

Black Box VX-HDMI-HDIP-TX

Black Box MediaCento IPX HDMI-Over-IP HD Extender Transmitter User Manual

Model: VX-HDMI-HDIP-TX

1. INTRODUCTION

The Black Box MediaCento IPX HDMI-Over-IP HD Extender Transmitter is designed to extend HDMI video signals over a Gigabit Ethernet network. This device allows for the distribution of high-definition video (up to 1080p) from a single source to multiple displays over an IP network, offering flexibility for digital signage and other video distribution applications. It is intercompatible with MediaCento 4K systems, enabling versatile integration within existing setups.

2. PRODUCT FEATURES

- Supports video resolutions up to 1080p HD.
- Enables setup and configuration directly from the front panel interface, eliminating the need for additional software.
- Interoperable with MediaCento 4K receivers for mixed resolution deployments.
- Facilitates "any source to any screen" video distribution over an IP network.
- Extends HDMI video signals efficiently over a standard Gigabit Ethernet network.

3. PHYSICAL DESCRIPTION AND COMPONENTS

3.1 Front Panel



Figure 1: Front panel view of the MediaCento IPX HD Extender Transmitter. This view shows the Power, Link, B1, B2 indicators, and the Video Channel selector dial.

- **Power LED (Green):** Indicates the unit is powered on.
- **Link LED (Amber):** Indicates network link activity.
- **B1/B2 LEDs:** Reserved for future use or specific system diagnostics.
- **Video Channel Selector Dial:** A rotary switch (0-F) used to set the video channel for the transmitter. This must match the channel set on the receiver for proper operation.

3.2 Rear Panel



Figure 2: Rear panel view of the MediaCento IPX HD Extender Transmitter. This view displays the LAN port (with PoE support), HDMI In port, and DC 5V-3A power input.

- **LAN Port (RJ-45, with PoE):** Connects to your Gigabit Ethernet network switch. Supports Power over Ethernet (PoE) for power delivery.
- **HDMI In Port:** Connects to the HDMI output of your video source (e.g., computer, media player).
- **DC 5V-3A Power Input:** Connects to the included 5V DC power adapter if PoE is not used or available.

4. SETUP INSTRUCTIONS

1. **Power Off Devices:** Ensure all devices (video source, display, network switch) are powered off before making connections.
2. **Connect Video Source:** Connect an HDMI cable from your video source's HDMI output to the **HDMI In** port on the MediaCento IPX Transmitter.
3. **Connect to Network:** Connect an Ethernet cable from the **LAN** port on the transmitter to a Gigabit Ethernet switch. If your switch supports PoE, the unit will power on automatically.
4. **Apply Power (if no PoE):** If your network switch does not provide PoE, connect the included 5V DC power adapter to the **DC 5V-3A** input on the transmitter and plug it into a power outlet.
5. **Set Video Channel:** Use a small screwdriver or similar tool to set the **Video Channel Selector Dial** on the front panel to the desired channel (0-F). This channel must match the channel set on the corresponding MediaCento IPX Receiver.
6. **Power On Devices:** Power on your video source, network switch, and then the display connected to the receiver.

For optimal performance, ensure your network infrastructure is capable of handling Gigabit Ethernet speeds and is properly configured for IP video distribution.

5. OPERATING INSTRUCTIONS

Once the MediaCento IPX Transmitter is properly set up and connected, operation is largely automatic. The unit will begin transmitting the HDMI signal over the network.

- **Power Indicator:** The green Power LED on the front panel should be illuminated, indicating the unit is

receiving power.

- **Link Indicator:** The amber Link LED should be illuminated or blinking, indicating an active network connection and data transmission.
- **Video Channel Matching:** Ensure the Video Channel selector on the transmitter matches the setting on the receiver to establish a correct video link.
- **Source Detection:** The transmitter automatically detects the HDMI input signal from your source.

6. MAINTENANCE

The MediaCento IPX Transmitter requires minimal maintenance to ensure long-term reliable operation.

- **Cleaning:** Periodically wipe the unit with a soft, dry cloth. Do not use liquid or aerosol cleaners.
- **Ventilation:** Ensure the unit has adequate ventilation and is not placed in an enclosed space that could lead to overheating.
- **Environmental Conditions:** Operate the device within its specified temperature and humidity ranges. Avoid extreme temperatures, direct sunlight, and high moisture environments.

7. TROUBLESHOOTING

If you encounter issues with your MediaCento IPX Transmitter, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No video output on display.	No power to transmitter. Incorrect video channel setting. Loose HDMI or Ethernet cable. Network issue. Source device not outputting signal.	Check Power LED. Ensure power adapter is connected or PoE is active. Verify the Video Channel dial on the transmitter matches the receiver. Ensure all cables are securely connected. Check network switch and cabling. Confirm network connectivity. Verify the video source is powered on and outputting a signal. Try a different HDMI cable or source.
Intermittent video or poor quality.	Network bandwidth issues. Cable quality. Interference.	Ensure your network has sufficient bandwidth for video streaming. Avoid network congestion. Use high-quality HDMI and Ethernet cables. Ensure units are not near strong electromagnetic interference sources.
Link LED is off.	No network connection. Faulty Ethernet cable.	Check the Ethernet cable connection to the network switch. Try a different Ethernet cable. Verify the network switch port is active.

8. SPECIFICATIONS

Feature	Detail
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Feature	Detail
Model Number	VX-HDMI-HDIP-TX
Supported Resolution	Up to 1080p HD
Connectivity	HDMI In, RJ-45 LAN (PoE)
Power Input	DC 5V-3A or Power over Ethernet (PoE)
Dimensions (L x W x H)	Approximately 12.5 x 9.75 x 3.75 inches (Package Dimensions)
Weight	2.2 pounds
Manufacturer	Black Box
First Available Date	January 24, 2019

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Black Box website or contact their customer service directly. Keep your purchase receipt for warranty claims.

Black Box Customer Support: www.blackbox.com/en-us/support