



HDMI Extender Series

# User Manual

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Model : HW02

Wall Plate HDMI & IR Repeater CAT5e Extender



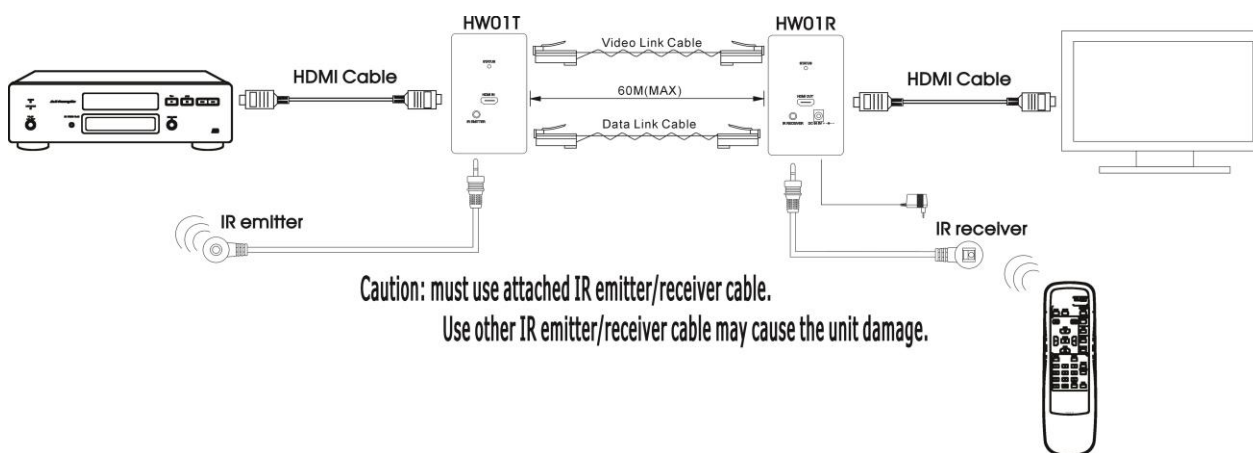
## Introduction

HW02 is an HDMI wall plate (UK Standard) extender that can use two cost-effective Ethernet cables to send HDMI and IR signals, with a resolution of 1080p@60Hz and a transmission distance up to 60M. Besides, the IR transmission allows you to conveniently control the remote HDMI source device, such as Blu-ray player.

## Features

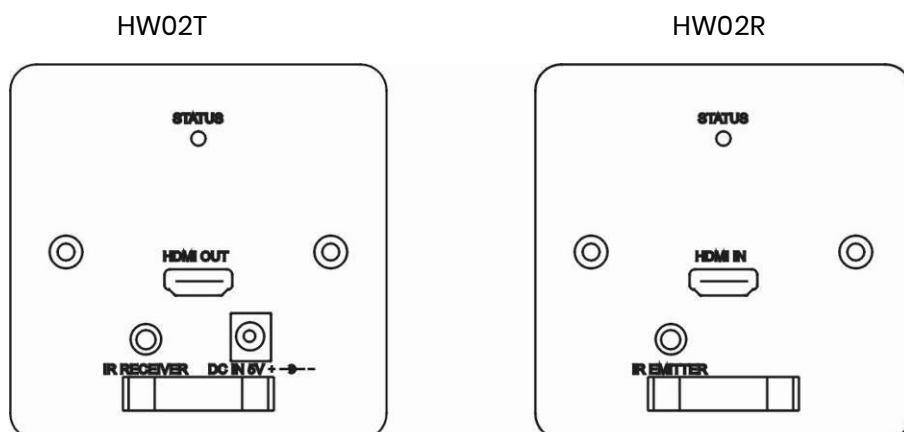
- Resolution up to 1080p@60Hz.
- Signal extension up to 60M over two CAT5e (or greater) cables.
- UK standard (86 x 86mm) housing design.
- Power input at either the terminal on the PCB or the external DC jack.
- Supports auto detection for different distance.
- Supports DDC, EDID, CEC, Hot Plug Detection.
- Managed via IR remote.

## Installation View



Resolution	Transmission Range (Max.)
480i / 576i / 480p / 576p	60M
720p / 1080i	CAT5e:50M CAT6:60M
1080p	CAT5e:30M, CAT6:40M

## Panel View



## 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	HW01R POWER
5. Blue-white	IR
6. Green	GND
7. Brown-white	SDA
8. Brown	HW01T 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 HW01R)

### HW02R Status

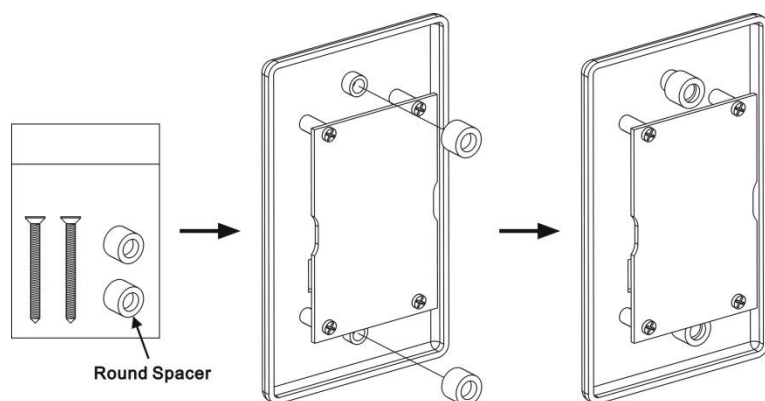
Blue normal.

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. HW01 Data Rate support up to 2.25Gbps, but not support 1080p Deep Color signal.
3. IR receiving angle is  $\pm 45^\circ$  with maximum distance 5 meters.  
IR emitting angle is  $\pm 30^\circ$  with maximum distance 3 meters.



## Specification

ITEM NO.	HW02T	HW02R
Support		
Compliance	HDMI 1.3a, HDCP 1.1	
Max. Video Resolution	1080p	
Video Bandwidth	2.25Gbps	
Max. Transmission Distance	40M at 1080p	
IR Support	38Khz	
Ports & Interfaces		
Video Input	1 x HDMI Type A	1 x RJ45
Video Output	1 x RJ45	1 x HDMI Type A
IR Receiver		1 x (3.5mm) Phone Jack
IR Emitter	1 x (3.5mm) Phone Jack	
Power		
Power Supply	DC 5V 1A	DC 5V 1A
Power Consumption		500mA
Ambient Temperature		
Operation	0 to 55°C	
Storage	-20 to 85°C	
Humidity	Up to 95%	
Physical Characteristics		
Dimensions	86 x 50 x 86mm	86 x 50 x 86mm
Weight	125g	130g