

HDMI Repeater

User's Manual

Boost high-quality, 1080p HDMI video up to 114 feet (35 m).



Specifications

- Distance** — Up to 114 feet (35 m) or longer at low resolutions*
- Resolution (Maximum)** — 1920 x 1080p/1920 x 1200
- User Control** — 8-position DIP switch for equalization
- Video Bandwidth** — 3.4 Gbps/340 MHz
- CE Approval** — Yes
- RoHS** — Yes
- Connectors** — Input: (1) HDMI F;
Output: (1) HDMI F
- Indicators** — (2) LEDs: (1) Power, (1) Activity
- Power** — Input: 100–240 VAC, 50–60 Hz, 0.8 A;
Output: 5 VDC, 2 A
- Size** — 1.4"H x 1.9"W x 1.5"D (3.5 x 5 x 4 cm)
- Weight** — 0.2 lb. (0.1 kg)

*Depending on cable quality.

What's Included

Your package should include the following items. If anything is missing or damaged, contact Black Box Technical Support at 724-746-5500 or info@blackbox.com.

- HDMI Repeater
- (2) "L"-shaped wallmount brackets with (4) screws
- (1) screwdriver
- This user's manual

NOTE: You might also need to use the optional power supply, part number VR-HDMI-PSU.

Overview

The HDMI Repeater regenerates digital video/audio signals over High-Speed HDMI® cable. It supports Full HD video up to 1080p and for 3D display, and features 340-MHz/3.4-Gbps bandwidth per channel (10.2 Gbps on all channels).

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Overview (continued)

The repeater also supports 12-bit-per-channel Deep Color depths (36-bit on all channels), and transmits uncompressed audio, such as LPCM, plus compressed audio (DTS® Digital, Dolby® Digital, DTS-HD®, etc.).

Choose from eight levels of equalization for optimizing for different cable lengths. Set with a simple turn of a switch.

The repeater supports HDCP passthrough, so it can be used with a Blu-ray™ player or other protected content source.

Hardware Description

The front and back panels of the HDMI Repeater are shown in Figures 1 and 2. Table 1 describes their components.

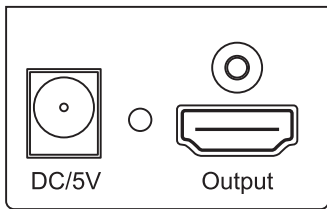


Figure 1. Front panel.

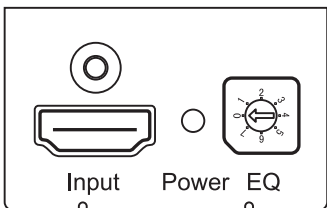


Figure 2. Back panel.

Table 1. HDMI Repeater components.

| Location | Component | Description |
|-------------|-------------------------|--------------------------------|
| Front panel | 5-VDC power output | For optional power supply unit |
| Front panel | HDMI output connector | Connects to output |
| Back panel | HDMI Input connector | Connects to input |
| Back panel | Equalization DIP switch | Select 0 to 7. |

Connection and Operation

1. Connect the output of the source device to the input of the HDMI Repeater, using a high-quality HDMI cable up to 114 feet (35 m).
2. Connect the output of the repeater to the HDMI display unit using a short HDMI cable.
3. If the source does not supply sufficient power, you may have to connect the optional 5-VDC power supply to the repeater.
3. Adjust the equalization (EQ) from 0 to 7, depending on the length of the input HDMI cable you are using.

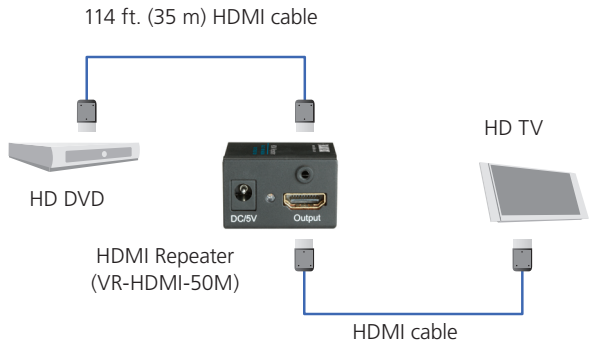


Figure 3. Connection diagram.

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VR-HDMI-50M, version 1