

# BZ400

## USER'S GUIDE

Blitz 400 Wireless Uncompressed Zero Delay HD Video System



### What's Included

- ☐ 1 x Transmitter
- ☐ 1 x Receiver
- ☐ 2 x Sony L Series Battery Plates (Installed)
- ☐ 2 x 5 GHz Omni-Directional Antennas (SMA Female)
- ☐ 2 x P-Tap to LEMO Cables
- ☐ 1 x 6 In. Articulating Arm
- ☐ 1 x Clamp
- ☐ 1 x Shoemount Adapter for Transmitter
- ☐ 1 x Hard Case



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## Preface

Thank you for purchasing the Ikan Blitz 400 HD Wireless Video System. This system features uncompressed high definition video with zero delay. Before using the product, please read this user's manual. If you have any further questions or comments please visit [www.ikancorp.com](http://www.ikancorp.com) or email [support@ikancorp.com](mailto:support@ikancorp.com).

### ■Cautions

1. Do not expose this product to extreme hot, cold, dusty or humid conditions.
2. Avoid dropping the product or it may damage the hardware.
3. Do not spill or get any liquid on the unit since it is not waterproof.
4. Do not dismantle, assemble or alter the product.

### ■Product model and standard

The Long Range Wireless HDMI/SDI Transmission Blitz 400 utilizes today's most advanced wireless video transmission technology, which supports broadcast quality and uncompressed 3G SDI/HDMI HD video signal transmitted with zero delay. The Blitz 400 includes one transmitter and one receiver, where the transmitter provides a 3G/HD SDI input and an HDMI input, and the receiver also provide a 3G/HD SDI output and an HDMI output. The Blitz 400 has 2 external antennas on the transmitter and 5 internal antennas on the receiver's side. Both the receiver and transmitter feature a frequency select knob, which provides a maximum of 10 workable frequency channels, and supports a maximum of 4 sets working simultaneously. The Blitz 400 can accept a wide range of DC power inputs and includes a Sony L series battery plate.

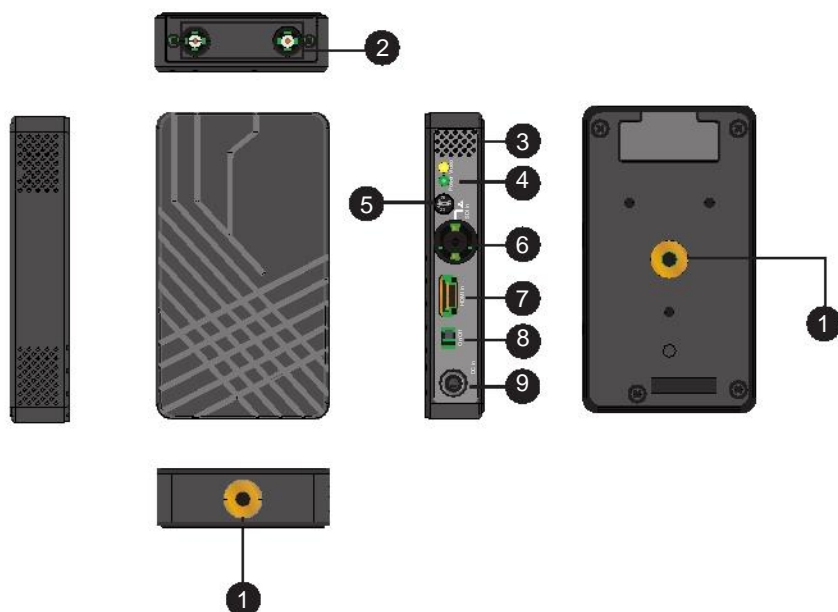
## ■Main features:

- ☐ Supports HDMI 1.3
- ☐ HDMI and SD/HD/3G SDI input and output
- ☐ Up to 1080p 60 Hz uncompressed with zero delay
- ☐ AES-128 encryption with air interface HD video data stream
- ☐ Supports point-to-point, and point-to-multipoint network topology
- ☐ 5GHz ISM frequency band, maximum of 10 frequency channels selected by user knob, coexist with WIFI.
- ☐ RX built-in antenna, more compact
- ☐ Maximum transmission distance 400ft
- ☐ Signal indicators for wireless power status, Video status and receiver RSSI
- ☐ Includes Sony L Series battery plate
- ☐ Machined aluminum case for durability

## ■ Specifications:

	Transmitter	Receiver
Interface	SDI Input ( BNC Female ) HDMI ; Input (Type A female) ; 2 Antenna port(RP-SMA male) ; DC input	SDI Output ( BNC Female ) HDMI ; Output (Type A female); DC input
Supply voltage range	7-36V DC	7-36V DC
Power consumption	< 6.5 W	< 7.5 W
Size	(L x W x H): 115x 67 x 23mm doesn't include antennas	(L x W x H): 152x 95 x 23mm
Mass Weight	270g	355g
Input Video Format	HDMI:525i, 625i, 720p 50/59.94/60, 1080i 50/59.94/60, 1080p23.98/24/25/2 9.9/30/50/59.94/60;HDMI Type A SDI:3G, HD, and SD-SDI (auto-selected), SMPTE- 259/274/292/296/372/424/425;1x BNC	/
Output Video Format	/	HDMI:525i, 625i, 720p 50/59.94/60, 1080i 50/59.94/60,1080p23.98/24/25/2 9.9/30/50/59.94/60;HDMI Type A SDI:3G, HD, and SD-SDI (auto-selected), SMPTE-259/274/292/296/372/424/425; 1x BNC
Input Audio Format	SDI embedded 2 channel 24 bit/48KHz	/
Output Audio	/	SDI embedded 2 channel 24 bit/48KHz
Signal Indicator	POWER-Green; VIDEO-Yellow	POWER-Green; Wireless RSSI-Blue (4 LEDs); POWER/VIDEO-Yellow
Frequency Band	5.1-5.9GHz,configurable with China, North American, Europe,etc	5.1-5.9GHz,configurable with China, North American, Europe,etc
Modulation Mode	OFDM 16QAM	OFDM 16QAM
Transmission Power	Maximum 18dBm	/
Receiver Sensitivity	/	-75dBm
Occupied Bandwidth	40MHz	40MHz
Temperature Range	0~40°C(operating condition); -20~60°C(Storage)	0 ~ 40°C (operating condition); -20~60°C(Storage)
Compliance	FCC; CE.	FCC; CE.

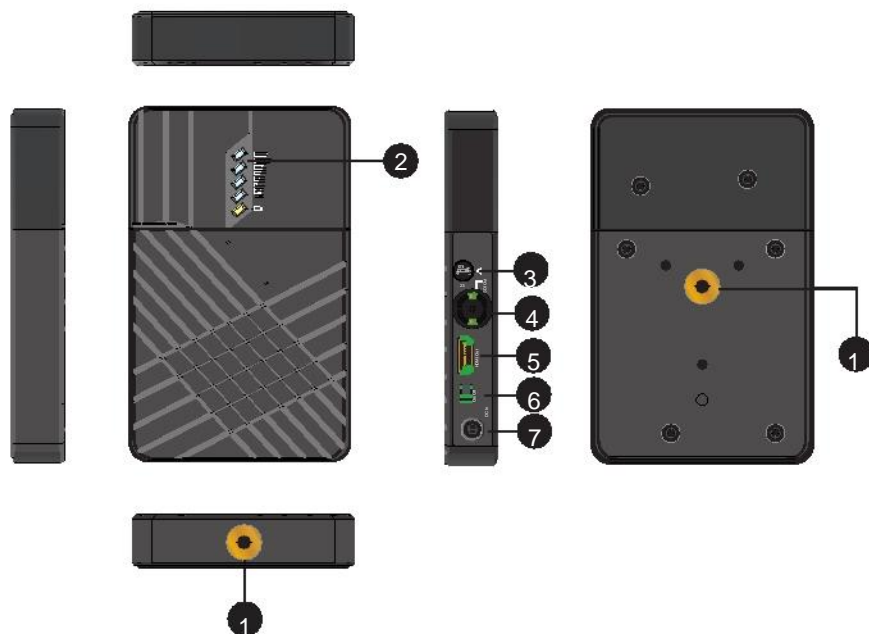
## ■ Specification:



### Transmitter

- 1) 1/4"-20 Screw Hole
- 2) RP-SMA male antenna connector
- 3) Video input indicator, 1 yellow LED
- 4) Power on Indicator, 1 green LED
- 5) Frequency selection knob
- 6) SD/HD/3G SDI input
- 7) HDMI Input
- 8) DC power switch
- 9) DC input, LEMO 4-pin B series connector

## ■Parameters:



### Receiver

- 1) 1/4"-20 Screw Adapter
- 2) LED status indicator (4 blue LED for RSSI & 1 LED yellow for POWER/VIDEO)
- 3) Frequency selection knob
- 4) SD/HD/3G SDI output
- 5) HDMI output
- 6) DC power switch
- 7) DC input, LEMO 4-pin B series connector

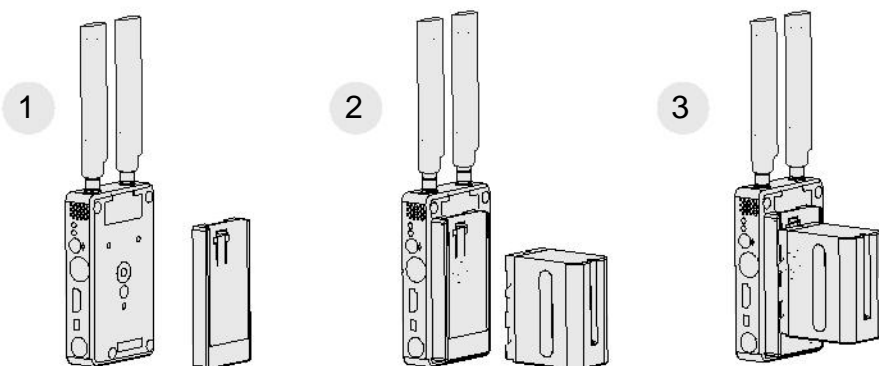
### ■Packing list:

- 1 x Transmitter
- 1 x Receiver
- 2 x Sony L Series Battery Plates (Installed)
- 2 x 5 GHz omni-directional antennas (SMA female)
- 2 x P-Tap to Lemo Cables
- 1 x 6 in. Articulating Arm
- 1 x Clamp
- 1 x Shoemount adapter for transmitter

### ■ Installation details and cautions

#### □ Transmitter side

- a) Install 2 Omni-directional antennas to the transmitter's RP-SMA female antenna connectors.
- b) There is one  $\frac{1}{4}$ "-20 threaded receiver on the bottom of the transmitter so the user can utilize the included shoemount adapter to attach the transmitter onto a camera.
- c) Install battery into battery plate. Unit comes installed with a Sony L Series type battery plate.
- d) The user can also use the included LEMO 4 pin-male to P-Tap power cable to get power input from an outside power source.

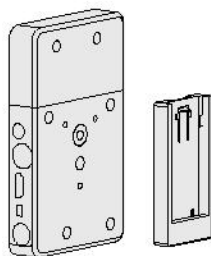


## Installation

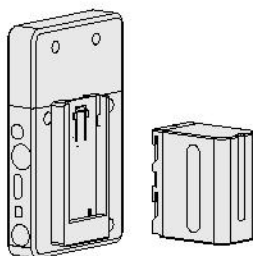
### □ Receiver side

- a) There is one  $\frac{1}{4}$ "-20 mount on the bottom side of the receiver. The user can utilize the included 6' in. articulating arm and clamp to install the receiver on a tripod.
- b) Install battery on to the battery plate. Unit comes installed with a Sony L Series type battery plate.
- c) The user can also use the included LEMO 4 pin-male to P-Tap power cable to get power input from a pro battery.

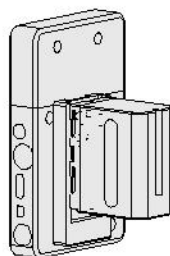
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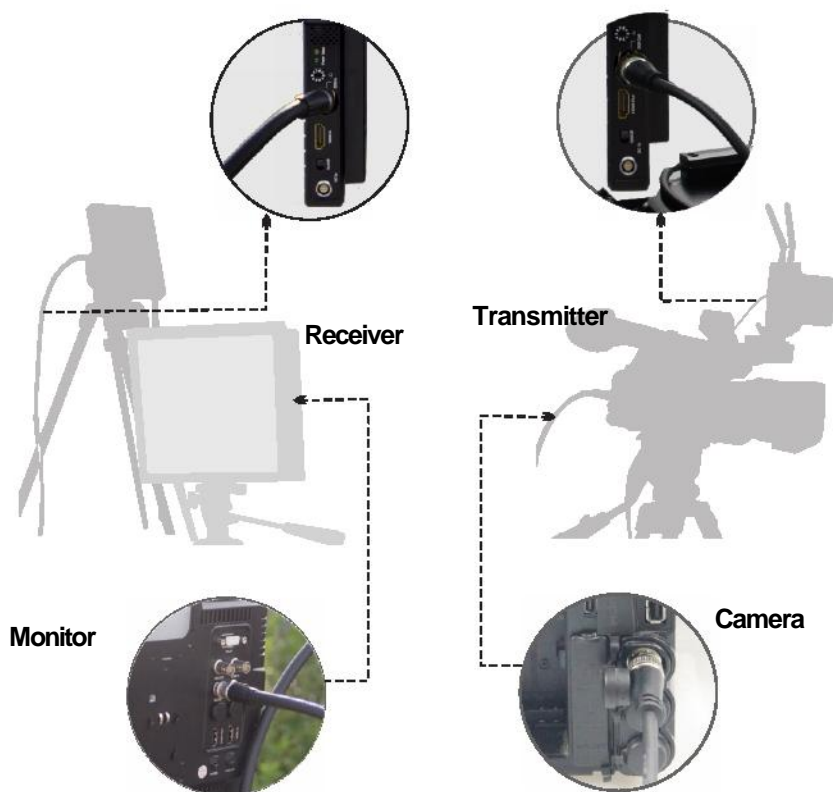


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### □ Typical connection instructions

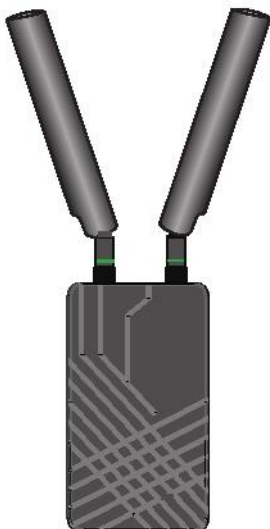
Connect the camera's SDI or HDMI output to the corresponding input port of the transmitter. Affix the transmitter to the hot shoe port of the camera. Connect the HDMI or SDI output port of the receiver to the SDI or HDMI input port of the HD monitor. Make sure all antennas and batteries are attached securely. See diagram below.



### □ Getting started

After finishing all the steps above, the system is ready to use. See below for the following steps.

- a) Ensure the source output of the camera is OK and the monitor is powered on. Then switch to the connected video input.
- b) Ensure input and output SDI or HDMI cables are connected.
- c) Ensure 2 TX antennas are installed perpendicular to each other for best RF performance. See below.

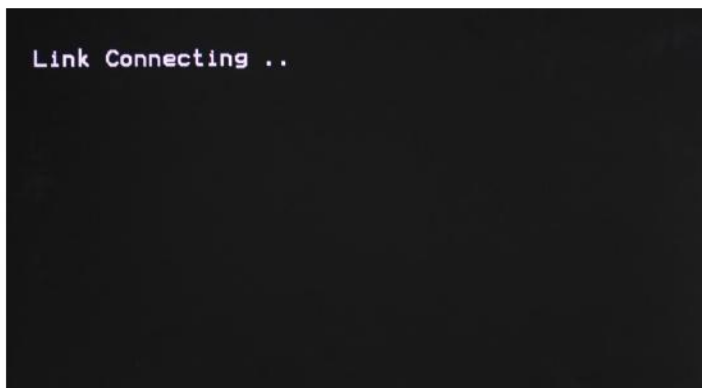


Transmitter

- d) Ensure that the batteries are installed on both the transmitter and receiver or connected via the DC input port to an outside power source. Then turn power switch of transmitter and receiver to 'ON', then the 'Power' indicator will turn on.

## Installation

- e) Ensure the frequency knobs of transmitter and receiver are set to the same number. This will ensure that the transmitter and receiver will be set to the same RF frequency.
- f) If the camera is on and outputting video the TX side 'video' light will turn on.
- g) Before the RX has finished its wireless link with the TX, the 4 'RSSI' indicators and 'Video' indicators will be off. When the connection is established, the 'RSSI' indicators will light first, and the 'RSSI' will indicate the received RF signal strength. If the receiver detects wireless video the 'Video' indicator will light up. Before that, if SDI or HDMI video output of the receiver has an HD monitor connected, the OSD will show: 'Link Connecting.....' like the picture below.



- h) The system will spend 20-30 seconds on establishing the link, actual link period will depend on the current wireless channel condition. When the wireless link is set up the "RSSI" light will light up and indicate current wireless signal strength. The "Video" indicators will also illuminate and then the connected HD monitor will display the video and audio accordingly.

## ■Input video port selection of transmitter

The transmitter has both 3G SDI and HDMI video input ports. The system will detect the chosen video source automatically and then set this to the default video input channel. If both SDI and HDMI have valid video input, the system will prioritize the SDI input.

## ■RSSI indicators

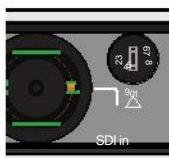
The receiver will calculate received RF signal strength internally and 5 "RSSI" LEDs will be used to indicate wireless signal power and quality. The user can observe the RSSI LED status to know if the current wireless link is reliable. From 1 to 5, the lit LEDs will show RSSI from Min to Max.

Lit RSSI LEDs volume	Wireless Link quality	Video Quality
4	Strong	Best
2-3	Middle	Good
1 or no lit LED	Weak	Visible Video Noise



## ■Frequency selection and configuration

The Blitz 400 can work in the 5.1-5.9GHz frequency band. The side panels of both the transmitter and receiver have a frequency selection knob, which provides a maximum of 10 workable frequency channels. The system supports a maximum of 4 sets working simultaneously. See below for the frequency knob figure.



### ■Storage conditions

Product storage temperature should be between -20°C~60°C. For long term storage requirement, please use original hard case, and avoid storing in high humidity, acidic or dusty conditions.

### ■Maintenance

#### Warning

To ensure your safety and the reliable performance of this system provide stable power within 7 – 35V

## ■Frequently Asked Questions

### a) No output on display

- Check that the TX and RX have stable power.
- Double check that the batteries are charged.
- Check that the TX and RX antennas are installed correctly.
- Check the 'Video' indicator, if TX 'Video' indicator is not lit, then check if the SDI or HDMI cable is plugged in and a video source is present.
- Check that the input video format is compatible with this product's specifications.

### b) Poor output video quality

- Check if the SDI or HDMI input or output cable is plugged in correctly.
- Check how many receiver side 'RSSI' LEDs are lit. There should be 2-3 RSSI LEDs lit for better video quality; if there is only 1 RSSI LED or no LEDs lit, that means the received wireless signal is weak. Decrease the distance between the TX and the RX or try a different frequency channel in case of interference.



**Learn Mode:**

More dynamic information at official website: [www.ikancorp.com](http://www.ikancorp.com)

**Support:**

Contact email: [support@ikancorp.com](mailto:support@ikancorp.com)

**Conditions of Warranty Service**

- Free service for one year from the day of purchase if the problem is caused by manufacturing errors.
- The components and maintenance service fee will be charged if the warranty period is expired.

**Free Service will not be provided in the Following Situations: (\*Even if the product is still within the warranty period).**

- Damage caused by abuse or misuse, dismantling, or changes to the product not made by the company.
- Damage caused by natural disaster, abnormal voltage, and environmental factors, etc.