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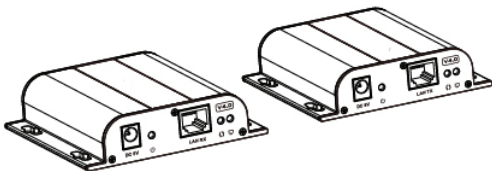# HDMI HDbitT CAT5e/6
Extender with IR - 120m
User's Guide

Thank you for purchasing from gofanco. Our products aim to meet all your connectivity needs wherever you go. For optimum performance and safety, please read the instructions carefully and keep this User's Guide for future reference. If you need more information about our products, please visit www.gofanco.com. For technical support, please email us at support@gofanco.com. For drivers/manuals download, please go to http://www.gofanco.com/downloads.

Important Safety Notices

Please read safety instructions carefully before installation and operation.

- Please pay close attention to all warnings and hints for this device

- Do not expose this unit to rain, heavy moisture, or liquid

- Do not repair the device or open the enclosure without professional guidance to avoid electric shocks. Doing so may void your warranty

- Keep the product in a well-ventilated location to avoid damage from overheating

- Shut off power and make sure environment is safe before installation
- Do not plug the HDMI cables and IR cables in/out when the device is in use to avoid cable damage. Make sure they are plugged into the correct ports
- Use the included DC5V power adapters only. Make sure the specification matches if using 3rd-party DC power adapters

Introduction

HDMI HDbitT CAT5e/6 Extender with IR - 120m extends high definition 1080P HDMI signals from a source device to a display device up to 120 meters using one economical CAT5e/6 cable with with IR support.

Package Contents

- HDMI HDbitT CAT5e/6 Extender with IR - 120m (1 TX & 1 RX)
- IR Blaster and IR Receiver cables (1 each)
- Power adapter (2pcs)
- User guide

Features

- Extends HDMI audio/video signals up to 394ft (120m) over a single CAT5e/6 cable
- Supports resolutions up to 1080p@60Hz
- Direct one-to-one connection or one-to-multiple over your Gigabit Ethernet switch - additional RXs, part number HDbitTv2-RX, sold separately
- Supports IR signal extension - control a media player from a remote location with the included IR Blaster and IR Receiver cables
- Includes 2 power adapters to ensure a steady flow of power and data transmission

Installation Requirements

1. HDMI source device (computer, DVD player, XBOX, PS3, etc)
2. HDMI display device (SDTV/Monitor, HDTV/Monitor, projector, etc.)
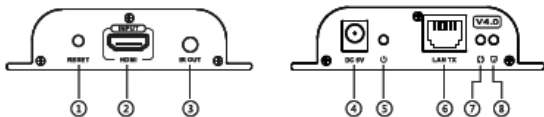3. UTP/STP CAT5e/6 cable following IEEE-T568B wiring standard

Product Layout

Figure 1: Transmitter (TX)

1. Reset: Press to reset the Transmitter
2. HDMI In: Connects to your HDMI source with an HDMI cable (cable not included)
3. IR Out: Connects to the IR Blaster cable
4. Power Jack: Connects to the included power adapter
5. Power LED: On when the Transmitter is powered
6. RJ45 Out: Connects to the RJ45 of the Receiver using a Cat cable
7. Data LED: Blinks during data transmission
8. Link LED: On when Cat cable is connected/ linked properly to Transmitter's and Receiver's RJ45
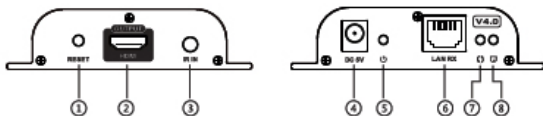
Figure 2: Receiver (RX)

1. Reset: Press to reset the Receiver
2. HDMI Out: Connects to your HDMI display with an HDMI cable (cable not included)
3. IR In: Connects to the IR Receiver cable
4. Power Jack: Connects to the included power adapter
5. Power LED: On when the Receiver is powered
6. RJ45 In: Connects to the RJ45 of the Transmitter using a Cat cable
7. Data LED: Blinks during data transmission
8. Link LED: On when Cat cable is connected/ linked properly to Transmitter's and Receiver's RJ45

CAT Cable Wiring

We suggest both RJ45 connectors be wired identically using T568B wiring standard for the best performance and compatibility.

Both connectors must be wired identically, to T568B standard.
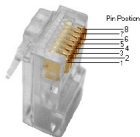
Note: You may use cat5e, cat6 UTP (cat6 preferred) in conjunction with the HDBitT output; however for best performance use cat6a or cat7 (particularly in electrically noisy environments). The maximum distances & transmission performance for HDMI and HDBT may be compromised by cable quality, patch panels, poor termination, wall plates, cable kinks and electrical interferences. Generally ensure the cat cable is solid copper core of 23AWG (avoid CCA type), in one straight run (avoid/minimise patches) and avoid close proximity to any noisy electrical sources.

Hardware Installation

1. Power off all devices including your HDMI source and HDMI display(s).
2. Connect your HDMI source device to the Transmitter's HDMI Input connector with an HDMI cable (HDMI cable not included).

3. Optional: Connect the IR Blaster cable to the Transmitter's IR Output port. Face the eye towards your HDMI source device's IR window. This connection is needed only if you need to control your HDMI source from the remote location.

4. Plug your CAT5e/6 cable between the Transmitter's RJ45 Output and Receiver's RJ45 Input.

5. Connect your HDMI display to the Receiver's HDMI Output connector with a HDMI cable (HDMI cable not included).

6. Optional: Connect the IR Receiver cable to the Receiver's IR Input port. This connection is needed only if you need to control your HDMI source device from the remote location.

7. Plug the included power adapters into the Transmitter's and Receiver's power jacks, then plug both power adapters into a reliable power source.

8. Power on all connected devices.

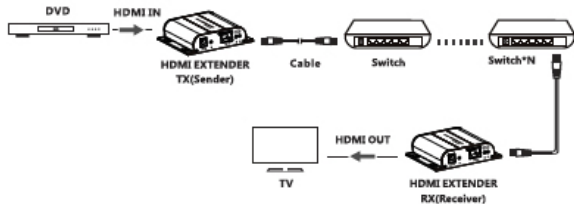9. The HDMI extender is ready for use.

Application

1-to-1 Connection

Direct connection between the TX and RX or through a Gigabit LAN via a Dedicated Gigabit Switch. If deployed within an existing network, create a VLAN to segregate our devices (TX and RX) from the rest of the network devices.
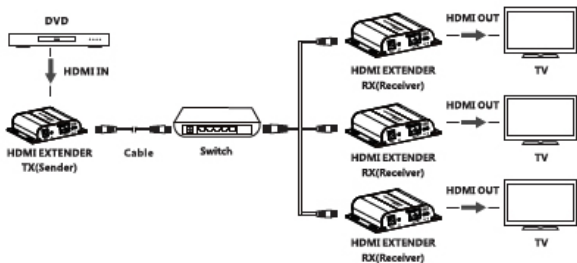
1-to-1 Direct Connection
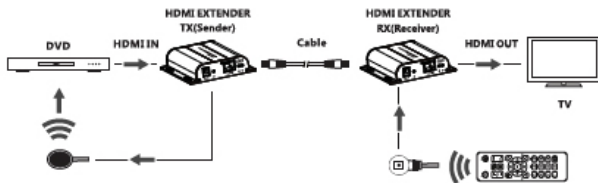
1-to-1 LAN Connection

1-to-Many Connection

A Dedicated Gigabit Switch is recommended. If deployed within an existing network, create a VLAN to segregate our devices (TX and RX's) from the rest of the network devices.

Notes:

- Many-to-Many Connection: A Smart Switch is required. Create a separate VLAN for each TX and its corresponding RX's. Each VLAN can only have 1 TX.

- Additional RXs, part number HDbitTv2-RX, sold separately.

FAQ & Solutions

Q: What if my display shows "Waiting for connection..."on the bottom right corner?

A: 1) Please check if the power adapters of Transmitter (TX) and Receiver (RX) are connected and powered on.

2) Check the network cable (CAT5e/6) is firmly connected between the TX and RX.

Q: The remote display says, "Please check the TX input signal":

A: 1) Please make sure the HDMI source device is connected to the Transmitter (TX) unit and powered on.

2) Use different HDMI cables.

3) If it's still not working, connect the HDMI source device to the TV directly to see if there's a signal.

Q: The extender is not working properly:

A: 1) Please check the cable lengths below:

- HDMI cables: Up to 2m

- Network cables (CAT5e/6): Up to 120m

2) Press the reset button on the TX/RX and reconnect.

Specifications

Item	Specifications
HDMI Signal	HDMI 1.3 and HDCP 1.4 compatible
Resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz
Network Cable	Low resistance, oxygen free, 100% copper (Cat5e/Cat6/Cat6A/Cat7)
Transmission Distance	Up to 394ft (120m) @ 1080p60Hz
IR Remote Control	Supportss 20-60KHz wide frequency remote control
Operating Temperature	32 to 140 F (0 to 60 C)
Power Adapter	5VDC/2A (output)
Power Consumption	TX: 3.5W; RX: 3W
Dimensions	3.8" (L) x 3.7" (W) x 0.9" (H) (2pcs)
Weight	Tx: 0.32lb; Rx: 0.32lb
Color	Black

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