4K HDMI over IP Multiviewer

4KIP200M



User Manual

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Introduction

Overview

This device is a 4K Multiview processor with the ability to scale and present up to four 4K@30Hz video sources simultaneously on a single screen. It is used in conjunction with encoders for flexible AV distribution over a Gigabit network. It is ideal for applications in which Multiview presentation and 4K@60Hz video processing are required, including video conferencing, auditoriums, and other live presentation venues.

Features

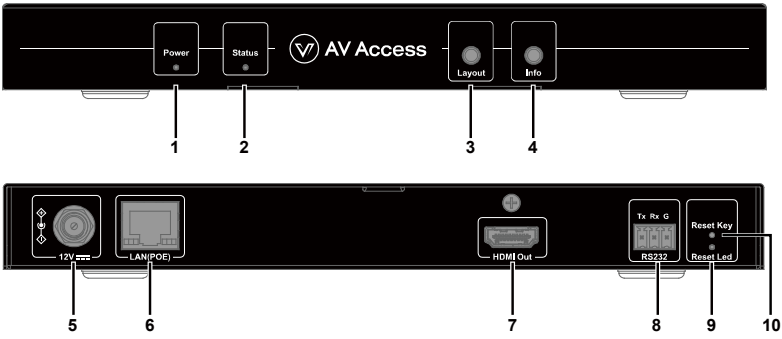
- Decodes and displays up to four 4K@30Hz video streams simultaneously on a single screen.
- Provides up to four display layouts for Multiview presentation.
- Supports HDMI output resolutions up to 4K@60Hz 4:4:4 8bit.
- Works easily with an Ethernet switch, no configuration is required.
- Supports CEC control on the connected display.
- Supports bidirectional serial communication for control of the connected RS232 device.
- Supports simple and intuitive control through the VDirector app on a tablet/cellphone/PC.

Package Contents

Before you start the installation of the product, please check the package contents:

- Multiviewer x 1
- Power Adapter (DC12V 1A) x 1
- 3.5mm 3-Pin Phoenix Male Connector x 1
- Mounting Brackets x 4
- Screws (M3*L5) x 4
- User Manual x 1

Panel



No.	Name	Description
1	Power LED	• On: The device is powered on. • Off: The device is powered off.
2	Status LED	• On: The device is connected to the network and receiving IP stream. • Blinking: The device is connected to the network but doesn't receive any IP stream. • Off: The device is not connected to the network. / The device is booting.
3	Layout	Press the button to switch among "1-1", "2-1", "3-1" and "4-1" layouts. For more information, refer to "*Multiview Layout Introduction*" section.
4	Info	Press the button to show the information of the device (including the device's IP address, MAC address and the connected encoder's MAC address) on the connected display.
5	12V	DC 12V power input port. Connect this port to the DC 12V power adapter provided.
6	LAN (POE)	Connect to a network switch for IP stream input and control of the device. **Note:** • This device can be powered either by a PoE-enabled Ethernet switch or by a power adapter. • Powered by the power adapter has priority over that by PoE. When the device is connected to both a power adapter and the PoE-enabled Ethernet switch, it receives power from the power adapter instead of the switch.
7	HDMI Out	Connect to an HDMI display.
8	RS232	Connect to an RS232 device for bidirectional serial communication.

No.	Name	Description
9	Reset LED	The Reset Key is used to reset the device. Use a pointed stylus to press and hold this key for more than five seconds until the Reset LED lights up, then release this key, the device reboots and restores to its factory defaults.
10	Reset Key	

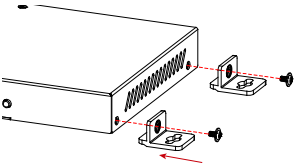
Installation and Application

Note: Disconnect all devices from power before installation.

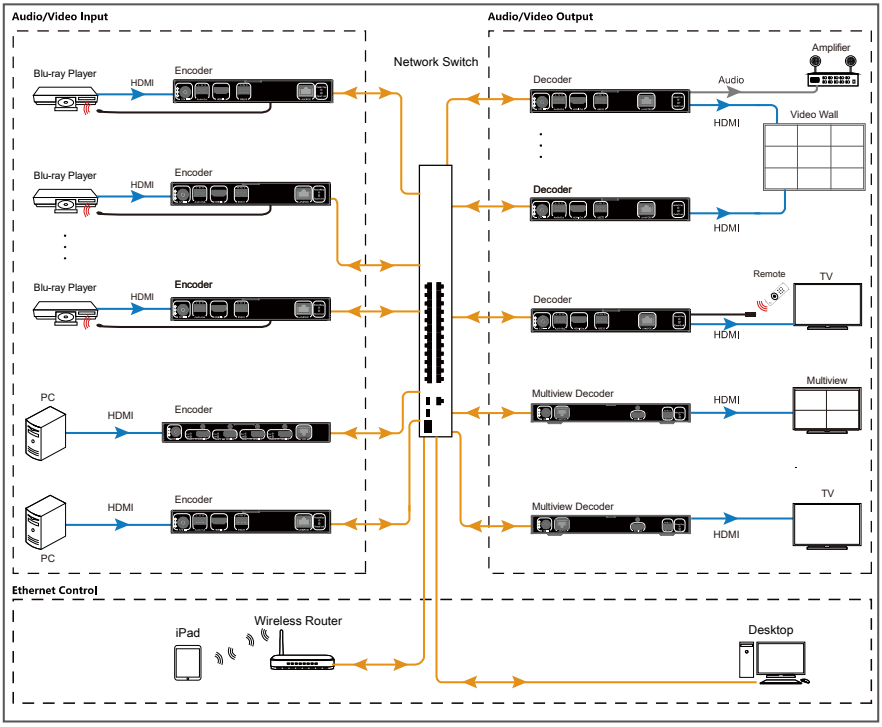
Bracket Installation

The device can be installed on a flat surface or a rack. To install the device on a surface, perform the following:

1. Attach the brackets to the panels of both sides using the screws (two on each side) provided.
2. Install the brackets onto the position as desired using screws (not included in the package).



Typical Application

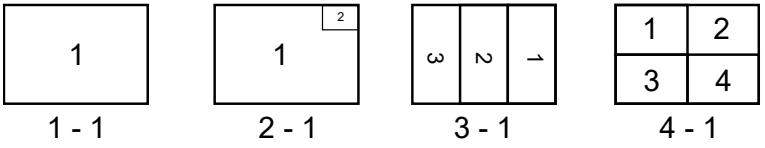


Note:

- The 4KIP200M can work with 4KIP200 series devices together to build an A/V distribution system.
- The VDirector App (Android/IOS/Windows Version) provides intuitive and simple control on the encoders and decoders.

Multiview Layout Introduction

The Multiview decoder allows one audio channel and up to four video channels to be played on one single screen simultaneously in the form of the following four layouts:



1. "1 – 1": Single view layout.
2. "2 – 1": Picture-in-Picture layout. In this layout, the decoder plays the audio of the HDMI source 1, and the image of the HDMI source 2 takes up one-sixteenth of the entire screen's size.
3. "3 - 1": Portrait triple view layout, in which each video source rotates 90 degrees clockwise. Before applying this layout, you shall flip your monitor 90 degrees counterclockwise from landscape to portrait so that all video sources present in the normal orientation. In this layout, the decoder plays the audio of the HDMI source 1.
4. "4 - 1": Quad view layout, in which the decoder plays the audio of the HDMI source 1.

Layout Switching Modes

Two modes are provided to switch the Multiview decoder to a certain screen layout: Auto and Manual. Default switching mode is **Auto**.

In Auto mode, the decoder automatically selects a layout according to the online encoders' quantity in the system it detects; the encoder with the smallest MAC address has the highest priority to link with the decoder. For example, if there are four or above online 4KIP200 encoders, four of which linked to the decoder successfully will be selected and displayed in the "4-1" layout; when it detects only three encoders are online, it will automatically switch to the "3-1" layout and output the three video sources.

The decoder supports two methods to enter Manual mode: through the front

panel Layout button or the VDirector App. You can simply press the Layout button to cycle through “1 - 1”, “2 - 1”, “3 - 1” and “4 - 1” layouts, or select a desired layout directly on the VDirector App.

Note: The decoder cannot fall back to Auto mode once you configure the screen layout through the Layout button or VDirector App. To return it to Auto mode, reset the decoder to factory defaults.

Specifications

Video	
Input Port	1 x LAN
Input Resolutions	up to 3840x2160p@30Hz
Output Port	1 x HDMI
Output Video Type	HDMI 2.0, HDCP 2.2
Output Resolutions	up to 3840x2160p@60Hz

Audio	
Input Port	1 x LAN
Output Port	1 x HDMI
Audio Format	LPCM Stereo

Control	
Control Method	Front panel button, VDirector App (IOS/Android/Windows Version)

General	
Operating Temperature	32°F ~ 113°F (0°C ~ 45°C), 10% ~ 90%, non-condensing
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C), 10% ~ 90%, non-condensing
Power Supply	DC12V 1A | PoE
Power Consumption	5.3W (Max)
ESD Protection	Human body model: ±8kV (air-gap discharge)/±4kV (contact discharge)
Dimensions (W x H x D)	220mm x 25mm x 130.2mm/ 8.66" x 0.98" x 5.13"
Net Weight	0.76kg/1.67lbs

Warranty

Products are backed by a limited 1-year parts and labor warranty. For the following cases AV Access shall charge for the service(s) claimed for the product if the product is still remediable and the warranty card becomes unenforceable or inapplicable.

1. The original serial number (specified by AV Access) labeled on the product has been removed, erased, replaced, defaced or is illegible.
2. The warranty has expired.
3. The defects are caused by the fact that the product is repaired, dismantled or altered by anyone that is not from an AV Access authorized service partner. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.
4. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.
5. The service, configuration and gifts promised by salesman only but not covered by normal contract.
6. AV Access preserves the right for interpretation of these cases above and to make changes to them at any time without notice.

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