

Control Your Video

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

# 8 Port HDMI LAN Splitter up to 120M over Single CAT5/6 with IR Support



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## **Product Application & Market Sectors**





Corporate House Of Worship















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### SECTION I: GETTING STARTED

## I.I IMPORTANTSAFEGUARDS

#### 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.
- · Causes external to the product, such as electric power fluctuation or failure.
- Use 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 HDM-C6IPX-SP8, HDMI Extender has been tested for conformity to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment's, the HDM-C6IPX-SP8 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.



### 1.3 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
	ONLY USE THE PROVIDED POWER CABLE OR POWER ADAPTER SUPPLIED. DO NOT TAMPER WITH THE ELECTRICAL PARTS. THIS MAY RESULT IN ELECTRICAL SHOCK OR BURN.
$\bigcirc$	DO NOT TAMPER WITH THE UNIT. DOING SO WILL VOID THE WARRANTY AND CONTINUED USE OF THE PRODUCT.
	THE VIDEO BOARDS ARE VERY SENSITIVE TO STATIC. LEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A JRFACE, IT SHOULD BE IN A GROUNDED ENVIROMENT.



# **A**WARNING

Read & understand user guide before using this device.

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



## 2. INTRODUCTION

Averview HDM-C6IPX-SP8, HDMI Distributed Amplifier is a dedicated 8 port HD splitter designed to provide extra distance and extra IR support to eight displays over CAT6 cable. We have engineered a newer chipset providing extra PPI in resolution and lower bandwidth so the user can extend any HD display with the resolutions 480i@60Hz to 1080p@50Hz/60Hz to 394 feet (120 meters) away from your HDMI or DvI-D source.

A: The 8 port Tx can extend the compatible Rx units 120 meters over CAT5/6 cable connection point to multipoint.

- Extends HDMI up to 120m over single CAT5E/6
- Supports HDMI, EDID, Support HDCp
- Supports resolution 480i@60Hz to 1080p@50Hz/60Hz
- IR Signal support 20-60kHz
- · LED Front Panel and Rear panel indicators



# 2.1 PACKAGE CONTENTS

Before you start the installation of HDM-C6IPX-SP8, please check the package contents.

I	HDM-C6IPX-SP8 Transmitter unit	хI	
2	IR EXTENDER	хI	•
3	IR BLASTER	×I	
4	POWERADAPTER (5V DC)	<b>x</b> 1	
5	MOUNTING BRACKET		
6	USER'S MANUAL	хI	

# 2.2 BEFORE INSTALLATION

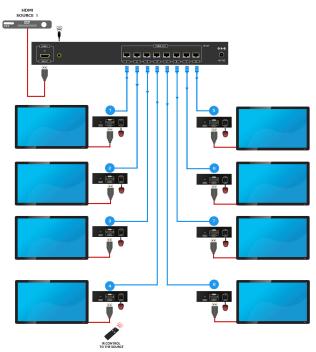
- Place the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- · Do not twist or pull by force the ends of the HDMI/UTP cable. It can cause malfunction.



HDM-C6IPX-SP8

1080p(1920x1080) = 120m (394 feet) CAT6E 330MHz 1080p(1920x1080) = 100m (330 feet) CAT6E 330-600Hz









We highly recommend achieving best results with our HDM-C6IPX-SP8 you acquire a high quality 26 or 24 AWG HDMI cable with the below specifications to maintain signal integrity and distances.

- length: 5m (16ft) to 15m (50ft)
- Bandwidth: 10.2 Gbps data transfer rate
- Supports Resolution: up to 1080p @ 24Hz / 50/60Hz/3D Conductor gauge: 26 / 24 AWG
- Deep Color
- 3D Capable
- CEC
- Ethernet Channel
- Audio Return Channel
- Connector I: HDMI (Type A) Male
- Connector 2: HDMI (Type A) Male

#### Selecting the Right Cable

Cable length - Always round up when estimating connection distances. It's better to have a bit too much cable than to come up short.

Cable Type - If you plan to enjoy 1080p content (i.e., Blu-ray Discs) or any advanced display technologies (3D, 4K, Deep Color, 120Hz refresh rates, etc.), a High Speed HDMI Cable is recommended.

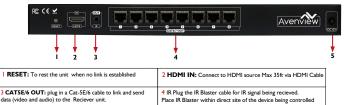
For 1080i or 720p signals (most cable, broadcast, and satellite HD signals), a Standard HDMI Cable is recommended. Longer Cable Runs

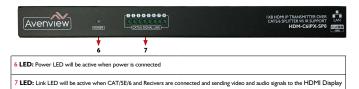
In complex home theater set-ups, such as multi-room environments, components can be placed relatively far from each other. There are several technologies available for these installations:

25 to 100 feet - If you need to send a 1080p signal more than 25 feet, or a 1080i signal more than 49 feet, active Avenview extender will help boost the HDMI signal to compensate.



### 2.3.1 Front Panel & Rear Panel (Transmitter, HDM-C6IPX-SP8)





### 2.3.2 Front Panel & Rear Panel (Compatible Receiver, HDM-C6IPX-R) not included

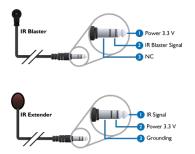


RESET		
5	6	7

I +5V DC: Connect to the 5V DC power supply Power LED will light BLUE.	2 CATSE/6 OUT: Plug in a Cat-5E/6 cable to link and receive data (video and audio) from the sender unit or network switch.
<b>3 DATA LED:</b> When data is transmitting from the source the led will continuously flash <b>YELLOW</b> .	4 LINK LED: When connected to RX or network switch the LED will light GREEN.
5 <b>RESET:</b> To rest the unit when no link is established	6 HDMI OUT: Connect to HDMI display Max 35ft via HDMI Cable

7 IR IN: Plug the IR Extender cable for IR signal being received. Place IR Extender within direct line of site with the IR Remote.





### **IR Sockets**

-- IR OUT -IR BLASTER: plug in the IR blaster to the HDMC6IPX-5 to emit all IR command signals received from the IR Extender plugged into the Rx (Monitor Side) to control the devices corresponding to the IR signals. Example: Set Top Box or DVD player (**The Source**). -- IR IN - IR EXTENDER: plug in the IR Extender into the (RX) Receiver (Monitor Side) to receive all IR command signals from the IR remote controls of the corresponding source. Example: Set Top Box or DVD player (**IR Remote Control**).





Important IR signals can be affected by very bright fluorescent light and also EMI Interference on the cables so be aware of wher you place and postion your IR cables. Please follow these instructions for best results.



### 3. INSTALLATION

Please ensure all the package contents are all received before proceeding.

To setup Avenview HDM-C6IPX-SP8 follow these steps for connecting to a device:

- 1. Connect your HDMI source (such as a Blu-ray Disc player) to Transmitter (HDM-C6IPX-SP8).
- 2. Connect your HDMI display (such as a LCD TV) to the receiving 8 unit HDM-C6IPX-R.
- 3. Connect your CAT-5E/6 follow the standards of TIA-568BI AN cable between the transmitting and receiving units.
- 4. Make sure CAT-5E/6 LAN cable is tightly connected and not loose.
- 5. Plug in 12v DC power cord to the power jack of the transmitting unit HDM-C6IP X-SP8
- 6. Plug in the 8 x 5v DC power cord to the power jack of the receiving unit HDM-C6IP X-R.

# 4. GENERAL TROUBLESHOOTING

PROBLEM	POSSIBLE SOLUTION
NO IMAGE	Check if connection to the source and the display are correct.     Ensure that display device supports 480i@60Hz to 1080p@50Hz/60Hz
SCREEN DEFECTS APPEAR	Check the DVI and HDMI connection
DATA TRANSMISSION LIGHT FLASHING SLOW	Check both units and make sure the TX and RX are not Reversed     Check the source device is powered ON
DATA TRANSMISSION LIGHT FLASHING FAST/NO IMAGE	<ul> <li>Check Graphics card on PC/HD Player. This product supports up to 480(@60Hz to 1080p@50Hz/60Hz resolution.</li> </ul>
NO LIGHT ON DATA TRANSMISSION	Check Network cable only use TIA-568B Standard     Network cable run is out of range



# 5. SPECIFICATIONS

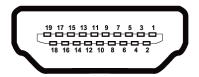
ITEM	DESCRIPTION		
UNITS	HDM-C6IPX-SP8	HDM-C6IPX-R (not included)	
UNIT DESCRIPTION	HDMI Transmitter Compatible HDMI Receiver		
HDMI COMPLIANCE	F	UII HD	
HDCP COMPLIANCE		Yes	
VIDEO BANDWIDTH	HDTchipse	et OVER CAT5/6	
SUPPORTED RESOLUTIONS	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz		
RESOLUTION AND DIS- TANCE (24-BIT)	Full HD: (1080p)-120meter (394feet) (CAT6)		
AUDIO SUPPORT	Surround Sound (up to 7	.1 Ch) or Stereo Digital Audio	
IR PASS-THRU	Supportrs 20~60KHz IR devices		
RS-232 SUPPORT	NO		
INPUT	Ix HDMI	I x RJ45, I x IR IN	
OUTPUT	8 x RJ45, 1 x IR Out	Ix HDMI	
HDMI CONNECTOR	Type A (	(19 pin female)	
RJ45 CONNECTOR	WE/SS 8p	98C with 2 LED	
POWER ADAPTER	D	C 12v/ 3A	
POWER CONSUMPTION	24W Max		
DIMENSION L X W X H	.7" x 4.3" x1.16"		
WEIGHT	EIGHT IIbs		
Environmental			
OPERATING TEMPERATURE	32° ~ I40°F (0° to 60°C)		
STORAGE TEMPERATURE	-4° ~ I40°F (-20° ~ 60°C)		
RELATIVE HUMIDITY	20~90% RH.(no condensation)		

### PERFORMANCE GUIDE FOR HDMI OVER CATEGORY CABLE TRANSMISSION

PERFORMANCE RATING		TYPE OF CATEGORY CABLE		
WIRING	SHIELDING	CAT5	CATSE	CAT6
SOLID	u NSHIEI DED (u Tp)	***	****	****
SOLID	SHIEI DED (STp)	***	***	****
STRANDED	u NSHIEI DED (u Tp)	*	**	**
STRANDED	SHIEI DED (STp)	*	*	**
TERMINATION		pl EASE u SE EIA/TI	A-568-B TERMINATION	(T568B) AT ANy TIME



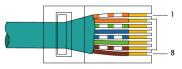
6. PIN & WIRING STANDARDDEFINITION



### TYPE A (RECEPTACLE) HDMI

pin I	TMDS Data2+	pin I I	TMDS Clock Shield
pin 2	TMDS Data2 Shield	pin 12	TMDS Clock-
pin 3	TMDS Data2-	pin 13	CEC
pin 4	TMDS Data I +	pin 14	Reserved (N.C. on device)
pin 5	TMDS Data1 Shield	pin 15	SCI
pin 6	TMDS Data1-	pin 16	SDA
pin 7	TMDS Data0+	pin 17	DDC/CEC Ground
pin 8	TMDS Data0 Shield	pin 18	+5v power
pin 9	TMDS Data0-	pin 19	Hot plug Detect
pin 10	TMDS Clock+		

### CAT5E/6 WIRING STANDARD



EIA/TIA-568B



### Notes



### Notes









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