



4K 1x2 HDMI Extender and Splitter

Model 103102



- ◆ Extend signal from an HDMI source to 2 remote displays simultaneously

HDMI®

User Manual

- Download the user manual at:
www.cablematters.com/dl/103102

support@cablematters.com

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1. INTRODUCTION

1.1 Introduction

Thank you for your purchase from Cable Matters® Inc., the 'Reliable Connectivity' company. This User Manual provides an overview of the features and installation of your new

4K 1x2 HDMI Extender and Splitter

Please read these instructions carefully before connecting, operating or configuring this product. Please keep this manual for future reference.

Contact support@cablematters.com for questions or product support.

1.2 Copyright and Trademarks

Cable Matters is a registered trademark or trademark of Cable Matters Inc. All rights reserved. All other trademarks are the property of their respective owners.

Dolby, Dolby Audio and the double-D symbol are trademarks of Dolby Laboratories. The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

1.3 FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device must not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

2. PRODUCT OVERVIEW

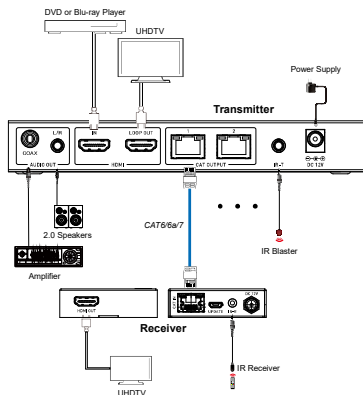
2.1 Package Contents

Please check that the following items are contained in the package:

- 1x 4K 1x2 HDMI Extender and Splitter Transmitter
- 2x 4K 1x2 HDMI Extender and Splitter Receiver
- 1x AC Locking Power Adapter
- 3x IR Cables (1xTx and 2xRx)
- 6x Mounting Brackets with Mounting Screws
- 2x HDMI® Cables—6 Feet
- 1x User Manual

2.2 Product Description

The Cable Matters **4K 1x2 HDMI Extender and Splitter** provides the ideal solution for connecting 2 remote displays with 4K@60Hz HDMI video and audio up to 115 feet simultaneously (up to 197 feet at 1080p 60Hz). Extend the signal from a computer, video streamer, Blu-ray player or Cable box to 2 remote displays with HDMI. Control the HDMI source at the far end with an IR Receiver. An optional local display can mirror the video sent to the remote displays.



2.3 Product Features

- Extend up to 2 displays from a single equipment source with 4K 60Hz video and audio up to 115 feet or 1080p HDMI video and audio up to 197 feet
- Support for a local display to mirror the output of the remote displays
- Use a Cat 6 cable instead of a long and heavy HDMI cable
- Supports 4K@60Hz 4:4:4 video resolution
- Supports HDR, HDR10+, HLG, Dolby Vision
- HDCP 2.2 support for viewing protected content
- Copy the local or remote display EDID info to the source HDMI device with a switch
- LPCM, Dolby TrueHD, and DTS HD-Master Audio support
- Rugged metal housing construction reduces EMI electromagnetic noise
- Screw-on locking power cords prevents an accidental disconnection of the power
- Surface-mountable with the included brackets and screws
- 2-Pack of HDMI Cables included

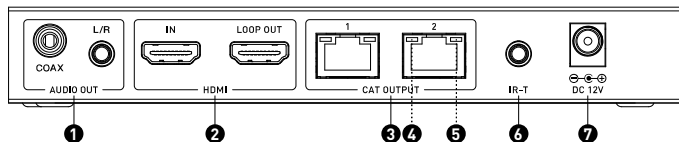
3. CONNECTION AND OPERATION

3.1 Installation Checklist

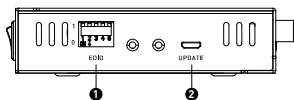
Please review this information before installing the **4K 1x2 HDMI Extender and Splitter**

- Installation with a surge protector is recommended to protect the equipment
- Power-off the source and display equipment before connecting
- Check for a nearby AC outlet for the power adapter
- Recommended maximum total HDMI cable distance In/Out is 25/25ft
- IR cables require line-of-sight with the source equipment
- Test the Extender and cables before installing in a permanent location
- Directly connect to a Cat 6 cable, do not use with an active hub, network switch or router

3.2 Transmitter Panel Connections

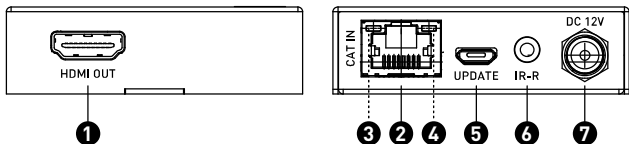


- 1. AUDIO OUT:** Connected to an amplifier or speaker
- 2. HDMI Ports:** IN: Connected to HDMI source LOOP OUT: Connected to a local HDMI display
- 3. CAT OUTPUT Ports:** Connect to the CAT IN port of the CAT receiver with a CAT cable
- 4. Link Signal Indicator (Green):** *Solid:* Transmitter and Receiver are connected
- 5. Data Signal Indicator (Orange):** *Solid:* HDMI signal with HDCP
Flashing: HDMI signal without HDCP *Dark:* No HDMI signal
- 6. IR-T:** Connect the IR Tx cable to transmit IR signal from the CAT receiver
- 7. DC 12V:** Plug the DC 12V power supply into the unit and connect the adapter to an AC outlet. (Note: The transmitter can power the receiver via a CAT cable)



- 1. EDID DIAL Switch:** Used to set EDID mode. Please refer to “EDID Management”
- 2. SERVICE Port:** Used for firmware update or serial port command control

3.3 Receiver Panel Connections



- 1. HDMI OUT:** Connect to the remote extended display with HDMI
- CAT IN:** RJ45 port for Cat 6 cable
- Power Indicator (Green):** When the receiver is on the power indicator will be on
- Data Signal Indicator (Orange):** *Solid:* HDMI signal with HDCP
Flashing: HDMI signal without HDCP *Dark:* No HDMI signal
- Service Port:** Used for firmware update
- IR-R:** 3.5mm port for IR Receiver
- DC 12V:** Plug the DC 12V power supply into the unit and connect the adapter to an AC outlet. (*Note: The receiver can be powered by the transmitter via a CAT cable*)

3.4 Connection Instructions

- Power off all the source equipment and output displays
- Connect the AC power adapter to the Transmitter and secure the locking ring
- Connect an HDMI cable to the HDMI IN port of the Transmitter and the HDMI out port of the host device. Connect HDMI cables to the HDMI OUT ports on the receivers and to remote displays. **OPTIONAL:** Connect an HDMI cable to the LOOP OUT port on the Transmitter and a local display.
- Connect the Cat 6 cable to the CAT 6 ports on the Transmitter and Receivers
- Connect the IR Transmitter and Receiver cables (See Page 6)
- Plug the Transmitter power adapter into an AC outlet and toggle the On/Off Switch to ON to turn on the Transmitter (look for a Green LED)
- Power on all the equipment and check for a video signal on the extended remote display
- Select an EDID Mode (See Page 5) if there is no video signal

Notes:

- Test all the equipment and cables before installing permanently
- Don't stack the Cat 6 cables together. Spread them out to get the best network performance

3.5 EDID Management

This 4K 1x2 HDMI Extender and Splitter can connect HDMI source equipment and output displays with different video resolutions and audio output settings. These settings can be individually programmed using the EDID management function.

EDID Position	EDID Description	EDID Position	EDID Description
11111	1080p, Stereo Audio 2.0	01111	4K60Hz 444, Dolby/DTS 5.1
11110	1080p, Dolby/DTS 5.1	01110	4K60Hz 444, HD Audio 7.1
11101	1080p, HD Audio 7.1	01101	4K60Hz 444, Stereo Audio 2.0 HDR
11100	1080i, Stereo Audio 2.0	01100	4K60Hz 444, Dolby/DTS 5.1 HDR
11011	1080i, Dolby/DTS 5.1	01011	4K60Hz 444, HD Audio 7.1 HDR
11010	1080i, HD Audio 7.1	01010	COPY FROM LOOP OUT
11001	1080p 3D, Stereo Audio 2.0	01001	COPY FROM CAT OUT1
11000	1080p 3D, Dolby/DTS 5.1	01000	COPY FROM CAT OUT2
10111	1080p 3D, HD Audio 7.1	00111	1080p, Stereo Audio 2.0
10110	4K30Hz 444, Stereo Audio 2.0	00110	1080p, Stereo Audio 2.0
10101	4K30Hz 444, Dolby/DTS 5.1	00101	1080p, Stereo Audio 2.0
10100	4K30Hz 444, HD Audio 7.1	00100	1080p, Stereo Audio 2.0
10011	4K60Hz 420, Stereo Audio 2.0	00011	1080p, Stereo Audio 2.0
10010	4K60Hz 420, Dolby/DTS 5.1	00010	1080p, Stereo Audio 2.0
10001	4K60Hz 420, HD Audio 7.1	00001	1080p, Stereo Audio 2.0
10000	4K60Hz 444, Stereo Audio 2.0	00000	PC control mode

EDID Selection Notes: Set the dip switches for the audio/video setting above. The Extender and Splitter should adjust to the new settings within a few seconds.

3.6 IR Remote Control



IR Transmitter (Blaster) Cable

IR Receiver Cable

IR Transmitter Cable: Connect to the IR-T port on the Transmitter box. Requires line-of-sight with the HDMI source equipment IR window. Tip: Shine a light on the source box to reveal the IR window, if it is not labeled. Source equipment should be within 5 feet of the IR-T bulb. (Check your HDMI source equipment documentation).

IR Receiver Cable: Connect to the IR-R port on the Receiver box. Requires line-of-sight with the IR remote.

Note: RF and Bluetooth remotes are not compatible.

3.7 Troubleshooting Notes

- Check that all connected equipment has power.
- Check that both the Transmitter and Receiver have power. The green power LED on the Transmitter and green LED of the Cat 6 port on the Receiver should be lit.
- Check the LEDs on the Receiver's Ethernet port. A green LED indicates the receiver is powered. An orange LED indicates data transfer.
- Check that all cables are connected to the correct input and output ports. Secure the power cable with the locking ring.
- Directly connect the HDMI source equipment to each display to test for compatibility.
- Test the Cat 6 cable with a network tester.
- Try different EDID settings, test with only 1 display (local and extended).
- Test with a different display for compatibility issues.
- Check that the correct video input source and output display is selected.
- Check the audio output settings from the source device or computer.
- Try a lower resolution and/or refresh rate.

- Test each HDMI cable by connecting it with other equipment.
- Recommended maximum total HDMI cable distance In/Out is 25/25ft.
- Connecting an HDMI cable with a coupler or wall plate may degrade the signal transmission.
- Place the Extender away from fluorescent lighting or equipment that generates electrical noise.
- A 'Not Supported' error message may indicate that the connected equipment does not support HDCP (or more than 2 outputs) for viewing content-protected video.
- Check that the IR window on the source equipment is not blocked. The IR cables require line-of-sight. Test at a closer range, some IR remotes transmit a weaker signal.
- Wait 10 seconds for a handshake signal when connecting a computer.
- Unplug and re-plug the HDMI cable.
- Reboot the video source and output displays.

Contact **support@cablematters.com** with any questions.

4. TECHNICAL SPECIFICATIONS Model 103102

Extender and Splitter Ports (Transmitter and Receiver)	
HDMI Input	1x HDMI Female
HDMI Output	3x HDMI Female
CAT Ports	RJ45 port for Cat 6 cable
IR Ports	1x IR out (Transmitter), 2x IR in (Receiver)
Service	1x Micro USB Female
Power Supply	DC 12V/1A with threaded ring
Audio/Video Compatibility	
HDMI Compatibility	HDMI 2.0b and below
HDCP Compatibility	HDCP 2.2
Video Resolution	4K@60Hz
Color Spaces	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8-bit, 10-bit, 12-bit (1080p@60Hz) 8-bit, 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:2 / 4:2:0) 8-bit (4K2K@60Hz YUV 4:4:4)
HDR	HDR10, HDR10+, HLG, Dolby Vision
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio
Extended Distance	115ft/35m at 4K@60Hz, 164ft/50m at 4K@30Hz 197ft/60m at 1080P@60Hz
Mechanical	
Transmitter Housing	(LxWxH) 6.89 x 3.95 x 0.98 Inches / 17.11 Ounces
Receiver Housing	(LxWxH) 3.46 x 2.4 x 0.71 Inches / 5.47 Ounces
Operating Temperature	32F - 104F
Miscellaneous	
Compliance	C E, FCC, RoHS, UKCA
Warranty	Limited One-Year

Note: Specifications are subject to change without notice

www.cablematters.com

5. WARRANTY AND SUPPORT

5.1 Customer Support and Contact Information

Cable Matters offers lifetime technical support as an integral part of our commitment to provide industry leading solutions.

Email us with any questions at support@cablematters.com.

5.2 Warranty Information

This product is backed by a limited one-year warranty. The warranty covers parts and labor costs only. Cable Matters does not warrant its products from defects or damages arising from misuse, abuse, or normal wear.

5.3 Limitation of Liability

In no event shall Cable Matters Inc. (including their officers, directors, employees or agents) be liable for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, loss of data, or any pecuniary loss, arising out of, or related to the use of this product exceeding the actual price paid for the product (as allowed by state law).

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Certified Premium HDMI®
Cable Model 300016



150' Snagless Cat 6 Patch Cable
Model 160001

150' Shielded Cat 6 Patch
Cable
Model 160012

