



AV Connectivity, Distribution  
And Beyond....

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

## 4XI HDMI switcher with IR & RS232 Control



**Model #: SW-HDM-4X1**



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## SECTION I: GETTING STARTED

### I.1 IMPORTANT SAFEGUARDS

**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.

### 2.1 SAFETY INSTRUCTIONS




The 4xI HDMI Switcher with IR and RS232 Control has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the SW-HDM-4XI 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.
- ⚠ 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.
	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. PLEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A SURFACE, IT SHOULD BE IN A GROUNDED ENVIROMENT.

	<p><b>⚠ WARNING</b></p> <p>Read &amp; understand user guide before using this device.</p> <p>Failure to follow the proper installation instructions could result in damage to the product and preventing expected results.</p>
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## 2. INTRODUCTION

The **SW-HDM-4XI** HDMI Switcher with IR and RS232 Control provides THREE simple and effective ways of switching among 4 HDMI sources to your HDMI/DVI enabled HD display.

This device has Auto-scan and Auto-detection function which provides quick surf on the connected sources sequentially and automatically switches to the first working source among 4 channels at power on. With IR remote control, front panel button and RS232; this allows users to display any of the 4 sources they choose.

Connecting PS3, DVD players, camcorders, or set-top boxes can be easily and simultaneously done with built-in HDCP support; allowing any device to be connected to the **SW-HDM-4XI**.

- Support HDMI Deep Color
- Fully HDCP compliant
- Front panel buttons to switch any Four (4) HDMI/DVI sources
- Supports 480p, 720p, 1080i, 1080p, and VESA resolutions
- Front panel LED indicators
- Equalization on input ports and pre-emphasis on output port
- Easy installation



THE HDMI INPUT AND OUTPUT ON THE SW-HDM-4XI IS ALSO COMPATIBLE WITH DVI.

PLEASE SEE THE EXAMPLE OF THE CABLE ABOVE TO USE.

***NOTE: CABLE NOT INCLUDED WITH PACKAGING CONTENTS DVI TO HDMI***



## 2.1 PACKAGE CONTENTS

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

I	- SW-HDM-4XI x I	
I	Power Adapter (+5V 0.85A DC)	
I	User's Manual	

## 2.2 BEFORE INSTALLATION

- Put 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 ends of the UTP cable. It can cause malfunction.



## 2.3 APPLICATION DIAGRAM

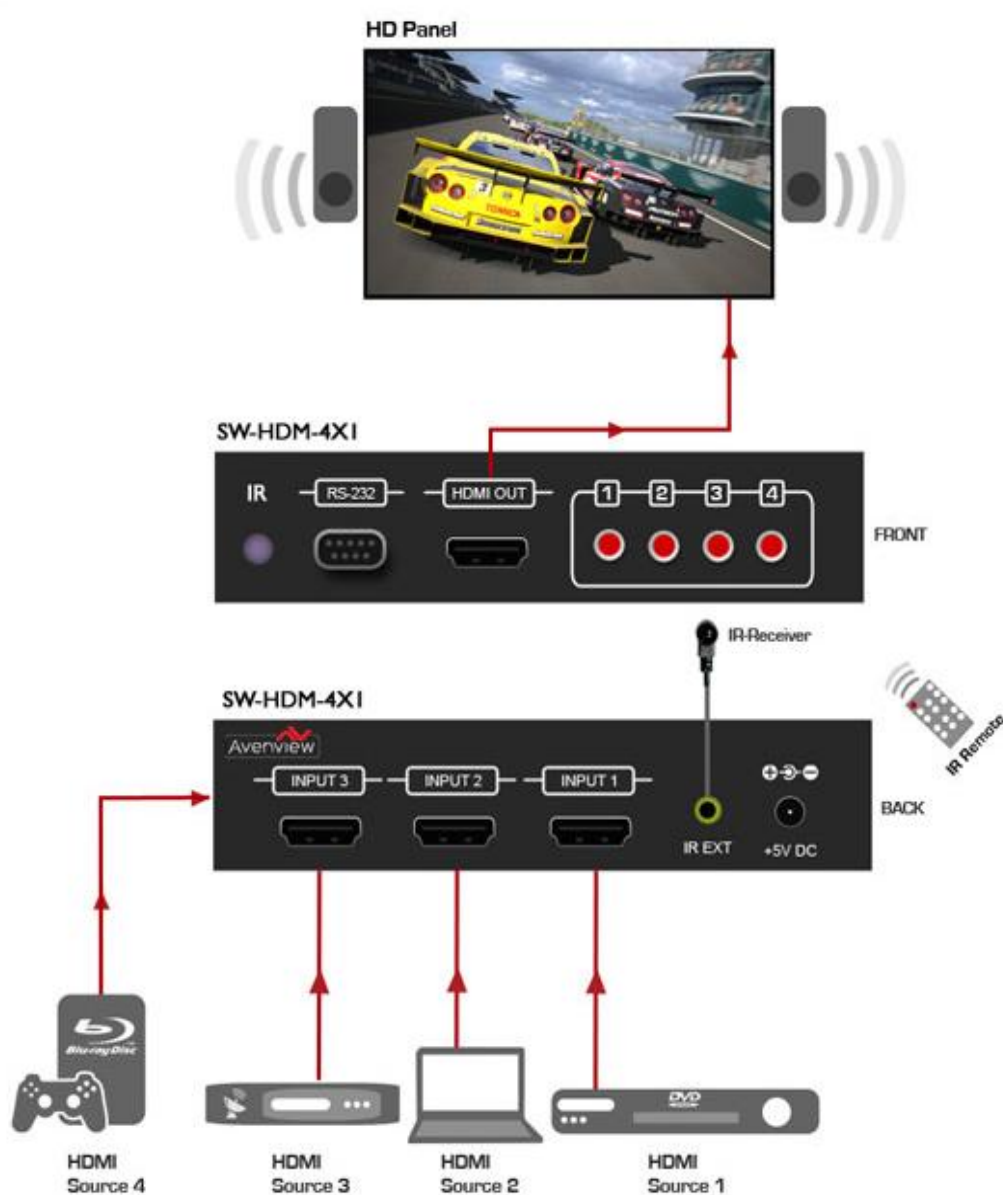
# SW-HDM-4X1

1080p = 30m (130 feet) HDMI

### CABLE INDEX

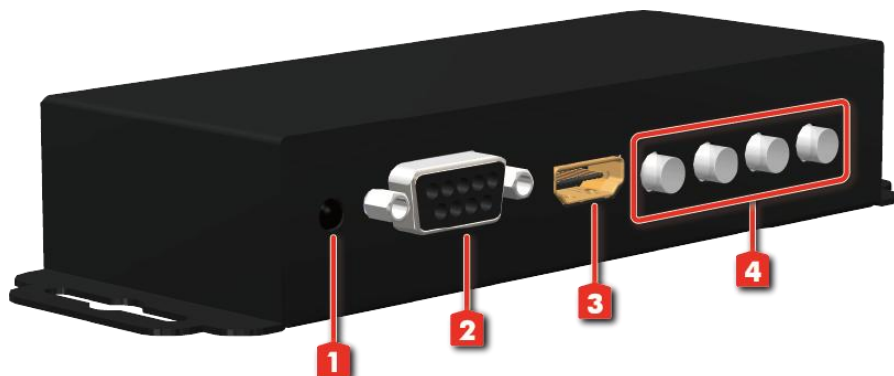
■ Input /Output

■ IR Extender



### 3. PANEL DESCRIPTION

#### INPUT PANEL (SWITCHER SW-HDM-4X1) Front



1. IR SENSOR	2. RS-232 CONTROL
3. HDMI OUT	4. I-4 INPUT SELECTOR



#### INPUT PANEL (SWITCHER SW-HDM-4X1) Rear

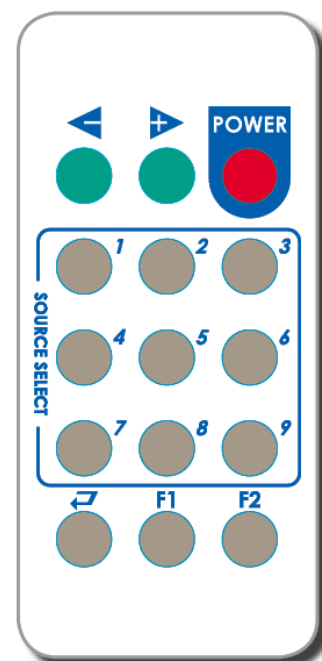


5. <b>HDMI IN:</b> Connect source 1-4	6. <b>IR Ext:</b> IR IN for hidden control
7. <b>POWER:</b> 5V 0.85A DC	



## 4. IR REMOTE FUNCTIONS

FUNCTION KEY	FUNCTION DESCRIPTION
<b>POWER</b>	N/A RESERVED
	N/A RESERVED
	N/A RESERVED
<b>SOURCE SELECT 1</b>	SELECT <b>HDMI INPUT 1</b> TO BE THE INPUT SOURCE
<b>SOURCE SELECT 2</b>	SELECT <b>HDMI INPUT 2</b> TO BE THE INPUT SOURCE
<b>SOURCE SELECT 3</b>	SELECT <b>HDMI INPUT 3</b> TO BE THE INPUT SOURCE
<b>SOURCE SELECT 4</b>	SELECT <b>HDMI INPUT 4</b> TO BE THE INPUT SOURCE



## RS 232 COMMANDS (SW-HDM-4xI)

The following RS 232 Commands can be used to control the SW-HDM-4X I

0x99 0x01 =>choose input 1  
 0x99 0x02 =>choose input 2  
 0x99 0x03 =>choose input 3  
 0x99 0x04 =>choose input 4  
 0x99 0x05 =>auto detection on  
 0x99 0x06 =>auto detection off

## 4. INSTALLATION (SW-HDM-4xI)

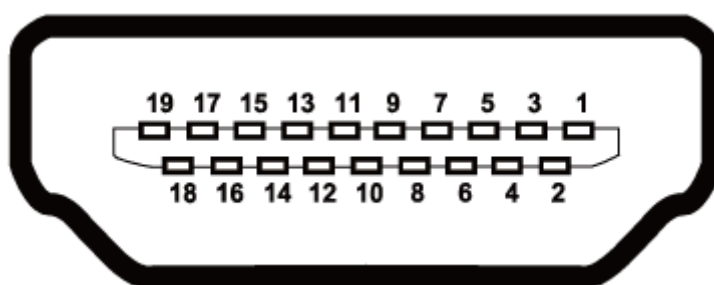
To setup Avenview SW-HDM-4X I please follow these steps for connecting to a HDTV/MONITOR

1. Turn off all devices including HDTV/MONITOR
2. Connect 1-4 sources to the INPUTS ports of the SW-HDM-4x I via HDMI cable.
3. Connect to a HDTV/Monitor via HDMI cable
4. Plug in 5V 0.85A DC Power (supplied) to the SW-HDM-4x I. (There is no power switch. Power is supplied when the power adapter is plugged into wall outlet.
5. Power on the HDMI display.
6. If you need to extend the HDMI signal further than 30ft, you may need to use an HDMI Extender (HDM3D-C5IR-SET,HDM3D-C53X-SET)



## 5. GENERAL TROUBLESHOOTING

PROBLEM	POSSIBLE SOLUTION
<b>NO IMAGE</b>	<ul style="list-style-type: none"> <li>Check if connection to the source and the display are correct.</li> <li>Ensure that display device supports 480p, 720p and 1080p resolution</li> </ul>
<b>SCREEN DEFECTS APPEAR</b>	<ul style="list-style-type: none"> <li>This product supports up to 1080p resolution.</li> <li>Check the HDMI connection</li> <li>If outputting from a PC. Check the maximum resolution range of the graphics card.</li> </ul>
<b>NOT SHOWING CORRECT SOURCE</b>	<ul style="list-style-type: none"> <li>Ensure you select the proper input ON THE UNIT</li> <li>Ensure all HDMI Cables are seated properly in the INPUTS/OUTPUT</li> </ul>



**Type A (Receptacle) HDMI**

<b>PIN 1</b>	TMDS DATA2+	<b>PIN 11</b>	TMDS CLOCK SHIELD
<b>PIN 2</b>	TMDS DATA2 SHIELD	<b>PIN 12</b>	TMDS CLOCK-
<b>PIN 3</b>	TMDS DATA2-	<b>PIN 13</b>	NC
<b>PIN 4</b>	TMDS DATA1 +	<b>PIN 14</b>	RESERVED (N.C. ON DEVICE)
<b>PIN 5</b>	TMDS DATA1 SHIELD	<b>PIN 15</b>	SCL
<b>PIN 6</b>	TMDS DATA1-	<b>PIN 16</b>	SDA
<b>PIN 7</b>	TMDS DATA0+	<b>PIN 17</b>	DDC/CEC GROUND
<b>PIN 8</b>	TMDS DATA0 SHIELD	<b>PIN 18</b>	+5V POWER
<b>PIN 9</b>	TMDS DATA0-	<b>PIN 19</b>	HOT PLUG DETECT



## SECTION 2: SPECIFICATIONS

<b>MODEL NAME</b>		<b>SW-HDM-4XI</b>
<b>ROLE OF USAGE</b>		4XI SWITCH
<b>HDMI COMPLIANCE</b>		HDMI DEEP COLOR
<b>HDCP COMPLIANCE</b>		YES
<b>VIDEO BANDWIDTH</b>		6.75 GBPS
<b>VIDEO SUPPORT</b>		480P, 720P, 1080I, 1080P, AND VESA RESOLUTIONS
<b>TRANSMISSION</b>		UP TO 15M/50FT AT 1080P
<b>AUDIO SUPPORT</b>		SURROUND SOUND (UPTO 7.1 CH) OR STEREO 2CH
<b>INPUT TMDS SIGNAL</b>		1.2 VOLTS (PEAK-TO-PEAK)
<b>INPUT DDC SIGNAL</b>		5 VOLTS (PEAK-TO-PEAK)
<b>INPUT</b>		4X HDMI / 1X RS-232 / 1X IR RECEIVER
<b>OUTPUT</b>		1X HDMI
<b>IR REMOTE CONTROL</b>		ELECTRO-OPTICAL CHARACTERISTICS: $\pi = 25^\circ$ / CARRIER FREQUENCY: 38KHZ
<b>HDMI CONNECTOR</b>		TYPE A [19-PIN FEMALE]
<b>RS-232 CONNECTOR</b>		DE-9 [9-PIN D-SUB FEMALE]
<b>MECHANICAL</b>		
<b>DIMENSIONS [L X W X H]</b>	<b>MODEL</b>	4.2" X 2.1" X 1"
	<b>PACKAGE</b>	6.9" X 10.4" X 3.1"
<b>WEIGHT</b>	<b>MODEL</b>	7.1OZ
	<b>PACKAGE</b>	1.14 LBS
<b>MOUNTING OPTIONS</b>		WALL-MOUNTING CASE
<b>POWER SUPPLY</b>		5V 0.85A DC
<b>POWER CONSUMPTION</b>		5 WATTS [MAX]
<b>OPERATION TEMPERATURE</b>		0~40°C [32~104°F]
<b>STORAGE TEMPERATURE</b>		-20~60°C [-4~140°F]
<b>RELATIVE HUMIDITY</b>		20~90% RH [NO CONDENSATION]





## TECHNICAL SUPPORT

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### CONTACT US



Phone: 1 (866) 508 0269



Email: [support@avenview.com](mailto:support@avenview.com)



**USA Head Office** Avenview Corp. 275 Woodward Avenue Kenmore, NY 14217

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