

## 1x2 HD Audio/Video Extender and Splitter

Model 103093



 Extend signal from an HDMI source to 2 remote displays simultaneously

# HDMI®

### **User Manual**

 Download the user manual at: <u>www.cablematters.com/dl/103093</u>

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

#### 1x2 HD Audio/Video 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

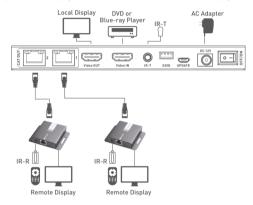
#### 2.1 Package Contents

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

- 1x 1x2 HD Audio/Video Extender and Splitter Transmitter
- 2x 1x2 HD Audio/Video Extender and Splitter Receiver
- 1x AC Power Adapter
- 3x IR Cables (1xTx and 2xRx)
- 2x Mounting Brackets with screws, Mounting Screws
- 2x HDMI® Cables—6 Feet
- 1x User Manual

#### 2.2 Product Description

The Cable Matters **1x2 HD Audio/Video Extender and Splitter** provides the ideal solution for connecting 2 remote displays with 4K HDMI video and audio up to 131 feet simultaneously (up to 230 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 30Hz video and audio up to 131 feet or 1080p HDMI video and audio up to 230 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@30Hz video resolution and YCbCr 4:4:4 8-bit color depth
- · HDCP 1.4 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



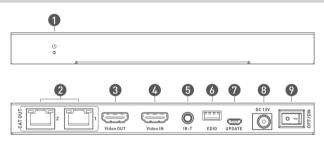
#### 3. CONNECTION AND OPERATION

#### 3.1 Installation Checklist

Please review this information before installing the 1x2 HD A/V 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

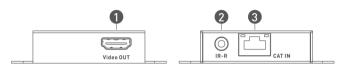
#### 3.2 Transmitter Panel Connections



- 1. POWER LED: Green when powered
- 2. CAT OUT1-OUT2: Two RJ45 ports for Cat 6 cable
- 3. Video OUT : Connect HDMI display to mirror the output of the remote displays
- 4. Video IN: Connect HDMI source equipment
- 5. IR-T: 3.5mm port for IR blaster cord
- 6. EDID: Dip switches to select output Video/Audio format (see page 5 EDID description)
- 7. UPDATE: Micro USB port for firmware update (if needed)
- 8. DC 12V: Threaded locking barrel port for power adapter
- 9. ON\OFF: Power ON\OFF Switch



#### 3.3 Receiver Panel Connections



- 1. Video OUT: Connect to the remote extended display with HDMI
- 2. IR-R: 3.5mm port for IR Receiver cord
- 3. CAT IN: RJ45 port for Cat 6 cable

#### 3.4 Connection Instructions

- 1. Power off all the source equipment and output displays
- 2. Connect the AC power adapter to the Transmitter and secure the locking ring
- Connect an HDMI cable to the VIDEO IN port of the Transmitter and the HDMI out port of the host device. Connect HDMI cables to the Video OUT ports on the receivers and to remote displays. OPTIONAL: Connect an HDMI cable to the VIDEO OUT port on the Transmitter and a local display.
- 4. Connect the Cat 6 cable to the CAT 6 port on the Transmitter and Receiver
- 5. Connect the IR Transmitter and Receiver cables (See Page 6)
- Plug the Transmitter power adapter into an AC outlet and depress the On/Off button to turn on the Transmitter (look for a Green LED)
- 7. Power on all the equipment and check for a video signal on the extended remote display
- 8. 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

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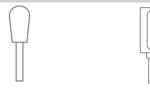
This 1x2 HD Audio/Video Extender and Splitter can connect HDMI source equipment and output displays with different video resolutions and audio output settings. These settings can be individually programmed using the EDID management function.

Number	EDID Position	EDID Description
1	0000	1080p, 2 Channel Audio
2	0001	1080p, DOLBY, DTS 5.1 AUDIO
3	0010	1080p, HD AUDIO
4	0011	1080i, 2 Channel Audio
5	0100	1080i, DOLBY, DTS 5.1 AUDIO
6	0101	1080i, HD AUDIO
7	0110	3D,1080p, 2 Channel Audio
8	0111	3D, 1080p,DOLBY, DTS 5.1 AUDIO
9	1000	3D,1080p, HD AUDIO
10	1001	4K 30Hz, 2 Channel Audio
11	1010	4K 30Hz, DOLBY DIGITAL/DTS 5.1 AUDIO
12	1011	4K 30Hz, HD Audio
13	1100	Copy Loop Out Resolution/Refresh Rate/Audio Settings
14	1101	720p, 2 Channel Audio
15	1110	720p, DOLBY, DTS5.1 AUDIO
16	1111	720p, HD AUDIO

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 have 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.

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- 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 103093

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 1.4b and below		
HDCP Compatibility	HDCP 1.4		
Video Resolution	Up to 4K@30Hz		
Color Spaces	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0		
Color Depth	8-bit, 10-bit, 12-bit (1080p), 8-bit (4K)		
HDMI Audio Formats	LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio		
Mechanical			
Transmitter Housing	(LxWxH) 6.9 x 3.2 x 0.7 Inches / 12.9 Ounces		
Receiver Housing	(LxWxH) 3.1 x 2.7 x 0.7 Inches / 4.6 Ounces		
Operating Temperature	32F - 104F		
Miscellaneous			
Regulatory Compliance	C E, FCC, RoHS, UKCA		
Warranty	Limited One-Year		

Note: Specifications are subject to change without notice

#### 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.

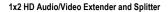
Email us with any questions at support@cablematters.com.

#### 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.





### View related products at www.cablematters.com

Certified Premium HDMI<sup>®</sup> Cable Model 300016





150' Snagless Cat 6 Patch Cable Model 160001

150' Shielded Cat 6 Patch Cable Model 160012

