

Important Information

Please read this user manual before you use this product, it contains all the notes and important things regarding operating this product. In accordance with the safety precautions and operating instructions listed on this user manual, our appliances provided the product is handled properly for its intended use, but may not apply to below cases:

- Repairs or product modification and alterations have been executed by unauthorized personnel.
- The damages are caused by accidents including but not limited to lightning, fire, exposed to rain or water, and moisture.
- Do not use provided power adapter with specific power voltage which are not compliant with the rated voltage range in the attached label of the power adapter in package.
- The model label on the product has been modified or the warranty tag has been removed by unauthorized personnel.



Safety Precaution

	To reduce the risks of electricity, do not remove or open the cover. No user-serviceable parts are inside. Please return to original factory for maintenance
	The high temperature in the process of operating the device may cause the high risk of scalding.
	Please use our standard power adapter. Detailed information Please refer to the rated voltage range showed on the label at the back of package's power adapter.



Danger: Be careful with electricity.

- As connecting any equipment (such as any player or TV , etc.), please turn off the power to the product before any operation is undertaken.
- Power outlet: To prevent electric shock or fire, short circuit, please make sure the type of electrical plug used on the receiver's and transmitter's power cord are compliant with the rated voltage range in the attached label of the power adapter in package.
- Power cord: Do not place any heavy articles above on the power cord. To avoid being stepped on or pinched by heavy items, the power cord should not be located on the place where people pass by frequently.
- Power overloading: Avoid overloading wall's electrical outlets and extension cord or other multi-socket; otherwise could result in electric shock or fire.
- Lightning: For protection from lightning or when the product is left unattended for a long period, please disconnect it from the power source.
- Please disconnect the power cord from the power outlet when you are not using the receiver and transmitter, this will reduce the risk of electric shock or fire.



Warning

- This product should not be exposed to dripping or splashing. Do not place any object filled with liquid on the product(eg. vases).
- To avoid electric shock, please do not block or stick anything on the air vent of product; do not remove the cover or put the object just like pins, steel wire into the gap of the air vent.
- Please place the receiver/ transmitter on a flat with hard and stable surface.
- Ventilation: please do not block the air vents on the receiver/transmitter or place any heavy object on top of them . Blocking the air flow can damage the product itself. Please make sure that there is adequate ventilation distance between the receiver and TV, and also put the product away from direct sunlight or any source of heat.
- Water Exposure: To reduce the risk of electric shock or fire , please do not expose the receiver/transmitter to rain or moisture.
- We assume no responsibility for any damage or result caused by using other adapters instead of our standard adapters

Special Notice

- Although the product has provided the function of data encryption when transmitting, you still need to pay attention to deliberate signal interception. There will be the Possibility of a third party intentionally intercept the transmission signal since the product adopt wireless communication. Please do not use the product on confidential and important communications, or life-related communications The main concern is that the content of wireless communication might be received by the third party's wireless devices deliberately or accidentally.
- The impact of radio waves (such as the following environment may cause the abnormal audio and video(blocked image, noise ...etc.).
 - 1) Transmit near the wall which is hard for the radio waves to get through.
 - 2) Quite close to the refrigerator, metal fitment and appliances, or next to the crowded situation.
- This product has been tested and manufactured to comply with national electrical safety rules, however, there will be noise caused by the interference with other machines in rare cases. If the interference is happened, please keep a certain distance away from other machines.
- The product is susceptible to interference from 5GHz wireless local area network or other wireless devices.
- Optimal range between transmitter and receiver is between 1 meter and 30 meters within line of sight indoor.
- Please do not set up the transmitter and receiver in metal shelf, or it will hinder the wireless communications.
- 1080P/60 Hz Wireless transmitting.
- It will take 15-20 seconds to boot the system before wireless communication start, the media receiver can not be operated during this time.

- Full HD Video
- for HDMI
- Portable with Battery
- All-in Hardware
- Low Latency
- Plug & Play
- Compact Size

GHOSTEYE WIRELESS VIDEO TRANSMISSION SYSTEM 100M

Transmission Solution

for DSLR/DV



EU Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.



USER MANUAL

Version: 2.0

Trademarks

Ghost-Eye Wireless Video Transmission Systems™ are trademarks of Cine Gears Inc. Web Interface.

Statement of Conditions

In the interest of improving internal design, operational function, and/or reliability, Cine Gears Inc. reserves the right to make changes to the products described in this document without notice.

Cine Gears Inc. does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

FCC Compliance Notice: Radio Frequency Notice

The device has met the FCC 15.247 requirement. In order to comply with the FCC RF exposure requirement, the user must keep 20cm away from the antenna.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Information to the user

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

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Brief Introduction

- Please read this manual carefully before you use this product and retain it properly for future reference.
- If there is any doubt or difficulty in the process of product usage, please feel free to contact us or the dealer.
- The company reserves the authority to amend the specification.

Brief Introduction

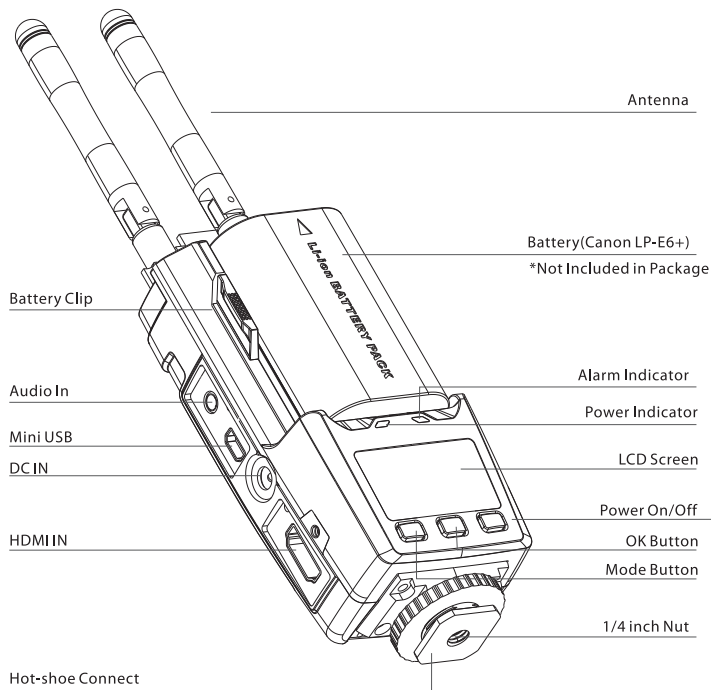
As the widely use of live broadcasting, there is some problem existed in the process of cable solutions, such as the high cost and short-life usage of the cable. Also, the cable trouble by accidents under insufficient site protection is the major cause of cable performance, even lead to the live broadcast accident. We provides you with more convenient and safer solution for live HD video broadcasting. The long distance transmission system applied with the high-capacity Li-battery, plug-and-play setting, can fully meet requirements of outdoor and indoor shooting. Especially, wireless transmission will be safer and bring more professional experience to you!

Features

- Wireless HD video transmission for DSLR/DV
- Support full-HD 1080P/60Hz video display with very low latency
- Full-hardware for plug & play, no software needed
- Up to 100m/330ft. effective range line of sight
- Support external Li-battery supply for mobile convenience
- Support Hot-shoe installation with 1/4 screw nut
- Support audio input from external microphone
- Hi-quality LCD screen display signal & battery status of product

The Transmitter

CB8822



Transmitter Interface

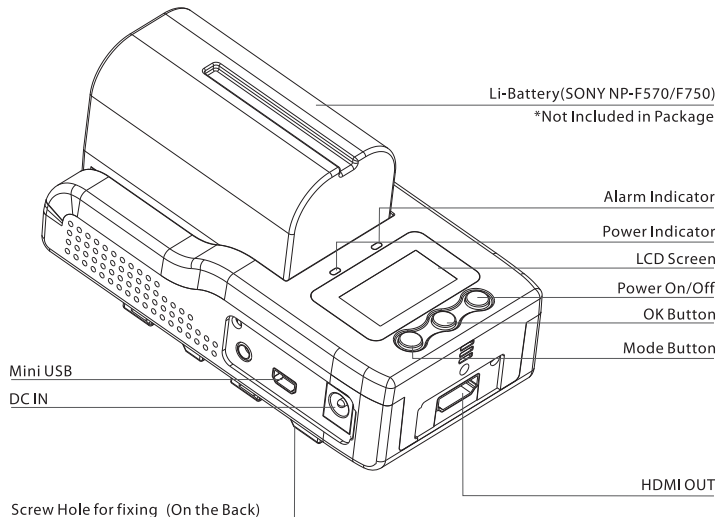
1. DC IN:
Connect to power adapter.
2. HDMI IN
Connect to HD video device and input
3. MINI USB: * Software upgrade
4. AUDIO IN(3.5mm)
Connect to active microphone.
5. POWER ON/OFF
Press for 2 seconds to power on the transmitter;
Press again for 2 seconds to Power OFF.
(* Not support charging the external battery.)
6. OK BUTTON
Confirm users selection, and external audio switching
(please refer to Operation Instruction for details)
7. MODE BUTTON
Press to switch the channel.
8. LCD SCREEN
Displaying the working status of transmitter(network video status, channel, working mode, battery capacity)
9. POWER INDICATOR
On: power supply is normal.
Off: power supply is OFF or abnormal.
10. ALARM INDICATOR
Flashing when the battery is low-capacity.
11. SCREW HOLE FOR FIXING DEVICE
1/4 inch hole is used to connect with screw.
12. HOT SHOE
For fixing transmitter to DSLR/DV.
13. BATTERY
Canon LP-E6+ and other compatible types.
14. ANTENNA
For wireless transmission
15. BATTERY CLIP
For the battery fixation

Remarks:

The battery is not included in the package. Please purchase the appropriate types from qualified distribution. Non-original battery may not fix exactly.

The Receiver

CB3812



Receiver Interface

- DC IN:**
Connect to power adapter.
- HDMI OUT**
Connect to HD display devices(HD Monitor\HDTV), and output.
- MINI USB:**
Connect to update the driver of device
- POWER ON/OFF**
Press for 2 seconds to power on the receiver;
Press again for 2 seconds to Power OFF.
(* Not support charging the external battery.)
- MODE BUTTON**
Press to switch the channel.
- OK BUTTON**
Confirm the operation; and external audio switching.
(please refer to Operation Instruction for details)
- LCD SCREEN**
Displaying the working status of receiver(network video status, channel, working mode, battery capacity)
- POWER INDICATOR**
On: power supply is normal.
Off: power supply is OFF or abnormal.
- ALARM INDICATOR**
Flashing when battery power is low-capacity.
- SCREW HOLE FOR FIXING**
1/4 inch nut, connected to bracket with screw.
- Li-BATTERY**
Sony F550/750/950 and compatible batteries.

Remarks:

The battery is not included in the package. Please purchase the appropriate types from qualified distribution. Non-original battery may not fix exactly.

Packing List

Please check the packing list carefully before installation, if any part is missing, please contact your retailer.

TX:CB8822



Wireless Transmitter
CB8822 x 1



Antenna x 2



Mini HDMI cable 90° x 1



Adaptor
(12V/1A) x 1

RX:CB3812



Wireless Receiver
CB3812 x 1



HDMI cable x 1



Adaptor
(12V/1A) x 1

* Accessories may be updated according to necessary without notification.
if you have relative questions, please contact the local distributor.

Installation

Transmitter Installation

Instruction

1. Install antenna and rotate antenna clockwise.



2. Adjust the antenna direction of transmitter.(as shown in figure)



a



b

3. Install battery. (as shown in figure)



4. Install the transmitter to DSLR camera and rotate transmitter clockwise til you tighten it. Connect transmitter to DSLR camera via HDMI cable. (as shown in figure)



5. Turn on the power of transmitter and DSLR/DV.

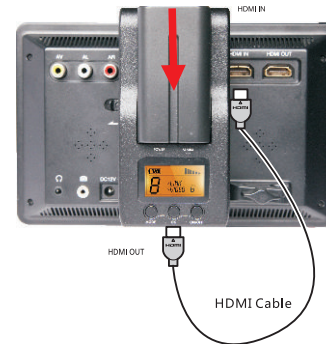
Warning: Remove the battery when product is not in use.

Receiver Installation

1. Install battery to receiver.



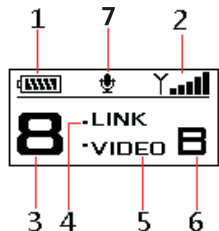
2. Install receiver to monitor via HDMI cable, power on receiver and monitor.



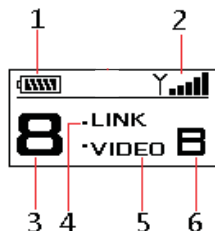
Warning: Remove the battery when product is not in use.

Operation Guide

LCD Screen



TX:CB8822



TX:CB3812

- ① Battery capacity
- ② Signal strength
- ③ Current channel
- ④ Network status
- ⑤ Video status

- ⑥ Working mode: B means Broadcasting
- ⑦ Microphone input indicator

* The Button Operation
Mode button for channel selection
OK for confirmation

Audio Switching (On transmitter)

Press OK key, microphone icon is displayed, and switching to external audio input; icon Off, switching to HDMI audio.

Remarks:

- * If no operation on the OK & Mode Buttons for about 10 seconds, system will be back to original status without save, and the LCD back light will turn off.
- * When the LCD back light is off, press any key to relight LCD.
- * All operation should be saved and implemented by press OK button, when the back light is on.
- * Long press ON/OFF button to turn ON/OFF.

Transmitting & Broadcasting

1. Make sure transmitter & receiver are set on the same channel.
 2. Connect the transmitter to the HD video source, and the receiver to the display screen; then power on both.
- * Also support additional receivers to display wirelessly via broadcasting.



TX:CB8822



RX1:CB3812



RX2:CB3812













RX3:CB3812

* Support Multiple Receiving

3. Make sure the transmitter & receiver are on the same channel. Wait about 10 seconds, the Video icon on receiver LCD will show up; and the display screen will display video source content.

Indicators

Item	Indicator	Display	Status
 TX:CB8822	Alarm Indicator	 ON	Battery capacity is enough
		 Flash	Battery capacity is low
	Power Indicator	 ON	Power supply is normal
		 OFF	Power supply is abnormal/OFF
 RX:CB3812	Alarm Indicator	 ON	Battery capacity is enough
		 Flash	Battery capacity is low
	Power Indicator	 ON	Power supply is normal
		 OFF	Power supply is abnormal/OFF

Specification

		CB8822
Transmitter	Transmission Frequency	5 GHz
	Video Communication	MIMO
	modulation Mode	OFDM
	Frequency Stability	±20PPM
	Bandwidth	40MHz
	Standard Protocol	HDMI 1.3, HDCP 1.2
	Receiving Sensitivity	≤ -70dBm
	System Latency	≤30ms
	Antenna	2 External Antennas
	Transmission Power(EIRP)	14dBm
	Transmission Distance	Up to 100m(330ft.) in open area
	Power Supply	1. DC(6V~17V) 2. Li-battery(Canon LP-E6+, or other compatible types)
	Dimensions (W x D x H)	118 x 54 x 43 (mm)
		CB3812
Receiver	Transmission Frequency	5 GHz
	Video Communication	MIMO
	Modulation Mode	OFDM
	Frequency Stability	±20PPM
	Bandwidth	40MHz
	Transmission Power(EIRP)	15dBm
	Receiving Sensitivity	≤ -70dBm
	System Latency	≤30ms
	Antenna	Built-in Antenna
	Standard Protocol	HDMI 1.3, HDCP 1.2
	Transmission Distance	Up to 100m(330ft.) in open area
	Power Supply	1. DC(6V~17V) 2. Li-battery (SONY NP-F570/ 750 / 950)
	Dimensions (W x D x H)	118 x 60 x 45 (mm)
		General
Operating Temperature	CB8822: -10~50°C; CB3812: -10~40°C; With Li-Battery: 0~40°C	
Storage Temperature	-40°C ~ 80°C	
Operating Humidity	15~85%RH	

* We are improving the products continuously. the specification may be upgraded with necessary change without notification.

Trouble Shooting

Possible Reasons:		Solutions:
OSD Information on TV	Network connect failed, Please check the device is ready	
	Transmitter is not electrified.	Power on transmitter.
	Transmitter or receiver is not placed erectly.	Place the TX or RX onto the base and replace them erectly.
	The transmitter and receiver are too far away.	Move the receiver closer to the transmitter.
	Several solid wall partition TX and RX.	Reduce the number of solid walls between TX and RX.
	There are too many obstacles between TX and RX.	Move the receiver closer to the transmitter.
	Haven't matched the code of TX and RX.	Rematch the code of transmitter and receiver.
	There is other transmitter which is under working condition near the receiver.	Power off other independent transmitter, place the receiver away from the other sources of interference.
	Video connect failed, Please check the device is ready	
	Transmitter and player are not connected.	Connect the transmitter with player by the HDMI cable
	Player is not turned on.	Power on player.
	Haven't switched player to HDMI output.	Switch player to HDMI output.
	Poor contact of transmitter's HDMI cable	Unplug and then plug the HDMI cable of the transmitter
	Abnormal working of transmitter	Reboot the transmitter.
	There are problems with HDMI cable between TX and player.	Change the HDMI cable.
Player don't support the output resolution format.	Switch the player's output resolution to other modes.	
The TV don't support HDCP authentication when using Blue-ray player.	Replaced with HDCP-certified TV.	
Image	No signals are input to TV	
	Receiver is not turned on.	Power on receiver.
	Receiver and TV are not connected.	Connect the receiver and TV by the HDMI cable.
	Haven't switched TV to HDMI input.	Switch TV to HDMI input.
	Poor contact of receiver or TV's HDMI cable	Unplug and then plug the HDMI cable of the receiver or TV.
	TV turn into standby mode	Switch the TV to normal operation mode.
	Abnormal working of receiver.	Reboot the receiver.
	No image appear on TV	
	Poor contact of receiver or TV's HDMI cable.	Re-plug the HDMI cable of the receiver or TV
	Abnormal working of receiver	Reboot the receiver
	Receiver failure	Please contact your distributor
	Abnormal color on TV screen	
	Poor contact of receiver or TV's HDMI cable.	Unplug and then plug the HDMI cable of the receiver or TV.
	Poor contact of transmitter or player's HDMI cable.	Unplug and then plug the HDMI cable of the TX and player.
	Abnormal working of transmitter or receiver	Reboot the transmitter and receiver.

Possible Reasons:		Solutions:
Image	Many noises or mosaics on the image displayed on TV	
	Transmitter or receiver is not placed erectly.	Place the TX or RX onto the base and maintain them erectly.
	The transmitter and receiver are out of effect range.	Move the receiver closer to the transmitter.
	Several solid wall partition TX and RX.	Reduce the number of solid walls between TX and RX.
Audio	There are too many obstacles between TX and RX.	Move the receiver closer to the transmitter.
	Images appear on TV normally but no voice is output.	
	Player or TV is muted.	Open the volume of player or TV.
	Player or TV's volume is too low.	Turn up the volume of player or TV.
IR Remote Control	Current player don't support the output audio format.	Switch the output audio format of player.
	Abnormal working of transmitter or receiver	Reboot the transmitter and receiver.
	Can't use the IR extended function to remote control the player.	
	The transmitter are not connected with the IR remote extension connector.	Plug the IR extension cable into the IR Out jack of transmitter, place the IR remote extension connector in front of IR windows area of player.
IR remote extension connector is misalignment to the IR sensor window of player.	Place the IR remote extension connector in the front of player and make sure the IR remote extension connector is aligned to the IR sensor window of player.	
The remote control is not aligned to the IR sensor window of receiver when using.	Make sure the remote control is aligned to the IR sensor window of receiver when using.	
A few special type of players do not support infrared remote control.	IR remote extension connector only supports 38KHz remote's signal protocol.	

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:-Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help. To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Cautions!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

FCC Notice

This device complies with Part 15 rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Declaration of Conformity for RF Exposure,

This device has been evaluated for RF exposure for Humans in reference to FCC radiation exposure limits set forth for an uncontrolled environment. The minimum separation distance from the antenna to human body is 20 cm.