4K HDMI Audio Extractor With Up/Down Scaler Series ITEM NO.: HAE01 4K HDMI Audio Extractor With Up/Down Scaler 1 in 2 out



The HAE01 is an HDMI multifunction tool: allow you to extract 4K HDMI for both digital optical S/PDIF (Toslink) and stereo analaog audio signal for use by an amplifier or AV receiver. With a special feature to do upscale 1080p signal up to 4K or Downscale 4K signal to 1080p. Full OSD operation by using 5 way joystick switches for easy set up and doing EDID management. It is a perfect solution for integrating a 4K source into a 1080P HD system or vice versa.

HAE01 4K HDMI Audio Extractor with Up/Down Scaler 1 in 2 out

- Support HDMI 2.0, HDCP 2.2, 4K@60Hz 4:4:4 18Gbps (6Gbps per color) 3D,HDR.
- Support extracts the 4K HDMI audio and output to a multi-channel digital or analog audio signal.
- Allows you to route HDMI audio simultaneously via S/PDIF and 3.5mm stereo audio outputs.
- HDMI audio output: LPCM7.1@192KHz, Dolby TrueHD, DTS-HD MA.
- Input: HDMI x 1, Output: HDMI x 2, Optical out x 1, analog stereo out x 1.
- Support uncompressed audio such as LPCM.
- Support 1080p to 4K upscale and 4K to 1080p downscale.
- Support 4K6G 4:4:4/4:2:2 convert to 4K3G 4:2:0.
- Audio output support: up to 7.1 channel
- Support CEC pass-through
- Built in EDID management, 2/5.1/7.1 patched EDID.
- Built in 5 way joystick switch for full OSD operation.

Application 1: 4K HDMI Audio Extractor



Full OSD operation for all setup/EDID management

5 way Joystick Switch Function:



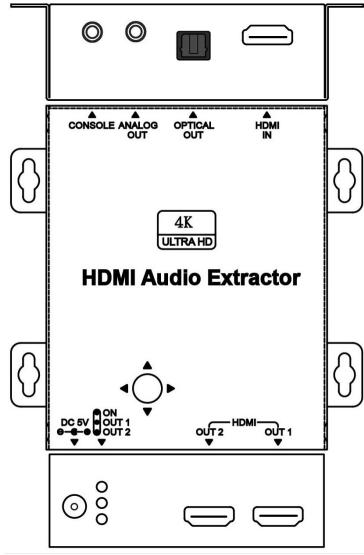
MENU Operation

SW1	Function		
	Up		
	Down		
	Left		
	Right		
\bigcirc	confirm		

MENU:

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	TPUT 1 NORMAL Output color subsampling same as			
SUBSAMPLING	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	OUTPUT 1 AUDIO MODE	Audio Selection		
AUDIO MODE	NORMAL	audio output		
	MUTE	No audio output		
	EXIT	Exit Sub Menu		
OUTPUT 2 MODE	AUDIO ONLY	Audio output only		
	DOWNSCALE	4K downscale to 1080P		
		Distribution Mode (Output signal same as		
	SPLITTER	OUTPUT 1)		
	EXIT	Exit Sub Menu		
EDID(VIDEO)		Use OUTPUT 1 EDID as priority, if		
	AUTO	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)		Use OUTPUT 2 as priority, If OUTPUT 1 and		
	AUTO	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:

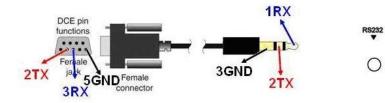


LED Indication:

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 JACK

RS232		3.5 mm Phone Jack	
Footprint	Define	Footprint	Define
Pin 2	ΤX	Pin 1	RX
Pin 3	RX	Pin 2	ΤX
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(F)/3.5mm STEREO PHONE JACK x 1 pcs Mounting Screw pack x 2 bags

Specification:

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ITEM NO	HAE01			
HDMI Input	HDMI Type A x 1			
HDMI Output	HDMI Type A x 2			
HDMI Video Support	Up to 4096x2160/60Hz/4:4:4(18Gbps) 💉 3D · HDR			
HDMI Audio Support	Up to 7.1 LPCM 192KHz / Dolby TrueHD / DTS-HD MA			
Digital Audio Connector	TOSLINK Type x 1			
Analog Audio Connector	3.5mm Phone Jack x 1			
Firmware updated Interface	DB9(F)/3.5mm STEREO PHONE JACK			
Power Supply	Regulated DC5V / 1A			
Power Consumption	4W			
Temperature	Operation : -10~45 $^{\circ}$ C , Storage : -30~70 $^{\circ}$ C ,Humidity : up to 95%			
Dimension mm	109.6 x 110.5 x 36			
Weight g	270			
Rohs (6 FC 💩	Rev. A1 V2.05 190218			