gofanco®

4-Port HDMI Extender/Splitter over CAT5e/6 with Loopout - 50M



G4-0158A

P/N: HDExt4P-Pro (v2.0)

Thank you for purchasing from gofanco. Our products aim to meet all our 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, email us at **support@gofanco.com**.
For drivers or manual 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 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

4-Port HDMI Extender/Splitter over CAT5e/6 with Loopout - 50M distributes HDMI signals from one input to four CAT5e/6/7 outputs and one HDMI output (loopout).

Features

- Extends HDMI transmission up to 50m (165ft) over CAT5e/6/7
- Supports up to 1080p @60Hz, HDCP 1.4 compliant
- Supported resolutions: 1080p, 1080i, 720p
- Supports up to PCM 5.1ch/7.1ch & Digital 5.1ch audio
- HDMI output (loopout) on the transmitter to connect to a local display or cascade HDMI signals (up to 4 layers)
- One-way IR extension
- PoC (Power over Cable) allows the receivers (RX's) to be powered by the transmitter (TX) over CAT cables
- Sturdy metal housing with surface mounting accessories

Installation Requirements

- HDMI source devices (DVD player, set top box, PC, etc.)
- HDMI displays (SDTV/Monitor, HDTV/Monitor, projector, etc.)
- HDMI cables (not included)
- CAT cables (not included)

Package Contents

- 1x HDMI splitter & 4x HDMI receivers
- 1x 12V DC adapter
- 1x User's manual
- 1x IR-TX cable & 4x IR-RX cables
- 10x mounting ears

Product Layout

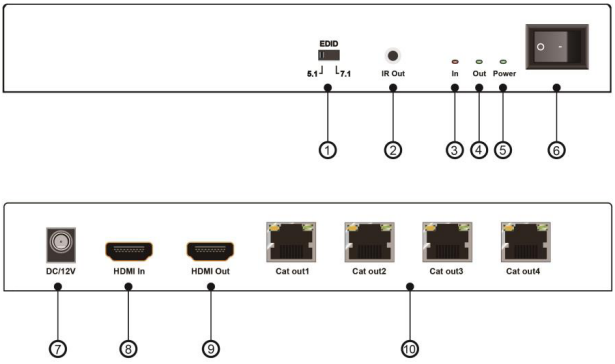


Figure 1: Transmitter Layout

1. EDID Switch
2. IR Out
3. HDMI Input LED
4. HDMI Output LED
5. Power Input LED
6. Power On/Off
7. Power Input
8. HDMI In
9. HDMI Output (loopout)
10. RJ45 Outputs (x4)

Product Layout Continued

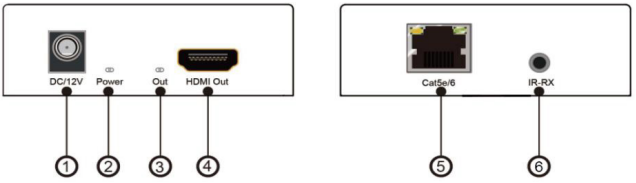


Figure 2: Receiver Layout

1. Power Input (not used)
2. Power Input LED
3. HDMI Output LED
4. HDMI Output
5. RJ45 Input
6. IR Input

Specifications

Operating Temperature Range	-10°-40° (+14-140°)
Operating Humidity Range	5 to 90% RH (No Condensation)
Video Amplifier Bandwidth	140MHz
Input Video Signal	0.5-1.0 Volts P-P
Input DDC Signal	5 volts p-p (TTL)
Data transfer speed rate	6 Gbps (Maximum)
Input port	1x HDMI
Output ports	4x Cat5e/6, 1x HDMI
Video Format Supported	DTV/HDTV: 720p/1080i/1080p 3D video support
Vertical Frequency range	60Hz
Support Audio Format	2.0/5.1/7.1
Transmission Distance	1080p60-8bit 50m Over single CAT5e/6/7 cable/24AWG/Solid
Dimension (L×W×H)	L202.3xW105.5xH29.2mm

EDID Settings

EDID Switch	Description
Left Position	1080p @60Hz, PCM 5.1 & Digital 5.1
Right Position	1080p @60Hz, PCM 7.1 & Digital 5.1

Note:

1. 1080p, 1080i, and 720p resolutions are supported with the above EDID settings.
2. If the source device is 4K capable, set the output to 1080p first.

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 is not included).
3. Connect your CAT cables between the Transmitter and CAT6/7 Receivers
4. OPTIONAL: Connect an HDMI display to the HDMI Out connector of the Transmitter using an HDMI cable (HDMI cable not included).
5. Connect an HDMI display to each CAT6/7 Receiver's HDMI Out connector with an HDMI cable (HDMI cables not included).
6. OPTIONAL: Connect the IR Receiver cables and the IR Emitter cable to the IR interface ports. This connection is needed if you need to control your HDMI devices from a remote location. See IR Control, starting on page 11, for proper IR connection.
7. Plug the included 12V power adapter into the transmitter's power jack. The receivers are automatically powered by the transmitter over CAT cables.
8. Power on your HDMI source device and HDMI display(s). The Splitter/Extender is ready for use.

Application Diagram

The application diagram shows the most typical input and output devices used with the Splitter/Extender.

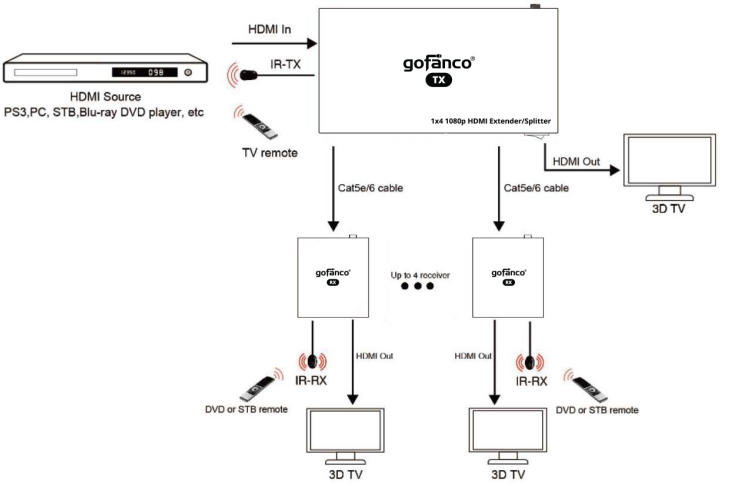


Figure 3: Application Diagram

The application diagram shows cascading 4 layers, used with the Splitter/Extender.

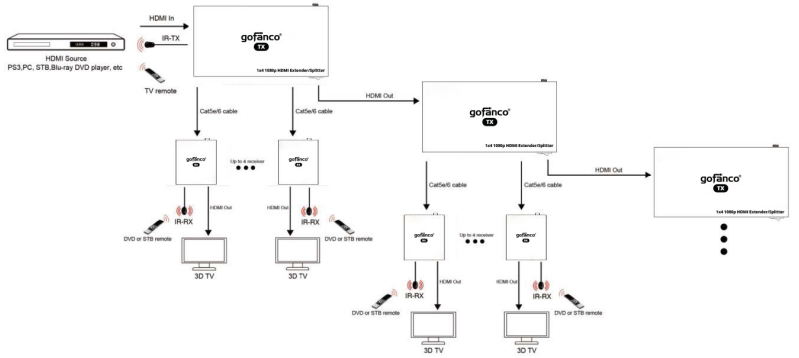
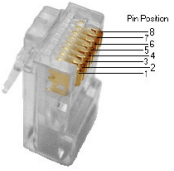


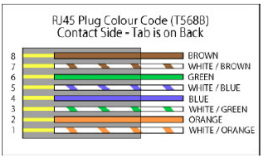
Figure 4: Application Diagram

CAT Cable Wiring

We suggest both RJ-45 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.

IR Control

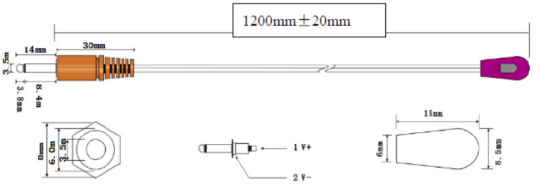
Provides one-way IR control of the connected devices. The Transmitter's IR Out connector will output the IR signals received from any of the CAT5e/6/7 Receivers, to allow control of a source from any of the remote CAT5e/6/7 Receivers.

Controlling the Source Device

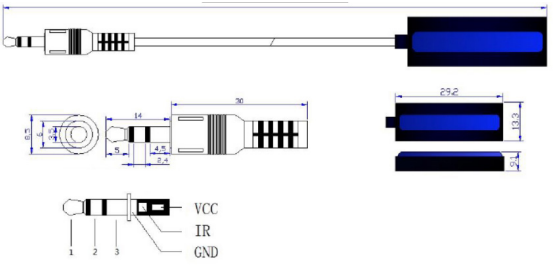
1. Connect an IR Blaster (IR-TX) cable to the IR Out port of the Transmitter.
2. Point the IR Blaster Cable's IR eye in line with the source device's IR window.
3. Connect an IR Receiver (IR-RX) cable to the IR In port on each CAT6/7 Receiver.

IR Pin Definition

IR-TX



IR-RX



FAQ & Troubleshooting

Q1: **Poor video quality or no video signal on display:**

A1: Check whether the HDMI cables are connected properly and are in good working condition.

A2: Make sure the resolution of the display is compatible with the splitter's resolution.

Q2: **Snowy or fuzzy screen on the displays:**

A1: Cause by damaged or low quality HDMI cables. Change to a higher quality HDMI cable. Make sure the cable length is less than or equal to 5 meters.

A2: Try another CAT cable and make sure the cable length is within the specified range.

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