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18G HDMI 2.0 CAT Extender with IR - 70m 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 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 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 DC24V power adapter only. Make sure the specification matches if using 3rd-party DC power adapters

Introduction

The 18G HDMI 2.0 CAT Extender with IR - 70m extends Ultra High Definition 4K HDR HDMI signals from a source device to a display device up to 70 meters over a single CAT6 cable.

Features

- Transmits HDMI signals from source device to display device up to 70 meters using economical CAT6 cabling
- Supports HDMI 2.0, up to 4K @60Hz YUV 4:4:4, HDR, HDCP 2.2
- Supports bi-directional IR remote control function to control the source device or display device from long distances

- With a 4K source: Supports simultaneous 4K output (TX) & 1080p (RX) via downscaling
- The Transmitter's HDMI loopout allows for a local display and monitoring of the extended display

Package Contents
- 18G HDMI 2.0 CAT Extender with IR - 70m (1 Transmitter & 1 Receiver)
- 1x IR Blaster cable and 1x IR Receiver cable
- 1x Power adapter (12VDC/1A)
- User's guide

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 CAT6 cable following IEEE-T568B wiring standard

Product Layout

Transmitter TX Front and Rear Panel
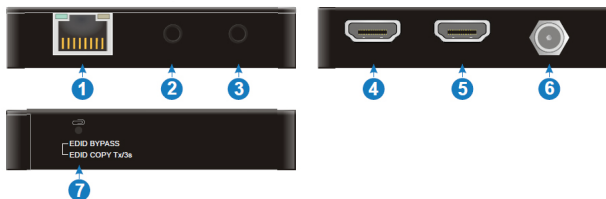
1. **RJ45 Out**: Connects to the Receiver's RJ45 In using a CAT cable. It supports PoC to power the Receiver. The orange LED illuminates when there is a valid HDMI signal. The Green LED illuminates when power is applied

2. **IR In**: Connects to the included IR Receiver cable to control the remote display device from the HDMI source location

3. **IR Out:** Connects to the included IR Blaster cable to control the HDMI source device from the remote display location

4. **HDMI Out**: Connects to an HDMI display for local monitoring of the remote display

5. **HDMI In**: Connects to your HDMI source

6. **Power Jack**: Connects to the included power adapter

7. **EDID Management**:

   • **EDID Bypass**: Press the button with a paper clip or other sharp object to learn the EDID from the remote display connected to the Receiver's HDMI Out

   • **EDID Copy Tx/3s**: Press and hold the button down for 3 seconds to copy the EDID from the local display connected to the Transmitter's HDMI out

   • **Default**: The source device learns EDID from the TV with the lowest resolution. To restore default setting, press and hold down while powering cycling the unit, then release 6 seconds after power is back on

Receiver RX Front and Rear Panel

1. **HDMI Out**: Connects to your HDMI display
2. **RJ45 In**: Connects to the Transmitter's RJ45 Out using a CAT cable. It supports PoC to power the Receiver. The orange LED illuminates when there is a valid HDMI signal. The Green LED illuminates when power is applied

Product Layout Continued

3. **IR In**: Connects to the included IR Receiver cable to control the remote display device from the HDMI source location

4. **IR In**: Connects to the included IR Blaster cable to control the HDMI source from the remote display device location

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.
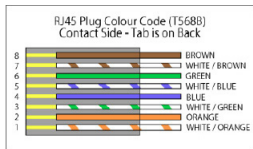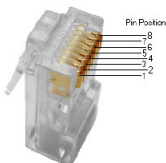
Note: You may use CAT5e, CAT6 wiring, however, for best performance CAT6a or CAT7 (particularly in electrically noisy environments) is recommended. The maximum transmission distance and video quality may be compromised by cable quality, patch cables, poor termination, wall plates, cable kinks, and electrical interference. We recommend using 100% copper 23AWG (avoid CCA type) CAT cable, in one straight run (avoid/minimize patches) and avoid close proximity to 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 In connector with an HDMI cable (HDMI cable not included).

3. Optional: Connect your HDMI display to the Transmitter's HDMI Out connector with an HDMI cable (HDMI cable not included) for local monitoring of the HDMI signal.

4. Optional: Connect the IR cable to the Transmitter's IR port. Face the IR eye towards your HDMI device's IR window. This connection is needed only if you need to control your HDMI device from the remote location. See the application diagram on page 9 for proper cable connection.

5. Plug a CAT6 cable between the Transmitter's RJ45 Out and Receiver's RJ45 In.

6. Connect your HDMI display to the Receiver's HDMI Out connector with an HDMI cable (HDMI cable not included).

7. Optional: Connect the IR cable to the Receiver's IR port. This connection is needed only if you need to control your HDMI device from the remote location. See the application diagram on page 9 for proper cable connection.

8. Plug the included power adapter into the Transmitter's power jack, then plug the power adapter into a reliable power source. One power adapter will power both the Transmitter and Receiver.

9. Power on all connected devices.

10. The HDMI extender is ready for use.

Application Diagram
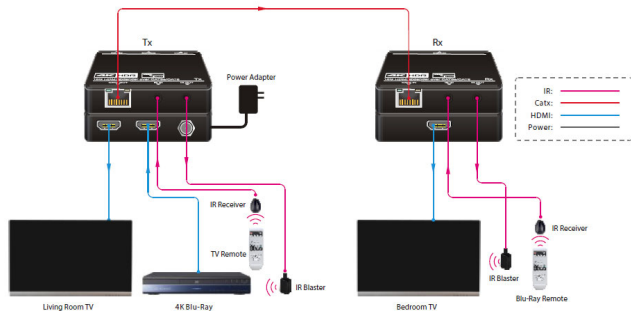
Specifications

Transmitter	
Input	(1) SOURCE
Input Connector	(1) 19-pin type-A female HDMI
Output	(1) DISPLAY, (1) CATx OUT
Output Connector	(1) 19-pin type-A female HDMI, (1) RJ45
Control	(1) IR IN, (1) IR OUT
Control Connector	(2) 3.5mm mini jacks
Receiver	
Input	(1) CATx IN
Input Connector	(1) RJ45
Output	(1) DISPLAY
Output Connector	(1) 19-pin type-A female HDMI
Control	(1) IR IN, (1) IR OUT
Control Connector	(2) 3.5mm mini jacks
General	
Video Resolution	Up to 4K@60Hz 4:4:4, HDR
Transmission Distance	4K/1080p ≤ 70 meters (230ft)
HDMI Version	Up to HDMI 2.0
HDCP Version	Up to HDCP 2.2. The HDCP of output follows the HDCP version of display device.
EDID Pass-through	Supported.
Power Supply	Input: 100VAC~240VAC, 50/60Hz; Output: 12VDC 1A
Power Consumption	4W (Max)
Operation Temperature	-5~55℃
Storage Temperature	-25~70℃
Relative Humility	10%-90%
Dimensions (W*H*D)	80mm x 16.8mm x 80mm
Net Weight	Tx/Rx: 70g

Disclaimer

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