



HDMI Distributor

# User Manual

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Model : HAE01

4K60Hz HDMI Audio Extractor with Up/down Scaler



## Introduction

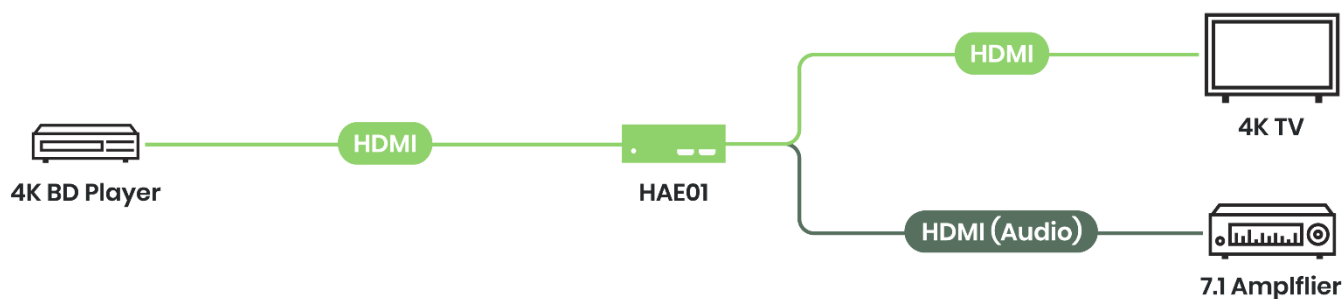
HAE01 is an HDMI multifunctional tool allowing you to extract HDMI audio to integrate external audio equipment, such as amplifiers, AV receivers, etc. Additionally, the up/down scaling function, which converts 1080p signal to 4K, or 4K signal to 1080p, allows you to save extra cost on a new HDMI monitor. Last but not least, the 5-way joystick switch can enable you to operate and setup functions efficiently.

## Features

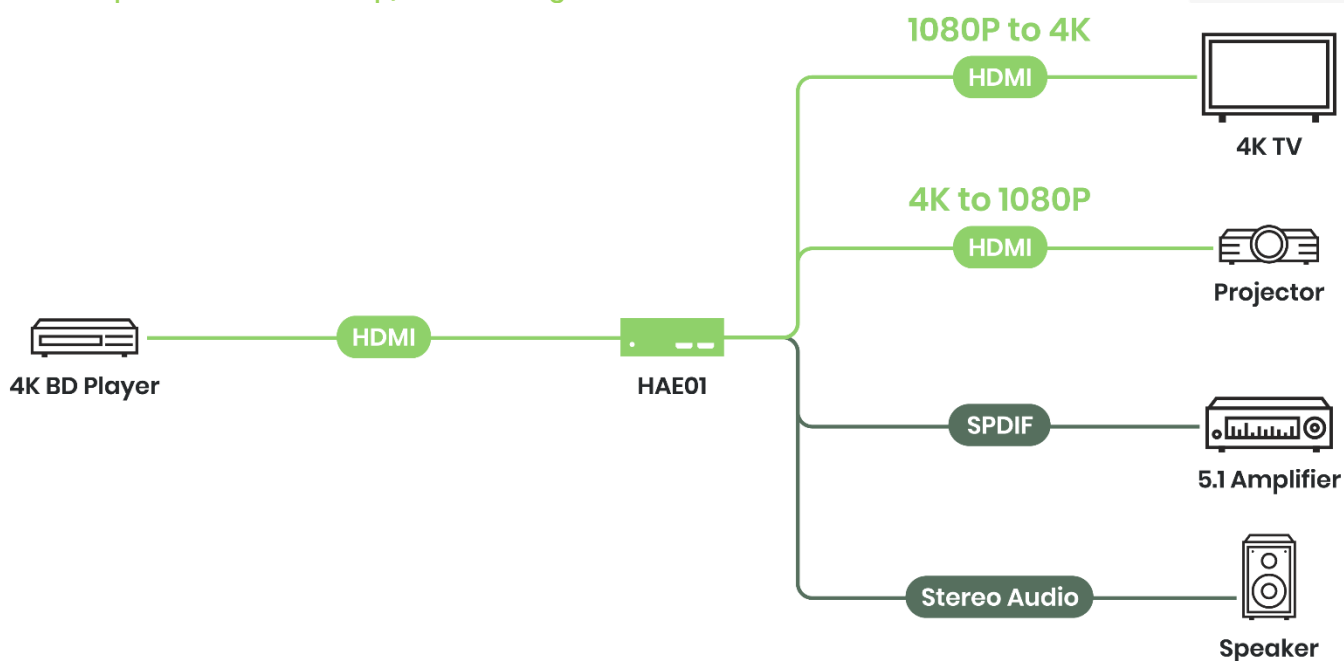
- Resolution up to 4K@60Hz 4:4:4. Built-in dual HDMI outputs.
- Built-in Toslink (digital audio) and 3.5mm phone jack (analog audio) interfaces.
- Supports resolution up/down scaling function.
- Supports chroma resampling function, 4K HDMI 4:4:4/ 4:2:2 to 4:2:0 conversion.
- Supports HDCP 2.2 to 1.4 conversion.
- Supports HDMI audio extract for integrating with external audio equipment.
- Supports OSD menu to check functions & modes.
- Supports EDID management.

## Installation View

### Application 1: 4K HDMI Audio Extrator



### Application 2 : 4K HDMI Up/Down Scaler with Audio Extrator HDCP 2.2 to 1.4 and 4:4:4 to 4:2:0 and Up/Down Scale Capable Full OSD operation for all setup/EDID management



## 5 way Joystick Switch Function



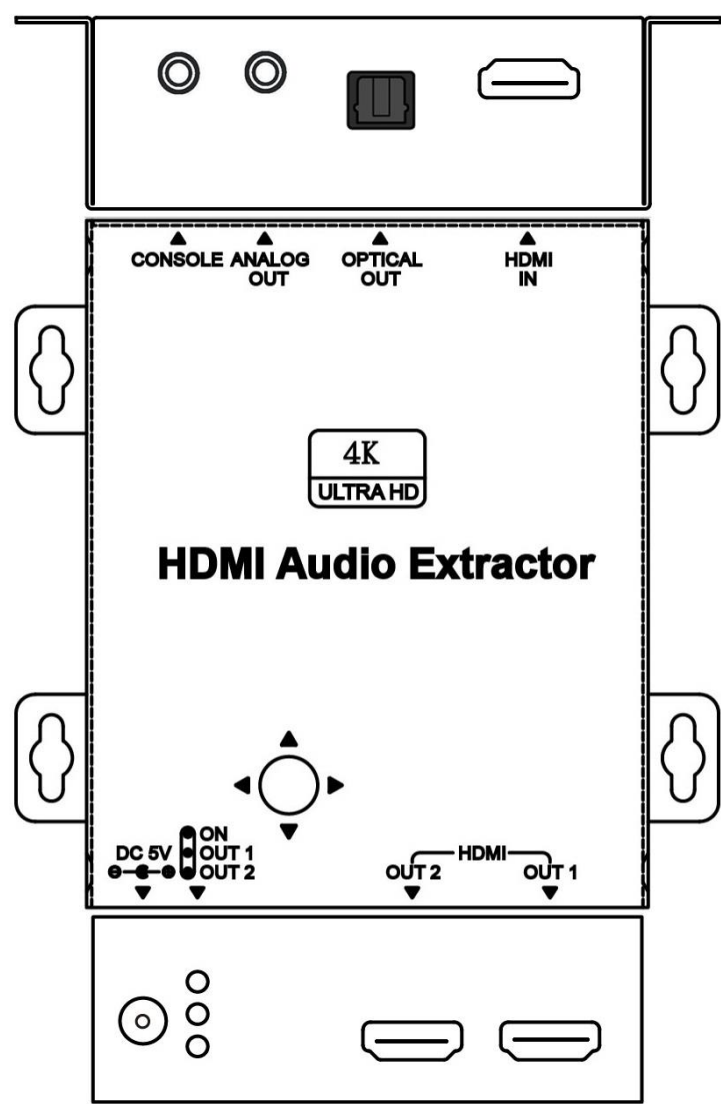
## MENU Operation

SW1	Function
	Up
	Down
	Left
	Right
	confirm

## MENU

Main Menu	Sub Menu	Sub Menu Function
OUTPUT 1 MODE	NORMAL	Output video same as input Video
	UPSCALE	1080P Upscale to 4K
	EXIT	Exit Sub Menu
OUTPUT 1 SUBSAMPLING	NORMAL	Output color subsampling same as Input
	4:4:4 → 4:2:0	4K6G 4:4:4/4:2:2 convert to 4K3G 4:2:0
	NORMAL	Output color subsampling same as Input
OUTPUT 1 AUDIO MODE	OUTPUT 1 AUDIO MODE	Audio Selection
	NORMAL	audio output
	MUTE	No audio output
	EXIT	Exit Sub Menu
OUTPUT 2 MODE	AUDIO ONLY	Audio output only
	DOWNSCALE	4K downscale to 1080P
	SPLITTER	Distribution Mode (Output signal same as OUTPUT 1)
	EXIT	Exit Sub Menu
EDID(VIDEO)	AUTO	Use OUTPUT 1 EDID as priority, if OUTPUT 1 and OUTPUT 2 not connected with TV, Default as 4K
	OUTPUT 1	Use OUTPUT 1 EDID
	OUTPUT 2	Use OUTPUT 2 EDID
	PRESET 4K	Default 4K 60Hz 8bit
	PRESET 1080P	Default 1080P 60Hz 8bit
	EXIT	Exit Sub Menu
EDID(AUDIO)	AUTO	Use OUTPUT 2 as priority, If OUTPUT 1 and OUTPUT 2 not connected with TV, Default as LPCM 2.0
	OUTPUT 1	Use OUTPUT 1 EDID
	OUTPUT 2	Use OUTPUT 2 EDID
	MULTI	Default AC3 and DTS Audio format
	LPCM 7.1CH	Default LPCM 7.1 CH Only
	LPCM 2CH	Default LPCM 2CH Only
	EXIT	Ext Sub Menu
MISCELLANEOUS	Main MCU : Vx.xx	Show firmware version
EXIT		Exit MENU

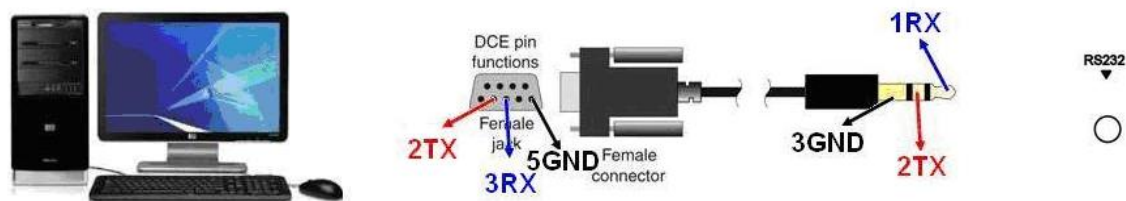
Panel View



LED Indication

Color	LED
GREEN	Power
BLUE	Output 1
RED	Output 2

## RS232 Define



DB9(F)/3.5mm STEREO PHONE JACK    DB9(F)/3.5mm STEREO PHONE

RS232		3.5 mm Phone Jack	
Footprint	Define	Footprint	Define
Pin 2	TX	Pin 1	RX
Pin 3	RX	Pin 2	TX
Pin 5	GND	Pin 3	GND

## Trouble Shooting

1. CEC function only works Output 1.
2. Any HDMI output with HDCP2.2 compatible issues will cause HDMI no video output, Under HDCP 2.2 mode: any one monitor HDCP authorization failed will cause no video status, other connecting monitors will be also failed. Then monitor testing must be one by
3. Up/down scale mode only support resolution conversion, frequency will be not changed.
4. Under HDMI 2.0 mode, must use Premium certified HDMI cable.

## HAE01 Package Include

HAE01 x 1 pcs  
DC5V 1Amp Power Adapter x 1 pcs  
DB9 (0F)/3.5mm STEREO PHONE JACK x 1 pcs  
Mounting Screw pack x 2 bags

## Specification

ITEM NO.	HAE01
Support	
Compliance	HDMI 2.0, HDCP 2.2, 3D, HDR
Max. Video Resolution	4K@60Hz 4:4:4
Video Bandwidth	18 Gbps
Audio Format	7.1 LPCM 192KHz, Dolby TrueHD, DTS-HD MA
Ports & Interfaces	
Video Input	1 x HDMI Type A
Video Output	2 x HDMI Type A
Digital Audio	1 x TOSLINK
Analog Audio	1 x (3.5mm) Phone Jack
RS232 Interface	1 x DB9 Female / 3.5mm Stereo Phone Jack (Firmware Update)
Power	
Power Supply	DC 5V 1A Regulated
Power Consumption	4W
Ambient Temperature	
Operation	-10 to 45°C
Storage	-30 to 70°C
Humidity	Up to 95%
Physical Characteristics	
Dimensions	109.6 x 110.5 x 36mm
Weight	270g