

# **40 Channel Auto Searching** **Wireless FPV Monitor with** **Diversity Receiver LCD Monitor**



## **User Manual**

## Product Overview

Wireless FPV monitor with dual receiver LCD monitor is a new multi-function product, adopts advanced integrated circuits and high-quality new HD LCD monitor. It integrates a high-sensitivity dual 5.8GHZ AV wireless receivers with auto searching, Aerial receiver, high-definition monitor. The Monitor casing compact, easy to operate, can be used for FPV ground station, Security monitoring, baby monitors, photography viewfinder, construction site video surveillance, advertising and other venues.

The monitor built-in battery, if you don't install the battery, you can use the power adapter 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 direct sunlight, heat or humid conditions.
3. Keep away from strong light while using this product so as to obtain the clearest and the most colorful picture. Please use sun shade for the outdoor 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 damage the product.

## **Product Feature**

- **Dual antenna receiver, high-sensitivity, strong anti-interference.**
- **5.8G wireless receiver, a monitor for the integration of Multi-functional combination machine, compact, suitable for a variety of purposes.**
- **5.8G wireless receiver, 40-channel selection, effectively to avoid the signal interference.**
- **Channel Auto scan, selection via button.**
- **High brightness, contrast, anti-glare screen with a sun shade, sun clearly visible.**
- **With VIDEO input and output, HDMI and audio 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.**
- **Built-in battery power, convenience for the outdoor use without power.**
- **Check Field**
- **Picture Screen Markers and Centre Markers**

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## 1. Product Description

### 1.1 Front Panel Features



1. Power Indicator

2. **POWER:** Standby button

3. **MODE:** Input signal selection button






4. **^/CH/Q** : Multi button for UP/CHANNEL/SEARCH:

Press this button for channel selection, long pressing for channel auto scan. In OSD for “UP” button

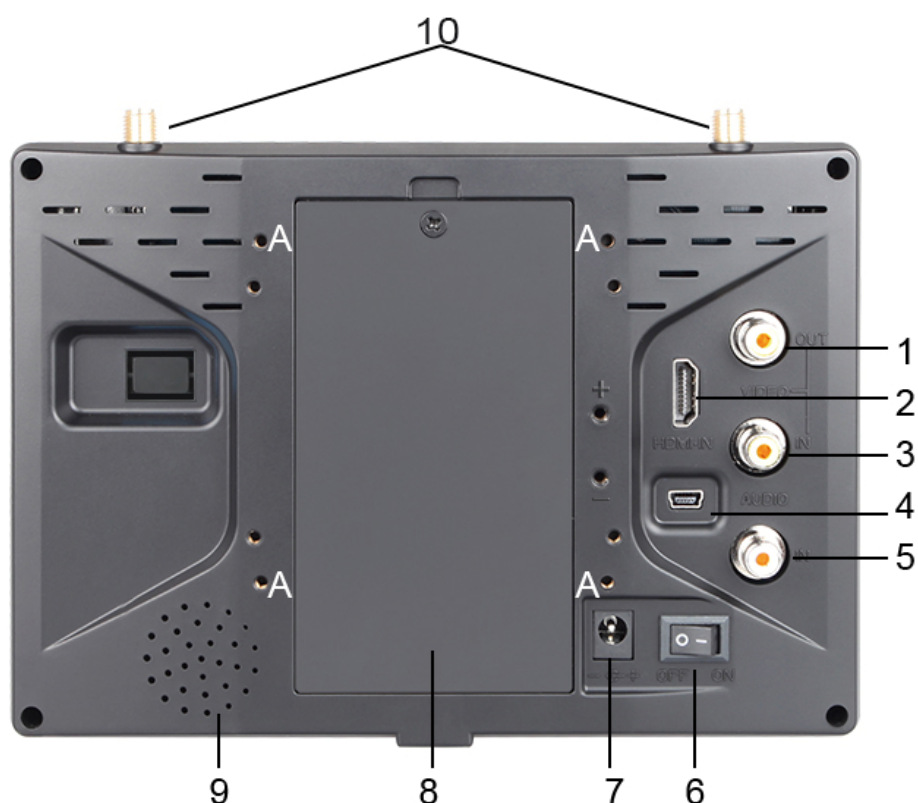
5. **∇/BAND** : Multi button for DOWN/Channel selection


Press this button for channel selection from “A/B/E/F/R”.

In OSD for “DOWN” button

6. **MENU:** Menu key, as exit button when on BAND selection
7.  : Volume up, press this key to increase the volume control, menu item selection for settings adjustment
8.  :Volume down and centre markers button; press this key for centre markers on/off. If would like to make the volume down, press “  ” firstly and then press this button for adjustment. Menu item selection for Settings adjustment
- 9 . **SCALE:** SCALE on and settings
- 10 .  : CAMERA mode on/off
- 11 . **FOCUS:** FOCUS on/off
- 12 .  : Stereo earphone jack
- 13 . LCD screen

## 1.2 Rear Panel Features



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 switch “—” Indicates that the power is turned ,  
“○” means Disconnect the power
7. Power input jack 
8. Battery Pack
9. Speaker
10. Antenna connector

A ~ A: 75×75mm VESA, Screw size: M4×5.0mm

## 2. Wireless Transmit Receiver Operation



Take the matching antennas assemble on the unit's antenna input ports; the assembly should be secured and locked on the buckle.

### 2.1 Channel Selection

**Wireless transmitter channel and receiver channel must be strictly consistent; otherwise it will not receive a transmitter signal.**

This unit can auto scan for 40 receiver channels. When multiple transmitters and receivers simultaneously work, should choose different frequency to avoid co-channel interference.



(Frequency range of each region are different, please check the unit's paste instructions).

Wireless 5.8GHz Diversity Receiver								
BAND	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
A	5865	5845	5825	5805	5785	5765	5745	5725
B	5733	5752	5771	5790	5809	5828	5847	5866
E	5705	5685	5665	5645	5885	5905	5925	5945
F	5740	5760	5780	5800	5820	5840	5860	5880
R	5658	5695	5732	5769	5806	5843	5880	5917



**Note! Channels must be supporting the transmitter**

## 2.2 Auto Searching

Confirm that the transmitter has entered a normal working condition and then press "POWER" to turn on the monitor, press "MODE" and select "RF" signal input.

Long pressing "**^/CH/Q**", "**Auto Searching**" will display on the top left corner of the screen, it means the machine start to auto searching. When the top left corner of screen shows the "**BAND:X CH:X**", image display means finished searching. Now it can receive the signal.

## 2.3 Manual Searching and setting

Confirm that the transmitter has entered a normal working condition and then press "POWER" to turn on the monitor, press "MODE" and select "RF" signal input. "**BAND:X CH:X**" will display on the top left corner of the screen, Press "**√/BAND**" to switch

channel A/B/E/F/R. Press “ $\wedge$ /CH/Q” to select 1~8 channel. If the time transmitter has worked, receiver and transmitter frequency in agreement, the receiver will receive the signal sent from the transmitter and displayed on the monitor

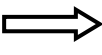
**Note: The effect of receiving and the distance has a great relationship with the reception power of the transmitter and the receiver venues. If the reception is poor, the antenna can be replaced with three leaves, four leaf antenna or panel antenna. When replace the antenna, the antenna and receiving should have same frequency.**

### 3. Operation Instructions

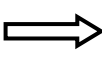
#### 3.1 Button Instructions

**POWER**  Standby button


**MODE**  Input Signal selection button


**^/CH/Q**  Multi button for UP/CHANNEL/SEARCH:

Press this button for channel selection, long pressing for channel auto searching. In OSD is for “UP” button.

**✓/BAND**  Multi button for DOWN/Channel selection, Press this button for channel selection from “A/ B/ E/ F/R”. In OSD is for “DOWN” button.

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

**>**  Volume up, press this key to increase the volume, menu item selection for settings adjustment.

**<**  Volume down and centre markers button; press this key for centre markers on/off. If would like to make the volume down, press “>” firstly and then press this button for adjustment. To menu item selection for settings adjustment

**SCALE**  Scale on and settings

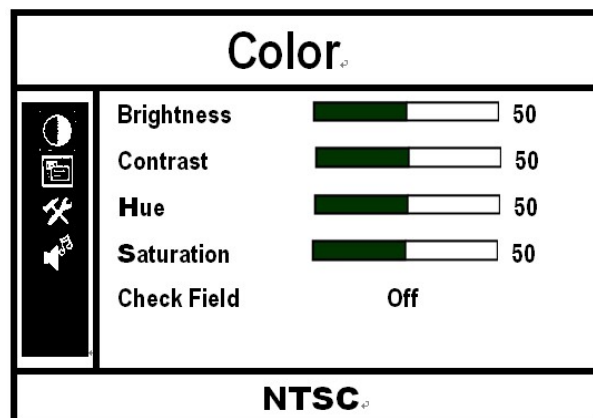
  Camera mode on/off

**FOCUS**  Focus on/off

### 3.2 Menu Instructions

Press "**MENU**" to enter the menu, use the "**^/CH/Q**" or "**√/BAND**" button to select "**Color/ OSD/ Function/ Sound**", select it and press "**<**" or "**>**" button to confirm. Enter the sub-menu operate, use the "**^/CH/Q**" or "**√/BAND**" button select the adjustment item. After selected adjustment item, press "**<**" or "**>**" button to select or adjust the parameters. After adjusting the value or setting, press "**MENU**" key to confirm. Exit the OSD menu press "**MENU**" again.

#### 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, Gray, Off)



## OSD

OSD	
Language	English
H Position	<div><div></div></div> 50
V Position	<div><div></div></div> 50
OSD Timeout	Off
Transparent	Off

NTSC

OSD	
Language	English 简体中文 Francois Italiano Deutsch Español 日本語 한국의 Pycc Portugues
H Position	
V Position	
OSD Timeout	
Transparent	

NTSC

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

**English**   简体中文   **Français**   **Italiano**   **Deutsch**

**Español**   日本語   한국의   **Pycc**   **Portugues**

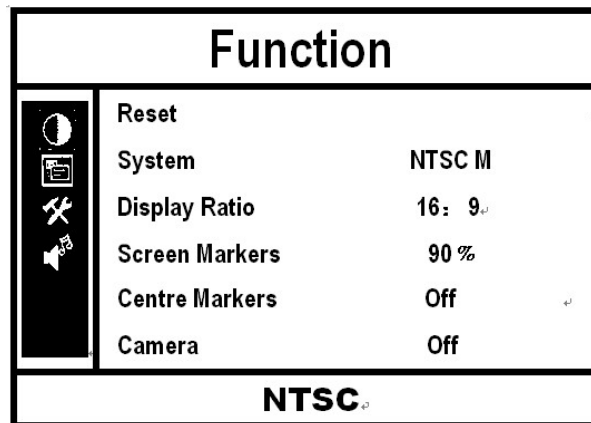
※ **H Position:** To adjust the OSD position in horizontal

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

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

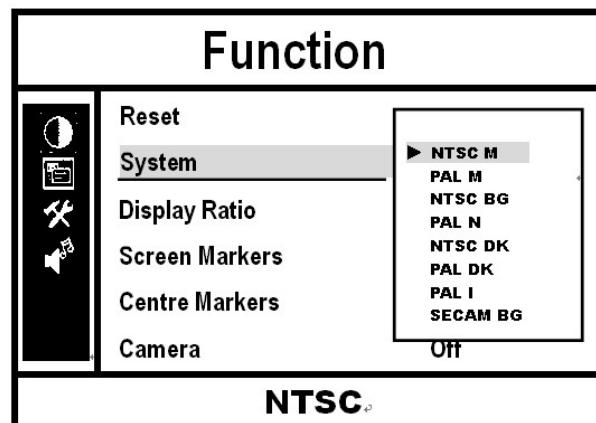
※ **Transparent:** To adjust the level of transparent

## Function



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

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



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

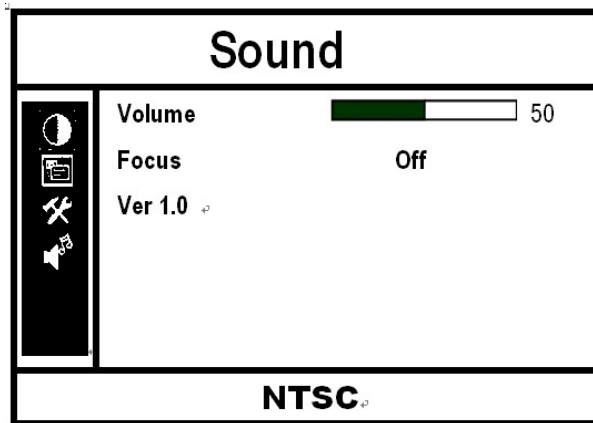
※ **Screen Markers:** To adjust screen marker (off, 96%, 93%, 90%, 85%, 80%)

※ **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 viewfinder.
- ※ **Ver.1.0:** Software version number

## 4. Sunshade Installation

**4.1** Positive parallel alignment of the sun shade and monitor, the projection of the sun shade hanging claw at the monitor sun shade slot (see the monitor front view).



**4.2** The sun shade's hanging claw and the monitor's sun shade slot should be aligned around inserted balanced to slide down.





**4.3** Put the corresponding sun shade with paste tape, follow the image and paste on the fixed frame.



**4.4** Assembled monitor with sun shade.



## **5. Power Supply**

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

### **5.1 Supply by city electricity with power adapter**

When the monitor connect the electricity by DC power adapter, red light is illuminated, means it is charging, after fully charged, the charging indicators will all be out.

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 DC9-19V,  $\geq 1.5A$ .

### **5.2 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.

### **5.3 Li-ion Battery**

- The working temperature of Li-ion battery is -20~60℃, 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 even explode. 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 place it in a cool place to weaken the perspiration 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.

## 6. Parameters

Panel Size	7.0 inch
Panel Type	TFT LCD
Resolution	800×480 Pixels
Backlight	LED
Dot Pitch	0.0642(W) × 0.1790(H) mm
Display Ratio	16:9
Brightness	1000cd/m <sup>2</sup>
Contrast	500:1
Response Time	T <sub>ON</sub> =10ms; T <sub>OFF</sub> =15ms
Viewing Angle	70°/70°(L/R) 50°/70°(U/D)
Input Signal	Video / Audio / RF/ 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: 9~19V
Power Consumption	≤13W
RF Receiving Frequency	5.8 G broadband FM audio and video synchronization receiving (other frequencies optional) 40 channel (Auto Searching)
RF Wireless Receiving Sensitivity	typical value -90dBm
Frequency Stability	±100ppm
Unit Size (mm)	188.4(L)x134(H)x33.7(D)mm
Unit Weight	540g (Including the battery but without antenna)
Installation Method	1. 1/4-20 thread mounting holes in the monitor, easy to install on the tripod 2. 75X75cm VESA
Built-in battery	Li-ion 7.4V/2200mA/h
Working Temperature	-20 ~ 50℃
Storage Temperature	-30 ~ 65℃

## **7. Trouble Shooting**

### **7.1 Only black and white or monochrome picture**

- ① Please check saturation, brightness & contrast adjustment.
- ② Please check monitor's "Color" from the menu "check field" is in monochrome image or other condition.

### **7.2 NO picture after put on the power**

- ① Check signal cable contact are in good condition, a monitor is Synchronized with the input signal, press the "MODE" then give it a try. If in the RF channel, please Check if the transmitter has been work.
- ② Check signal cable connecting, and make sure to use the standard adapter connect the monitor. If power supplied by battery, please check if the battery is fully charged.

### **7.3 Images are not synchronized**

- ① The RF signal is too weak.
- ② Find "Function" in OSD, check if the input video color format matches accordingly, try other condition.

### **7.4 NO sound**

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

### **7.5 Open the RF, no signal detected**

- ① Transmitter is working properly or not.
- ② If transmitter frequency matches with the receiver frequency band

- ③ If customer change the receiving antenna, please note that antenna must match with the transmitter, otherwise receiving sensitivity may below, even can't receive signals
- ④ Re-auto searching or selection channel by hand operation

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

★ **If there are changes without prior notice.**