The VAC-S18U is a 1x8 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

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td></td>
</tr>
<tr>
<td>1 input</td>
<td></td>
</tr>
<tr>
<td>HDMI/DVI 1.0</td>
<td></td>
</tr>
<tr>
<td>TMDS single link, HDCP 1.4/2.2</td>
<td></td>
</tr>
<tr>
<td>x.v.Color/3D (*1)HDR (*2)/CEC (Pass-through)</td>
<td></td>
</tr>
<tr>
<td>ARC/HEC are not supported.</td>
<td></td>
</tr>
<tr>
<td>Connector: 1 female HDMI Type A (19-pin)</td>
<td></td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td>8 outputs</td>
<td></td>
</tr>
<tr>
<td>HDMI/DVI 1.0</td>
<td></td>
</tr>
<tr>
<td>TMDS single link, HDCP 1.4/2.2</td>
<td></td>
</tr>
<tr>
<td>x.v.Color/3D (*1)HDR (*2)/CEC (Pass-through)</td>
<td></td>
</tr>
<tr>
<td>ARC/HEC are not supported.</td>
<td></td>
</tr>
<tr>
<td>Connector: 8 female HDMI Type A (19-pin)</td>
<td></td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td></td>
</tr>
<tr>
<td>VGA to 4K</td>
<td></td>
</tr>
<tr>
<td>480i / 480p / 576i / 576p / 720p / 1080i / 1080p / 4K</td>
<td></td>
</tr>
<tr>
<td>For 4K formats, 24 Hz/25 Hz/30 Hz/50 Hz (4:4:4)/60 Hz (4:4:4) are supported.</td>
<td></td>
</tr>
<tr>
<td><strong>Color depth</strong></td>
<td></td>
</tr>
<tr>
<td>24 bit, 30 bit, 36 bit Deep Color</td>
<td></td>
</tr>
<tr>
<td>For 4K@60/59.94Hz RGB/YCbCr 4:4:4, 24 bit is supported.</td>
<td></td>
</tr>
<tr>
<td><strong>Dot clock</strong></td>
<td></td>
</tr>
<tr>
<td>75 MHz to 600 MHz</td>
<td></td>
</tr>
<tr>
<td><strong>TMDS clock</strong></td>
<td></td>
</tr>
<tr>
<td>25 MHz to 300 MHz</td>
<td></td>
</tr>
<tr>
<td><strong>TMDS data rate</strong></td>
<td></td>
</tr>
<tr>
<td>0.75 Gbps to 18 Gbps</td>
<td></td>
</tr>
<tr>
<td><strong>Plug &amp; Play</strong></td>
<td></td>
</tr>
<tr>
<td>DDC/2B (can be selected from Built-in EDID, Copied EDID, or EDID of connected monitor)</td>
<td></td>
</tr>
<tr>
<td>Built-in EDID: The maximum resolution can be selected.</td>
<td></td>
</tr>
<tr>
<td><strong>Digital audio input</strong></td>
<td></td>
</tr>
<tr>
<td>Multi-channel LPCM up to 8 channels</td>
<td></td>
</tr>
<tr>
<td>Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit</td>
<td></td>
</tr>
<tr>
<td>Reference level: -20 dBFS, Max. input level: 0 dBFS</td>
<td></td>
</tr>
<tr>
<td><strong>Digital audio output</strong></td>
<td></td>
</tr>
<tr>
<td>Multi-channel LPCM up to 8 channels</td>
<td></td>
</tr>
<tr>
<td>Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit</td>
<td></td>
</tr>
<tr>
<td>Reference level: -25 dBFS, Max. output level: 0 dBFS</td>
<td></td>
</tr>
<tr>
<td><strong>Analog audio output</strong></td>
<td></td>
</tr>
<tr>
<td>1 output</td>
<td></td>
</tr>
<tr>
<td>Unbalanced Stereo LR</td>
<td></td>
</tr>
<tr>
<td>Output impedance: 50 Q, Reference level: -10 dBu, Max. output level: +10 dBu</td>
<td></td>
</tr>
<tr>
<td>Connector: 1 captive screw (3-pin)</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum transmission distances</strong></td>
<td></td>
</tr>
<tr>
<td>Digital input</td>
<td></td>
</tr>
<tr>
<td>98 ft. (30 m) (1080p@60), 39 ft. 12 m (4K@60) (*3)</td>
<td></td>
</tr>
<tr>
<td>Digital output</td>
<td></td>
</tr>
<tr>
<td>98 ft. (30 m) (1080p@60), 39 ft. 12 m (4K@60) (*3)</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
</tr>
<tr>
<td>LAN</td>
<td></td>
</tr>
<tr>
<td>1 port/RJ-45 10Base-T/100Base-TX (Auto Negotiation), Auto MDI/MDI-X</td>
<td></td>
</tr>
<tr>
<td><strong>Functions</strong></td>
<td></td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
<tr>
<td><strong>AC adapter</strong></td>
<td></td>
</tr>
<tr>
<td>Input : 100 - 240 VAC ±10%, 50 Hz/60 Hz ±3 Hz</td>
<td></td>
</tr>
<tr>
<td>Output : DC 12 V 3 A (A dedicated AC adapter is provided)</td>
<td></td>
</tr>
<tr>
<td><strong>Power consumption</strong></td>
<td></td>
</tr>
<tr>
<td>About 22 Watts</td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
</tr>
<tr>
<td>8.3 (W) x 1.7 (H) x 5.9 (D)</td>
<td></td>
</tr>
<tr>
<td>(210 (W) x 42 (H) x 150 (D) mm)</td>
<td></td>
</tr>
<tr>
<td>(Half rack wide, 1U high) (Excluding connectors and the like)</td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
</tr>
<tr>
<td>2.9 lbs. (1.3 kg)</td>
<td></td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td></td>
</tr>
<tr>
<td>Operating: 32°F to 104°F (0°C to +40°C)</td>
<td></td>
</tr>
<tr>
<td>Storage: -4°F to +176°F (-20°C to +80°C)</td>
<td></td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td></td>
</tr>
<tr>
<td>Operating/Storage: 20% to 90% (Non Condensing)</td>
<td></td>
</tr>
</tbody>
</table>

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

*4 For digital systems, some problems, such as an 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

- All specifications and drawings are subject to change without notice.
- Please do not use the supplied AC adapter and power supply cable for other products.
- The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.
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