



1x4 HD Audio/Video Extender and Splitter

Model 103089



- ◆ Extend signal from an HDMI source to 4 remote displays simultaneously

User Manual

- Download the user manual at:
www.cablematters.com/dl/103089

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

1x4 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

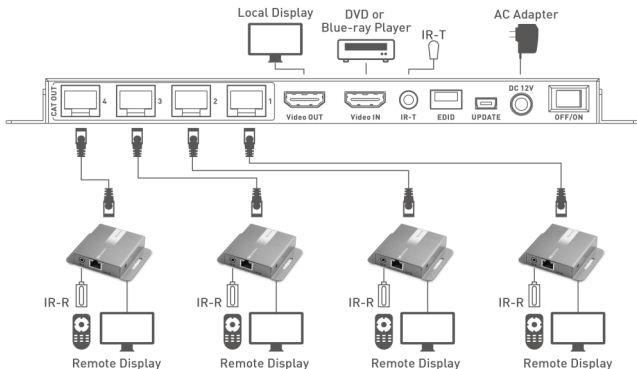
2.1 Package Contents

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

- 1x 1x4 HD Audio/Video Extender and Splitter Transmitter
- 4x 1x4 HD Audio/Video Extender and Splitter Receiver
- 1x AC Power Adapter
- 5x IR Cables (1xTx and 4xRx)
- 2x Mounting Brackets with screws, 20 Mounting Screws
- 2x HDMI® Cables
- 1x User Manual

2.2 Product Description

The Cable Matters **1x4 HD Audio/Video Extender and Splitter** provides the ideal solution for connecting 4 remote displays with 1080P HDMI video and audio up to 164 feet simultaneously. Extend the signal from a computer, video streamer, Blu-ray player or Cable box to 4 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 4 displays from a single equipment source with 1080P HDMI video and audio up to 164 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 1080P@60Hz video resolution and YCbCr 4:4:4 color depth
- HDCP 1.2 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 High Speed HDMI Cables included

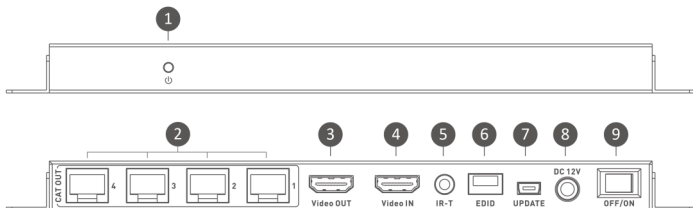
3. CONNECTION AND OPERATION

3.1 Installation Checklist

Please review this information before installing the **1x4 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:** White when powered
2. **CAT OUT1-OUT4:** Four RJ45 ports for Cat 6 cable
3. **Video OUT :** Connect HDMI display 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:** Mini 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. **EQ:** Adjust the distance of Transmitter and Receiver (see page 6 **EQ setting**)
2. **Video OUT:** Connect to the remote extended display with HDMI
3. **IR-R:** 3.5mm port for IR Receiver cord
4. **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 adapters to the Transmitter and secure the locking ring
3. Connect the HDMI cables to the Video IN, Video OUT (optional) on the Transmitter, and Video OUT on the Receiver
4. Connect the Cat 6 cable to the CAT 6 port on the Transmitter and Receiver
5. Connect the IR Transmitter and Receiver cables (Page 6)
6. Plug the Transmitter power adapters into an AC outlet and depress the On/Off button to turn on the Transmitter (look for a White LED)
7. Power on all the equipment and check for a video signal on the extended remote display
8. Select an EDID Mode (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 and Spread them out to get the best network performance

3.5 EDID Management









This 1x4 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	 Same audio/video setting as Transmitter's Video out
11	1010	 720p, 2 Channel Audio
12	1011	 720p, DOLBY, DTS 5.1 AUDIO
13	1100	 720p, HD AUDIO
14	1101	 3D,720p, 2 Channel Audio
15	1110	 3D,720p, DOLBY, DTS 5.1 AUDIO
16	1111	 3D,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 EQ Settings

This 1x4 HD Audio/Video Extender and Splitter can connect 4 remote displays up to 164 feet simultaneously through Cat 6 Cable. These settings can be individually programmed using the EQ Settings.

EQ Position	CAT 6 Cable Length
 0  1	Shorter than 15m (49.5ft)
 2  3	15-30m (49.5 ft - 99ft)
 4  5	30-40m (99ft - 132ft)
 6  7	40-50m(132ft - 164ft)

3.7 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.

3.8 Troubleshooting Notes

- Check that all connected equipment have power.
- Check that both the Transmitter and Receiver have power. The white power LED on the Transmitter and green LED of the Cat 6 port on the Receiver should be lit.
- 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).
- Adjust the EQs setting to allow longer distance between Transmitter and Receiver.
- 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.
- 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.
- Plug and re-plug the HDMI cable.
- Reboot the video source and output displays.

Contact support@cablematters.com with any questions.

4. TECHNICAL SPECIFICATIONS Model 103089

Extender and Splitter Ports (Transmitter and Receiver)	
HDMI Input	1x HDMI Female
HDMI Output	5x HDMI Female
CAT Ports	RJ45 port for Cat 6 cable
IR Ports	1x IR out (Transmitter), 4x IR in (Receiver)
Service	1xMini USB Female
Power Supply	DC 12V/2.5A with threaded ring
Audio/Video Compatibility	
HDMI Compatibility	HDMI 1.3 and below
HDCP Compatibility	HDCP 1.2
Video Resolution	Up to 1080p@60Hz
Color Spaces	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDMI Audio Formats	LPCM 7.1CH, Dolby True HD, and DTS-HD Master Audio
Mechanical	
Transmitter Housing	(LxWxH) 8.3 x 3.3 x 0.7 Inches / 14.6 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
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® Cable
Model 300016



150' Snagless Cat 6 Patch Cable
Model 160001

150' Shielded Cat 6 Patch Cable
Model 160012

