NEXIS

SP818
1 by 8 4K UHD HDMI Splitter

HDMI®
HIGH-DEFINITION MULTIMEDIA INTERFACE

Operation Manual

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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	16/08/16	Preliminary Release

CONTENTS

1. INTRODUCTION

This 1 by 8 4K UHD HDMI Splitter is an advanced solution for splitting and distributing a single HDMI input to 8 HDMI outputs. It provides a high level of audio and video performance with support for resolutions up to 4K@60Hz (YUV4:2:0) resolution and high definition digital audio formats such as LPCM 7.1CH with audio sampling rates up to 192kHz, Dolby TrueHD, Dolby Digital Plus, Dolby Atmos and DTS-HD Master Audio. Additionally, the System Reset function allows the unit to change the input selection on any connected, CEC enabled, TVs to the input the unit is currently connected to automatically.

2. APPLICATIONS

• Classroom and Lecture Hall Presentations
• Showrooms and Demo Rooms
• Hotel Lobby information Displays
• Public Commercial Displays

3. PACKAGE CONTENTS

• 1 by 8 HDMI splitter
• 5V/1.2A DC Power Adaptor
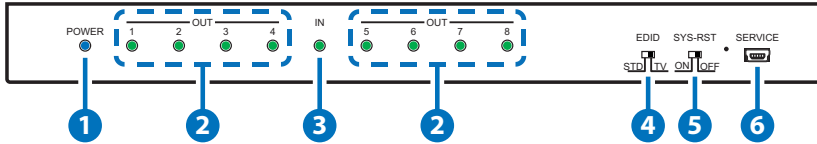• Operation Manual

4. SYSTEM REQUIREMENTS

• HDMI source equipment such as media players, video game consoles or set-top boxes.
• HDMI receiving equipment such as HDTVs, monitors or audio amplifiers.
• The use of "Premium High Speed HDMI" cables id highly recommended.

5. FEATURES

- HDMI 2.0 and DVI 1.0 compliant
- HDCP 1.4 compliant
- 1 HDMI input and 8 HDMI outputs
- System reset function (CEC active source command)
- Simultaneous display of a single Ultra High-Definition source on up to 8 4K UHD TV displays
- 3D signal support(with 3D source and compatible 3D TV)
- Supports 4K UHD resolutions up to 4096x2160@60Hz(YUV4:2:0, 8 bit)
- Pass-through high definition audio: including LPCM up to 7.1, Dolby Digital, DTS
- Pass-through of high definition audio including LPCM up to 7.1, Dolby Digital, DTS, Dolby TrueHD, Dolby Atmos and DTS-HD Master Audio
- EDID management control including Standard mode and TV mode
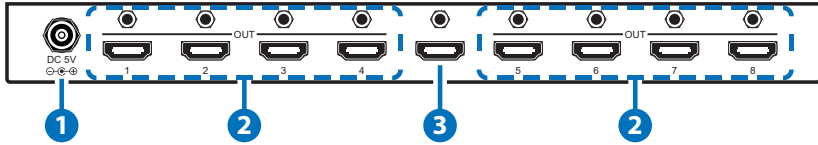
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel

1 **Power:** This LED will illuminate when the device is connected to an active power supply.

2 **OUT LED 1~8:** When output detected, the LED will illuminate, and when output is not connected, the LED will off.

3 **IN:** When input detected, the LED will illuminate. When input is not connected, the LED light will be off.

4 **SYS-RST:** Switch the dip switch from off to on, the unit will trigger TV to its HDMI input immediately, when stays in on, the unit will trigger the system in every 8~10 minutes. (*The purpose of reset is to guarantee all outputs are displaying the corresponding image. For example, at the display side user may switch to different HDMI input or select other sources and this reset function will force the display to switch back to its HDMI input. TV/displays shall support CEC function in order to perform this function successfully.)

5 **EDID:** Switch the dip switch to choose EDID mode to Standard (STD) or TV mode. When on TV mode, the unit will automatically detect and store output 1 sink EDID data. Switch to STD mode and reboot the unit, the unit will search the suitable resolution out of all connected display with video standard at 1080p and audio standard at LPCM 2 channel.

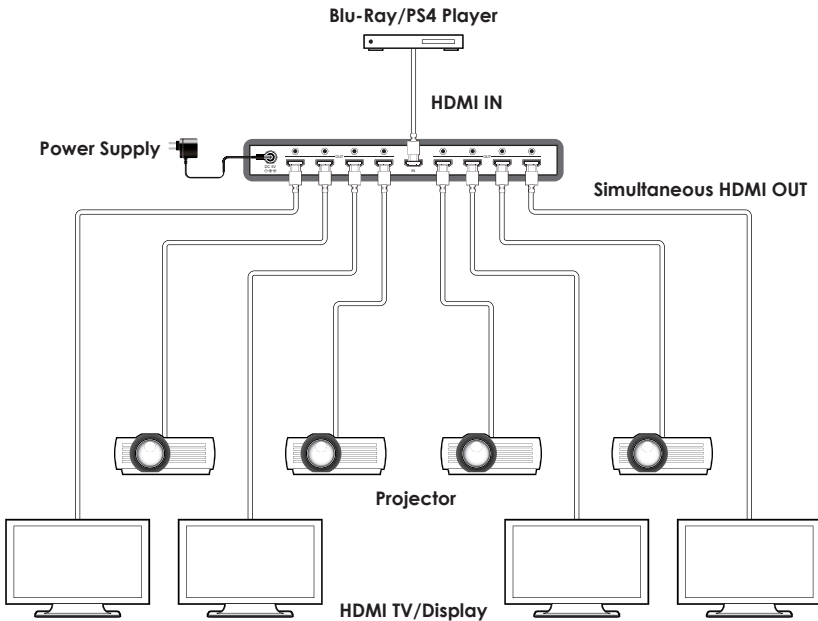**6** **SERVICE:** This is reserved for firmware update use only.

6.2 Rear Panel

1 **DC 5V:** Plug the 5V DC power adapter into the unit and connect it to an AC wall outlet for power.

2 **OUT 1~8:** Connect to HDMI TVs, monitors or amplifiers for digital video and audio output.

3 **IN:** Connect to HDMI source equipment such as a media player, game console or set-top box.

7. CONNECTION DIAGRAM

Blu-Ray/PS4 Player

HDMI IN

Power Supply

Simultaneous HDMI OUT

Projector

HDMI TV/Display

8. SPECIFICATIONS

8.1 Technical Specifications

Video Bandwidth	300MHz/9Gbps
Input Ports	1× HDMI
	1× USB(Service)
Output Ports	8 × HDMI
Supported Resolutions	VGA~WUXGA
	480i~1080p@60Hz
	4K@24/25/30Hz (4:4:4)
	4K@50/60Hz (YUV4:2:0)
HDMI Cable I/O Distance*	5M (4K@60Hz, YUV4:2:0, 8-bit)
	10M (1080p@60Hz, 8-bit)
Power Supply	5V/1.2A DC (US/EU standards, CE/FCC/ UL certified)
ESD Protection	Human Body model:
	± 8kV (air-gap discharge)
	± 4kV (contact discharge)
Chassis Material	Metal
Silkscreen Color	Black
Dimensions	260mm × 22mm × 68mm (W×H×D)
	[Case Only]
	260mm × 26mm × 76.5mm (W×H×D)
	All Inclusive]
Weight	488 g
Operating Temperature	0˚C~40˚C / 32˚F ~ 104˚F
Storage Temperature	-20˚C ~ 60˚C / -4 ˚F ~ 140 ˚F
Relative Humidity	20 ~ 90% RH (no condensation)
Power Consumption	3.63 W

8.2 Supported Resolutions

DVI and HDMI Supported Resolutions	Input	Output
640x480@60/72/75/85Hz	✓	✓
800x600@56/60/72/75/85Hz	✓	✓
1024x768@60/70/75/85Hz	✓	✓
1280x1024@60Hz	✓	✓
1366x768@60Hz	✓	✓
1600x1200@60Hz	✓	✓
1920x1080@60Hz	✓	✓
1920x1200@60Hz	✓	✓
1440x576i@50Hz	✓	✓
1440x480i@59.94/60Hz	✓	✓
720x480p@59.94/60Hz	✓	✓
720x576p@50Hz	✓	✓
1280x720p@50/59.94/60Hz	✓	✓
1920x1080i@50/59.94/60Hz	✓	✓
1920x1080p@23.97/24/25/29.97/30/50/59.94/60Hz	✓	✓
3840x2160@24/25/30Hz	✓	✓
3840x2160@50/60Hz (YUV4:2:0)	✓	✓
4096x2160@24/25/30Hz	✓	✓
4096x2160@50/60Hz (YUV4:2:0)	✓	✓