

# CW-1

## Wireless HD Video Transmission System

### Operation Manual



IDX thanks you for choosing the CW-1 and is sure that you will benefit from its unique features. Please utilize this instruction manual to best maximize and safety use your CW-1.

#### ■ Product overview

The CW-1 is a wireless transmission device which transmits video and audio with 5GHz band radio frequencies. CW-1 provide DFS function which enable to use indoor and outdoor without any concern of local wireless regulations. Where a direct line-of-sight is offered between TX and RX, the signals can be transmitted up to 50m (150ft).

#### ■ SAFETY INSTRUCTIONS

To use this product safely and correctly please follow the safety precautions set out below. Product misuse may cause fire, shock, injury, product failure or other hazards. Please read this manual prior to using your CW-1 and retain for future reference.

#### ⚠ CAUTION Fire or electric shock may cause injury or other accidents.

- Before using an external power supply, always check that the voltage is within the specified range and that the polarity of the connector is correct, as this will avoid smoke or fire.
- Do not attempt to disassemble, modify or repair this product yourself. That may cause fire or electric shock. Please refer inspection and repair services to your dealer or local IDX office.
- Do not use this product near water or in high humidity environments. This may cause fire or electric shock.
- In case of damage, smoke, unusual smell or other unexpected situations, stop use immediately and consult your dealer or local IDX office.
- If ventilation openings are blocked, this may cause excessive heat or damage.
- After long periods of continuous use, the case of the unit may be warm be touch.
- Using the CW-1 in an environment with a lot of moisture, soot or dust may cause excessive heat or electric shock.
- Do not place this product on an uneven surface or one with vibration. It may cause failure or damage.

#### Caution on the use of this product and radio waves

- This product has approved for technical standard compliance certification as a wireless device of radio stations with low antenna power specified under the FCC (in US) / ETSI (in Europe) Radio wave regulation. Thereby a license for radio station use is not required for operation.
- This product allows to be used only in designated region by IDX.
- This product can be used in indoor only, it is recommended to keep it at least 20cm away from user to ensure safety.

#### ■ Packing list

- ✓ CW-1 TX (Transmitter)
- ✓ CW-1 RX (Receiver)
- ✓ AC adapter for RX
- ✓ DC cable for AC adapter
- ✓ HDMI angled adapter (Female-Female)
- ✓ HDMI cable for RX
- ✓ USB cable for TX (for TX power supply)

\*HDMI cable/adaptor for the TX will be provided separately. \*Customer option

#### Features

- HDMI IN and OUT allow for using with commonly available small camcorders.
- Enables to transmit uncompressed HD video and SD video wirelessly about 30m/100ft LOS.
- Transmission delay is less than 1msec.
- Signal is encoded by 128bit AES encryption
- DFS functionality allows for use in both indoor and outdoor

#### ■ Set-UP and Operation

- 1) Install the TX to the attachment and connect the HDMI cable with video output of the camera.
- 2) Connect the AC adaptor and RX then connect the HDMI cable to the monitor.

- 3) When the system powered properly then CW-1 automatically starts searching for available frequency. Link LED turned on as soon as system linked firmly.
- 4) Video LED turned off when video signal failed.

#### Attention

- \* In the locations with other 5GHz wireless devices been operating, transmission may be interrupted.
- \* CW-1 is programmed accordingly prior to ship to each region, thus the transshipment and use in the un-specified region may be violate law.
- \* A maximum transmission range vary depend on the surrounding environment such as radio wave conditions, composition of the wall, weather, etc.
- \* Unstable signal reception may be caused by the height, angle and distance between TX and RX.

#### DFS Function

DFS is the abbreviation of “Dynamic Frequency Selection”. DFS detects the radio waves of weather radar and the CW-1 automatically searching for available frequency to avoid interference, and LINK TIME takes approximately one minute.

#### ■ Specifications

Video		Power	
		Power input	DC 5V
		Connectors	
Video format	1080i 59.94/50Hz.	Video in/out	TX: HDMI plug RX: HDMI jack
	1080p 59.94/50/29.97/25/24/23.98Hz.		HDMI 1.3
	720p 59.94/50Hz.	DC in	TX: Mini USB TypeAB
	525i/59.94Hz. 625i/50Hz.		RX: Pin jack 2.5φ
	525p/59.94Hz. 625p/50Hz.	RX service terminal	Service: Used for service purpose by IDX USB: Used for service purpose by IDX
Wireless transmission		Product specification	
Frequencies	US: 5270, 5310, 5510, 5550, 5670 MHz EU: 5510, 5550, 5670 MHz	Dimension	TX: 91.5 (W) × 31.0 (D) × 17.5 (H) mm RX: 99.0 (W) × 56.0 (D) × 20.5 (H) mm
Channel Bandwidth	40MHz	Weight	TX: 30g RX: 80g
Transmission distance	30m / 100ft (outdoor LOS)	Power consumption	TX: 3.5W RX: 5W
Transmission format	MIMO/OFDM/JSCC	Operating temperature	0~40°C
Antenna	Build-in	Regulation / Certification	FCC: Part 15 Subpart B (class B) Part 15 Subpart C
	TX: DOWNLINK x2 / UPLINK x1 RX: DOWNLINK x5 / UPLINK x1		Part 15 Subpart E
Coding	AES 128bit encryption		CE: EN301 489-1, EN301 489-17 EN301 893, EN60950-1:2006+A11:2009
Link mode	UNICAST		RoHS
Indication and Operation			
LINK LED	Search : Blink		
	Linked : Light on		
VIDEO LED	Video valid : Light on		
	Video fail : Light off		

#### ■ Warranty & Service

- Warranty period of the CW-1 is two years after purchase.
- Warranty may be voided even within the warranty period when IDX noticed followings:  
Improper use of CW-1 / Failure due to excess or deficiency of power / Failure due to short circuit of the power / Fiscal damages caused by dropping or vibration / Failure due to water / Un-authorized used and/or modification done by customer
- When required any assistance, please contact your IDX dealer or appropriate IDX office below.

#### ■ 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.

## ■ FCC Statement

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.

Note: 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 device).



---

**IDX Company, Ltd.** : 6-28-11 Shukugawara, Tama-ku, Kawasaki-shi, Kanagawa-ken 214-0021, Japan

Tel: +81-44-850-8801 Fax: +81-44-850-8838 E-mail: [idx.japan@idx.tv](mailto:idx.japan@idx.tv)

**IDX System Technology, Inc.** : 19001 Harbortgate Way, Suite 105 Torrance, CA 90501 USA

Tel: +1-310-328-2850 Fax: +1-310-328-8202 E-mail: [idx.usa@idx.tv](mailto:idx.usa@idx.tv)

**IDX Technology Europe Ltd.** : Unit 9, Langley Park, Waterside Drive, Langley, Berkshire SL3 6EZ, ENGLAND

Tel: +44-1753-547692 Fax: +44-1753-546660 E-mail: [idx.europe@idx.tv](mailto:idx.europe@idx.tv)