



Mini HDMI Signal Generator and Display Emulator AGEN-200



User Manual

Version 1.0

Thank You for Purchasing This Product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge Protection Device Recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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1. Introduction

The AGEN-200 is a portable mini HDMI signal generator and display emulator (signal analyzer), combining two functions into a compact size chassis. This is very useful for AV installers or testers; When working as signal generator, it can generate 4 signals, up to a max resolution of 4K@60Hz 4:4:4. It can also analyze HDCP content, there is a 4 pin DIP switcher to control this. When working as a display emulator, it can also analyze the HDCP content and signal status (5V, TMDS). The LEDs will show the signal or HDCP status.

2. Features

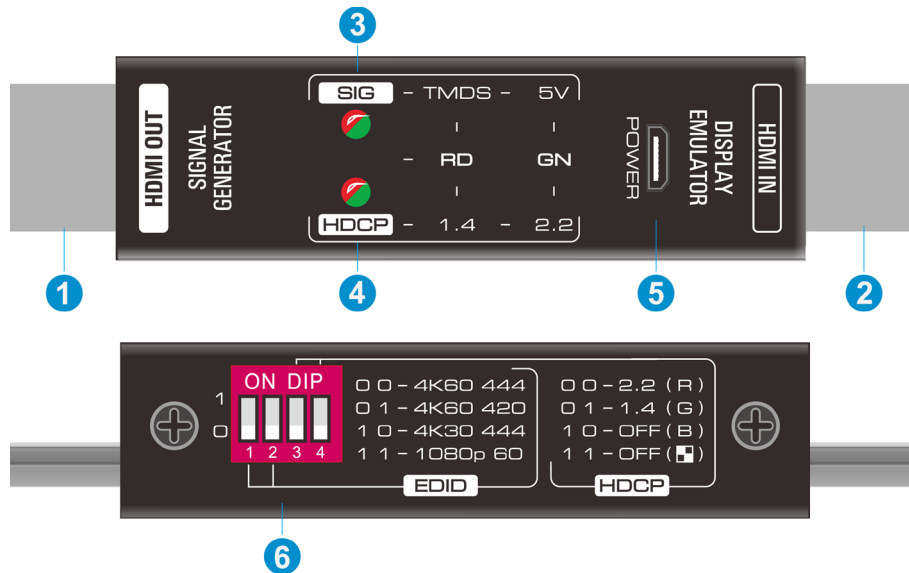
- ⌚ HDMI resolutions up to 4K 60Hz 4:4:4
- ⌚ HDMI signal generator and display emulator
- ⌚ 4-pin DIP switch for setting video resolution and HDCP
- ⌚ Supports HDCP OFF, HDCP 1.4 or HDCP 2.2 output
- ⌚ Supports four different test patterns for HDCP version

3. Package Contents

Before using this unit, please check the packaging and make sure the following items are contained in the shipping carton:

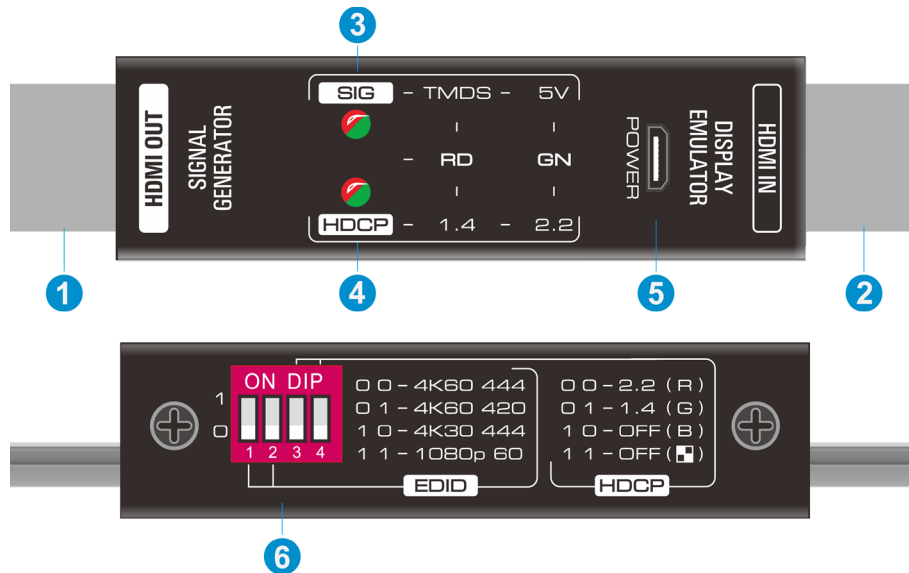
- ⌚ AGEN-200.....(1 piece)
- ⌚ USB Power Cord.....(1 piece)
- ⌚ Brown Cloth Bag.....(1 piece)
- ⌚ User Manual.....(1 piece)

4. Product Description

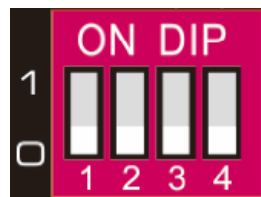


1. **HDMI OUT:** Connects to HDMI display device. The AGEN-200 is used as a HDMI signal generator to output HDMI signal.
2. **HDMI IN:** Connects to HDMI source device. The AGEN-200 is used as a display emulator to detect the HDCP content and signal status (5V, TMDS) of HDMI source.
3. **Signal LED:**
 - ☞ When the AGEN-200 is used as a HDMI signal generator, the LED turns red when there is HDMI signal output.
 - ☞ When the AGEN-200 is used as a display emulator, the LED turns green when only 5V signal is detected, or turns red when 5V and TMDS signals are detected simultaneously, or off when no HDMI signal input.
4. **HDCP LED:**
 - ☞ When the AGEN-200 is used as a HDMI signal generator, the HDCP content can be selected by 4-pin DIP switch. The LED turns green whe HDCP 2.2 is selected, or red when HDCP 1.4 is selected, off when no HDCP.
 - ☞ When the AGEN-200 is used as a display emulator, The LED turns green when the HDCP content of HDMI source is HDCP 2.2, or red when it is HDCP 1.4, or off when no HDCP.

4. Product Description



5. **Power:** Micro USB port for power cord connection. The AGEN-200 must be powered on when it is used as a signal generator. When the AGEN-200 is used as a display emulator, it can be powered by HDMI source, so the power cord connection is no required, if the HDMI source has no enough power, both of the SIG LED and HDCP LED will blink.
6. **Dip Switch:** When the AGEN-200 is used as a HDMI signal generator, switch 1 & 2 are used for built-in EDID (video) selection, and switch 3 & 4 are used for HDCP content selection.

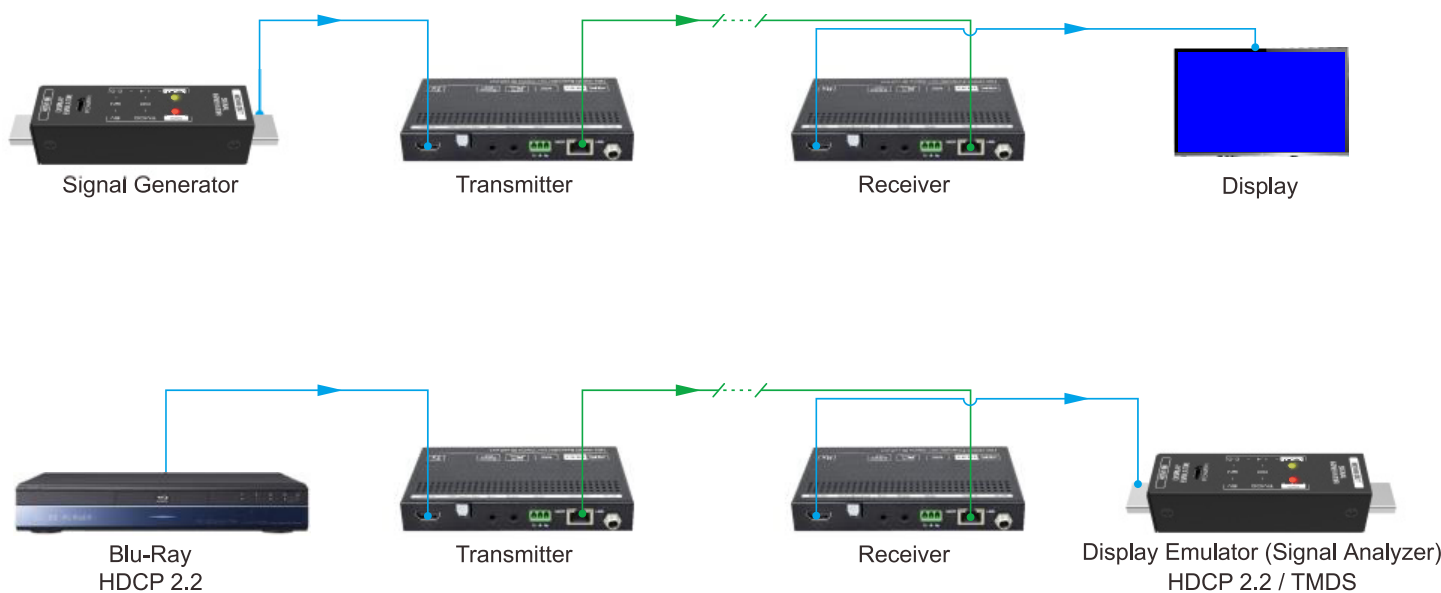


There are four switches (1~4). The switch represents "0" when in the lower position, and it represents "1" while putting the switch in the upper position.

Switch Status 1 & 2	EDID
00	4K 60Hz 4:4:4
01	4K 60Hz 4:4:2
10	4K 30Hz 4:4:4
11	1080P 60Hz / 3D

Switch Status 3 & 4	HDCP	Test Pattern
00	HDCP 2.2	Red Screen
01	HDCP 1.4	Green Screen
10	HDCP OFF	Blue Screen
11	HDCP OFF	Alternate WB

5. System Diagram



6. Specifications

Input	HDMI 2.0 IN - 4K 60Hz 4:4:4 8bit
Output	HDMI 2.0 OUT - Up to 4K 60Hz 4:4:4 8bit
Power Connector	Micro-USB
Control	4 Pin Dip Switch
HDCP Content	2.2, 1.4
Power Supply	DC 5V 1A
Power Consumption	2W Max
Operation Temperature	-5° to +55°C (+23° to +131°F)
Storage Temperature	-25° to +70°C (-13° to +158°F)
Relative Humidity	10% to 90%, Non-condensing
Dimensions	75mm x 22mm x 19mm
Net Weight	65g