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HDMI CAT Extender with EDID
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/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

The HDMI CAT Extender with EDID extends HDMI transmission up to 130ft @4K and 230ft @1080p over CAT6/7.

Package Contents

- HDMI CAT Extender with EDID (1 Transmitter & 1 Receiver)
- 1 IR Blaster cable and 1 IR Receiver cable
- 2 Power adapters (5VDC/1A)
- User's guide

Installation Requirements

1. HDMI source
2. HDMI display(s)
3. HDMI cables
4. UTP/STP CAT6/7 cable following IEEE-T568B wiring standard

Features

- Supports up to 4K @30Hz YUV 4:4:4. HDMI and HDCP 1.4 compliant
- Transmission distance:
  CAT6: 230ft/70m @ 1080p, 130ft/40m @ 4K @30Hz
  CAT5E: 197ft/60m @ 1080p, 115ft/35m @ 4K@30Hz
- HDMI loopout equipped on the TX, allows cascading
- Supports EDID copy from either the HDMI loopout or Receiver (RX)
- Compact metal enclosure, surface mountable, with IR extension
- Supports up to 7.1ch HD audio
- Low latency

Product Layout

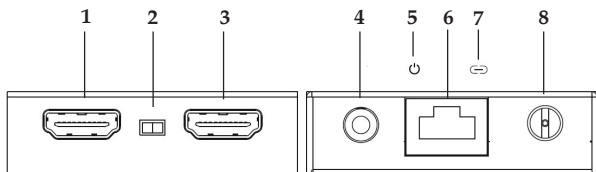Transmitter (TX) Front and Rear Panel

Figure 1: Transmitter Front and Rear Panel Layout

1. **HDMI In**: Connect to your HDMI source
2. **EDID**: EDID selector switch
    • **RX**: Slide the switch to the left to copy the EDID from the HDMI display connected to the Receiver's HDMI Out
    • **TX**: Slide the switch to the right to copy the EDID from the display connected to the Transmitter's HDMI Out (Loopout)
3. **HDMI Out**: Connect to an HDMI display for local monitoring of the remote display
4. **IR Out**: Connect to the IR Blaster cable. Point the IR eye at the source device's IR window
5. **Power LED**: On when the TX is powered on

6. **RJ45 Out**: Connect to the Receiver's RJ45 In using a CAT cable
7. **Link LED**: On when the HDMI source device signal is detected
8. **Power Jack**: Connect to the included power adapter
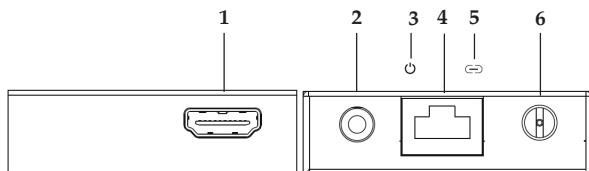
Receiver (RX) Front and Rear Panel

Figure 2: Receiver Front and Rear Panel Layout

1. **HDMI Out**: Connect to an HDMI display
2. **IR In**: Connect to the IR Receiver cable
3. **Power LED**: On when the RX is powered on
4. **RJ45 In**: Connect to the Transmitter's **RJ45 Out** using a CAT cable
5. **Link LED**: On when the CAT cable is connected and HDMI signal is detected
6. **Power Jack**: Connect to the included power adapter

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.
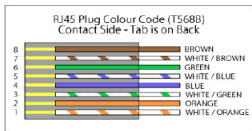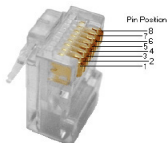
Note: You may use cat5e, cat6 UTP (cat6 preferred) in conjunction with the RJ45 output; however for best performance use cat6a or cat7 (particularly in electrically noisy environments). The maximum distances & transmission performance for HDMI and USB may be compromised by cable quality, patch panels, 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 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 Blaster cable to the Transmitter's IR port. Face the IR eye towards your source device's IR window. This connection is needed only if you need to control your HDMI source from the remote display location.

5. Plug a CAT6/7 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 Receiver cable to the Receiver's IR port. This connection is needed only if you need to control your HDMI source device from the remote display location.

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

9. Power on all connected devices.

10. The HDMI extender is ready for use.

Connection Diagram

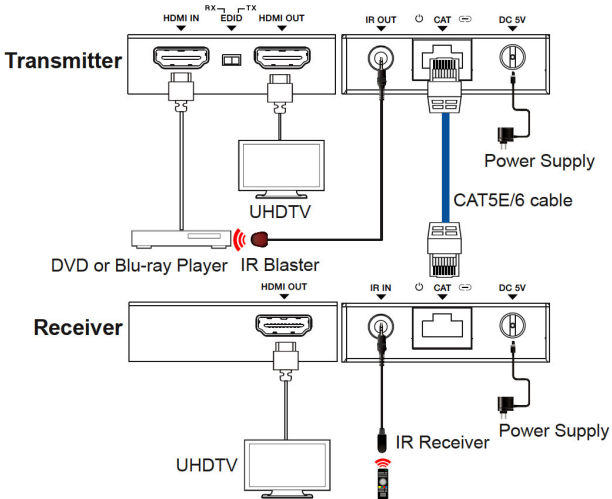The connection diagram shows the most typical input and output devices used with the HDMI CAT Extender.

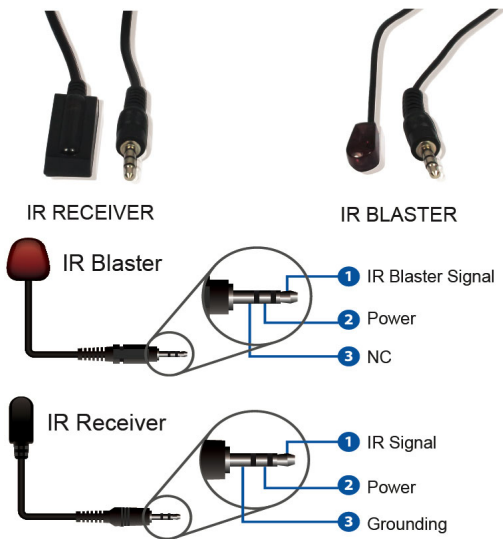**Figure 3: Connection Diagram with IR**

IR Pin Definition

IR RECEIVER   IR BLASTER

IR Blaster
  1 IR Blaster Signal
  2 Power
  3 NC

IR Receiver
  1 IR Signal
  2 Power
  3 Grounding

Figure 4: IR Pin Definition

Specifications

Technical	
HDMI	HDMI Compliant
HDCP	HDCP 1.4
Video Bandwidth	10.2Gbps
Video Resolution	Up to 4K@30Hz
Audio Support	Up to 7.1CH HD audio
Input TMDS Signal	3.3 volts
Input DDC Signal	5.0 volts/P-P
ESD Protection	Human Body model: +/- 8 kV (air-gap discharge) +/- 4 kV (contact discharge)
Connection	

Transmitter	Input: 1 x HDMI Type A [19-pin female]
	Outputs:1 x HDMI Type A [19-pin female]
	          1 x IR OUT
	          1 x CAT OUT [RJ45, 8-pin female]

Receiver	Inputs: 1x IR IN 1x CAT IN [RJ45, 8-pin female] Output: 1x HDMI Type A [19-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	79.5mm[W] x 69mm[D] x 16.5mm[H]
Weight	Transmitter: 132g, Receiver: 130g
Power Supply	5V/1A DC
Power Consumption	Transmitter: 1.86W, Receiver: 0.87W
Operation Temperature	32 - 104°F / 0 - 40°C
Storage temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

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