# 7" Full HD SDI On-camera Monitor

Support 4K HDMI Input/ Output



# **User Manual**

#### **Product Overview**

Thank you for purchasing our photography, broadcasting kits color LCD monitor, which adopts advanced integrated digital signal processing circuits and professional IPS LED panel, which makes it high brightness, low power consumption, stable performance, etc. It is equipped with SDI, HDMI input and output, which make it wide application, casing compact, simple operation, portable convenience and strong compatibility.

Advanced features include Histogram, False Colors, Zebra Exposure, Focus Assist, Nine Grid, Embedded Audio, Center Marker, Safe Frames, Color Temp., Picture Setting, Color Setting etc., ideal portable lightweight as viewfinder and video monitor. The monitor is equipped with an external battery plate; you can use the power adapter supply or use the external battery for power supply.



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

# **CAUTION**

- Please avoid the heavy impact and drop onto the ground when move the product.
- Please do not cover the vents and holes on the enclosure and do not place the machine on a bed, sofa, and rug to ensure good ventilation. Otherwise it will lead to overheating and reduce the service life.
- The screen of this product is made of glass. Please do not drop the screen towards the ground. Keep away from injury if the screen is broken.

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- Keep the product away from the heat source, such as the radiator, the water heater, the stoves and the other heating products.
- Avoid the prolonged exposures to the sun as the LCD screen will be damaged.
- Please use the qualified adapter or battery if need.
- To avoid damaging the product, please do not take apart or repair the unit by yourself without the adjustable components in the unit.
- To maintain the LCD screen better, please notice the ways as below to avoid the scratch, the discoloration and the other damages.
  - 1. Please refrain from using the hard objects to hit the screen.
  - 2. Please do not force to wipe the screen.
  - 3. Please do not use the chemical solutions to clean the screen.
  - 4. Please do not spray any detergent on the screen.
  - 5. Please do not write on the screen directly.
  - 6. Please do not stick on the screen.
  - 7. Please simply wipe with a clean soft cloth and make sure no water on the screen.
- To protect the plastic cover better, please follow these ways as below to avoid the damages;
  - 1. Please do not use the chemical solutions to clean the cover.
  - 2. Please keep away from the volatile things.
  - 3. Please keep away from the rubber.
  - 4. Please do not clean the case hard.
  - 5. Please simply wipe with a clean soft cloth and make sure no water on the cover.

# **Features**

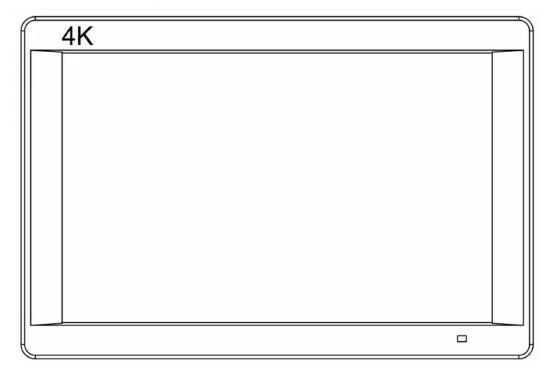
- IPS Full HD LCD panel,
- Support 4K UHD signal input and output
   3840×2160p (30/29.97/25/24/23.98 Hz) / 4096×2160p (24Hz)
- Histogram is a quantitative tool to inspect the image brightness,
   to guide the exposure control
- Analog stereo L/R, embedded audio display
- Focus Assist (Focus edge can be Red, Green, Blue)
- Zebra and False Color function, convenient to guide the using light when shooting and the post production
- Check Field (Red, Green, Blue, Mono)
- Anamorphic Mode
- Image Flip (H, V, H/V)
- Image Freeze
- Image Nine Grid, zoom one of the images to realize the full scre
- Image Zoom-in function.
- Pixel to Pixel
- Marker Types, Safe Frames and Center Marker
- Display and adjust the image Color Temp
- Brightness, Contrast, Tint, Saturation and Color Temp Adjustment.
- Support varieties of the different types of the battery brands (F970, E6, D28S, U60)
- Speaker and earphone output

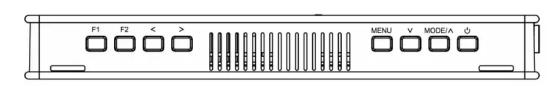
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# 1. Product Description

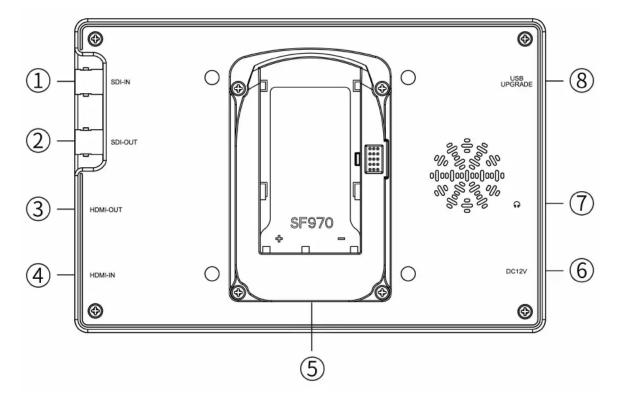
# 1.1 Front Panel/ Button Instruction





Button	Function when OSD	Function when OSD is
	not displayed	displayed
F1	Custom button F1	1
F2	Custom button F2	1
<	Decrease the volume	Decrease or adjust value o selected parameter
>	Increase the volume	Increase or adjust value of selected parameter
MENU	Display OSD main me	Return to previous OSD m
V	1	Select next menu item
MODE/ ∧	Signal input selection	Select previous menu item
ڻ ن	Power on/off button	

#### 1.2 Rear Panel Instruction



- ①. SDI-IN: SDI signal input
- 2. SDI-OUT: SDI signal output
- ③. HDMI-OUT: HDMI signal output
- 4. HDMI-IN: HDMI signal input
- 5. Battery plate
- 6. DC power input interface
- ⑦. : ∉arphone output port
- 8. USB upgrade port

# 1.3 Battery Plate

There is a battery plate installed on the back of the monitor, you can assemble the corresponding battery to power the monitor.

There are many different battery plates. Customers can choose the suitable battery plate according to the battery.

Battery Plates in different models as below:









F970 LP-E6 D28S U60

•Sony F970 battery plate for battery of Sony DV:

Sony F970 F960 F950 F930 F770 F750 F730 F570 F550 F530 QM91D QM91 QM90D QM90 QM71D QM71 QM70D QM70 QM51D QM51 FM71 FM70 series

- •LP-E6 battery plate for battery of Canon DV:

  Canon LP-E6
- •D28S battery plate for battery of Panasonic DV:

  Panasonic D55 554S D54SE D40 D35 D33 D32 D28 D25 D22

  series
- •U60 battery plate for battery of Sony DV: SONY BP-U30/U60/U90, domestic U62/U65/U66/U95/U98 series.
- •Four types of batteries corresponding to the upper battery plates.









F970 LP-E6 D28S U60

Remark: Different specifications of the battery have different capability. The working time for the monitor will be different. Higher

capability (working time) will be longer. Please take off the battery from the monitor if you don't use the monitor in a long time.

## **CAUTION**

RISK OF EXPLOSION IF BATTERY IS REPLACE
BY AN INCORRECT TYPE
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS

#### 1.4 Sunshade



③ Fixed Frame ④ Sunshade Application

First open the Sunshade Frame ①, and match the sticker on the sunshade inside to the marked part of the sunshade frame ②, smooth and press 3 sides on the sunshade ③, and then complete the sunshade installation ④.

# 2. Menu Operation Instruction

After correctly connect to the power supply, the indicator will turn (Red), press to turn on monitor power, the indicator will be Yellow, and then input signals, the indicator will turn Green from Yellow.

2.1 Press "**MENU**" button to enter OSD main menu, and press "<" or ">" button to go through the secondary menu function.



2.2 Then press "∨" button to enter secondary menu (cursor move to secondary menu position).

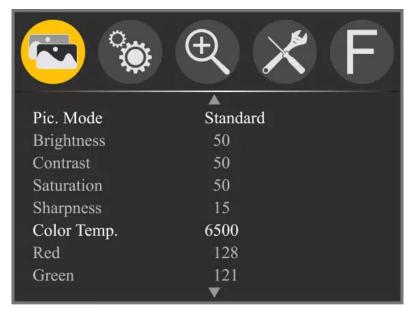
Name of the last	<b>A</b>	
Pic. Mode	Standard	
Brightness	50	
Contrast	50	
Saturation	50	
Sharpness	15	
Color Temp.	6500	
Red	128	
Green	121	
	▼	

Press " $\vee$ " or "**MODE**/ $\wedge$ " button to move cursor and select the items in the secondary menu.

- 2.3 After select the items in the secondary menu, press "<" or ">" button to adjust the item parameters.
- 2.4 Press "**MENU**" button to confirm the item adjustment and exit the menu.

# 3. Menu Function Instruction

• Image (Including 2 pages)





★ Pic. Mode: Standard, Mild, User, Dynamic Select 'user' to adjust Brightness, Contrast, Saturation, Sharpness.

**★** Brightness: 0~100

To adjust image's brightness.

**★** Contrast: 10~100

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.

#### $\bigstar$ Saturation: 0 $\sim$ 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.

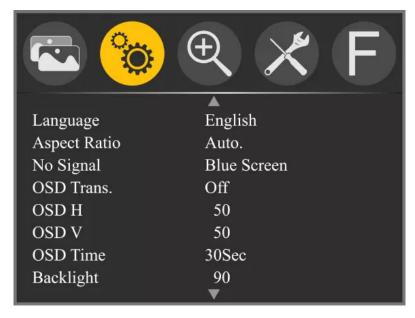
# ★ Color Temp.: 6500, 9300, User

Select image white color temperature of the monitor. When select 'user', adjust the Red, Green, Blue to meet the different user's requirement for the different Color Temp.

#### $\bigstar$ Tint: 0~100

To adjust the image cool and warm hue.

# Setting (including 2 pages)





- ★ Language: English, 简体中文, Español, Português, Français, Nederlands, Deutsch,日本語, 繁體中文
  To select the display menu language.
  - ★ Aspect Ratio: Auto., 4:3, 16:9, Just Scan, Panorama, P2P

To select the image aspect ratio.

★ No Signal: Blue Screen, Red Screen, Green Screen,
Black Screen, White Screen

To select the screen background color when no signal.

- ★ OSD Trans.: Off, Low, Middle, High

  The transparent of image background when menu display.
- ★ OSD H: 0~100
  To adjust the OSD position in horizontal.
- ★ OSD V: 0~100
  To adjust the OSD position in vertical.
- ★ OSD Time: Off, 10Sec, 20Sec, 30Sec

  The function is to adjust the menu time.
- ★ Backlight: 0~100

To adjust the brightness of screen backlight.

#### **★** Power On: Auto., Manual

When select the Auto., the monitor will turn on when input power. But if select the manual, it is standby when input power, need to press button to turn on the power.

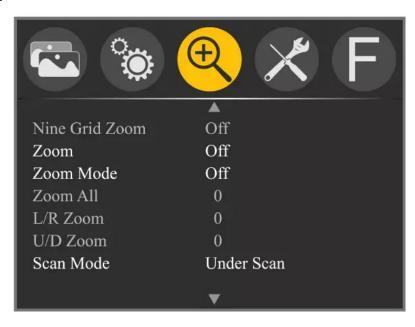
### **★** USB Upgrade

When need to upgrade the native data application software, copy the file to the U disk, connect the USB cable with upgrade USB port, press ">" button to confirm. After the upgrade, monitor will automatically restart.

#### **★** Reset

Press">" button to confirm, back to original setting.

#### Zoom



# ★ Nine Grid Zoom: Off, On

After turning on the Nine Grid function, then turn on this function, you can press "<" or ">" button to choose a image, and then press " $\vee$ " or "MODE/ $\wedge$ " button to zoom

the image to full screen. Press " $\vee$ " or "MODE/ $\wedge$ " to exit the local zoom function. (To achieve this function, you need to first open the Nine Grid function.)

#### ★ Zoom: Off, 4X, 9X, 16X

Image Zoom function, to help the photographer observe more careful image by changing it.

## ★ Zoom Mode: Off, Mode1, Mode2

Zoom All, L/R Zoom, U/D Zoom can be customized.

Zoom All:  $0\sim100$ 

To adjust the image to zoom in or zoom out.

L/R Zoom: 0~100

To adjust the proportion of the image Left and Right to Zoom In or Zoom Out.

U/D Zoom: 0~100

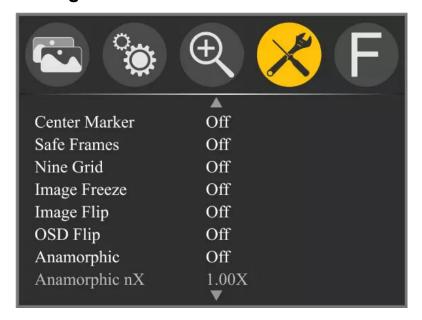
To adjust the proportion of the image Up and Down to Zoom In or Zoom Out.

# ★ Scan Mode: Under Scan, Over Scan

The scan mode can be selected.

Function (Including 3 pages)

#### Menu of Page One



★ Center Marker: Off, On

To set center mark (cross mark) display.

- ★ Safe Frames: Off, 80%, 85%, 90%, 96%, 93%, 2.35:1

  To select the screen marker.
- ★ Nine Grid: Off, On

To make the image segmented into nine grids.

★ Image Freeze: Off, On

The current picture still (capture function).

- ★ Image Flip: Off, H\_V Flip, H Flip, V Flip Image Flip function.
- ★ OSD Flip: Off, On

After turning on the Image Flip, turn on this function again to achieve the OSD Flip function.

★ Anamorphic: Off, 1.3X, 2.0X, 2.0X MAG, User

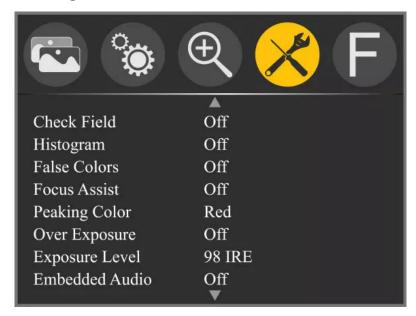
It uses together with some side screen film lens to restore

the real proportion of scene. Under the "user" adjustment item, the **Anamorphic nX** can be customized.

## ★ Anamorphic nX: 1.20X~2.00X

Customizable anamorphic adjustment is available.

# Menu of Page Two



# ★ Check Field: Off, Mono, Red, Green, Blue

To switch among Color, Mono, Red, Green, Blue.

# ★ Histogram: Off, On

It stands for the image pixels numbers in each level of brightness and shows the brightness distribution of pixels in the image.

# ★ False Colors: Off, On

It is the analysis of the whole image brightness and display False Color. It is convenient to guide using light when shooting and post production.

# ★ Focus Assist: Off, On

By sharpening the edge of images to help photography for

focusing operation.

# ★ Peaking Color: Red, Green, Blue

Due to the image color is colorful when shooting in natural light, so the user may react to the edge of the single line not too sensitive, at this time to change the auxiliary focal edge line color will improve the sensitivity of the image contour. It is convenient during filming tracking in focus. The edge line color can be chosen according to the site situation to select red, green and blue.

## **★** Over Exposure: Off, On

To turn on or off this function.

# $\bigstar$ Exposure Level: 1 $\sim$ 100 IRE

When exposure exceeds the preset value, the monitor screen appear the twill, it is to reflect the picture exposure conditions, so as to suggest the photographer adjust the aperture to obtain proper exposure.

# ★ Embedded Audio: Off, On

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.

# Menu of Page Three



★ Ratio Marker: Off, 4:3, 13:9, 14:9, 15:9, 16:9, 1.85:1, 2.35:1

Image display ratio marker.

★ Mark Color: Red, Green, Blue, Black, White
To select the above high contrast mark color according to different image.

 $\bigstar$  Mark Width: 1 $\sim$ 7

To select the above mark color display width.

 $\bigstar$  Modified Mark: 0 $\sim$ 6

Adjust the brightness of the image outside tag line to highlight the inside tag line of image.

# ● Custom Button Setting F1~F2



★ F1/ F2: Center Marker, Safe Frames, Check Field,
Focus Assist, Aspect Ratio, Image Flip, Image Freeze,
Histogram, False Colors, Over Exposure, Embedded
Audio, Nine Grid, Zoom, Anamorphic

For example: When in OSD men ", press "\" button to select F1, and press "<" or ">"button to pop-up function items and and press "MODE/\" or "\" button to select one of them, such as "Focus Assist", and press "MENU" button to confirm.

So when you exit OSD menu, you could press F1 directly in the front of panel to turn on "Focus Assist" function.

You could press "\" button to set **F2** in the same way.

# 4. Technical Parameters

Panel Size	7" IPS
Resolution	1920×1200 pixels
Dot Pitch	0.07875(W) x 0.07875 (H)mm
Aspect Ratio	16:10
Brightness	450cd/m²
Contrast	1200:1
Viewing Angle	80°/80°(L/R) 80°/80°(U/D)
Backlight	LED
Input	SDI, HDMI
output	SDI, HDMI
Audio	3.5mm Stereo Headphone, Speaker
	480i/576i
ODI Comment Format	720p (60/59.94/50/30/29/25/24/23.98)
SDI Support Format	1080i (60/59.94/50)
	1080p(60/59.94/50/30/29.97/25/24/24sF/23.98/23.98sF)
	480i/576i/480p/576p
	720p(60/59.94/50/30/29/25/24/23.98)
HDMI Input / Outpu	1080i(60/59.94/50)
Support Format	1080p(60/59.94/50/30/29.97/25/24/24sF/23.98/23.98sF)
	4K UHD 3840×2160p (30/29.97/25/24/23.98 H
	4096×2160p (24Hz)
Input Voltage	DC6.5~24V
Power Consumption	≦9W
Unit Size	180Lx120Hx22D (mm)
Unit Weight	320g/350g (With F970 Battery Plate)

Installation Method	1/4 inch bracket screw holes, can be easily conn the hot shoe mount, tripod fixed installation
Working Temperature	
Storage Temperature	- 30℃~65℃

# 5. Trouble Shooting

# 5.1 Only black and white or monochrome picture

- ① please check saturation, brightness & contrast adjustment.
- 2 Please check "Check Field" is in black, white or monochrome image or other condition.

# 5.2 NO Image after put on the power

- ① Check if signal cable connecting is in good condition, and if monitor is synchronized with the input signal.
- ② Check signal cable connecting, and make sure to use the standard adapter to connect the monitor. If power is supplied by battery, please check if the battery is fully charged.

#### 5.3 No sound

- ① Check if Volume control does not open, try to increase the volume.
- 2 Check the signal input source is normal or not.
- If there are still other problems, please contact with our related technologists.
- ★As we are improving product features and product performance, so if there is any change on the specification without prior notice.