

3-in 1- out DVI Switcher

CDVI-31

Operation Manual



Application

Cypress CDVI-31 DVI Switcher is a high performance digital HD signal processor that designed for use in switching between various DVI sources such as satellite receiver, DVD player and PCs for sharing one TV display.

Features

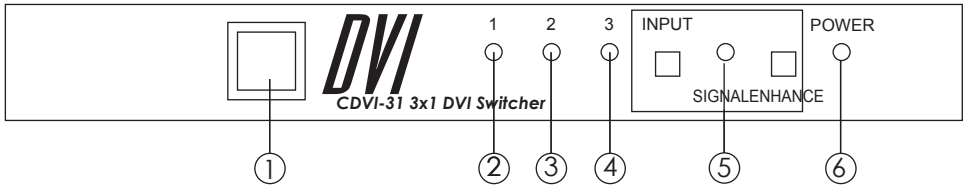
- * HDCP 1.1 and DVI 1.0 compliant
- * The unit has the function of signal enhancer to improve the signal quality after long distance transmission.
- * LED indicators
- * Ideal for home theater integration.
- * Supports high resolution:
PC:VGA, SVGA, XGA, SXGA and UXGA 1600X 1200,&
DTV: 480i, 576i, 480p, 576p, 720p, 1080i and 1080p @ 60Hz
- * Remote control
- * Easy to install and simple to operate
- * Low cost solution for home theater integration
- * Plug-and-Play. No software installation
- * CDVI-31 can be controlled either through input selection button on the front panel or using an included infrared remote control.

Package Includes

- The CDVI-31 unit
- IR remote control
- 5VDC power supply with universal plugs

Operation Controls and Functions

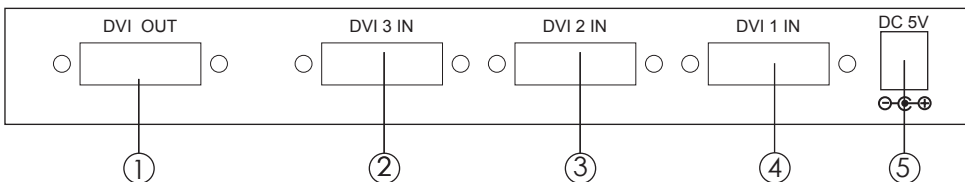
Front Panel



1. IR sensor: Infrared remote control sensor.
2. LED 1: When it lights up, it means source 1 is selected.
3. LED 2: When it lights up, it means source 2 is selected.
4. LED 3 : When it lights up, it means source 3 is selected.
5. Signal Enhance: After long distance transmission you can press this button to enhance the signal.
6. Power: When power LED lights up, the unit works on.

Operation Controls and Functions

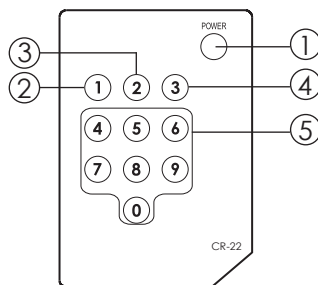
Rear Panel



1. DVI out: Use a DVI to DVI cable to connect to your display.
2. DVI 3 in: Use a DVI to DVI cable to connect to your source 3.
3. DVI 2 in: Use a DVI to DVI cable to connect to your source 2.
4. DVI 1 in: Use a DVI to DVI cable to connect to your source 1.
5. DC power jack: 5V 2A DC power input.

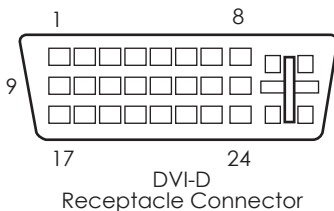
Remote Control

1. Power: Switch between power ON and Standby.
2. Press button 1 to select source 1.
3. Press button 2 to select source 2.
4. Press button 3 to select source 3.
5. 4~0: Void buttons.



DVI-D Pin Configuration

DVI-Digital (DVI-D): Supports display-only connections between the host computer and display. This interface is designed for a 12 or 24-pin connection to enable single or dual-link mode activation.



Digital-Only Connector Pin Assignments

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2/4 Shield	11	T.M.D.S. Data1/3 Shield	19	T.M.D.S. Data0/5 Shield
4	T.M.D.S. Data4-	12	T.M.D.S. Data3-	20	T.M.D.S. Data5-
5	T.M.D.S. Data4+	13	T.M.D.S. Data3+	21	T.M.D.S. Data5+
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground (for +5)	23	T.M.D.S. Clock+
8	No Connect	16	Hot Plug Detect	24	T.M.D.S. Clock-

Specifications:

- * Frequency bandwidth: 1.65Gbps(Single link)
- * Inputs: 3 DVI-I female ports (Single link)
- * Output: 1 DVI-I female port (Single link)
- * Power supply: 5VDC 2A/ center positive
- * Weight: 0.57kgs
- * Dimension: 105(W) x20(L) x 25(H)mm

RS-232 Remote Control Protocol

The connection between splitter and remote controller with **RS-232 modem cable**.
ns definition of modem cable

Splitter		Remote Controller	
PIN	Definition	PIN	Definition
1	NC	1	NC
2	T xD	2	R xD
3	R x D	3	T x D
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

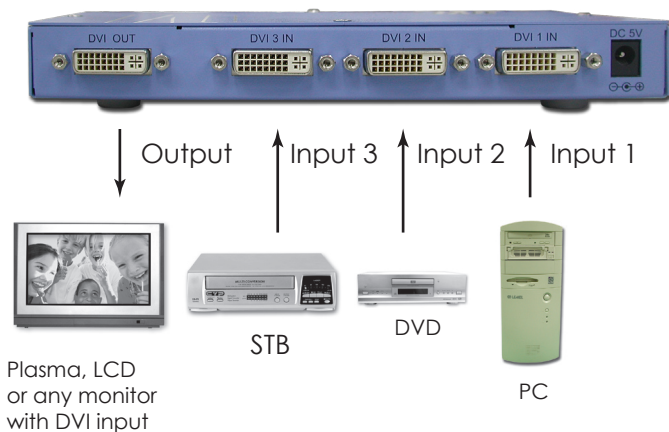
Stop Bit: 1 bit

RS-232 command

- * The command is combined with a characters and digits.
- * This combination command code has to be separated by ASCII character SPACE
- * The command will be executed after ASCII character "CR" input
- * After ASCII character "CR" is entered, if the command is legal the unit will reply "OK" message
- * If the command is illegal, The unit will reply "NG" message

Command Code	Comment
PORT 1	PORT 1 ON
PORT 2	PORT 2 ON
PORT 3	PORT 3 ON
SIGNAL 1	ENABLE SIGNAL ENHANCE
SIGNAL 0	DISABLE SIGNAL ENHANCE
POWER 1	POWER ON
POWER 0	POWER OFF

Connection and Installation



Trouble Shooting Guide

When there is no picture present, please check:

1. Whether all connectors connect well or not? Or
2. Whether the connecting cable is damaged?

