The Extron DA HD 4K PLUS Series are HDCP 2.2 compliant distribution amplifiers for HDMI signals up to 4K/60 @ 4:4:4 chroma sampling. They support data rates up to 18 Gbps, HDR, 3D, and HD lossless audio formats, along with integrator-friendly features such as automatic input cable equalization, automatic color bit depth management, and selectable output muting. The DA HD 4K PLUS Series distribution amplifiers are available in sizes from two to six outputs, and are ideal for applications that require reliable distribution of a single HDMI source signal to multiple displays.

- Supports computer and video resolutions up to 4K/60 @ 4:4:4
- Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12 bit, 3D, and HD lossless audio formats
- HDCP 2.2 compliant
- Automatic input cable equalization
- EDID Minder® automatically manages EDID communication between connected devices
- Key Minder® continuously verifies HDCP compliance
The Extron DA HD 4K PLUS Series are HDCP 2.2 compliant distribution amplifiers for HDMI signals up to 4K/60 @ 4:4:4 chroma sampling. They support data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats, along with integrator-friendly features such as automatic input cable equalization, automatic color bit depth management, and selectable output muting. They also feature Extron EDID Minder® and Key Minder® technologies to maintain continuous EDID communication between connected devices and ensure simultaneous distribution of HDCP-encrypted source content. The DA HD 4K PLUS Series distribution amplifiers are available in sizes from two to six outputs, and are ideal for applications that require reliable distribution of a single HDMI source signal to multiple displays.

To enhance and simplify integration, the DA HD 4K PLUS Series offers many integrator-friendly features. Input cable equalization restores and reshapes incoming HDMI signals, reducing the need for additional signal conditioning equipment by compensating for weak source signals or signal loss from a long input cable. Color bit depth is automatically adjusted based on the display EDID, which prevents color compatibility conflicts between source and display. Also, outputs can be muted independently via RS-232, allowing content to be previewed on a local monitor.

The DA HD 4K PLUS distribution amplifiers provide immediate visual confirmation of HDCP authentication and signal presence for each port via front panel LED indicators. If HDCP-encrypted content is transmitted to a non-HDCP compliant display, a full-screen green signal provides immediate visual notification that protected content cannot be viewed on that display. HDCP authorization is user-selectable, allowing the unit to appear HDCP compliant or non-HDCP compliant to the connected source. This is beneficial if the source automatically encrypts all content when connected to an HDCP-compliant device. The DA HD 4K PLUS Series distribution amplifiers also provide +5 VDC, 250 mA on each output for powering peripheral devices such as an Extron HD 4K 101 Plus cable equalizer.

**KEY FEATURES**

- **Input:** One female HDMI type-A connector
- **Output:** Two, four, or six female HDMI type - A connectors
- **Supports computer and video resolutions up to 4K/60 @ 4:4:4**
- **Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats**
- **Support for HDR - High Dynamic Range video** – These products provide the video bandwidth, color depth, and metadata interchange capability required to support HDR video signals. HDR provides a greater contrast range and wider color gamut.
- **HDCP 2.2 compliant** – Ensures display of content-protected media and interoperability with other HDCP - compliant devices.
- **Automatic input cable equalization** – Actively conditions incoming HDMI signals to compensate for signal loss when using long cables, low quality cables, or source devices with poor signal output.
- **EDID Minder® automatically manages EDID communication between connected devices** – Ensures that the source powers up properly and reliably outputs content for display.
- **Key Minder® continuously verifies HDCP compliance** – Authenticates and maintains continuous HDCP encryption between all input and output devices to enable simultaneous distribution of a single source signal to two or more displays.
- **Selective output muting via RS-232** – Provides the capability to mute one or all outputs at any time. This allows content to be viewed on a local monitor prior to appearing on the main presentation display.
- **User-selectable HDCP authorization** – Allows the unit to appear HDCP compliant or non-HDCP compliant to the connected source, which is beneficial if the source automatically encrypts all content when connected to an HDCP-compliant device. Protected material is not passed in non-HDCP mode.
- **HDCP Visual Confirmation provides a green signal when encrypted content is sent to a non-compliant display**
- **Automatic color bit depth management** – The DA HD 4K PLUS Series automatically adjusts color bit depth based on the display EDID, preventing color compatibility conflicts between source and displays.
- **HDMI to DVI Interface Format Correction** – Automatically reformats HDMI source signals for output to a connected DVI display.
- **HDCP authentication and signal presence LED indicators**
- **Provides +5 VDC, 250 mA power on each output for external peripheral devices**
- **RS-232 control port**
- **Front panel USB configuration port**
- **Easy setup and commissioning with Extron’s PCS - Product Configuration Software** – Conveniently configure multiple products using a single software application.
- **Rack-mountable, metal enclosure** – The DA HD 4K PLUS Series two-output model features a 1" (2.5 cm) high, quarter rack width enclosure. Four and six-output models feature a 1U high, half rack width enclosure.
- **Includes LockIt® HDMI cable lacing brackets**
- **Extron EverLast™ power supply** – Provides worldwide power compatibility with high reliability and low power consumption for reduced operating costs. The two-output model includes an external power supply, replacement part #70-1175-01. Four and six-output models are equipped with a 100-240 VAC, 50/60 Hz, internal universal power supply.
- **Extron EverLast power supply is covered by a 7-year parts and labor warranty.**
## Specifications

### True 4K Specifications

#### Max 4K Capabilities

<table>
<thead>
<tr>
<th>Resolution and Refresh Rate</th>
<th>Chroma Sampling</th>
<th>Max Bit Depth per Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>4096 x 2160 at 60 Hz</td>
<td>4:4:4</td>
<td>8 bit</td>
</tr>
<tr>
<td>3840 x 2160 at 60 Hz</td>
<td></td>
<td>12 bit</td>
</tr>
<tr>
<td>4096 x 2160 at 30 Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3840 x 2160 at 30 Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4096 x 2160 at 60 Hz</td>
<td>4:2:0</td>
<td></td>
</tr>
<tr>
<td>3840 x 2160 at 60 Hz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Frame rate
- 24, 25, 30, 50, or 60 fps

#### Chroma sampling
- 4:4:4, 4:2:2, or 4:2:0

#### Color bit depth
- 8, 10, or 12 bits per color

#### Signal type
- HDMI 2.0b, HDCP 2.2

#### Max. video data rate
- 18.0 Gbps (6 Gbps per color)

Note: Subject to the maximum data rate limit. Use our calculator [http://www.extron.com/4Kdatarate](http://www.extron.com/4Kdatarate) to determine video parameters supported by this data rate.

### Video Input

- **Number/signal type**: 1 single link HDMI (or DVI-D*)
- **Connectors**: 1 female 19-pin HDMI type A
- **Input cable length**: Up to 15 feet (4 meters) with a 600 MHz signal (100 feet, (30 meters) with 165 MHz)

### Video Output

#### DA2 HD 4K PLUS
- **Number/signal type**: 2 single link HDMI (or DVI-D*)
- **Connectors**: 2 female 19-pin HDMI type A

#### DA4 HD 4K PLUS
- **Number/signal type**: 4 single link HDMI (or DVI-D*)
- **Connectors**: 4 female 19-pin HDMI type A

#### DA6 HD 4K PLUS
- **Number/signal type**: 6 single link HDMI (or DVI-D*)
- **Connectors**: 6 female 19-pin HDMI type A

### Communications

- **Serial control port**: RS-232, 3.5 mm, 3-pole captive screw connector
- **Baud rate and protocol**: 9600 baud, 8 data bits, 1 stop bit, non-parity
- **Serial control pin configuration**: 1 = Tx, 2 = Rx, 3 = GND
- **USB control port**: 1 front panel, female, mini USB B
- **USB standards**: USB 2.0
- **Program control**: Extron Simple Instruction Set (SIS™)

### General

#### Power
- **DA2 HD 4K PLUS**: External
  - Input: 100-240 VAC, 50-60 Hz
  - Output: 12 VDC, 0.5 A, 6 watts
- **DA4 HD 4K PLUS and DA6 HD 4K PLUS**: Internal
  - Input: 100-240 VAC, 50-60 Hz

#### Power consumption
- **DA2 HD 4K PLUS**: 3.6 watts
- **DA4 HD 4K PLUS**: 8.6 watts
- **DA6 HD 4K PLUS**: 10.6 watts

#### Temperature/humidity
- **Storage**: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing
- **Operating**: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing

#### Thermal dissipation
- **DA2 HD 4K PLUS**: 10.2 BTU/hr
- **DA4 HD 4K PLUS**: 25.5 BTU/hr
- **DA6 HD 4K PLUS**: 30.5 BTU/hr

#### Mounting
- **Yes**, with optional rack shelf kit

#### Enclosure dimensions
- **DA2 HD 4K PLUS**: 1.00" H x 4.30" W x 3.00" D (25 mm H x 109 mm W x 76 mm D)
- **DA4 HD 4K PLUS and DA6 HD 4K PLUS**: 1.75" H x 8.75" W x 6.00" D (44 mm H x 222 mm W x 152 mm D)

#### Product weight
- **DA2 HD 4K PLUS**: 0.35 lbs (0.2 kg)
- **DA4 HD 4K PLUS and DA6 HD 4K PLUS**: 1.6 lbs (0.7 kg)

#### Warranty
- **3 years parts and labor**

**NOTE:** All nominal levels are at ±10%.

### Model Version Description

<table>
<thead>
<tr>
<th>Model</th>
<th>Version Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA2 HD 4K PLUS</td>
<td>Two Output 4K/60 HDMI DA</td>
<td>60-1607-01</td>
</tr>
<tr>
<td>DA4 HD 4K PLUS</td>
<td>Four Output 4K/60 HDMI DA</td>
<td>60-1608-01</td>
</tr>
<tr>
<td>DA6 HD 4K PLUS</td>
<td>Six Output 4K/60 HDMI DA</td>
<td>60-1609-01</td>
</tr>
</tbody>
</table>

### Optional Accessories

<table>
<thead>
<tr>
<th>Model</th>
<th>Version Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI Pro Series</td>
<td>Premium High Speed, High Speed, and Standard HDMI Cables</td>
<td>Various</td>
</tr>
<tr>
<td>HDMI Ultra Series</td>
<td>Ultra Flexible Premium High Speed and High Speed HDMI Cables</td>
<td>Various</td>
</tr>
<tr>
<td>MBU 123</td>
<td>Low-Profile Mount Kit for 1/8, 1/4, and 1/2 Rack Width Products</td>
<td>70-212-01</td>
</tr>
<tr>
<td>UTS 100 Series</td>
<td>Under Table Shelf System</td>
<td>70-1028-01</td>
</tr>
<tr>
<td>RSB 123</td>
<td>Basic Rack Shelf for 3.5&quot; Deep Products</td>
<td>70-077-01</td>
</tr>
<tr>
<td>RSU 126</td>
<td>Universal Rack Shelf Kit for 6&quot; Deep Products</td>
<td>70-190-10</td>
</tr>
<tr>
<td>Half Rack Shelf System</td>
<td>Half-Rack Width Rack Shelf and Accessories</td>
<td>Various</td>
</tr>
</tbody>
</table>

For complete specifications, please go to [www.extron.com](http://www.extron.com).

Specifications are subject to change without notice.