4-in 1-out HDMI /Digital Audio Switcher

Operation Manual


CHDMI-41AT

Introduction

CHDMI-41AT is a high performance HDMI switcher with separate digital audio input and output. It allows your various HDMI sources to share one HDTV display. Simply pressing one button to select your desired HDMI source
for display on the HDTV.

Features

* HDMI 1.2, HDCP 1.1 and DVI 1.0 compliant.
* Signal Enhancement feature allows you to improve signal quality
   after long distance transmission.
* Optical and coaxial digital inputs and outputs.
* LED indicators.
* Ideal for home theater integration.
* Supports high resolution input:
   PC: VGA, SVGA, XGA, SXGA, and UXGA (1600 x 1200)&
   HDTV: 480i, 576i, 480p, 576p, 720p, 1080i, and 1080p
* Remote control.
* Easy to install and simple to operate.

Operation Controls and Functions

Front Panel
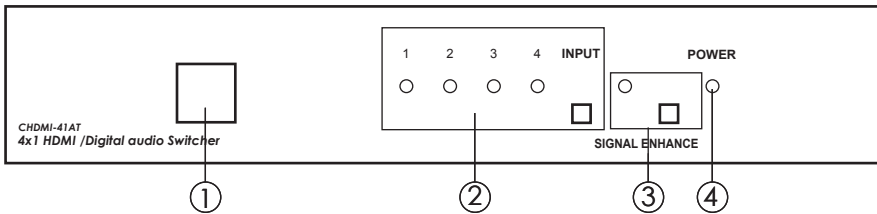
1. **Remote control sensor.**
2. **Input select/Indicators:** Press the " INPUT" button repeatedly to switch to your desired input source and the LED will illuminate to indicate which input source is being selected.
3. **Signal Enhancement/Indicator:** Press the " Signal Enhance" button to turn on this feature to improve signal quality after long distance transmission. Press again to turn off. The LED will illuminate when the signal is enhanced.
4. **Power LED Indicator:** The LED will illuminate when the power is connected.

Operation Controls and Functions

Rear Panel
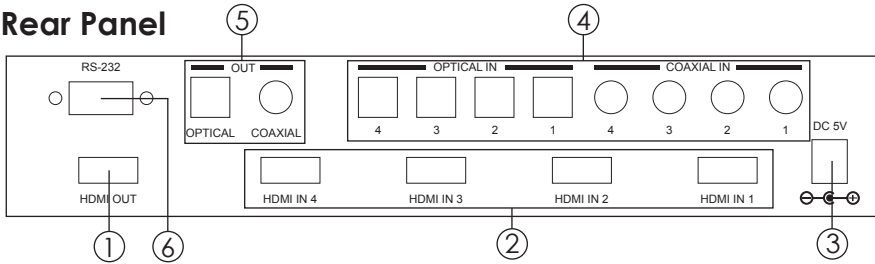
1. HDMI output: Connect the HDMI output to the HDMI input of your display using HDMI cable.

2. HDMI inputs: Connect your various HDMI sources to each of the HDMI input of the unit using HDMI cables.

3. Power: Plug the supplied 5VDC power supply into the unit.

4. Digital audio inputs:
- Connects your various toslink sources to each of the toslink input of the unit using optical cables.
- Connects your various SPDIF sources to each of the coax input of the unit using coax cables.

5. Digital audio output:
- Connects the toslink output to the toslink input of your display using optical cable.
- Connects the digital SPDIF output to the digital coax input of the display using coax cable.

6. RS232: 9-pin D-sub female connector for connecting to your other control console for remote control.
  * The connection between CHDMI-41AT and remote controller through RS-232 modem cable.

RS-232 Remote Control Protocol

Pins definition of modem cable			Remote Controller	
PIN	Definition		PIN	Definition
1	NC		1	NC
2	TxD	→	2	RxD
3	RxD		3	TxD
4	NC		4	NC
5	GND	←	5	GND
6	NC		6	NC
7	NC		7	NC
8	NC		8	NC
9	NC		9	NC

* RS-232 transmission format:
  Baud Rate: 9600 bps
  Data Bit : 8 bits
  Parity   : None
  Stop Bit : 1 bit

* Command:

Command Code	Comment
"I" + "1"	PORT 1 ON
"I" + "2"	PORT 2 ON
"I" + "3"	PORT 3 ON
"I" + "4"	PORT 4 ON
"S" + "1"	ENABLE SIGNAL ENHANCE
"S" + "0"	ENABLE SIGNAL ENHANCE
"P" + "1"	POWER ON
"P" + "0"	POWER OFF

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Remote Control

1. Power:
   Press the button to turn on/off the unit.
2. Direct input selector:
   Press numerical number button to select your desired input source.
3. Void buttons (No function). If the button number is greater than the total input number of the unit then the button is of no function.

POWER

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪

① ② ③

CR-22
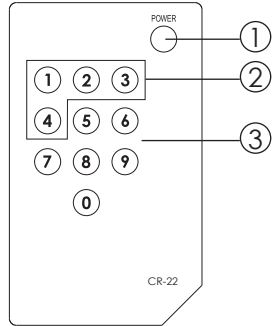
Specifications

* Frequency bandwidth: 1.65Gbps(single link)
* Inputs: - 4 x HDMI female ports (Type A connector)
         - 4 x SPDIF digital inputs.
         - 4 x toslink digital inputs.
* Output: - 1 x HDMI female port (single link).
          - 1 x SPDIF digital output.
          - 1 x Toslink digital output.
* 5VDC power supply
* Weight: 0.85kgs
* Dimension: 240(W) x110(L) x 50(H)mm
* **Option: CHDMI-41 4-in/1-out HDMI switcher.**
          CHDMI-31 3-in/1-out HDMI switcher.
          CHDMI-61 6-in/1-out HDMI switcher.
          CHDMI-81 8-in/1-out HDMI switcher.
          CH-210 2-in/1-out HDMI switcher.

Connection and Installation

DVD 1

DVD 3

DVD 2   STB

RS-232   OUT   OPTICAL IN   COAXIAL IN

OPTICAL COAXIAL   4   3   2   1   4   3   2   1   DC 5V

HDMI OUT   HDMI IN 4   HDMI IN 3   HDMI IN 2   HDMI IN 1

LCD TV   DVD 1   DVD 2   DVD 3   STB