4K HDR
Multi-Channel to Two-Channel Audio Converter

Application Programming Interface
## Version Information

<table>
<thead>
<tr>
<th>Version</th>
<th>Release Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>07/18</td>
<td>Initial release</td>
</tr>
</tbody>
</table>
**Commands**

The following tables provide an alphabetical list of commands available on both the AT-HDR-M2C and AT-HDR-M2C-QUAD. All commands are case-sensitive and must be entered as documented. If the command fails or is entered incorrectly, then the feedback is “Command FAILED”. References to AT-HDR-M2C also apply to the AT-HDR-M2C-QUAD.

**IMPORTANT:** Each command is terminated with a carriage-return (0x0d) and the feedback is terminated with a carriage-return and line-feed (0x0a).

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<th>Description</th>
</tr>
</thead>
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</tr>
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<td>Adjusts the bass on the audio output</td>
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<td>Enables / disables broadcast mode</td>
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<td>Sets the HDCP mode on the HDMI input</td>
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<td>Displays the list of available commands</td>
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<td>Adds a user to TCP/IP control</td>
</tr>
<tr>
<td>IPCFG</td>
<td>Displays the IP settings of the AT-HDR-M2C</td>
</tr>
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<td>IPDelUser</td>
<td>Deletes the specified user from TCP/IP control</td>
</tr>
<tr>
<td>IPDHCP</td>
<td>Enables / disables DHCP mode</td>
</tr>
<tr>
<td>IPLogin</td>
<td>Enables / disables IP login</td>
</tr>
<tr>
<td>IPStatic</td>
<td>Sets the static IP address of the AT-HDR-M2C</td>
</tr>
<tr>
<td>IPTimeout</td>
<td>Sets the TCP/IP timeout interval before the connection is terminated</td>
</tr>
<tr>
<td>Mreset</td>
<td>Resets the AT-HDR-M2C to factory-default settings</td>
</tr>
<tr>
<td>PrefTimg</td>
<td>Sets the preferred timing on the output</td>
</tr>
<tr>
<td>TREBLE</td>
<td>Adjusts the treble on the audio output</td>
</tr>
<tr>
<td>Type</td>
<td>Displays the model information of the AT-HDR-M2C</td>
</tr>
<tr>
<td>Version</td>
<td>Displays the firmware version of the AT-HDR-M2C</td>
</tr>
<tr>
<td>VOUT</td>
<td>Adjusts the volume of the audio output</td>
</tr>
<tr>
<td>VOUTMute</td>
<td>Mutes / un-mutes the audio on the analog AUDIO OUT and HDMI ports</td>
</tr>
</tbody>
</table>
**AudioOut**

Enables / disables audio on the **HDMI - PCM 2, OPTICAL**, and analog output ports. on = enables the audio output; off = disables audio output; sta = displays the current AudioOut1 setting. Note that the **HDMI - PCM 2** port is not available on the AT-HDR-M2C-QUAD.

**Syntax**

AudioOut1 X

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>State</td>
<td>on, off, sta</td>
</tr>
</tbody>
</table>

**Examples**

AudioOut1 on

**Feedback**

AudioOut1 on

---

**BASS**

Increases / decreases the amount of bass on the **HDMI - PCM 2, OPTICAL**, and analog output port. In addition to specifying an integer value, the + and - arguments can be used, by themselves, to increase or decrease the bass by 1 value, respectively. To display the current value, execute the BASS1 command without any arguments. Note that the **HDMI - PCM 2** port is not available on the AT-HDR-M2C-QUAD.

**Syntax**

BASS1 X

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>-15 ... 15</td>
</tr>
</tbody>
</table>

**Example**

BASS1 -5
BASS1 +

**Feedback**

BASS1 -5
BASS1 -4
Commands

Broadcast
Enables or disables broadcast mode. By default, broadcast mode is set to ON. When set to ON, any system changes will be broadcasted to the web GUI will also be affected on the control system (if connected), via TCP/IP. To separate control between the web GUI and Telnet, set this feature to OFF. Command queries such as IPCFG and Type will only return information to the requester. Use the sta argument to display the current setting.

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Broadcast X</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>on, off, sta</td>
</tr>
</tbody>
</table>

Example
Broadcast on

Feedback
Broadcast on

HDCPSet
Set the HDCP reporting mode of the HDMI IN port. Some devices will automatically send HDCP content if an HDCP-compliant display is detected. Setting this value to off, will force the device to ignore detection of HDCP-compliant displays, allowing non-HDCP content to be transmitted from the source. Note that disabling this feature will not decrypt HDCP content. on = enables HDCP detection; off = disables HDCP detection; sta = displays the current HDCPSet1 setting.

<table>
<thead>
<tr>
<th>Syntax</th>
<th>HDCPSet1 X</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>on, off, sta</td>
</tr>
</tbody>
</table>

Example
HDCPSet1 on

Feedback
HDCPSet1 on
Commands

help
Displays a list of all available commands.

Syntax
help

This command does not require any parameters

Example
help

Feedback
Command List
-----------------
help
IPCFG
IPDHCP
...
...
TREBLE1

IPAddUser

Adds the specified user. This command performs the same function as adding a user within the web GUI. Refer to the User Manual for more information.

Syntax
 IPAddUser X

Parameter | Description | Range
----------|-------------|------
X          | User        | User name

Example
IPAddUser minion2

Feedback
IPAddUser minion2
TCP/IP user was added

IPCFG

Displays the current network settings for the AT-HDR-M2C.

Syntax
IPCFG

This command does not require any parameters

Example
IPCFG

Feedback
IP Addr 10.0.1.86
Netmask 255.255.255.0
Gateway 10.0.1.1
IP Port 23
**Commands**

**IPDelUser**

Deletes the specified user. Deleted users will no longer be able to access the web GUI or initiate Telnet sessions. This command performs the same function as removing a user within the web GUI. Refer to the User Manual for more information.

**Syntax**

```
IPDelUser X
```

**Parameter** | **Description** | **Range**
--- | --- | ---
X | User | User name

**Example**

```
IPDelUser Minion2
```

**Feedback**

```
TCP/IP user was deleted
```

**IPDHCP**

Enables / disables DHCP mode on the AT-HDR-M2C. on = enables DHCP mode; off = disables DHCP mode; sta = displays the current IPDHCP setting. If this feature is disabled, then a static IP address must be specified for the AT-HDR-M2C. Refer to the IPStatic command.

**Syntax**

```
IPDHCP X
```

**Parameter** | **Description** | **Range**
--- | --- | ---
X | Value | on, off, sta

**Example**

```
IPDHCP on
```

**Feedback**

```
IPDHCP on
```

---
Commands

**IPLogin**
Enables / disables the use of login credentials when starting a Telnet session using the AT-HDR-M2C. If this feature is set to on, then the AT-HDR-M2C will prompt for both the username and password. Use the same credentials as the web GUI. on = login credentials required; off = no login required; sta = displays the current IPLogin setting.

<table>
<thead>
<tr>
<th>Syntax</th>
<th>IPLogin X</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>on, off, sta</td>
</tr>
</tbody>
</table>

**Example**
IPLogin off

**Feedback**
IPLogin off

**IPPort**
Sets the TCP/IP listening port.

<table>
<thead>
<tr>
<th>Syntax</th>
<th>IPPort X</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Port</td>
<td>0 ... 65535, sta</td>
</tr>
</tbody>
</table>

**Example**
IPPort 230

**Feedback**
IPPort 230
**Commands**

**IPStatic**
Sets the static IP address, subnet mask, and gateway (router) address. Before using this command, DHCP must be disabled on the AT-HDR-M2C. Refer to the IPDHCP command for more information. Each argument must be entered in dot-decimal notation and separated by a space. The default static IP address is 192.168.1.254.

**Syntax**
```
IPStatic X Y Z
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>IP address</td>
<td>0 ... 255 (per byte)</td>
</tr>
<tr>
<td>Y</td>
<td>Subnet mask</td>
<td>0 ... 255 (per byte)</td>
</tr>
<tr>
<td>Z</td>
<td>Gateway (router)</td>
<td>0 ... 255 (per byte)</td>
</tr>
</tbody>
</table>

**Example**
IPStatic 192.168.1.112 255.255.255.0 192.168.1.1

**Feedback**
IPStatic 192.168.1.112 255.255.255.0 192.168.1.1

**IPTimeout**
Specifies the time interval of inactivity before the Telnet session is automatically closed.

**Syntax**
```
IPTimeout X
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Interval (in seconds)</td>
<td>0 ... 300</td>
</tr>
</tbody>
</table>

**Example**
IPTimeout 60

**Feedback**
IPTimeout 60

**Mreset**
Resets the unit to factory-default settings.

**Syntax**
```
MReset
```

This command does not require any parameters

**Example**
Mreset

**Feedback**
Mreset
PrefTimg

Sets the preferred timing of the input video signal. When selecting **HDMI OUT** or **HDMI PCM 2**, the device will use the EDID of the display/sink device, connected to that output. If no sink is present, then this option will not be available. Note that the **HDMI - PCM 2** port is not available on the AT-HDR-M2C-QUAD.

**Syntax**

```
PrefTimg X
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>0 ... 10</td>
</tr>
</tbody>
</table>

**Preferred Timing List**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1280 x 800</td>
</tr>
<tr>
<td>1</td>
<td>1920 x 1080</td>
</tr>
<tr>
<td>2</td>
<td>1024 x 768</td>
</tr>
<tr>
<td>3</td>
<td>1280 x 720</td>
</tr>
<tr>
<td>4</td>
<td>1920 x 1200</td>
</tr>
<tr>
<td>5</td>
<td>1366 x 768</td>
</tr>
<tr>
<td>6</td>
<td>800 x 600</td>
</tr>
<tr>
<td>7</td>
<td>1600 x 900</td>
</tr>
<tr>
<td>8</td>
<td>2560 x 1600</td>
</tr>
<tr>
<td>9</td>
<td>3840 x 2160 @ 30 Hz</td>
</tr>
<tr>
<td>10</td>
<td>3840 x 2160 @ 60 Hz</td>
</tr>
<tr>
<td>11</td>
<td>HDMI OUT</td>
</tr>
<tr>
<td>12</td>
<td>HDMI PCM 2</td>
</tr>
</tbody>
</table>

**Example**

PrefTimg 2

```
Feedback
PrefTimg 2
```

TREBLE

Increases / decreases the amount of treble **HDMI - PCM 2**, **OPTICAL**, and analog output port. In addition to specifying an integer value, the `+` and `-` arguments can be used, by themselves, to increase or decrease the amount of treble by 1 value, respectively. To display the current value, execute the TREBLE1 command without any arguments. Note that the **HDMI - PCM 2** port is not available on the AT-HDR-M2C-QUAD.

**Syntax**

```
TREBLE1 X
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>-15 ... 15</td>
</tr>
</tbody>
</table>

**Example**

TREBLE1 8
TREBLE1 -

```
Feedback
TREBLE1 8
TREBLE1 7
```
Commands

### Type
Displays the model information.

**Syntax**

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td></td>
</tr>
</tbody>
</table>

This command does not require any parameters

**Example**

```
Type
```

**Feedback**

AT-HDR-M2C

### Version
Displays the current firmware version.

**Syntax**

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td></td>
</tr>
</tbody>
</table>

This command does not require any parameters

**Example**

```
Version
```

**Feedback**

```
0.2.05
```

### VOUT
Increases / decreases the audio volume **HDMI - PCM 2, OPTICAL**, and analog output port. In addition to specifying an integer value, the + and - arguments can be used, by themselves, to increase or decrease the volume by 1 value, respectively. To display the current value, execute the VOUT1 command without any arguments. Note that the **HDMI - PCM 2** port is not available on the AT-HDR-M2C-QUAD.

**Syntax**

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOUT1</td>
<td></td>
</tr>
</tbody>
</table>

**Parameter**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>Value</td>
<td>-80 ... 6</td>
</tr>
</tbody>
</table>

**Example**

```
VOUT1 4
VOUT1 +
```

**Feedback**

```
VOUT1 4
VOUT1 5
```
VOUTMute

Mutes / unmutes the audio on the HDMI - PCM 2, OPTICAL, and analog output port. on = enables muting; off = disables muting; sta = displays the current VOUTMute1 setting. Note that the HDMI - PCM 2 port is not available on the AT-HDR-M2C-QUAD.

Syntax

VOUTMute1 X

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>on, off, sta</td>
</tr>
</tbody>
</table>

Example

VOUTMute1 on

Feedback

VOUTMute1 on