# 400M Wireless 3G SDI/HDMI Extender User Manual

This is a Wireless HD HDMI/SDI transmission products that use the highest level of wireless communication technology to enable transmit lossless, uncompressed, no-delay 3G SDI or full HD HDMI signal .This product includes a transmitter and a receiver, and is equipped with 3G/HD SDI interface and full HD HDMI interface. The transmitter has two antennas and the Receiver has five antennas.The antennas' operate frequency is 5.1GHz~5.9GHz, and these frequency is changeable through the software configuration to adopt the wireless regulatory requirements in the world.
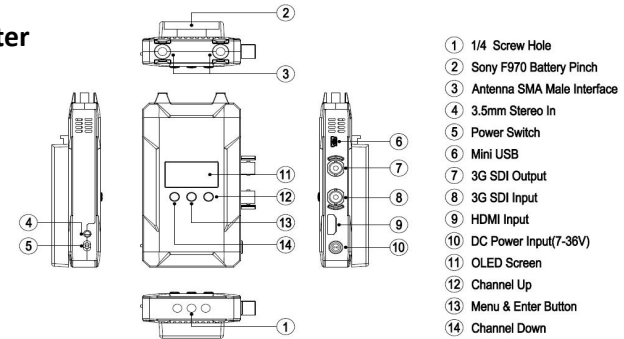
Application

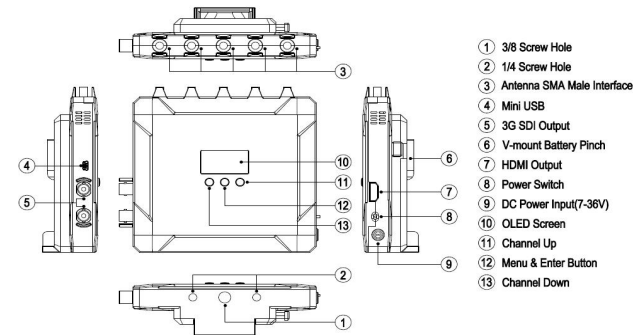| Camera | Transmitter | Receiver | Monitor |

400 m
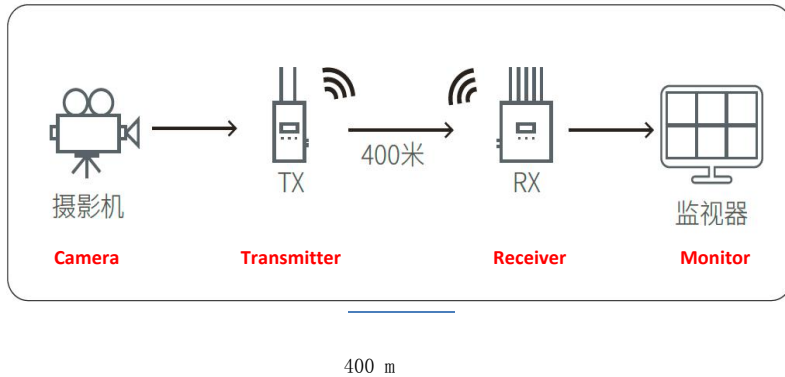
■ Features

- ● HDMI 1.3 compliant
- ● Support SMPTE 425M , SMPTE 424M, SMPTE 292M Standard
- ● Support HDMI and 3G-SDI inputs and outputs
- ● Support point to point, and point-to-multiple network topology
- ● Support resolutions up to 1080P@60Hz, zero delay and no compression
- ● Support 5GHz ISM frequency band, maximum 10 frequency channels selected by buttons with OLED display
- ● Maximum transmission range is 1300ft(400 meters)
- ● Support display DC power status, video status and receiver RSSI by OLED
- ● Support Wide range power supply,range from 7V to 36V
- ● Support Optional Sony F970,V-mount and G-mount, battery buckle, convenient for field battery install and replacement
- ● Support ±8 KV ESD protection level (HBM, Contact discharge)
- ● Industrial case, stable, reliable and convenient

■ Panel Diagram

Transmitter

1. 1/4 Screw Hole
2. Sony F970 Battery Pinch
3. Antenna SMA Male Interface
4. 3.5mm Stereo In
5. Power Switch
6. Mini USB
7. 3G SDI Output
8. 3G SDI Input
9. HDMI Input
10. DC Power Input(7-36V)
11. OLED Screen
12. Channel Up
13. Menu & Enter Button
14. Channel Down

Receiver

1. 3/8 Screw Hole
2. 1/4 Screw Hole
3. Antenna SMA Male Interface
4. Mini USB
5. 3G SDI Output
6. V-mount Battery Pinch
7. HDMI Output
8. Power Switch
9. DC Power Input(7-36V)
10. OLED Screen
11. Channel Up
12. Menu & Enter Button
13. Channel Down

■ Installation

Please check below devices and accessories before installation,if there are missing ,please contact your distributor.

●	Transmitter	1PCS
●	Receiver	1PCS
●	2 Pin LEMO to D-Tap Cable	2PCS
●	5GHz Antennas	8PCS
●	Magic Arm	1PCS
●	User manual	1PCS

■ Specificaiton

Item	Description	
	Transmitters	Receiver
Interface	SDI input(BNC female);SDI Loop out(BNC female);HDMI input(Type A female);DC input(2pin LEMO female)	SDI output(BNC female);HDMI output (Type A female);DC input(2pin LEMO female)
Power	<6.5W TX or <6W RX	
Video bandwidth	Maximum TMDS clock frequency 148.5MHz, 4.45Gbps	
Resolution and distance	1080P@60Hz 1300ft	
Audio formats	SDI embedded 4 channel 24 bit/48KHz	
Bandwidth	40MHz	
Frequency Band	5.0 GHz~ 5.9GHz, Configurable with China、American、Japan、Europe etc.	
Transmission Power	Maximum 21dBm	/
Receive	/	-75dBm
SDI Meta Data	Time code(LTC VITC1 VITC2);Remote Control(Trigger);	
ESD Level	HBM +/-8kv (Contact Discharge)	
Dimension	. x W x H): 80.30mm x 34.60mm x 134.40mm	W x H): 156.60mm x 43.00mm x 141.40
Net Weight	0.232kg per unit (No antenna included)	0.512kg per unit (No antenna included)
Temperature	0 ~ 40 °C (operation), -20~60 °C (stock)	

Specifications are subject to change without notice.

■ Common troubleshooting

Follow the following solves :

● Please check the power supply of transmitter and receiver first. If power is supplied by battery or external power supply,

● Please ensure that the battery or external power supply is energized and output normally.

● Please check whether the antenna connected to the transmitter and receiver is firmly installed.

● please check whether the video output format of the camera is compatible with this product.

● Please check if the battery is too low.

● Make sure that transmitters and receivers are placed at least 1.5 meters above the ground.

● If the problem still can not be solved, please contact your supplier.

■

⚠ Attentions:

Below skills will be usable When some problems happened, like as connecti+L59:T68on distance short, no connection, not stable or screen flicker and so on

1) Open the function of scan tools, screen out the interrupt signals against wireless environment.

Turn off the Transmmiter at worksite and then press Receiver's Menu button for 5 seconds for choosing the 2nd item named AFS Trigger. Push Menu button as OK function,the signals with good performance will be choosed out by Receiver after detected the signals all around, and these signals will be shown on screen.

2) Check the Antenna and SMA Connectors: Keep the Transmitters and Receivers as connections status, push the menu button under the screen for 5 seconds. Choose the 1st item named Signal Info. Push Menu button as OK function, there will have four-line parameter index on screen,Which are SNR IN/SNR OUT/PIN/Audio BER/PKT BER

* **SNR IN**: There are five columns of data, which stands for five antenna's peformance,these numbers must over 24 value. The larger the value, the better the performance. If one(s) of them under 24,then the Antenna(s) looss or the Antenna/SMA connectors broken probably.

* **SNR OUT**: There are two columns of data,the last two columns stands for the performance of Transmmiter'santenna. The value must over 15.The larger the value,the better the performance.

* **PIN**: There are five columns of data,which stands for the numbers of lost packets when machine work on, the valus must under 60. The bigger the value, the more complete the data transmission.

* **AUDIO BER**:There is one column of data, which stands for Audio Packet Loss.Reference value is 0. The larger the value, the more packet loss the audio will be.