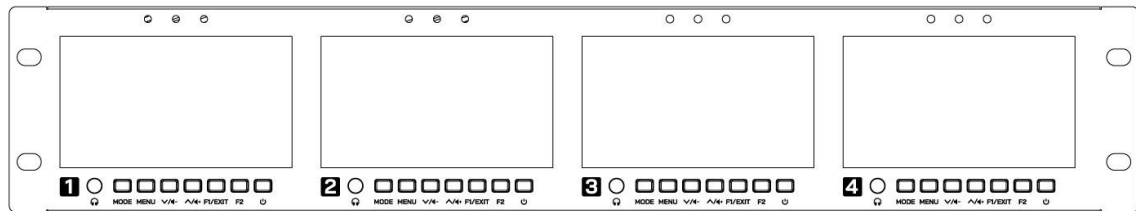# 4.5-inch 2RU Quadruple
Rack-mount Monitor

User Manual

Foreword

Thank you for purchasing our quadruple rack-mount monitor, please read this manual carefully before using the unit, have a nice experience.

Cautions

1. Please use the adapter attached in the accessory, if necessary, please use qualified adapter.
2. Please do not store or use in too cold, too hot or humid place.
3. Please keep the monitor away from the strong light while using this product to ensure the image effect and long-term use.
4. Please avoid heavy impact or drop onto the ground.
5. Please do NOT use chemical solutions to clean this product. Please wipe the monitor with a clean soft cloth to maintain the brightness of the surface.
6. No adjustable components in the monitor. Please do not take apart or repair the unit by yourself, to avoid the damage of the product.

Function Features

◆2RU quadruple rack mount LCD monitor, compact thin and lightweight design, which make it suitable for installing where the space is limited and also could be installed in the standard 19-inch rack.

◆ HD1280x720 IPS, 350nit brightness

◆ Three-color Tally indicator, enhance team cooperation

◆ With CVBS, AUDIO, HDMI, 3G-SDI input, suitable for a
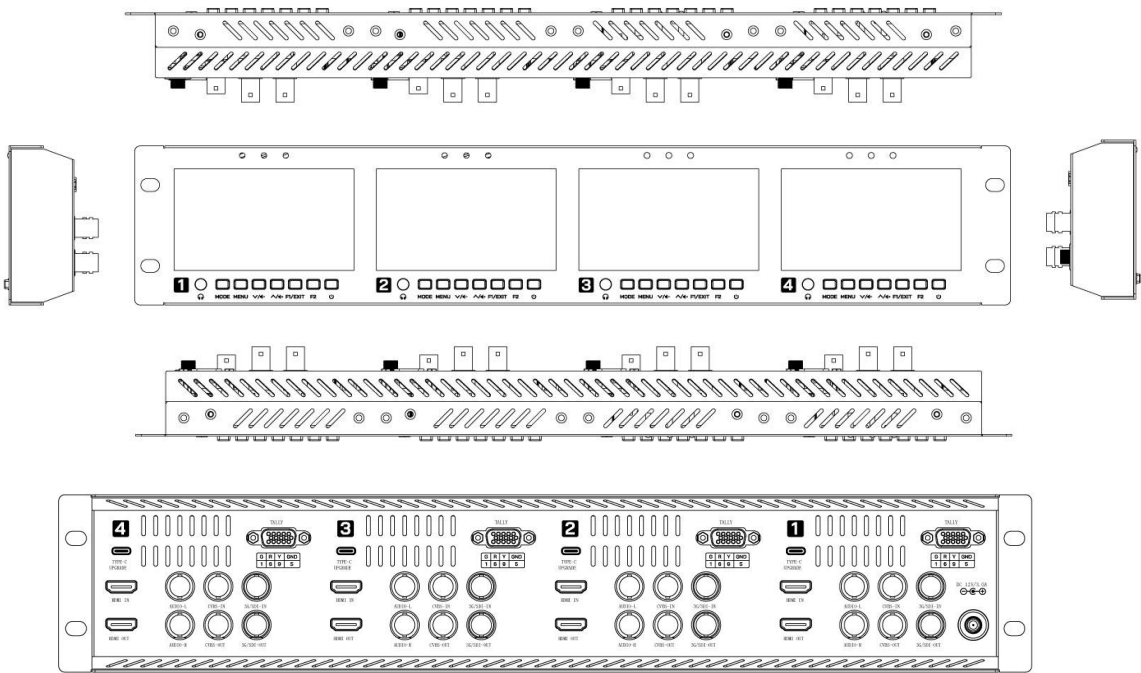
variety of signals.

◆ Custom buttons, could set the custom F button function

  as customers operating habit.

◆ Load custom 3D-LUT, preview film look

◆ All waves accurately analysis, save budget

◆ With advanced functions like Center Marker, Safe Frames,

Check Field, Focus Assist, Over Exposure, Audio Meters, Image

Flip, P2P, Image Freeze, etc.

◆ 3.5mm headphone jack output
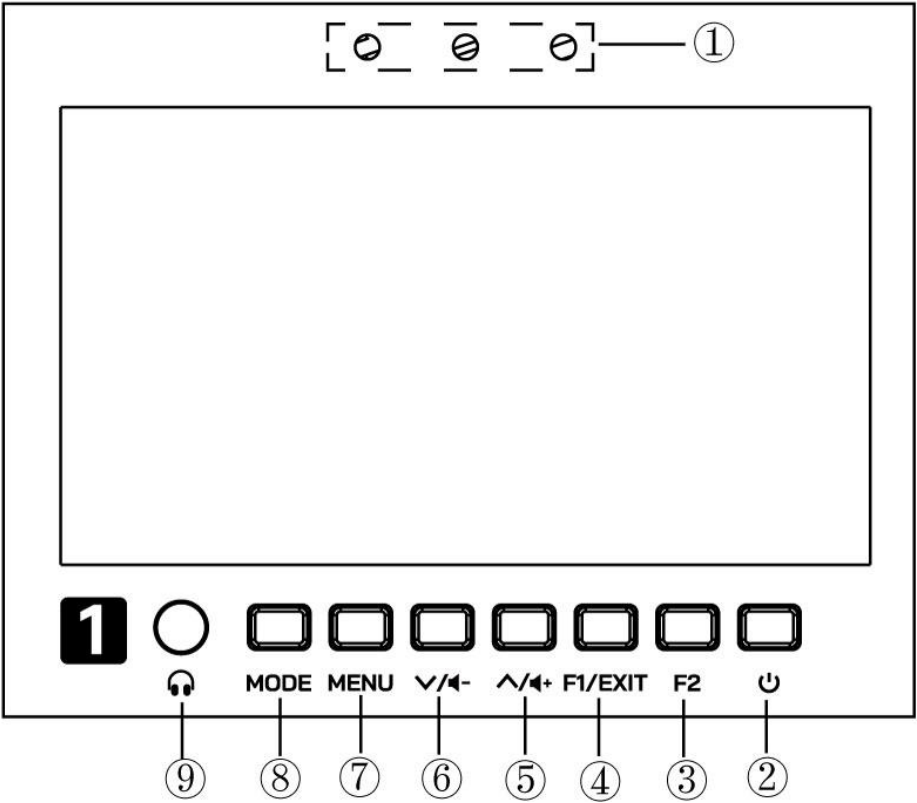
CONTENTS

1. Product Overview

1.1 Front Panel

①	/	Tally indicator
②	⏻	ON/Standby button
③	F2	Custom function shortcut button
④	F1/EXIT	Custom function shortcut button Menu return/exit
⑤	∧/◁+	Previous item selection/parameters increasing after enter the menu; Volume increasing adjustment when menu without display
⑥	∨/◁-	Next item selection/parameters decreasing after enter the menu; Volume decrease adjustment when menu without display
⑦	MENU	Menu button, enter/confirm
⑧	MODE	Input signal selection
⑨	🎧	Earphone jack port

1.2 Rear Panel
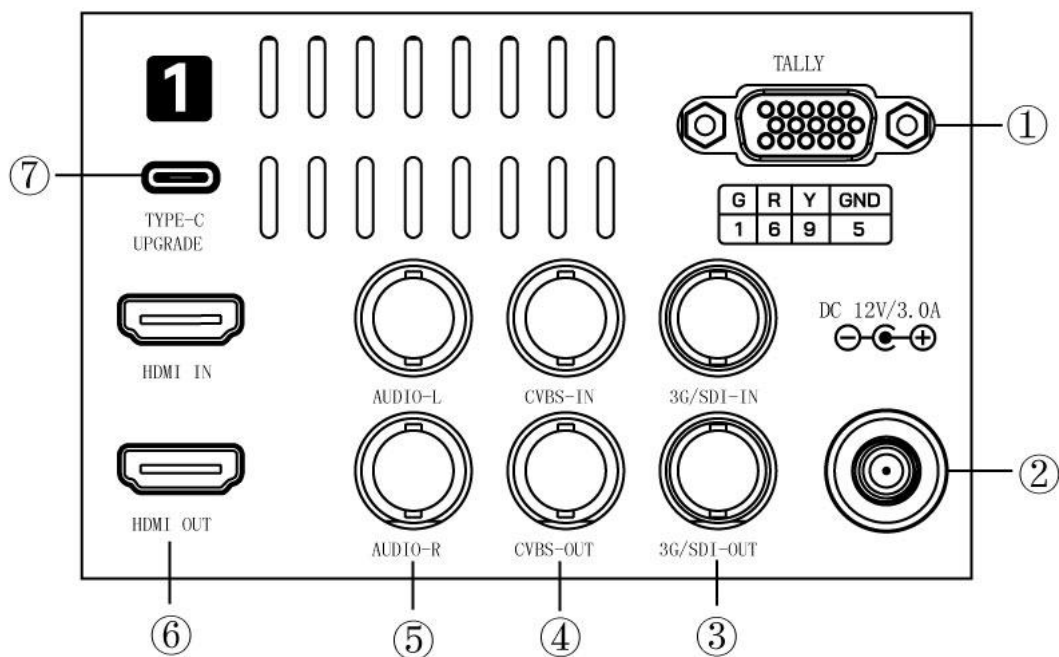
①	TALLY	TALLY indicator input port
②	/	DC 12V Power Input
③	3G/SDI	IN (SDI serial data input) OUT(SDI serial data output)
④	CVBS	IN(Composite video broadcast signal input) OUT(Composite video broadcast signal output)
⑤	AUDIO	L(Audio signal left stereo input) R(Audio signal right stereo input）
⑥	HDMI	IN(High definition multimedia interface input) OUT(High definition multimedia interface output)
⑦	USB Type-C	Firmware update,LUT file importing port

1.3 Power Input Way

The direct plug-in DC power input port supply. You can use the standard DC5.5*2.1m DC power adapter, power input polarity as shown below:
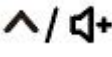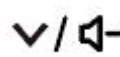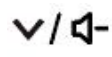
– — ● — +

1.4 TALLY Indicator Connection
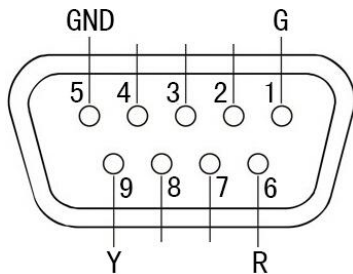
Indicator Color	Pin connect
Green	1-5
Red	6-5
Yellow	9-5
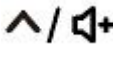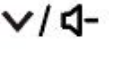
2. Operation Instruction

2.1 After connecting to the DC12V power supply, the three monitors automatically turn on

2.2 Connect the signal for each monitor separately, the screen will display the connected video image

2.3 Press "MENU" key enter to main menu, press ∧/◁+ or ∨/◁- button to select the first level menu, press "MENU" key to confirm after selecting and enter the second level menu

2.4 Press ∧/◁+ or ∨/◁- button to selection the function of second level menu, press "MENU" key to confirm after selecting and enter the third level menu

2.5 Press ∧/◁+ or ∨/◁- button select open/close function or select the needed parameters, press "MENU" key to confirm after selecting.

2.6 Press **F1/EXIT** key to return/exit menu

Remark: the buttons on each monitor are independently control

3. Menu Function Instruction

Functional Assist

	All Waves	**On, Off** After turning on, waveform, vector, histogram and embedded audio will be shown.
	Waveform	**On, Off** **Mode : RGB、YUV、Y** This essential feature assists with the calibration of professional video cameras. It shows the overall brightness of the image assisting the video professional in correcting exposure. The waveform feature also checks the evenness of the lighting when lighting a chromakey or background. **Waves Trans. : Off, 25%, 50%, 75%**
	Vector	**On, Off** shows how saturated the image is and where the pixels in the image land on the color spectrum.
	Histogram	**On, Off** **Mode：RGB1、RGB2、Y** RGB Histogram:It can display the graphic of color tone distribution, can intuitively display the exposure status of

		the image, and display overlapping histograms in red, green, and blue channels Y Histogram: A quantitative tool to check the picture brightness, display different color for different brightness.
![icon]	**Focus Assist**	**On, Off** **Color :**（Red, Green, Blue） **Peaking Level :you can adjust the peaking level after turning on（1～10）** It highlights the areas that are in focus so you are able to quickly focus the camera and not miss crucial shots.
![icon]	**Embedded Audio**	**On, Off** The Audio Level Meters provide numerical indicators and headroom levels. The audio meter is green, and will turn yellow when exceeds -20dB, and turn red when exceeds -9dB. The Audio Level Meters provide numerical indicators and headroom levels.
![icon]	**Over Exposure**	**On, Off** **Exposure Level : you can adjust the exposure level after turning on**（10~100） Areas of the image over a certain threshold are filled with a striped pattern to dramatically highlight areas where too much light is falling on the image sensor.
![icon]	**Check Field**	**On, Off** **Mode : Red, Green, Blue, Mono** When enabled, hue and saturation adjusted quickly and accurately
![icon]	**False Colors**	**On, Off** An image that depicts an object in colors that differ from

		those a photograph (a true color image) would show.
TC **Time Code** **(Only under SDI signal)**	**On, Off** **Mode: LTC, VITC**	

    Mark

Nine Grid	**On, Off** **Color: Red, Green, Blue, Black, White, Gray** The area of the picture can be divided into 9 equal grids
Safe Frames	**On, Off** **Mode: 80%, 85%, 90%, 93%, 96%, 2.35:1** **Color: Red, Green, Blue, Black, White, Gray**
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、1.85:1、2.35:1** **Color: Red, Green, Blue, Black, White, Gray** **Modified Mark : 0~5**

    Display

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** Provides a wide variety of aspect ratio to match different

		camera anamorphic lenses.
	Anamorphic	**On, Off** **Mode：1.33X, 1.6X, 2.0X, 2.0X MAG, User** Under the **User**, can be customized（1.20X～2.00X） Allows you to use anamorphic lenses or adapters and see the image unsqueezed, even if your camera does not de-squeeze in camera.
	Image Flip	**On, Off** **Mode: H Flip, V Flip, H_V Flip**
	Zoom Mode	**On, Off** **Mode：2X、4X、9X、16X、User** Under the **User**, can be customized（100%~200%）
	Image Freeze	**On, Off**
	P2P	**On, Off** Enable the filmmaker to check the image from the 1:1 signal source without scaling.This feature is essential for capturing optimum detail.

 User

LUT		**On, Off** After the LUT Switch is turned on, you can use the **Lut (SLOG2, SLOG3, LOGC, VLOG)**. **Lut Import：Confirm** **Lut Table**

		Show the 4 built-in Lut and the custom load Lut (up to 32）
	Display Adjustment	**Backlight：0~100** Adjust the screen brightness **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	**Color Temp.：5600K, 6500K, 9300K, User** Under the **User**, the red, green and blue of the image can be adjusted (0~255)
	Shortcut Key	All Waves, Waveform, Vector, Histogram, Embedded Audio, Center Marker, Safe Frames, Nine Grid, Focus Assist, False Colors, Over Exposure, Anamorphic, Image Freeze, Check Field, Zoom, Image Flip, Aspect Ratio To set the 2 shortcut custom button F1, F2 on the panel e.g.: Press MENU button enter menu , ∨/◁- ,∧/◁+ button select **User** and press "MENU" button to confirm. Then select Shortcut Key and press "MENU" to confirm, select F1 and confirm to pop-up function items，

	then select one of them and press to confirm, the cursor will be changed to gray color after confirmed.Same setting for F2

 System

Language	English、简体中文、Español、Português、Français、Nederlands、Deutsch、日本語、繁體中文、한국어로、русский язык
OSD Option	OSD Time：Off, 15Sec, 30Sec, 45Sec OSD Trans: Off, 25%, 50%, 75% No Signal: Red, Green, Blue, Black, White, Gray
Volume	**On, Off** 0~100
Reset	Scroll the wheel to select **Reset** and press **Confirm**, the system back to original setting.
Firmware Update	After copying the upgrade file to the USB flash drive and insert it into USB to Type-C adapter , press "MENU" button **Confirm** to update. Don't power off during the upgrade processing

4. How to Load LUT

7.1 USB flash driver 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 driver 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 driver

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

5. Support Signal Formats

Signals	Support signal formats
Video	PAL/NTSC auto recognize
HDMI	480i /480p /576i /576p 720p(60/59.94/50/30/29/25/24/23.98）

	1080i(60/59.94/50）
	1080p(60/59.94/50/30/29.97/25/24/24sF/23.98/23.98sF)
	4K 3840×2160p(60/50/30/29.97/25/24/23.98)
	4K 4096×2160p (60/50/30/29.97/25/24/23.98)
SDI	720p (60/59.94/50/30/29/25/24/23.98)
	1080i (60/59.94/50)
	1080p(60/59.94/50/30/29.97/25/24/24sF/23.98/23.98sF)

6. Parameters

Panel Size	4.5″ IPS LCD×4
Resolution	1280x720 pixels
Dot Pitch	0.0639(H)×0.0213(W) mm
Aspect Ratio	16:9
Brightness	350 cd/m²
Contrast	1200:1
Viewing Angle	80°/80°(L/R) 80°/80°(U/D)
Backlight	LED
Input Voltage	DC 7～24V
Input Signal	3G-SDI , HDMI, CVBS, Audio(L/R)
Output Signal	3G-SDI , HDMI, CVBS
Audio	Stereo 3.5mm headphone jack
Other Interface	Type-C (Firmware update/LUT file import)
Power Consumption	≤ 32 W

Special Function	TALLY indicator
Working Temperature	-10℃ ～ 50℃
Storage Temperature	-20℃ ～ 60℃
Install Way	Rackmount
Unit Size	482.5x87.5x35.8 mm
Unit Weight	≈1832g

7. Trouble Shooting

If there is any problem when using the unit, please try following

ways to inspect and solve. Please contact us if you still can not

solve it or have other problems.

● **Without image display**	**Trouble shooting**
◆ Video cable off or connect incorrectly	Check the quality of the cable, make sure the correct input interface
◆ Without video signal input	Check the signal source and output interface connect is correct or not
◆ Monitor is not be powered on	Check whether the power is connected
◆ Supply voltage instability	The power adapter plug is poor connected with the socket
◆ self-contained power	Reference "Power Input Way" and reconnect

supply, polarity connect inversely	

● Image/color display abnormal   Trouble shooting

◆ Video cable poor contact	Change the video cable, try again
◆ Video signal interfered by external environment	Move to another environment to try again
◆ Video input signal amplitude too low	Check signal source video output, or change signal source and have a try.
◆ Menu color saturation adjustment closing	Enter menu to check color, or reset to factory settings
◆ Check Field set in mono or black & white	Reset Check Field, back to the color
◆ Image deformation	Reset the image ratio

●Earphone without sound   Trouble shooting

◆ Audio cable off or connection properly	Confirm connected with the corresponding input port
◆ Volume adjustment was closed	Reset the volume control and adjust to a proper position.
◆ HDMI cable poor Connected	Check the quality of cable, or change cable and have a try

| ◆ No sound after switch video signal | Check whether there is an AUDIO signal input in AV Mode. |

■ Remark:

★If there are still other problems, please contact with our related technical persons.

★If there are changes without prior notice.