

# YODA HB301-4K

## HDMI (HDBaseT) CAT5 Extender Series

### HB301-4K HDMI & IR CAT5 Extender over Single CAT5 Cable

HB301-4K HDMI (HDBaseT) CAT5 Extender is using only one cost effective CAT5e/6 cable to extend your HDTV display up to 60 meters at 1080p, 70 meters by CAT6a cable. With IR function to delivers significant value to the entire home and commercial entertainment system.



### 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.
- Built in IR control, IR signal could be selectable at either TX/RX side.
- Max. Data Rate- 10.2Gbps.
- HDMI 1.4 and HDCP compliance.
- Transmission range up to 60M by CAT5e/6, 70M by CAT6a cable at 1080p@60Hz@24bit.
- Audio support up to LPCM7.1, Dolby TrueHD, DTS-HD MA.

### Installation view:



### IR Switch Setting:

1. When use BD/DVD remote controller (DVD at remote side), HB301-4KR IR switch move to RX and connect with Receiver cable; HB301-4KT IR switch move to TX and connect with Emitter cable.
2. When use TV remote controller (TV at remote side), HB301-4KT IR switch move to RX and connect with Receiver cable; HB301-4KR IR switch move to TX and connect with Emitter cable.

### 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 Ethernet, RS-232, IR, and CEC of signal transmission.

### LED Indication:

Power GREEN on (power)  
 Link BLUE on (linking)  
 Flash (low-power mode)

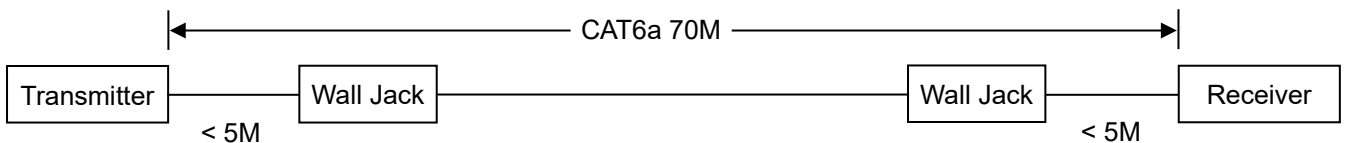
### Cable:

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	60 M	≤ 225MHz	≤ 5.3Gbps (Full HD Video)	1080p 60Hz 36 bit
CAT.6a / CAT.7	70 M			
CAT.5e / CAT.6	35 M	> 225MHz	> 5.3Gbps (Ultra HD Video)	1080p 60Hz 48 bit 1080p 60Hz 3D, 4K x 2K 30Hz
CAT.6a / CAT.7	40 M			

If connection through the wall socket, the cable length must less 5 meters between HDMI extender and wall jack, as below drawing:



10/100Mbps network connection using general CAT5e cable and working distance up to 60M.

### RJ45 Define:

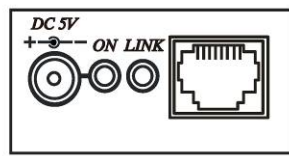
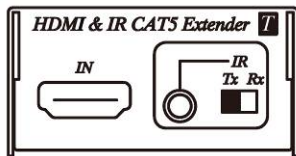


## Video Link (TIA/EIA-568-B)

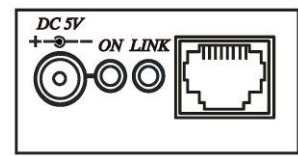
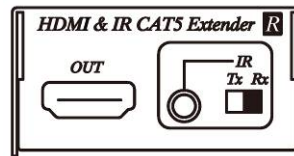
- |                 |         |
|-----------------|---------|
| 1. Orange-white | DATA0 + |
| 2. Orange       | DATA0 - |
| 3. Green-white  | DATA1 + |
| 4. Blue         | DATA2 + |
| 5. Blue-white   | DATA2 - |
| 6. Green        | DATA1 - |
| 7. Brown-white  | DATA3 + |
| 8. Brown        | DATA3 - |

## Panel view:

HB301-4KT



HB301-4KR



## 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.

## HB301-4K Package Include:

HB301-4KT HDMI Transmitter x 1 pcs

HB301-4KR HDMI Receiver x 1 pcs

IR Emitter Cable x 1 pcs

IR Receiver Cable x 1 pcs

Mounting Screw pack x 1 bags

Power Adapter x 2 pcs



**Specification:**

ITEM NO.	HB301-4KT	HB301-4KR
HDMI Video Support	Up to 1080p@60Hz@48bits,3D,4K x 2K	
HDMI Audio Support	LPCM 7.1 192KHz, Dolby Trued, DTS-HD MA	
Distance	60M by CAT5e/6, 70M by CAT6a	
Input / Output Interface	HDMI Type A x 1	
HDBaseT Connector	RJ45 x 1	
IR Carrier Frequency	30-60Khz	
IR Angle	± 15°	± 55°
IR Distance	5m / Bi-directional	
Power Supply	DC 5V 2A	DC 5V 2A
Power Consumption	Max 3W, Low Power 0.8W	Max 6W,Low Power 1W
Temperature	Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%	
Dimensions mm	49 x 92.3 x 25	49 x 92.3 x 25
Weight g	125	135

**RoHS**   

Rev. C

