DATA SHEET

VX-HDMI-4KIP-TX, VX-HDMI-4KIP-RX, VX-HDMI-HDIP-TX, VX-HDMI-HDIP-RX, VSW-MC-CTRL

MEDIACENTO IPX AV OVER IP EXTENSION

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM
INTRODUCTION

The MediaCento™ IPX HD extends HDMI over IP via CATx cable. The transmitters and receivers support multicasting to allow one transmitter to broadcast video to multiple receivers simultaneously. They can be connected in a unicast, multicast, or video wall setup to support a wide variety of applications using the same system. A built-in Web UI is included for convenient operation.

The MediaCento IPX 4K extends HDMI, USB, Audio, RS-232 and IR over IP via CATx or fiber optic cable. The extender consists of two units: one transmitter and one receiver.

NOTE: You can link the 4K transmitter and receiver together via one CATx cable or one pair of fiber optic cables, but not both types of cable at the same time.

The MediaCento IPX Controller provides full control over the IP based MediaCento IPX transmitters and receivers. It turns the system into an IP-based matrix switch and video wall controller. A Web interface enables users to switch from any source to any display, create presets, and combine multiple receivers into a video wall. Users can control and switch the receivers or entire video wall zones remotely. The system's mobile support enables users to easily access and activate presets from a cell phone or tablet device.

And because the system is IP-based, it does not have any port limits and can potentially support hundreds of devices and video walls up to 8 x 8 (64 screens).

FEATURES

- USES ONE UTP/STP CATx CABLE OR ONE PAIR OF FIBEROPTIC SINGLE-MODE OR MULTIMODE CABLES BETWEEN EACH TRANSMITTER/RECEIVER LINK
- USES A VISUALLY LOSSLESS COMPRESSION ALGORITHM
- HD OR 4K MODEL EXTENDS HDMI DIGITAL VIDEO/AUDIO UP TO 330 FEET (100 METERS) BETWEEN TRANSMITTER AND RECEIVER (POINT-TO-POINT) USING CATx CABLE OR (4K MODEL ONLY) UP TO 6.2 MILES (10 KILOMETERS) BETWEEN TRANSMITTER AND RECEIVER OVER SINGLE-MODE FIBEROPTIC CABLE USING A STANDARD GIGABIT SFP (SMALL FORM-FACTOR PLUGGABLE) MODULE
- 4K UNITS SUPPORT USB, SERIAL, IR, AND ANALOG AUDIO
- SUPPORTS EDID COPY OR PASSTHROUGH FOR THE BEST COMPATIBILITY WITH A WIDE VARIETY OF DISPLAYS
- HDCP 2.2 COMPLIANT
- POWERED VIA POE TO ELIMINATE ADDITIONAL POWER SUPPLIES
- LOCKING HDMI CONNECTIONS COMPATIBLE WITH BLACK BOX LOCKING HDMI CABLES TO PREVENT CABLES FROM BEING DISCONNECTED
- COMPATIBLE SFPS INCLUDE BLACK BOX PART NUMBERS LFP411, LFP412, LFP413, LFP414, AND LFP418. ALSO SUPPORTS MOST GIGABIT FIBER SFP MODULES
- 4K MODEL SUPPORTS RESOLUTIONS UP TO ULTRA HD VIDEO 4096 X 2160 @ 30 HZ AND 1920 X 1200 @ 60 HZ
- HD MODEL SUPPORTS RESOLUTIONS UP TO FULL HD 1080P VIDEO
- ALLOWS VIDEO TO BE REPEATED OR DISTRIBUTED IN A POINT-TO-POINT OR A MATRIX APPLICATION THROUGH A GIGABIT ETHERNET SWITCH
- MAPS DIFFERENT TRANSMITTER SOURCES TO CHANNELS AND ALLOWS EACH RECEIVER TO BE ASSIGNED TO A CORRESPONDING VIDEO CHANNEL
- CONTROLLER PROVIDES AN INTUITIVE USER INTERFACE
- CONTROLLER INCLUDES WEB APP AND MOBILE SUPPORT
- CONTROLLER ENABLES YOU TO CONTROL VIDEO WALLS UP TO 8 X 8 (64 SCREENS)
- CONTROLLER PROVIDES TWO ETHERNET INTERFACES FOR CONTROL FROM SECONDARY NETWORK
- CONTROLLER ENABLES MATRIX SWITCHING AND FULL VIDEO WALL CONTROL TO YOUR EXISTING MEDIACENTO NETWORK

COMPARISON CHART

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<th>SPECIFICATION COMPARISON CHART</th>
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<th>VX-HDMI-HDIP-TX, -RX</th>
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<td>HDMI</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>USB</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>AUDIO</td>
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<td>NO</td>
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<tr>
<td>RS-232</td>
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<td>NO</td>
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<tr>
<td>IR</td>
<td>YES</td>
<td>NO</td>
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<tr>
<td>LOCAL VIDEO OUT</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>4K</td>
<td>YES</td>
<td>NO</td>
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<tr>
<td>HD</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>VIDEO WALL</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>WEB INTERFACE</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>CABLE</td>
<td>CATX OR FIBER</td>
<td>CATX</td>
</tr>
</tbody>
</table>
**SPECIFICATIONS**

**MEDIACENTO IPX 4K (VX-HDMI-4KIP-TX, VX-HDMI-4KIP-RX)**

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**WHAT’S INCLUDED WITH THE TRANSMITTER**

- (1) MEDIACENTO IPX 4K TRANSMITTER
- (1) 5-VDC, 3-A POWER SUPPLY
- (1) IR BLASTER CABLE
- (1) USB 2.0 CABLE
- (1) AUDIO/MIC CABLE
- (1) QUICK START GUIDE

**WHAT’S INCLUDED WITH THE RECEIVER**

- (1) MEDIACENTO IPX 4K RECEIVER
- (1) 5-VDC, 3-A POWER SUPPLY
- (1) IR RECEIVER CABLE
- (1) IR REMOTE CONTROL
- (1) QUICK START GUIDE

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**MEDIACENTO IPX 4K (VX-HDMI-4KIP-TX, VX-HDMI-4KIP-RX)**

**CONNECTORS**

| Transmitter: | Video Input: (1) locking HDMI female; |
| | Video Output: (1) locking HDMI female; |
| | Serial Port (RS-232): (1) DB9 female; |
| | Ethernet Network Port: RJ-45 Ethernet; |
| | Fiber Port: Gigabit SFP; |
| | USB interface: (1) USB Type B female; |
| | Audio: (2) 3.5-mm jacks for 2-way analog audio, (1) Line IN, (1) Line OUT; |
| | IR: (2) 3.5-mm; |
| Receiver: Console Connection: | Video Output: (1) locking HDMI female; |
| | Serial Port (RS-232): (1) DB9 male; |
| | Ethernet Network Port: RJ-45 Ethernet; |
| | Fiber Port: Gigabit SFP; |
| | USB interface: (4) USB Type A; |
| | Audio: (2) 3.5-mm jacks for 2-way analog audio: (1) Mic IN, (1) Line OUT; |
| | IR: (2) 3.5-mm |

**AUDIO SUPPORT**

Transmitter and Receiver: Supports high-definition audio (HD) 5.1/6.1/7.1 surround sound; Dolby TrueHD, DTS-HD Master Audio; LPCM channels up to 7.1 channels 192 kHz

4K units also support bi-directional analog audio

**USER CONTROLS**

Hardware Switches: Set/Reset Pushbutton;
Function Selection: Pushbutton;
Video Channel: Pushbutton (CH+/CH-);
Infrared Remote: Bidirectional, through 20 to 60 kHz, two-way passthrough

**INDICATORS**

Transmitter: Status LEDs: Power (blue), Link (blue);
Function Selection LEDs: EDID Copy (blue), SFP Status (blue), Video Profile Selection (Video or graphic mode) (blue);
Receiver: Status LEDs: Power (blue), Link (blue);
Function Selection LEDs: EDID Update (blue), SFP Status (blue), Video Profile Selection (Video or graphic mode) (blue)
USB Link (upstream): blue

**DDC SUPPORTED**

DDC, DDC2, DDC2B

**EXTENSION CABLE TYPE AND LENGTH**

Ethernet, CAT5e/6 up to 328 ft. (100 m);
Fiberoptic (SFP module), multimode or single-mode, up to 30 km

**MAX. VIDEO RESOLUTION**

4096 x 2160 @ 30 Hz, 1920 x 1200 @ 60 Hz

**ENVIRONMENTAL**

Operating Temperature: 32 to 122°F (0 to 50°C);
Storage Temperature: -4 to +140°F (-20 to +60°C);
Operating Humidity: 80%, noncondensing

**DIMENSIONS**

Each unit: 1.25”H x 3.58”W x 7.34”D (3.2 x 9.8 x 18 cm)

**WEIGHT**

TX Unit: 1.034 lb. (470 g); RX Unit: 1.036 lb. (471 g)

**HOUSING MATERIAL**

Metal chassis
SPECIFICATIONS

MEDIACENTO IPX HD (VX-HDMI-HDIP-TX, VX-HDMI-HDIP-RX)

WHAT’S INCLUDED WITH THE TRANSMITTER
- (1) MEDIACENTO IPX HD TRANSMITTER
- (1) 5-VDC, 3-A POWER SUPPLY
- (1) QUICK START GUIDE

WHAT’S INCLUDED WITH THE RECEIVER
- (1) MEDIACENTO IPX HD RECEIVER
- (1) 5-VDC, 3-A POWER SUPPLY
- (1) QUICK START GUIDE

MEDIACENTO IPX HD (VX-HDMI-HDIP-TX, VX-HDMI-HDIP-RX)

CONNECTORS
- Transmitter: Video Input: (1) locking HDMI female; Ethernet Network Port: RJ-45 Ethernet;
- Receiver: Video Output: (1) locking HDMI female; Ethernet Network Port: RJ-45 Ethernet

AUDIO SUPPORT
- Transmitter and Receiver: Supports high-definition audio (HD) 5.1/6.1/7.1 surround sound; Dolby TrueHD, DTS-HD Master Audio; LPCM channels up to 7.1 channels 192 kHz

USER CONTROLS
- Hardware Switches: Set/Reset Pushbutton;
- Function Selection: Pushbutton;
- Rotary switch: Select from 16 Video Channels (HEX 0–F), Paired TX and RX units must use the same channel

INDICATORS
- Transmitter: Status LEDs: Power (blue), Link (blue);
- Function Selection LEDs: EDID Update (blue), Video Profile Selection (Video or graphic mode) (blue);
- Receiver: Status LEDs: Power (blue), Link (blue);
- Function Selection LEDs: EDID Update (blue), Video Profile Selection (Video or graphic mode) (blue)

DDC SUPPORTED
- DDC, DDC2, DDC2B

EXTENSION CABLE TYPE AND LENGTH
- Ethernet, CAT5e/6 up to 328 ft. (100 m)

MAXIMUM VIDEO RESOLUTION
- 1080p

ENVIRONMENTAL
- Operating Temperature: 32 to 122° F (0 to 50° C);
- Storage Temperature: -4 to +140° F (-20 to +60° C);
- Operating Humidity: 80%, noncondensing

DIMENSIONS
- Each unit: 1.25"H x 3.86"W x 7.09"D (3.2 x 9.8 x 18 cm)

WEIGHT
- Each unit: 1.04 lb. (470 g)

HOUSING MATERIAL
- Metal chassis
## MEDIACENTO IPX CONTROLLER (VSW-MC-CTRL)

### APPROVALS
FCC, TUV, UL, CE, CSA, RoHS2, WEEE

### ETHERNET
Network Controller: (2) RJ-45 (10/100/1000 Mbps)

### CONNECTORS
- (1) HDMI,
- (1) VGA,
- (2) RJ-45,
- (2) USB 2.0,
- (1) DB9 RS-232 console port

### INDICATORS
- (1) Power LED, (2) Network Connection LEDs

### DEFAULT SETTINGS
username: admin
password: BBNSMediaCento

### ENVIRONMENTAL
Operating Temperature: 32 to 140° F (0 to 60° C);
Operating Humidity: 5–95%, noncondensing

### POWER
Input: 100–240 VAC, 50/60 Hz, 0.5 A,
Output: 12 V, 1.5 A

### DIMENSIONS
1.23”H x 6.13”W x 5.13”D (3.12 x 15.57 x 13.03 cm)

### WEIGHT
1.1 lb. (0.5 kg)

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**WHAT’S INCLUDED WITH THE CONTROLLER**

- (1) MEDIACENTO IPX CONTROLLER
- (1) POWER SUPPLY WITH POWER CORD
- (1) QUICK START GUIDE
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Black Box is a world leading technology solutions provider specializing in complete high-performance KVM, professional A/V signal distribution and extension and switching solutions for mission-critical applications. Black Box is dedicated to delivering superior project engineering, technical support, and 24/7 customer service you can rely on for your most critical operations.

Every day, our customers trust us to design, integrate, and maintain reliable control room solutions for broadcasting, post-production, stadiums & arenas, medical, air traffic control, oil & gas, government & military, and utility industries. Leave the tech to us and our comprehensive technology solutions will deliver secure connections, fast-response times, real-time collaboration and more.

ORDERING INFORMATION

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<td>MediaCento IPX HD</td>
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<td>Locking HDMI Cables</td>
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<tr>
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<td>VCL-HDMIL-00xM</td>
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<tr>
<td>Locking HDMI male to non-locking HDMI male</td>
<td>VCL-HDMIS-00xM</td>
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<tr>
<td>Locking HDMI male to DVI male</td>
<td>VCL-HDMIDVI-00xM</td>
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NOTE: Locking HDMI cables come in 1, 2, 3 and 5 meter lengths.