

SIMPLIFIED
MFG

EXMICRO2i



User Manual

VER 1.1

Thank you for purchasing this product

The Simplified MFG EXMICRO2i is designed to provide years of reliable service. At Simplified MFG, we want the experience with this device to be the best possible and are committed to helping achieve that experience.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended to protect and extend the life of your equipment. A HDSURGE is highly recommended on cable and satellite boxes.

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1. Introduction

The EXMICRO2i can extend an HDMI2.0b (18Gbps) high-definition audio and video signal and two-way IR up to 50 meters (164 feet) between transmitter and receiver over a single Cat5e/6/7 cable. The EXMICRO2i supports resolutions up to 4K2K@60Hz 4:4:4, up to 18Gbps, and HDCP 2.2/1.4. In addition, the EXMICRO2i extender is equipped with two-way IR which allows for source and display control, EDID override settings, a HDMI loop output.

The EXMICRO2i extender is one of if not the most efficient HDMI extenders available today. The current draw is typically less than ¼ the normal current draw making this device more efficient and smaller.

2. Features

- HDMI 2.0b, HDCP 2.2 / HDCP 1.4 and DVI 1.0 compliant
- Supports input and output video resolution up to 4k2k@60Hz 4:4:4 up to 18Gbps
- Supports HDR/HDR+
- Distance up to 164ft/50m @ 4k or 1080p
- Compact size
- Two-way IR transmission HDMI loop output
- EDID override (copy display/ 1080p 2 ch./ 4K 2ch./ copy loop out
- Single power supply – can be powered from either the RX or TX

3. Package Contents

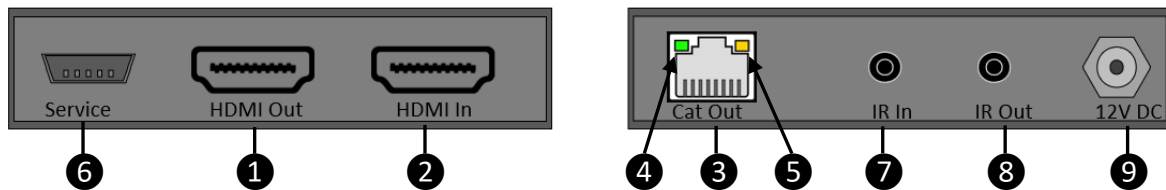
- 1× HDMI 18Gbps transmitter
- 1× HDMI 18Gbps receiver
- 1× IR Blaster (1.5m length)
- 1× 20~60KHz IR Receiver (1.5m length)
- 1× 12V/1A Locking Power supply
- 4× Mounting Ears
- 1× User Manual

4. Specifications

Technical		
HDMI Compliance	HDMI 2.0b	
HDCP Compliance	HDCP 2.2 / HDCP 1.4	
Video Bandwidth	18Gbps	
HDR Formats	HDR/HDR10+	
Video Resolution	Up to 4K60Hz 4:4:4	
Color Space	RGB / YCbCr 4:4:4, YCbCr 4:2:2/4:2:0, YUV 4:4:4	
Color Depth	8/10/12-bit (1080P60Hz, 4K30Hz, 4K60Hz YCbCr 4:2:2/4:2:0) 8-bit (4K60Hz 4:4:4)	
HDMI Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus (DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X	
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)	
Connections		
Transmitter	Inputs: 1x HDMI Type A [19-pin female] 1 x IR in [3.5mm Stereo mini jack] 1x SERVICE [Micro USB, Update port] Outputs: 1x HDMI Type A [19-pin female] 1x IR out [3.5mm Stereo mini jack] 1x CAT out [RJ45, 8-pin female]	
Receiver	Inputs: 1x IR in [3.5mm Stereo mini jack] 1x CAT in [RJ45, 8-pin female] 1x SERVICE [Micro USB, Update port] Outputs: 1x HDMI Type A [19-pin female] 1 x IR out [3.5mm Stereo mini jack]	
Mechanical		
Housing	Metal Enclosure	
Color	Black	
Dimensions	Transmitter / Receiver: 90mm/3.5" [W] x 68mm/2.625" [D] x 15mm/.75" [H]	
Weight	Transmitter: 160g, Receiver: 155g	
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 12V/1A	
Power Consumption	3.84 W	
Op. Temperature	32 - 104°F / 0 - 40°C	
Storage Temperature	-4 - 140°F / -20 - 60°C	
Relative Humidity	20 - 90% RH (no condensation)	
Distance	4K	1080p
CAT5e	147ft / 45M	147ft / 45M
CAT6/6a/7	164ft / 50M	164ft / 50M

5. Operation Controls and Functions

5.1 Transmitter Panel

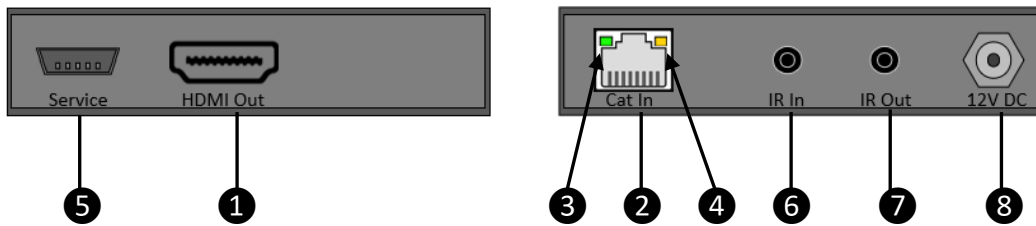


Number	Name	Function description
1	HDMI Out	HDMI loop output port, connect to HDMI display device such as TV or Projector with an HDMI cable.
2	HDMI In	HDMI input port, connect to HDMI source device such as Media server or other 4K source
3	CAT Out	Connect to CAT IN port on the receiving end with a CAT6 cable.
4	Power LED (Green)	The LED will illuminate when the transmitter is powered on.
5	Data signal LED (Orange)	The LED will illuminate when the transmitter and the receiver have signal transmission (link)
6	SERVICE port	For firmware updated use.
7	IR In	Connect to IR receiver (included). The IR signal is then sent to the IR Out to the IR Blaster at the receiver.
8	IR Out	Connect to wideband IR Blaster (included). The IR signal is from the IR IN port of the receiver.
9	DC 12V	Plug DC 12V/1A power supply into the unit and connect the adapter to an AC outlet. (Note: The EXMICRO2 can be powered from either the RX or the TX by 12V/1A power adapter, only one supply is needed)



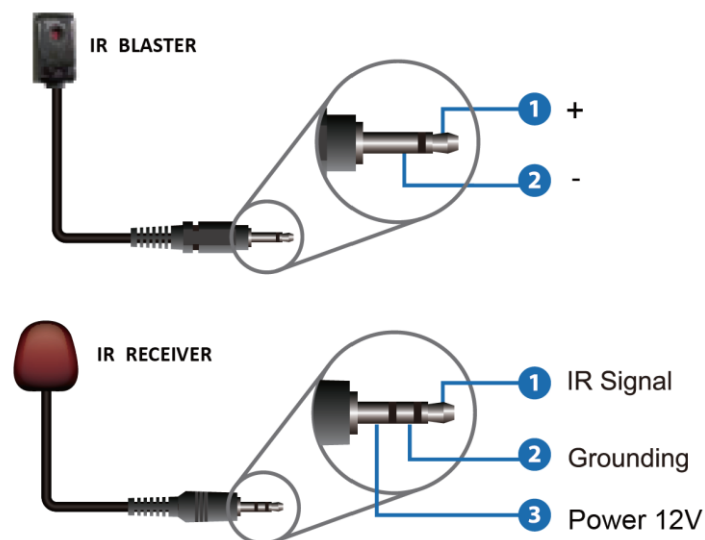
	EDID information is copied from the display at the RX
	EDID is preset to 4K @ 60Hz. Stereo
	EDID is preset to 1080p Stereo
	EDID is copied from the HDMI out at the TX

5.2 Receiver Panel

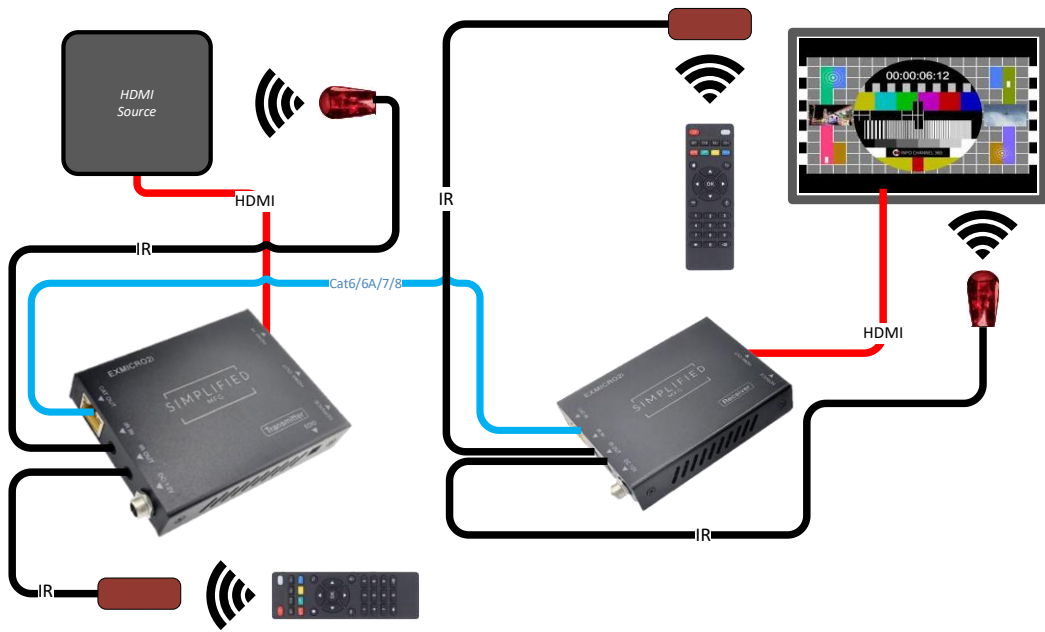


Number	Name	Function description
1	HDMI Out	HDMI output port, connect to HDMI display device such as TV or Projector with an HDMI cable.
2	CAT In	Connect to CAT Out port on the transmitter end with a CAT6 cable.
3	Power LED (Green)	The LED will illuminate when the receiver is powered on. Power can come from power supply or via category cable
4	Data signal LED (Orange)	The LED will illuminate when the transmitter and the receiver have signal transmission (link).
5	SERVICE port	For firmware update use.
6	IR In	Connect to wideband IR Receiver. The IR signal will be transmitted to the IR Out port of the transmitter.
7	IR Out	The IR from the TX IR In will be transmitted through the IR blaster connected here.
8	DC 12V	Plug DC 12V/1A power supply into the unit and connect the adapter to an AC outlet. (Note: The EXMICRO2i can be powered from either the RX or the TX by 12V/1A power adapter, only one supply is needed)

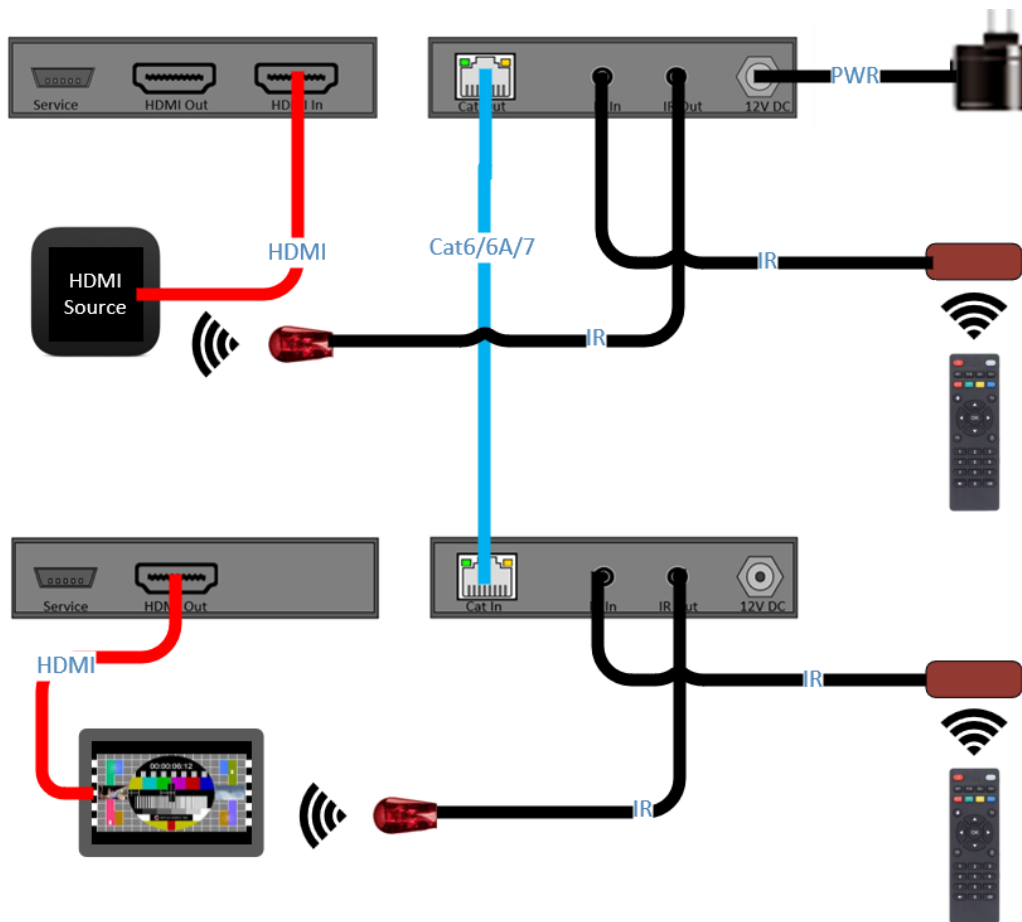
5.3 IR Pin Definition



IR Use Example:



6. Application Example



7. Warranty

Should you feel that this product does not function adequately due to defects in materials or workmanship, we (referred to as “the warrantor”) will, for the length of the period indicated below (starting from the original date of the purchase) either a) repair the product with new or refurbished parts. Or b) Replace the product with new or refurbished product. All Simplified MFG products are covered by a 3-year PARTS and LABOR warranty. During this period there will be no charge for unit repair, replacement of unit components or replacement of the product if deemed necessary. The decision to repair or replace is made by the warrantor. The purchaser must mail in the product during the warranty period. This limited warranty only covers the product purchased as new and is extended to the original purchaser only. It is non-transferrable to subsequent owners, even during the warranty period. A purchase receipt or other proof of purchase date is required for the limited warranty service.

8. Contact Information

Sales and Tech Support

P. 833-HDMI-411 (833-436-4411)

E. info@simplifiedmfg.com



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