

5" Touch Screen Live Streaming On-Camera Monitor

User Guide



Important Safety Instructions:

- Please read User Guide before using this product.
- Please keep User Guide for future reference.
- Please read the precaution to prevent possible danger and loss of property.

Precaution:

- Please do not place the display screen towards the ground.
- Please avoid heavy impact or drop onto the ground.
- Please do not use chemical solutions to clean this product. Please wipe with a clean soft cloth to maintain the brightness of the surface.
- Please do not block any vent hole.
- Please follow the instructions and trouble-shootings to adjust the product. Other improper adjustment may result in damage. Any further adjustment must be performed or conducted by a qualified technician.
- Please unplug the power and remove the battery if long-term no-use, or thunder weather.

Contents

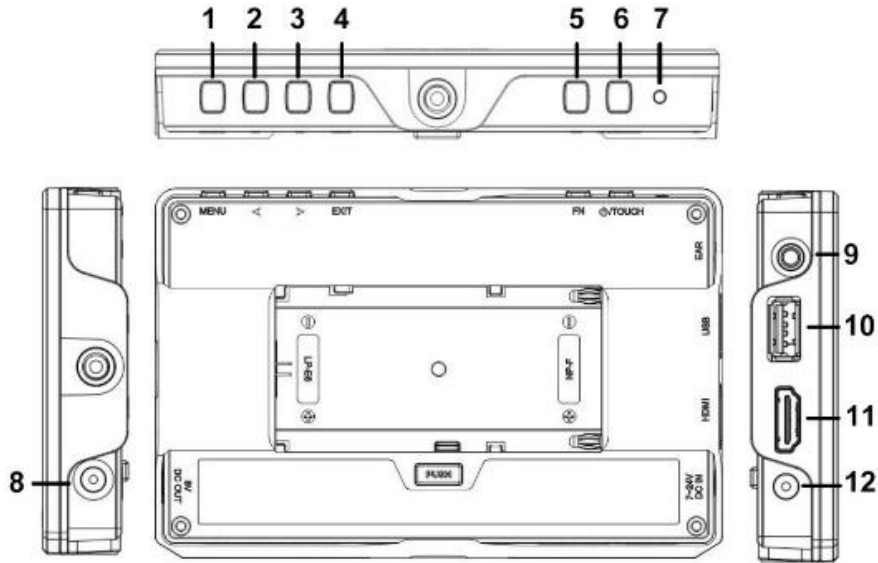
1. Main Features	3
2. Production Description	4
2.1 Buttons & Interfaces.....	4
2.2 Battery Mount Plate	5
3. Menu Setting	6
3.1 Shortcut Touch Gestures	6
3.2 Menu Operation.....	8
3.2.1 Assistant Function.....	8
3.2.2 Color Adjustment.....	11
3.2.3 LUT	12
3.2.4 Display	13
3.2.5 Audio	15
3.2.6 Marker.....	16
3.2.7 Setting	17
- USB UVC Operation.....	17
4. Product Parameters	19
5. Accessories	21
6. 3D-LUT Loading.....	22
7. Trouble Shooting.....	25

1. Main Features

- Support HDMI 2.0 4K 60Hz input, USB output
- Built-in Video & Audio Capture Function
 - Import the acquired live video on a live video platform (like OBS, Twitch, YouTube Live, etc.) on the computer via USB
 - Driver free
 - Supports up to 1080p60
 - Comply with UAC and UVC standard
 - Compatible with Windows, Linux, macOS
- Support Menu Touch Function
- Zoom images in and out at will, and images can be moved when zooming in
- Multiple Waveform Mode (Y / YCbCr / RGB)
- With 17 default 3D-LUT modes, and 6 user LUT modes can be loaded
- HDR Support (ST2084 300 / ST 2084 1000 / ST 2084 10000 / HLG)
- Peaking (Red / Green / Blue / White)
- Multiple False Color Mode (Default / Spectrum / ARRI / RED)
- Check Field (Red / Green / Blue / Mono)
- Scan Mode: Aspect / Pixel to Pixel / Zoom
- Audio Out Support (CH1&CH2 / CH3&CH4 / CH5&CH6 / CH7&CH8)
- Markers: Center Marker, Aspect Marker, Safety Marker
- HDMI EDID: 4K / 2K
- User-definable Shortcut Function

2. Production Description

2.1 Buttons & Interfaces



1) MENU Button:

- Menu key: Press it to enter the menu when power on
- Confirm key: Press it to confirm the selected option or value.

2) Right Selection Button

- Selection: select options in the menu, or adjust the value upward.
- Shortcut Menu: When power on and no menu, directly press the right button to enter the shortcut menu: [Brightness], [Contrast], [Saturation], [Tint], [Back Light], [Volume].

3) Left Selection Button

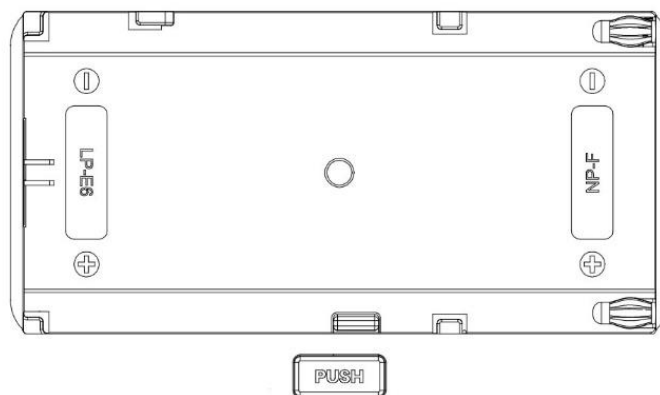
- Selection: Select options in the menu or adjust the value downward.
- Shortcut Menu: When power on and no menu, directly press the left button to enter the shortcut menu: [Brightness], [Contrast], [Saturation], [Tint], [Back Light], [Volume].

4) EXIT Button: To return or exit the menu function.

5) FN Button: User-definable function button. Default as Peaking function.

- 6) **⏻/TOUCH** :
 - Short press: POWER button. Power on/off.
 - Long press: Touch on/off.
- 7) Power Indicator: Press POWER button to turn on monitor, the indicator light will turn green as operating.
- 8) Power Output: DC 8V/1A.
- 9) Earphone Jack.
- 10) USB 2.0:
 - For video & audio capturing on PC.
 - For LUT loading.
 - For firmware upgrade.
- 11) HDMI 2.0 Input.
- 12) DC 7-24V Input.

2.2 Battery Mount Plate



- Put battery into the plate
 - Please slide Canon LP-E6 battery to the left.
 - Please slide Sony NP-F series battery to the right.
- **PUSH Button:**

Press the “PUSH” button to remove the battery.

3. Menu Setting

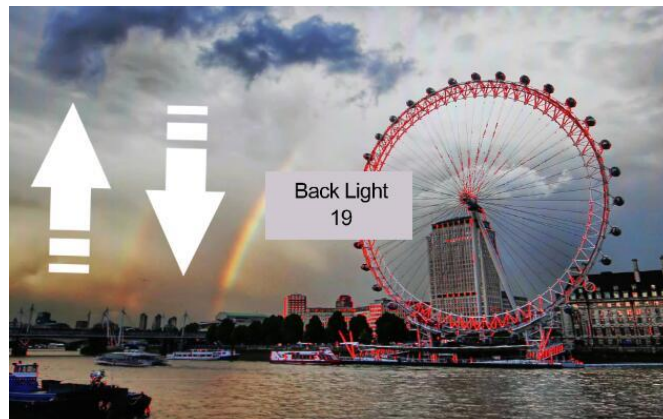
Before setting the functions, please make sure the device is connected correctly.

3.1 Shortcut Touch Gestures

- Center swipe up or down: Activate or hide the menu, hide the shortcut menu.



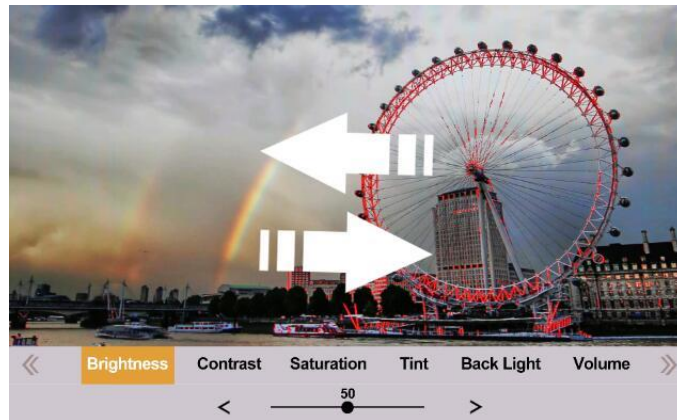
- Left swipe up or down: Back Light control.



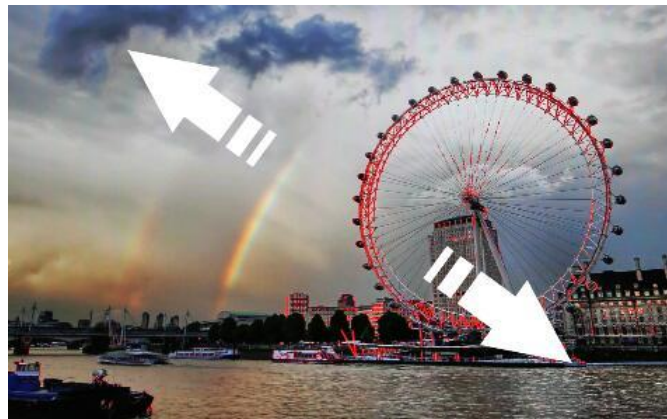
- Right swipe up or down: Volume control.



- Swipe left or right: Activate the shortcut menu.



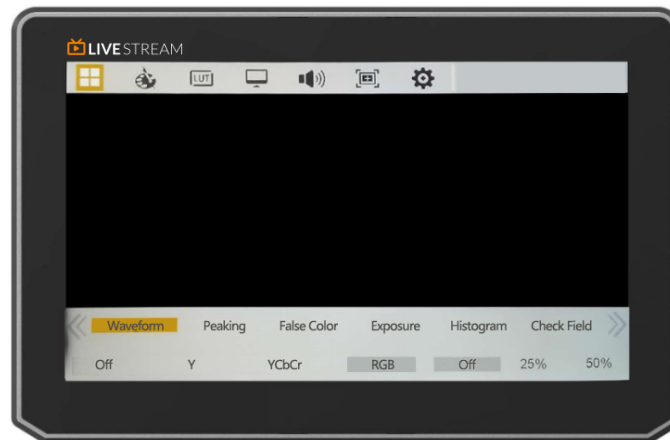
- Two-finger zoom: When no menu, zoom-in and zoom-out of image, and support moving image when zooming-in.



- Long press the Power Button to switch the touch function off/on.

3.2 Menu Operation

3.2.1 Assistant Function



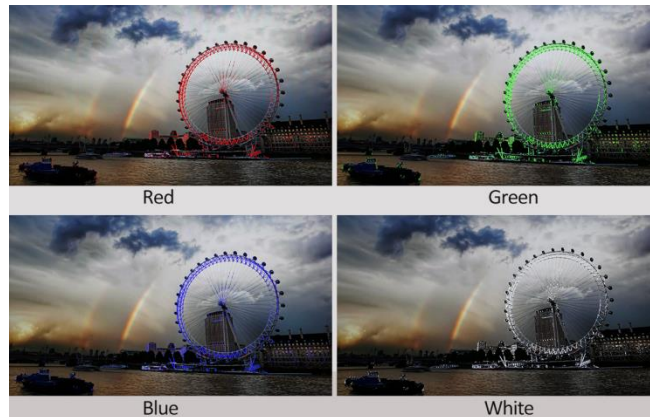
- **Waveform**

- When activated, select one of the waveform mode from among [Y], [YCbCr], and [RGB].
- Adjust the transparency of the waveform, histogram and level meter among [off], [25%], and [50%].
 - [Off] : The background of waveform / histogram / level meter is shown at 100% black.
 - [25%]: The background of waveform / histogram / level meter is shown at 75% black.
 - [50%]: The background of waveform / histogram / level meter is shown at 50% black.

- **Peaking**

Use this item to activate or deactivate the peaking function. It is used to aid the camera operator in obtaining the sharpest possible picture.

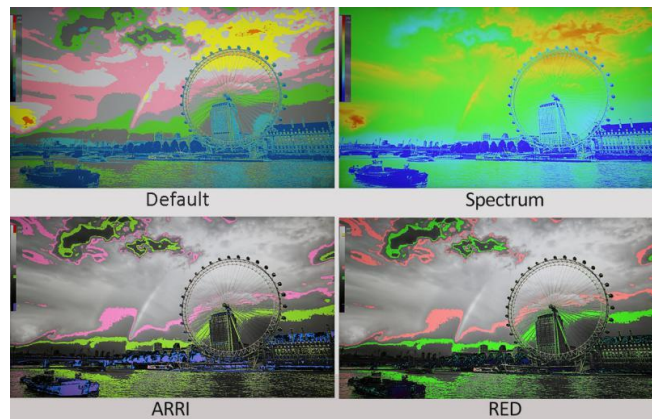
- Peaking Level: Adjust the level of peaking from 1-100. The higher peaking level is, the more obvious peaking effect is.
- Peaking Color: Choose the color of focus assist lines among [Red], [Green], [Blue], and [White].



- **False Color**

The function represents the exposure levels of the image by replacing the colors of the image with a standard set of colors.

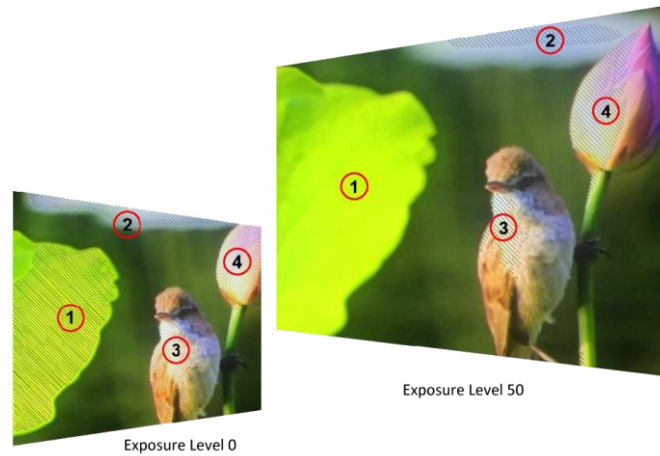
- When activated, [Default], [Spectrum], [ARRI], and [RED] are for optional.
- False Color Table: Activate or deactivate the false color table. The range of the false color table is between 0-100 IRE.



- **Exposure**

The exposure feature helps the user achieve optimum exposure by displaying diagonal lines over areas of the image that exceed the setting exposure level.

- Activate or deactivate the exposure function.
- Exposure Level: Adjust the level of exposure among 0-100.

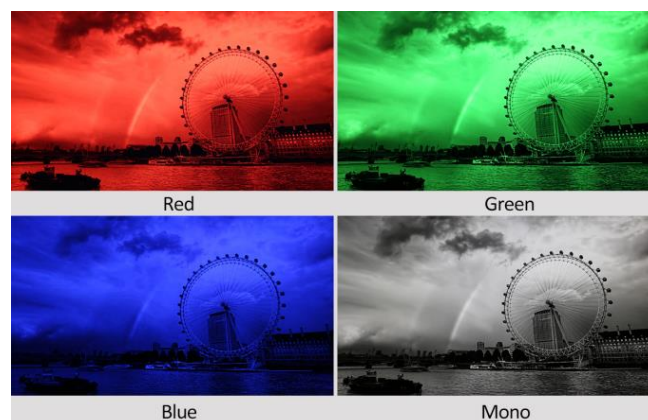


- **Histogram**

Use this item to activate or deactivate the histogram.

- **Check Field**

Use the check field modes for monitor calibration or to analyze individual color components of an image. In [Mono] mode, all color is disabled and only a grayscale image is shown. In [Blue], [Green], and [Red] check field modes, only the selected color will be shown.



3.2.2 Color Adjustment



- **Brightness**

Control the degree of brightness between 0-100, default value: 50.

- **Contrast**

Control contrast ratio between 0-100, default value: 50.

- **Saturation**

Adjust the color intensity between 0-100, default value: 50.

- **Tint**

Adjust tint between 0-100, default value: 50.

- **Sharpness**

Control sharpness of the image between 0-100, default value: 0.

- **Color Temp.**

Use this item to choose one of the color temperature presets: [6500K], [7500K], [9300K], [User]. Default: [6500K].

Note! Only under [User] mode, R/G/B Gain and Offset can be adjusted.

- **R/G/B Gain**

Adjust the R/G/B Gain of the current color temperature from 0 to 255. Default value: 128.

- **R/G/B Offset**

Adjust the R/G/B Offset of the current color temperature from 0 to 511. Default value: 255.

3.2.3 LUT



- **Camera LUT**

When activated, select one camera LUT mode among [Def. LUT], and [User LUT].

- **Def. LUT**

17 kinds of default LUT model can be optional:

[SLog2ToLC-709], [SLog2ToLC-709TA], [SLog2ToSLog2-709], [SLog2ToCine+709], [SLog3ToLC-709], [SLog3ToLC-709TA], [SLog3ToSLog2-709], [SLog3ToCine+709], [ArriLogCTo709], [ArriLogCToP3DCI], [CLogTo709], [VLogToV709], [JLogTo709], [JLogTo709HLG], [JLogTo709PQ], [Z7 NLogTo709], and [D780 NLogTo709].

- **User LUT**

Use this item to choose one of the user LUT modes (1-6). Please load the user LUT as the following steps:

- The user LUT must be named with .cube in the suffix.

Note! The device only supports the file with 17x17x17 / 33x33x33 and with BGR for both Data format and Table format. If the format does not meet the requirement, please use tool “Lut Tool.exe” to transform it.

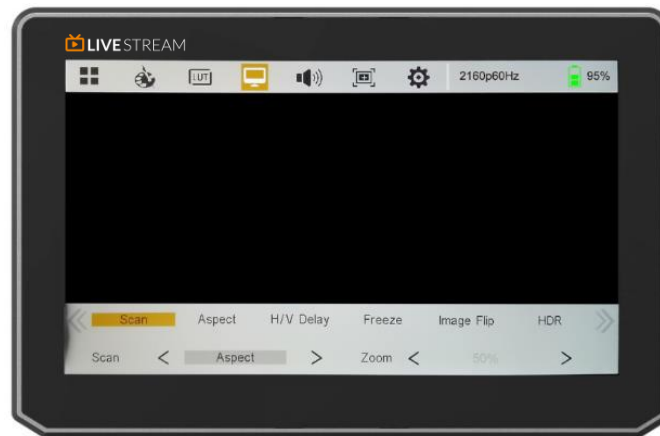
- Naming the user LUT as User1-User6.cube, then copy the user LUT into USB flash disk. Insert the USB flash disk to the device, the user LUT is saved to the device automatically at the first time. The power indicator will flash during saving the user LUT, then stop flashing when saved completely.

If the user LUT is not loaded for the first time, the device will pop up a prompt message, please choose whether to update or not. If there is not a prompt message,

please check the format of document system of the USB flash disk or format it (The document system format is FAT32). Then try it again.

Note! After saving the LUT through the USB flash disk, please restart the device.

3.2.4 Display



- **Scan**

- Adjust the scan mode among [Aspect], [Pixel To Pixel], and [Zoom].

Note! Only when the [Aspect] mode under [Scan] is selected, the markers including center marker, aspect marker and safety marker can work.

- Only when the [Zoom] mode is selected, the zoom scale can be adjusted among [10%], [20%], [30%], [40%], [50%], [60%], [70%], [80%], [90%] and [User].

- **Aspect**

- Select the aspect of the image among [16:9], [1.85:1], [2.35:1], [4:3], [3:2], [1.33X], [1.5X], [2.0X], and [2.0X MAG].



- Overscan: Activate or deactivate overscan.

Note! Only when the [Aspect] mode under [Scan] is selected, the aspect and overscan function can be adjusted.

- **H/V Delay**

Select one of the H/V modes: [Off], [H], [V], [H/V]. When H/V Delay on, the blanking portions of the input signal will be displayed horizontally or vertically.

- **Freeze**

Choose [On] to capture one frame of current image on the screen, and choose [Off] to close freeze function.

- **Image Flip**

Allow the displayed image to be flipped horizontally or vertically by selecting one of flip mode among [H], [V], [H/V].

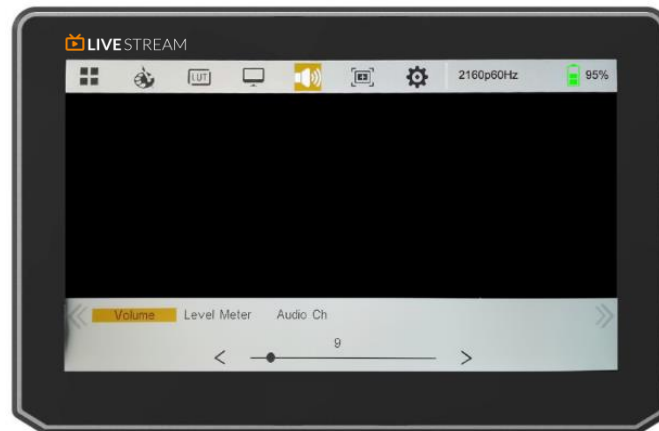


- **HDR**

When activated, the display reproduces a greater dynamic range of luminosity, allowing lighter and darker details to be displayed more clearly. Effectively enhancing the overall picture quality.

Select one of the HDR presets: [ST 2084 300], [ST 2084 1000], [ST 2084 10000], and [HLG].

3.2.5 Audio

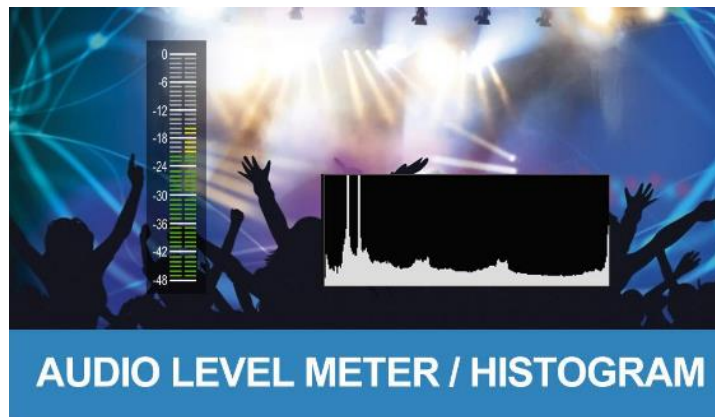


- **Volume**

Adjust the volume among 0-100.

- **Level Meter**

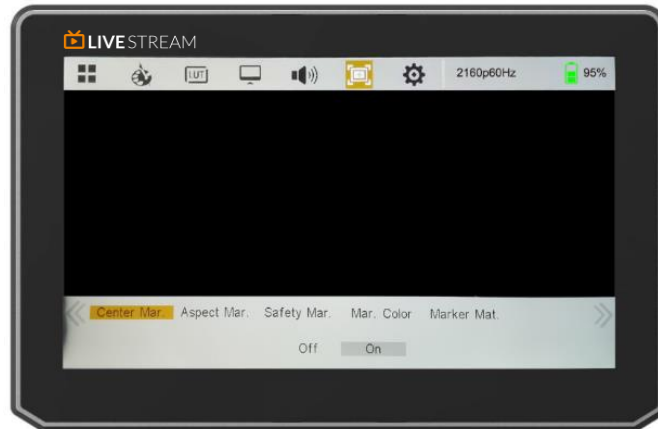
Select whether to activate or deactivate level meter. Default: [On].



- **Audio Ch**

Select one of the audio channels among [CH1&CH2], [CH3&CH4], [CH5&CH6], [CH7&CH8]. Default: [CH1&CH2]

3.2.6 Marker

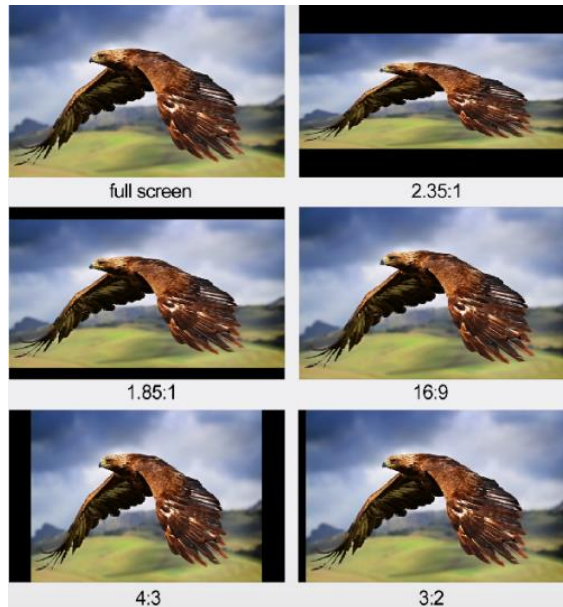


- **Center Marker**

Select [On] to display the center marker “+” and [Off] not to display it.

- **Aspect Mar.**

Select the aspect ratio of the marker: [Off], [16:9], [1.85:1], [2.35:1], [4:3], [3:2], [Grid].



- **Safety Mar.**

Used to select and control the size and availability of the safety area. Select the size of the safety markers: [95%], [93%], [90%], [88%], [85%], [80%].

Note! When [Aspect Marker] is selected as [Grid], the safety marker cannot be displayed.

- **Marker Color**

Select the color of marker displayed on the screen: [Black], [Red], [Green], [Blue], and [White].

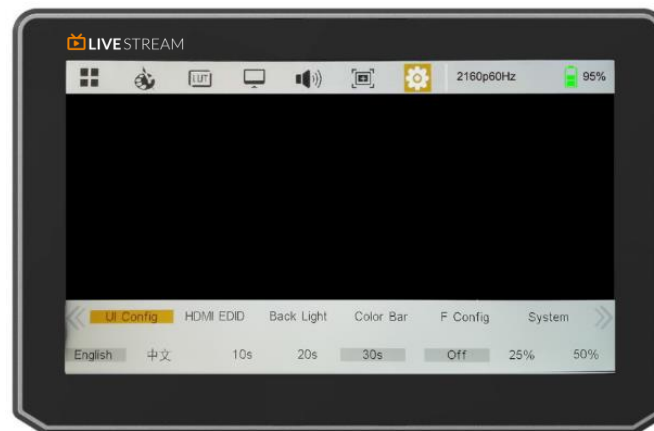
- **Aspect Mat.**

-Thickness: Adjust the line width of the center marker, aspect marker and safety marker among [1-15]. The step value is 1. Default value: 6.

- Aspect Mat.: Darkens the area of the outside of Marker. The degrees of darkness are between [0] to [7].



3.2.7 Setting



- **UI Config**

- Language: [English] and [中文] for optional.

- OSD Display Timer: [10s], [20s], and [30s] for optional. Default: [10s].

- OSD Transparency: [Off], [25%], [50%] for optional. Default: [off].

- **HDMI EDID**

Select HDMI EDID between 4K and 2K, default: 4K.

This function enables the PC or other devices to better identify the attributes of the monitor, which is beneficial to achieve the best display effect of the monitor.

- **Back Light**

Adjust the level of the back light from 0 to 100, default value: 100.

- **Color Bar**

Option: [Off], [100%], [75%], default: [off].

- **F Config**

Select FN "Configuration" for setting. Functions of FN button can also be customized:

[Peaking], [False Color], [Exposure], [Histogram], [Waveform], [Level Meter], [Mute], [Center Marker], [Aspect Marker], [Safety Marker], [Overscan], [Scan], [Aspect], [HDR], [Camera LUT], [Check Field], [H/V Delay], [Freeze], [Color Bar].

Default: [Peaking].

- **System**

- Reset: When select [On], restore the factory settings.

- USB UVC:

When select [On], connecting the USB 2.0 to a PC, a third party video player like PotPlayer, OBS, YouTube, etc. can be used to play the captured video and audio by HDMI signal. The USB2.0 port is based on UVC (USB video class) and UAC (USB audio class) standard. No additional drivers need to be installed. The relevant video and audio device will be detected in the Windows Device Manager as below:

- Under Imaging Devices: USB Capture Video
- Under Audio inputs and outputs: USB Capture Audio

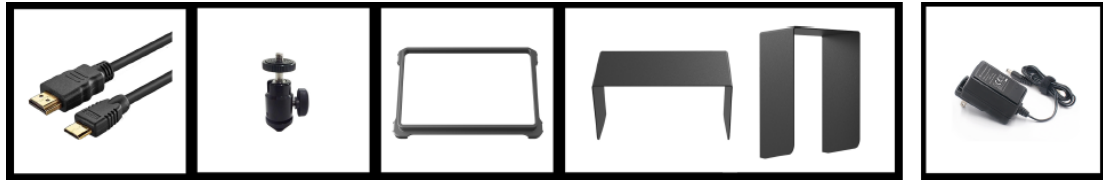
Note! When the USB UVC is off, the USB port will be used for upgrading and loading LUT.

4. Product Parameters

Panel Size	5"
Resolution	1920*1080
Brightness	400 cd/m ²
Contrast Ratio	1000:1
Viewing Angle	170°/ 170° (H/V)
Interfaces	HDMI 2.0 input, USB 2.0, Earphone jack, DC input & output
HDMI Input Format	2160p 24/25/30/50/60, 1080p 24/25/30/50/60, 1080i 50/60, 720p 50/60...
USB Output Format	1920x1200, 1920x1080, 1680x1050, 1600x1200, 1440x900, 1368x768, 1280x1024, 1280x960, 1280x800, 1280x720, 1024x768, 1024x576, 960x540, 856x480, 800x600, 768x576, 720x576, 720x480, 640x480, 640x360
Audio & Video Capture	UAC (USB Audio Class) and UVC (USB Video Class) standard
Video Codec	MJPEG
Audio Codec	2-channel, 16bit PCM, 48kHz, 1536kbps
Supported OS	Windows 7/8/10, Linux (Kernel version 2.6.38 and above), macOS (10.8 and above)
Software Compatibility	OBS studio, Skype, ZOOM, Teams, GoogleMeet, YoutubeLive, QuickTime Player, Facetime, Wirecast, CAMTASIA, Ecamm.live, Twitch.tv, Potplayer, etc.
Compatible SDK	DirectShow (Windows), DirectSound (Windows)
Power Requirements	DC 7-24V input, DC 8V output
Power Consumption	≤7W
Compatible Batteries	Canon LP-E6 & Sony NP-F series
Operating Temperature	0°C ~50°C

Storage Temperature	-30°C ~70°C
Dimensions (LWD)	132*86*18.5mm
Weight	190g

5. Accessories



- | | |
|---|-----|
| 1) HDMI A/C cable | 1pc |
| 2) Mini Hot shoe mount | 1pc |
| 3) Sun shade frame | 1pc |
| 4) Folding sun shade cover (Horizontal) | 1pc |
| 5) Folding sun shade cover (Vertical) | 1pc |
| 6) DC power adapter (optional) | 1pc |

6. 3D-LUT Loading

6.1 Format Requirement

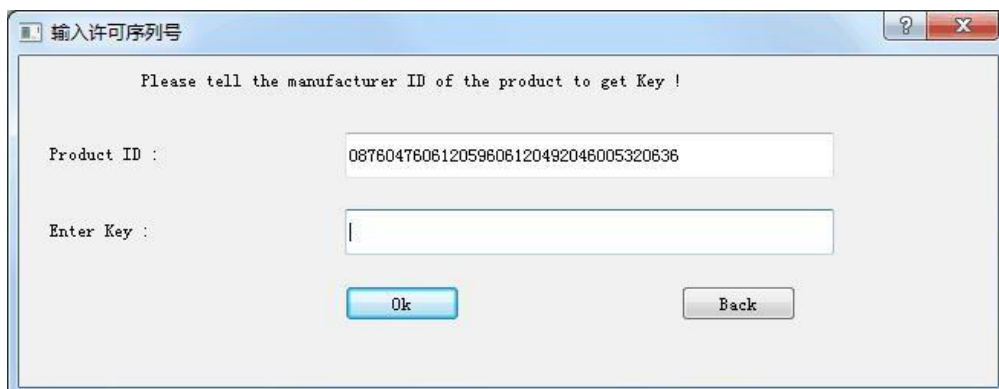
- LUT format
 - Type: .cube
 - 3D Size: 17x17x17
 - Data Order: BGR
 - Table Order: BGR
- USB flash disk version
 - USB: 2.0
 - System: FAT32
 - Size: <16G
- Color calibration document: lcd.cube
- User LUT: User1.cube ~User6.cube

6.2 LUT Format Conversion

The format of LUT should be transformed if it doesn't meet monitor's requirement. It can be transformed by using LUT Converter (V1.3.30).

6.2.1 Software User Demo

- Activate LUT converter.



One individual Product ID for one computer. Please send the ID number to Sales to get an Enter Key. Then the computer gets the permission of the LUT Tool after input the Enter Key.

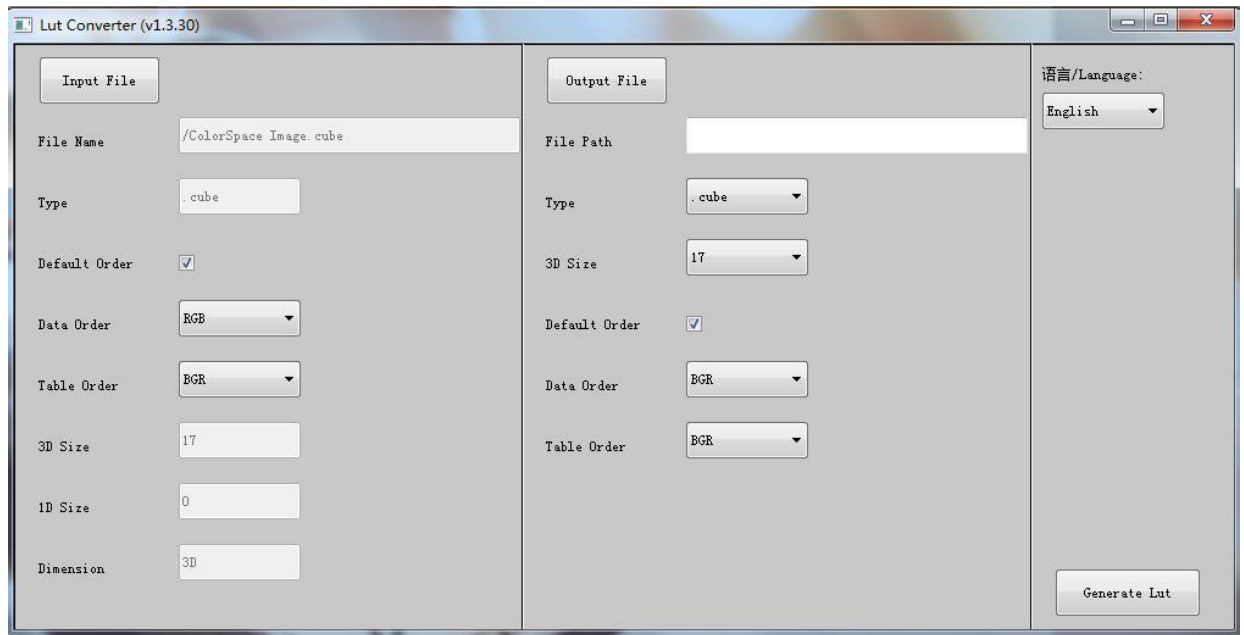
- Enter the LUT Converter interface after input the Enter Key.

The screenshot shows the Lut Converter (v1.3.30) interface. It is divided into three main sections: Input File, Output File, and Language. The Input File section has fields for File Name, Type, Default Order (checked), Data Order (RGB), Table Order (BGR), 3D Size, 1D Size, and Dimension. The Output File section has fields for File Path, Type (.cube), 3D Size (17), Default Order (checked), Data Order (BGR), and Table Order (BGR). The Language section has a dropdown menu set to English and a Generate Lut button.

- Click Input File, then select *LUT.

The screenshot shows the Lut Converter (v1.3.30) interface after selecting an input file. The Input File section now shows File Name as /ColorSpace Image.cube, Type as .cube, 3D Size as 17, 1D Size as 0, and Dimension as 3D. The Output File section remains the same as in the previous screenshot. The Language section remains the same as in the previous screenshot.

- Click Output File, choose the file name.



- Click Generate LUT button to finish.

6.3 USB Loading

Copy the needed files to the root directory of the USB flash disk. Plug the USB flash disk into USB port of the device after power on. Click “Yes” on the pop-up prompt window (If the device doesn’t pop-up the prompt window, please check if the LUT document name or the USB flash disk version meets monitor’s requirement.), then press Menu button to update automatically. It will pop-up a prompt message if the update completed.

7. Trouble Shooting

1) Only black-and-white display:

Check whether the color saturation is properly setup or not.

2) Power on but no pictures:

Check whether the cable of HDMI is correctly connected or not.

Whether the signal source has output.

3) Wrong or abnormal colors:

Check whether the cables are correctly and properly connected or not. Broken or loose pins of the cables may cause a bad connection.

4) When on the picture shows size error:

Press "MENU → DISPLAY → ASPECT → OVERSCAN" to zoom in/out pictures automatically when receiving HDMI signals.

5) How to delete 3D-LUT User camera log:

The User camera LUT cannot be deleted directly from the monitor, but can be replaced by reloading the camera log with same named.

6) Other problems:

Please press "MENU" button and choose "SYSTEM → Reset → On".

Note: Due to constant effort to improve products and product features, specifications may change without priority notice.