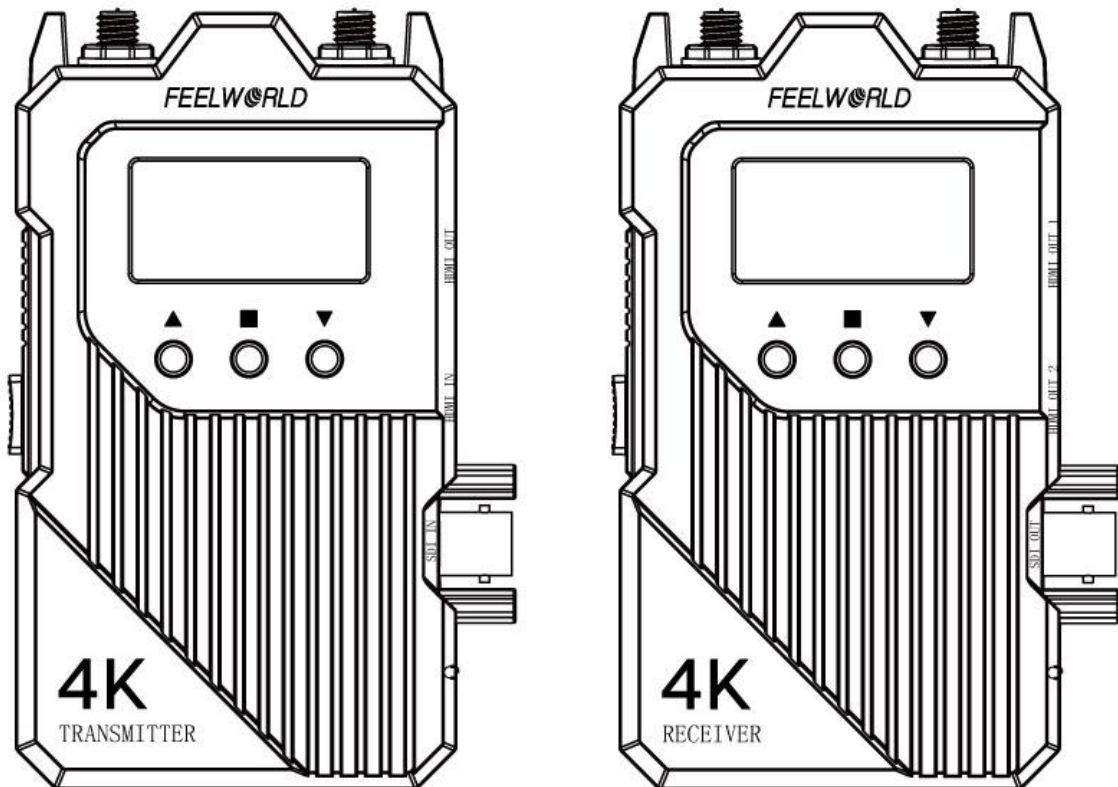


# WT1S WT1H

## 4K Wireless Transmission System



## User Manual

# Foreword

Thank you for purchasing FEELWORLD WT1S/WT1H 4K wireless video transmission system. Equipped with TX/RX set which integrated with intercom and live streaming. With 10Mbps high data rate, SDI (for WT1S) and dual HDMI ports and other features built for professional filmmaking, empowering filmmakers, crews, and content creators everywhere. Please read this manual carefully before using the product, wish you a happy experience!

## ■ Cautions

- Do not expose this device to extreme hot, cold, dusty or humid environments.
- Do not scratch the device with sharp objects.
- Do not drop this device from high place, as this may cause hardware damage.
- This device is designed for non-water proofing. Please do not allow any liquid to penetrate into the device.
- Do not attempt dismantle, open or repair this device by non-technical person, as this may cause permanent damage to the device.

## ■ Features

- Dual HDMI & SDI (optional) signal interfaces
- Transmission range up to 1000ft, with ultra-low latency 0.08S
- Up to 4K30Hz
- With type-C to Ethernet adapter accessory, achieve live streaming
- The transmitter can be switched as a receiver at will.
- Wireless full-duplex talkback, real-time intercom between the

director and the photographer.

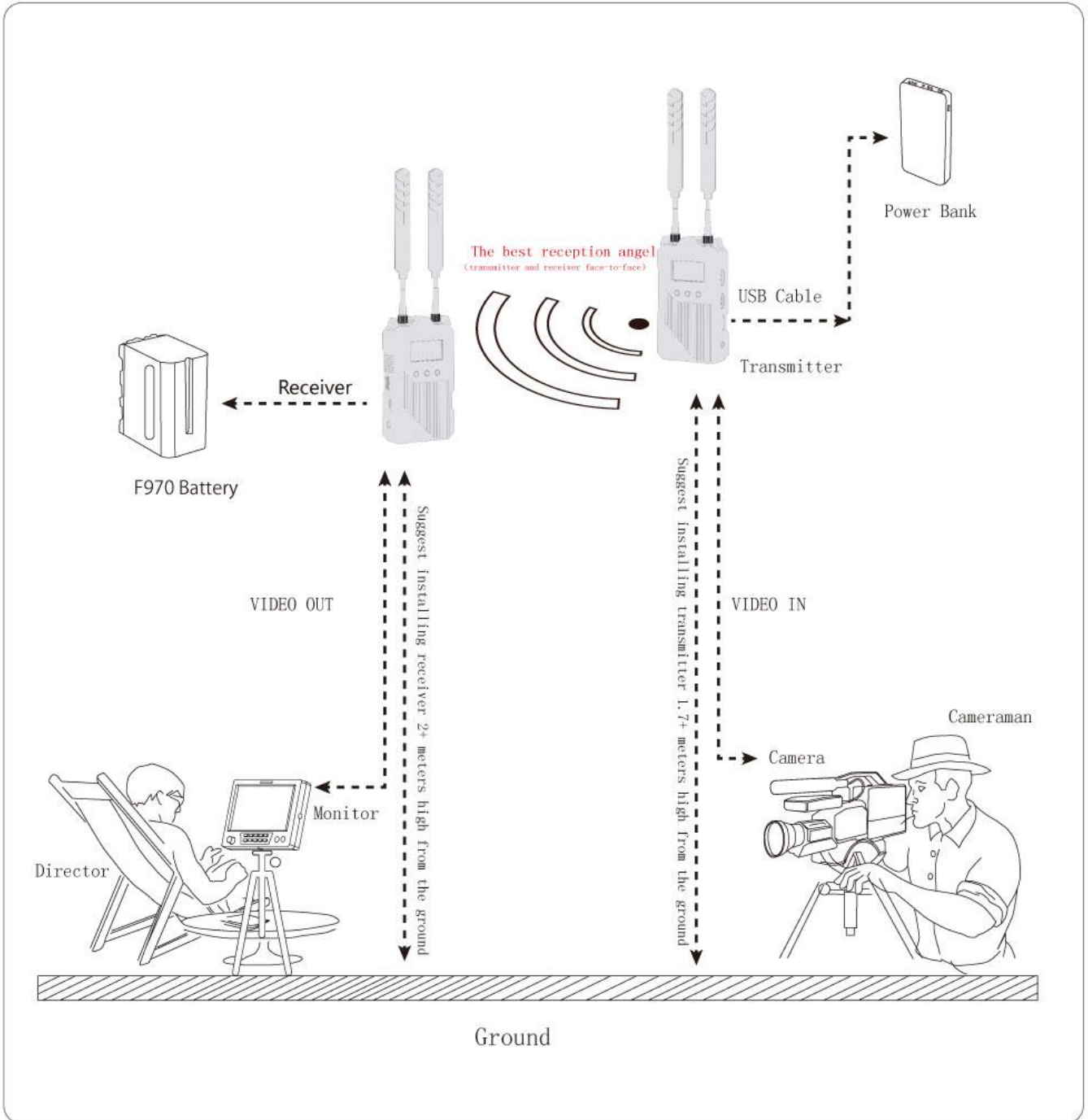
- One TX to multiple RX
- Under Grouping mode, TX and RX can be paired easily and quickly
- Support APP monitoring for Android/IOS system.
- 13 frequency channels, AUTO channel scan.

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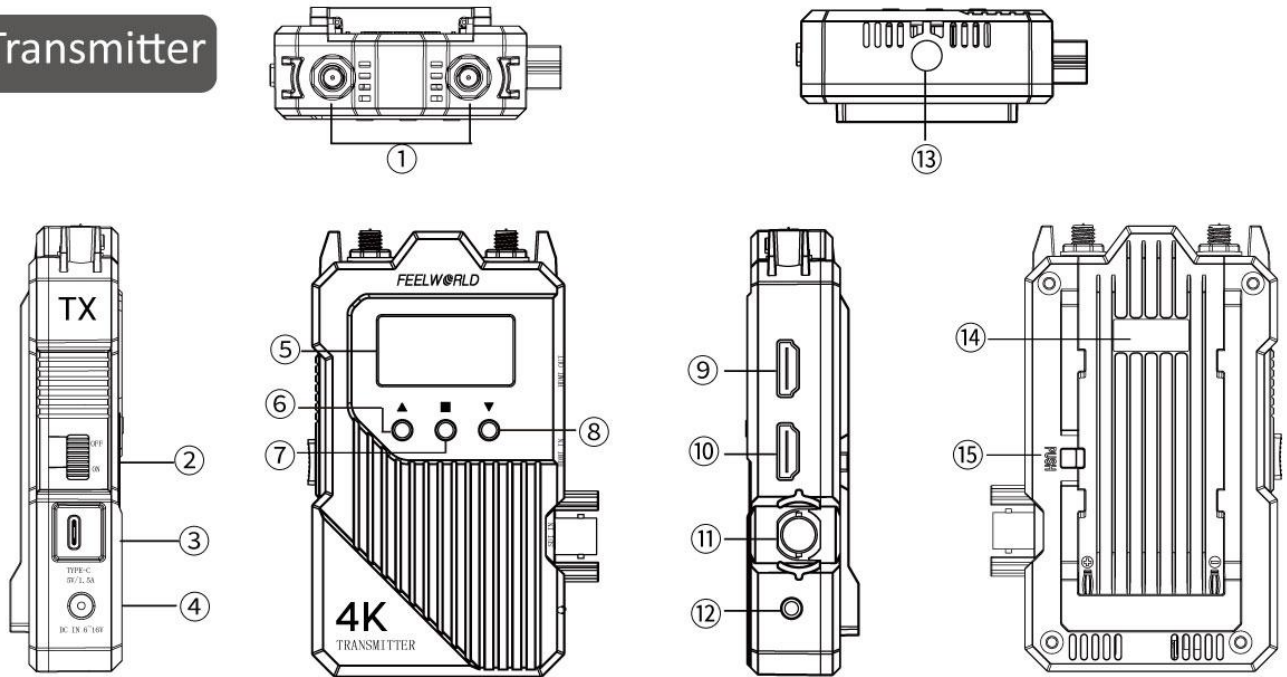
# Installation Instruction



# Port Instruction

Take WT1S for example

## Transmitter



①: Antenna Ports

②: Power OFF/ON

③: Type-C Power Input/Upgrade

④: DC Power IN

⑤: OLED Screen

⑥: UP button

⑦: OK button

⑮: Battery Release Button

⑧: DOWN button

⑨: HDMI Signal Output

⑩: HDMI Signal Input

⑪: SDI Signal Input

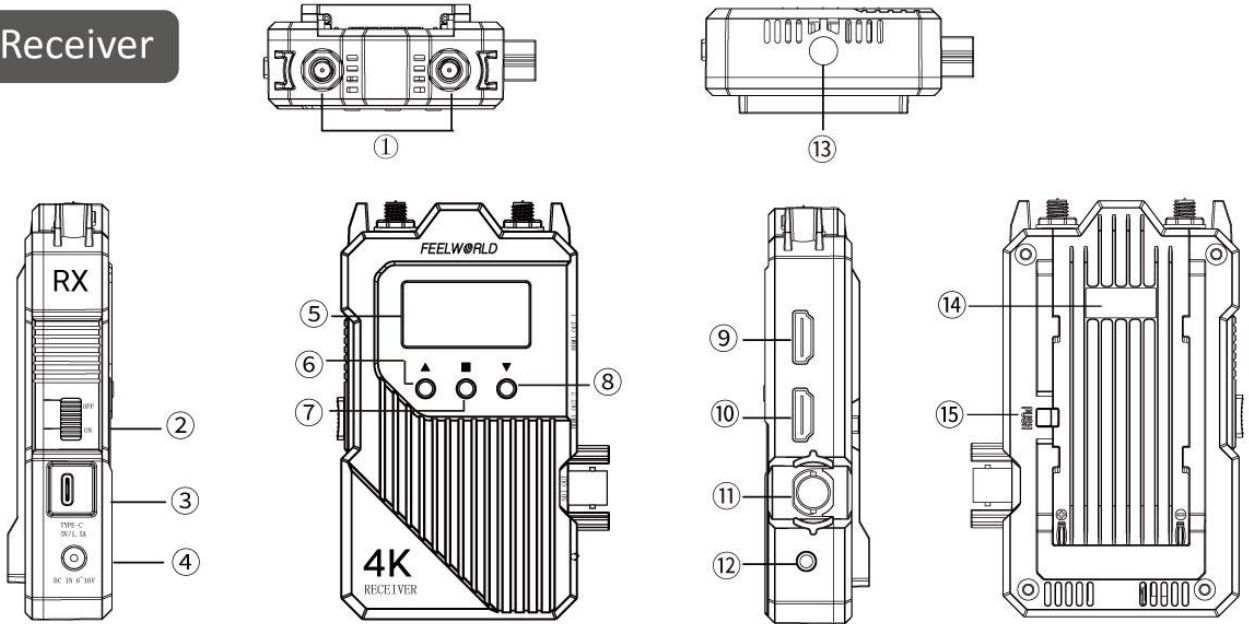
⑫: 3.5mm Earphone Port

⑬: 1/4 Screw Hole

⑭: NP-F battery slot

# Port Instruction

## Receiver



①: Antenna Ports

②: Power OFF/ON

③: Type-C Power In/Streaming/Upgrade

④: DC Power IN

⑤: OLED Screen

⑥: UP button

⑦: OK/MENU button

⑮: Battery Release Button

⑧: DOWN button

⑨: HDMI Signal Output1

⑩: HDMI Signal Output2

⑪: SDI Signal Output(optional)

⑫: 3.5mm Earphone Port

⑬: 1/4 Screw Hole

⑭: NP-F battery slot

# UI Instruction

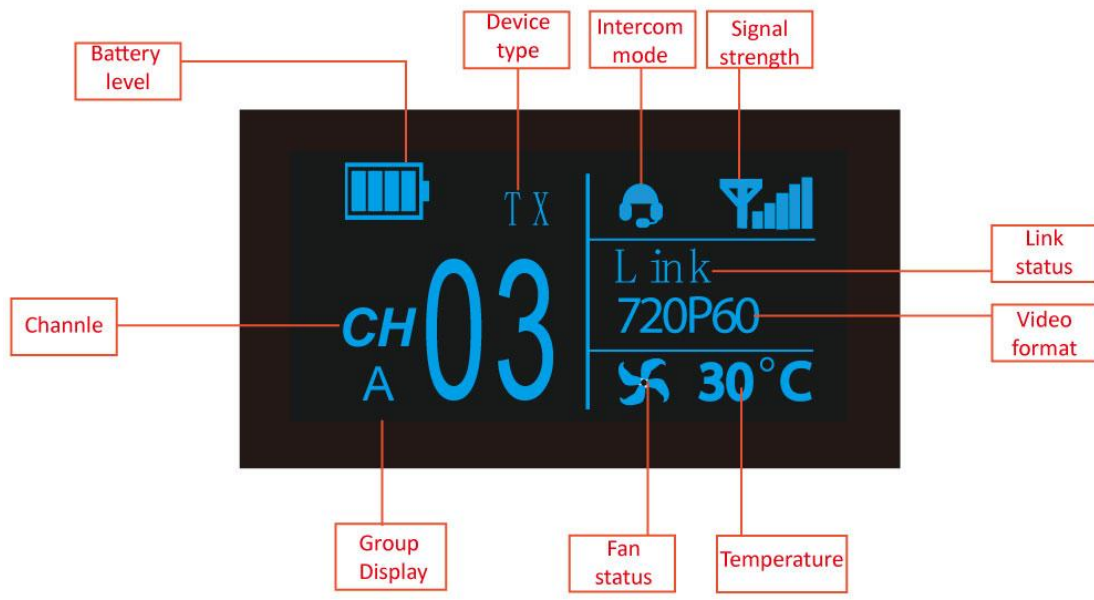
## 1. Startup

The startup screen is as below. When the device runs, the main menu will display.



## 2. Main Menu

including channel, device type(TX/RX), link status, signal strength, video format, intercom mode, battery level, temperature, fan status, etc. information.



Channel switch: press“△”or“▽”to change channels. Press“□”to confirm the channel.

## UI Instruction

### 3. Secondary Menu

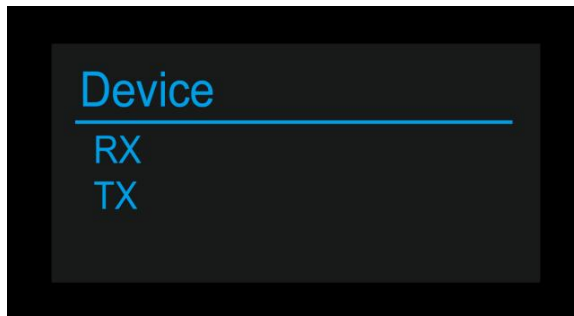
Long press“□”for 2 seconds to enter into the secondary menu.

Long press“□”for 2 seconds again to back to the secondary menu.

Press“△”or“▽”to switch the options in secondary menu and press“□”to confirm selection.

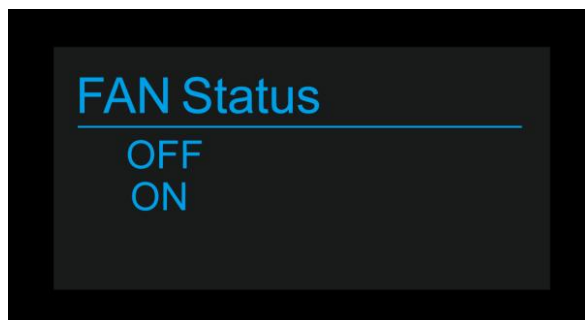
**Device** (transmitter only): device type

Switch TX (transmitter) and RX (receiver) manually.



**FAN status**

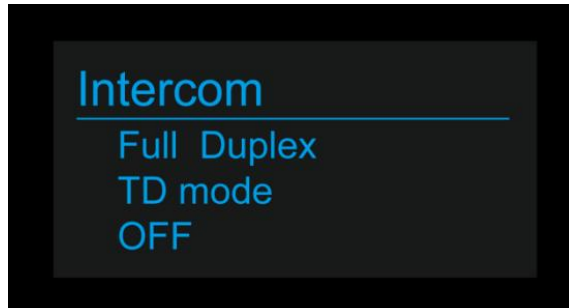
Turn on or off the fan manually



## UI Instruction

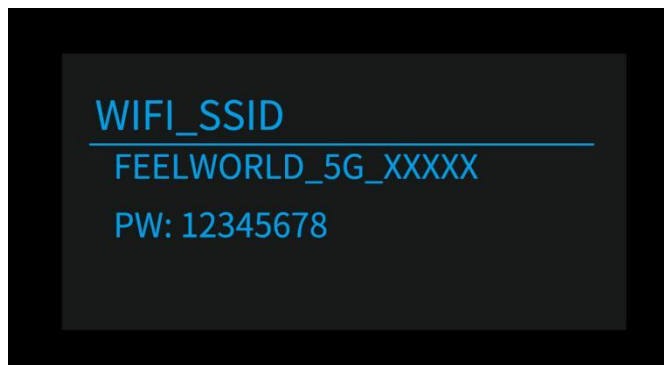
### Intercom

Switch between Full Duplex, TD mode(TD speak, Cameraman listen),  
OFF(turn off intercom)



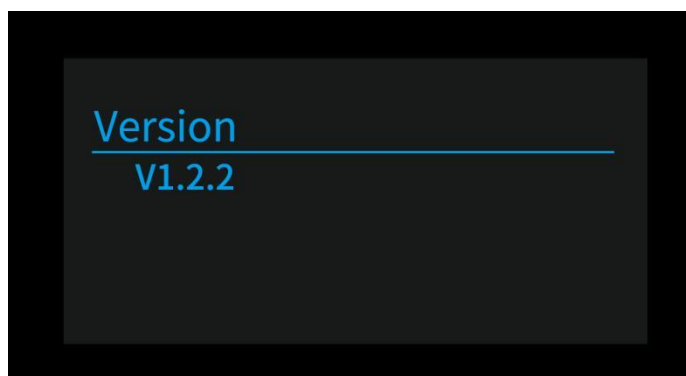
### WIFI\_SSDI

Showing device name and password



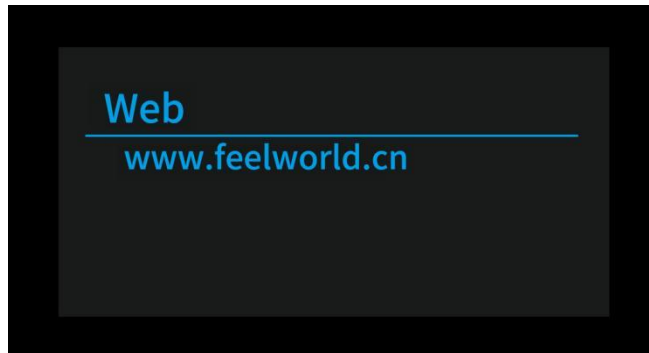
### Version

Showing the device's version number

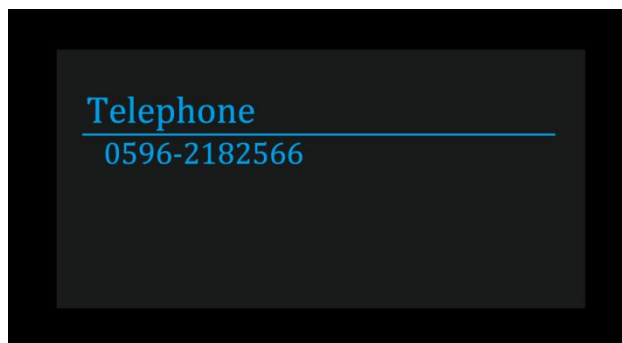


## UI Instruction

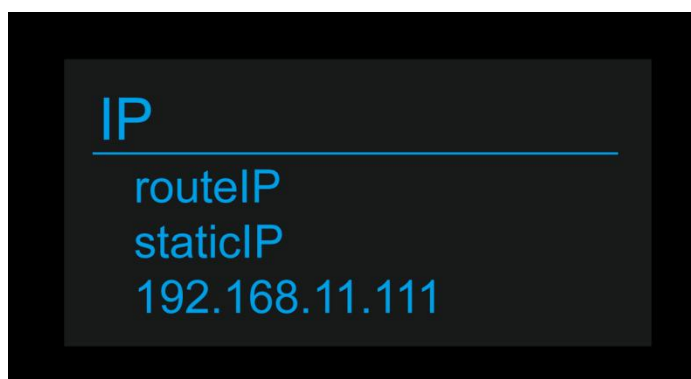
### Web



### Telephone

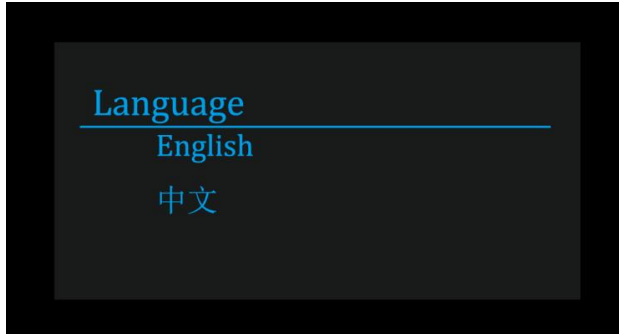


**IP:** IP address (only the receiver has this menu)

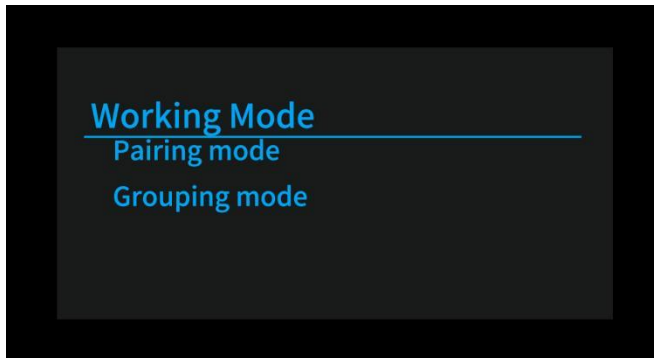


## UI Instruction

### Language

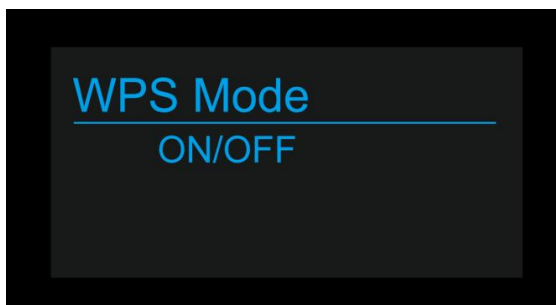


### Working Mode



**When select Pairing mode, you can pair the devices manually.**

To pair transmitter and receiver. One Transmitter allows to pair 4 receiver maximum. Turning on WPS both for transmitter and receiver at the same time, then turn off the receive which finished pairing. Using the same pairing method to add next one receiver. Last, turning on all of the paired devices.



## UI Instruction

When select Grouping mode, TX and RX can be paired automatically. You can set TX and RX in the same group and channel, such as TX is A CH03 RX also is A CH03, then they can connect automatically

### Grouping

---

A B C D E

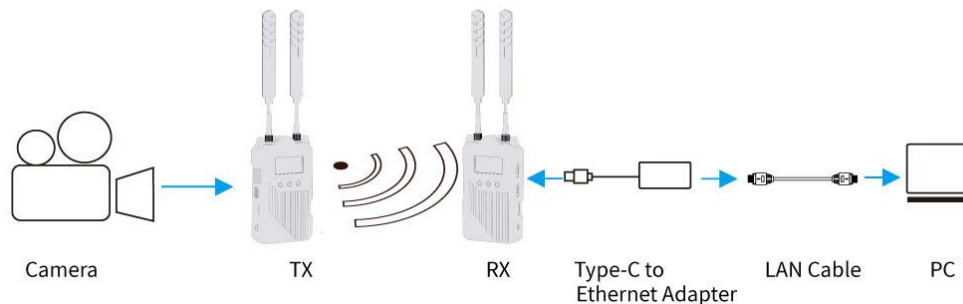
F G H I J

## Streaming Instruction

After the receiver links to transmitter and receives the video, plug the Type-C to Ethernet adapter to receiver's Type-C port. The Type-C to Ethernet adapter will flash red light.

### Static IP setting

1. The receiver's default mode is static IP. It can be selected in the secondary menu IP->staticIP



2. As the picture shown above, connect the Type-C to Ethernet adapter with computer via LAN cable.

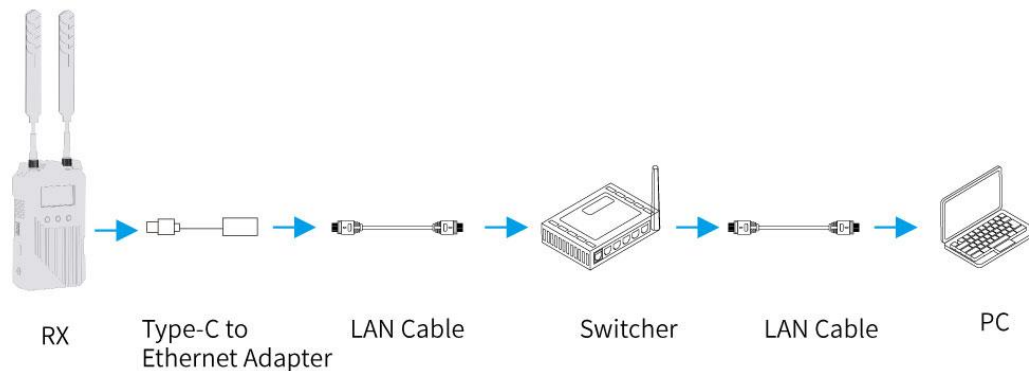
3. The receiver's static IP address is 192.168.11.111. It can be found on the receiver's secondary menu. The computer also has to be set to static IP. Set the computer's static IP to be 192.168.11.xxx, xxx can be replaced by any number between 2 and 254 not include 111. After the settings completed, run CMD->ping 192.168.11.111 on computer to check if it works.

4. Use the URL `rtsp://192.168.11.111:554/test.264` on up streaming software such as VLC or OBS.

# Streaming Instruction

## Route IP setting

1. Enter into the secondary menu on the receiver's IP. Then select routelP



2. Connect a monitor to the receiver. Then connect the receiver to the router via the Type-C to Ethernet adapter. If the blue light flashes on the adapter, it indicates that the connection is good. The monitor will show the IP address.

3. Connect the computer to the router. Push streaming with the url:  
rtsp://IP address shown on the monitor/test.264

**Note: The IP address of the router needs to be set in the same network segment as the IP address of the device**

# APP Operation Instruction

## 1. APP Download

iOS APP Download



iOS user search “feelworld wireless 2” to get

Android APP Download (You can get the monitoring function from Android APP at present, the recording and other functions such as waveform, histogram, etc. are developing )



Search “ feelworld wireless 2” on Google Play to get



Scan the QR code to download

## 2. Connect smart devices to transmitter

When first using, after the transmitter is powered on, go to Setting-Wireless & networks on smartphone/tablet, select the transmitter’s name and input the password, then click “join” to connect the device. Please find the transmitter’s name and initial password as below. Then enter to APP and click “Go” to enter monitoring interface.


# APP Operation Instruction

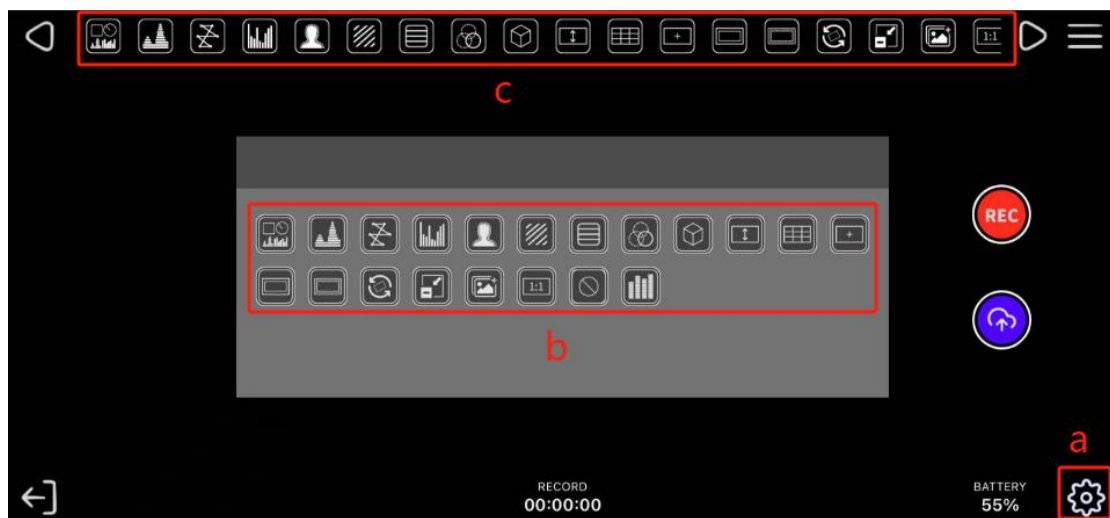
Device name: FEELWORLD\_5G\_XXXXX

Password: 12345678

When use again, after the transmitter is powered on, enter to APP then click “Go” and follow the prompts to join the network. After successful connection, click Go to enter the monitoring page.

## 2. APP Operation ( e.g. iOS system)

- Click  pop up all monitoring auxiliary functions
- Click on the corresponding monitoring function to add it to the top of the screen as a shortcut bar
- After adding, all added functions will be displayed at the top, and clicking on the corresponding function can quickly turn it on or off



# APP Operation Instruction

## Function Settings and Instructions

Click  to set most of functions



### **All waves**

After turning on, waveform, vector, histogram will be shown.



### **Waveform**

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.



### **Vector**

Shows how saturated the image is and where the pixels in the image land on the color spectrum.



### **Histogram**

**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

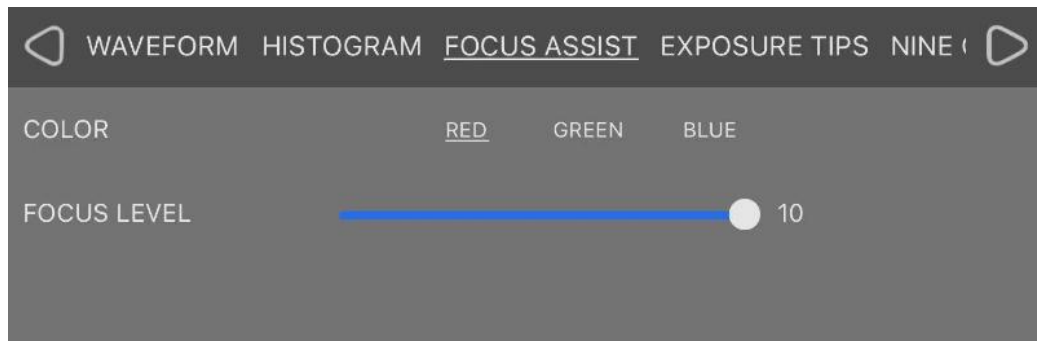
**Y Histogram:** A quantitative tool to check the picture brightness, display different color for different brightness

## APP Operation Instruction



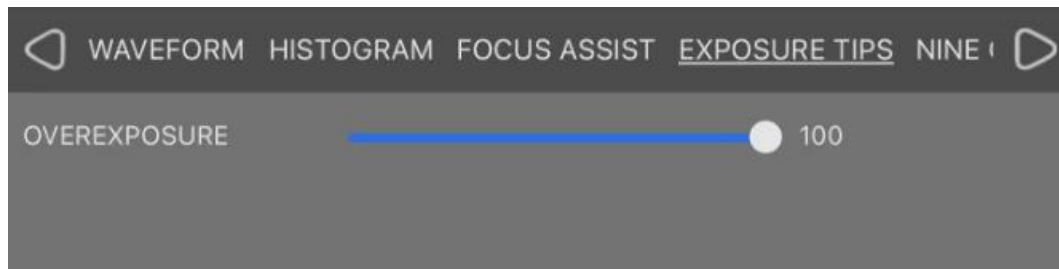
### **Focus Assist**

It highlights the areas that are in focus so you are able to quickly focus the camera and not miss crucial shots.



### **Exposure Tips**

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.



### **False Colors**

An image that depicts an object in colors that differ from those a photograph (a true color image) would show.



### **Monochrome Display**

When enabled, hue and saturation adjusted quickly and accurately

## APP Operation Instruction



### : LUT

LUT is a table for quickly looking up and output specific color data. By loading different 3D-LUT tables, it can quickly recombine color tone to form different color styles.

Click “ LUT SELECTION” to select, built-in 4 Luts




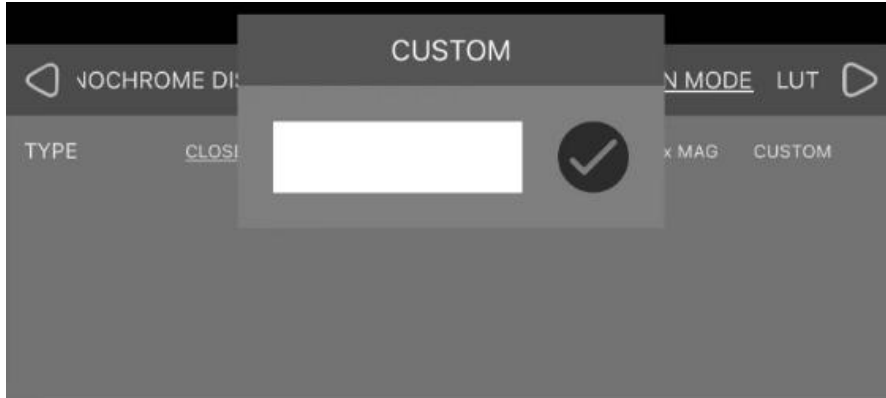
### : Deformation Mode

Allows you to use anamorphic lenses or adapters and see the image unsqueezed, even if your camera does not de-squeeze in camera.



# APP Operation Instruction


Click "CUSTOM" can be set range 1.0x~2.0x. After key in the value, then click  and the value will be display the **TYPE** list

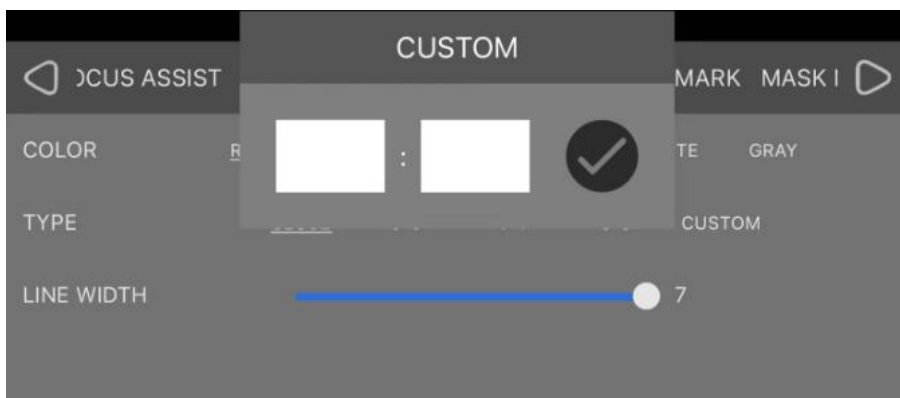


## : Nine Grid

The area of the picture can be divided into equal grids



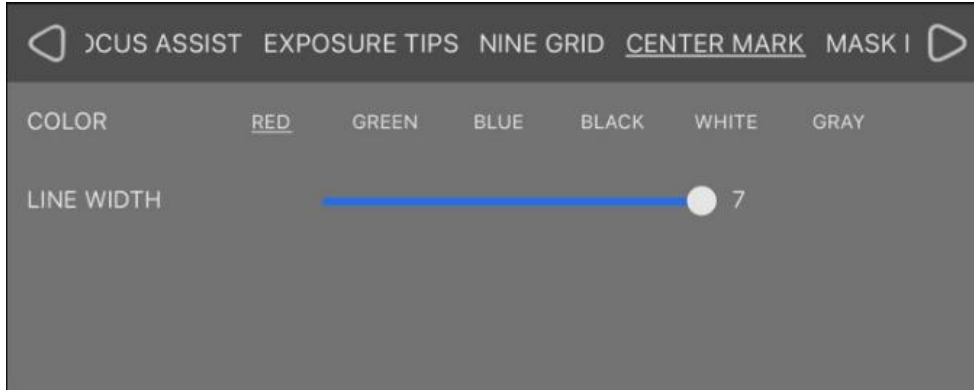
Click "CUSTOM" can be set the number among 2~100. After key in the number, then click  and the number will be display the **TYPE** list



# APP Operation Instruction



**Center Mark**



**Safety Frame**



**Mask Mark**



# APP Operation Instruction



## : Image Flip



## : Scan Mode

Click the icon which on the shortcut column directly, click first time is “Under Scan”, click second time is “Over Scan”.



## : Pixel to Pixel

Enable the filmmaker to check the image from the 1:1 signal source without scaling. This feature is essential for capturing optimum detail.



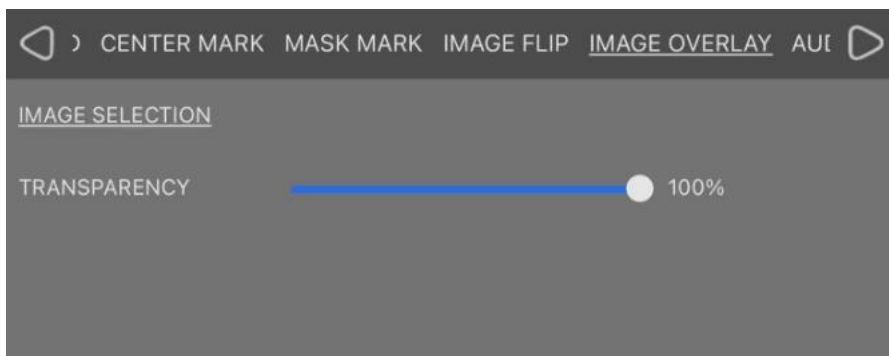
## : Image Freeze



## Image Overlay

Click “IMAGE SELECTION” to select the image to overlay

**Note:** The selected image can only be a screenshot image from the APP

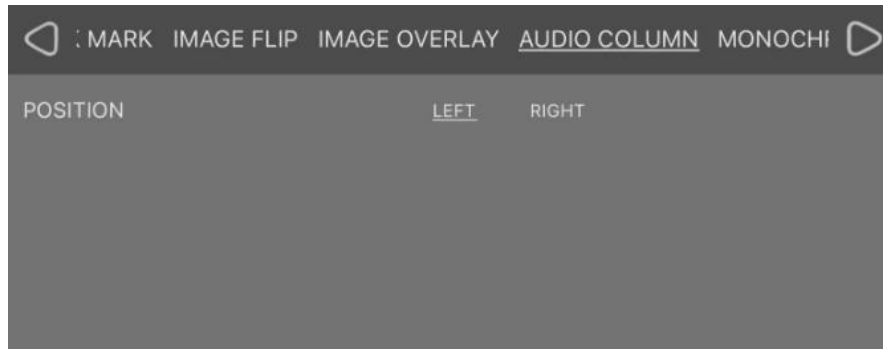


# APP Operation Instruction



## : Audio Column

Provide numerical indicators and headroom levels.



: RECORD



: Click to pop up the recorded video

# Parameter

	Transmitter	Receiver
Screen	OLED	OLED
Interface	1 * SDI input (optional) 1 * HDMI input, 1* HDMI output 2 *Antenna port ( RP-SMA Male ) DC power input, 3.5mm headphone jack , Type-C	2* HDMI output 1* SDI output (optional) 2 *Antenna port ( RP-SMA Male ) DC power input, 3.5mm headphone jack, Type-C
Power Supply Way/Voltage Range	F970 battery , Type-C: 5V/1.5A DC adapter: 6-16V Note: Due to the actual output of some batteries will be greater than 16V, it may burn out. Please make sure that the actual output voltage of the battery used is less than 16V.	F970 battery , Type-C: 5V/1.5A DC adapter: 6-16V Note: Due to the actual output of some batteries will be greater than 16V, it may burn out. Please make sure that the actual output voltage of the battery used is less than 16V.
Power Consumption	<5.5W	<6W
HDMI Input/Output Video Format	480P60, 576P60 720P60/59.94/50 1080P60/59.94/50/30/29.97/25 /24/23.98 1080i60/59.94/50 HDMI Type A	480P60, 576P60 720P60/59.94/50 1080P60/59.94/50/30/29.97/25 /24/23.98 1080i60/59.94/50 HDMI Type A
SDI Input/Output Video Format	480P60, 576P60 720P60/59.94/50 1080P60/59.94/50/30/29.97/25/24/ 23.98 1080i60/59.94/50 1*BNC	480P60, 576P60 720P60/59.94/50 1080P60/59.94/50/30/29.97/25/24/ 23.98 1080i60/59.94/50 1*BNC
Frequency	5.1-5.9GHz	5.1-5.9GHz
Modulation Mode	OFDM	OFDM
Transmission Power	22dBm	/
Receiving Sensitivity	/	-87dBm
Band Width	20/40MHZ	20/40MHZ
Latency	Min0.08S	Min0.08S
Intercom Frequency Response Range	20Hz~20KHz	20Hz~20KHz
Operating Temperature	0℃ ~ 40℃	0℃ ~ 40℃
Storage Temperature	-20℃ ~ 60℃	-20℃ ~ 60℃
Unit Size(mm)	77.1x30x118.6 (excluding antenna )	77.1x30x118.6 ( excluding antenna )
Unit Weight	138.8g	138.8g

## Frequency Chart

Device Channel	WiFi Channel	Frequency/MHz
AUTO-9	AUTO	AUTO is the best
10	48	5240
11	44	5220
12	149	5745
13	165	5825

### Common Problem

1. The screen appears mosaic or the signal connection is unstable  
It means that there is a WIFI signal close to the transmission frequency, you can re-select another channel. (Note: only the receiver is allowed to adjust the channel)
2. When the transmitter and receiver cannot be connected in pairing mode.  
Please turn off the transmitter and receiver, then turn them on again at the same time, and turn on the WPS mode to pair again.
3. When signal frequency is weak  
Please try to choose another channel with a wider frequency span. (For instance, the signal of channel 8 is weak, please choose channel 1 or 5, but not channel 7 or channel 9).
4. The poor WIFI reception of the mobile phone  
It is related to the brand and model of the mobile phone. Please try different mobile phones.

★ As we are improving product features and product performance, so if there is any change on the specification without prior notice.