



# **XA-HSP**

**HDMI Surge Protection Tool**

**/// OPERATION MANUAL**



## SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

## REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
RDV1	10/07/16	Preliminary Release

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## 1. INTRODUCTION

Designed to help protect your HDMI devices, the XA-HSP is a crucial tool when installing HDMI systems in locations where there can be power fluctuations caused by unstable mains power or where the site is susceptible to earthing problems or lightning strikes. Installers feedback has identified this as an issue in some geographical locations worldwide, along with applications for test beds, outside broadcast vehicles, old buildings such as places of worship, and for marine installations to name a few examples. As a completely passive device, there is no need for a PSU to be connected and thus simply connecting the XA-HSP in-line on the HDMI signal path will protect all HDMI equipment from voltage surges.

The XA-HSP is HDCP2.2 compliant and will support 4K/UHD resolutions including HDR. In addition, 3D Video signals and High Definition Audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus, Dolby Atmos and DTS-HD Master Audio are also supported.

## 2. APPLICATIONS

- Entertainment Room & Home Theater
- Show Room & Demo Room
- Lecture Room & Hall Presentation
- Public Commercial Display

## 3. PACKAGE CONTENTS

- 1 x Surge protector unit
- 1 x Operation Manual

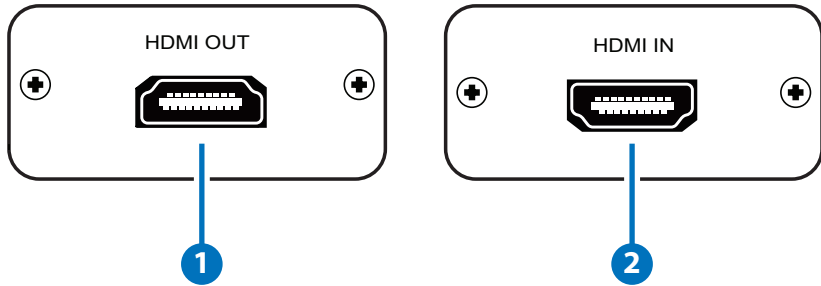
## 4. SYSTEM REQUIREMENTS

Input source equipment such as PS3/Blu-ray player and output UHD TV or display or connects between matrix/scaler and displays/projector

## 5. FEATURES

- HDCP1.4 and HDCP2.2 Compliant
- Supports HDTV resolutions up to 4Kx2K (3840x2160@24/25/30/ 50/60 YUV\_420 & 4096x2160@24/25 YUV\_420).
- Supports bypass of high resolution digital audio formats including LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio
- Sink +5V protection
- HDMI Cable lengths of up to 5m either side of the device is supported
- Supports CEC bypass
- Passive device (no PSU required)

## 6. OPERATION CONTROLS AND FUNCTIONS



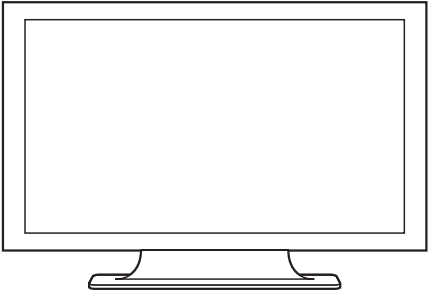
### 1 HDMI OUT

Connects with displays or projector.

### 2 HDMI IN

Connects the source equipment such as DVD player or matrix / scaler unit.

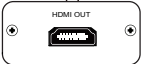
# 7. CONNECTION DIAGRAM



Display



HDMI Cable



HDMI Cable



DVD player



## 8. SPECIFICATIONS

<b>Input Ports</b>	1 x HDMI
<b>Output Ports</b>	1 x HDMI
<b>Over voltage protection</b>	5V
<b>Supported Resolution</b>	480 i to 4K2K YUV 4:2:0
<b>Supported audio formats</b>	LPCM, Dolby, DTS
<b>Support audio sampling rate</b>	32kHz ~ 192kHz
<b>EDID</b>	Bypass
<b>Audio Return Channel</b>	Bypass
<b>3D content</b>	Bypass
<b>CEC</b>	Bypass
<b>Deep color</b>	8 bit, 10 bit and 12 bit
<b>HDMI transmission distance</b>	5 meter for HDMI Input and output (3840 x 2160)
<b>ESD</b>	±15kV (Air) / ±8kV (Contact)
<b>Chassis Material</b>	Plastic
<b>Chassis Color</b>	Black
<b>Weight</b>	56g
<b>Dimensions</b>	482mm(W) x 354mm(D) x 96mm(H)

## 9. SUPPORT TIMING TABLE & HDMI CABLE LENGTH

### 9.1 Support Timing Table

HDMI IN & OUT RESOLUTION	SUPPORTED
480i	✓
576i	✓
480p	✓
576p	✓
640x480	
800x600	
1080i @50&60	✓
1080p@50&60	✓
1024x768	✓
1360x768	
1280x1024	✓
1600x1200	✓
1920x1200	✓
3840x2160p@24&25&30	✓
3840x2160p@60(YUV420)	✓
4096x2160p@24	✓
4096x2160p@50 & 60(YUV420)	✓

### 9.2 HDMI Cable Length

HDMI CABLE LENGTH (MAX)		
Resolution	Input	Output
3840x2160p	5m	5m





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RDV1