

# MARS 400S

User Manual

## DESCRIPTION

Thank you for purchasing Hollyland MARS 400S wireless HD video transmission system. The product uses the latest coding, decoding technology and 5G wireless transmission technology and can achieve ultra-low latency wireless video transmission. It has a transmission range over 400ft with a clean line of sight (LOS), supports up to 1080P 60Hz image resolution, and in the end achieves full HD HDMI/SDI video transmission.

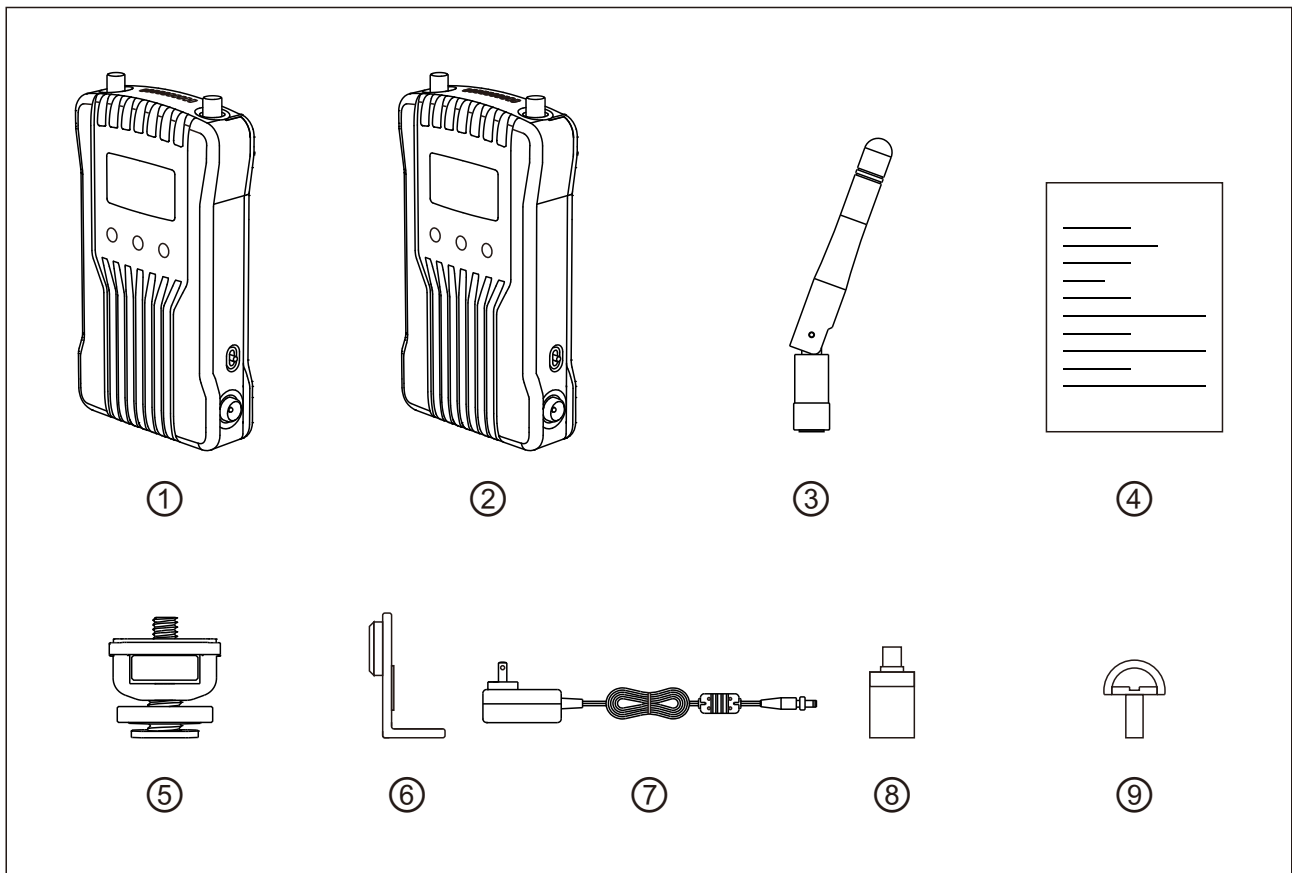
## KEY FEATURES

- iOS & Android App Monitoring
- 1 Transmitter Supports up to 2 Receivers
- OLED Display Screen
- Channel Scan
- Three Application Scene Modes
- Low-Battery Warning Indicator
- 400ft Transmission Range (LOS)
- Less than 0.1s Latency
- Both HDMI & SDI Connection Options
- USB Firmware Upgrade
- Stable & Reliable Industrial Metal Case

## APPLICATIONS

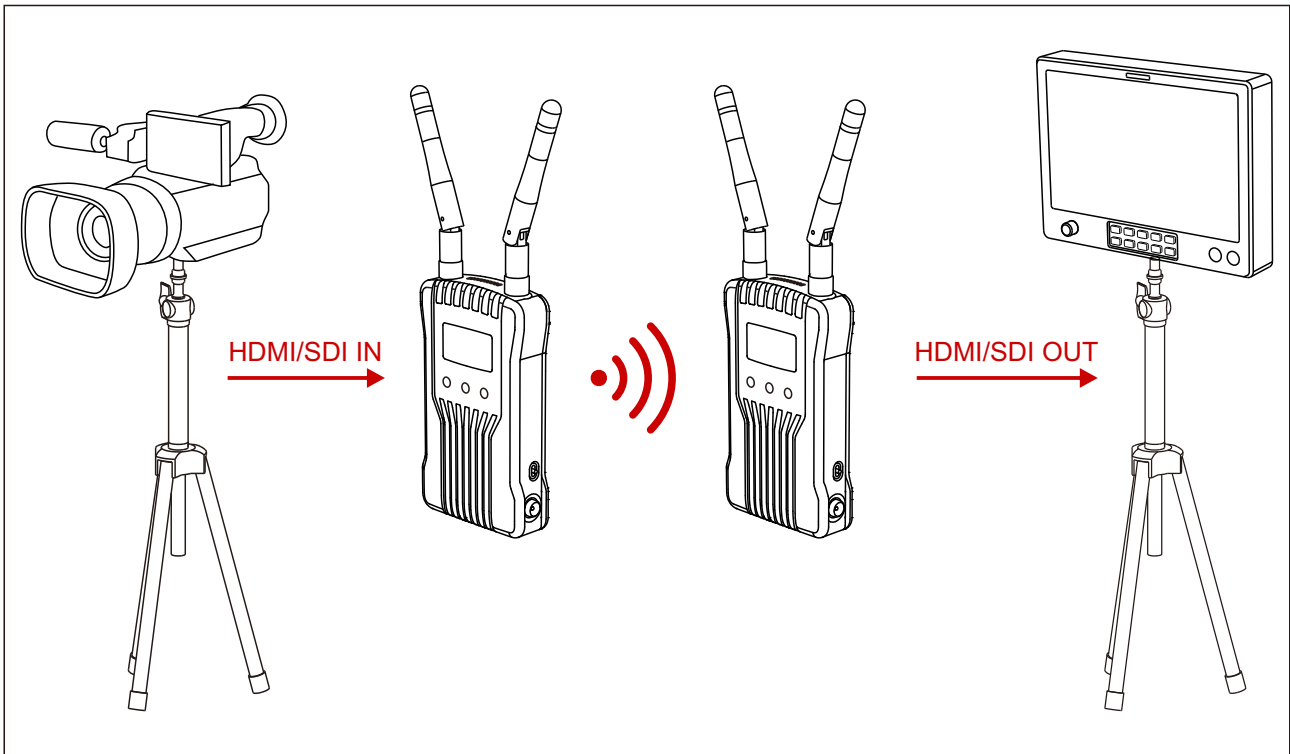
- Indie Filmmaking
- Live Broadcasting
- Sports Activities
- Education Recording
- Wedding Ceremonies
- Corporate Events

# PACKING LIST



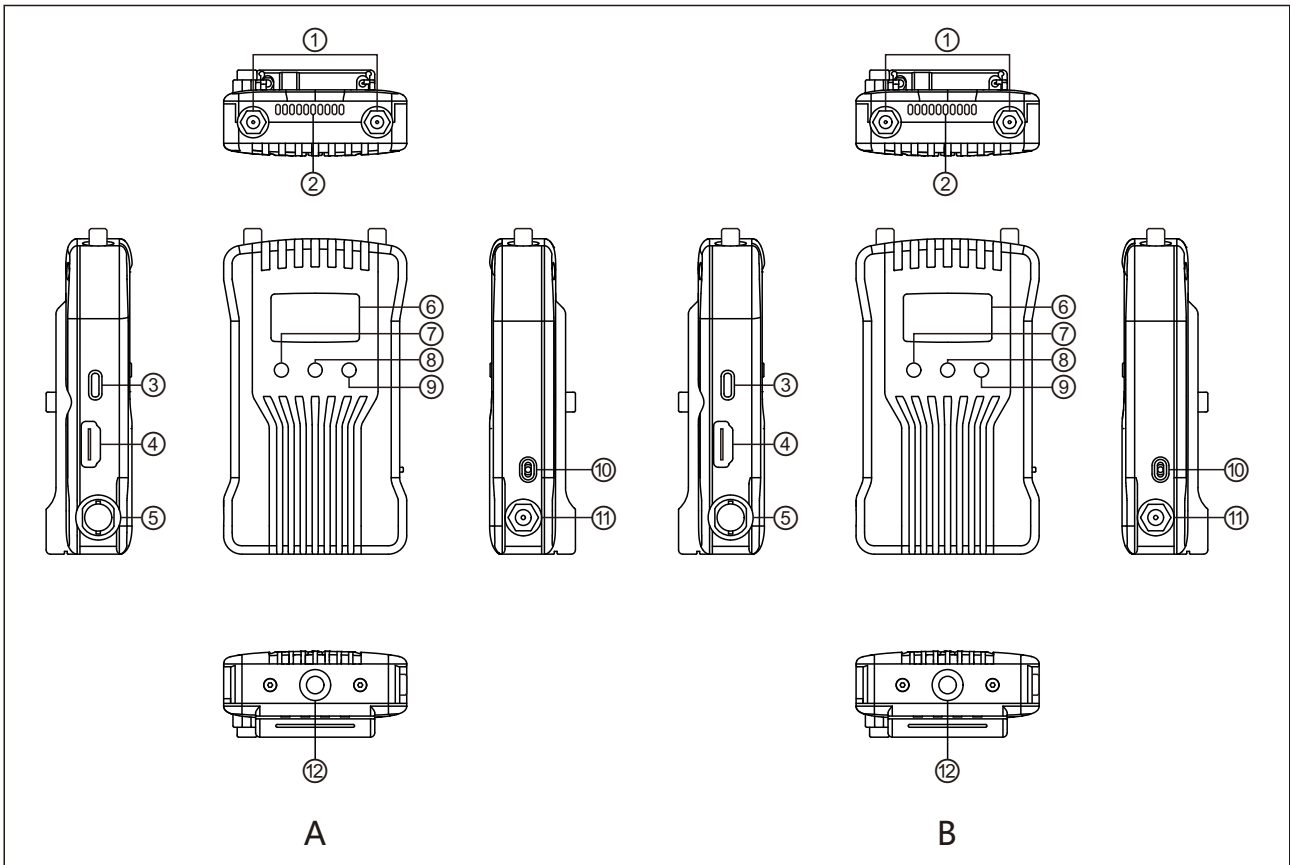
①	Transmitter	x1
②	Receiver	x1
③	Antenna	x5
④	Quick Guide	x1
⑤	Cold Shoe	x1
⑥	Expansion Accessory	x1
⑦	DC Adapter	x1
⑧	USB Type-C to Type-A OTG Adapter	x1
⑨	C-Shaped Screw	x1

## TYPICAL SETUP



This wireless HD video transmission system uses the latest wireless communication technology and transmits ultra-low latency HD video. The transmitter supports both HDMI and SDI input, while the receiver supports both HDMI and SDI output. It is configured with OLED display screen and supports iOS & Android App Monitoring.

# PRODUCT INTERFACES



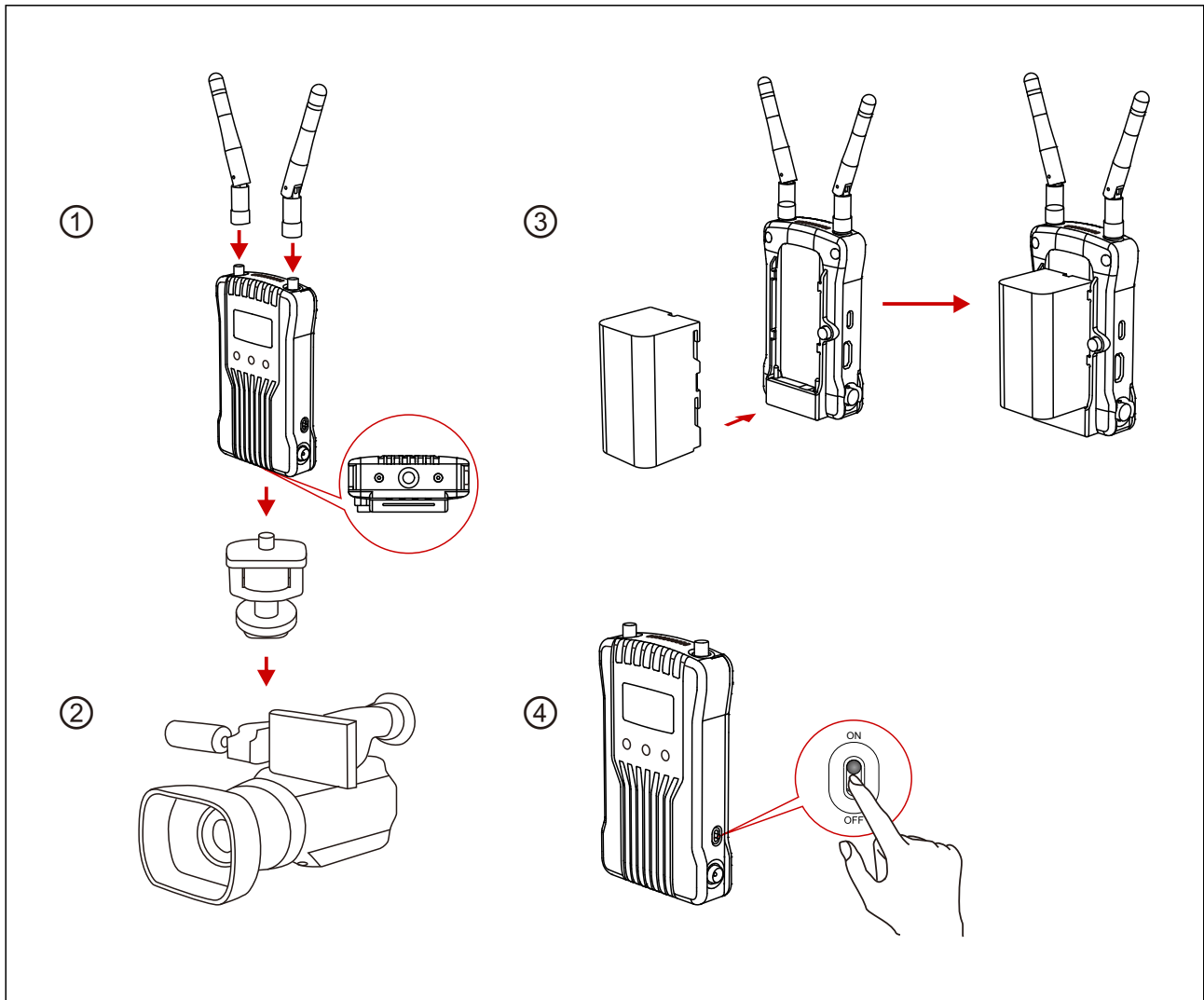
## A TRANSMITTER

- ① Antenna Interface (RP-SMA Male)
- ② Fan Air Outlet
- ③ USB Type-C Interface
- ④ HDMI Input
- ⑤ SDI Input
- ⑥ OLED Display Screen
- ⑦ Down
- ⑧ Menu/OK
- ⑨ Up
- ⑩ Power Switch
- ⑪ DC Input
- ⑫ 1/4 Screw Hole

## B RECEIVER

- ① Antenna Interface (RP-SMA Male)
- ② Fan Air Outlet
- ③ USB Type-C Interface
- ④ HDMI Output
- ⑤ SDI Output
- ⑥ OLED Display Screen
- ⑦ Down
- ⑧ Menu/OK
- ⑨ Up
- ⑩ Power Switch
- ⑪ DC Input
- ⑫ 1/4 Screw Hole

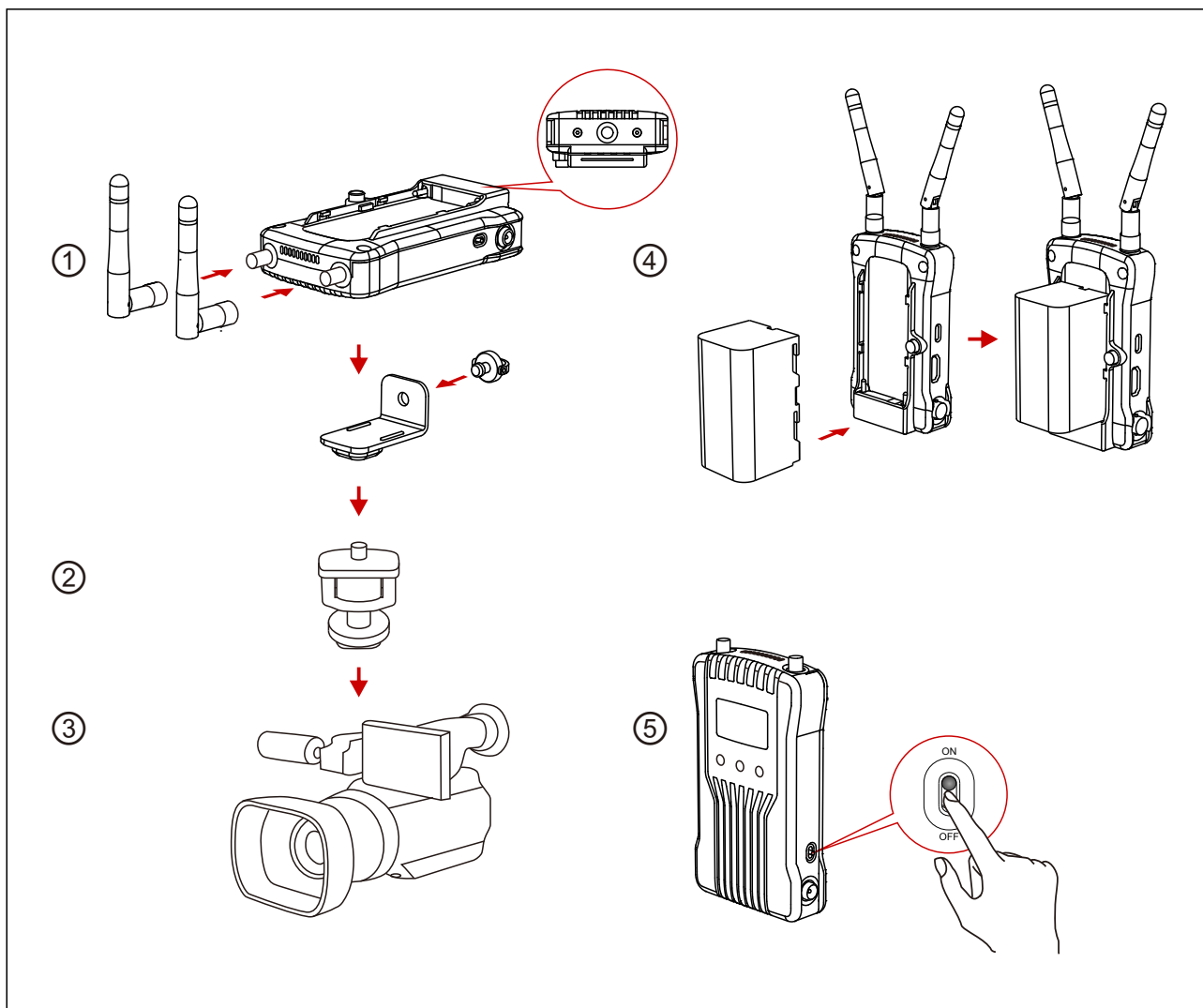
# INSTALLATION



## ■ VERTICAL INSTALLATION

- ① Install the antennas as demonstrated
- ② Secure the cold shoe with 1/4 screw hole at the bottom of the transmitter and mount it to the camera
- ③ Connect to a power supply (Compatible with NP-F970 or the same series of batteries)
- ④ Turn on the devices

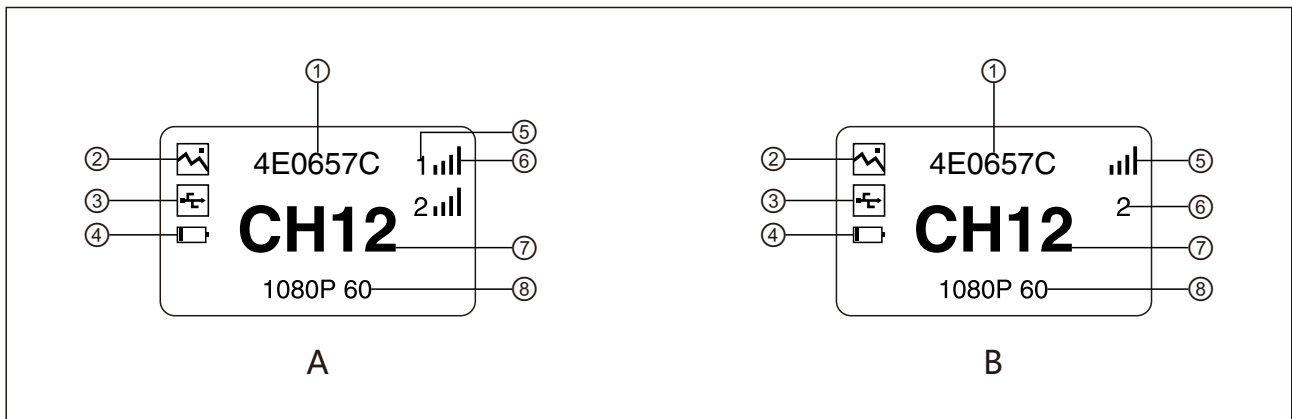
# INSTALLATION



## HORIZONTAL INSTALLATION

- ① Install the antennas as demonstrated
- ② Connect the expansion accessory with the 1/4 screw hole at the bottom of the transmitter by a C-shaped screw
- ③ Secure the cold shoe with the 1/4 screw hole on the expansion accessory and install them on the camera
- ④ Connect to a power supply (Compatible with NP-F970 or the same series of batteries)
- ⑤ Turn on the devices

# OLED DISPLAY



## A TRANSMITTER

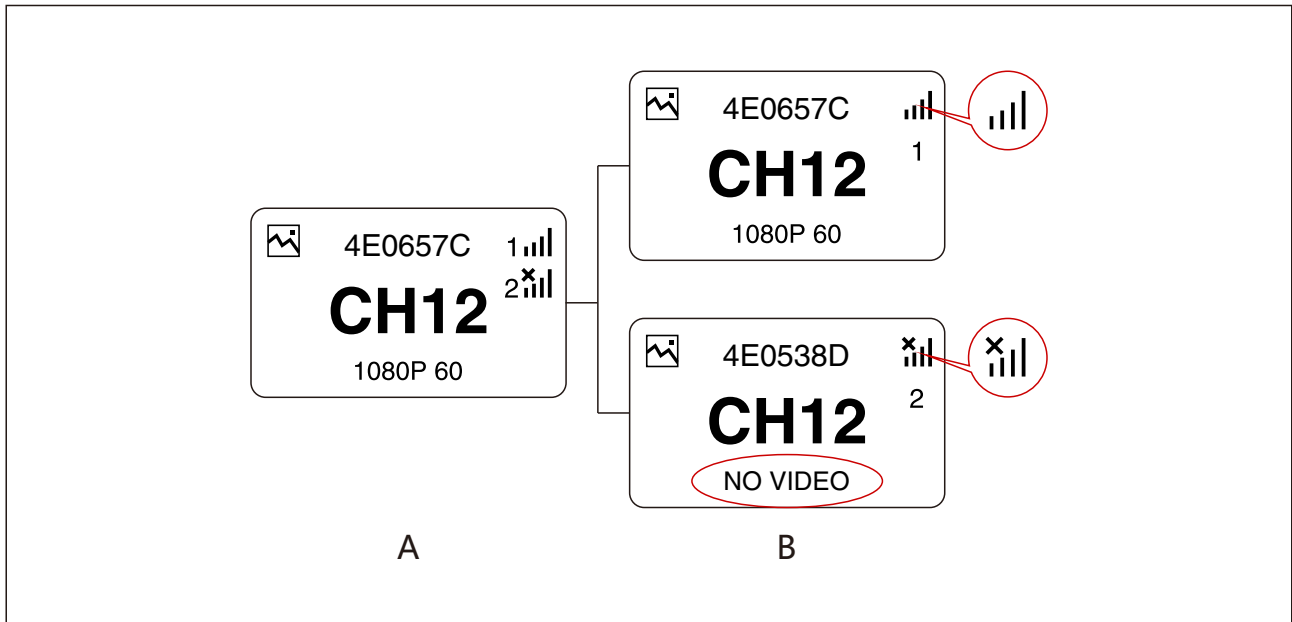
- ① Device ID
- ② Scene Mode
- ③ USB Flash Detection Indicator
- ④ Battery Status
- ⑤ Device Number
- ⑥ Signal Strength
- ⑦ Channel Display
- ⑧ Video Format

## B RECEIVER

- ① Device ID
- ② Scene Mode
- ③ USB Flash Detection Indicator
- ④ Battery Status
- ⑤ Signal Strength
- ⑥ Device Number
- ⑦ Channel Display
- ⑧ Video Format

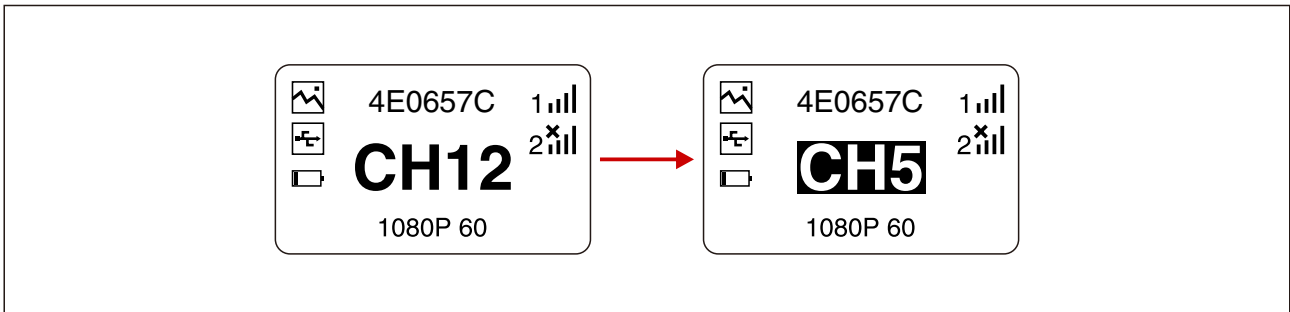


## STATUS DESCRIPTION



1. When the devices are disconnected, a cross “x” will appear above the signal strength bars on both the transmitter and the receiver. As shown in the above picture, device 1 is on connected status, while device 2 is on disconnected status.
2. As shown in the above picture, “NO VIDEO” will appear on the screen if there is no video input detected, and the video format will appear if there is a video input detected.

## STATUS DESCRIPTION

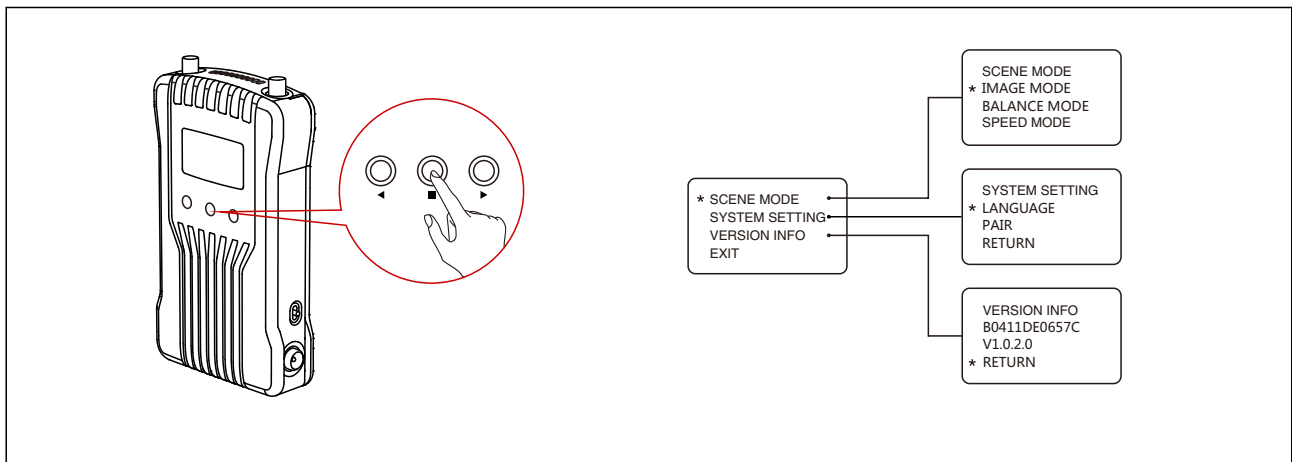


3. When the device detects a connection to a USB flash, the USB flash detection Indicator will light up.
4. When the voltage is too low, the low battery alarm will be triggered and the low-battery icon will flash slowly.

### ■ CAUTION

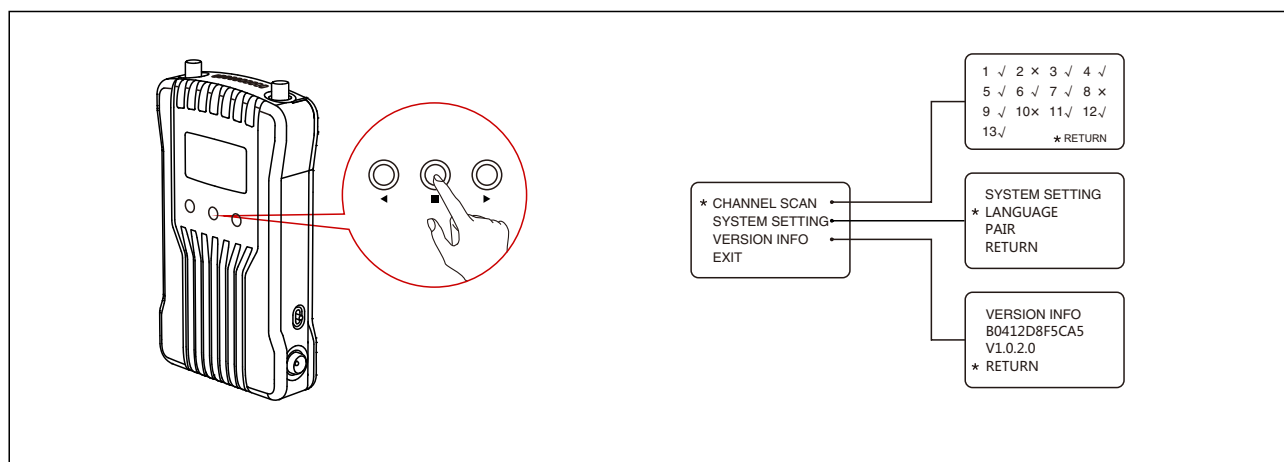
- When the receiver is not connected, it will not display the Channel ID.
- When the receiver is turned on, the channel ID will not be displayed before the receiver is connected with the transmitter.

## QUICK GUIDE



## TRANSMITTER

1. Long press the “MENU” button for about 3 seconds to enter the root menu interface. The root menu has “SCENE MODE”, “SYSTEM SETTING” and “VERSION INFO” options.
2. Select “SCENE MODE”, then click the “OK” button, you would be able to select “IMAGE MODE”, “BALANCE MODE” or “SPEED MODE”.
3. Select “SYSTEM SETTING”, then click the “OK” button, you would be able to select “LANGUAGE (Chinese/English)”, “PAIR” or “RESET”.
4. Select “VERSION INFO”, then click the “OK” button, you would be able to check the version information.



## RECEIVER

1. Press the “MENU” button for about 3 seconds to enter the root menu interface. The root menu has “CHANNEL SCAN”, “SYSTEM SETTING” and “VERSION INFO” options.
2. Select “CHANNEL SCAN”, then click the “OK” button, the device will scan and detect the current frequency environment, available channels will display with a“√”, while unavailable channels will display with a“×”.
3. Select “SYSTEM SETTING”, then click the “OK” button, you would be able to select “LANGUAGE” (Chinese/English), “PAIR” or “RESET”.
4. Select “VERSION INFO”, then click the “OK” button, you would be able to check the version information.

### ■ CHANNEL CHANGE

Press the channel button “UP/DOWN” on the transmitter or the receiver to change the current channel. Press “OK” to confirm the channel number, then the channel of the transmitter and the receiver will be synchronously and automatically changed.

### ■ DEVICE UPGRADE

1. Copy the upgrade firmware to the root directory of a USB flash.
2. Insert the USB flash into the OTG adapter and connect it with the Type-C upgrade interface on the transmitter.
3. Reset the device, then enter the upgrade interface.
4. Once the upgrade is complete, it will display with “upgrade successfully”, and the device will be automatically upgraded.

### ■ CAUTION

The USB flash has to be at FAT32 format.

### ■ IOS & ANDROID APP MONITORING

#### ■ Android System Installation and Use

1. The application name is “HollyView”. It is available on Hollyland's official website and Android APP store.

#### 2. Method No.1

Scan the QR code on the back of the transmitter then the APP will be automatically connected to the device. Enter the main interface and you would be able to monitor the video shot on the camera.

#### Method No.2

Input the device's ID number and manually connect the device. Enter the main interface then you would be able to monitor the video shot on the camera.

#### ■ IOS System Installation and Use

1. The application name is “HollyView”. It is available at APP Store.

2. The using methods are the same as the above methods for Android system.

# PARAMETERS

	Transmitter	Receiver
<b>Interface</b>	HDMI Input (Type A Female) SDI Input 2 Antenna Interfaces (RP-SMA Male) DC Input, Type-C USB	HDMI Output (Type A Female) SDI Output 2 Antenna Interfaces (RP-SMA Male) DC Input, Type-C USB
<b>Supply Interface</b>	6~16V DC	6~16V DC
<b>Power Consumption</b>	<11W	<6W
<b>Weight</b>	192g	189g
<b>Size</b>	112*65*23.5mm (L*W*H) External antennas and battery plate excluded	112*65*23.5mm (L*W*H) External antennas and battery plate excluded
<b>Input / Output Video Format</b>	HDMI: 480p60 576p50 720p50/59.94/60 1080i50/59.94/60 1080p23.98/24/25/29.9/30 1080P50/59.94/60 SDI: 1080P60/59.94/50(Level A) 1080P60/59.94/50(Level B) 1080i60/59.94/50 1080P30/29.97/25/24/23.98 1080Psf25 720P60/59.94/50 1080Psf24/23.98	HDMI: 480P60 576P50 720P50/60 1080i50/60 1080P24/25/30 1080P 50/60 SDI: 1080P60/50(Level A) 1080i60/50 1080P30/25/24 720P60/50 1080i50(1080Psf25/24/23.98 Input) 1080i60(1080Psf30/29.97 Input)
<b>Modulation Mode</b>	OFDM	OFDM
<b>Frequency</b>	5GHz	5GHz
<b>Transmission Power</b>	Maximum 21dBm	/
<b>Receiver Sensitivity</b>	/	-80dBm
<b>Transmission Latency</b>	Less than 0.1s	Less than 0.1s
<b>Bandwidth</b>	20MHz	20MHz

### ■ CONNECTION ISSUES

1. Check and make sure that the power supply works fine on both the transmitter and the receiver.
2. If the device displays with the low-battery sign, change or charge the battery in time.
3. Try to change to another channel and to connect the devices again for there might be interference for the current channel.
4. Re-pair the devices.
5. Check if the antennas on the transmitter and receiver are correctly installed.

### ■ DISPLAY ISSUES

1. Check if the video source is connected to the HDMI IN or SDI IN interface correctly.
2. Check if the OLED displays the video format. If not, check if the HDMI/SDI cable connected to transmitter is correctly linked with the camera and if the camera has the video output.
3. Check if the format of the camera output interface is compatible with this system.




### ■ LIMAGE LOW QUALITY ISSUES

1. Set “SCENE MODE” to “IMAGE MODE”.
2. Check if the HDMI/SDI IN or OUT cables are correctly connected.
3. Make sure both the transmitter and the receiver are installed at least 1.5m above the ground.
4. Check the signal strength status. If it is with only 1 bar signal, it means that the signal strength is very weak. In this case, change the channel or shorten the distance between the devices.

### ■ LAPP CONNECTION ISSUES

1. Check the number of connected APP devices. When 1 transmitter is connected with only 1 or none receiver, the system can still connect up to 4 App monitoring devices; or 1 transmitter can connect with maximum 2 receivers and no APP monitoring device.



 HollylandTech

 HollylandTech

 HollylandTech

 sales@Hollyland-tech.com

 www.hollyland-tech.com