Table of Contents

Features

. Uses License-Free 5GHz ISM frequency band, maximum 10 frequency channels selection, coexist with WIFI.

. Highest resolution 10 bits color depth 4:4:4, 1080p 60FPS HDMI and SD/HD/3G SDI input and output, HDMI SDI cross conversion is supported.

. Support wireless 10 bit HD video with no compression and no delay up to 1150FT(350M).

. Uncompromised picture quality with very low latency, <1ms.

. Supports point to point, and point to multi points network topology, one transmitter can be connected up to 4 receivers.

. Support professional audio formats include Dolby True HD, DTS-master, etc.

. AES-128/256 encryption with air interface HD video data stream.

. Wide range power voltage input, compatible with most kinds of camera batteries.

. Sony F970 battery buckle, convenient for field battery install and replacement.

. All input and output ports have +-8 kV ESD protection level(HBM, contact discharge).

. Plug & Play – no software is required.

. Professional standard 4-pin LEMO power plugs.

. Each RX(receiver) paired to the unique TX(transmitter) in factory.

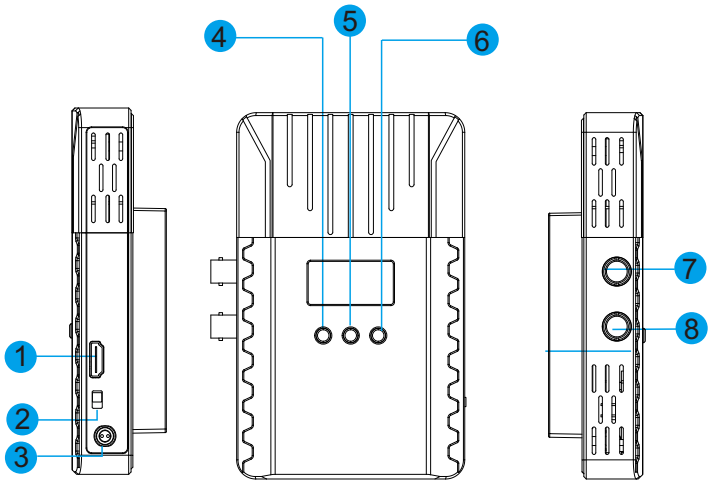
. industrial metal and plastic case with robust cooling and durability.

. RX built-in directional antenna.

. OLED screen display power status, Temperature, Fan on/off, RSSI, Frequency Channel, Resolution, Video Status.

. The hard carrying case provide water and shock proof to product

Receiver Diagram



Receiver：

1： HDMI Output

2： Power On/Off

3 ： DC Input

4 ： Frequency Channel Up

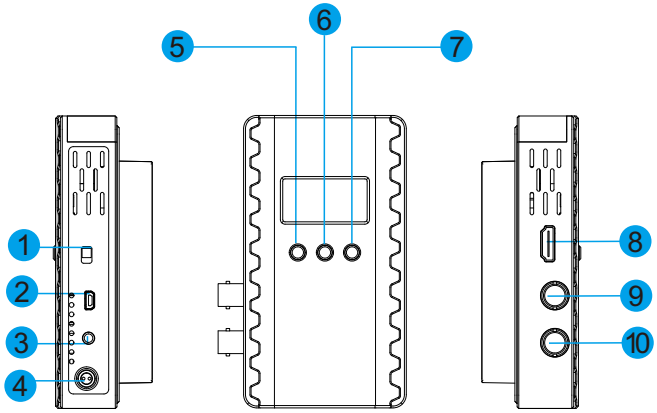
5 ： Frequency Channel Confirm
(press and hold to turn on or off the fan)

6 ： Frequency Channel Down

7 ： SDI Output1

8 ： SDI Output2

Transmitter Diagram



Transmitter:

1: Power On/Off

2: USB port for firmware update

3 : Audio input

4 : DC Input

5 : Frequency Channel Up

6 : Frequency Channel Confirm
(press and hold to turn on or off the fan)

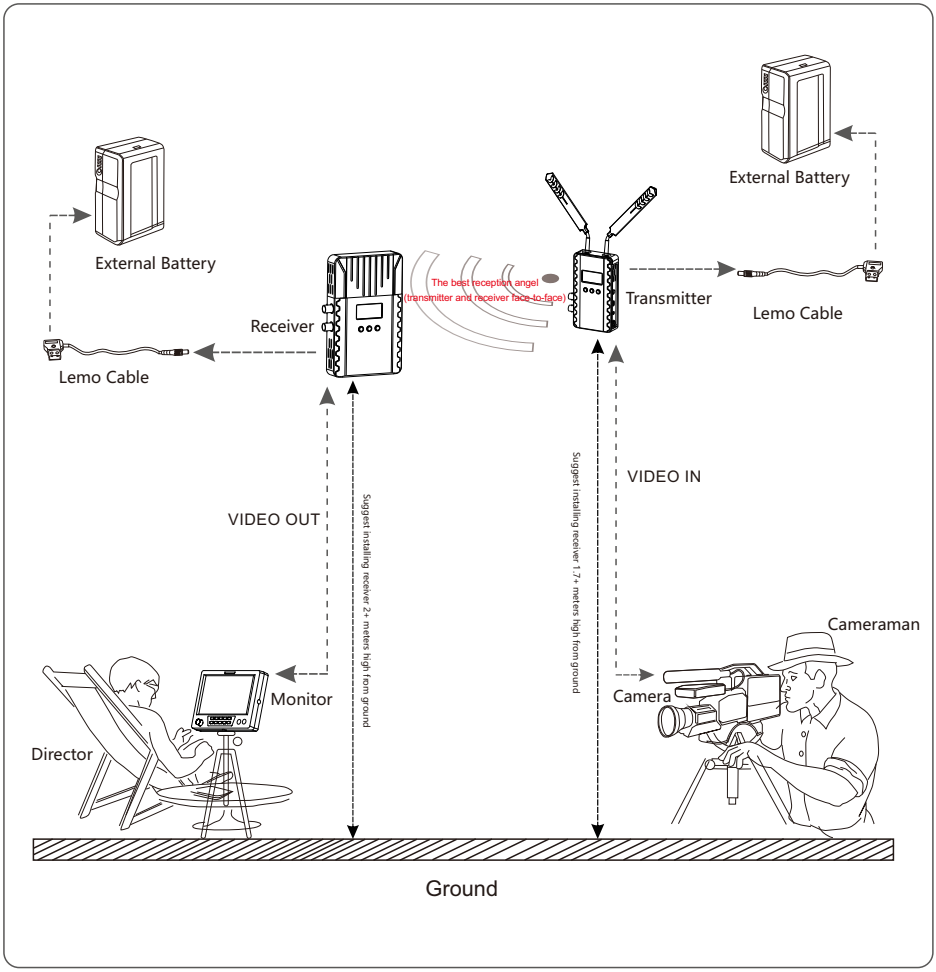
7 : Frequency Channel Down

8 : HDMI Input

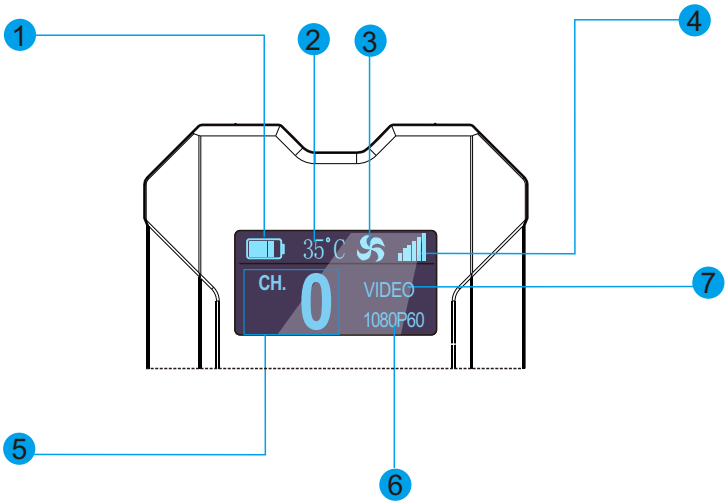
9 : SDI Input

10 : SDI Loop-out

Installation



Screen Instruction



Menu description:

1: Battery Level

2: Working Temperature

3: Fan status

4: RSSI

Strong

Middle

Weak

5 : Frequency Channel

6 : Resolution

7 : Video Status

Troubleshooting Guide

If the transmission system worked well at short distance but has problem at long distance or the video quality is not good. Please follow instructions as below.

	Step 1	Step 2	Step 3	Step 4
The system can’ t establish link	If the transmission system can’ t establish link at long distance but works well at shorter distance. Please check if the transmitter and receiver under specified working distance. And if the transmitter and receiver set at the same frequency.	If the problem is not solved after step 1. Please restart the transmitter and receiver.	If the problem is not solved after step 2. Please shorten distance and check the link status.	If established link at shorter distance. Please go to next guide.
The working distance can’ t reach 244M	If established link at shorter distance. Please check if the antennas are screwed tightly. The transmitter and receiver are NOT parallel to each other. The 2 TX antennas’ angle is 45°. Make sure no big obstacle between transmitter and receiver.	If the problem is not solved after step 1. Please change the frequency and check the link status. If the link is improved. The problem is caused by interference. 。	If the problem is not solved after step 2. Please replace the antennas with new ones and try again.	If the problem is not solved after step 3. Please contact with us for RMA.
The video quality is bad	Please make sure the distance is within the maximum working distance. The transmitter and receiver are NOT parallel to each other. The 2 TX antennas’ angle is 45°. If there is big obstacle between transmitter and receiver, please shorten distance.	If the RSSI on receiver has more than 3 lights on, please go to next step. If the RSSI has less than 3 lights on. Please change the frequency and check the video quality.	If the video quality is not improved after changing frequency. Please replace antennas with new ones or try other system with good performance before.	If the other system has the same problem. Please move to other place and try again. If the old system works well and the new system still has problem after changing place. Please contact with us for RMA.
The RSSI is good but the video quality is bad	The RSSI is good but the video quality is bad. Please make sure the distance is within the maximum working distance and the 2 TX antennas’ angle is 45°, the transmitter and receiver are NOT parallel to each other.	If the problem is not solved after step 1. Please check the input video resolution. Downgrade the resolution and check again. 1080i’ s working distance is longer than 1080p with the same video quality.	If the video quality is not improved after downgrading resolution. Please shorten distance by half. If the video quality is improved. Please record the distance when the video quality becoming bad.	If the video quality is not improved after shortening distance. Please change the frequency. If it’ s still not improved. Please contact with us for RMA.

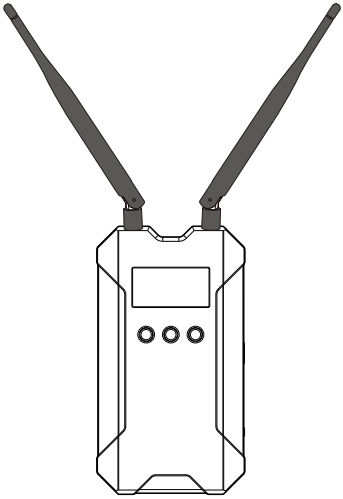
Specification

	Transmitter	Receiver
Interface	HDMI input(Type A female); SDI input（BNC female）; SDI loop-out（BNC female）; 2 antenna port(PR-SMA male); DC input (4-pin LEMO female)	HDMI output(Type A female); SDI output*2（BNC female)）; DC input (4-pin LEMO female)
Supply Voltage Range	7-36V DC	7-36V DC
Transmission Range	Optimal range 800FT/244M Maximum range:1150FT(350M)	Optimal range 800FT/244M Maximum range: 1150FT(350M)
Power Consumption	＜6.5W	＜6W
Size	(L x W x H): 66.5*124*27mm	(L x W x H): 95.4*153.2*25.7mm
Weight	250g	300g
Input Video Format	HDMI: 525i, 625i, 720p 50/59.94/60,1080i 50/59.94/60,1080p23.98/24/25/29.9/30/50/59.94/60; HDMI Type A SDI: 3G, HD, and SD-SDI (auto-selected) SMPTE-259/274/292/296/372/424/425; 1x BNC	/
Output Video Format	SDI: 3G, HD, and SD-SDI (auto-selected) SMPTE-259/274/292/296/372/424/425; 1x BNC	HDMI: 525i, 625i, 720p 50/59.94/60,1080i 50/59.94/60,1080p23.98/24/25/29.9/30/50/59.94/60; HDMI Type A SDI: 3G, HD, and SD-SDI (auto-selected) SMPTE-259/274/292/296/372/424/425; 1x BNC
Frequency Band	5.1-5.9GHz,configurable with China, North America, Europe, etc	5.1-5.9GHz,configurable with China, North America, Europe, etc
Modulation Mode	OFDM 16QAM	OFDM 16QAM
Transmission Power	Maximum 16dBm	/
Receiver Sensitivity	/	-75dBm
Occupied Bandwidth	20/40MHz	20/40MHz
Temperature Range	0-40℃(working temperature); -20-60℃(storage temperature)	0-40℃(working temperature); -20-60℃(storage temperature)

Installation

1) Ensure the video source output of the camera is OK, and the HD monitor is powered on and switched to connected video input port.

2) Ensure 2 TX antennas are installed. For optimal results set the dual antennas in the form of a "V" and maintain unobstructed line of sight between transmitter and receiver. Below figure for your reference.



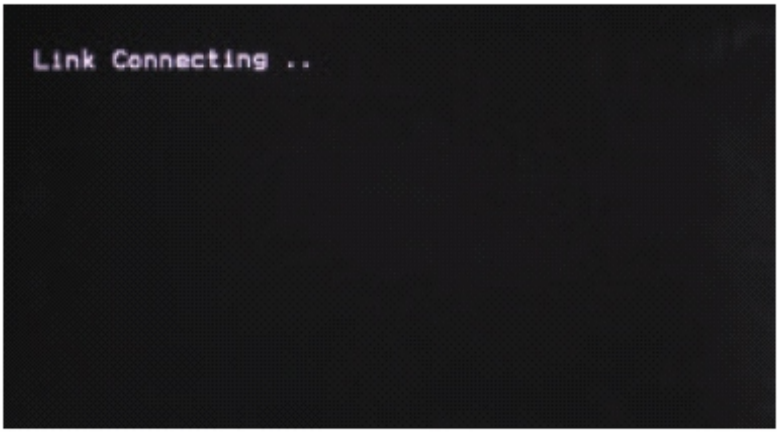
3) Ensure all input, output SDI or HDMI cables are connected.

4) Ensure both transmitter and receiver are powered via battery or DC input. Then turn on power switch of the transmitter and receiver respectively. The screen will light.

5) Ensure the transmitter and receiver is set with the same frequency.

6) If the camera is on and video input is OK, TX screen will show HDMI or SDI.

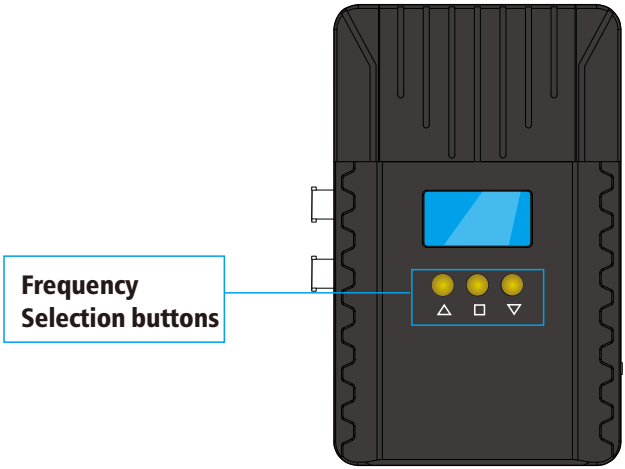
7) Before RX finished wireless link with TX, the RX screen displays and NO VIDEO; when wireless link is done, RSSI indicators will indicate the signal strength. If the receiver detects wireless video signal, the screen will display VIDEO. Before that, If SDI or HDMI video out port of the receiver has HD monitor connected, it will display an OSD of Link connecting…… as in the figure below.



8) The system will spend 10 seconds constructing the link, depending on link strength and the signal channel condition. When wireless link is established the screen will display the current wireless signal strength, VIDEO, and the connected HD monitor will be playing the real-time video and audio.

Frequency Selection

The wireless transmission system works in the 5.1-5.9GHz frequency band and can be flexibly configured to other licensed or ISM bands to accommodate different global regions. The front panel of the transmitter and receiver features frequency channel selection and confirmation buttons (see below illustration), which provides a maximum of 10 workable frequency channels, and supports a maximum of 4 simultaneous receiver units.



Warning

- 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-waterproofing. Please do not allow any liquid to penetrate into the device.
- Do not attempt to dismantle, open or repair this device yourself, as this may cause permanent damage to the device.。