

Product Data Sheet

MediaCentro IPX 4K



OVERVIEW

The MediaCentro IPX 4K extends HDMI, USB, Audio, RS-232, and IR over IP via CATx, or single-mode or multimode 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 pair of fiberoptic cables, but not both types of cable at the same time.

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

The extender supports 7.1 CH audio, 3D video, USB 2.0/1.1, serial and IR.

You can use the built-in web user interface (UI) for configuration and operation.

BASIC FEATURES

- ◆ Uses one UTP/STP CATx cable OR one pair of fiberoptic single-mode or multimode cables between each transmitter/receiver link
- ◆ Supports a visually lossless compression algorithm
- ◆ Extends HDMI digital video/audio 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 supports 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

- ◆ 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
- ◆ 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

SPECIFICATION	DESCRIPTION
Connectors	
Transmitter	Video Input: (1) HDMI female Video Output: (1) HDMI female Serial Port (RS-232): (1) DB9 female Ethernet 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 IR: (2) 3.5-mm
Receiver	Console Connection: Video Output: (1) HDMI female Serial Port (RS-232): (1) DB9 male Ethernet 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
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 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)

TABLE 1 (CONTINUED). SPECIFICATIONS

SPECIFICATION	DESCRIPTION
Additional Specs	
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
Maximum Video Resolution	3840 x 2160 (4096 x 2160) @ 30 Hz or 1920 x 1080 (1920 x 1200) @ 60 Hz
Power	
Power Supply	(1) 5-VDC, 3-A power supply
Power over Ethernet (PoE)	Complies with IEEE 802.3at standard, Class 4; Power: Normal input: 48 VDC; Input Range: 36 to 57 VDC; Consumption: 10.5 W, CAT6, 328 ft. (100 m)
Environmental	
Operating Temperature	32 to 122° F (0 to 50° C)
Storage Temperature	-4 to +140° F (-20 to +60° C)
Humidity	0 to 80% relative humidity
Mechanical	
Dimensions	1.25"H x 3.58"W x 7.34"D (3.2 x 9.8 x 18 cm)
Weight	Transmitter: 1.034 lb. (470 g) Receiver: 1.036 lb. (471 g)
Housing Material	Metal Chassis

TABLE 2. COMPATIBLE SFPS

PART NUMBER	DESCRIPTION
LFP411	SFP, 1250-Mbps Fiber with Extended Diagnostics, 850-nm Multimode, 550 m LC
LFP412	SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Multimode, 2 km LC
LFP413	SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, 10 km LC
LFP414	SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, 30 km LC
LFP418	SFP, 1250-Mbps Fiber with Extended Diagnostics, 1550-nm Single-Mode, 80 km, LC

NOTE: Also should support most gigabit fiber SFP modules

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