

AV Connectivity, Distribution And Beyond...

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

# IX4 DisplayPort Splitter with PCM 7.1 and 2560x1600 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 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.
- External causes 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 SPLIT-DPDL-4A 4 Port DisplayPort Splitter has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the SPLIT-DPDL-4A 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.
- A 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.
- A 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
	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.
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.



# **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

The Avenview SPLIT-DPDL-4A 4 port splitter has the ability to duplicate a single DP (DisplayPort) source to any four DP screen /display. This unit also has two useful features – supports resolutions up to 2560x1600 and extends PCM 7.1 audio to the supported DP screens/displays attached.

Video Signals - up to 2560x1600

Audio Signals - PCM 7.1

The SPLIT-DPDL-4A includes one unit: 4 Port Splitter with one (1) DisplayPort Input that can and four (4) DisplayPort Outputs.

#### Features

- Support DisplayPort specification
- Deep Color video up to 12-bit, resolution support up to 2560x1600
- Supports audio up to PCM 7.1CH (32-192kHz Fs sample rate)
- Supports pixel component format with RGB; YCbCr 422; YCbCr 444
- Color space conversion between RGB and YCbCr color space
- Supports 1.62/2.7 Gbps data rate (Low/High bit rate)
- Supports flexible 1/2/4 lanes configurations;
- Full 10.8Gbps data rate support (4lanes at 2.7Gbps)
- Supports EDID switch and setting



# 2.1 PACKAGE CONTENTS

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

I	SPLIT-DPDL-4A	Avenview Manager ha source
	POWER ADAPTER 5V/3A	
2	USER'S MANUAL	

# 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.
- Use 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 Displayport cable. It can cause malfunction



# 2.3 CABLE SPECIFICATION



We highly recommend achieving best results with our SPLIT-DPDL-4A you acquire a high quality 26 or 24 AWG HDMI cable with the below specifications to maintain signal integrity and distances.

#### UltraAV DisplayPort to DisplayPort Version 1.1a Cable

The DisplayPort cable is fully compliant to DPCP (DisplayPort Content Protection) ensuring full compatibility and successful transmission of all audio and video content. The cable supports PC resolutions of up to 2560x1600 and all HDTV resolutions including 1080p. It also supports uncompressed audio and extended color depths of up to 12-bits per component ensuring flexibility to meet most display application needs.

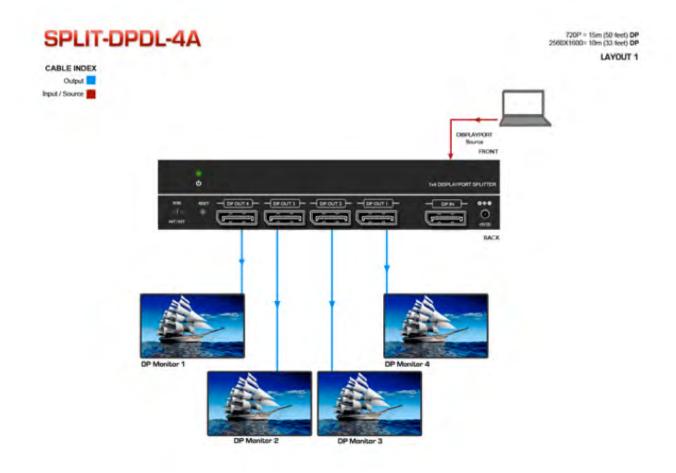
Please note, features are subject to the capabilities of the computer and graphics solution

#### DisplayPort to DisplayPort Version 1.1a Cabl

- Connect a DisplayPort Enabled Computer to a DisplayPort Monitor, TV or Projector
- Transfers Both Uncompressed Audio and High-Definition Video Signals
- 2.7 Gbps data rate x 4 lanes Effective total throughput 8.64 Gbps
- Supports HDTV Resolutions up to 1080p and 2560x1600 for Computers
- DisplayPort Version 1.1a compliant VESA Authorized Test Center (ATC) certified
- Locking DisplayPort Connectors Keep the Cable Securely Connected

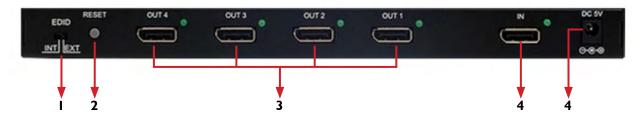


# 2.4 APPLICATION DIAGRAM





## 2.5.1 INPUT PANEL (SPLIT-DPDL-4A) Back Panel



- EDID: EDID switch INT/EXT: This switch allows user to select the built-in EDID (INT) or the display's EDID (EXT). Note: When the EDID switch is on EXT, the unit will detect Output 1'sdisplay EDID and record in the unit. If the first Detected Output 1 is Not connected, it will pass to the next which is Output 2..... and so on until the display's EDID is recorded in the unit
- 2. RESET: Press this button every time when switch the EDID allowing the device to update the EDID selection.
- 3. DP OUT 1-4: connect the DP cable to the output for displaying a single source on four screens simultaneously.
- 4. DP IN: Connect the DP cable from the source Equipment for signal sending.
- 5. Power Supply: 5V/3A only insert adaptor supplied.

Video Support		
VGA	•	
720p	•	
2560x1440	•	
Audio Support		
PCM 2CH 48K	•	
PCM 2CH 44.1K	•	
PCM 2CH 32K	•	

### 2.5.2 INPUT PANEL (SPLIT-DPDL-4A) Front Panel

POWER ©
DISPLAYPORT 1x4 SPLITTER

6. Power LED: The LED will illuminate in green when power on and in red when in reset mode.





# 3. INSTALLATION (SPLIT-DPDL-4A)

To setup Avenview SPLIT-DPDL-4A please follow these steps for connecting to a device:

- 1. Power off sources such as using DP graphic card, Laptop Mac etc.
- 2. Connect DisplayPort video Source to the INPUT- upto 2560x1600
- 3. Connect DisplayPort cable to DisplayPort Displays
- 4. Plug in 5V DC power cord to power jack of SC-HDM-HD42K
- 5. Power on DisplayPort Source and DisplayPort Display
- 6. When the Input is connected and turned on the corresponding LED will light on the output port

# 4. GENERAL TROUBLESHOOTING

PROBLEM	POSSIBLE SOLUTION
CHANGE TX	<ul> <li>Check if connection to the source and the display are correct.</li> <li>Ensure that display device supports DP and upto 2560x1600</li> <li>Please use the supplied power supply-DC 5V 3A</li> <li>Check LED light on Front Panel see (Section 3 Panel Description)</li> <li>Check EDID Switch position see (Section 3 Panel Description)</li> </ul>



# SECTION 7: SPECIFICATIONS

# 5. SPECIFICATIONS

ltem	Description	
UNITS	SPLIT-DPDL-4A	
UNIT DESCRIPTION	IX4 DP splitter with PCM audio support	
DP COMPLIANCE	YES	
DPCP	Compliant	
VIDEO BANDWIDTH	10.8Gbps (4lanes at 2.7Gbps)	
VIDEO SUPPORTED	2560X1600 DEEP COLOR 12BIT	
	SEE ALSO Section 3	
DISPLAY PORTCABLE	WQXGA: (2560X1600) ~ IN 5m(16ft) OUT 10m(33ft)	
AUDIO SUPPORT	PCM 7.1(32-192kHz Fs sample rate)	
ESD PROTECTION	Human body model — ±8kV (air-gap discharge)	
esperotection	±4kV (contact discharge)	
INPUT	I x DisplayPort Type A (20 pin female)	
OUTPUT	2 x DisplayPort Type A (20 pin female)	
LED	Front Panel Indicators	
	10.6" x 5" x 1.14"	
DIMENSIONS (L X W X H)	270(W) x 124.5(D) x 29(H)	
WEIGHT	I.5 lbs	
WEIGHT	680g	
POWER SUPPLY	5V / 3A DC	
POWER SOFFLY	(US/EU standards, CE/FCC/UL certified)	
POWER CONSUMPTION	7 Watt (max)	
Environmental		
OPERATING TEMPERATURE	32° ~ 104°F (0° to 40°C)	
STORAGE TEMPERATURE	-4° ~ I40°F (-20° ~ 60°C)	
RELATIVE HUMIDITY	20~90% RH (non-condensing)	









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# **TECHNICAL SUPPORT**



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