



# User Manual

**Multi-functional Portable**

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**HD LCD Monitor**

## **Product description:**

Multi-functional portable HD LCD monitor is a new multi-function products, adopted advanced integrated circuits, high-quality new HD LCD panel and built-in high capacity battery. It is with VIDEO output and some special functions, which make it wide application, casing compact, simple operation, and portable convenient. The monitor can be applied to FPV ground station, Security monitoring, baby monitors, photography viewfinder, live interview, construction site video surveillance. Advertising and other terminal display application field.

The monitor build-in battery, if you don't install the battery, you can use the 9~18V power supply or use the battery plate for external power supply.



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

### **CAUTION**

1. Do not use any damaged or leaking battery and please replace the battery immediately if its working life becomes short significantly
2. Do not expose this product to sunlight directly, heat or humid conditions
3. Keep away from the strong light while using this product so as to obtain the clearest and the most colorful picture. Please use sun shade for the outdoor if necessary
4. Please avoid heavy impact or drop on the ground.
5. Do not use chemical solutions to clean this unit. Please simply wipe with a clean soft cloth to keep the brightness of the surface.
6. Without adjustable component in the unit, please do not take apart or repair the unit by yourself, to avoid any damage for the product.

## **Product feature:**

- **High brightness, contrast, anti-glare screen with a sun shade, sun clearly visible**
- **with VIDEO input, output, HDMI input, suitable for variety of sources.**
- **Color Control Systems support, enter the menu to manually select the appropriate format, and adaptable**
- **Front headphone monitors playback audio effects**
- **Build-in battery and optional battery plate, can be equipped with Variety of battery, No power to facilitate use of the site in Country**
- **with VIDEO signal output function, connecting multiple monitors.**
- **Check Field**
- **Picture Screen Markers and Center Marker**

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# 1. Product description:

## 1.1 Front panel instruction:

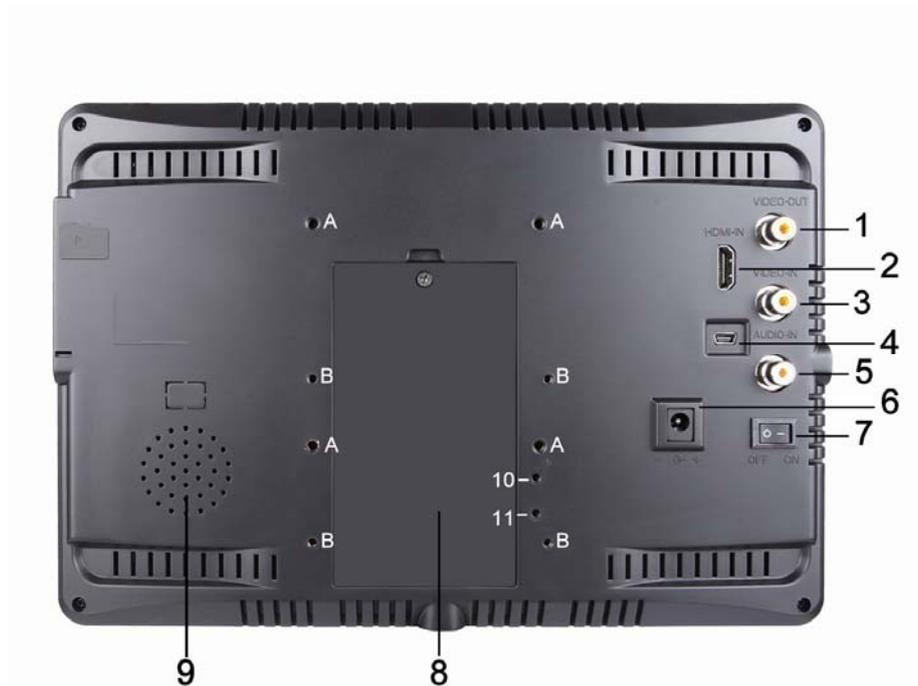


1. Power Indicator
2. **POWER:** Standby button
3. **MODE:** Input signal selection button
4. **UP:** Multi button for UP, in OSD for “UP” button
5. **Down:** Multi button for DOWN, in OSD for “DOWN” button
6. **MENU:** Menu key, as exit button when on BAND selection
7. **RIGHT:** Volume up, press this key to increase the volume control, menu item selection for settings adjustment
8. **LEFT:** Volume Down and center mark button, press this key for center mark on/off. If you would like to make the volume down, press “RIGHT” firstly and then

press this button for adjustment, menu item selection  
for settings adjustment.

9. **SCALE:** SCALE on and settings
10. **CAMERA:** CAMERA mode on/off
11. **FOCUS:** FOCUS on/off
12. : Stereo earphone jack
13. LCD screen

## 1.2 Rear battery plate instruction:



- 1、 **VIDEO OUT:** Composite video signal output
- 2、 **HDMI:** HD HDMI signal input
- 3、 **VIDEO IN:** Composite video signal input
- 4、 USB data ungraded port
- 5、 **AUDIO IN:** Audio signal input
- 6、  Power input jack
- 7、 Power switch “-” Indicates that the power turns on  
“O” means that the power turns off
- 8、 Battery Pack
- 9、 Speaker
- 10、 11: It is a screw hole for battery plate, when you use battery external, 10 is “+”, 11 is “-”, Copper Screw size: M3×9.5mm
- A:** Battery plate locking screw hole, 4 holes, Copper Screw size: M3×5.0mm
- B:** 75×75mm VESA, Screw size: M4×5.0mm

## **2. Operating instructions:**

### **2.1 Button instructions:**

**POWER** ⇨ Standby button

**MODE** ⇨ Input Signal selection button

**UP** ⇨ In OSD for “UP” button

**DOWN** ⇨ In OSD for “DOWN” button

**MENU** ⇨ Menu key, as exit button when on BAND selection

**RIGHT** ⇨ Volume up, press this key to increase the volume control, menu item selection for settings adjustment

**LEFT** ⇨ Volume Down and center mark button, press this key for center mark on/off. If you would like to make the volume down, press ”RIGHT” firstly and then press this button for adjustment, menu item selection for settings adjustment.

**SCALE** ⇨ SCALE on and settings

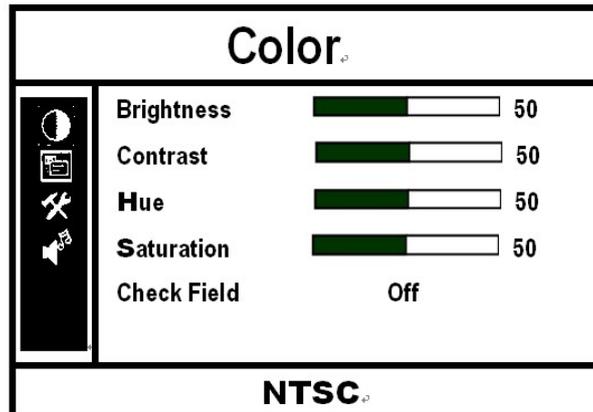
**CAMERA** ⇨ CAMERA mode on/off

**FOCUS** ⇨ FOCUS on/off

### **2.2 Menu instructions**

Press “menu” to enter the menu, use the ”RIGHT” or “LEFT” button to select “Color/MENU/Function/Volume”, select it and press ”MENU” button to confirm, enter the submenu Operation, use the “RIGHT” or “LEFT” button select the adjustment item. After selected adjustment item, press the “MENU” once again to confirm, press ”MENU” key to exit the OSD menu.

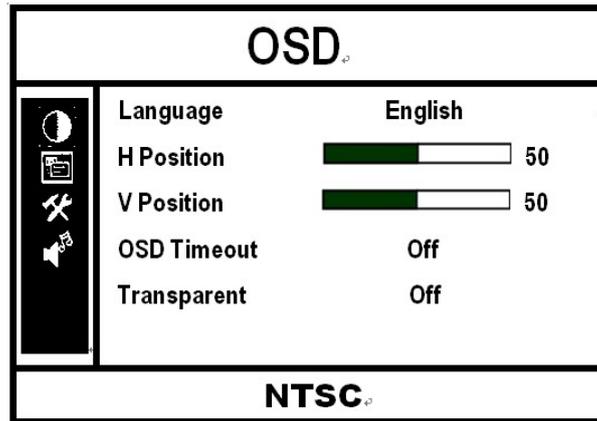
## Color



- ※ **Brightness:** To adjust the image's brightness.
- ※ **Contrast:** To adjust the brightest and darkest ratio of the image, please note the sense of picture when adjust, proportion too large or small, will make the picture lose the color of showy.
- ※ **Hue:** On NTSC Video mode, the image color tint difference is adjustable by tint.
- ※ **Saturation:** To adjust color concentration
- ※ **Check Field:** Switch on/off Check Field (Red, Green, Blue, Monochromatic and Color)



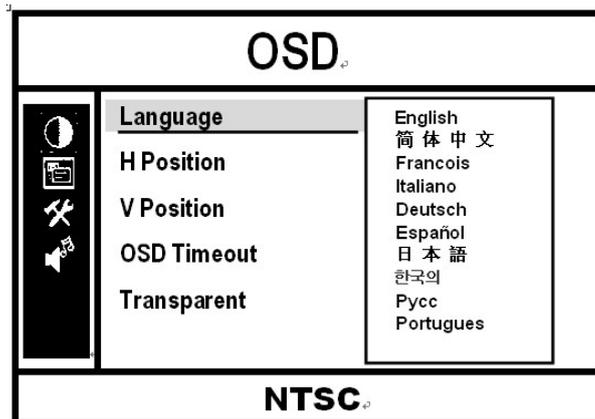
## OSD



※ **Language:** Languages for OSD as below:

**English, 简体中文, François, Italia no, Deutsch**

**Español, 日本語, 한국의, Pycc, Portuguesa**



※ **H Position:** To adjust the OSD position in horizontal

※ **V Position:** To adjust the OSD position in vertical

※ **OSD Timeout:** To adjust the clock

※ **Transparent:** To adjust the level of transparent

## Function

Function	
	Reset
	System NTSC M
	Display Ratio 16: 9
	Screen Markers 90 %
	Centre Markers Off
	Camera Off

**NTSC**

※ **Reset:** Back to original setting.

※ **System:** To adjust color video format.

Function	
	Reset
	System
	Display Ratio
	Screen Markers
	Centre Markers
	Camera

▶ NTSC M  
PAL M  
NTSC BG  
PAL N  
NTSC DK  
PAL DK  
PAL I  
SECAM BG  
Off

**NTSC**

※ **Display Ratio:** To change the display ratio 16:9/4:3

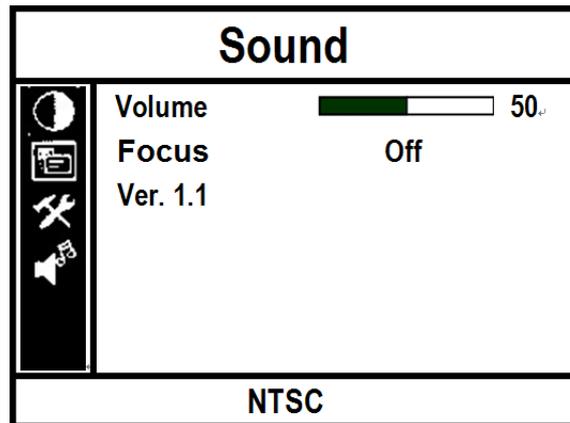
※ **Screen Markers:** To adjust screen marker (off, 96%, 93%, 90%, 85%, 80%)

※ **Centre Markers:** To set centre mark (cross mark) display

※ **Camera:** Use the Canon 5 d II or similar camera, the monitor video has real-time images. NO black screen, NO delay, perfect without distortion.



Sound



- ※ **Volume:** To adjust the volume.
- ※ **Focus:** As an auxiliary functions (in HDMI mode) when used as the camera viewfinderr.
- ※ **Ver.1.1:** Software version number

### 3. Power Supply

**There are three versions for power supply:**

#### 3.1 Supply by city electricity with power adapter

When the monitor connect the electricity by DC power adapter, red light is illuminated, means is charging, after fully charged, then switch to green light.

When the power switch is on “—”, the monitor is in operation mode, green light is illuminated. If the built-in battery is not fully charged , it still continue to charge the battery, until the battery is full.

To use power adapter supply , it can choose the power adapter(optional) , which matches to the monitor. If the customer need to use the other power adapter, please use the qualified power supply in DC9-18V,  $\cong 1.5A$ .

### 3.2 Built-in Battery Power Supply

This model is built-in Li-ion battery capacity: 7.4V-2200mA/h (2Hours), after fully-charged, it lasts to work 2 hours.

### 3.3 External Battery Plate to install battery

When no electricity, in order to longer the battery working hour, the user can install the external battery plate (optional) with battery to supply the monitor power.

When install the external battery plate, please follow “1.2 rearview”.

Please use the M3×9.5mm copper screw to fasten the two power output cables into NO.12.13 at the back of monitor.

When screwing, please pay attention to the polarity, 12 is +; 13 is -. Then match the 4 screw holes of plates to A point at the back of monitor, And use M3×5.0mm copper screw to fasten the plate and monitor.

### 3.4 Battery Plate:



**F970**



**LP-E6**



**D28**

According to the different requirements of battery for the customers attached different battery plate slots. NO requirements, the factory defaults assembly F970 battery plate.

### **F970 battery slot for battery of Sony DV**

Sony F970 F960 F950 T930 F770 T750 F730 F570 F550 F530  
QM91D QM91 QM90D QM90 QM71D QM71 QM70D QM70  
QM51D QM51 FM71 FM70 series

### **LP-E6 battery slot for battery of Canon DV**

Canon LP-E65

### **D28 battery slot for battery of Panasonic DV**

Panasonic D55 D54S D54SE D40 D35 D33 D32 D28 D25 D22  
series

### **Three types of batteries corresponding to the upper three slots**



F970



LP-E6



D28

**Remark:** Different specifications of the battery, capability is different. The working time for the monitor will be different. Higher capability (working time) will be longer.

### **3.5 Li-ion Battery**

- The working temperature of Li-ion battery is  $-20\sim 60^{\circ}\text{C}$ , please don't use battery in the place with temperature too low or too high. The power of battery will be reduced if it is working in low temperature environment. Please don't use the battery in high temperature environment, may cause battery swell then fire.

Please check the temperature of battery when it working in high temperature environment.

- Over- charge and over-discharge, it will cause permanent damage to the positive pole and negative pole of batteries.  
No need over discharge then rechargeable every time.
- Period of time to do a deep charge and discharge the battery under the protection circuit control to correct the consumption statistics, but it will not improve your battery's actual capacity
- please be placed in a cool place to weaken the aestivation speed of battery, if you don't use the battery for long time.
- Please charge power stored in the battery to prevent self-discharge of excessive led to excessive discharge damage if you don't use the battery for long time.

#### 4. Parameters

Panel size	TFT LCD 10.1 inch
Panel type	TFT LCD
Resolution	1024×600×RGB= 1843200 Pixels
Backlight	LED
Dot pitch	0.2175(H) x 0.2088(W)
Display ratio	16:9
Brightness	500cd/m <sup>2</sup>
Contrast ratio	500:1
Response time	10ms
Viewing angle	50°/50°(L/R) 30°/50°(U/D)
Input signal	Video/Audio/HDMI

Output signal	Video
Video color system	PAL-4.43 / NTSC-3.58
HDMI support format	480i /480p /576i /576p 720p /1080i /1080p (50/60Hz)
Headphone output	stereo 3.5mm
Input voltage	DC: 9~18V
Power consumption	≦ 15W
Unit size (mm)	260(L)x188(W)x36(H)mm(without battery plate)
Unit weight	790g (Including the battery but without battery plate)
Installation method	1/4-20 thread mounting holes in the monitor, easy to install on the tripod 75X75cm VESA
Build-in battery	Li-ion 7.4V/2200mA/h
Working temperature	-20~50℃
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 monitor's "color" from the menu "monochrome" is in black and white or monochrome image or other condition.

### 5.2 NO picture after put on the power

- ① Check signal cable contact are in good condition, a monitor is Synchronized with the input signal, and can press the "SOURCE/EXIT" gives it a try. If in the RF channel, please Check to see if the transmitter has been work.

- ② Check signal cable connecting, and make sure use the standard adapter connect the monitor. If power supply by battery, please check the battery whether fully charged.

### **5.3 Images are not synchronized, DVR can't enter the menu**

- ① Find “FUNCTION” in OSD, check if the input video color format matches accordingly, try other condition.

### **5.4 Playback the video without sound**

- ① Volume control did not open, try increasing the volume.
- ② Check if the AUDIO input is workable

■ **Remark: If there are still other problems, please contact with our related deals.**

★**As we constantly strive to improve product features and product performance if there are changes without prior notice.**