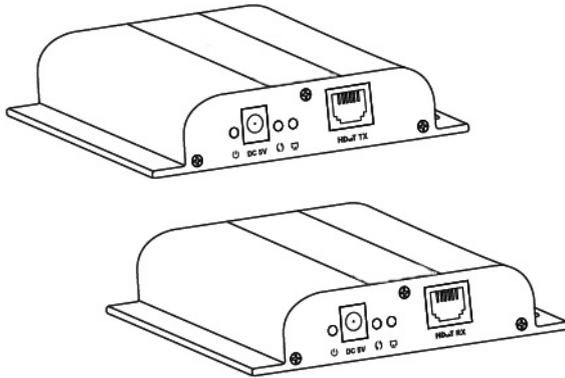




# HDMI HDbiT Extender 4K HDCP 2.2 - 120m User's Guide



**Part Number:**  
HDBitT4K22 (Kit)  
HDBitT4K22-RX (Receiver)

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](http://www.gofanco.com). For technical support, email us at [support@gofanco.com](mailto:support@gofanco.com). For drivers/manuals download, please go to <http://www.gofanco.com/download>.

## **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 put any items into the device or attempt to modify its operation
- 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 power adapters only. Make sure the specification matches if using 3rd-party DC power adapters

## Introduction

The HDMI HDBitT Extender 4K HDCP 2.2- 120m extends 4K HDMI signals over one Cat6 cable up to 120m (394ft) with IR support.

## Features

- HDMI 1.4 and HDCP 2.2 compliant
- Supports up to 4K@30Hz resolution
- Extends HDMI signal up to 120 meters (394ft) over a single Cat6 cable
- Supports One-to-One, One-to-Many, or Cascade configurations
- Additional Receivers (part # HDBitT4K22-RX) sold separately
- Supports IR remote control function to control the source device from long distances

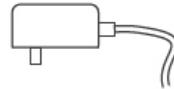
## Package Contents



Transmitter (1pc)



Receiver (1pc)



Power Adapter  
5VDC /2A (2pcs)



IR Blaster Cable (1pc)



IR Receiver Cable (1pc)



User's Guide (1pc)

## Product Layout

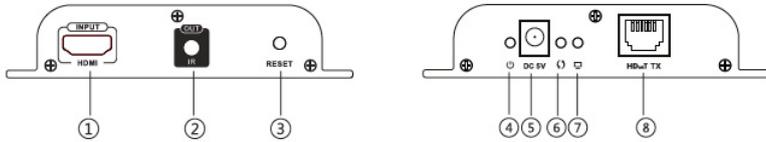


Figure 1: Transmitter (TX)

- 1 **HDMI In:** Connect your HDMI source here with an HDMI cable (cable not included)
- 2 **IR Out:** Infrared 3.5mm socket. Plug IR Blaster Cable here. See instructions on page 6.
- 3 **Reset:** Press to reset if the HDMI Extender doesn't work properly
- 4 **Power LED:** On when the Transmitter is powered
- 5 **Power Jack:** Connect the included power adapter here
- 6 **Activity LED:** Blinks during data transmission
- 7 **Link LED:** On when the Cat6 cable is connected/linked properly to Transmitter's and Receiver's RJ45
- 8 **RJ45 Out:** Link to Receiver's RJ45 In using a Cat6 cable

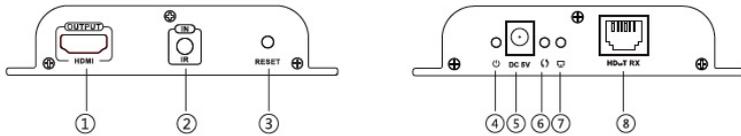


Figure 2: Receiver (RX)

- 1 **HDMI Out:** Connect your HDMI display here with an HDMI cable (cable not included)
- 2 **IR In:** Infrared 3.5mm socket. Plug IR Receiver Cable here. See instructions on page 7.
- 3 **Reset:** Press to reset if the HDMI Extender doesn't work properly
- 4 **Power LED:** On when the Receiver is powered
- 5 **Power Jack:** Connect the included power adapter here
- 6 **Activity LED:** Blinks during data transmission
- 7 **Link LED:** On when the Cat cable is connected/linked properly to Transmitter's and Receiver's RJ45
- 8 **RJ45 In:** Link to the Transmitter's RJ45 Out via a Cat6 cable

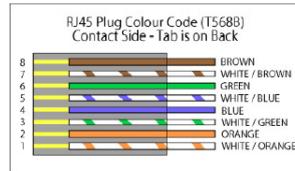
## Installation Requirements

1. HDMI source device (DVD player, set top box, PC, etc.)
2. HDMI display device (SDTV/Monitor, HDTV/Monitor, projector, etc.)
3. HDMI cables (not included)
4. UTP/STP CAT6/6A/7 cable, following IEEE-568B wiring standard

## 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 HDBiT 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

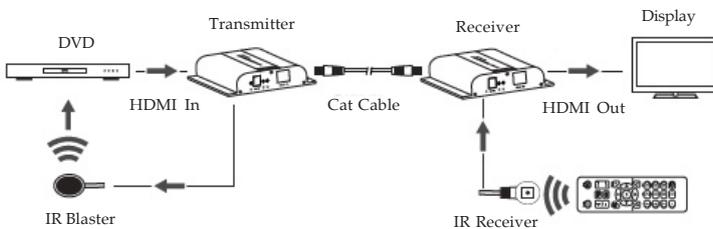
To achieve optimal performance, Cat6 cable is recommended.

1. Power off all devices including your HDMI source and HDMI display.
2. Connect your HDMI source to the Transmitter's HDMI In connector.
3. Optional: Connect the IR Blaster Cable to the Transmitter's IR Out 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. Connect your Cat6 cable between the Transmitter's RJ45 Out and Receiver's RJ45 In.

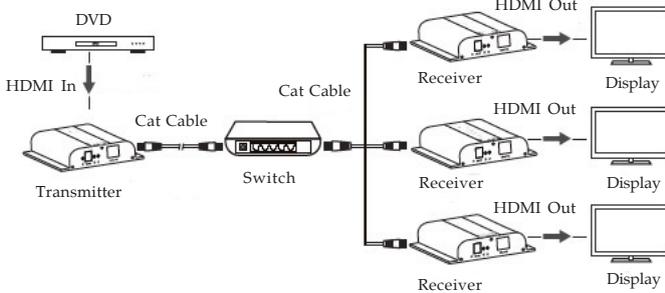
5. Connect your HDMI display to the Receiver's HDMI Out connector with an HDMI cable (HDMI cable not included).
6. Optional: Connect the IR Receiver Cable to the Receiver's IR In port. This connection is needed only if you need to control your HDMI source device from the remote location.
7. Plug the included power adapters into the Transmitter's and Receiver's Power Jacks, then plug both power adapters into reliable power outlets.
8. Power on your HDMI source device and HDMI displays. The extender is ready for use.

## Connection Diagram

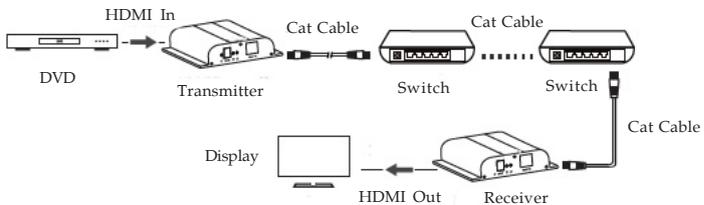
1. One-to-One: Extends HDMI signals up to 120 meters over a single Cat6 cable.



2. One-to-Many: Extend and split using dedicated network router/switch.
- One Transmitter (TX) to several Receivers (RX).
  - Additional Receivers (part# HDBitT4K22-RX) sold separately.



3. Cascade: Unlimited extension using dedicated network routers/switches.



## FAQ & Solutions

Q1: The TV displays "Waiting for connection..." on the right corner:

- A:
1. Check whether the power adapter of Transmitter (TX) and Receiver (RX) or Network Router /Switch (if used) is connected.
  2. Make sure the network cable (Cat6) is firmly connected between the TX and RX.

Q2: The TV displays "Please check the TX input signal":

- A:
1. Make sure the HDMI source device is connected to the Transmitter (TX) and powered on.
  2. Use other HDMI cables to connect.
  3. If still doesn't work, connect the HDMI source device to the TV directly to see if there's a signal.

Q3: The HDMI extender isn't working properly:

- A:
1. Please check the cable lengths are within below:
    - HDMI cables: 2 meters
    - Network cable (Cat6): 120 meters
  2. Press the "Reset" button on the TX and RX and reconnect.

Q4: When playing 4K source, the screen is black without content:

- A:
1. Make sure both TV and HDMI cable support HDMI 1.4 specification
  2. Press the "Reset" button on the TX and RX and reconnect.

## Specifications

Item	Specification
Compliance	HDMI 1.4, HDCP 2.2
Transmission protocol	HDbitT
HDMI input resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 4Kx2K@24/25/30Hz
HDMI output resolution	1080p@60Hz, 4Kx2K@30Hz
Transmission distance	Cat5: Up to 80m (262ft) Cat5e: Up to 100m (328ft) Cat6: Up to 120m (394ft)
IR signal	20KHz - 60KHz
Operating temperature	32 - 140 F (0 - 60 C)
Power adapter	5VDC / 2A
Power consumption	TX: 6W; RX: 4W
Dimensions	TX & RX: 4.22" (L) x 3.7" (W) x 0.93" (H) each
Weight	TX & RX: 0.37 lbs (each)

## **Disclaimer**

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