MediaCento IPX 4K

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

NOTE: You can link the transmitter and receiver together via one CATx cable or one single-mode fiberoptic cable, but not both types of cable at the same time.

Multicasting supports multiple transmitters (TX) and receivers (RX) that can be arranged in a crosspoint matrix architecture.

The extender supports 7.1 CH audio, 3D video, and USB 2.0/1.1.
You can use the built-in web user interface (UI) for configuration and operation.

Basic Features
- Uses one UTP/STP CATx cable OR one single-mode fiberoptic cable between each transmitter/receiver link
- Supports a visually lossless compression algorithm
- Extends HDMI Digital Audio/Video up to 330 feet (100 meters) between Transmitter and Receiver (point-to-point) using CATx cable or up to 6.2 miles (10 kilometers) between Transmitter and Receiver over single-mode fiberoptic cable using a standard SFP (Small Form-factor Pluggable) module.
- Compatible SFPs include Black Box part numbers LFP411, LFP412, LFP413, LFP414, and LFP418. Also should support most gigabit fiber SFP modules
- Supports Ultra HD video 4096 x 2160 @ 30 Hz and 1920 x 1200 @ 60 Hz (reduced blanking)
- Supports all 3D image formats
- Provides repeating/distributing/matrix extension through a Gigabit Ethernet Switch with a transceiver installed that is compatible with both Transmitter and Receiver units

(continued on page 2)
Basic Features (continued)

- Compatible with USB 2.0 devices at data rates up to 480 Mbps and backward with USB 1.1. The transmitter uses one USB Type B host interface and the receiver uses four USB Type A device interfaces.
- Can map different transmitter sources or create a grouping loop for each receiver that corresponds to a video channel
- Wall-mount housing design with rack mountable bracket enables easy and robust installation
- Audio supports 7.1CH LPCM, DTS, Dolby, analog LINE-IN/LINE-OUT
- Supports Interlaced and Progressive Display Modes
- Provides DDC/DDC2B, Hot-Plug Detection (HPD) and complies with HDCP standards
- Supports Default EDID and EDID copy function for optimal PC-to-Screen performance
- Uses a bidirectional Infrared Remote (IR) signal and RS-232 control communication (Transmitter and Receiver)
- Transmitter has a 4K HDMI local loopback output
- Uses a 7-segment LED display for video channel indication
- Includes IR remote control for video channel setting
- Operates as a PoE powered device (PD) using IEEE 802.3at PoE+

Advanced Features

- Web UI shows the linking connection status for all Transmitter (TX) and Receiver (RX) units
- Switches TX-RX connections via web UI, pushbuttons, IR remote control or keyboard hotkey
- Can upgrade firmware via web UI
- Visualizes video wall configuration
- Transmitter (TX) unit monitors HDMI-in and synchronizes HDMI-out
- If a firmware update fails, the MediaCento IPX 4K recovers redundant Flash ROM
- Two-digit LED display indicates current transmitting and receiving channel
- Supports 99 selectable channels to transmit or receive
### TABLE 1. SPECIFICATIONS

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>
| **Connectors** | Video Output: (2) HDMI female  
Serial Control Port (RS-232): (1) DB9 female  
Video Input: (1) HDMI female  
Network Port: RJ-45 Ethernet  
Fiber Port: SFP Ethernet  
USB interface: (1) USB Type B female  
Audio: (2) 3.5-mm jacks for 2-way analog audio, (1) Line IN, (1) Line OUT |
| **Transmitter** | Console Connection:  
Video Output: (1) HDMI female  
Serial Control Port (RS-232): (1) DB9 male  
Network Port: RJ-45 Ethernet  
Fiber Port: SFP Ethernet  
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 |
| **Receiver** | 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** | 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** | 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) |
### TABLE 1 (CONTINUED). SPECIFICATIONS

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additonal Specs</td>
<td>DDC, DDC2, DDC2B</td>
</tr>
<tr>
<td>Extension Cable Type and Length</td>
<td>Ethernet, CAT5e/6 up to 328 ft. (100 m)</td>
</tr>
<tr>
<td></td>
<td>Fiberoptic (SFP module), single-mode, up to 30 km</td>
</tr>
<tr>
<td>Maximum Video Resolution</td>
<td>4K/2K</td>
</tr>
<tr>
<td>Power</td>
<td>(1) 5-VDC, 3-A power supply</td>
</tr>
<tr>
<td>Power over Ethernet (PoE)</td>
<td>Complies with IEEE 802.3at standard, Class 4,</td>
</tr>
<tr>
<td></td>
<td>Power: Normal input: 48 VDC; Input Range: 36 to 57 VDC;</td>
</tr>
<tr>
<td></td>
<td>Consumption: 10.5 W, CAT6, 328 ft. (100 m)</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>32 to 122° F (0 to 50° C)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-4 to +140° F (-20 to +60° C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>0 to 80% relative humidity</td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>1.25&quot;H x 3.58&quot;W x 7.34&quot;D (3.2 x 9.8 x 18 cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>Transmitter: 1.034 lb. (470 g)</td>
</tr>
<tr>
<td></td>
<td>Receiver: 1.036 lb. (471 g)</td>
</tr>
<tr>
<td>Housing Material</td>
<td>Metal Chassis</td>
</tr>
</tbody>
</table>

### TABLE 2. COMPATIBLE SFPS

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>LFP411</td>
<td>SFP, 1250-Mbps Fiber with Extended Diagnostics, 850-nm Multimode, 550 m LC</td>
</tr>
<tr>
<td>LFP412</td>
<td>SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Multimode, 2 km LC</td>
</tr>
<tr>
<td>LFP413</td>
<td>SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, 10 km LC</td>
</tr>
<tr>
<td>LFP414</td>
<td>SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, 30 km LC</td>
</tr>
<tr>
<td>LFP418</td>
<td>SFP, 1250-Mbps Fiber with Extended Diagnostics, 1550-nm Single-Mode, 80 km LC</td>
</tr>
</tbody>
</table>

NOTE: Also should support most gigabit fiber SFP modules
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