

Multi-Format Broadcast LCD Monitor **High Resolution Monitor**



User Manual

Product Overview

Thank you for using our photography, broadcast color lcd monitor. This monitor adopts digital signal processing circuit and professional LCD screen, which makes it high brightness, low power consumption, stable performance and low radiation etc. It also has strong compatibility, adjustable color temperature control. Its advanced features include: Peaking Focus Assist, Check Field, Camera Mode, Pixel to Pixel, Center Marker, Screen Marker, Image Flip, etc. It is an ideal NLE (Nonlinear Edit) matching monitor.

To meet different customers' needs, our monitor has High-Definition Multimedia Interface signals HDMI, the serial digital interface signals SDI, and DVI, YPbPr , Video, Audio(L/R) interface.

To insure best use of the unit, please read the user's manual carefully

CAUTION

1. Please use the adapter in the accessory, and use the qualified battery if need.
2. Please do NOT expose this product directly in the sunlight, heat, and humid conditions.
3. Please keeps 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. To avoid damaging the product, please do not take apart or repair the unit by yourself without adjustable component in the unit.

Product Feature

- ◆ Peaking Focus Assist function
- ◆ Check Field: To switch among Mono, Red, Green, Blue.
- ◆ Camera Mode Function
- ◆ P2P: The display mode that makes the resolution of the image is consistent with display of the physical resolution.
- ◆ Screen Center Marker (cross mark) display setting
- ◆ Screen Marker: 96%, 93%, 90%, 85%, 80%, 2.35:1
- ◆ Image Flip: The H_V Flip, H Flip, V Flip of the image around flip
- ◆ Image Freeze: The current picture still (capture function)
- ◆ Aspect Ratio: To change the display to ratio Just Scan, Panorama, Autom, Zoom 1, Zoom 2, 16:9, 4:3
- ◆ Image magnification function (Zoom All)
- ◆ U/D Zoom
- ◆ L/R Zoom
- ◆ Panel buttons (F1 ~ F4) function custom settings
- ◆ LED backlight, Image display more brighter, screen does not flicker.
- ◆ Front panel stereo earphone output, built-in speaker
- ◆ Multiple signal output port, flexible use

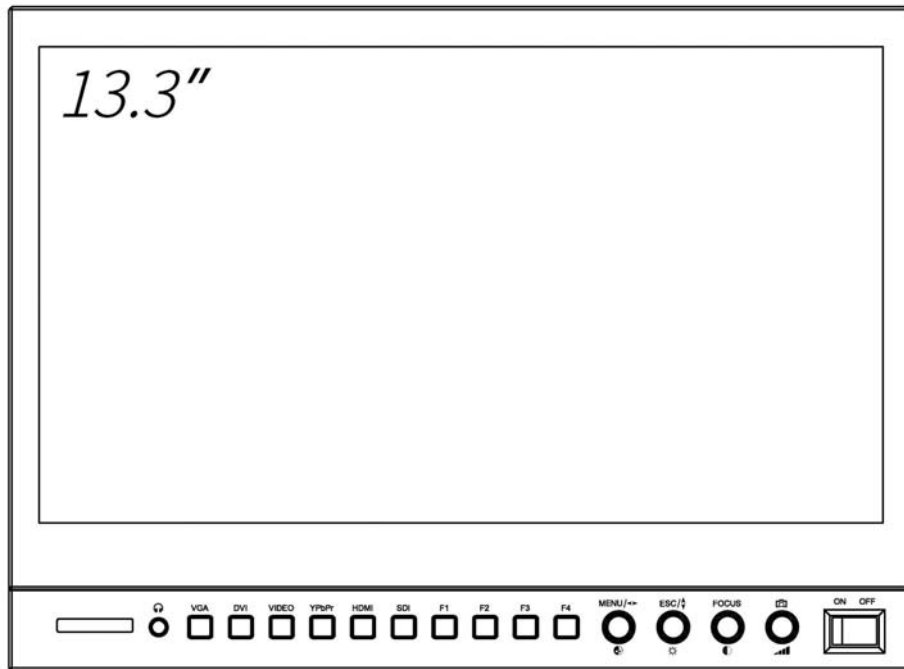
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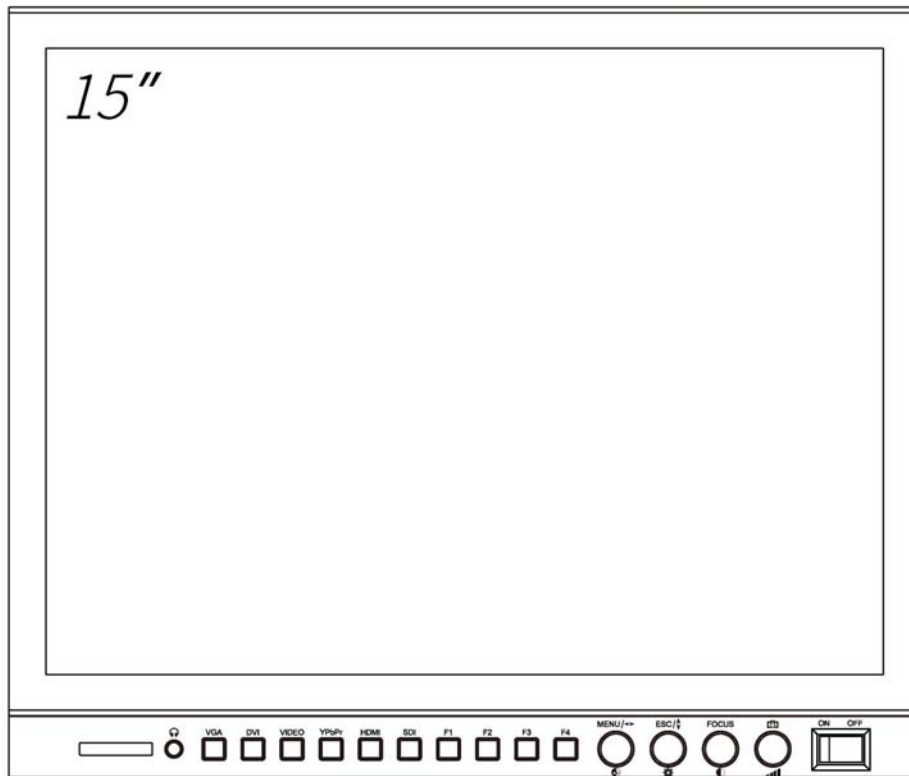
1. Product Description

1.1 Front Panel Features

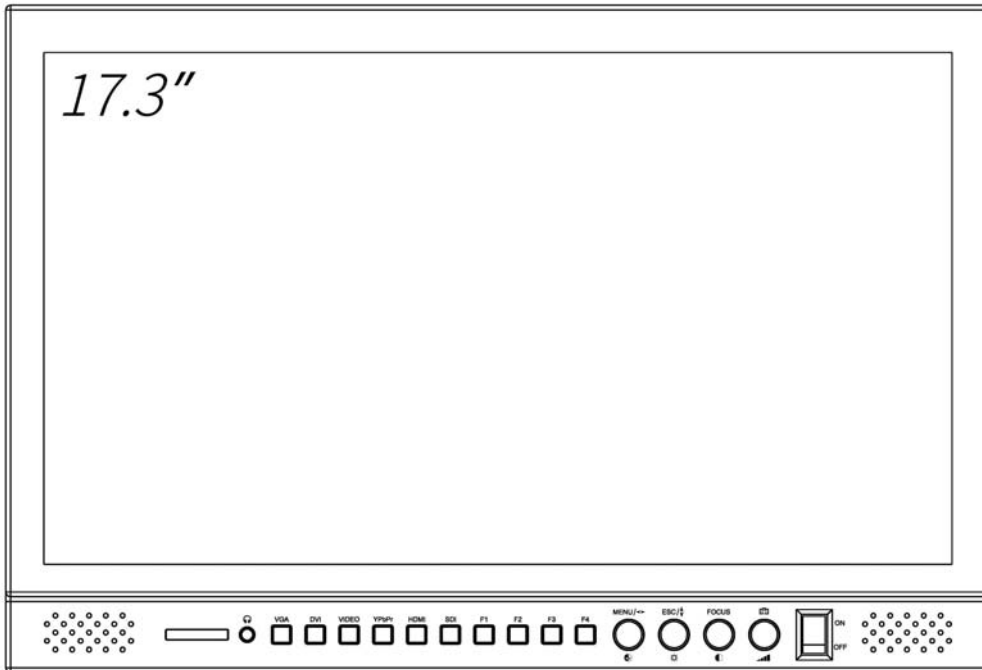
- 13.3"



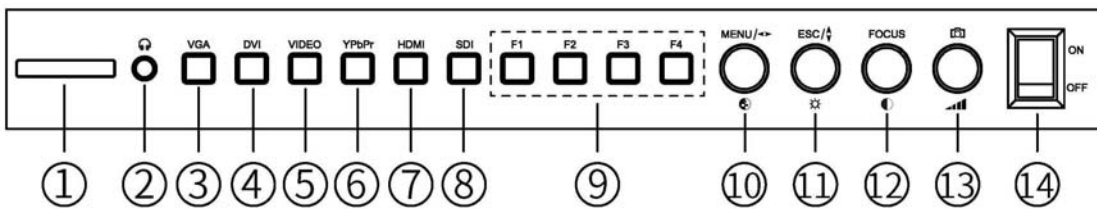
- 15.0"



- 17.3"



- Innovation OSD Operations



1. **TALLY Indicator**

2.  : Earphone jack output port

3. **VGA:** VGA signal input selection button

4. **DVI:** DVI Digital video signal input selection button







5. **VIDEO:** Composite video signal video input selection button

6. **YPbPr:** Component video input signals selection button

7. **HDMI:** HDMI HD signal input selection button.

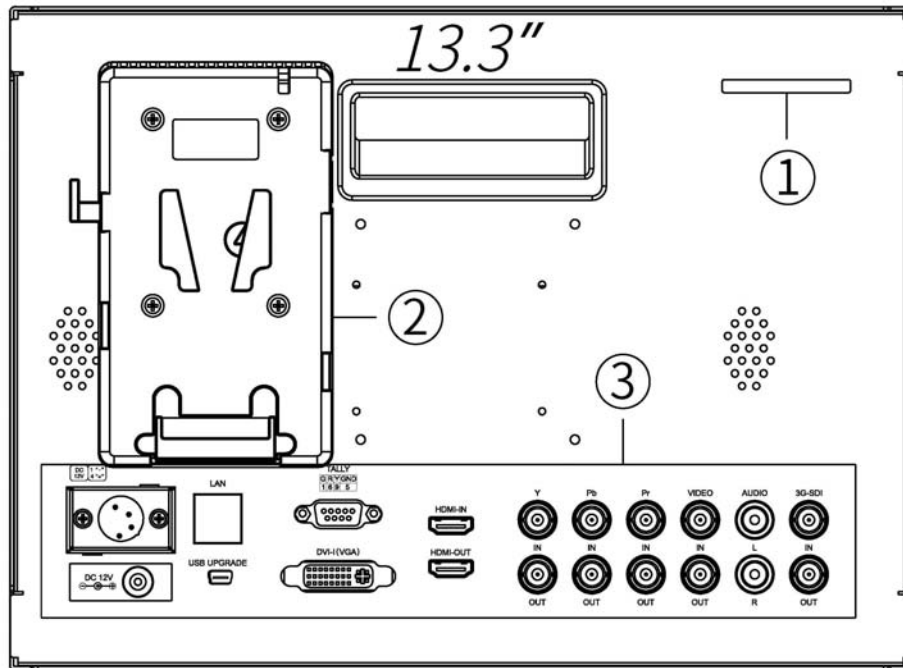
8. **SDI:** Serial Digital Interface signal input selection button

9. **F1~F4:** Customized button, users can set the functions in F menu bar according to their own operating habits.

10.  : **Multifunctional knob button**
- Menu button/ L/R Rotate/ Saturation**
- No menu display, rotate this button is for image Saturation adjustment; directly press MENU button to enter OSD. Then rotate MENU button is for menu function selection. After entering the function menu to set the item selection or value adjustment. After setting the menu function, press it again is for exit (confirm) of current menu setting.
11.  : **Multifunctional knob button**
- Exit button/ U/D rotate/ Brightness**
- No menu display, rotate this button is for Brightness adjustment. When press MENU button to enter OSD and choose the menu function, rotate it to enter the secondary menu, then to set or select the adjustment. Press this button is for all exit of OSD.
12.  : **Multifunctional button**
- Focus Assist/ Contrast**
- Directly press it is for “Focus Assist” function; Rotate this button is to adjust the image Contrast.
13.  : **Multifunctional button**
- Camera Mode/ Volume**
- Directly press it to open “Camera Mode” function; Rotate this button is to adjust the Volume.
14. **Power ON/ OFF:**  : Power on;  : Power off.

1.2 Rear Panel Features

- 13.3"



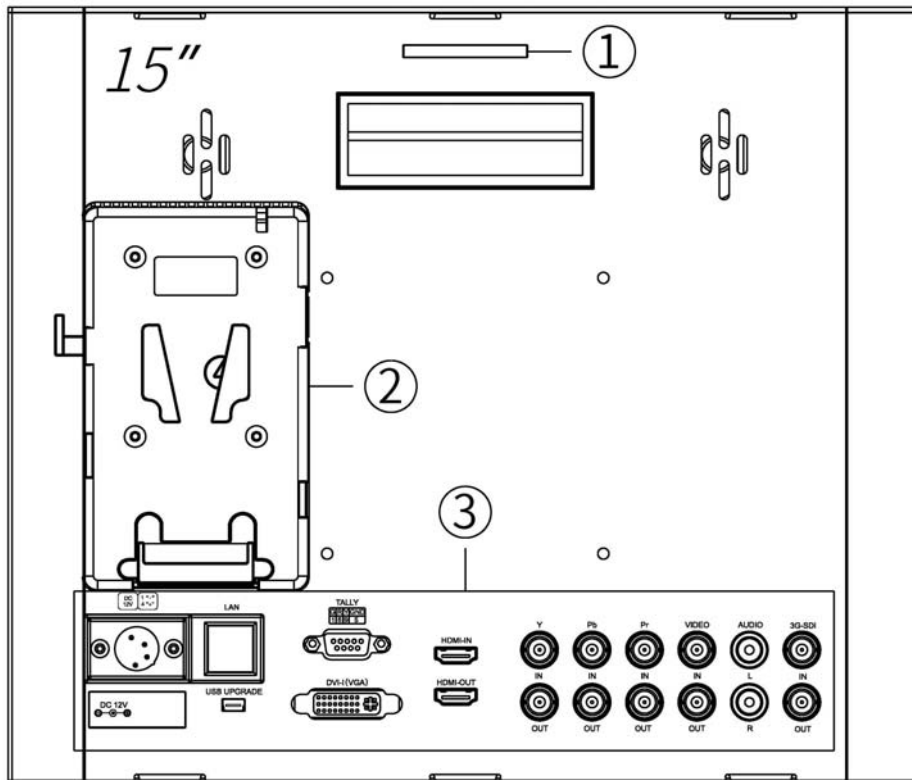
1. Tally Indicator

2. Battery Plate slot

(According to the users' requirements selection)

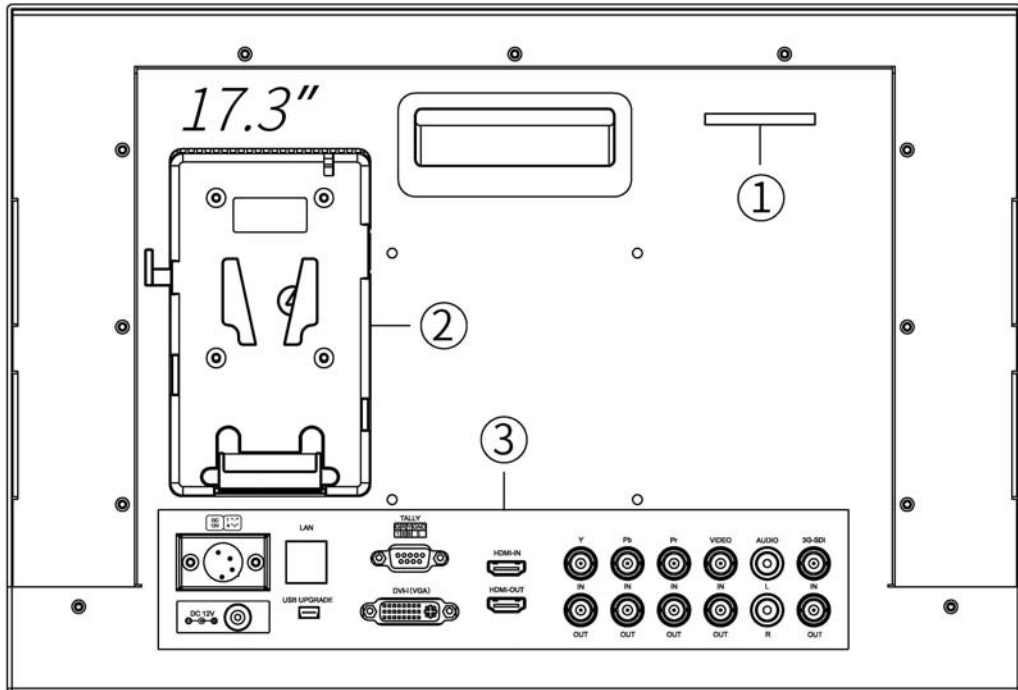
3. Interfaces (See below Rear Panel interfaces Instructions)

• 15"



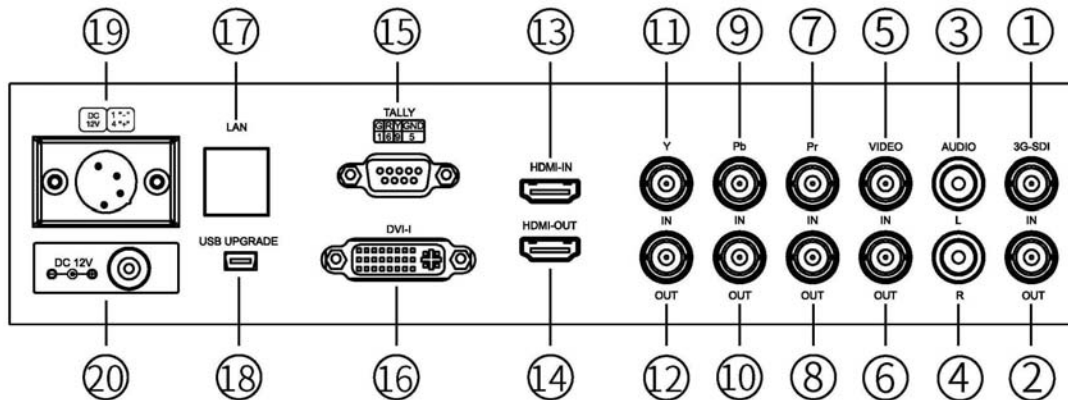
1. **Tally Indicator**
2. **Battery Plate slot**
(According to the users' requirements selection)
3. **Interfaces** (See below Rear Panel interfaces Instructions)

- **17.3"**



- 1. Tally Indicator**
- 2. Battery Plate slot**
(According to the users' requirements selection)
- 3. Interfaces** (See below Rear Panel interfaces Instructions)

● Rear Panel interfaces Instructions



1. **3G-SDI IN:** Serial Digital Interface signal input
2. **3G-SDI OUT:** Serial Digital Interface signal output
3. **AUDIO L:** Audio L channel input
4. **AUDIO R:** Audio R channel input
5. **VIDEO IN:** Composite Video signal input
6. **VIDEO OUT:** Composite video signal output
7. **Pr IN:** Component video Pr input signal in YPbPr
8. **Pr OUT:** Component video Pr output signal in YPbPr
9. **Pb IN:** Component video Pb input signal in YPbPr
10. **Pb OUT:** Component video Pb output signal in YPbPr
11. **Y IN:** Component video Y input signal in YPbPr
12. **Y OUT:** Component video Y output signal in YPbPr
13. **HDMI IN:** HDMI (High Definition Multimedia Interface) signal input
14. **HDMI OUT:** HDMI (High Definition Multimedia Interface) signal output.
15. **Tally (indicator) signal input**
16. **DVI-I signals input** (VGA input from this port after conversion module signal conversion)

- 17. **LAN:** Network interface (No use on this monitor)
- 18. **USB upgrades port**
- 19. **4-pin XLR DC power input**
- 20. **The direct DC plug-in power input port supply**

1.3 Power Input Way

There are three ways of power supply to our monitor:

a. Powered by the direct plug-in power input port supply.

Please select DC power plug supply and the polarity is as image

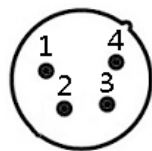


below:

Please provide the qualified output power that is NOT less the maximum power consumption of the monitors and DC 9-24V.

b. Via 4 pin XLR interface power supply, to share power with the camera or via power adapter input.

Polarity of the 4-pin XLR power input as below image, please note the polarity of the power input, otherwise it may damage monitor.



Pin number	Signal
1	GND
2	No connection
3	No connection
4	+12V

c. Add battery to the monitor battery plate to supply the power.

The product back case including battery plate is available for two types of batteries. Customers can choose different battery plates according to their needs. (If the customers have no requirement

on the battery, the factory assembles Sony V-Mount Plate by default).

1.4 Battery Plates



Panasonic Anton Plate



Sony V-Mount Plate

We assemble the suitable battery plate for the customers according to the different requirements of the batteries. If the customers have no requirement on the battery, the factory assembles Sony V-Mount Plate by default.

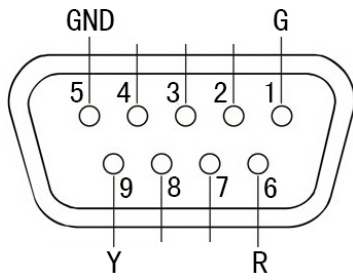
Remark: According to the different specification of the battery, the capability is different, and the working time for the monitor will be different. Higher capability (working time) will be longer.

Without the charging circuit design for the monitor, please remove the battery to charge with the battery charger.

Suggestion: Better to remove the battery if don't use this product in a long time.

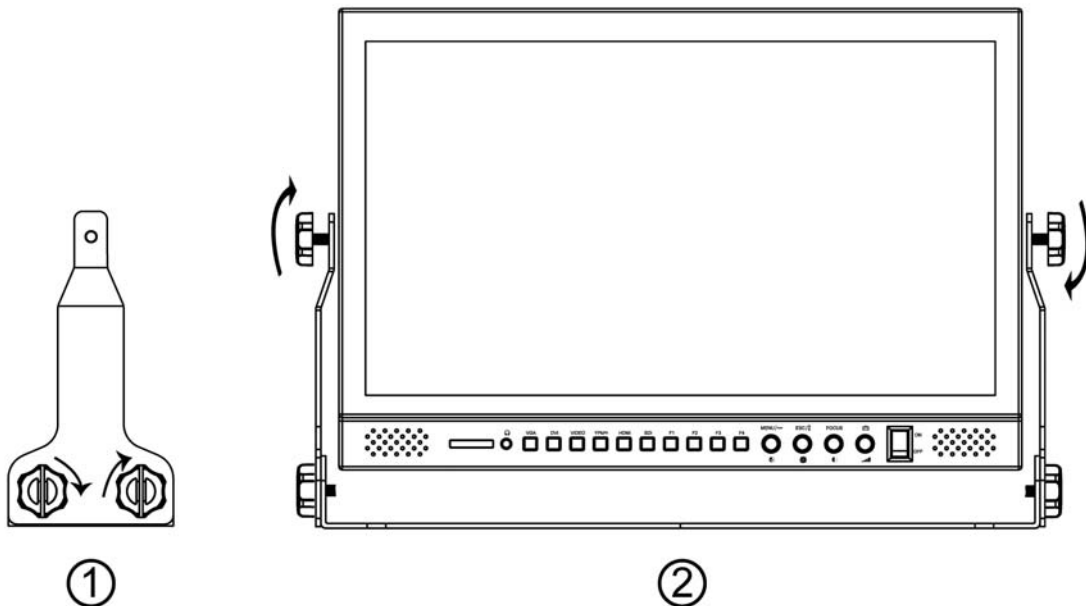
The monitor's working voltage range is 9 ~ 24V DC. When customers choose the power adapter by themselves, please choose the power adapter with output voltage of DC 9 ~ 24V, output power NOT less the maximum power consumption of the monitors

1.5 TALLY Indicator Connection



Indicator colors	Pin connection
Green	1-5
Red	6-5
Yellow	9-5

1.6 Desktop Bracket Installation



- ①: Keep screw holes in the left and right two sides alignment with the base, then lock it with 1/4" nut. There are two nuts in both two sides.
- ②: Put the assembled bracket on both sides of the matched monitor and lock it with 1/4" nut.

2. Button Operation Instructions

● Signal input selection

VGA → VGA signal input selection

DVI → DVI Digital video signal input selection


VIDEO → Composite video signal input selection



YPbPr → Component video input signals selection

HDMI → High Definition Multimedia Digital signal input selection

SDI → Serial Digital Interface signal input selection

● Characteristics control operation (press the corresponding operation button)

 → **Camera Mode:** Using 5D2 or 550D and other similar

 camera, press the  button, the screen image disappears about 6-8 seconds, after that it will return to full screen display image, then watch from framing of the screen image to the recording is no time difference, image no distortion, no black screen, no delay, perfect without distortion.

FOCUS → **Focus Assist function:** In the actual operation process to focus on the photographed object, with rotating the focusing ring, the closer focus, the more obvious red particles will appear on the picture, we can observe the red particles in the intensity of the object contour appear on the screen, to judge whether the camera focus accurately or not.

F1~F4 → **F1 to F4 is customized button.** Customers can enter the F menu function in **OSD** and select (**Center Marker, Safe Frames, Check Field, Focus Assist, Aspect Ratio, Image Flip, P2P, Image Freeze, Color Temp.**) one of them definition function according to user's favorite, operation habits.

● **Analog adjustment (rotate the corresponding knob)**

 → Image color Saturation adjustment


 → Image Brightness adjustment



 → Image Contrast adjustment

 → The speaker or earphone Volume adjustment

● **Menu Operation**

MENU → **Menu button**, press **MENU** to enter, after set or adjust the value in the secondary menu, press **MENU** button to confirm. Press **MENU** button again, exit to main menu.

 → **L/R selection (rotate)**, when enter the menu, rotate it is for L/R selection of menu function. After enter the secondary menu, it is to select the set items or adjust the value.

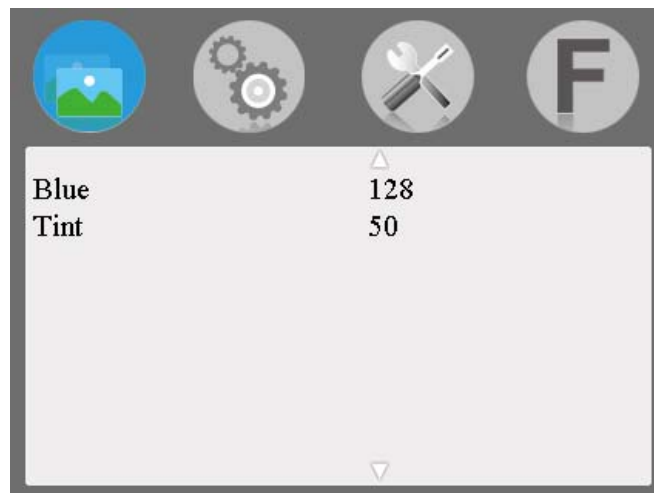
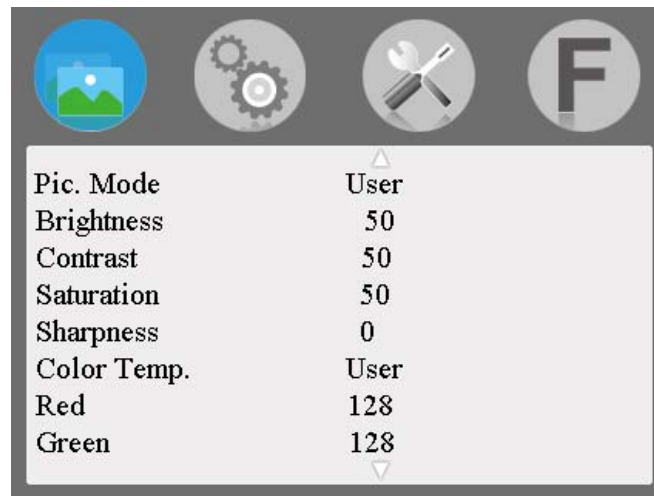
 → **U/D selection (rotate)**, when enter the menu, rotate  to choose and confirm the corresponding menu function, then rotate this button to enter the secondary menu, it is for U/D selection for the set items.

ESC → **Press it to exit all menu**

3. Menu Function Introductions



Image Color (including 2 pages)



※ **Pic. Mode: Standard, Dynamic, Mild, User**

Select 'user' to adjust Brightness, Contrast, Saturation, Sharpness.

※ **Brightness: 0~100**

To adjust image's brightness

※ **Contrast: 0~100**

To adjust the brightest and the darkest ratio of the image, please note the sense of picture when adjust, proportion too high or too low will make the picture lose the color.

※ **Saturation: 0~100**

To adjust color concentration.

※ **Sharpness: 0~100**

Also called 'Resolution', is an indicator for the image plane definition and image edge sharpness. If sharpness is higher, then the details contrast on the image is higher, the image is more clearly.

※ **Color Temp.: 6500, 9300, User**

When select 'user', adjust the R/G/B to meet the different user's requirement for the different Color Temp.

※ **Tint: 0~100**

On NTSC video mode, color tint is adjusted by Tint.



Setting (including 2 pages)

● **Menu of Page One**



※ **Language: English, 中文, Español, Português, Français, Nederlands, Deutsch, 日本語**

To select menu language.

※ **Aspect Ratio: Just Scan, Panorama, Auto., Zoom 1, Zoom 2, 16:9, 4:3.**

To change the display ratio.

※ **No Signal: Black Screen, White Screen, Red Screen, Green Screen, Blue Screen**

Color options of screen background when no signal.

※ **OSD Trans.: High, Middle, Low, Off**

To adjust the level of transparent.

※ **OSD H: 0~100**

To adjust the OSD position in horizontal.

※ **OSD V: 0~100**

To adjust the OSD position in vertical.

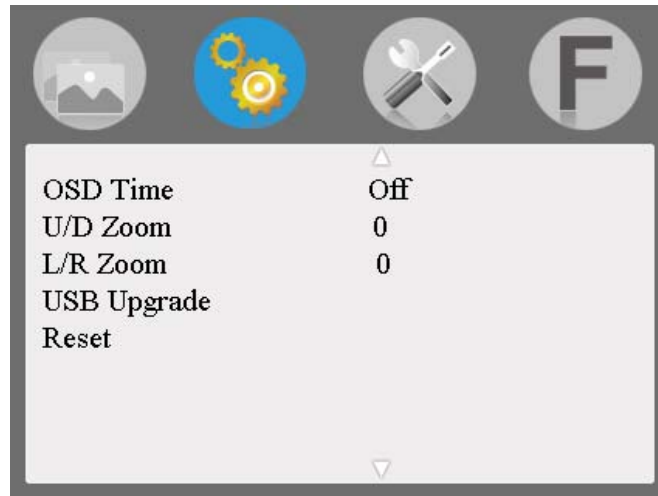
※ **Camera Mode: On, Off**

The monitor video has real-time images. NO black screen, NO delay, perfect without distortion.

※ **Zoom All: 0~100**

Rotate ◀▶ button, to adjust the image to Zoom in or Zoom out.

● Menu of Page Two



※ **OSD Time: 10Sec, 20Sec, 30Sec, Off**

To adjust the menu display time.

※ **U/D Zoom: 0~100**

Rotate ◀▶ button, to adjust the proportion of the image Up and Down to Zoom In or Zoom Out.

※ **L/R Zoom: 0~100**

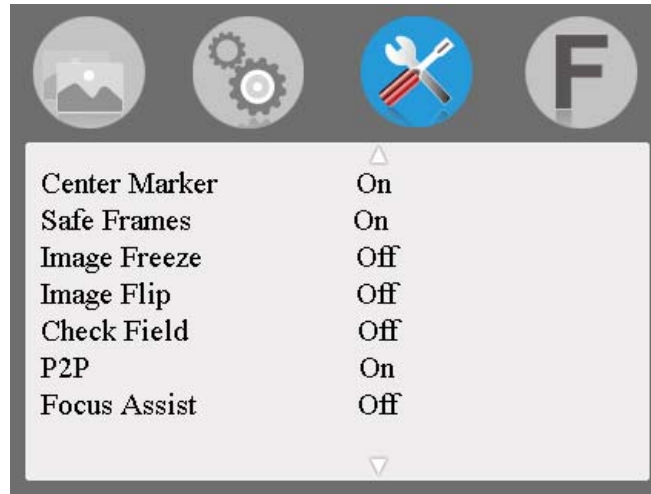
Rotate ◀▶ button, to adjust the proportion of the image Left and Right to Zoom In or Zoom Out.

※ **USB Upgrade:** When need to upgrade the software, copy the file to the U disk, then through the USB cable to connect with upgrade USB port, then rotate ◀▶ to confirm. After the upgrade, monitor will automatically restart. Do NOT plug a USB cable into this connector without contacting the factory.

※ **Reset:** Rotate ◀▶ button, back to original setting.



Function



※ **Center Marker: On, Off**

To set center mark (cross mark) display

※ **Safe Frames: 80%, 85%, 90%, 93%, 96%, 2.35:1, Off**

To adjust screen marker.

※ **Image Freeze: On, Off**

The current picture still (capture function)

※ **Image Flip: H_V Flip, H Flip, V Flip, Off**

Image Flip function.

※ **Check field: Red, Green, Blue, Mono, Off**

To display the picture in monochrome (black & white) or in individual primary colors.

※ **P2P: On, Off**

The display mode makes the resolution of the image consistent with display of the physical resolution

※ **Focus Assist: On, Off**




Under HDMI input, select this function, Peaking (Superimpose red highlight over parts of the monochrome image in focus). Focus to view image auxiliary functions when used as the camera viewfinder.



Shortcut Button Setting



- ※ **F1: Center Marker, Safe Frames, Check Field, Aspect Ratio, Image Flip, P2P, Image Freeze, Color Temp.**

Choose F1, then rotate  button, then rotate  button to select one of options as definition function. Press “**MENU**” button to confirm and rotate  button back to next F setting.

- ※ **F2:** Customized button, see F1
- ※ **F3:** Customized button, see F1
- ※ **F4:** Customized button, see F1

4. Support Signal Formats

Video Signals	Support signal formats
Video	PAL/NTSC auto recognize
HDMI	480i/576i/480p/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)
SDI	480i/576i 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)

5. Parameters

Panel Size	13.3" IPS LCD	15.0" TFT LCD	17.3" TFT LCD
Resolution	1920×1080 pixels	1024×768 pixels	1920×1080 pixels
Dot pitch	0.1533(H) ×0.1533(V) mm	0.297(H) ×0.297(V) mm	0.1989(H) ×0.1989(V)mm
Aspect Ratio	16:9	4:3	16:9
Brightness	400cd/m ²	350cd/m ²	400cd/m ²
Contrast	1000:1	800:1	600:1
Viewing Angle	85°/85°(L/R) 85°/85°(U/D)	80°/80°(L/R) 65°/80°(U/D)	80°/80°(L/R) 60°/80°(U/D)
Backlight	LED		
Inputs	3G-SDI, HDMI, YPbPr, Video, Audio(L/R), DVI-I(VGA)		
Outputs	3G-SDI, HDMI, YPbPr, Video, Stereo Headphone, Speaker		

Input Voltage	DC 9~24V		
Power Consumption	≤ 12 W	≤ 15 W	≤ 26 W
Special Function	TALLY Indicators		
Working Temperature	0 ~ 50°C		
Storage Temperature	- 20 ~ 60°C		
Unit Size	315.5L×231H ×26.4D mm	331.1L×282.6H ×33.8D mm	414L×280H ×35.1D mm
Unit Weight	≈1640g	≈2070g	≈2750g

6. 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 cannot 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 corrected or not
◆ Monitor cannot be powered on	Check whether the power is connected, put the power switch to "on" position
◆ Supply voltage instability	The power adapter or battery is poor connected with battery plate
◆ self-contained power supply, polarity connect inversely	Reference "Power input way" reconnect

• Image/color display abnormal	Trouble shooting
◆ Video cable poor contact	Change 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

• Speaker without sound	Trouble shooting
◆ Audio cable off or improper connection	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	This monitor is with audio signal only in audio input and HDMI state

■ **Remark:**

- ★ If there are still other problems, please contact with our related technical persons.
- ★ If there are changes without prior notice.