COSMO 2000

DESCRIPTION

Thank you for choosing Cosmo2000 Wireless HD Video Transmission System. Using the latest wireless technologies, it can transmit wireless video with no compression and delay at a range of 2000ft and is widely used in film shooting, sport games, education market etc.

KEY FEATURES

- Broadcast level uncompressed, non-delayed wireless HD video transmission
- Transmit range 2000ft
- 5.1~5.9GHz frequency band, support different regional frequency configuration
- SDI, HDMI input and SDI loop out, Dual SDI & HDMI output
- Support one transmitter to multiple receivers
- Built-in fan for heat dissipation
- RX battery-mountable
- 7~36V DC Voltage input
- USB software upgrade interface
- Industrial metal case, stable and reliable

APPLICATION

- Filmmaking
- Sports Activities
- Wedding Ceremonies
- Corporate Events

PACKING LIST
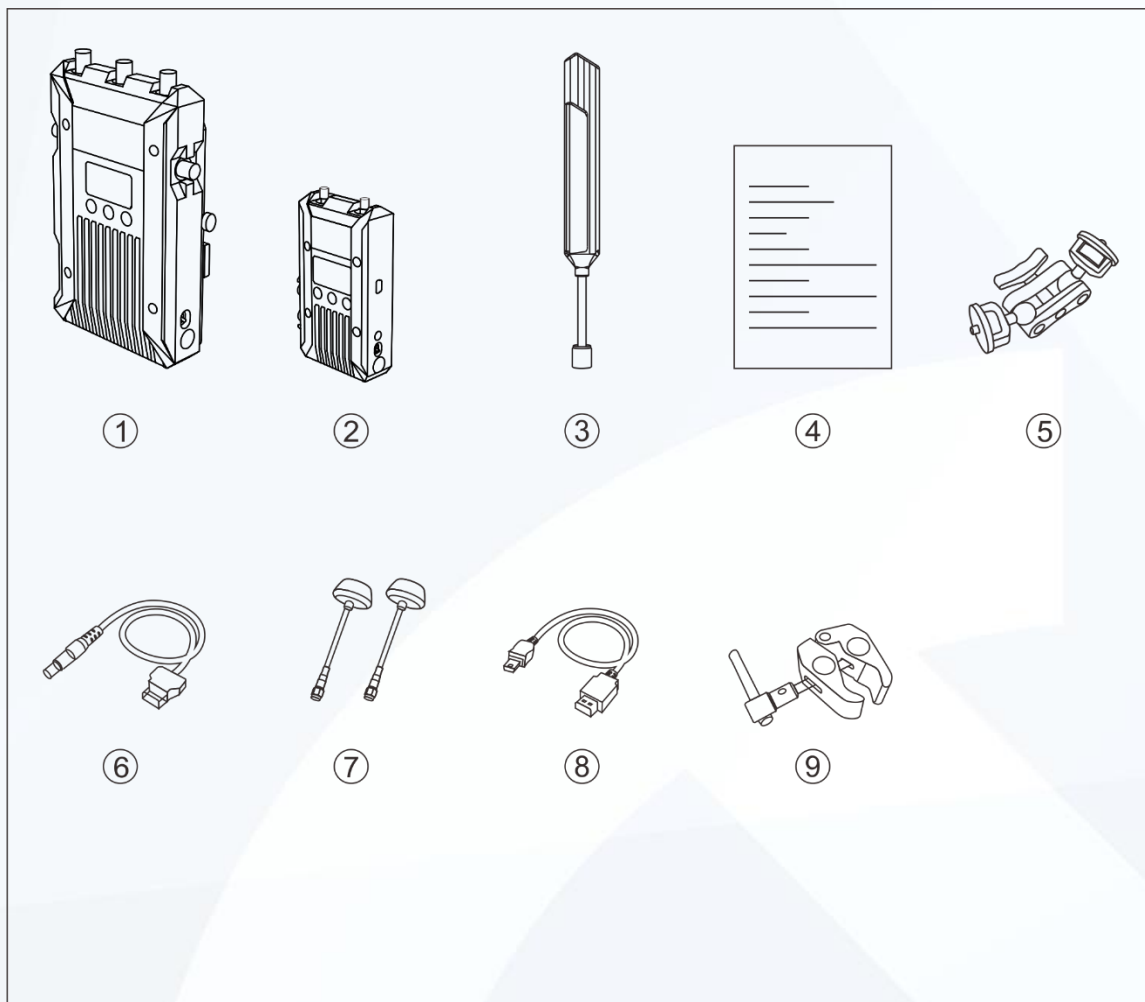
(1) 1*1 PACKING LIST

1.Receiver	x1	
2.Transmitter	x1	
3.5GHz Antenna	x8	
4.User Manual	x1	
5.7-inch Magic Arm	x1	
6.DC/Lemo Conversion Cable	x2	
7.Mushroom Antenna	x2	
8.Mini USB Cable	x1	
9.Crab Clamp	x1	

(2) 1*2 PACKING LIST

1.Receiver	x2
2.Transmitter	x1
3.5GHz Antenna	x13
4.User Manual	x1
5.7-inch Magic Arm	x3
6.DC/Lemo Conversion Cable	x1
7.Mushroom Antenna	x2
8.Mini USB Cable	x1

STANDARD SETUP

SDI IN

SDI OUT
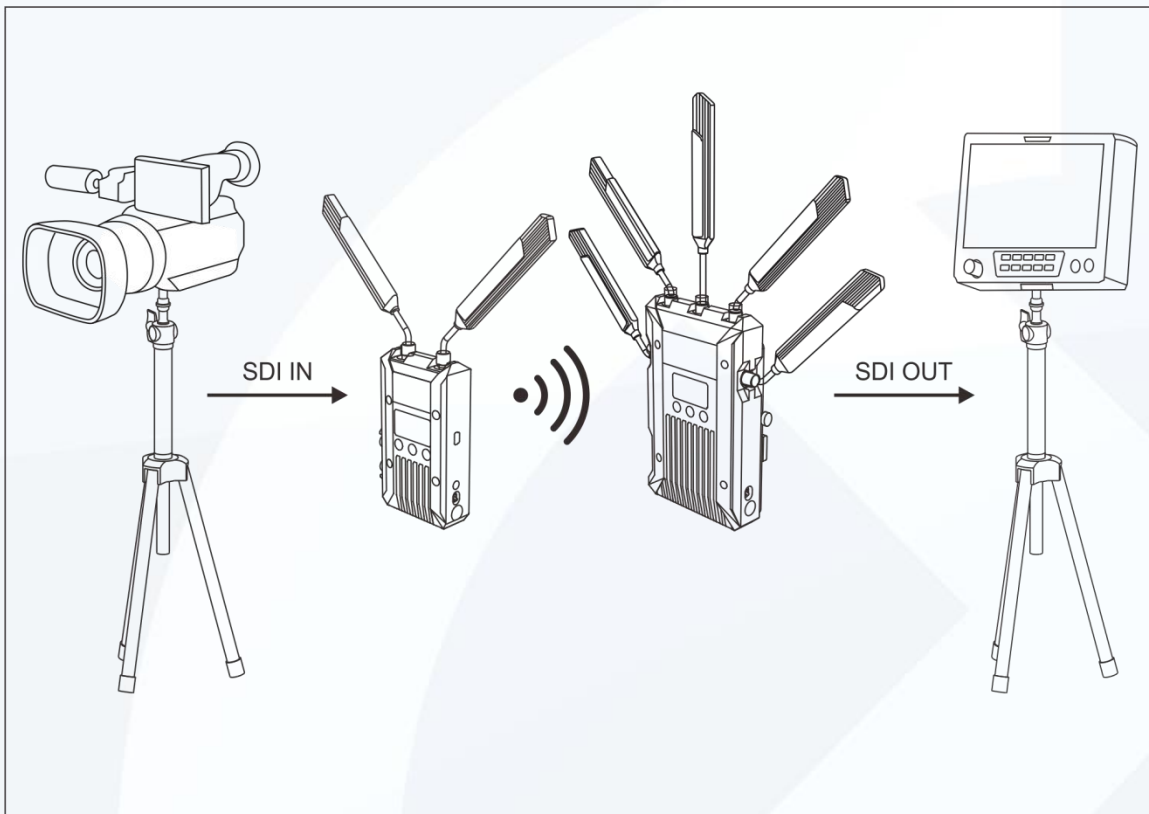
The wireless high-definition video transmission system uses the latest wireless Transmission technology, transmits broadcast-Level uncompressed, non-delayed HD signals. Transmitter supports SDI and HDMI input and SDI loop out. Receiver supports dual SDI and HDMI output. The transmitter works on a certain channel in broadcast mode, with a transmission distance of 2000ft.
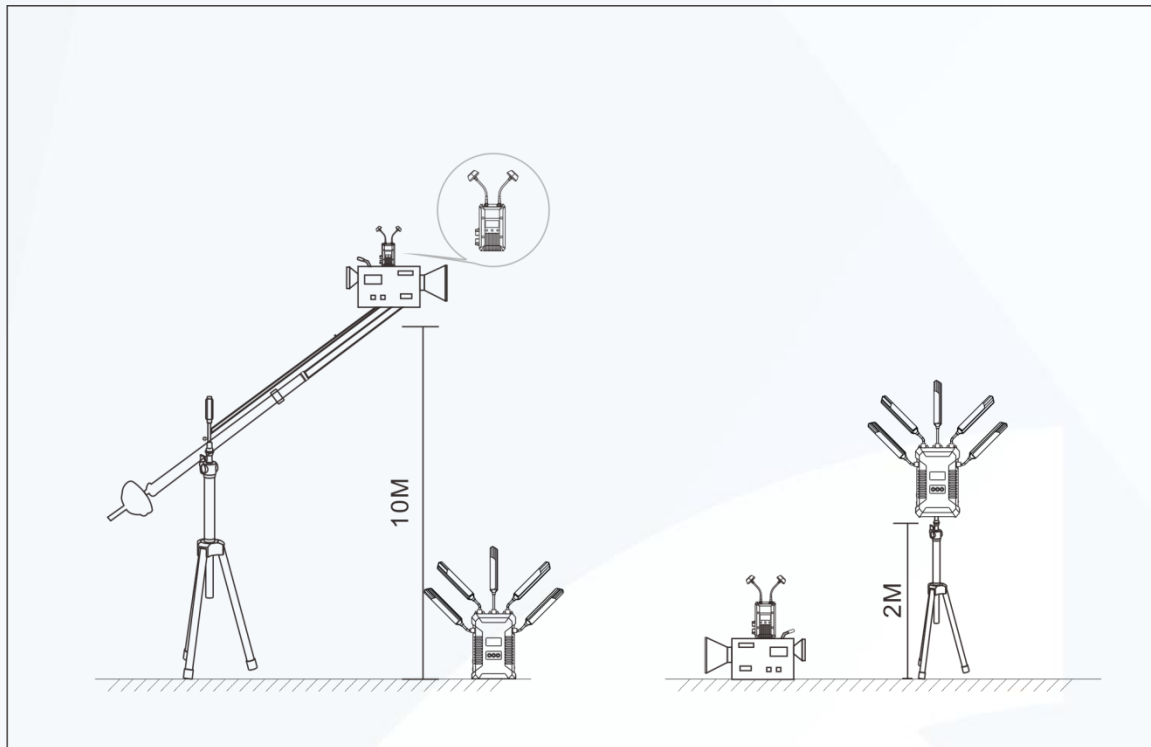
Mushroom antennas are recommended to enhance stability performance of the system, especially when there is a big height difference between the transmitter and the receiver.

PRODUCT INTERFACES

(1)   (2)
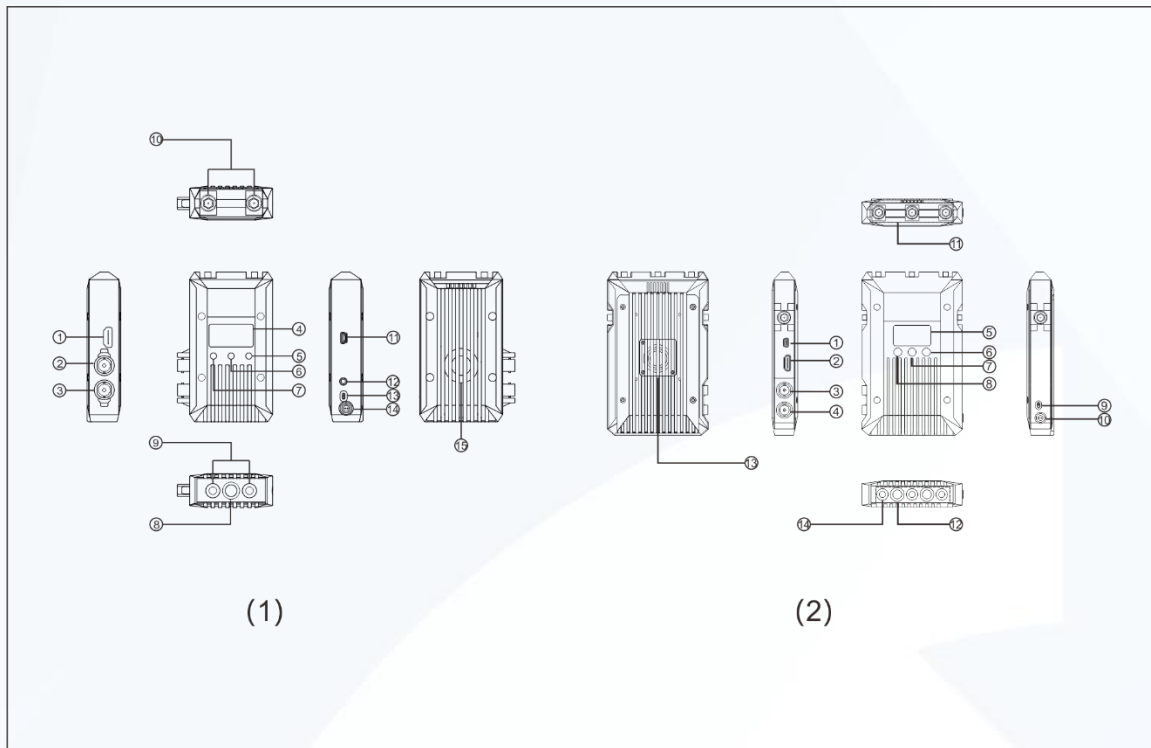
(1) Transmitter

1.HDMI Input

2.3G-SDI Loop Out

3.3G-SDI Input

4.OLED Display

5.Frequency Channel Up

6.Frequency Confirm

7.Frequency Channel Down

8.3/8-16 Screw Hole

9.1/4-20Screw Hole

10.RP-SMA Antenna male interface

11.Mini USB Interface

12.3.5mm Analog Audio Input

13.DC Power Switch

14.DC Input

15.Smart Cooling Fan

(2) Receiver

1.Mini USB

2.HDMI Output

3.3G-SDI Output1

4.3G-SDI Output2

5.OLED Display

6.Frequency Channel Up

7.Frequency Confirm/Menu

8.Frequency Channel Down

9.DC Power Switch

10.DC Power Input

11.RP-SMA Antenna male interface

12.3/8-16 Screw Hole

13.Smart Cooling Fan

14.1/4-20 Screw Hole

INSTALLATION
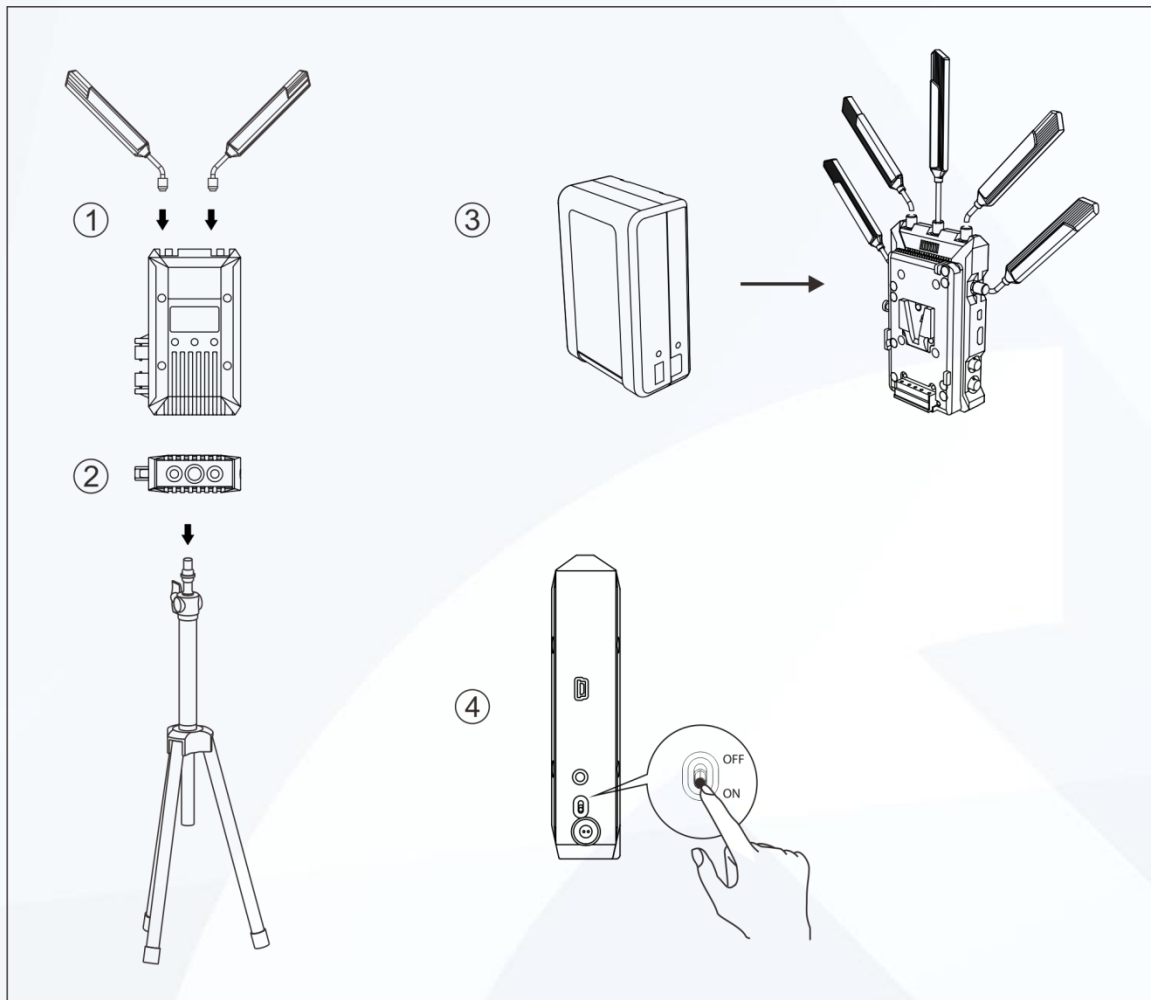
1.Follow the picture instruction to install the antennas

2.Stabilize the transmitter and receiver

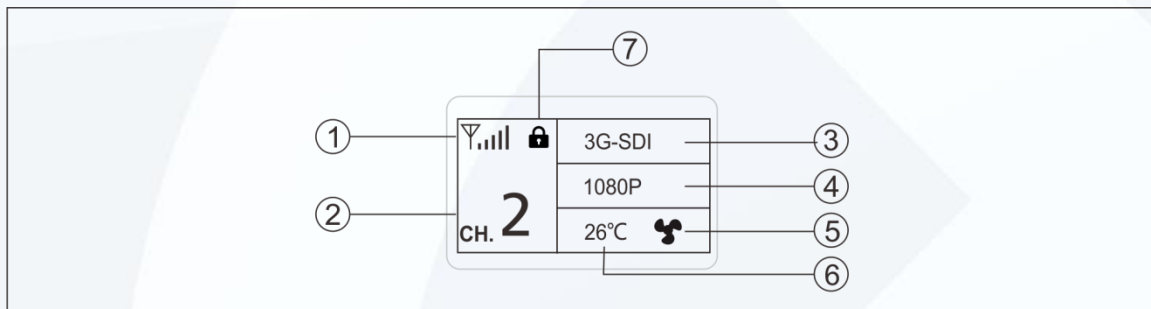3.Connect power supply

4.Turn "ON" the switch.
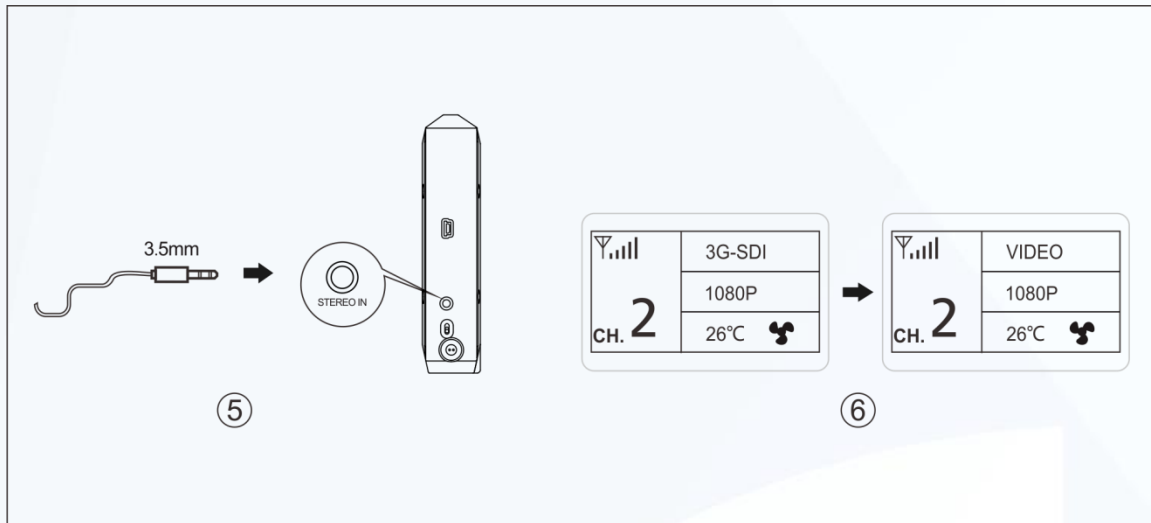
5. Connect the transmitter audio stereo in

6. Set up connection

When the receiver does not receive the signal, the display shows the status of 'No Video', no format display

OLED DISPLAY

1. RSSI indicator

2. Frequency display

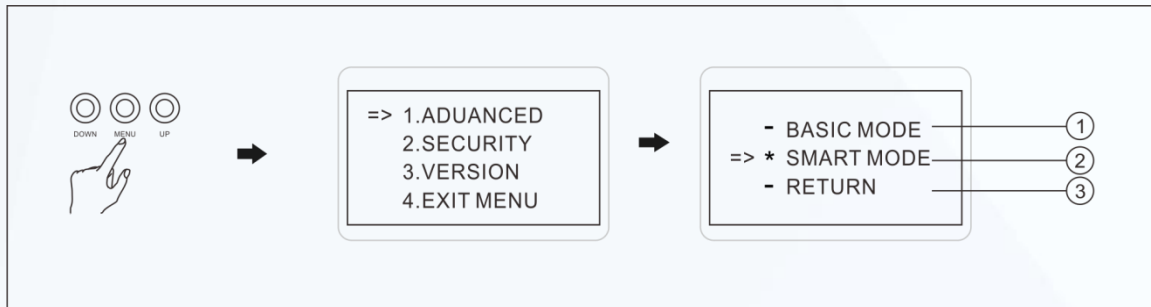3. Transmitter -Source Signal Display，receiver -Video Status Display

4. Signal input/ output Format

5. Temperature reminder

6. Temperature Display
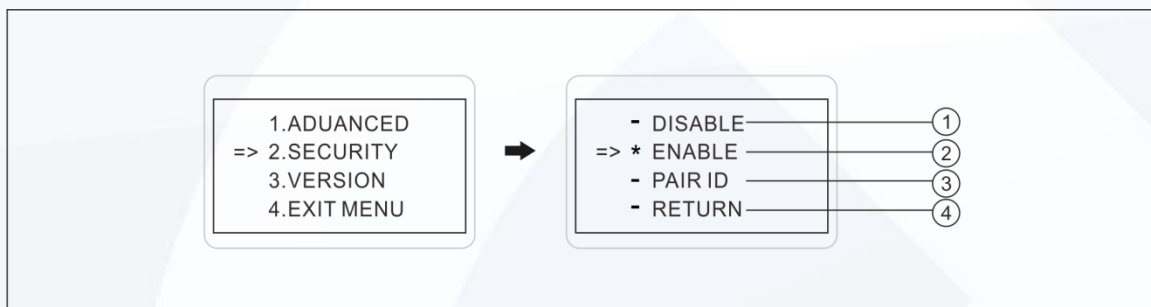
7. Device encryption reminder

Transmitter Fan Function


```
        => 1.ADUANCED          -  BASIC MODE    ——①
           2.SECURITY      => * SMART MODE  ——②
           3.VERSION           -  RETURN        ——③
           4.EXIT MENU
```

Press MENU button for 6 seconds to enter menu, select "ADVANCED" to enter TX fan option.

1."BASIC MODE "-Turn off replay without delay function, smart cooling fan and reduce power
   consumption

2."SMART MODE "-Turn on replay without delay function, turn on or off smart cooling fan
automatically according to temperature

3."RETURN"- back

Transmitter Encryption Pair Function


```
           1.ADUANCED          -  DISABLE   ——①
        => 2.SECURITY       => * ENABLE    ——②
           3.VERSION           -  PAIR ID   ——③
           4.EXIT MENU          -  RETURN    ——④
```

Select "SECURITY" to enter encryption pair option

1."DISABLE"-Transmitter encryption disable

2."ENABLE"-Enable transmitter encryption and start to pair

3."PAIR ID"-Transmitter ID, to check device ID number

4."RETURN"-back to superior menu

## Transmitter Smart Cooling Fan and Encryption Pair Selection
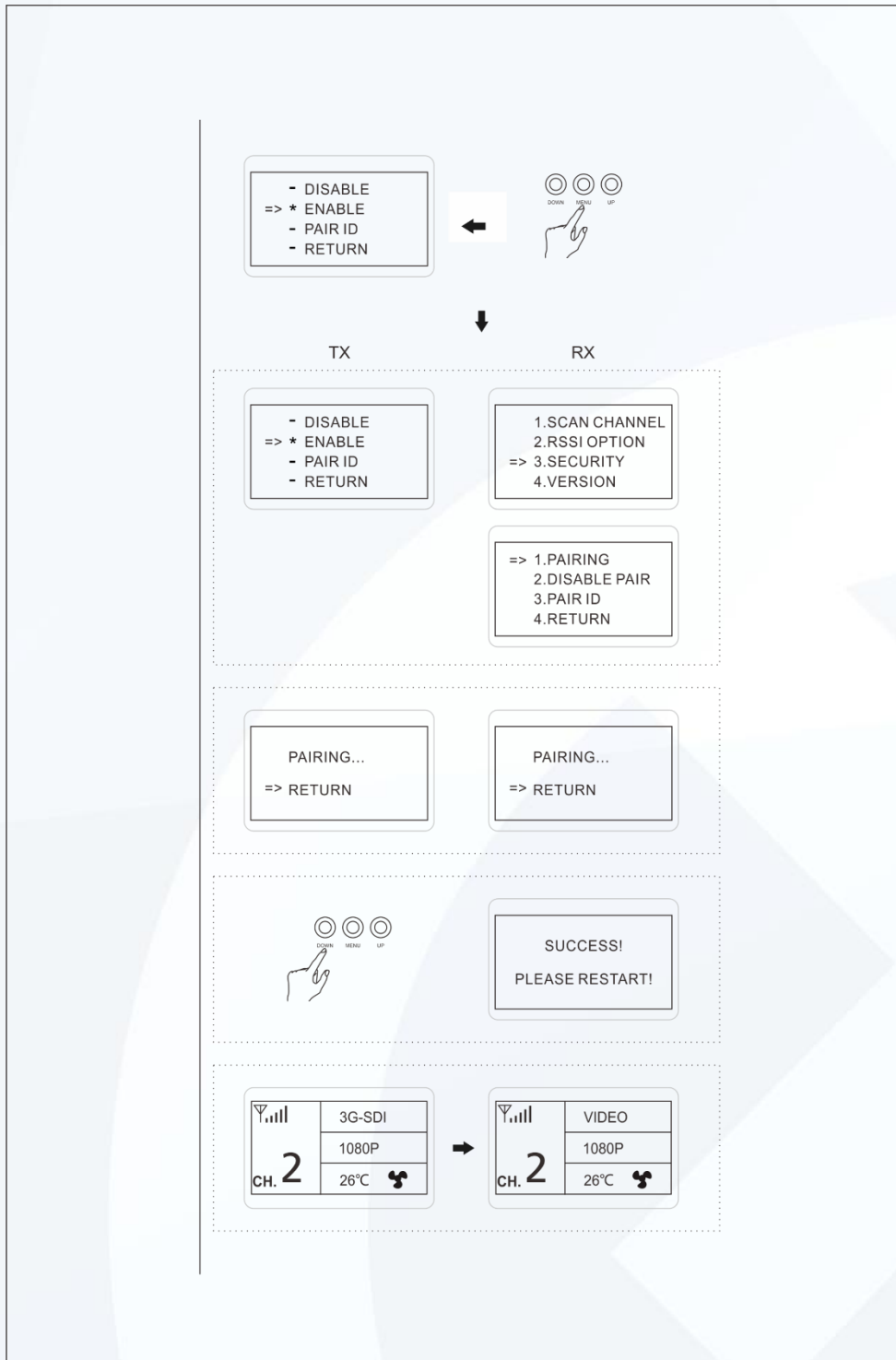
1.Long press "MENU" button, enter into "SECURITY" menu, select "ENABLE", transmitter start encryption pairing

2.After successfully paired, single press transmitter "MENU" button to exit pairing and return to main menu interface, restart receiver.

PRODUCT INSTALLATION and CHECK

Receiver Scan Channel and Wireless Signal Strength Indication
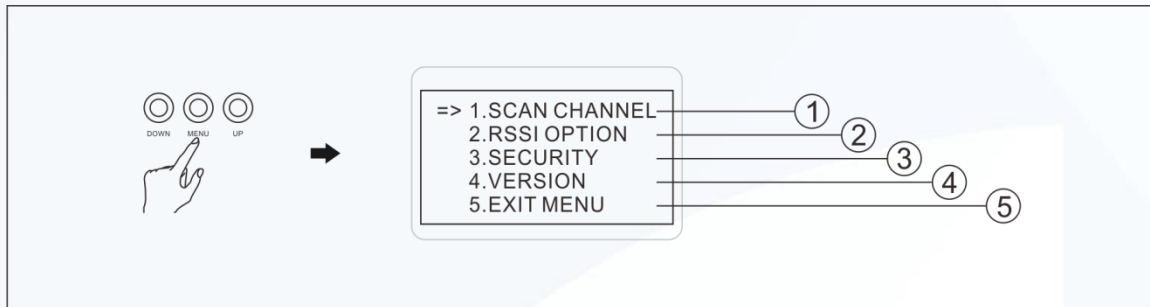
Press receiver "MENU" button for 6 seconds, enter main menu

1."SCAN CHANNEL"-Auto scan channel function

2."RSSI OPTION"--Received signal strength indication

3."SECURITY"-Encryption, decryption and device ID check

4."VERSION"-Software version

5."EXIT MENU"-Return to main menu

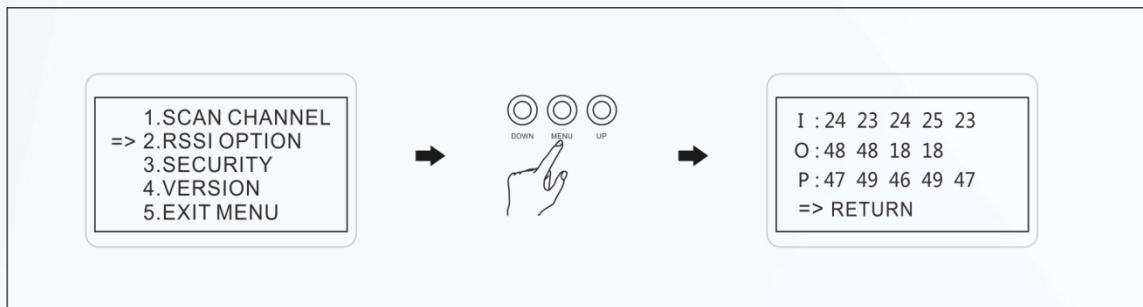## Receiver "Auto Channel Scan" introduction
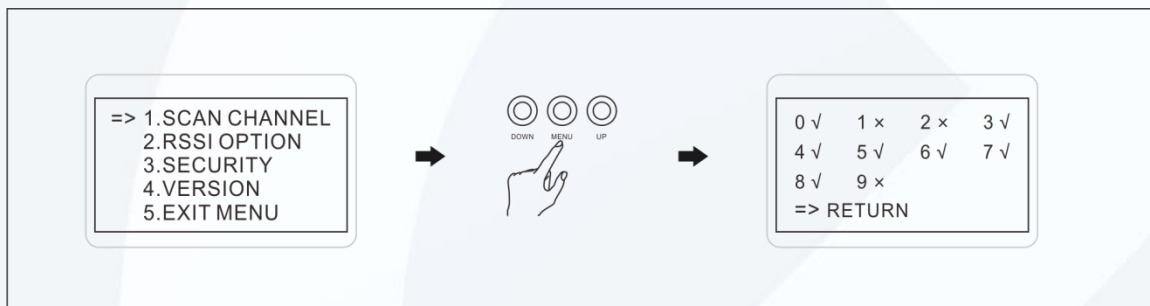
Disable encryption on receiver main menu and single press to select "SCAN CHANNEL", then the receiver detect the electromagnetic environment automatically

"√" Means the electromagnetic environment of the channel is clear and available

"✕" Means the channel is occupied, not available

Note：please turn off TX when using this function

Receiver "Received Signal Strength Indication" Introduction


```
    1.SCAN CHANNEL              I : 24  23  24  25  23
=> 2.RSSI OPTION               O : 48  48  18  18
    3.SECURITY                 P : 47  49  46  49  47
    4.VERSION                  => RETURN
    5.EXIT MENU
         DOWN  MENU  UP
```

Disable encryption on receiver main menu and single press to select "RSSI OPTION，the display will show the quality of signal received by the 5 antennas.

Note：Value of I and Q the bigger the better, value of P the smaller the better.

PARAMETERS

	Transmitter(TX)	Receiver(RX)
Interface	SDI Input (BNC female); SDI Loop Out (BNC female); HDMI Input (Type A female); 2 Antennas (RP-SMA male); DC Power Input, MINI USB; 3.5mm Stereo In	SDI Output1 (BNC female); SDI Output2 (BNC female) HDMI Output (Type A female); 5 Antennas (RP-SMA male); DC Power Input, MINI USB;
Supply Voltage Range	7~36V DC	7~36V DC
Power Consumption	<9W	<8W
Net Weight	315g	520g
Size	（LxWxH）:116x68x25mm Not include antennas and battery plate	（LxWxH）:158x102x25mm Not include antennas and battery plate
Input Video Format	HDMI: 480p60,576p50,720p50/59.94/60,1080i50/59.94/60,1080p23.98/24/25/29.	/

	9/30/50/59.94/60; SDI: 3G, HD, and SD-SDI(auto-selected),SMPTE-259/274/292/296/372/424/425;	
Output Video Format	/	HDMI: 480p60,576p50,720p50/59.94/60,1080i50/59.94/60,1080p23.98/24/25/29.9/30/50/59.94/60; SDI: 3G,HD,and SD-SDI(auto-selected),SMPTE-259/274/292/296/372/424/425;
Input Audio	SDI embedded 2 channel 24 bit/48KHz	/
Output Audio	/	SDI embedded 2 channel 24 bit/48KHz
Frequency Band	5.1-5.9GHz, configurable with China, North America, Europe and etc.	5.1-5.9GHz, configurable with China, North America, Europe and etc.
Modulation Mode	OFDM-16QAM	OFDM-16QAM
Transmission Power	Max 21dBm	/
Receiver Sensitivity	/	-75dBm
Occupied Bandwidth	40MHz	40MHz

FAQ

1.No video output on display

1).Please check TX and RX power first. If power is supplied by battery or external power source, please make sure the battery or external power source works normally.

2).Please check that the antenna connected to the transmitter and receiver is securely mounted.

3).Then check if the transmitter shows the source and format; if not, check if the SDI cable or HDMI cable connected to the transmitter is reliably connected to the camera or if the camera has video output.

4).Please check input video format is compatible with this product specs

5).Please check if battery power is too low.

2.Poor Output Video Quality

1).Check if SDI or HDMI input or output cables are well plugged;

2).Make sure the transmitter and receiver are placed at least 1.5 meters above the ground;

3).Please check the wireless signal strength indicating "RSSI" status. There should be at least 2-3 RSSI LED lit if the user wants to get better video quality. If there is only 1 RSSI LED or no LED light, that means the received wireless signal is too weak. Please change to other frequency channels in case some exist interference or decrease the transmission distance.