

2x7" HDMI & 3G-SDI Rack Mount Monitor

with Full HD Resolution, 3RU rack mount design.

User Manual

ULE-702-HDR



Ikegami

IMPORTANT SAFETY INSTRUCTIONS:

- Please read User Guide before using this product.
- Please keep User Guide for future reference.

FEATURES:

- 160° Wide viewing angles;
- High resolution: 1920×1200;
- High brightness: 400cd/m²;
- High contrast: 2000:1;
- Faster response time;
- TALLY interface with indicating light;
- Firm & thin design.

CAUTIONS:

1. Please do not place the display screen towards the ground.
2. Please avoid heavy impact or drop onto the ground.
3. Please do NOT use chemical solutions to clean this product. Please wipe with a clean soft cloth to maintain the brightness of the surface.
4. Please do not block any vent hole.
5. 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.
6. Please unplug the power if long-term no-use, or thunder weather.

7. TROUBLE SHOOTING

1. Only black-and-white display:

Check whether the color saturation is properly set up or not.

2. Power on but no pictures:

Check whether the cables of HDMI, SDI are correctly connected or not. Please use the standard power adapter equipped with the product package. Improper power input may cause damage.

3. Wrong or abnormal colors:

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

4. When power on, the picture shows size error:

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

5. Other problems:

Please press "MENU" button and choose "SYSTEM→ Manufacturer Default →ON", then press "ENTER" button to confirm it.

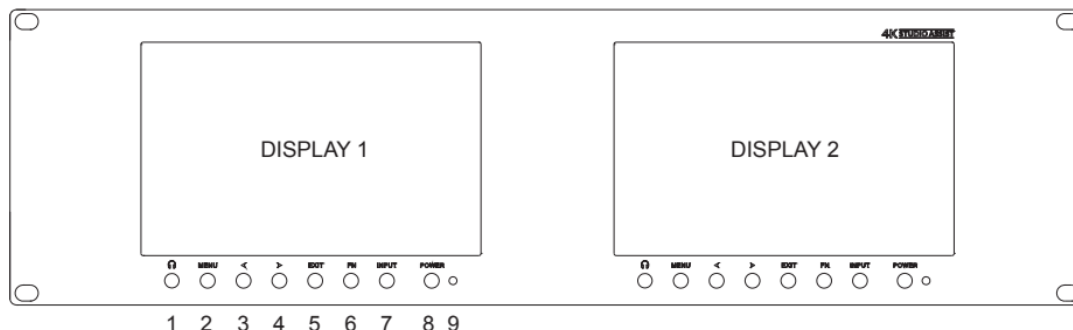
Note: due to constant effort to improve products and product features, specifications may change without prior notice.

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1. PRODUCT DESCRIPTION

● Front Housing



1. Earphone

2. MENU: To activate OSD (on-screen display) menu. Press “◀ / ▶” button to switch among the picture, marker, function, waveform, audio, system.

3. ◀ Left selection button: to select item on OSD menu and adjust its value; Press to decrease the value of brightness, sharpness, contrast, saturation and Tint.

4. ▶ Right selection button: to select item on OSD menu, adjust its value and confirm it; Press to increase the value of brightness, sharpness, contrast, saturation and Tint.

Note: When press ◀ or ▶ button, then press MENU button, it will activate user-definable menu OSD (Brightness, Contrast, Saturation, Sharpness, Volume, Back light, Peaking Level). User can select the shortcut item based on different demand. Volume is default.

5. EXIT

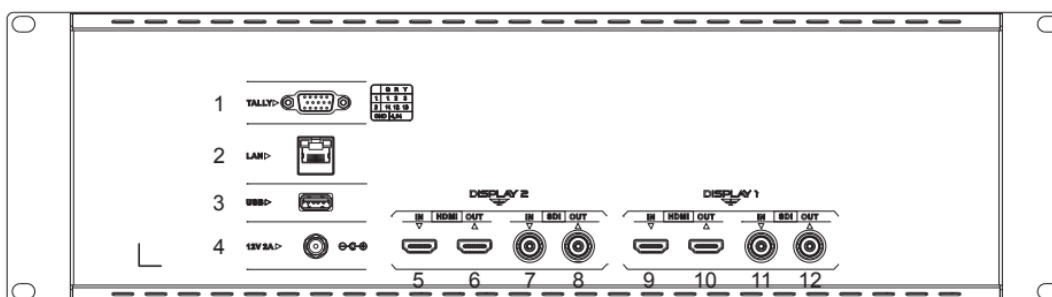
6. FN: Customized Function button; to launch function menu quickly. Peaking as default.

7. INPUT: circularly switch among of HDMI, SDI.

8. POWER on/off button

9. Power indicator light

● Back Housing



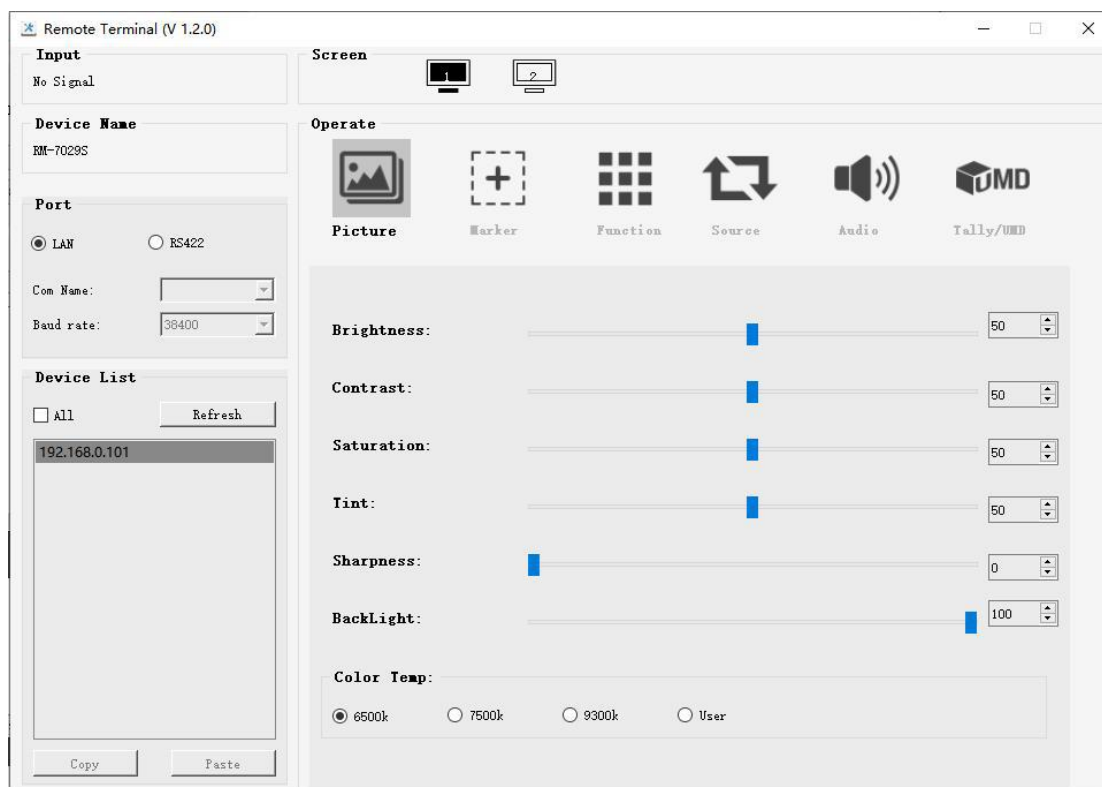
● Function

- Port Selection: Select the specific connection port according to the device interface and click "LAN" to switch.
- Device Search: Click "Refresh" button to search devices after configuring the port. There are all of the found devices in the device list after a successful search.
- Screen Choice: The "Screen" shows the number of the screens for the current device. For the device with multiple screens, use left mouse button to click the screen icon to select the corresponding screen for operation; use right mouse button to click the screen icon to copy the screen.
- Device Control: Click the icons of [Picture], [Marker], [Function], [Source], [Audio] and [UMD] to switch the control page of the corresponding function.
- Activate "All": Simultaneously control all of the devices in the device list if there is two or more devices with the same model after activating "All".
- Device Copy Function: If there are two or more devices with the same model in the device list, click one of them and click "Copy" button to copy the source device, and then click the target device and click "Paste" button to copy the configuration of the source device to the target one.

6.Remote Terminal Instructions

Remotely control the device by Remote Terminal application.

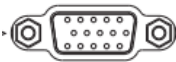
● Home Screen



Picture: The home screen of the application

- 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 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.
- Control Screen: The control rules for the device.

Note: The interfaces within DISPLAY 1 provide signal source for left monitor. The interfaces within DISPLAY 2 provide signal source for right monitor.

1.  TALLY interface and interface definition.
2.  LAN port. (Connected to PC network interface for function adjustment.)
3.  USB input (Only used for program upgrades and LUT load, do NOT use if non-professionals).
4.  DC 12V power input.
5. & 9.  **HDMI IN** HDMI input.
6. & 10.  **HDMI OUT** HDMI output.
6. & 11.  **SDI IN** SDI input.
8. & 12.  **SDI OUT** SDI output.

2. MENU SETTING

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

2.1 FN user-definable function button:

Press FN button to pop up the default options, Use “◀ / ▶” buttons to adjust the value of selected item.

Long press FN button for 3-5 seconds to pop up shortcut menu directly. As

Center Marker

Aspect Marker
Safety Marker
Overscan
Scan
Aspect
Camera Log
Check Field
H/V Delay
Freeze
Color Bar
Peaking
False Color
Exposure
Histogram
TimeCode

shown in right Figure (default menu is displayed in white font).

Use “◀ / ▶” buttons to select the desired item.

Functions of FN button can be customized: Center Marker, Aspect Marker, Safety Marker, Overscan, scan, Aspect, Camera Log, Check field, H/V delay, Freeze, Color Bar, Peaking, False color, Exposure, Histogram, TimeCode, Mute, Level Meter.

2.2 MENU Operation

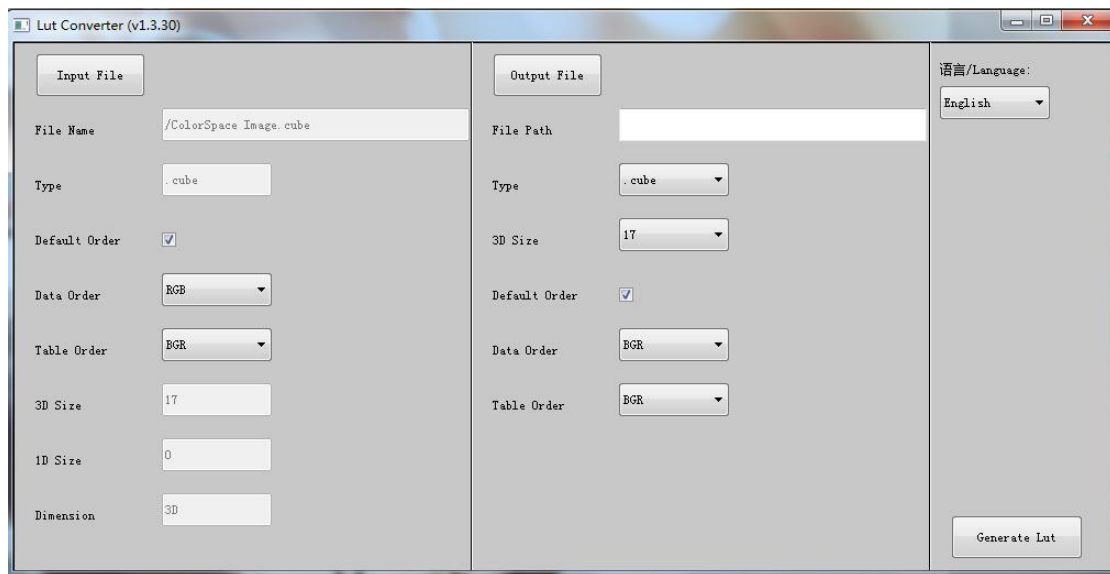
Press “MENU” button on the device after power on. The menu used for setting function will display on the screen.

Press ◀/▶ buttons to select the sub-menu; then press MENU button to confirm it; after that, press EXIT button to return to main menu.

2.2.1 PICTURE

SDI Mode		HDMI Mode	
PICTURE		PICTURE	
	Brightness 50		Brightness 50
	Contrast 50		Contrast 50
	Saturation 50		Saturation 50
	Tint 50		Tint 50
	Sharpness 0		Sharpness 0
	Camera Log Off		RGB Range Limited
	Def. Log SLog3ToLC-709		HDMI EDID 4K
	User Log User1		Camera Log Off
	SDI		HDMI

- **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**



5.3.5. Click Generate Lut button to finish.

5.4. USB Loading

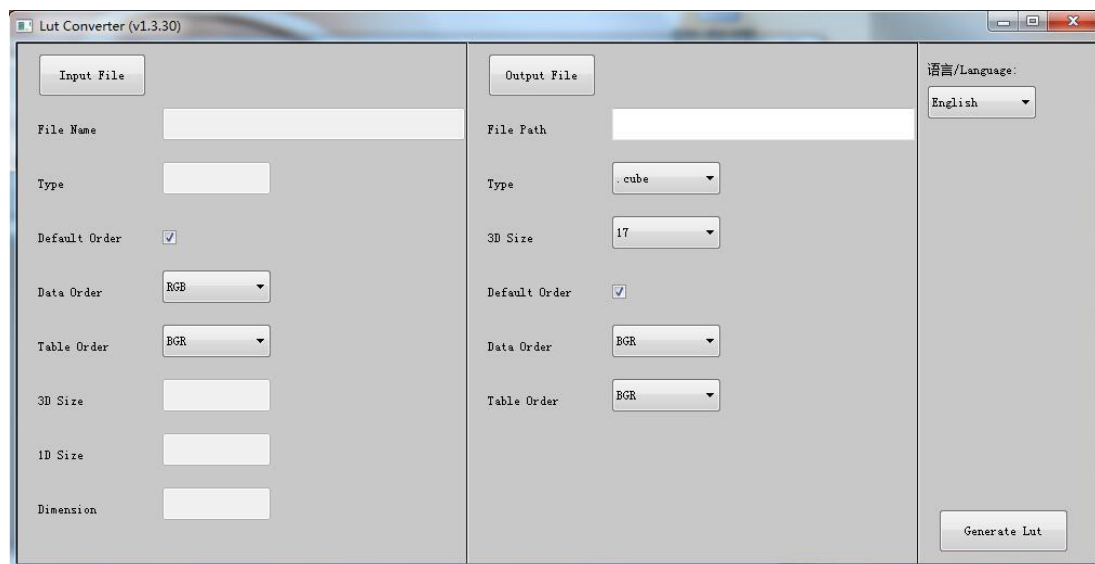
Copy the needed files to the root directory of the USB flash disk.

Note! LUT files after conversion must be named "User1", "User2", "User3", "User4", "User5" or "User6".

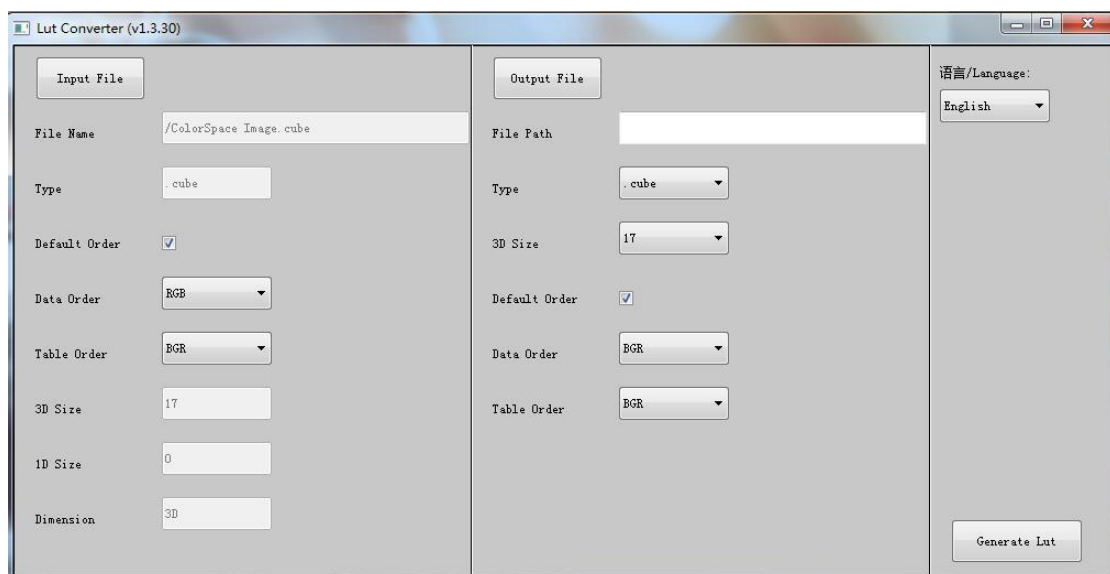
Plug the USB flash disk into USB port of the device after power on. Click "Yes" on the pop-up prompt window (If the device doesn't pop-up the prompt window, please check if the LUT document name or the USB flash disk version meets monitor's requirement.), then press Menu button to update automatically.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

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.

5.3.2. Enter the Lut Converter interface after input the Enter Key.



5.3.3. Click Input File, then select *LUT.



5.3.4. Click Output File, choose the file name.

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

- **HDMI EDID**

Select the HDMI EDID from between [4K] and [2K]. This item enables PC or other devices to recognize the property of this monitor and makes the images look excellent on the screen.

- **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 "Lut 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.

- **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: [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.

2.2.2 MARKER



- Center Marker

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

- Aspect Marker

Select the aspect ratio of the marker: [Off], [16:9], [1.85:1], [2.35:1], [4:3], [3:2], [1.3X], [1.5X], [2.0X], [2.0X MAG].



- Safety Marker

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

Note:When this item is used with the aspect marker, it is only in aspect marker.

- 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).

5. 3D LUT Loading Demo

5.1. 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

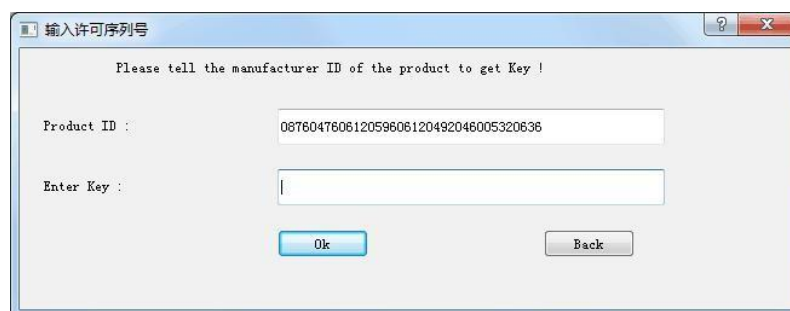
- User Log: User1.cube ~User6.cube

5.2. 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).

5.3. Software user demo

5.3.1. Activate Lut converter



4. ACCESSORIES



- | | |
|-------------------------|---------|
| 1. DC 12V Power Adapter | 1 piece |
| 2. TALLY Connector | 1 piece |
| 3. User Manual Card | 1 piece |



● Thickness

Adjust the thickness of all the marker lines from 1-7 (Step value is 1).

2.2.3 FUNCTION

FUNCTION		
	Scan	Aspect
	Aspect	Full
	Overscan	Off
	H/V Delay	Off
	Check Field	Off
	Zoom	50%
	Freeze	Off
	HDMI	

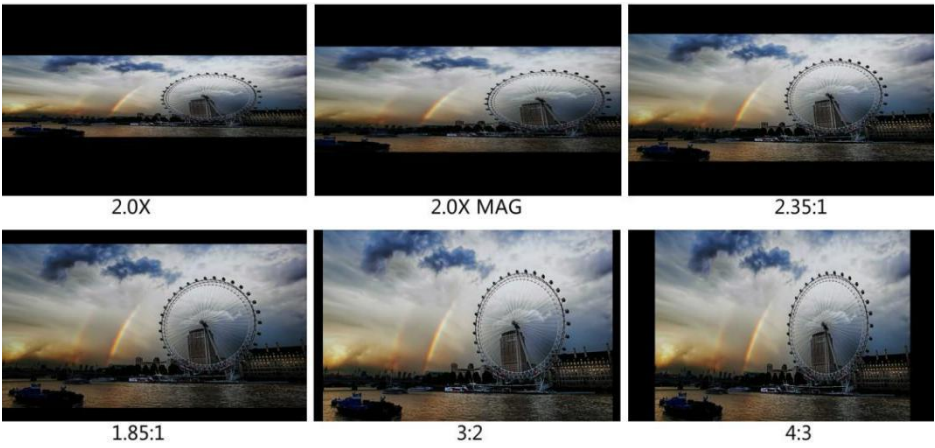
● Scan

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

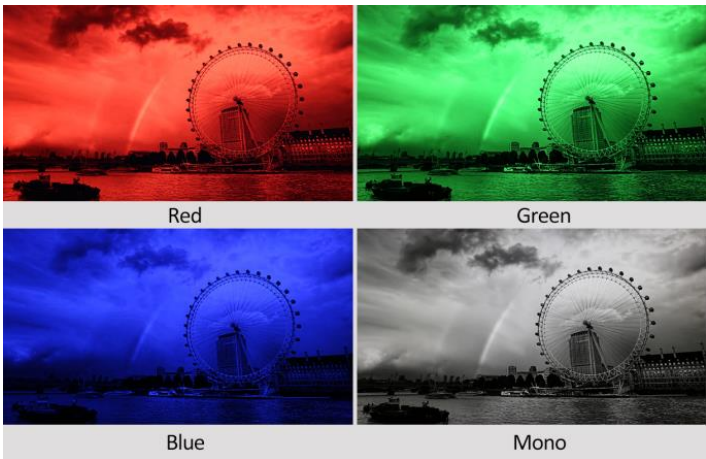
Note: Aspect and Overscan functions only can be adjusted under [Aspect] mode. Both of them cannot be adjusted in [Zoom] and [Pixel To Pixel] modes.

● Aspect

Select the aspect of the image among [Full], [16:9], [1.85:1], [2.35:1], [4:3], [3:2], [1.3X], [1.5X], [2.0X], [2.0X MAG].



- **Overscan**
Use this item to activate or deactivate overscan.
- **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.
- **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%).
- **Freeze**
Choose [On] to capture one frame of current image on the screen, and choose [Off] to close freeze function.

2.2.4 WAVEFORM

WAVEFORM		
	Transparency	50%
	Peaking	Off
	Peaking Color	Red
	Peaking Level	50
	False Color	Off
	False Color Table	On
	Exposure	Off
	Exposure Level	100IRE
	SDI	

- **Transparency**
Adjustment of transparency can support histogram, audio vector, level meter. Transparency can be selected from among [Off], [25%], and [50%].

3. PARAMETERS

Panel	2×7"
Physical Resolution	1920×1200
Brightness	400 cd/m ²
Contrast	2000: 1
Viewing Angle	160°/ 160°(H/V)
Input Voltage	DC 12V
Input Signal	HDMI, SDI, LAN, TALLY, USB
Power Consumption	≤18W
Operating Temperature	-20°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Dimension (LWD)	480×131.6×29.3mm
Weight	2.2KG

Option: 0-100. Default: 50.

- **OSD V Position**

Option: 0-100. Default: 50.

- **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: 0.0.0.0

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

- **Sub Mask**

Manually configure Sub net Mask: 0.0.0.0

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

- **Gateway**

Manually configure Gateway: 0.0.0.0

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

- **Reset Option: [Off], [On]**

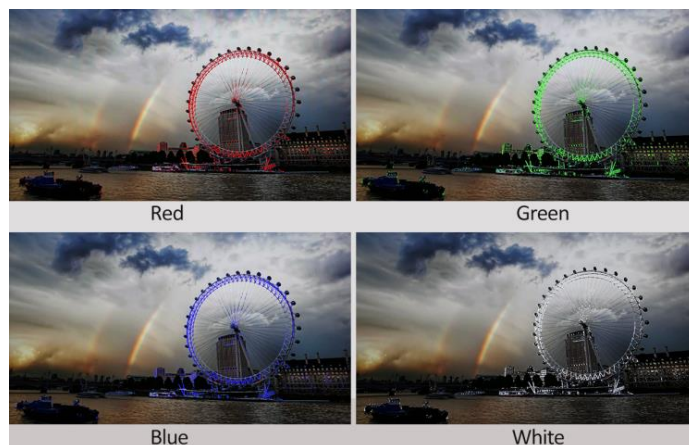
- [Off] : The background of waveform is shown at black.
- [25%]: The background of waveform is shown at 25% intensity.
- [50%]: The background of waveform is shown at 50% intensity.

- **Peaking**

Use this item to activate or deactivate the peaking function.

- **Peaking Color**

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



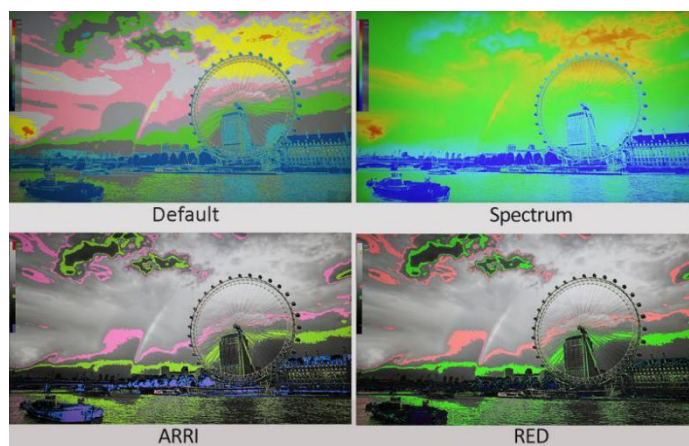
- **Peaking Level**

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.

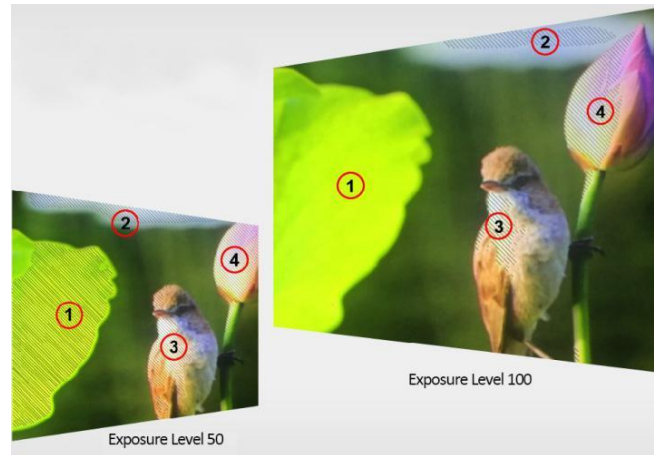
- Exposure

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

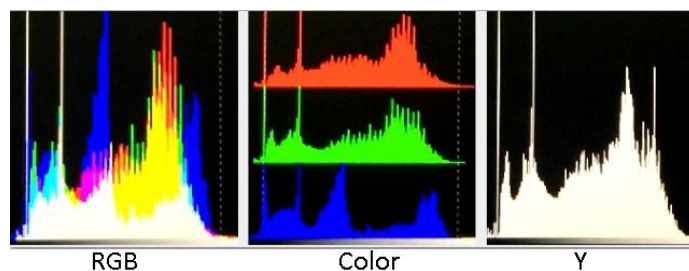
Use this item to adjust the level of exposure between 50-100 IRE.



- 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.

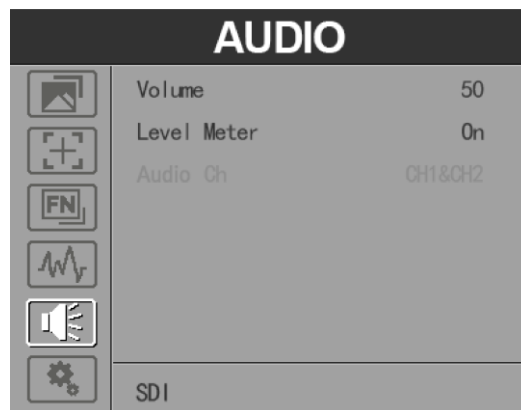


- Time Code

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.

2.2.5 AUDIO



- **Volume**

Adjust the volume among 0-100.

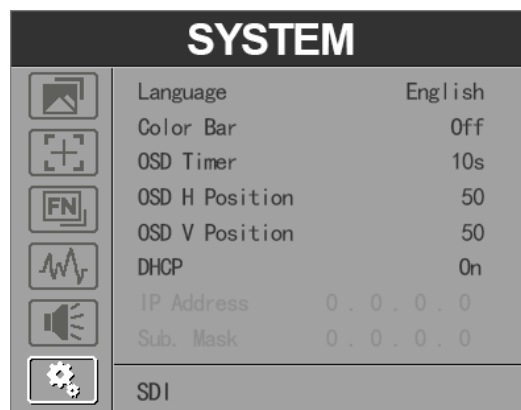
- **Level Meter**

Select whether to activate or deactivate level meter.

- **Audio Ch**

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

2.2.6. SYSTEM



- **Language**

Option: [English], [Chinese] .

- **Color Bar**

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

- **OSD Timer**

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

- **OSD H Position**