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HT-EM-8K

8K HDMI EDID Emulator

USER MANUAL

February 18, 2025



Important Safety Instructions



1. Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.



2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.



3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.



4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



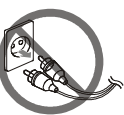
5. Do not place sources of naked flames, such as lighted candles, on the unit.



6. Clean this apparatus only with dry cloth.



7. Unplug this apparatus during lightning storms or when unused for long periods of time.



8. Protect the power cord from being walked on or pinched particularly at plugs.



9. Only use attachments / accessories specified by the manufacturer.



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Introduction

OVERVIEW

The HT-EM-8K is an 8K HDMI EDID emulator that acts as an HDMI monitor by emulating the EDID found in a typical HDMI monitor. Most PCs and laptops require a special handshake from the display before they output video. This handshake involves reading the EDID table from the monitor. The EDID contains information such as native or supported resolutions and video formats. Some older equipment may not support the EDID properly and the end result is that you often cannot get video from your PC to the external display. This emulator helps to solve potential handshake issues.

By default the EDID in the HT-EM-8K is pre-programmed with many standard resolutions up to HDMI 2.0. The emulator can also learn an EDID from a monitor, and can also be placed in a mode to support HDMI 2.1.

FEATURES

- Default mode supports resolutions up to 4K@60Hz
- Backup mode supports resolutions up to 4k@120Hz and 8K@60Hz
- Learning button used to learn the monitor's EDID or revert back to default EDID
- Hides the sink's EDID and provides the general EDID to the source
- Supports VESA and CEA spec
- Supports HDMI 2.1

Package Contents

- 1 x 8K HDMI Emulator



Panel Description



No.	Name	Description
1	Display – HDMI	Female HDMI input for connection from the display/monitor
2	EDID Learn	When held for 3 seconds the emulator learns the EDID of the display/monitor
3	LED	<ul style="list-style-type: none"> • LED Off: Emulator is in default mode • LED Flashing: Emulator is changing modes after a 3-second button press • LED On: Emulator is in Backup mode
4	Source – HDMI	Male HDMI output for connection to the video source

Installation and Wiring

INSTALLATION



Modes

When connecting a PC with a monitor, the PC will verify the EDID (Extended Display Identification Data) of the monitor and then send out the appropriate video format. The main function of an emulator is to block the EDID on the monitor side and provide the emulator's internal EDID to the PC, allowing the selection of the desired output resolution.

The internal EDID of the emulator can be divided into two modes: Default mode and Backup mode. The Default mode is designed to meet the requirements of most monitors. However, if a specific EDID is needed, the emulator can enter Backup mode and transfer the EDID from the monitor to the emulator. No additional burning tools are required for this mode.

DEFAULT MODE

The HT-EM-8K is in Default mode by default. When the source and display are connected to the emulator, the PC will read the internal EDID of the emulator and send video accordingly. This EDID supports up to HDMI 2.0. The LED indicator remains off in this mode.

BACKUP MODE

After connecting the PC and display to the emulator, press the EDID Learn button for 3 seconds. The LED indicator will flash as the emulator learns the EDID of the display and will remain on when the EDID has been learned.

To return to Default mode, press the EDID Learn button again for 3 seconds. The LED indicator will flash as it is changing modes, and then will remain off when in Default mode.

NOTE: Due to differences in the HDMI 2.1 specification compared to previous versions, the settings for transmitting video on different HDMI 2.1 displays may not be the same. When the emulator learns the EDID of HDMI 2.1 display (display A for example) and then is used on a different display (display B), there is a chance of abnormal operation or no display output. Therefore it is not recommended to use the emulator on a different display after it learns HDMI 2.1 with a display.

Specifications

Device	
Interface Ports	1 x Female HDMI: Used to connect to the display 1 x Male HDMI: Used to connect to the source
Resolution	Default Mode: 4k@60Hz Backup Mode: 4k@120Hz, 8k@60Hz
HDMI Support	HDMI 2.0 (Default), HDMI 2.1 (Backup)
Video Spec Support	VESA and CEA

General	
Operating Temperature	0 to + 45°C (32 to + 113°F)
Storage Temperature	-20 to +70°C (-4 to + 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Device Dimension (WxHx D)	0.8" x 2.0" x 0.4" (22mm x 52mm x 10mm)
Net Weight	0.05lbs. (0.023kg)



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