

HDMI Audio Extractor Manual

Audio Selection Switch

Users can select the audio output from HDMI, analog, or digital. Slide the switch to the desired position: 2ch, S/PDIF, or HDMI.

Table 4-2. Audio Selection Switch.

Audio Selection Switch	EDID Audio Partition	Audio Output Port Description		
		Analog	HDMI	S/PDIF
2ch	2ch only	Output	Mute	Output
S/PDIF	Use monitor EDID	Output	Mute	Output
HDMI	Use monitor EDID	Output	Output	Output

NOTE: If you readjust the Audio selection switch to another position, you need to power down then power up the extractor so the change will take effect.

Table 4-3. LED indicator for output audio status.

LED	Monitor Detected	HDCP
Emits Blue and goes off 3 times	HDMI	N/A
Emits Blue and goes off 2 times	DVI	N/A
Emits Purple and goes off 3 times	HDMI	Yes
Emits Purple and goes off 2 times	DVI	Yes

NOTE: If you don't see a screen display when you power on the computer, follow these steps:

1. Make sure the device cables are correctly and firmly attached.
2. Set your display device's (TV, monitor, etc.) input source as HDMI.
3. Check the PC BIOS configuration for the video output setting.
4. Connect the video source **directly** to the display to see if the video signal gets through.



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aex-hdmi_user_rev1



BLACK BOX AEX-HDMI

HDMI Audio Extractor

Extract audio signals from an HDMI source and convert HDMI audio to digital optical or analog stereo.



1. Specifications

HDMI Audio Format	PCM2/5.1/7.1, Dolby 5.1, DTS 5.1, DD+, D-TrueHD, DTS-HD
TMDS Clock Rate (Maximum)	225 MHz
Video Resolution (Maximum)	Full HD 1080p (1920 x 1080)
User Controls	(1) Slide switch (Audio out select: 2ch, S/PDIF, or HDMI)
Connectors	Input: (1) HDMI female; Output: (1) HDMI female, (1) S/PDIF, (1) Analog stereo
Indicators	(1) Power/System Status tri-color LED
Power	Consumption: 5 VDC, 550 mA
Dimensions	0.9"H x 3.3"W x 2.3"D (2.2 x 8.4 x 5.9 cm)
Weight	0.33 lb. (0.15 kg)

2. Overview

2.1 Introduction

The HDMI Audio Extractor extracts audio signals from an HDMI source and converts embedded HDMI audio to digital optical or analog stereo.

2.2 Features

- Intelligent EDID handling and processing ensures plug-and-play operation.
- Compliant with HDMI v1.3, HDCP 1.2.
- HDCP Compliant and Blu-ray ready.
- HDTV compatible.
- Supports up to 24-bit resolution digital audio.
- Supports 3D signals.
- Supports 8/10/12 bit deep color.
- Includes multi-color LED Status indicators for easy troubleshooting and monitoring.

2.3 What's Included

- (1) HDMI Audio Extractor
- (1) power adapter with necessary AC cord
- (1) set of foot pads

You will also need:

- (1) HDMI cable
- (1) audio cable

This user manual/installation guide can be downloaded from the Black Box Web site.

To download from the Web site:

1. Go to www.blackbox.com
2. Enter the part number (AEX-HDMI) in the search box:
3. Click on the "Resources" tab on the product page, and select the document you wish to download.

If you have any trouble accessing the Black Box site to download the manual, you can contact our Technical Support at 724-746-5500 or info@blackbox.com.

2.4 Hardware Description

Figures 2-1 through 2-3 show the top, front, and back panels of the HDMI Audio Extractor. Table 2-1 describes its components.



Figure 2-1. Top panel.

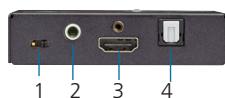


Figure 2-2. Front panel.

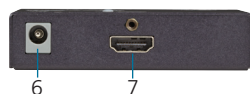


Figure 2-3. Back panel.

Table 2-1. HDMI Audio Extractor components.

Number in Figures 2-1 through 2-3	Component	Description
1	Audio selection switch	Extract audio selection
2	Audio output	Connect to the speaker
3	HDMI output	Connect to the HDMI display
4	S/PDIF output	Connect to S/PDIF output amplifier
5	LED indicator	Power/Status
6	Barrel connector	Links to 5 VDC, 550 mA power
7	HDMI input	Connect to the HDMI w/audio source

3. Installation

- Before installation, power off all devices that will be connected to this system.
- Make sure that all devices you will connect are properly grounded.
- Place cables away from fluorescent lights, air conditioners, and machines that are likely to generate electrical noise.

NOTE: If the source device is a computer, you must connect the HDMI Audio Extractor to the computer before you power on the computer.

1. Adjust the Audio Selection Switch to the proper position.
2. Using an HDMI cable, connect the video source to the input port on the unit.
3. Using an HDMI cable, connect the display to the output port on the unit.
4. Connect the speaker(s) to the 3.5-mm earphone jack and/or S/PDIF connector.
5. Apply power to the unit. After finishing the installation you may now turn on the display and source devices.

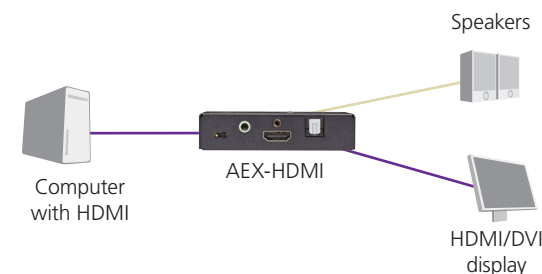


Figure 3-1. Connection pattern.

4. Operation

A tri-color LED indicates the status of the embedder.

Table 4-1. Tri-color Status LED.

LED Color	Description
Green	No video signal in
Blue	Video signal without HDCP detected
Purple	Video signal with HDCP compliant