

# 8K 12G-SDI

## 1200 Nits Portable Production Monitor

3840×2160 Resolution, features with  
4×12G-SDI Interfaces

# User Guide



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## 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.

## 1. Main Features

- 23.8 inch 3840x2160 physical resolution, with 1200 nits high brightness.
- Support standard 12G-SDI input interface (x4), Single-Link, Dual-Link and Quad-Link signals (8K 60Hz).
- Support HDMI 2.1 input and loop output support up to 7680x4320 60Hz.
- Support SFP input, optical module for optional.
- Support Quad Split Multiview.
- 12G-SDI Input & loop out Quad-Link signals support up to 7680x4320 60Hz.
- 12G-SDI Input & loop out Single-Link support up to 3840x2160 60Hz.
- 12 bits data processing and 12 bits data buffering.
- Monitor control via GPI/ RS422/ LAN.
- Customized F1-F4 Buttons and Menu Knobs.
- Support customized various waveform mode: Waveform/ Vector/ Histogram/ Audio Vector/ Level Meter.
- HDR (High Dynamic Range) display supporting ST 2084/ Hybrid Log Gamma.
- Gamma selection: 1.8-2.8.
- Custom 3D LUT file load through USB.
- The Color Gamut can support up to SMPTE-C/ Rec709/ EBU/ DCI-P3/ BT2020.
- Color Space/ HDR/Gamma / Camera Log comparison with original (side by side).
- Color Temperature: 3200K/ 5500K/ 6500K/ 7500K/ 9300K/ User.
- False Color: Default/ Spectrum/ ARRI/ RED.
- Aspect Marker (16:9/ 1.85:1/ 2.35:1/ 4:3/ 3:2/ 2.0X/ 2.0X MAG/ 256:135/ Grid/ User).
- Aspect (Full/ 16:9/ 1.85:1/ 2.35:1/ 4:3/ 3:2/ 2.0X/ 2.0X MAG).
- Audio: supporting Audio Vector, Level Meter, (HDMI supporting 8 channels / SDI supporting 16 channels).
- Time Code: LTC/ VITC.
- UMD display: White/ Red/ Green/ Blue/ Yellow/ Cyan/ Magenta text color for optional.
- Color Bar Mode: Rec601/ Rec709/ BT2020.
- Check Field: Red/ Green/ Blue/ Mono.
- Zoom at any position and at different scale.
- Peaking (Red/ Green/ Blue/ White/ Black).
- Tally (Red/ Green/ Yellow).

## 2. Production Description

### 2.1 Front Panel



1) Tally Light

2) Speaker

3) USB (For 3D LUT load and software update)

4) 3.5mm Earphone Jack

5) SDI Button and Lamps

- Single Button: SDI1/ SDI2/ SDI3/ SDI4/ SFP signal input.

- MV1 Input Button (Under Quad Mode): SDI1/SDI2/SDI3/SDI4/SFP/HDMI signal input.

- 2SI Button

- MV2 Input Button (Under Quad Mode): SDI1/SDI2/SDI3/SDI4/SFP/HDMI signal input.
- Square Button
- MV3 Input Button (Under Quad Mode): SDI1/SDI2/SDI3/SDI4/SFP/HDMI signal input.

#### 6) HDMI Button and Lamp

- MV4 Input Button (Under Quad Mode): SDI1/SDI2/SDI3/SDI4/SFP/HDMI signal input

#### 7) F1- F4 Buttons and Lamps

Assigned function by factory as follow:

- [F1]: Peaking
- [F2]: Waveform
- [F3]: Level Meter
- [F4]: Color Space
- Long press the F1-F4 buttons to customize the shortcut function.

#### 8) Exit Button

- Exit the menu.
- Under Quad Mode: Display the signal input status.

#### 9) Menu Knob

#### 10) Back Light Knob

- Rotate to call up the back light setting.
- Long press the knob to customize the setting shortcut.

#### 11) Volume Knob

- Rotate to call up the volume setting.
- Long press the knob to customize the setting shortcut.

#### 12) Power Button and Lamp

## 2.2 Rear Panel



1) Metal Grip.

2) VESA 75/100mm Mount.

3) Power Switch.

4) Power Connector: 4-pin XLR DC.

5) Fan

6) HDMI 2.1 Input and Loop Output.

7) 12G SFP+ Connector

8) 4x12G-SDI Input and Loop Output.

9) Remote Control Connector.

- GPI Input (RJ45, 8-pin): See Page 22 GPI 1-8.

- RS422 Input (RJ45, 8-pin): Supporting the default and TSL V3.1 protocols to control Monitor.

Follow this instructions about this port.

PIN Number	Instruction
PIN 1	Y
PIN 2	Z



PIN 3	A
PIN 4	NC
PIN 5	NC
PIN 6	B
PIN 7	NC
PIN 8	GND

- RS422 Output (RJ45, 8-pin): Supporting the default and TSL V3.1 protocols to control Monitor. The instructions about the port is as above.

- LAN (10/ 100) Input (RJ45): Supporting the default protocol to control Monitor.

*Note: The "RemoteWeb.exe" as default protocol to control Monitor.*

## 2.3 Suitcase & Sunshade (Optional)



Front



Rear





Suitcase



Sunshade Structure

A rugged suitcase with fully upgraded protection that is super resistant to drop and shock. It also has a wealth of functionality, making it both practical and durable at the same time.

- Mountable Gears

Supports 1/4" and 3/8" interfaces, compatible with most brackets on the market.



### 3. Menu Setting

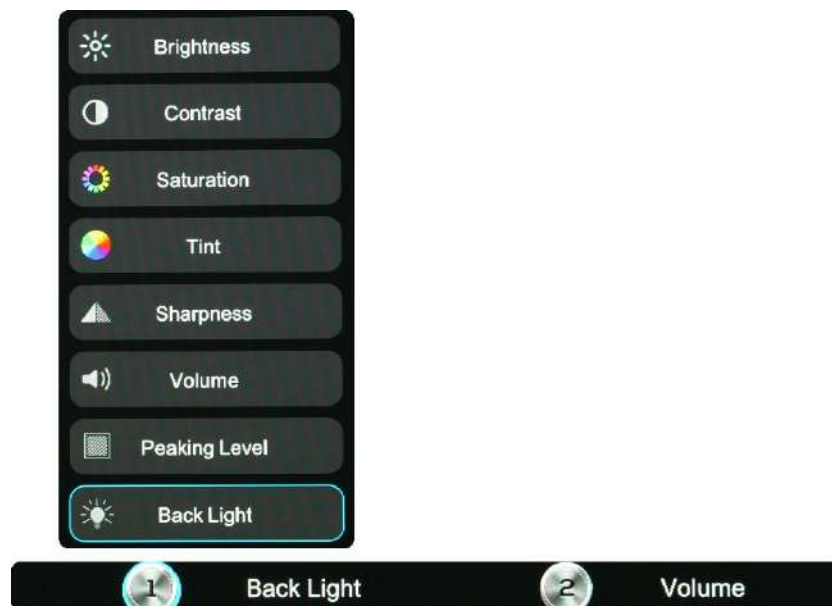
#### 3.1 Shortcut keys

##### 3.1.1 Three Knobs

- Power on the monitor, press <MENU> Knob to display OSD, and select options as the following sequence

via rotating it: PICTURE / MARKER / FUNCTION / WAVEFORM / AUDIO / REMOTE / SYSTEM.

- Press <MENU> Knob to enter the desired function, rotate it to change the value / option, and press Menu Knob or Exit again to confirm the changes.
- Functions of <BRI.> and <VOL.> Knobs can be customized: [Brightness], [Contrast], [Saturation], [Tint], [Sharpness], [Volume], [Peaking Level], [Back Light] After setting the Knob's customized function, rotating it can display the function, and rotating it again can adjust the value. Press it to switch to the next option in turn. Default option: [Back Light], [Volume].



### 3.1.2 F1-F4 Buttons:

- Long press any F1-F2-F3-F4 buttons for 2-3 seconds to pop up shortcut menu on the screen. As shown in Figure. Select option via rotating the <MENU> Knob, and set it as default via pressing the Knob, then press Exit button to exit shortcut setting menu.
- Functions of F1-F2-F3-F4 buttons can also be customized: [Center Marker], [Aspect Marker], [Safety Marker], [Overscan], [Scan], [Aspect], [Color Space], [Gamma], [Camera Log], [Check Field], [H/V Delay], [Freeze], [Color Bar], [Peaking], [False Color], [Exposure], [Histogram], [Waveform], [Vector], [Time Code], [Mute], [Level Meter], [Audio Vector] and [MV Mode] .
- Default function: F1: [Peaking] F2: [Waveform].  
F3: [Level Meter] F4: [Color Space].



## 3.2 MENU Operations

### 3.2.1 PICTURE



- **Brightness**  
Control the degree of brightness between 0-100.
- **Contrast**  
Control contrast ratio between 0-100.
- **Saturation**  
Adjust the color intensity between 0-100.
- **Tint**  
Adjust tint between 0-100.

## ● Sharpness

Control sharpness of the image between 0-100.

## ● RGB Range

Use this item to choose the RGB range of the HDMI input: [Full], [Limited].

## ● HDMI EDID

Select the HDMI EDID from between [Internal] and [External].

- [Internal]: Support HDMI 8K signal, and part of 4K and 2K signals.

- [External]: Support most of 4K and 2K signals.

- Import EDID table: If users need to import individual EDID table, please contact the engineers.

## ● Color Space

Select the display gamut from among [Native], [SMPTE-C], [Rec709], [EBU], [DCI-P3], [BT2020].

## ● Camera Log

Use this item to choose one of the camera Log modes:

- [Off]: Turn off Camera Log.

- [Def. Log]: Use this item to choose one of the Camera Log modes as the following sequence:

[SLog2ToLC-709], [SLog2ToLC-709TA], [SLog2ToSLog2-709], [SLog2ToCine+709], [SLog3ToLC-709],

[SLog3ToLC-709TA], [SLog3ToSLog2-709], [SLog3ToCine+709], [ArriLogCTo709], [ArriLogCToP3DCI],

[CLogToV709], [VLogToV709], [JLog To709], [JLogTo709HLG], [JLogTo709PQ], [Z7 NLogTo709], [D780

NLog To709].



- [User Log]: Use this item to choose one of the User Log modes (1-6). Please install the User Log as following steps:

The User Log must be named with .cube in the suffix. Please note: the device only supports the format of User Log: 17x17x17 / 33x33x33; Data order is BGR; Table order is BGR. If the format does not meet the requirement, please use tool “LutConverter Tool.exe” to transform it. Naming the User Log as User1-User6.cube, then copy the user Log into USB flash disk. Insert the USB flash disk to the device, the User Log is saved to the device automatically at the first time. If the User Log is not loaded for the first time, the device will pop up a prompt message, please choose whether to update or not.

- **Gamma**

Use this item to choose the display Gamma: [Off], [1.8], [2.0], [2.2], [2.35], [2.4], [2.6], [2.8].



*Note: Gamma mode can be only activated while HDR function closed.*

- **HDR**

Use this item to choose one of the HDR presets: [Off], [ST 2084 300], [ST 2084 1000], [ST 2084 10000], [HLG].

- **Back Light**

Adjust the level of the back light from 0 to 100.

- **Color Temp.**

Use this item to choose one of the color temperature presets: [3200K], [5500K], [6500K], [7500K], [9300K], [User].

*Note: Only available under [User] mode to adjust R/G/B Gain and Offset.*

- **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: 256.



### 3.2.2 MARKER



- **Center Marker**

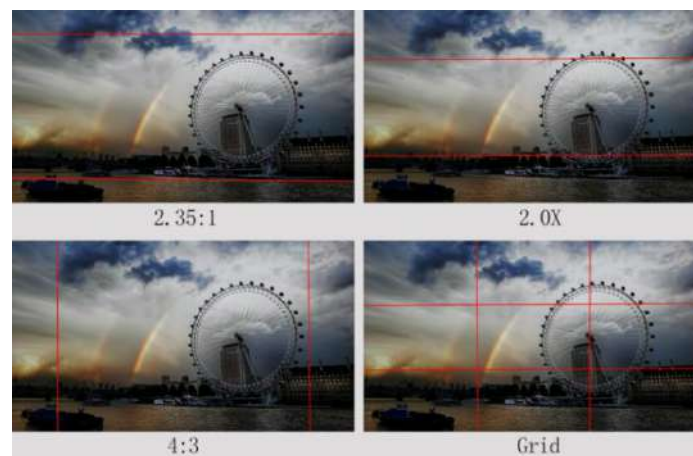
Select [On] to display the center marker “+” and [Off] not to display it.

- **Center Marker Size**

When [Center Marker] is activated, its size can be selected. [Small], [Middle] and [Large] are for optional. Default option: [Middle].

- **Aspect Marker**

Select the aspect ratio of the marker: [Off], [16:9], [1.85:1], [2.35:1], [4:3], [3:2], [2.0X], [2.0X MAG], [256:135], [Grid], [User].



- **Safety Marker**

- Select [Off] not to display the safety marker. When this item is used with the aspect marker, it is only in aspect marker. When [Aspect Marker] is selected as [User], the safety marker does not be changed.

- Select the size of the safety markers: [95%], [93%], [90%], [88%], [85%], [80%].

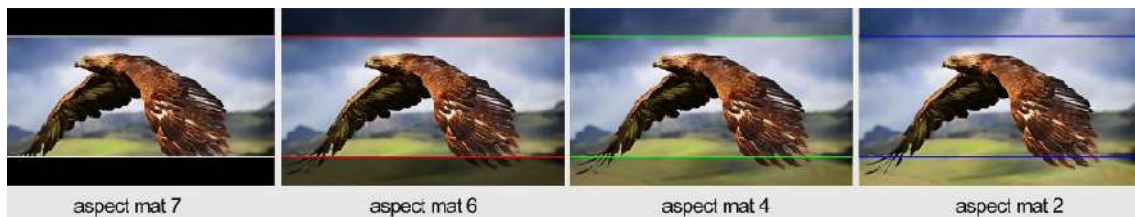
*Note: When [Aspect Marker] is selected as [Grid], the safety marker cannot be displayed.*

- **Marker Color**

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

- **Aspect Mat.**

When activated, it can be selected from 1-7 (Step value is 1).



- **Thickness**

Adjust the thickness of all the marker lines from 1-15 (Step value is 1).

- **User Marker**

H1/H2: Adjust the position of vertical markers from 1 to 3840 (Step value is 1).

V1/V2: Adjust the position of horizontal markers from 1 to 2160 (Step value is 1).

*Note: User maker only in [Aspect Maker]- [User] mode available.*

*Note: The Marker function is not available in Quad Mode.*



### 3.2.3 FUNCTION



#### ● MV Mode

- MV Mode: Off, Quad

MV1 Source: SDI1/SDI2/SDI3/SDI4/SFP/HDMI signal input

MV2 Source: SDI1/SDI2/SDI3/SDI4/SFP/HDMI signal input

MV3 Source: SDI1/SDI2/SDI3/SDI4/SFP/HDMI signal input

MV4 Source: SDI1/SDI2/SDI3/SDI4/SFP/HDMI signal input

- Frame Line Width: Off, 2, 4, 6, 8, 10, 12, 14

MV1 Frame Line Color: White, Red, Green, Blue, Yellow

MV2 Frame Line Color: White, Red, Green, Blue, Yellow

MV3 Frame Line Color: White, Red, Green, Blue, Yellow

MV4 Frame Line Color: White, Red, Green, Blue, Yellow

#### ● Scan

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

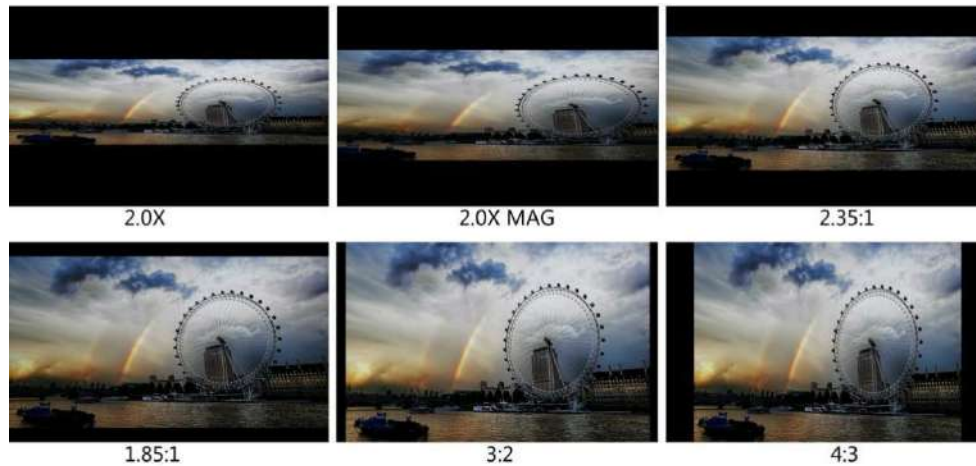
*Note: Aspect and overscan functions only can be adjusted only under [Aspect] mode. Both of them cannot be adjusted in [Zoom] and [Pixel To Pixel] modes.*

*Note: The Scan function is not available in Quad Mode.*

#### ● Aspect

Select the aspect of the image among [Full], [16:9], [1.85:1], [2.35:1], [4:3], [3:2], [2.0X], [2.0X MAG],

[256:135].



*Note: The Aspect function is not available in Quad Mode.*

- **Overscan**

Use this item to activate or deactivate overscan.

*Note: The Overscan function is not available in Quad Mode.*

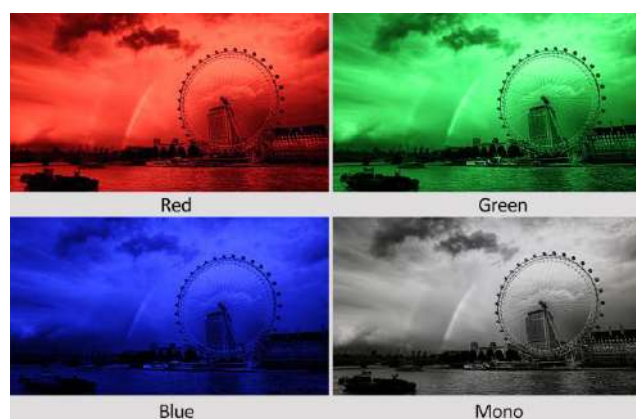
- **H/V Delay**

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 and vertically.

*Note: The H/V Delay function is not available in Quad Mode.*

- **Check Field**

Select one of check field modes: [Off], [Red], [Green], [Blue], [Mono].



- **Zoom**

Select zoom scale from 10% to 90% (Step value is 10%).

When you select [Scan] as [Zoom], any part of the enlarged image can be displayed on the screen via the Menu Knob.

*Note: The Zoom function is not available in Quad Mode.*

### ● Freeze

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

*Note: The Freeze function is not available in Quad Mode.*

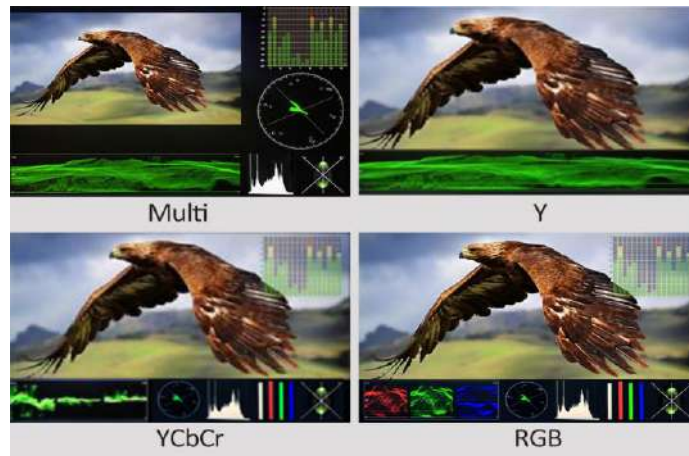
## 3.2.4 WAVEFORM



### ● Waveform

Use this item to activate or deactivate Waveform. Select the waveform mode from among [Multi], [Y], [YCbCr], [RGB].

- [Multi]: Display waveform, histogram, audio vector, vector, and level meter simultaneously.
- [Y]: Display Y Waveform.
- [YCbCr]: Display YCbCr Waveform.
- [RGB]: Display R/G/B Waveform.



*Note: The Waveform function is not available in Quad Mode.*

- **Vector**

Use this item to activate or deactivate Vector.

*Note: The Vector function is not available in Quad Mode.*

- **Transparency**

Adjustment of transparency can support waveform, vector, histogram, audio vector, level meter.

Transparency can be selected from among [off], [25%], and [50%].

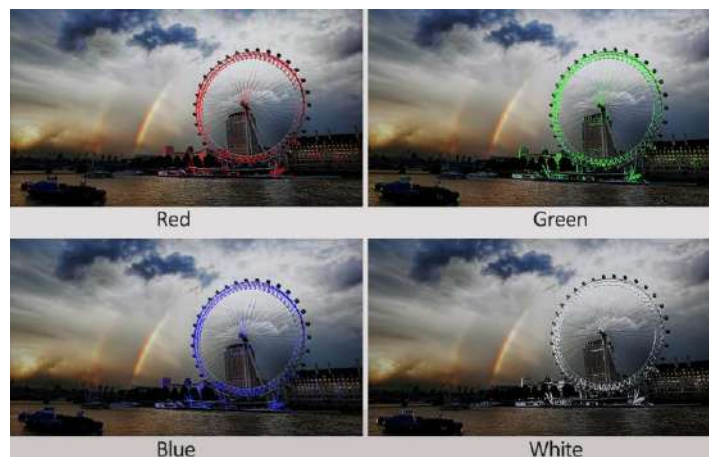
- [Off]: The background of waveform is shown at black.
- [25%]: The background of waveform is shown at 25% intensity.
- [50%]: The background of waveform is shown at 50% intensity.

- **Peaking**

Use this item to activate or deactivate the peaking function.

- **Peaking Color**

Select one of the peaking colors: [Red], [Green], [Blue], [White], [Black].



- **Peaking Level**

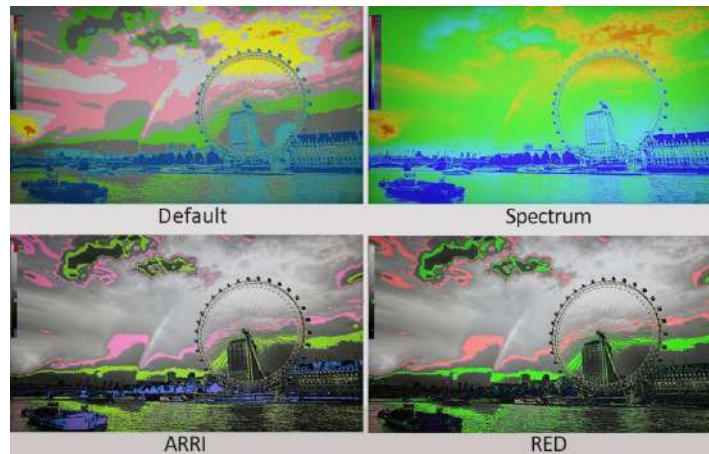


Use this item to adjust the level of peaking from 1-100. The higher peaking level is, the more obvious peaking effect is.

### ● False Color

Use this item to activate or deactivate the false color function.

When activated, [Default], [Spectrum], [ARRI], [RED] are for optional.



### ● False Color Table

Use this item to activate or deactivate the false color table. The range of the false color table is between 0-100 IRE.

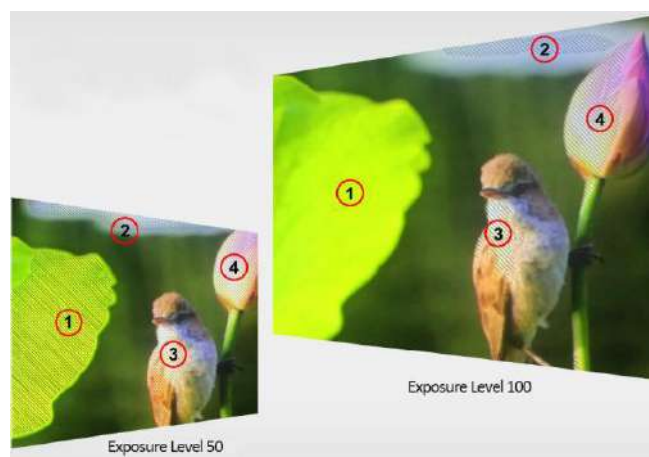
### ● Exposure

Use this item to activate or deactivate the exposure function.

When activated, exposure works if the input signal exceeds the designated exposure level.

### ● Exposure Level

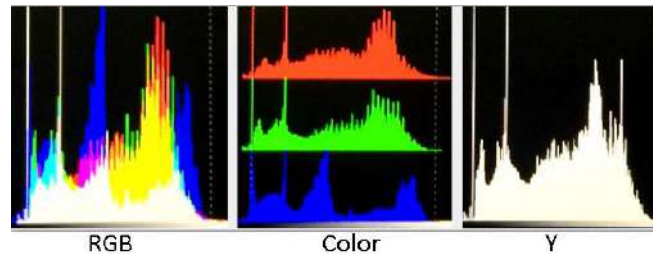
Use this item to adjust the level of exposure between 50-100 IRE.



### ● Histogram

Use this item to activate or deactivate histogram. When activated, [Y], [RGB], [Color] are for optional.

- [Y]: Display Y histogram.
- [RGB]: Display RGB mixed histogram.
- [Color], Display RGB separated histogram.



*Note: The Histogram function is not available in Quad Mode.*

### ● Time Code

Use this item to activate or deactivate the Time Code. When activated, [LTC], [VITC] are for optional.

*Note: Time code is only available under SDI mode.*

## 3.2.5 AUDIO



### ● Volume

Adjust the volume among 0-100.

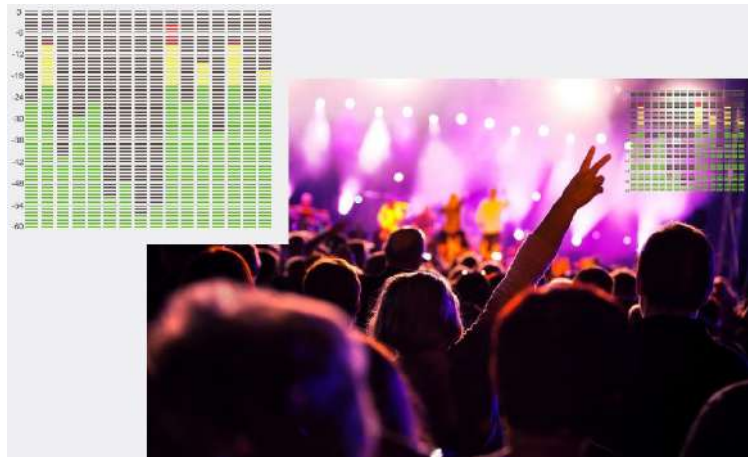
### ● Audio Source: SDI1/SDI2/SDI3/SDI4/SFP/HDMI

*Note: The Audio Source is only available under Quad mode.*

### ● Level Meter

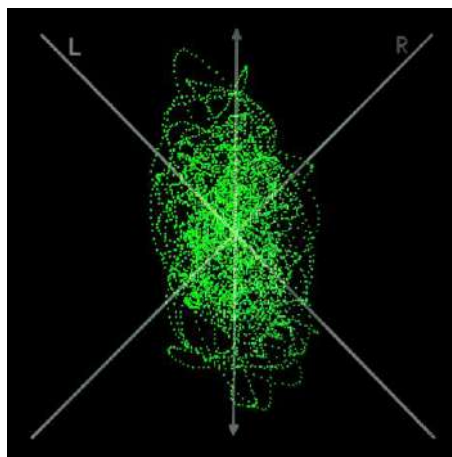
Option: Off, 2CH, 4CH, 8CH, 16CH.

*Note: Default as on under [Waveform]-[Multi] function.*



### ● Audio Vector

Select whether to activate or deactivate audio vector. Audio phase can be monitored by the audio vector.



*Note: The Audio Vector is not available under Quad mode.*

### ● Vector Ch.

In HDMI mode, select the vector channels from among [Ch1&Ch2], [Ch3&Ch4], [Ch5&Ch6], and [Ch7&Ch8].

In SDI mode, select the Vector Channels from among [Ch1&Ch2], [Ch3&Ch4], [Ch5&Ch6], [Ch7&Ch8], [Ch9&Ch10], [Ch11&Ch12], [Ch13&Ch14], and [Ch15&Ch16].

*Note: The Vector Ch is not available under Quad mode.*

### ● Audio Left/Right Out

In HDMI mode, select one of the audio channel from among 1-8.

In SDI mode, select one of the audio channel from among 1-16.

*Note: The Audio Left/Right Out is not available under Quad mode.*



### 3.2.6 REMOTE



- **DHCP**

- [On]: The monitor will automatically get an IP address from network for remote control via various programs.

- [Off]: Manually configure IP address.

- **IP Address**

Manually configure IP address: xxx.xxx.xxx.xxx

*Note: When [DHCP] on, IP address cannot be manually set .*

- **Sub net Mask**

Manually configure Sub net Mask: xxx.xxx.xxx.xxx

*Note: When [DHCP] on, Sub net Mask cannot be manually set .*

- **Gateway**

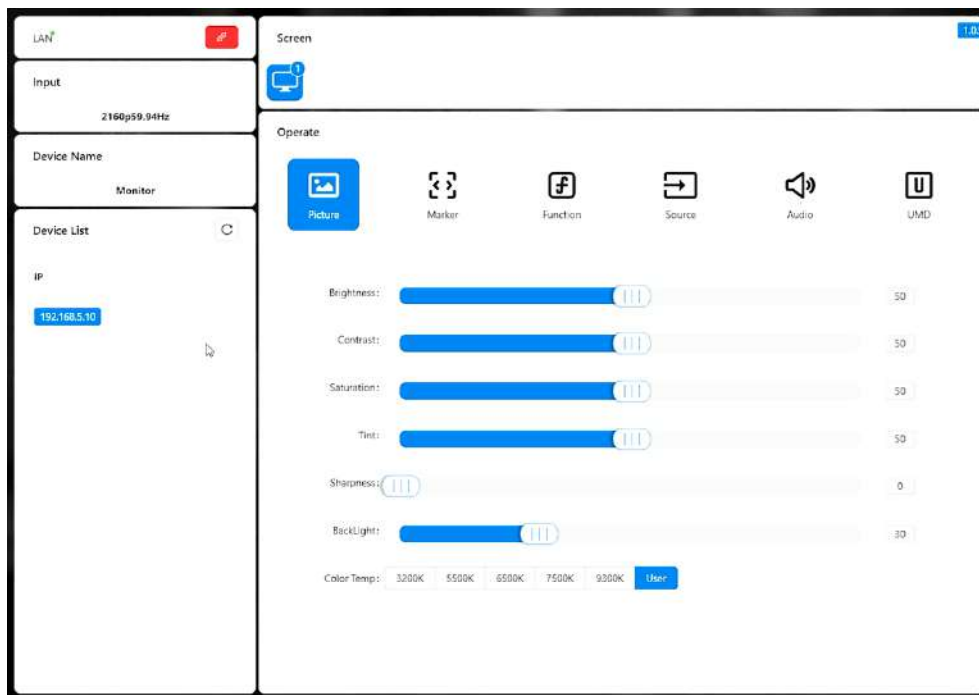
Manually configure Gateway: xxx.xxx.xxx.xxx

*Note: When [DHCP] on, Gateway cannot be manually set .*

- **RS Type**

Select RS type: [Default], [TSL V3.1], [TSL V5.0].

Default software connection as below,



## ● RS ID

Set the ID of RS422 communication. The valid address range is between 1-126.

*Note: ID must be unique in a RS422 network.*

## ● Baud Rate

Select one of RS422 Baud Rate: [19200], [38400], [57600].

*Note: Set the same Baud Rate in PC's monitoring software.*

*Note: The Baud Rate is not available under Quad mode.*

## ● UMD

UMD 1: Off, On

UMD 1 Text Color: White, Red, Green, Blue, Yellow, Cyan, Magenta

UMD 2: Off, On

UMD 2 Text Color: White, Red, Green, Blue, Yellow, Cyan, Magenta

UMD 3: Off, On

UMD 3 Text Color: White, Red, Green, Blue, Yellow, Cyan, Magenta

UMD 4: Off, On

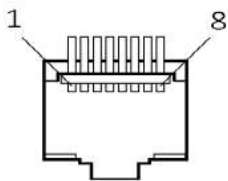
UMD 4 Text Color: White, Red, Green, Blue, Yellow, Cyan, Magenta

## ● GPI 1-8

PIN Number	GPI	Settable Values
------------	-----	-----------------

1	1	Single/ 2SI/ SQUARE
2	2	HDMI
3	3	Center Marker
4	3	16:9 Marker/ 1.85:1 Marker/ 2.35:1 Marker/ 4:3
5	4	Marker/ 3:2 Marker/ 2.0X Marker/ 2.0X MAG
6	5	Marker/ Grid
7	6	SA 95%/ SA 93%/ SA 90%/ SA 88%/ SA 85%/ SA 80%
8	7	Pixel To Pixel
9	8	Blue Only
10	9	H/V Delay
11	10	Peaking
12	11	False Color
13	12	Exposure
14	13	Mute
15	14	Level Meter
16	15	Audio Vector
17	16	Tally Red/ Tally Green
18	17	MV Mode
19	18	GND

#### [Pin Assignment]



The GPI function is activated when the GPI pin is connected with the ground, and closed when it is disconnected from the ground. Connect to GPI to control the monitor remotely.

### 3.2.7. SYSTEM



- **Language**

Option: [Chinese], [English].

- **SFP**

Option: [On], [Off].

When the SFP on, SFP signal input can be selected via SDI-Single button on the front panel.

- **Color Bar**

Turn on/off color bar. When the color bar on, it can be selected: [100%], [75%].

*Note: The Color Bar Mode is not available under Quad mode.*

- **Color Bar Mode**

Option: [Rec601], [Rec709], [BT2020] color space.

*Note: The Color Bar is not available under Quad mode.*

- **OSD Timer**

Option: [10s], [20s], [30s].

- **OSD Transparency**

Turn on/off OSD transparency. When OSD Transparency on, option: [25%], [50%].

- **OSD H Position**

Option: 0-100. Default: 50.

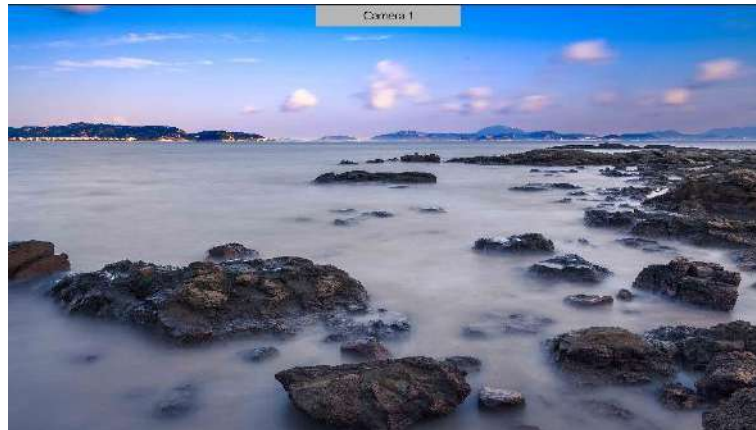
- **OSD V Position**

Option: 0-100. Default: 50.

### ● Info. Windows

Option: [Off], [On]. Default: [Off].

- It supports UMD display. As show in the picture below,



- UMD feature in the info. windows:

Support user UMD input data on screen, ASCII: 0x20~0x7e

Support display up to 16 characters that are input by TSL protocol V3.1 on the screen.

*Note: The Info. Windows is not available under Quad mode.*

### ● Info. Transparency

Select to turn on/off info. Windows transparency, option: [Off], [25%], [50%]. Default: [Off].

*Note: It is not available under Quad mode.*

### ● Info. Windows H/V Position

The option range: 0-100.

*Note: When [Info. Window] is selected as [Standard], its position can be adjusted freely. When [Info. Window] is selected as [Full], its vertical position can be adjusted freely.*

### ● Fan

Option: [Auto], [On], [Off]. Default: [Auto].

- [Auto]: The monitor will automatically turn on/off the fan according to the setting value of fan auto temp.

### ● Closed Caption

Option: [On], [Off]. Default: [Off].

The 23.8 inches 1200 nits  
Production Monitor

- **Caption Type**

Option: [608 (in 708)], [708].

- **Channel/Service**

Option: [CC1], [CC2], [CC3], [CC4].

- **Color Calibration**

Select [On] or [Off].

If the device needs to be calibrated color, please operate as following:

- Connect the device with the PC via HDMI interface.
- Make sure the device and color calibration equipment to work more than 30 minutes.
- After the previous step, activate the Color Calibration function of the device and color calibration software to calibrate the color (See the document “CMS Color Calibration Process” for details).
- It will generate a document “Rec709.cube” after calibrated, then copy this document to USB flash disk.
- Insert the USB flash disk to the device and save the document. This document “Rec709.cube” will be found under Color Space Option.

*Note: It is not available under Quad mode.*

- **Comparison En**

Use this setting to activate or deactivate the Comparison En function.

When activated, the screen displays the comparison of Original image and customized image, as shown:



Option: [Off], [Gamma/HDR], [Color Space], [Camera Log]. Default: [Off].

*Note: It is not available under Quad mode.*

- **Back Color**

Option: [Blue], [Black].

- **Version**

Show the version of firmware.

- **Reset**

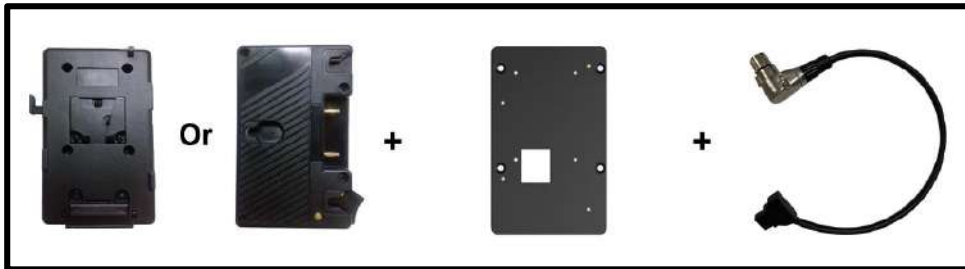
Select the Reset option, press the Menu knob to automatically reset.

## 4. Product Parameters

Panel	23.8" 10 bit
Resolution	3840×2160
Aspect Ratio	16:9
Brightness	1200 cd/m <sup>2</sup>
Contrast	1000:1
Viewing Angle	178°/178°
Input	12G-SDI*4, HDMI 2.1, GPI, RS422, LAN, USB, SFP
Output	12G-SDI*4, HDMI 2.1, RS422, Earphone jack
Supported Formats	12G-SDI: Support up to 8K 60Hz; HDMI 2.1 Support up to 8K 60Hz; 12G SFP+: Support up to 4K 60Hz.
Remote Control	RS422 In/Out, GPI, LAN
Power In	DC 15-24V
Power Consumption	≤90W (19V)
Operating Temperature	0~50°C
Storage Temperature	-20~60°C
Dimensions (LWD)	576.6x375.5x53.5mm / 632.4x431.3x171mm (with suitcase)
Weight	7.7kg / 17.8kg (with suitcase)



## 5. Accessories



### ● Standard:

- |  |        |
|--|--------|
| 1) 19V/6A DC Adapter   | 1 pc   |
| 2) Base Brackets   | 1 pair |
| 3) 8GB USB flash drive (User guide and software included)                        | 1 pc   |
| 4) V-Mount/Anton Bauer Battery Plate + VESA Mount Plate + D-tap to XLR Connector | 1 set  |



### ● Optional:

- |                             |      |
|-----------------------------|------|
| 5) SFP Optical Fiber Module | 1 pc |
| 6) Suitcase & Sunshade      | 1 pc |

## 6. 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 cables of SDI and HDMI are correctly connected or not. Please use the standard power adapter coming with the product package. Improper power input may cause damage.

### 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 → FUNCTION → Overscan” to zoom in/out pictures automatically when receiving HDMI signals.

### 5) Other problems:

Please press “MENU” button and choose “MENU→SYSTEM→ Reset →On”.

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

## Appendix 1: 3D LUT Loading

3D LUT supports upload color calibration document and User Log via USB flash disk.

### ● Format Requirement

#### ● LUT format

Type: .cube

3D Size: 17x17x17/33x33x33

Data Order: BGR

Table Order: BGR

#### ● USB flash disk version

USB: 2.0

System: FAT32

Size: <16G

#### ● LUT formatColor calibration document: Rec709. cube

#### ● User Log: User1. cube-User6.cube

### ● LUT Format conversion

Please convert LUT format according to the following steps.

*Note: For Mac users, please copy the "mac OS" file to Mac, then click and follow the steps below.*

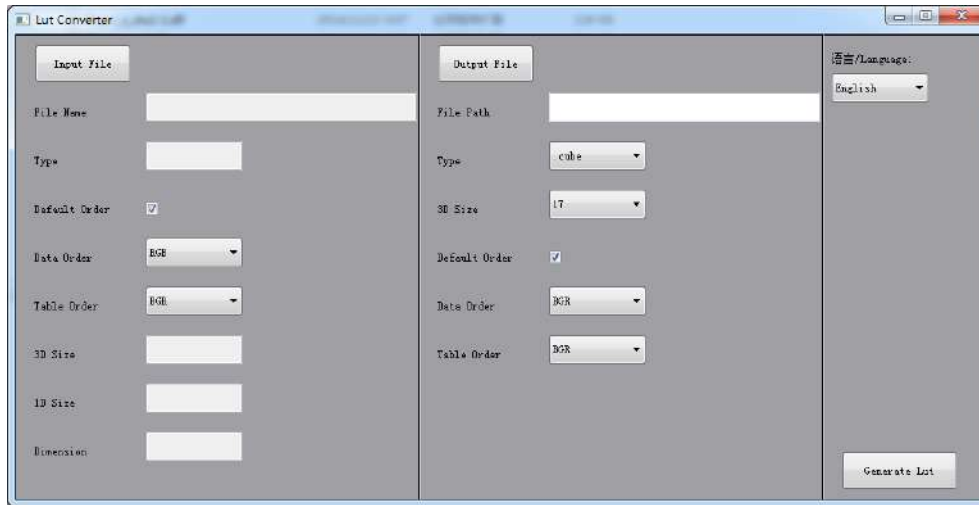
#### ● Activate Lut converter



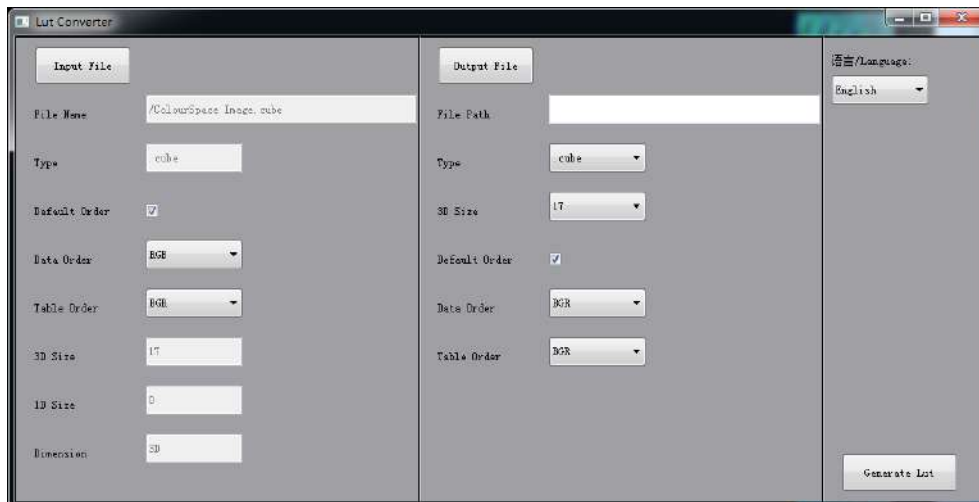
One individual Product ID for one computer. Please send the ID number to Sales to get an Enter Key.

Then the computer gets the permission of the Lut Tool after input the Enter Key.

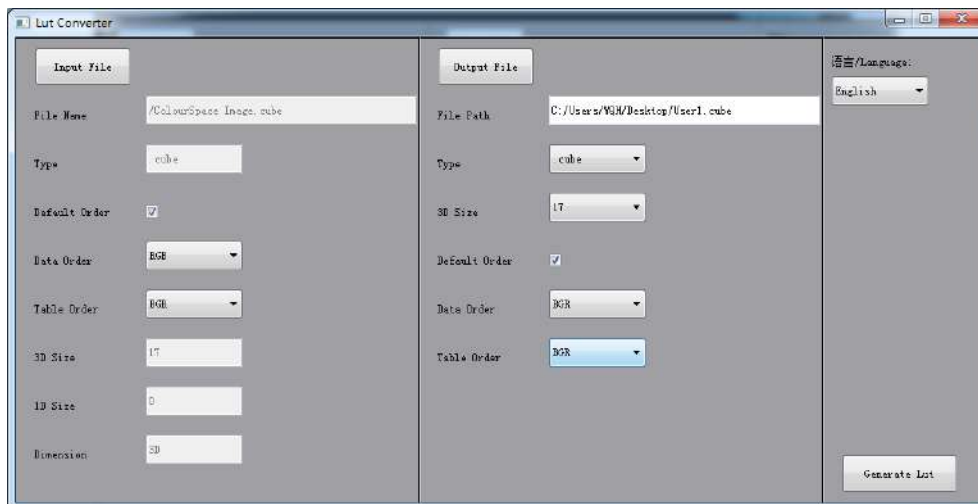
- Lut Converter user demo
- Activate Lut Tool.exe.



- Click Input File, then select \*LUT.



- Click Output File, choose the file name.



- Click Generate Lut button to finish.

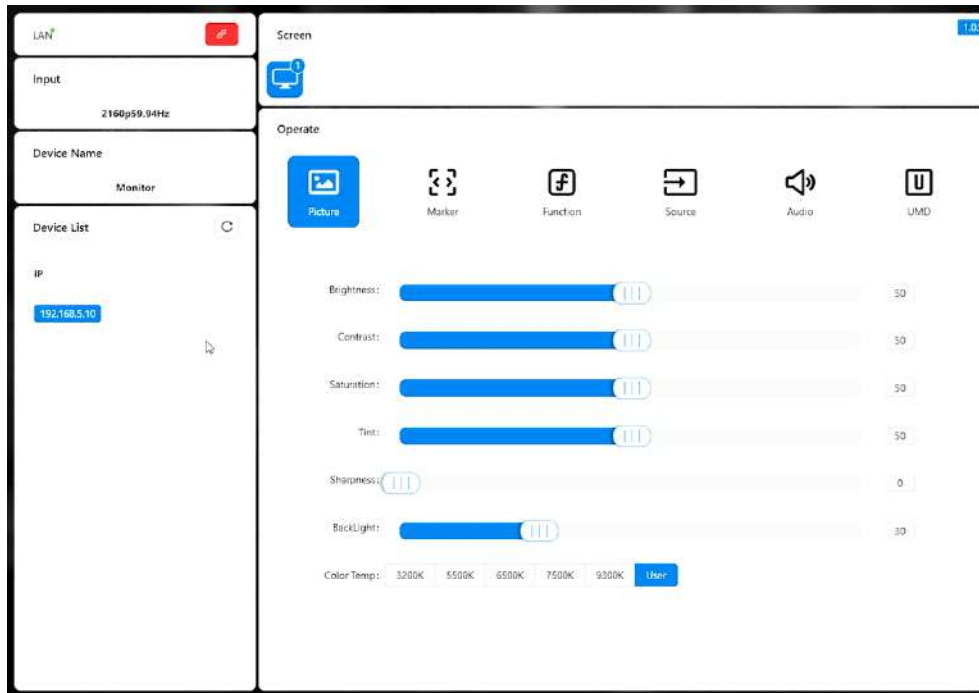
## ● USB Loading

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 the LUT document name or the USB flash disk version), then press Menu button to update automatically. It will pop-up a prompt message if the update completed.

## Appendix 2: Remote Terminal Instructions

Remotely control the device by “Remote Web”.

### ● UI



- Input: Display the signal format of the connected device. For example, there is “No Signal” when no device is connected or no signal is input.
- Device Name: Display the Model No. of the connected device.
- Port: Select the connection way of the port when connecting a device, and support “RS422” or “LAN” communication protocol.
- Device List: Display all of the found peripheral device.
- Screen: Display the number of screens for the selected device and the current screen index.
- Operate: Operate the items for the device.

### ● Function

- Port Selection: Select the specific connection port according to the device interface and click “RS422” or “LAN” to switch. When RS422 selected, it needs to further set the COM name and baud rate. For baud rate, it needs to be adapted to the baud rate of the connected device.
- Device Control: Click the icons of [Picture], [Marker], [Function], [Source], [Audio] and [UMD] to switch the control page of the corresponding function.