPE-C interface of monitor , tap **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

7. How to Load LUT

7.1 USB flash drive format FAT32

7.2 Max Files Limit Maximum 32 Lut files

7.3 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

7.4 Steps for loading

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

7.4.2 Enter main menu --LUT--**Lut Import -- Confirm** to load

the monitor will auto detect the USB flash drive

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

8. Technical Parameters

Panel Size	7-inch (touch)
Resolution	1920 × 1080 pixels
Dot Pitch	0.027(H) x 0.081(V) mm
Number of Colors	10.7B (10bit)
Color Gamut	97% DCI-P3
Aspect Ratio	16:9
Brightness	1500cd/m^2
Contrast	1500:1

Viewing Angle	88°/88°(L/R) 88°/88°(U/D)
Backlight	LED
Adjustable Backlight	Yes
Response Time	Ton+Toff=25ms
Signal Input	HDMI 2.0
Signal Output	HDMI 2.0
Other interface	Type-C (firmware update/LUT file upload)
Audio	3.5mm stereo headphone jack
Battery Capacity	4300mAh/31.82Wh
Voltage	7.4V
Battery Runtime After Full Charged	About 3.5 hours
Battery Charging Time	2.5 hours
Power Connector	USB-C 9V/2A compatible with PD2.0/3.0 fast charging protocol compatible with Samsung AFC fast charging protocol compatible with HUAWEI FCP fast charging protocol compatible with QC2.0/3.0 fast charging protocol Note: the voltage of the charger must be 9V
HDMI 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 Consumption	charging + working: ≤22W
Unit Size (mm)	176Lx107Hx20D (mm)
Unit Weight	526g

Mount Points	¼-20 thread points (Right, Top, Bottom)
Working Temperature	-30℃～80℃
Storage Temperature	-30℃～80℃

9. Trouble Shooting

9.1 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.

9.2 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.

9.3 Earphone No sound

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

9.4 Battery Charging Troubleshooting Guide

If your monitor fails to charge or cannot maintain a charge, please follow the troubleshooting steps below:

9.4.1. Check the Power Source

Ensure the power adapter meets the recommended output specifications:

- USB-C 9V/2A

- Compatible with PD2.0/3.0 fast charging protocol
- Compatible with Samsung AFC fast charging protocol
- Compatible with HUAWEI FCP fast charging protocol
- Compatible with QC2.0/3.0 fast charging protocol

Note: The charger voltage must be 9V.

Avoid using low-power USB ports (e.g., those on computers or hubs).

Plug the adapter directly into a wall outlet.

9.4.2. Inspect the Charging Cable and Port

Use the original charging cable or a certified high-quality alternative.

Check the cable and charging port for dust, debris, or physical damage.

Ensure the charging connector is fully inserted and securely connected.

9.4.3. Allow Sufficient Charging Time

Charge the monitor for at least 2 hours continuously.

Do not turn on the monitor during charging to facilitate full battery recovery.

The charging indicator should display a normal charging status.

9.4.4. Perform a Power Cycle

Disconnect the charging cable and shut down the monitor completely.

Wait for 2-3 minutes, then reconnect the charger and attempt charging again.

9.4.5. Check the Ambient Temperature

Charge the monitor in an environment with a temperature between 10°C–35°C (50°F–95°F).
Extremely low or high temperatures may impair battery charging performance.

9.4.6. Test with Another Compatible Power Adapter

If available, test charging with another adapter that meets the required voltage and current specifications.
This helps eliminate issues related to the original adapter.

9.4.7. Contact Customer Support

If the issue persists after completing all the above steps, please contact customer support for assistance.
We will provide a replacement in accordance with the warranty terms.

■ 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.