AEON-DEC
AEON HEVC Rack Decoder

Overview:
The AEON HEVC Rack Decoder provides low latency HEVC Ultra High Definition decoding from ASI/IP input. Ideal for adding decode support for the AEON Transmitter to existing receiver systems. Each decoder can support single 4K or up to 2 HD streams via quad 3G-SDI outputs, and has two stereo balanced audio outputs available. The decoder has an integrated control panel with sunlight-readable OLED display covering all major functions, as well as IP based control.

The HEVC codec used in AEON products offers a step change in compression efficiency over H.264 systems, whilst maintaining low end to end latency suitable for live events.

Features and Benefits:
Ultra-low latency HEVC SD, HD and 4K decoding with Tri-level sync genlock
Video formats up to 2160p60, 10-bit and 4:2:2 Chroma sampling, future HDR support
Controlled via IP or integrated sunlight-readable OLED display
Designed for sports & events coverage, newsgathering and wireless studio camera applications
Scalable decoding platform supporting single 4K or two HD services
Low power consumption and active cooling for extended field performance
Compact 1/2 1RU rack form factor

Product Information:

<table>
<thead>
<tr>
<th>Product Includes</th>
<th>Feature</th>
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</thead>
<tbody>
<tr>
<td>CA0512</td>
<td>XLR audio output cable</td>
</tr>
<tr>
<td>CA0649</td>
<td>XLR 12V 6.67A 80W desktop PSU</td>
</tr>
<tr>
<td>SA4075</td>
<td>AEON HEVC support USB stick</td>
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Accessory Options (sold separately)

<table>
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<tr>
<th>Product Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>CA0512</td>
<td>Additional second channel XLR audio output cable</td>
</tr>
<tr>
<td>AEON-TX</td>
<td>AEON HEVC Transmitter</td>
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<tr>
<td>AEON-ENC</td>
<td>AEON HEVC Encoder 1/2 1RU Rack</td>
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<tr>
<td>PRORXD-1RU</td>
<td>4-way Professional Receiver 1/2 1RU Rack</td>
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<tr>
<td>PRORXD-2RU</td>
<td>8-way Professional Receiver 1/2 2RU Rack</td>
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Related Documents

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>100249</td>
<td>AEON HEVC User Guide</td>
</tr>
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### Technical Specification:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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<tr>
<td><strong>SD/HD/3G-SDI outputs</strong></td>
<td>4 x BNC</td>
</tr>
<tr>
<td><strong>ASI input</strong></td>
<td>BNC</td>
</tr>
<tr>
<td><strong>ASI output</strong></td>
<td>BNC</td>
</tr>
<tr>
<td><strong>Genlock input</strong></td>
<td>BNC</td>
</tr>
<tr>
<td><strong>Balanced audio outputs</strong></td>
<td>2 x 5-way 9B Lemo (CA0512 2 x XLR3)</td>
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<tr>
<td><strong>Serial data output</strong></td>
<td>9-way D-sub</td>
</tr>
<tr>
<td><strong>Power input</strong></td>
<td>4-way XLR</td>
</tr>
<tr>
<td><strong>Ethernet</strong></td>
<td>RJ45</td>
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</tbody>
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#### Video

- **SD input format**
  - SMPTE-259M
  - 720x576i 50Hz
  - 720x480i 59Hz
- **HD input format**
  - SMPTE-292M/424M
  - 1920x1080i 60/59.94/50Hz
  - 1920x1080p 60/59.94/50/30/29.97/25/24/23.97Hz
  - *1920x1080psf 30/29.97/25/24/23.97Hz
  - 1280x720p 60/59.94/50Hz
- **Ultra HD input format**
  - SMPTE ST-2081/2082
  - 3840x2160p 60/59.94/50/29.94/25/24/23.97Hz
- **HEVC compression**
  - HEVC/H.265/MPEG-H part 2
  - 8-bit or 10-bit, 4:2:0 or 4:2:2
- **H.264 compression**
  - AVC/H.264/MPEG-4 part 10
- **MPEG-2 compression**
  - H.262/MPEG-2 part 2
- **HDR support**
  - **Standards TBC**

#### Audio

- **Analogue audio output**
  - Two balanced analogue stereo pairs
  - +24dBu max output level
- **Digital audio output**
  - SD/HD/3G-SDI re-embedding
- **Sample rate**
  - 48kHz
- **Decoding modes**
  - Up to 16 channels (8 pairs)
  - LPCM
  - **MPEG Audio Layer 2**
  - **AAC-LC**
  - **HE-AAC**

#### Other

- **RS232 data output**
  - 1k2 to 115k2, 7/8 bit, no/odd/even parity
- **Front panel**
  - Built in OLED with buttons

#### Physical

- **Dimensions**
  - L 180mm, W 222mm, H 43mm
- **Weight**
  - 1250g

#### Power

- **DC input**
  - 12V to 17.0V
- **Power consumption**
  - Typically 16.0W with 4K decoding

#### Environment

- **Temperature range**
  - -10°C to +50°C
- **Humidity**
  - Less than 85% non-condensing

#### Software License Code

- **Silver (included)**
  - Single 4K and Quad HD Decoder
- **LIC-AEON-PSF**
  - PSF Video Formats

*Additional license feature
**Future development

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Export of encrypted products is subject to United Kingdom regulatory export controls.