HDMI v1.4 4in:2out Matrix Switch - ID# 885

Operation Manual

CONVERTERS.TV

Introduction

This is a high performance four input & two outputs HDMI Switcher supports, the output ports support Audio Return Channel (ARC) and HDMI Ethernet Channel (HEC) follow by HDMI v1.4 specification. The ARC provides an S/PDIF link from and HDMI sink and output through ARC port to AVR to get true audio from the sink. The HEC feature adds a connection to the HDMI link that is capable of carrying the same data as a full duplex, 100Mbps Ethernet connection. Using an HDMI with HEAC cable allowing for convenient integration of Digital Televisions (DTVs) into the end user's home network system.

Applications

- Simultaneous display one HDMI source on 2 TVs
- Professional audio display
- Showroom display
- Education demo
- Commercial usage

System Requirements

- Source equipments with HDMI output connector(s)
- Displays TV/monitor with HDMI input connector(s)
- Two output ports can be connect to the Ethernet Channel (HEC) of Digital Televisions (DTVs) from end user's home network system and Audio Return Channel (ARC) can output to the AVR to get true audio from the sink.

Features

- Support multiplexed HDMI 4-input and 2-output
- Two output ports support Ethernet Channel (HEC) and Audio Return Channel (ARC) follow by HDMI v1.4 specification
- HDMI 1.4 support:
    - Audio Return Channel (ARC)
    - 3D
    - CEC 1.4
    - HDMI Ethernet Channel (HEC), enabling high-speed, bi-directional networking at up to 100Mb/sec
- HDCP repeater support
- Deep Color support 36/30/24-bit, 1080p@60Hz
- EDID can selected Standard, TV or Lock EDID feature
- Audio support:
    - HDMI 1.4 compatible audio interface
    - Dedicated, flexible audio input/output port Al Dolby TrueHD
    - DTS-HD Master Audio
    - Full audio input and output support

Operation Controls

and Functions
Front Panel
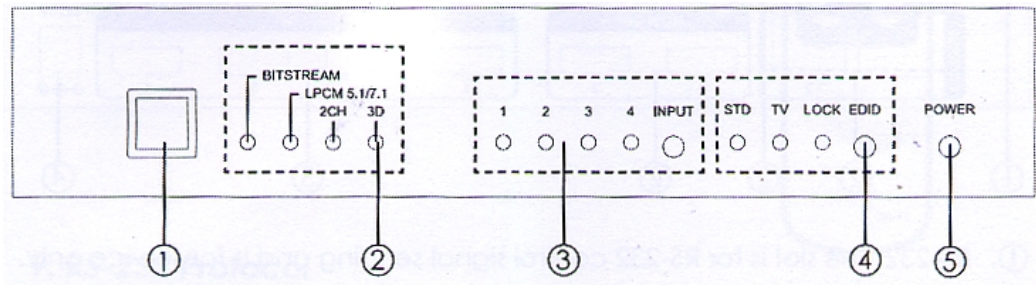
1). IR Remote Control Sensor.

2). Audio/3D content indicator: The system will automatically detect incoming audio/video signal and the Green LEDs will illuminate accordingly.

3). Input selection: Press input button to select input source, the Blue LED will illuminate accordingly.

4). EDID selection: This EDID control button is determined if you are going to use the EDID from the display attached to output 1 or use an onboard EDID the Green LED will illuminate accordingly. When press EDID button longer then 3 seconds, the RED LED will illuminate which means the EDID already lock STD or TV EDID as you selected accordingly.

5). Power LED Indicator: The LED will illuminate when the power is

Rear Panel
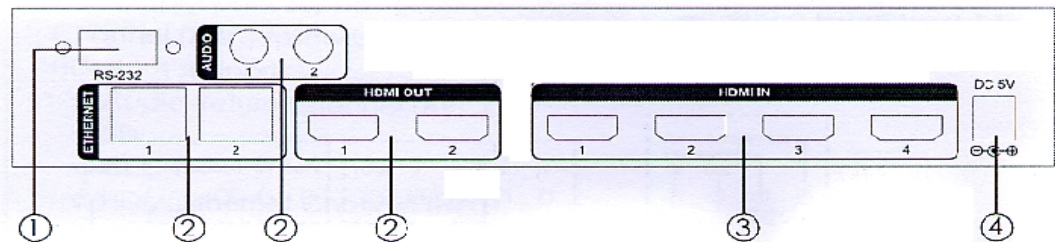
1). RS-232: This slot is for RS-232 control signal sending and is for service only.

2). HDMI 1-2out/ARC 1-2/Ethernet 1-2: Connect Ethernet and Audio Return Channel to capabilities of sink, The sink will pass the Ethernet and Audio signal via HDMI input to HDMI output port individually, each HDMI will separate the Ethernet and audio and send it out from ARC and Ethernet ports. For the ARC, the user had a sink with a built-in tuner or DVD player and wanted to send content "upstream" from the TV back to the audio system to play and multi-channel audio.

The HDMI Ethernet Channel, it can consolidates video, audio and data streams into a single HDMI cable to the Ethernet Hub/AP to access the internet and it

incorporates a dedicated data channel into the HDMI link, enabling high-speed, bi-directional networking at up to 100Mb/sec to control and search from the sink.

Note:

1.Be sure to connect devices with one of the new cables designed to support HDMI Ethernet Channel functionality, either the standard HDMI cable with Ethernet or High Speed HDMI cable with Ethernet.

2.When the HDMI output with the Audio and ARC are exist at the same time the ARC will be the first priority to access.

3.). HDMI input 1-4: Connect to HDMI or DVI sources equipment such as DVD player or set-top-box for input video and audio sending.

4). Power: Plug the DC 5V power supply into the splitter and connect the adaptor to AC wall outlet.

Remote Control

1). **Power button:** Press to switch On the device, press it again to set the device in standby mode.
2). **1-4:** Press the desire input button to select the input source.
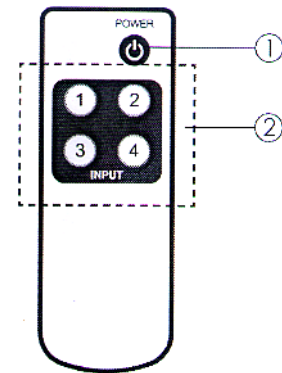

RS232 Protocol

Pin Definition

CPRO-3D42S			Remote Control Console	
PIN	Definition		PIN	Definition
1	NC		1	NC
2	Tx		2	Rx
3	Rx	►	3	Tx
4	NC		4	NC
5	GND	◄	5	GND
6	NC		6	NC
7	NC		7	NC
8	NC		8	NC
9	NC		9	NC

Baud Rate: 9600bps Data bit: 8bits
Parity: None
Stop bit: 1 bit
Flow Control: None

Command

Command	Action
POWER 00	Power Off (standby)
POWER 01	Power On
PORT 11	Output Select Input 1
PORT 12	Output Select Input 2
PORT 13	Output Select Input 3
PORT 14	Output Select Input 4
PORT 21	Output Select Input 1
PORT 22	Output Select Input 2
PORT 23	Output Select Input 3
PORT 24	Output Select Input 4

Connection
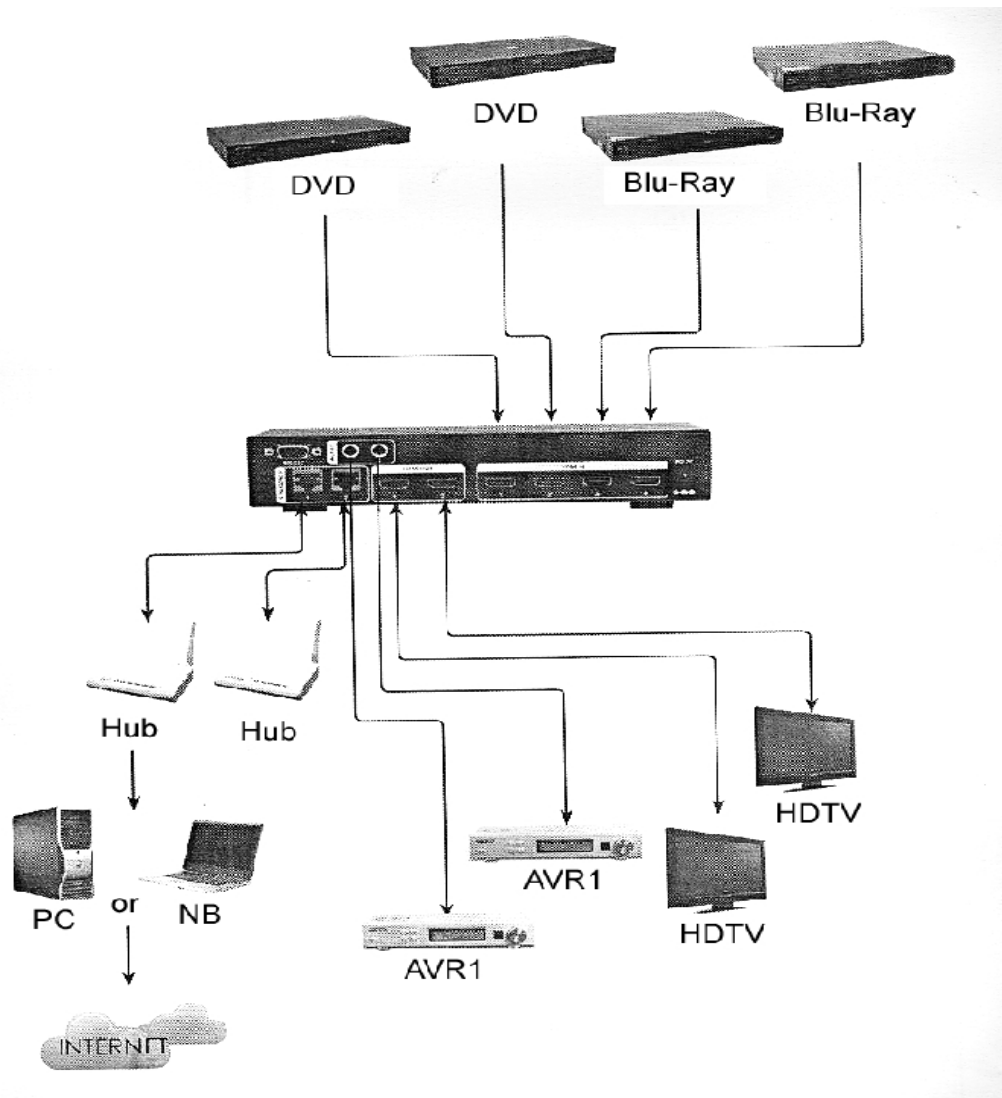
Specifications

Frequency Bandwidth	2.25Gbps (single link)
Input Ports	4x HDMI (Female type)
Output Ports	2 x HDMI (Female type)
	2 x Ethernet
	2 x ARC
Output Resolution	480i -1080p 50/60, 1080p24, VGA-UXGA
ESD Protection	Human Body model: ±8kV (air-gap discharge)
	± 4kV (contact discharge)
Dimensions (mm)	(W)240 x (D)105 x (H)40
Weight(g)	800
Chassis Material	Metal
Silkscreen Color	Black
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 (non-condensing)
Power Consumption	4.1W