

DVI with Digital Audio to HDMI Converter ID# 432



Operation Manual

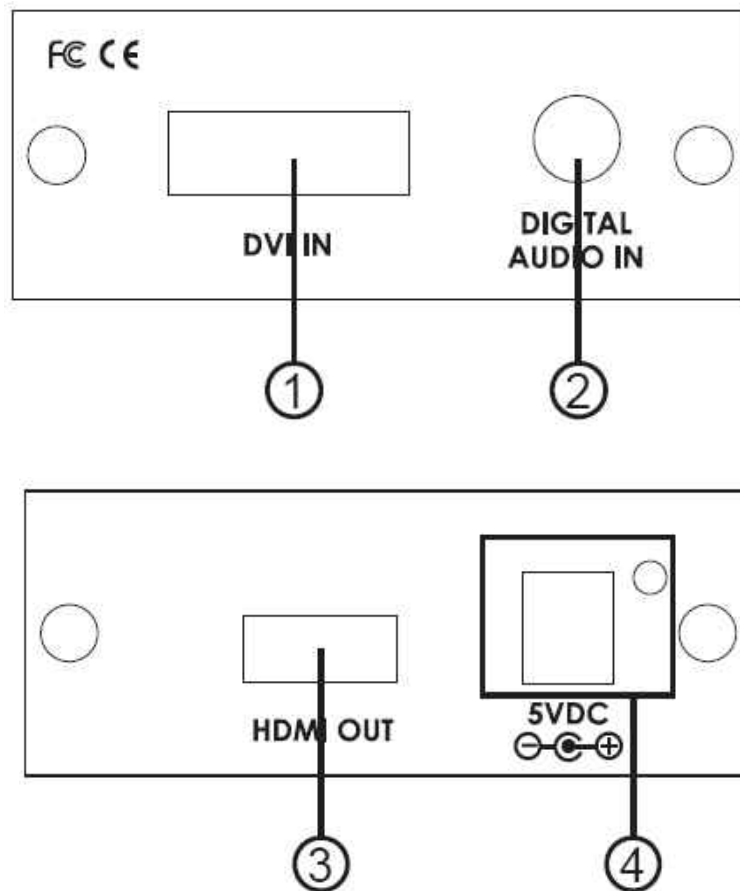
Introduction

The DVI with Digital Audio to HDMI Converter combines your digital video(DVI) and audio(SPDIF) input and converts it to HDMI output. It adds the HDMI output capability to your DVI sources so new HDMI TVs can be used with your DVI sources with sound.

Features

- * Combines your digital A/V signal and converts it to HDMI output format.
- * Adds the HDMI output capability to your DVI sources such as PC or DVD player.
- * Input format auto detection: Digital RGB or YPbPr.
- * HDCP compliant.
- * Plug and play, easy to install.

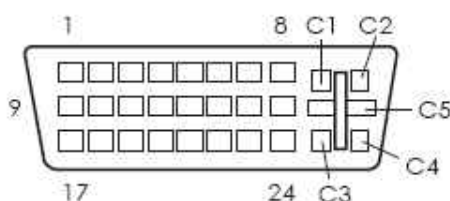
Operating Functions and Controls



Pin Configuration

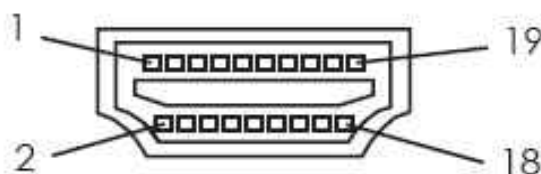
- 1. DVI input:** Connects to the DVI output connector of your source equipment.
- 2. Digital audio (SPDIF) input:** Connects to the digital audio output of your source equipment.
- 3. HDMI output:** Connects to the HDMI input connector of your HDMI display or switcher.
- 4. Power input:** Plug the supplied 5V DC power supply into the unit and the LED will illuminate when the power is connected.

A. DVI-D Input Pin Assignment



| 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 Output 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

(1) HDMI display



(2) HDMI switcher



Specifications

- * **Digital video input:** DVI-I connector (but DVI-D input signal only)
- * **Digital audio input:** Coaxial (SPDIF)
- * **HDMI output:** 19-pin HDMI connector
- * Compliant with DVI 1.0 & HDMI 1.2
- * HDCP is compliant with HDCP 1.1 and downward compatible with HDCP 1.0
- * **Operation frequency:** Up to 165 MHz
- * **Frequency bandwidth:** 1.65Gbps(single link)
- * **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 center-positive