Wall Plate HDMI & IR Repeater CAT5 Extender

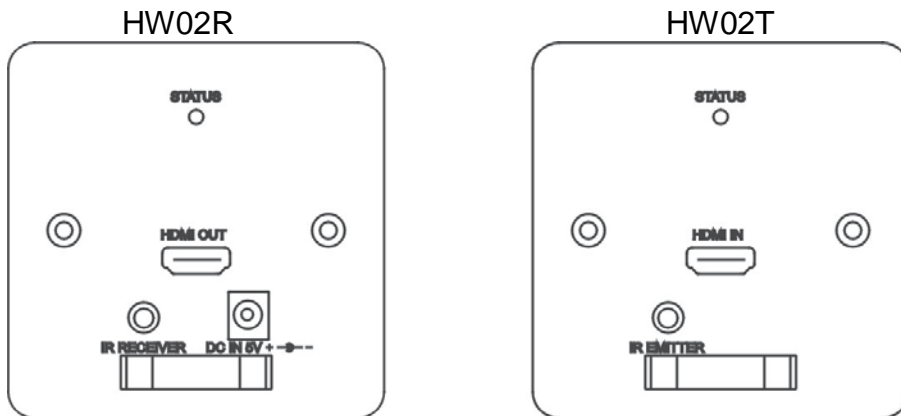## ITEM NO.:   HW02   Wall Plate HDMI & IR Repeater CAT5 Extender

HW02 Wall Plate HDMI with IR repeater CAT5 extender is designed to use two low cost CAT5E cable to extend HDTV sources from DVD players, Blu-ray Disc player PS3.   With extra IR repeater function for easy and friendly control HDMI sources from the remote site.
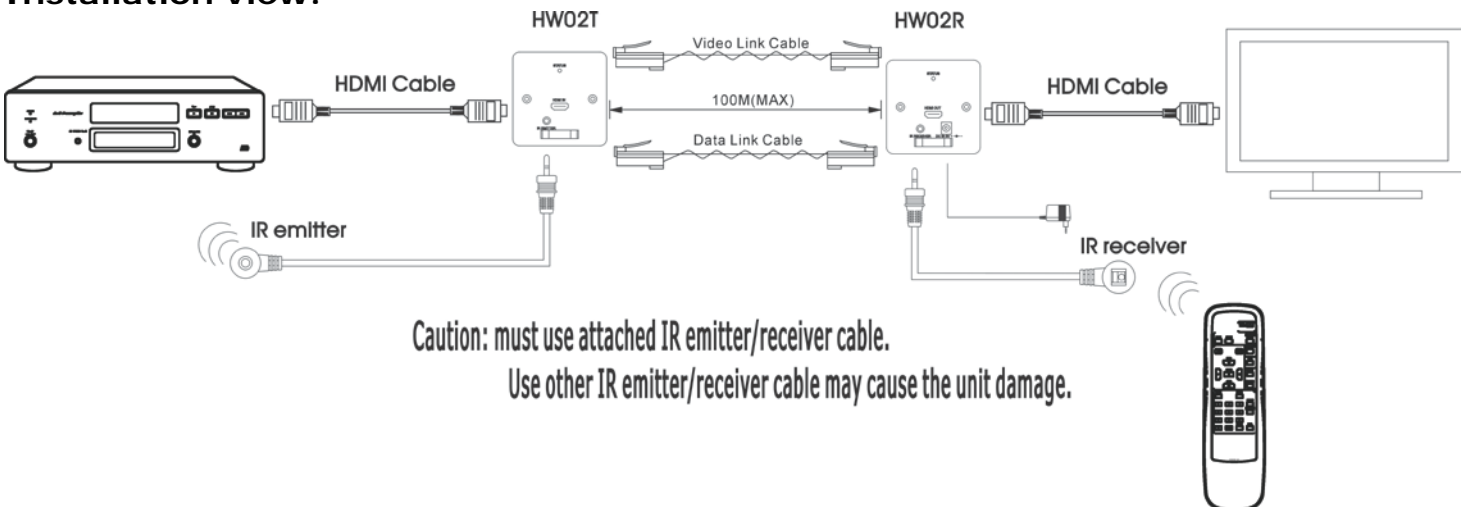
Features:

- Extends HDMI and IR signal over two CAT5/5e/6 cables.
- Transmission range up to 100 meters.
- Support high resolution up to 1080p.
- Built in auto EQ function, no need to do any adjustment for different range.
- Fully HDCP compliant.
- HDMI 1.3a compatible, HDCP 1.1, support DDC, EDID, CEC, Hot Plug Detect
- Built in IR repeater function, could be control the source devices from remote side.
- Receiver unit power could be sending from PCB inside 5V terminal or external 5V DC Jack.
- Package includes: transmitter and receiver unit, one external power adapter, IR emitter cable and IR receiver cable. (1.8 meters（6 ft）)

Panel view & Function:

HW02R   HW02T

Installation view:

Caution: must use attached IR emitter/receiver cable.

Use other IR emitter/receiver cable may cause the unit damage.

Resolution	Transmission Range (Max.)
480i / 576i / 480p / 576p	100M
720p / 1080i	70M
1080p	30M

Cable:
Video Link cable using hi quality CAT5E UTP or CAT6 UTP cable,
CAT6 cable enhances transmission range and signal stability.

Data Link cable using CAT5E UTP/STP cable,
It is not hi speed signal transmission, so using regular CAT5E UTP cable will be ok.

RJ45 pin Define:
Video Link   (TIA/EIA-568-B)
1. Orange-white   TMDS Data2 +
2. Orange   TMDS Data2 -
3. Green-white   TMDS Clock +
4. Blue   TMDS Data1 +
5. Blue-white   TMDS Data1 -
6. Green   TMDS Clock -
7. Brown-white   TMDS Data0 +
8. Brown   TMDS Data0 -

Data Link (TIA/EIA-568-B)
1. Orange-white   CEC
2. Orange   HPD
3. Green-white   SCL
4. Blue   HW02R POWER
5. Blue-white   IR
6. Green   GND
7. Brown-white   SDA
8. Brown   HW02T POWER

LED Indication:
HW02T Status: Blue = normal.
               Red   = abnormal (HDMI equipment power off or cable not have
                        properly connection)
               Flash = IR emitting.
               Off   = No Power. (HDMI Source power off and no connect with HW02R)

HW02R Status: Blue = Normal.
                Red = abnormal (HDMI equipment power off or cable not have
                        properly connection)
                Off = No power or power source is too low

Caution:
1. The cabling must away from any equipment with electromagnetic wave, i.e.: microwave, radio equipment, high voltage.
2. HW02 Data Rate support up to 1.65Gbps, but not support 1080p Deep Color signal.
3. IR receiving angle is ±45° with maximum distance 5 meters.
   IR emitting angle is ±30° with maximum distance 3 meters.

Specification:

ITEM NO.	HW02T	HW02R
Resolution	480i / 576i / 480p / 576p / 720p / 1080i / 1080p	
Max. Data Rate	2.25 Gbps	
Equalization	40dB @ 825MHz (1.65Gbps)	
Link Cable Distance	CAT5E 60M@1080i , CAT5E 40M @1080p	
HDMI Connector	HDMI A Type x 1 (Input)	HDMI A Type x 1 (Output)
3.5 mm Connector	IR emitter	IR receiver
Link Connector	RJ-45 Shielded x 2	
IR Carrier Frequency	38Khz	
Max. Power Consumption	X	DC 5V 500mA
Power Supply	X	DC5V 1Amp
Temperature	Operation: 0 ~ 55℃, Storage: -20 ~ 85℃, Humidity: up to 95%	
DIMENSIONS W x H x D mm	86 x 50 x 86	
Weight g	125	130

RoHS CE FC C