



HDMI Distribution Amplifier

VAC-S12U

The VAC-S12U is a 1x2 HDCP 2.2 compliant distribution amplifier for HDMI signals at resolutions up to 4K@60 (4:4:4).

OUT1 includes a down converter that enables 4K input video signals to be converted automatically to 1080p if the sink device does not support 4K. It also features audio de-embed function.

Output signal can be set to muted (black screen) or disabled for each channel separately.

Input and output signals of VAC-S in the system can be monitored from WEB browser for problem analysis.

■ Specification

Item		Description
Input		1 input HDMI/DVI 1.0 TMDS single link, HDCP 1.4/2.2 x.v.Color/3D (*1)/HDR (*2)/CEC (Pass-through) ARC/HEC are not supported. Connector: 1 female HDMI Type A (19-pin)
		2 outputs HDMI/DVI 1.0 TMDS single link, HDCP 1.4/2.2 x.v.Color/3D (*1)/HDR (*2)/CEC (Pass-through) ARC/HEC are not supported. Connector: 2 female HDMI Type A (19-pin)
Format		VGA to 4K 480i / 480p / 576i / 576p / 720p / 1080i / 1080p / 4K For 4K formats, 24 Hz/25 Hz/30 Hz/50 Hz (4:4:4)/60 Hz are supported.
Color depth		24 bit, 30 bit, 36 bit Deep Color For 4K@50/59.94/60 RGB/YCbCr 4:4:4, 24 bit is supported.
Dot clock		25 MHz to 600 MHz
TMDS clock		25 MHz to 300 MHz
TMDS data rate		0.75 Gbps to 18 Gbps
Plug & Play		DDC2B (can be selected from Built-in EDID, Copied EDID, or EDID of connected monitor) Built-in EDID: The maximum resolution can be selected.
Digital audio input		Multi-channel LPCM up to 8 channels Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit Reference level: -20 dBFS, Max. input level: 0 dBFS
Digital audio output		Multi-channel LPCM up to 8 channels Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit Reference level: -20 dBFS, Max. output level: 0 dBFS
Analog audio output		1 output Unbalanced Stereo LR Output impedance: 50 Ω, Reference level: -10 dBu, Max. output level: +10 dBu Connector: 1 captive screw (3-pin)
Maximum transmission distances	Digital input	98 ft. (30 m) (1080p@60), 39 ft. 12 m (4K@60) (*3)
	Digital output	98 ft. (30 m) (1080p@60), 39 ft. 12 m (4K@60) (*3)
Control	LAN	1 port/RJ-45 10Base-T/100Base-TX (Auto Negotiation), Auto MDI/MDI-X
Functions		WEB browser control, Anti-Snow, Connection Reset (*4), Button security lockout, OUT1 supports down conversion (4K to 1080p), Status notification, Each video output OFF, I/O signal status display, System check
General	AC adapter	Input : 100 - 240 VAC ±10%, 50 Hz/60 Hz ±3 Hz Output : DC 12 V 3 A 36.0 W (A dedicated AC adapter is provided)
	Power consumption	About 6 W
	Dimensions	4.2 (W) × 1.7 (H) × 5.9 (D)" (106 (W) × 42 (H) × 150 (D) mm) (Quarter rack wide, thin type) (Excluding connectors and the like)
	Weight	1.3 lbs. (0.6 kg)
	Temperature	Operating: 32°F to 104°F (0°C to +40°C) Storage : -4°F to +176°F (-20°C to +80°C)
	Humidity	Operating/Storage: 20% to 90% (Non Condensing)

*1 3D is supported if external EDID is selected while a 3D-supported sink device is connected for EDID setting or if copied EDID of 3D-supported sink device is selected for EDID setting. Input 3D signal is output from all output connectors.

*2 HDR is supported if external EDID is selected while an HDR-supported sink device is connected for EDID setting or if copied EDID of an HDR-supported sink device is selected for EDID setting. Input HDR signal is output from all output connectors.

*3 The maximum cable distance varies depending on the connected devices and was measured under following conditions:

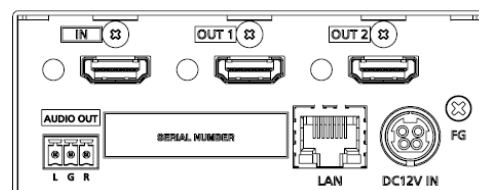
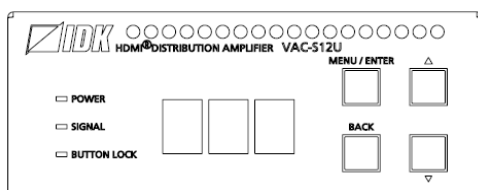
• 1080p@60 : When IDK's 24 AWG cable was used and signals of 1080p@60 24 bit/pixel (8 bit/component) was input or output.

• 4K@60 : When IDK's 18 Gbps supported cable was used and signals of 4K@60 24 bit/pixel (8 bit/component) was input or output.

The maximum cable distance depends on the connected devices. The distance may not be extended with some device combinations, cabling method, or other manufacturer's cable. Video may be disturbed or may not be output even if signals are within the range mentioned above.

*4 For digital systems, some problems, such as a HDCP authentication error, can often be recovered by physically disconnecting and reconnecting the digital cables. However, the Connection Reset feature will fix these problems automatically without the need to physically plug and unplug the cables. It creates the same condition as if the cable were physically disconnected and reconnected. This feature only works for the VAC-S's output. If other devices are connected between the VAC-S's output and sink device, this feature may be invalid.

■ Front & Rear Panels



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