HDMI to DVI-D Converter w/ SPDIF Digital Audio ID# 431

Operation Manual

CONVERTERS.TV

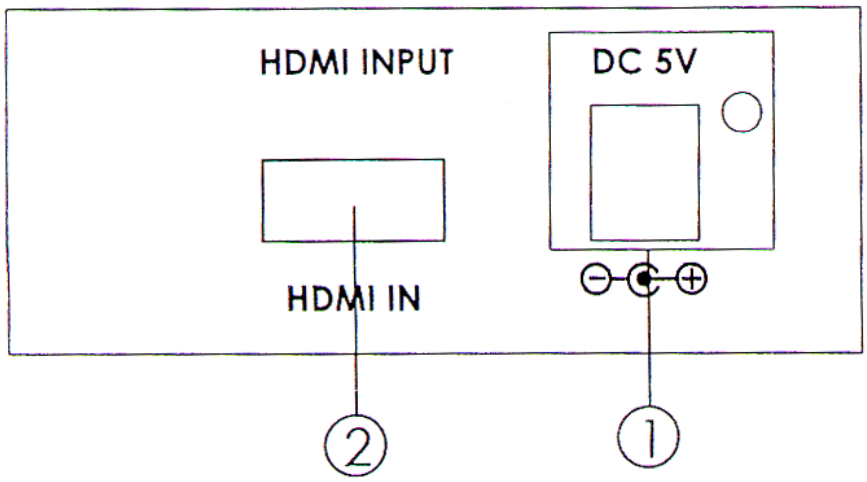
Introduction

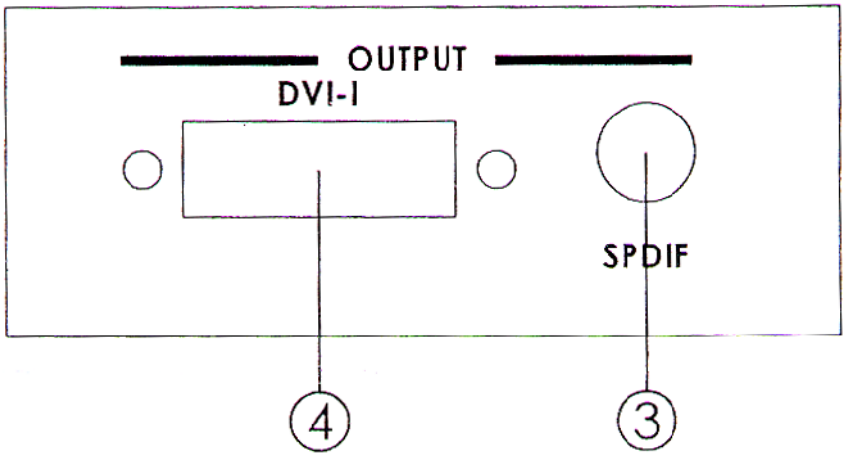
This converter box is designed to convert video and audio signal from HDMI source to DVI-D plus Coaxial audio outputs. The product allows you to connect the HDMI source to a display with DVI-D input meanwhile extract digital audio signal from the same source to an audio receiver. The HDMI converter box also does signal amplification and equalization for incoming TMDS data before re-transmitting them with optimal quality regardless of the incoming signal quality. Therefore, its output could be connected to an HDMI device, with a DVI-D to HDMI cable or adapter, to be utilized as an HDMI repeater

Features

- HDMI 1.2, HDCP 1.1 and DVI 1.0 compliant.
- Supports HDMI input and DVI-D (or HDMI, using proper cable/adapter) with Coaxial output.
- Detects input format between digital RGB and YPbPr automatically.
- Supports input/output video resolutions up to UXGA (PC) or 1080p@60Hz (HDTV).
- Supports input/output digital audio signal of LPCM, Dolby Digital or DTS.
- Supports HDMI signal amplification and equalization.
- Easy to install and to operate.

Operating Functions and Controls



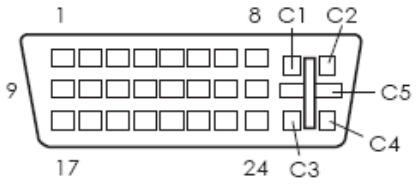


1. **Power input:** Plug the supplied 5V DC power supply into the unit and the LED will illuminate when the power is connected.
2. **HDMI output:** Connects the HDMI output connector of your source equipment.
3. **Digital audio (SPDIF) input:** Connects to the digital audio output of your source equipment.
4. **DVI input:** Connects to the DVI-D connector of you DVI display such as monitor or projector. It outputs only DVI-D signal via a DVI-I connector.

Pin Configuration

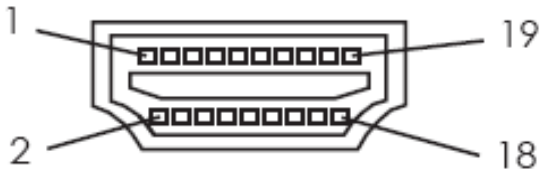
A. DVI-D Output Pin Assignment

DVI-Digital (DVI-D): supports digital 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.



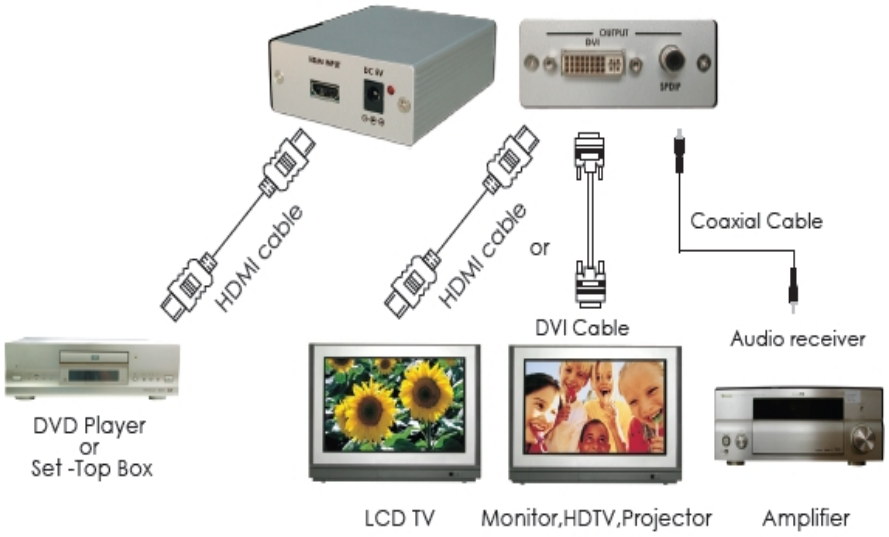
Digital only connector pin assignments					
Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S Data2-	9	T.M.D.S Data1-	17	T.M.D.S Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2 Shield	11	T.M.D.S. Data1 Shield	19	T.M.D.S. Data0 Shield
4	N.C.	12	N.C.	20	N.C.
5	N.C.	13	N.C.	21	N.C.
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground (for +5V)	23	T.M.D.S. Clock+
8	No Connect	16	Hot Plug Detect	24	T.M.D.S. Clock-
C1	N.C.	C2	N.C.	C3	N.C.
C4	N.C.	C5	N.C.		

B. HDMI Intput Pin Assignment



Pin#	Function Assignment	Pin#	Function Assignment
1	TMDS Data2+	2	TMDS Data2 Shield
3	TMDS Data2-	4	TMDS Data1+
5	TMDS Data1 Shield	6	TMDS Data1-
7	TMDS Data0+	8	TMDS Data0 Shield
9	TMDS Data0-	10	TMDS Clock+
11	TMDS Clock Shield	12	TMDS Clock-
13	CEC	14	Reserved (N.C. on device)
15	SCL	16	SDA
17	DDC/CEC Ground	18	+5V Power
19	Hot Plug Detect		

Connection and Installation



Specifications

Input port:	1 x HDMI
Output ports:	1 x DVI, 1 x SPDIF(Coaxial)
Digital video output:	DVI-I connector (RGB or YpbPr pass through)
Digital audio output:	Coaxial (S/PDIF)
HDMI input:	Compliant with HDMI 1.1
Operation frequency:	Up to 165 MHz
Input/Output resolutions:	
PC:	VGA@60/72/75/85Hz, SVGA@60/72/75/85Hz, XGA@60/70/75/85/87Hz, SXGA@60/75/85Hz, UXGA@60Hz, 1152@70/75/85Hz
HDTV:	480p@60Hz, 576@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@24/25/30/50/60Hz
Dimensions:	105(W) x 76(D) x 30(H)mm
Power:	5V/1A DC (US/EU standards, CE/FCC/UL certified)
Weight(g): 188	
Chassis Material:	Aluminum
Silkscreen Color:	Silver
Operating Temperature:	0°C ~ 40°C