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EL-C61C
v1.3 HDMI 6-Way Switcher with CEC

OPERATION MANUAL

Table of Contents

1. Introduction

Each switcher in the Elector Range is compatible to v1.3 HDMI specifications, supporting up to 16 bit Deep Colour together with High Definition audio. This CEC command function switcher allows the latest v1.3 HDMI equipment to Auto-Switch on source power up.

2. Features

- v1.3 HDMI, HDCP 1.1 and DVI 1.0 compliant.
- HDMI 6-Way Switcher with Consumer Electronics Control (CEC).
- Resolutions Supported: PC - VGA, SVGA, XGA, SXGA, UXGA . HDTV - 480i, 576i, 480p, 576p, 720p, 1080i, 1080p and 1080p24fps.
- High Definition Audio supported - Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio plus LPCM.
- Auto signal enhancement feature can improve signal quality after long distance transmission.
- Ideal for home theatre integration, conference room or retail stores.
- Supports high resolution input:
- PC: VGA, SVGA, XGA, SXGA, UXGA (1600 x 1200) and 1920 x 1200.
- HDTV: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p, and 1080p 24fps.
- RS-232 & IR Remote Control.
- CEC Auto switch control function.
- Supports 'Deep Colour' (10 & 12 bit).
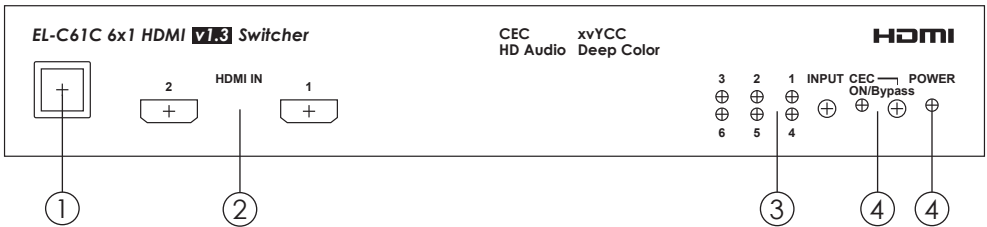- Supports xvYCC.
- Supports 3D signals.

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3. Package Contents

- 6 by 1 HDMI v1.3 Switcher
- Remote Control (CR-63 with battery)
- 5V DC Power Supply Adaptor
- Operation Manual.
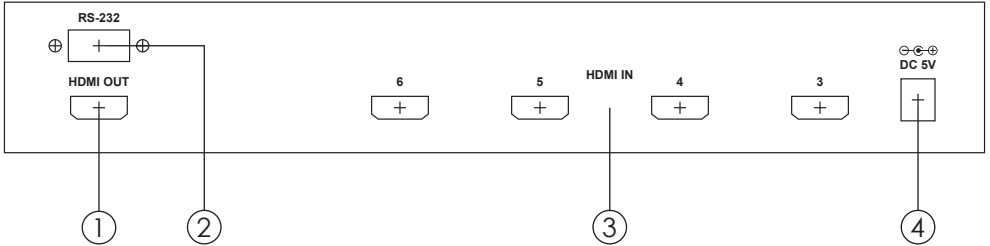
4. Operation Controls and Functions

4.1 Front Panel

1. Remote control sensor.
2. HDMI IN 1~2: These slots connect to the HDMI/DVI output ports of your source equipments. ie, set- up-box, DVD or Blue Ray.
3. Input select indicators: Press the "INPUT" button repeatedly to switch to your desired input source. The LED that illuminates indicate the corresponding input source is selected.
4. CEC button indicator: When the LED illuminate it means CEC is ON. Press again to switch CEC to bypass mode and the LED will not illuminate which means the CEC function will be terminate. Note: Both input source and output display must support CEC function for the switcher to properly perform CEC.
5. POWER indicator: When power is connected to the device, the device automatically turns on and the power LED will turn red. Note: To turn ON or switch the device to standby mode, please press the "POWER" button on the remote control unit.
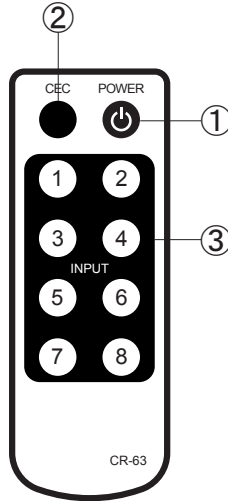
4.1 Rear Panel

1. HDMI OUT: This is the slot where you connect the HDMI output of the switcher to the HDMI input of your display using a HDMI cable.
2. RS-232 input: When doing firmware upgrade and/or PC remote system control, connect a D-sub 9 pin cable from this RS232 slot to your computer.
3. HDMI IN 3~6: These slots connect to the HDMI/DVI output ports of your source equipments. ie, set- up-box, DVD or Blue Ray.
4. DC 5V: Connect the 5V DC power adaptor into this slot and plug the adaptor to an AC wall outlet.

4.3 Remote Control

1.   Power: Press the button to turn on the unit-or set the device to standby mode.

2.   CEC: Press the button to turn on /Bypass the CEC function. When the LED illuminate it means CEC is ON and both input source and output display must support CEC function in order to perform CEC rightly. Press again to switch CEC to Bypass mode and the LED will not illuminate whic means the CEC function will be terminate.

3.   Input selector: Press from 1~4 to select the desired input sources. No. 5~8 is not functioning for this model.

5. RS232 Pinouts

EL-41AT		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

RS-232 transmission format:

- Baud Rate: 19200 bps
- Data bit: 8 Bits
- Parity: None
- Stop Bit: 1 bit
- Flow Chart: None

6. Commands Sets

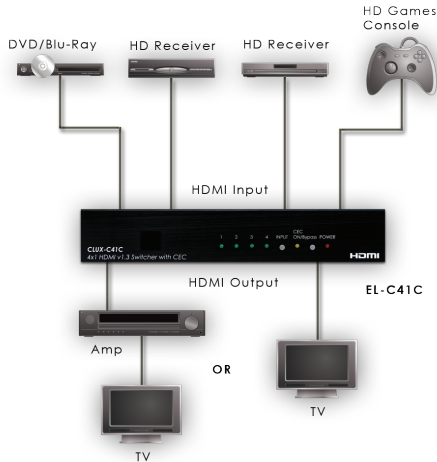| COMMAND	ACTION
"I" + "1"	PORT 1 ON
"I" + "2"	PORT 2 ON
"I" + "3"	PORT 3 ON
"I" + "4"	PORT 4 ON
"C" + "1"	ENABLE SIGNAL ENHANCE
"C" + "0"	DISABLE SIGNAL ENHANCE
"P" + "1"	POWER ON

"P" + "0"	POWER OFF
"P" + "0"	POWER OFF
"S"	REPORT STATE

RS-232 transmission format:
- Baud Rate: 19200 bps
- Data bit: 8 Bits
- Parity: None
- Stop Bit: 1 bit
- Flow Chart: None

7. Connection Diagram

7. Specifications

HDMI Input Port	6 x HDMI female ports + 1 x RS-232
HDCP Version	V1.1
HDMI Output Port	1 x HDMI female port
Color Space	YCbCr 4:2:2 16/20/24 bits
Deep Colour	RGB / YCbCr 4:4:4 24/30/36 bits
ESD Protection	Human body model: ± 10kV (air-gap discharge)
	± 6kV (contact discharge)
Input TMDS signal	1.2 Volts (peak-to-peak)
Input DDC signal	5 Volts (peak-to-peak, TTL)
Frequency bandwidth	2.25Gbps (single link)
Power Supply	5V/1A DC (US/EU standards, CE/FCC/UL certified)
Dimensions (mm)	240 (W) x 110 (D) x 50 (H)
Weight (g)	540
Chassis Material	Aliminium
Chassis Colour	Black
Operating Temperature	Operating from 0°C ~ 48°C

Notes:

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