

YODA HB302-4K

HDMI (HDBaseT) CAT5 Extender Series

HB302-4K HDMI CAT5 Extender with IR/PoH



HB302-4K HDMI (HDBaseT) CAT5 Extender is provides full 3D (all formats) & resolutions up to 4Kx2K (4 times the 1080p) with multi-channel audio over a single low cost CAT5e/6 cable. Fully compliant with HDCP, EDID and CEC control. Built-in bi-directional simultaneous IR transmission to allow extend the remote control either source or/display side. With supports PoH (Power over HDBaseT) feature which eliminating excess or unwanted power drain and also provides power to the receiver at the remote location.

Features:

- Extends HDMI and IR signal over one CAT5/5e/6 cable.
- Uncompressed high definition video up to 1080p@60Hz@48bits and 3D and 4K*2K capable.
- Bi-directional IR, support 30-60kHz.
- Max. Data Rate- 10.2Gbps.
- HDMI 1.4 and HDCP compliance.
- Transmission range up to 70M by CAT5e/6 at 1080p@60Hz@24bit.
- Audio support up to LPCM7.1, Dolby TrueHD, DTS-HD MA.
- Support PoH (Power over HDBaseT), no external power required at receiver.
- External power supply included for the Transmitter.

Installation view:



LED Indication:

Power:

Green On/Off

HDMI:

Blue ON: With HDMI signal

Flash: HDMI signal without HDCP

OFF: No HDMI signal

HDBaseT:

Blue ON: HDBaseT link

Flash: Low power mode

OFF: HDBaseT unlink

IR receive/emit LED:

Blue Flash: IR signal transmission

OFF: No IR signal

Cable:

Link cable recommend use high quality Cat.5e、Cat.6、Cat.6a、Cat.7 UTP / STP or FTP cable. Poor quality cable or network connection or improper construction will cause unstable connection, video or sound disruptions, picture noise appears.

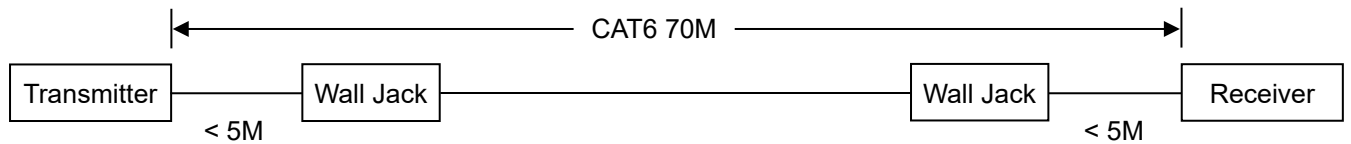
HDBaseT Distance chart by different cable:

Cable Type	Range	Pixel Clock Rate	Video Data Rate	Supported Video
CAT.5e / CAT.6	70 M	$\leq 225\text{MHz}$	$\leq 5.3\text{Gbps}$ (Full HD Video)	1080p 60Hz 36 bit
CAT.5e / CAT.6	35 M	$> 225\text{MHz}$	$> 5.3\text{Gbps}$ (Ultra HD Video)	1080p 60Hz 48 bit
CAT.6a / CAT.7	40 M			1080p 60Hz 3D, 4K x 2K 30Hz

If connection through the wall socket, the cable length must less 5 meters between HDMI

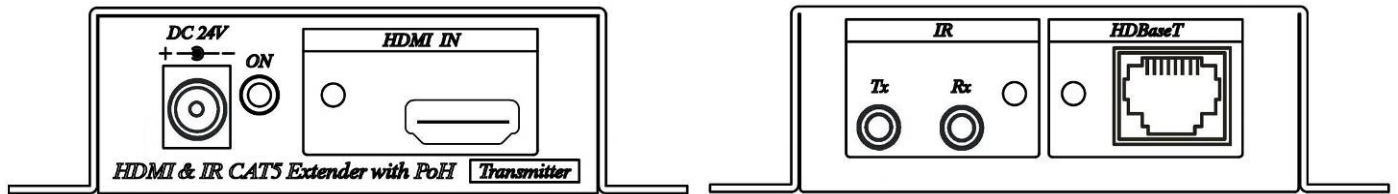


extender and wall jack, as below drawing:

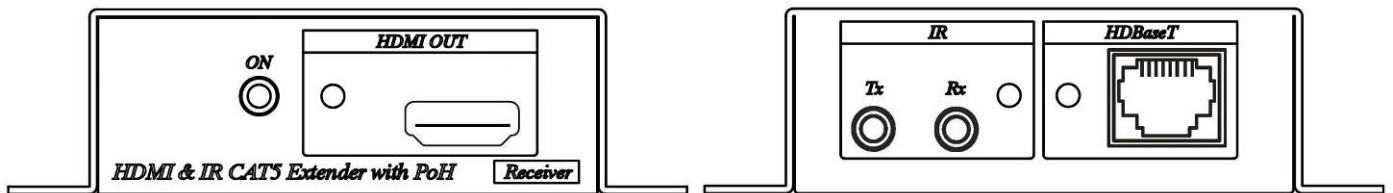


Panel view:

HB302-4KT



HB302-4KR



Low-power Mode:

When there is no HDMI video signal input or TV is not connected or power off, this product will enter a low-power mode to save power consumption; under a low power mode still provides IR and CEC of signal transmission.

RJ45 Define:

Video Link (TIA/EIA-568-B)

- | | |
|-----------------|---------|
| 1. Orange-white | DATA0 + |
| 2. Orange | DATA0 - |
| 3. Green-white | DATA1 + |
| 4. Blue | DATA2 + |
| 5. Blue-white | DATA2 - |
| 6. Green | DATA1 - |
| 7. Brown-white | DATA3 + |
| 8. Brown | DATA3 - |

Caution:

1. The wiring must away from any equipment with electromagnetic wave, i.e.: mobile phone, microwave, radio equipment, fluorescent lamp, high voltage power lines.
2. The cable must pull in straight to avoid any crosstalk interference and the transmission stability.



3. This device HDBaseT port is not general Ethernet signal; do not connect with Network devices to avoid damage.
4. IR transmitter do not put near from receiver to avoid mutual interference.
5. The receiver unit working temperature is higher which is in normal condition.

HB302-4K Package Include:

HB302-4KT HDMI Transmitter x 1 pcs

HB302-4KR HDMI Receiver x 1 pcs

IR Emitter Cable x 2 pcs

IR Receiver Cable x 2 pcs

Mounting Screw pack x 1 bags

DC24V Power Adapter x 1 pcs

Specification:

ITEM NO.	HB302-4KT	HB302-4KR
Input / Output Interface	HDMI Type A x 1	
HDMI Video Support	Up to 1080p@60Hz@48bits,3D, 4096x2160@30Hz	
HDMI Audio Support	LPCM 7.1 192KHz, Dolby Trued, DTS-HD MA	
Distance	60M by CAT5e/6, 70M by CAT6	
HDBaseT Connector	RJ45 x 1	
LED Indication	Green x 1, Blue x 3	
IR Carrier Frequency	30-60Khz	
IR Angle	± 15°	± 55°
IR Distance	5m / Bi-directional	
Power Supply	DC 24V 1.25A	x
Power Consumption	Max 11.4W, Low Power 1.8W	
Temperature	Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%	
Dimensions mm	67 x 95 x 27 (mm)	
Weight g	155	165

RoHS CE FC

Rev. A

