## 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





## **OVERVIEW**

#### MEDIACENTO IPX AV OVER IP EXTENSION DATA SHEET

#### INTRODUCTION

The MediaCento<sup>™</sup> 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 fiberoptic 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 fiberoptic 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**

SPECIFICATION COMPARISON CHART					
	VX-HDMI-4KIP-TX, -RX	VX-HDMI-HDIP-TX, -RX			
НДМІ	YES	YES			
USB	YES	NO			
AUDIO	YES	NO			
RS-232	YES	NO			
IR	YES	NO			
LOCAL VIDEO OUT	YES	NO			
4К	YES	NO			
HD	YES	YES			
VIDEO WALL	YES	YES			
WEB INTERFACE	YES	YES			
CABLE	CATX OR FIBER	CATX			



## SPECIFICATIONS

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

FRONT VIEW	BACK VIEW	FRONT VIEW	BACK VIEW
	transitive dK		SFP LAX The second sec
VX-HDMI-4KIP-TX	VX-HDMI-4KIP-TX	VX-HDMI-4KIP-RX	VX-HDMI-4KIP-RX
WHAT'S INCLUDED	WITH THE TRANSMITTER	WHAT'S INCLUDED WITH	THE RECEIVER
(1) MEDIACENTO IPX 4K TR	ANSMITTER	• (1) MEDIACENTO IPX 4K RECEIVER	
<ul> <li>(1) 5-VDC, 3-A POWER SUPF</li> </ul>	PLY	<ul> <li>(1) 5-VDC, 3-A POWER SUPPLY</li> </ul>	
(1) IR BLASTER CABLE		(1) IR RECEIVER CABLE     (1) IR REMOTE CONTROL	
<ul> <li>(1) USB 2.0 CABLE</li> <li>(1) AUDIO/MIC CABLE</li> </ul>		<ul> <li>(1) IR REMOTE CONTROL</li> <li>(1) QUICK START GUIDE</li> </ul>	
(1) QUICK START GUIDE		(),	
MEDIACENTO IPX 4K (VX	-HDMI-4KIP-TX, VX-HDMI-4KIP-RX)		
	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 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 audia 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		

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## **SPECIFICATIONS**

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



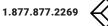
#### WHAT'S INCLUDED WITH THE TRANSMITTER

- (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 (V	X-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



## **SPECIFICATIONS**

#### MEDIACENTO IPX CONTROLLER (VSW-MC-CTRL)



#### WHAT'S INCLUDED WITH THE CONTROLLER

- (1) MEDIACENTO IPX CONTROLLER
- (1) POWER SUPPLY WITH POWER CORD
- (1) QUICK START GUIDE

MEDIACENTO IPX COM	NTROLLER (VSW-MC-CTRL)
APPROVALS	FCC, TUV, UL, CE, CSA, RoHS2, WEEE
ETHERNET	Network Controller: (2) RJ-45 (10/100/1000 Mbps)
CONNECTORS	<ul> <li>(1) HDMI,</li> <li>(1) VGA,</li> <li>(2) RJ-45,</li> <li>(2) USB 2.0,</li> <li>(1) DB9 RS-232 console port</li> </ul>
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)

## **ORDERING INFORMATION**

ITEM	CODE	
MediaCento Extenders and Controller		
MediaCento IPX 4K		
Transmitter	VX-HDMI-4KIP-TX	
Receiver	VX-HDMI-4KIP-RX	
MediaCento IPX HD		
Transmitter	VX-HDMI-HDIP-TX	
Receiver	VX-HDMI-HDIP-RX	
MediaCento IPX Controller	VSW-MC-CTRL	
Locking HDMI Cables		
Locking HDMI male, both sides	VCL-HDMIL-00xM	
Locking HDMI male to non-locking HDMI male	VCL-HDMIS-00xM	
Locking HDMI male to DVI male	VCL-HDMIDVI-00xM	
NOTE: Locking HDMI cables come in 1, 2, 3 and 5 meter lengths.		

#### DISCLAIMER

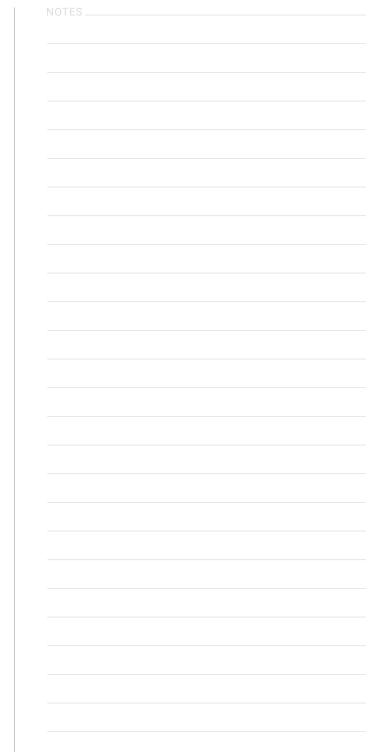
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Every day, our customers trust us to design, integrate, and maintain reliable control room solutions for broadcasting, post-production, stadiums & arenas, medical, air traffic control, oil & gas, government & military, and utility industries. Leave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

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