

Control Your Video

VIDEO WALLS VIDEO PROCESSORS VIDEO MATRIX SWITCHES EXTENDERS SPLITTERS WIRELESS CABLES & ACCESSORIES

HDMI H.264 IP MATRIX AUDIO DECODER OVER CAT/X WITH POE SUPPORT



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Product Application & Market Sectors



Corporate



House Of Worship



Military



Residential



Education



Industrial



Medical



Aviation



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SECTION I: GETTING STARTED

I.I IMPORTANT SAFE GUARDS

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
- Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
- Repair or attempted repair by anyone not authorized by us.
- Any damage of the product due to shipment.
- Removal or installation of the product.
- External causes to the product, such as electric power fluctuation or failure.
- u se of supplies or parts not meeting our specifications.
- Normal wear and tear.
- Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

I.2 SAFETY INSTRUCTIONS

The Avenview AUD-C6MWIP-R, HDMI H.264 IP Matrix Audio Decoder has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the AUD-C6MWIP-R should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

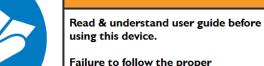
- ⚠️ Do not dismantle the housing or modify the module.
- ▲ Dismantling the housing or modifying the module may result in electrical shock or burn.
- A Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- 🔥 keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- 🔥 Have the module checked by a qualified service engineer before using it again.
- 🔥 Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

I.3 REGULATORY NOTICES FEDERAL COMMUNICATIONS COMMISSION (FCC)

This equipment has been tested and found to comply with part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to	this equipment may void the user	's authority to operate this equipment.
--------------------------------------	----------------------------------	---

Warning symbols	Description
	ONIY USE THE PROVIDED POWER CABLE OR POWER ADAPTER SUPPLIED. DO NOT TAMPER WITH THE ELECTRICAI PARTS. THIS MAY RESULT IN EI ECTRICAL SHOCK OR BURN.
\bigcirc	DO NOT TAMPER WITH THE UNIT. DOING SO WIII VOID THE WARRANTY AND CONTINUED USE OF THE PRODUCT
BEWARE this unit contains static sensitive devices	THE VIDEO BOARDS ARE VERY SENSITIVE TO STATIC. PLEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A SURFACE, IT SHOULD BE IN A GROUNDED ENVIROMENT.



Failure to follow the proper installation instructions could result in damage to the product and preventing expected results.

2. INTRODUCTION

The Avenview AUD-C6MWIP-R, H.264 IP Matrix Audio Decoder delivers end-to-end balanced analog audio over IP networks. The AUD-C6MWIP-R is composed of a single decoder which utilizes the media stream from the compatible HDM-C6MWIP-S. receives the encoded IP signal through the device Ethernet port or LAN port of the connected network switch and decodes audio signal out through phoenix connector interface. Both units can also support RS-232 data transfer and stereo deembeding.

FEATURES:

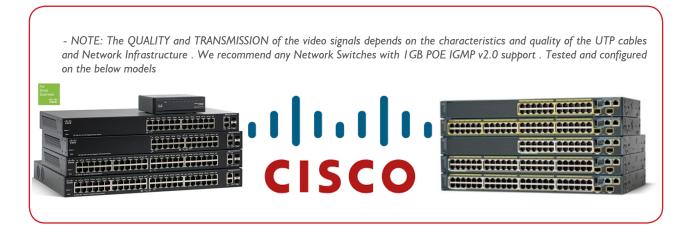
- Flexible PC,WEB GUI iPad control;
- Supports POE;
- Supports IP audio streaming;
- Accepts One Streaming Media Input;
- Supports balanced analog audio out;
- Supports H.264, TCP/IP, Telnet, UDP and IGMP;
- Support Telnet, WEB GUI control and 3rd Party control sytems API commands;
- Supports Auto IP, DHCP and Static IP
- Seamless switching via PC Control Software
- Support RS232 communication to any RS232 device for control;

Other features include:

Point to Point - (Direct Connection with CAT5/6) - 330ft

Point to Multi - point with CAT5/6 requires a POE Network Switch which supports port based, IGMP v2.0 or above protocol. For large application, we would recommend Cisco SG family and the Cisco Catalyst.

Matrix Function – with CAT 5/6 cable without any signal loss add multiple Sources to multiple encoders which links via LAN by cascading any POE Gigabit Ethernet switches up to 3 levels, to the decoder connected to the HD Monitors at different locations on the Network. Transporting full HD 1080p video and internally H.264 video compression adapts to available network bandwidth if needed while retaining vivid picture with PCM audio.





2.1 PACKAGE CONTENTS

Before you start the installation of the HDMI Extender, please check the package contents.

I	AUD-C6MWIP-R X2	
2	Power Adapter (+ 12V DC 1A) + International Adapters X2	
3	I x Right and Left Ear Rack Sets X2	
5	Phoenix Connector x1 5-PIN x1 6-PIN	
6	User Guide X I	

2.2 BEFORE INSTALLATION

- put the product in a level and stable location. If the product falls, it may cause damage or malfunction to components within the casing.
- Do not place the product in temperatures under 0°C or over 50°C. High humidity may also cause the unit to malfunction.
- u se the DC power adapter with correct specifications supplied with the unit. If the improper power supply is used, this may result in malfunction of the unit and may cause fire.
- Do not twist or pull by force the ends of the UTP cable. It will cause malfunction.

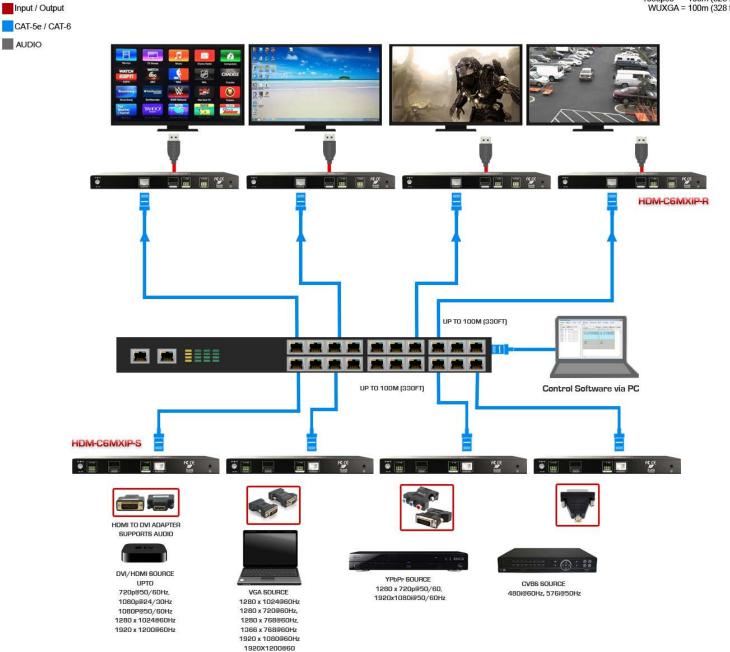


HDM-C6MXIP-SET

CABLE INDEX

Application Diagram 2

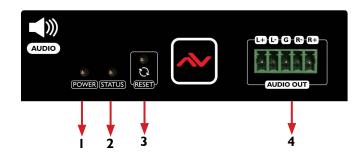
MULTI SOURCE TO MULTI DISPLAY 1080p60 = 100m (328 feet) CAT6 WUXGA = 100m (328 feet) CAT6





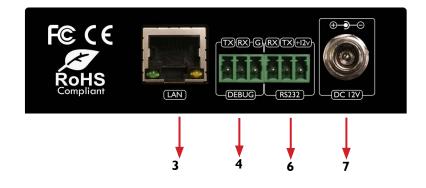
2.4 PANEL DESCRIPTION

2.4.1 FRONT PANEL (Decoder, AUD-C6MWIP-R)



- I. Power LED: Indicates if the unit is powered OFF or ON by a RED LED
- 2. Status LED: Steady Blue Light ON indicates unit is communicating properly. LED blinking waiting on Source
- 3. Reset Button: If held for 5 sec or more, this will reset the unit to factory default settings.(All user settings erased)
- 4. Audio OUT: 5 Pin Phoenix connector for balanced Audio out from the designated TX unit(Source).

2.4.2 REAR PANEL (Decoder, AUD-C6MWIP-R)



- I. LAN: Connects to the Network Switch port to receive the audio stream from TX. POE enabled feature.
- 2. Debug: Connect 3 Pin Phoenix connector to a PC for troubleshooting purpose-TX,RX,GND.
- 3. RS-232: Connect 3 Pin Phoenix connector to a RS232 device for control (2-way)- GND,RX,TX.
- 4. Power + 12V/DC 12V: Power adapter supplied to power unit, POE supported by LAN port with POE switches
- The +12V on the phoenix connect will only supply 12V 500mA to power other devices with P Adapter connected.



3. INSTALLATION (AUD-C6MWIP-R) POINT to POINT

To setup Avenview AUD-C6MWIP-R please follow these steps for connecting this device:

- I. Turn off all devices including monitors / TV.
- 2. Connect an HDMI source (such as a Blu-Ray Disc player or PC) to the Encoder HDM-C6MWIP-S.
- 3. Connect CAT5/6 from Encoder to Decoder at the LAN port.
- 4. Connect an 5 wire GND R+ R from the phoenix connector AUD-C6MWIP-R decoder to an Amplifer with speakers for audio from the connected TX (Source).
- 6. Ensure all cable connections are secure and not loose.
- 7. Plug in 12V DC power (supplied) and connect the HDM-C6MWIP-S and AUD-C6MWIP-R to power receptacle.
- 8. Please use the M-series PC Console to pair the units (Drag the TX and RX onto a Screen and then click 'Apply'.

NOTE: For network setup please see the Network switch configuration guide and Network Connection guide to acheive best results.

3.1 NETWORK TOPOLGY

3.1.1 IP Matrix Switch Guide

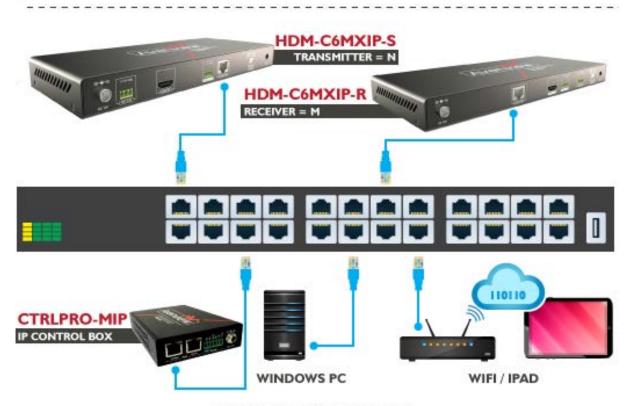
TX and RX	TX and RX Guide		Networking Switch Guide
Distribution Status	Total Quantity	Network Topology	Recommended Switches
Centralized	Less than or equal to 20 TX/RX	Single Switch	Cisco SG 300 24-port 1000 Mbps Ethernet Switch HUAWEI 24-port 1000 Mbps Ethernet Switch
	Less than or equal to 40 TX/RX	Networking	Cisco SG300 /500 48-port 1000 Mbps Ethernet Switch HUAWEI 48-port 1000 Mbps Ethernet Switch
	More than 40 TX/RX	Cascading	Cisco switch SG Series or Catalyst:
Distributed	No requirement	Switch Networking	Core switches uses 1000 Mbps Ethernet switches. Extended switches use 1000 Mbps Ethernet switches



3.2 SINGLE SWITCH NETWORKING GUIDE

24-Port Single Switch Networking

N + M (No more than 20)



Deployed by the field requirement

The illustration above is an example of how the user can connect using a 24 port network switch. The following brands are recommended and was tested resulting in stable working conditions.

I. Cisco brand

24-port 100Mbps Ethernet switch: WS-C2960-24TC-L

24-port 1000Mbps Ethernet switch: SG300-28

24-port 1000Mbps PoE Ethernet switch: SG300-28P, WS-C2960S-24PS-L, WS-C2960X-24PSQ-L

2. HUAWEI Brand

24-port 100Mbps Ethernet switch: S2700-26TP-EI-AC

24-port 1000Mbps PoE Ethernet switch: S5700-28P-PWR-LI-AC



3.3 NETWORKING GUIDE

Avenview M-Series HDMI over IP units can be networked together with a recommended Layer 2 Gigabit Smart Switches. As mentioned previously in section 3 the importance of calculation for the capacity of the switch meets the requirements of the number of encoders/decoders you have on your network. These units can perform well over a standard network infrastructure, however the quality of this infrastructure is critical. We have tested many brands of switches all of which perform well in small system configurations of around 10 Encoders and Decoders. However, for larger installations, Avenview highly recommends using CISCO SG300/500 or CATALYST series switches.

3.3.1 Simple Setup Guide for Network switch

M-series should be connected to a Layer 2 managed switch which supports Multicast & IGMP snooping.

Do not connect any units to the switch until all the network switch configuration has been. For recommended switches and PDF configuration guides please see the 'downloads' section of any M-series device at avenview.com.

3.3.2 POE Requirements

It is not necessary to change the IP addresses of the encoders and decoders units – factory default AutoIP is used to configure correct IP addresses to simply work out of the box.

DHCP addresses are not recommended, while Static addresses are for supervised setups and network strict environments.

Failure to note the IP settings of any unit changed may result in a complicated reset procedure.

Most M-Series installations use the POE (Power Over Ethernet) function to power the encoder & decoders units.

HDM-C6MWIP & AUD-C6MWIP devices are Class 0 rated POE devices, they can require up to 15.4W of power each, but tested their

actual power draw is between 5-7W. In order to calculate the number of devices that is recommended on a network switch please

divide the total POE power capacity of the switch by 15.4.

Please see the example:

CISCO SG300-52P with a POE power output of 375W: 375 / 15.4 = 24.35. From the answer 24 devices can be powered by this switch.

In order to have all ports powered by POE on a network switch, please see the example:

SG300-52MP which provides 740W. 740 / 15.4 = 48. From the answer 48 devices can be powered by this switch.

3.3.3 Data Bandwidth

Each HDM-C6MWIP-S encoder will produce up to 50 Mb/s of data > therefore 10 x encoders will require 10 x 50 Mb/s = 0.5 Gbps.



4. PC CONFIGURATOR

You can connect multiple HDM-C6MWIP-S and the HDM-C6MWIP-R, AUD-C6MWIP-R H.264 decoder to build a modular IP video and audio matrix. With the PC configurator, you can configure and manage this function. For more information, see the user guide of PC configurator.

Minimum System Requirements PC Software

Operating System: Microsoft® Windows® XP, Windows® Vista, Windows® 7 or Windows® 8 CPU: 1.5 GHz Memory: 1 GB of RAM HDD: 32 GB of available hard disk space Network: 10/100 NIC

4. I Setting a Static IP on Your Computer

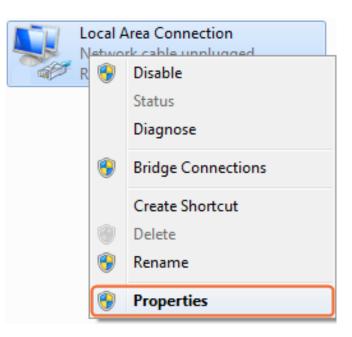
Before using the Avenview PC Configurator, please ensure you download the most recent version from the product HDM-C6MWIP-S Sender and AUD-C6MWIP-R Receiver website link /downloads PC control software .

All devices must be in the same network segment. To verify and properly control the devices, please set a static IP on your computer. See the instructions below if not sure on how to proceed:

The Sender and Receiver units are pre-configured with AutoIP. Upon connecting the units to a stand alone network switch (without router attached), the units will be on IP address range at 169.254.1.1 and subnet mask 255.255.0.0. Set your computer's IP address as 169.254.X.X and subnet mask as 255.255.0.0.

A Windows 7 PC/Laptop is used as an example to configure a static IP address.

- I. Click Start.
- 2. Choose Control Panel > Network and Internet > Network and Sharing Center > Change Adapter Settings, right click Local Area Connection, and then choose Properties.





3. Double-click Internet Protocol Version 4 (TCP/IPv4).

Local Area Connection Properties	×		
Networking Sharing			
Connect using:			
Realtek PCIe GBE Family Controller			
<u>Configure</u> This connection uses the following items:			
 Client for Microsoft Networks QoS Packet Scheduler File and Printer Sharing for Microsoft Networks Internet Protocol Version 6 (TCP/IPv6) 			
 Internet Protocol Version 4 (TCP/IPv4) Ink-Layer Topology Discovery Mapper I/O Driver Link-Layer Topology Discovery Responder 			
Install Uninstall Properties			
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	:		
ОК Са	ncel		



- 4. Select **Use the following IP address**. After configuring the settings in the following example, click **OK**.
 - > IP address: 169.254.2.5
 - Subnet mask: 255.255.0.0

General				
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
i Obtain an IP address automati	cally			
Use the following IP address:				
IP address:	169.254.2.5			
S <u>u</u> bnet mask:	255.255.0.0			
Default gateway:				
Obtain DNS server address au	tomatically			
• Use the following DNS server a	ddresses:			
Preferred DNS server:				
<u>A</u> lternate DNS server:				
Validate settings upon exit				
	OK Cancel			

5. Click OK.

Configuring Your Operating System

Firewall

Your operating system firewall may block some features of PC Configurator and prevent it from communicating with Sender and Receiver. A computer running Windows 7 is used as an example to configure your operating system firewall through either of the following two approaches.

Method I

You can configure the firewall in the **Windows Firewall** panel on your computer, for example select both **Home/Work (Private)** and **Public** for **PC Configurator & Matrix**.



	and the second			
• 🛥 د 🌏 😔	System and Security Windows Firewall Allowed Programs	👻 🍫 Sean	ch Control Panel	٩
	Allow programs to communicate through Windows To add, change, or remove allowed programs and ports, click Chang What are the risks of allowing a program to communicate? Allowed programs and features: Name Mainteen to a Network Projector Core Networking Create a System Repair Disc Distributed Transaction Coordinator File and Printer Sharing HomeGroup ISGS Service Media Center Extenders Microsoft Office Grove Microsoft Office Onkote Microsoft Office Onkote	Firewall ge settings.	Public Public Public Remove	
		ОК	Cancel	

Method 2

You can also configure the firewall in the **Windows Security Alert** window. When starting CTRLPRO-M PC IP Console, the **Windows Security Alert** may display. If so, use the administrator privileges to select a network you allow this software to communicate on, for example select both private and public networks, and then click **Allow access**.



Recommended M-Series PC Console version V7.0.0-PIAV for simple PC control

+ - E Zayout					
	👻 🏰 Create Layout 📝 Edit Layout	🔀 Remove Layout		NO. Alias Type H IP Version	
Sort item in the list	Apply	Automatically apply		1 T Input- TX -	
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TX: Input-DTV-Top RX: Wall-05-2x1	TX: Input-DTV-Top RX: Wall-06-2x2	■ TX: Input-DTV-Top ■ RX: Wall-07-2x3	TX: Input-DTV-Top RX: Wall-08-2x4	9 T Input-8 TX - 10 T Input- TX - 11 T Input- TX - 12 T Input- TX - 13 T Input- TX - 13 T Floater TX -	
TX: Input-DTV-Top	TX: Input-DTV-Top ■ RX: Wall-10-3x2	■ TX: Input-DTV-Top ■ RX: Wall-11-3x3	● TX: Input-DTV-Top ● RX: Wall-12-3x4	24 🗋 input ix _	
TX: Input-DTV-Top RX: Wall-13-4x1	● TX: Input-DTV-Top ● RX: Wall-14-4x2	TX: Input-DTV-Top RX: Wall-15-4x3	■ TX: Input-DTV-Top ■ RX: Wall-16-4x4		
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	Rx: Well-01-1x1	RX: Wall-01-1x1 RX: Wall-02-1x2 TX: Input-DTV-Top FX: Input-DTV-Top RX: Wall-05-2x1 FX: Input-DTV-Top TX: Input-DTV-Top FX: Input-DTV-Top RX: Wall-05-2x1 FX: Input-DTV-Top TX: Input-DTV-Top FX: Input-DTV-Top RX: Wall-05-3x1 FX: Input-DTV-Top RX: Wall-05-3x1 FX: Input-DTV-Top RX: Wall-05-3x1 FX: Input-DTV-Top RX: Wall-15-4x1 FX: Input-DTV-Top	RX: Well-02-1x1 RX: Well-02-1x2 RX: Well-02-1x3 TX: Insuk-0TV-Top TX: Insuk-0TV-Top TX: Insuk-0TV-Top RX: Well-05-2x1 RX: Well-05-2x2 TX: Insuk-0TV-Top RX: Well-05-2x1 RX: Well-05-2x3 RX: Well-05-2x3 TX: Insuk-0TV-Top RX: Well-05-3x2 RX: Well-05-3x3 TX: Insuk-0TV-Top RX: Well-10-3x2 RX: Well-13-3x3 TX: Insuk-0TV-Top RX: Well-10-3x2 RX: Well-13-3x3 TX: Insuk-0TV-Top RX: Well-10-3x2 RX: Well-13-3x3	DX: Well-01-1x1 DX: Well-02-1x2 DX: Well-02-1x3 DX: Well-04-1x4 TX: Input-DTV-Top TX: Input-DTV-Top TX: Input-DTV-Top DX: Well-02-1x3 DX: Well-04-1x4 TX: Input-DTV-Top TX: Input-DTV-Top DX: Well-02-1x3 DX: Well-02-1x3 DX: Well-04-1x4 TX: Input-DTV-Top TX: Input-DTV-Top DX: Well-03-1x3 DX: Well-04-1x4 DX: Well-04-1x4 TX: Input-DTV-Top TX: Input-DTV-Top DX: Input-DTV-Top DX: Well-03-1x3 DX: Input-DTV-Top TX: Input-DTV-Top TX: Input-DTV-Top DX: Well-13-3x3 DX: Well-12-3x4 DX: Well-12-3x4 TX: Input-DTV-Top TX: Input-DTV-Top TX: Input-DTV-Top DX: Well-13-4x3 DX: Well-13-4x4 TX: Well-13-4x1 DX: Well-14-4x2 DX: Well-13-4x3 DX: Well-15-4x3 DX: Well-16-4x4	TX: Input OTV-Tap TX: Input OTV-Tap TX: Input OTV-Tap XX: Wall-03-1x1 VX: Wall-03-1x2 XX: Wall-03-1x2 XX: Wall-03-1x2 TX: Input OTV-Tap VX: Wall-03-1x2 XX: Wall-03-1x2 XX: Wall-03-1x2 TX: Input OTV-Tap TX: Input OTV-Tap XX: Wall-03-1x2 XX: Wall-03-1x2 TX: Input OTV-Tap TX: Input OTV-Tap XX: Wall-03-1x2 XX: Wall-03-1x2 TX: Input OTV-Tap TX: Input OTV-Tap TX: Input OTV-Tap XX: Wall-03-2x1 TX: Input OTV-Tap TX: Input OTV-Tap TX: Input OTV-Tap XX: Wall-03-2x1 TX: Input OTV-Tap TX: Input OTV-Tap TX: Input OTV-Tap XX: Wall-03-2x1 TX: Input OTV-Tap TX: Input OTV-Tap TX: Input OTV-Tap XX: Wall-03-2x4 TX: Input OTV-Tap TX: Input OTV-Tap TX: Input OTV-Tap XX: Wall-03-2x4 TX: Input OTV-Tap TX: Input OTV-Tap TX: Input OTV-Tap TX: Input OTV-Tap TX: Wall-03-4x1 DX: Wall-13-4x2 DX: Wall-13-4x2 TX: Input OTV-Tap TX: Wall-03-4x1 DX: Wall-13-4x2 DX: Wall-13-4x2 TX: Input OTV-Tap TX: Wall-03-4x1 DX: Wall-13-4x2 DX: Wall-13-4x2 TX: Input OTV-Tap



Easily Mute the AUD-C6MWIP-R by simply right clicking on the device within the PC Software, then applying the function you would like to perform Turn On Audio or Mute Audio.

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R	Wal.		Config	
R	Wal.		Video Settings	
R	Wal	RX	Audio Settings	
R	Wal	RX	5	
R	Wal	RX	Update	
R	Wal	RX	Delete	
R	Wal		turn on	
R	Wal		mute	
R	Wal		mute	
R	Wal		Turn On OSD	
R	Wal		Turn Off OSD	
R	Wal Wal			
R	Wal		Background settings	
R	Wal		Reset	
R	Sur.		Reset EDID	
R	Sta			
R	Sou	RX	Restart	
R	Sho	RX	MWIPR-341B22801	
R	Off	RX	MWIPR-341B22801	
R	Gre	RX	MWIPR-341B22801	
R	Gla		MWIPR-341B22801	
R	Den	RX	MWIPR-341B22801	

6. AUDIO DELAY FUNCTION

In some scanario where the Video and audio is not syncned due to the environment and setup with multiple devices, the user can simply

Right Click on the device	Config
Audio Settings	Video Settings
When selected a dialog box will appear	Serial Setting
Audio delay can be adjusted 0 ms to 500ms	Audio Settings
Basic Advanced Audio delay Audio delay 100 MS(0~500) Apply	Layout Settings Update Delete turn on mute Turn On OSD Turn Off OSD Background settings Reset Reset EDID Restart Change Group



7. SPECIFICATIONS

ltem	Description				
Units	HDM-C6MWIP-S	AUD-C6XIP-R			
Unit Description	HDMI Transmitter/Encoder	Audio Receiver/Decoder			
Input Video Port	I x HDMI IN	I x CAT5/6			
Input Video Type	HDMI, DVI 1.0	Streaming Media Audio			
Input Resolution	HDMI:				
	HDMI: $640 \times 480@60Hz,$ 480i@60Hz 480p@60Hz, 576i@50Hz, 576P@50Hz, $800 \times 600@60Hz,$ $1024 \times 768@60Hz,$ $1280 \times 800@60Hz, 1280 \times 1024@60Hz,$ $1280 \times 800@60Hz, 1280 \times 1024@60Hz,$ $1360 \times 768@60Hz, 1366 \times 768@60Hz,$ $1400 \times 1050@60Hz,$ $1400 \times 1050@60Hz,$ 1080p@24Hz, 1080p@25Hz, 1080p@30Hz, 1080p@50Hz, 1080p@60Hz, $1920 \times 1200@60Hz$ DVI: $640 \times 480@60Hz,$ $1800 \times 600@60Hz,$ $1024 \times 768@60Hz,$ $1024 \times 768@60Hz,$ $1280 \times 800@60Hz,$ $1280 \times 800@60Hz,$ $1280 \times 800@60Hz,$ $1280 \times 1050@60Hz,$ $1280 \times 1050@60Hz,$ $1280 \times 1050@60Hz,$ $1400 \times 1050@60Hz,$ 1080p@25Hz, 1080p@25Hz, 1080p@30Hz, 1080p@24Hz, 1080p@25Hz, 1080p@30Hz, 1080p@24Hz, 1080p@25Hz, 1080p@30Hz, 1080p@24Hz, 1080p@25Hz, 1080p@30Hz, 1080p@24Hz, 1080p@25Hz, 1080p@30Hz, 1080p@50Hz, 1080p@60Hz, $1280 \times 1050@60Hz,$ $1280 \times 1024@60Hz,$ $1280 \times 1024@60Hz,$ $1280 \times 768@60Hz,$ $1280 \times 720@60Hz,$ $1280 \times 768@60Hz,$ $1280 \times 768@60Hz,$ $1360 \times $				



	1680 ×10 1920 ×10 1920 × 11 YPbPr: 720 × 48 720 × 57 1280 ×72 1920 ×10 CVBS:	050@60Hz 950@60Hz, 980@60Hz, 200@60Hz 0i@60Hz,720 x 480p@60Hz, 6i@50Hz,720 x 576P@50Hz, 90p@50Hz,1280x720p@60Hz 980i@50Hz,1920 x 1080i@60Hz		
Input Video Signal		0.5~I.2 V p-p	NA	
Encoding Data Rate		Up to 30 Mbps, configurable	NA	
Output Video Ports		I x CAT5/6	NA	
Output Video Type		H.264/MPEG-4 AVC	NA	
Output Video Resolutions		Large IP stream: 480p@60Hz~1920 x 1200@60Hz Small IP stream: 352x288@5Hz		
Video Impedence		100 Ω		
Input DDC Signal		5 V p-p (TTL)	NA	
End-to-End Time Latency		About 60ms-90ms (Low latency mode) About 250ms-300ms (High quality mode)	About 60ms-90ms (Low latency mode) About 250ms-300ms (High quality mod	
Input Audio Ports		HDMI	I x CAT5/6	
Input Audio Format		Audio embedded in streaming media input	Audio embedded in streaming media input	
Output Audio Ports		I x Phoenix connector	I x Phoenix connector	
Output Audio Format		Stereo	Balanced Stereo	
Control Method		Rear panel CAT5/6 port, PC configurator and RS-232	PC configurator and RS-232	
Power Supply				
Power Consumption		6W (Max.)	2.3 W (Max.)	
Shipping Dimensions (L X H		12.2" x 3.0" x 7.1"	12.2" x 3.0" x 7.1"	
Product Dimensions (L X H	X D)	9.3" x 1.0" x 3.7" lbs	10.5" x 1.0" x 4.4"	
Weight ESD Protection		Human body model: -±8kV (air-gap discharge) -±4kV (contact discharge)	I.3 lbs Human body model: -±8kV (air-gap discharge) -±4kV (contact discharge)	
Environmental				
OPERATING TEMPERATURE		32° ~ 104°F (0° to 40°C)	$32^{\circ} \sim 104^{\circ}F$ (0° to 40°C)	
STORAGE TEMPERATURE		-4° ~ I40°F (-20° ~ 60°C)	-4° ~ I40°F (-20° ~ 60°C)	
RELATIVE HUMIDITY		20~90% RH (no condensation)	20~90% RH (no condensation)	
		· · · · · ·	•	



8. TROUBLESHOOTING

Problem	on		
PC Configurator cannot find devices	 Check the Windows Firewall. Taking Windows 7 as an example: Click Start menu, go to Control Panel System and Security > Windows Firewall > Allowed Programs, select Home/Work (Private) and Public for PC configurator. 		
	Ta dd, derag promos dalord group on gal pros. Ha Charge status. Wie wirk wird and darge prospecti sammer Lander. New Charge program and fordure New Charge program and fordure New Charge program and fordure Charge program	A Standard Fauncia A Advand Partyane (*)	
	PC Configurator (HDMI over IP)	Maintain Tool	
	 The computer, Sender, Receiver and switch should be in the same network segment. Therefore, set your computer's IP address as 169.254.X.X and subnet mask as 255.255.0.0. For more information, see the description in the networking guide. Check the switch configuration, and that IGMP snooping and all the other functions are enabled. 		
	I. Check all devices are powered on.		
	2. Check all cables are securely seated and co	nnected properly.	
	 3. Check the LED STATUS indicators on the Receivers to see if Senders and Receivers are linked correctly. Power ON LED -Solid Device powered on. Status LED Flashes every 200 millisecond (ms) Device is powered on but not linked to TX via PC Software 		
	Flashing If the units are paired within the PC software but no source is connected to the TX HDMI to send the audio stream.		
	Check that source device is powered on and the HDMI cable is connected.		
	 Check the displays are powered on and the correct input selection. Check the HDMI cable is plugged into the correct port. 		

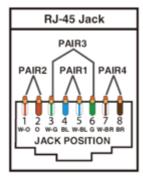


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	5. Example switch to HDMI I if a display's HDMI I port is connected to Receiver via an HDMI cable.		
	6. Ensure the displays/monitor support HDCP.		
	7. Check native EDID timings from the manufactures guide to match the Receiver output resolution. If so, replace the displays with other models.		
	 Check that Sender supports the resolutions of the input signals. For more information about the resolutions, see "Specifications" of "Introduction" section. 		
	 Check the switch configuration, and that IGMP snooping and all the other functions are enabled. 		
No audio	I. Check all the devices are powered on.		
	2Check all cables are securely seated and connected properly.		
	3. Check the LED STATUS indicators on the Receivers to see if Senders and Receivers are linked correctly. Blue Steady=OK Blue Blinking=standby To link the devices use the PC configurator on your PC/Laptop, drag the TX to the RX and click apply.		
	4. Check the A/V device is playing a video with sound.		
	5. Check the A/V devices audio output with an RCA jack to a speaker or amplifier, also use a headphones if the equipment has a 3.5mm audio out.		
	6. Check the A/V devices are not set to mute or 0 for volume.		
	7. Check Receiver is not set to mute(Phoenix port only), open PC configurator and right click on the Receiver and on the drop down select mute . For more information, see the user guide of PC configurator.		
	 Please ensure your AUD-C6MWIP-R, CTRLPRO-MIP and your wirless router is on the same network segment. 		
Live preview on Windows7 or iPad App	 2. For Window 7/iPad app, please ensure the units are Version HDM-C6MWIP-S v2.10.0 HDM-C6MWIP-R v2.10.2 AUD-C6MWIP-R v2.10.0 CTRLPRO-MIP-v1.11/7.3.0 (v7.3.0) M-Series PC Console v7.2.1 Windows M v2.5.12 IOS M v3.6.0 		



- All HDMI over CATx transmission distances are measured using Belden CAT6A (625MHz), 4-Pair,UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Patented Double-H spline, Ripcord, PVC Jacket using Quantum 980 signal HDMI Video Generator Module with Video Pattern Testing and shielded ends.
- 2. The transmission length is largely affected by the type of category cables, also the type of HDMI sources, and the type of HDMI display. The testing result shows solid UTP cables (usually in the form of 300m or 1000ft bulk cable) can transmit a lot longer signals than stranded UTP cables (usually in the form of patch cords). Shielded STP connectors are better suit than unshielded UTP connectors. A solid UTP CAT6A cable shows longer transmission length than solid UTP CAT5E/6E cable.
- 3. EIA/TIA-568-B termination (T568B) for category cables is recommended.
- 4. To reduce the interference among the unshielded twisted pairs of wires in category cable, you can use shielded STP cables with shielded connector to improve EMI problems, which occurs in poor wiring environments with unplanned cable runs situated away from EMI interference.
- 5. Because the quality of the category cables has the major effects in how long transmission distance will be made and how good is the received signal on the display, the actual transmission length is subject to high quality category cables. For resolution greater than 1080i or 1280x1024, a solid CAT6E 250MHz cable is the only viable choice.

	Data Link TIA/EIA-568-B					
PIN	Color	Function				
1	● ₩-0	TX0-				
2	• •	TX0+				
3	🐑 W-G	TX1-				
4	📁 BL	TX2-				
5	W-BL	TX2+				
6	🗊 G	TX1+				
7	ФЭЭW-BR	TXC-				
8	e BR	TXC+				



PERFORMANCE GUIDE FOR HDMI OVER CATEGORY CABLE TRANSMISSION

PERFORMANCE RATING		TYPE OF CATEGORY CABLE		
WIRING	SHIELDING	CAT5	CAT5E	CAT6
SOLID	u NSHIEI DED (u Tp)	***	****	****
	SHIEI DED (STp)	***	****	****
STRANDED	u NSHIEI DED (u Tp)	*	**	**
	SHIEI DED (STp)	*	*	**
TERMINATION		PLEASE USE EIA/TIA-568-B TERMINATION (T568B) AT ANY TIME		









Control Your Video

TECHNICAL SUPPORT



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