



4K HDR 4x4

HDMI to HDMI Matrix Switcher

Application Programming Interface

AT-HDR-H2H-44M

API

Version Information

Version	Release Date	Notes
1	02/22	Initial release

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Commands

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Commands

The following tables provide an alphabetical list of commands available on the AT-HDR-H2H-88MA. 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".



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

Command	Description
All#	Resets all inputs to corresponding outputs
Blink	Enable/Disable red blinking of the PWR button LED
Broadcast	Enables, disables, and displays status of broadcast mode
Clear	Erases the saved I/O route settings for the chosen preset number
CSpara	Set RS-232 parameter
EDIDMSet	Sets the EDID of an input to default, internal, or a previously saved EDID
EDIDOut	Saves the output EDID to memory
HDCPSet	Sets HDCP mode of the HDMI ports
IPAddUser	Add a user for TCP/IP control
IPCFG	Displays IP address configuration
IPDelUser	Delete a user from TCP/IP
IPDHCP	Turns DHCP on / off
IPLogin	Enables / Disables IPLogin mode
IPPort	Set the TCP/IP port
IPQuit	Logs out of TCP/IP
IPStatic	Sets a static IP address
IPTimeout	Determines amount of seconds of inactivity before TCP/IP disconnects
IROFF	Disables the front panel IR receiver window
IRON	Enables the front panel IR receiver window
IRSTA	Displays the current status of the front panel IR receiver window
Lock	Locks the front panel of the matrix so no buttons are active
Mreset	Sets matrix back to the default settings
PWOFF	Turns the unit off
PWON	Turns the unit on
PWSTA	Displays the power status of the matrix
Recall	Recalls saved I/O route settings for the chosen preset number

Commands

Command	Description
Save	Saves I/O route settings for future use, preset options 0 to 8
Status	Displays which inputs are currently connected to which outputs
System	Displays system information about the AT-HDR-H2H-44M
Telnet	Enables/Disables telnet daemon
TrigCEC	Triggers the stored CEC command to turn the display on and off
Type	Brings up the model information
Unlock	Unlocks the front panel of the matrix, enabling the buttons again
Version	Brings up the current firmware version
VOUtmute	Mutes/Unmutes audio output volume
x?All	Sets selected input to all outputs
x?\$	Changes status of output channel
x?AVx&	Switch input to output

All#

Resets all inputs to corresponding outputs.

Syntax

All#

Example

All#

Feedback

x1AVx1, x2AVx2, x3AVx3, x4AVx4

Blink

Enable/Disable red blinking of the PWR button LED for identifying the unit among others similar units. Default is off.

Syntax

Blink X

Parameter	Description	Range
X	Value	on, off, sta

Example

Blink sta

Feedback

Blink off

Broadcast

Enables, disables, and displays status of broadcast mode.

Syntax

Broadcast X

Parameter	Description	Range
X	Variable	on, off, sta

Example

Broadcast sta

Feedback

Broadcast on

Clear

Erases the saved I/O route settings for the chosen preset number.

Syntax

ClearX

Parameter	Description	Range
X	I/O preset number	1 to 4

Example

Clear2

Feedback

Clear2

CSpara

Set RS-232 parameters

Syntax
CSpara[W,X,Y,Z]

Parameter	Description	Range
W	Baud rate	2400, 4800, 9600, 19200, 38400, 57600, 115200
X	Data bits	7, 8
Y	Parity bit	None, Odd, Even
Z	Stop bits	1, 2

Example

CSpara[115200,8,0,1]
CSpara[sta]

Feedback

CSpara[115200,8,0,1]
CSpara [115200,8,0,1]

EDIDMSet

Sets the EDID of an input to default, internal, or a previously saved EDID.

Syntax
EDIDMSetX YZ

Parameter	Description	Range
X	Input	1 to 4
Y	EDID type	default, save, int
Z	Variable	save - 1 to 4 int - 1 to 12

Example

EDIDMSet1 default
EDIDMSet2 save2
EDIDMSet3 int3

Feedback

EDIDMSet1 default
EDIDMSet2 save2
EDIDMSet3 int3

Internal EDIDs

1: 1080p / 2 channel
2: 1080p / multichannel (lossless)
3: 1080p 3D / Dolby Digital
4: 1080p 3D / 2 channel
5: 1080p 3D / multichannel (lossless)
6: 1080p 3D / Dolby Digital

7: 4K 60 4:2:0 / 2 channel
8: 4K 60 4:2:0 / multichannel (HD lossless)
9: 4K 60 4:2:0 HDR / 2 channel
10: 4K 60 4:2:0 HDR / multichannel (HD lossless)
11: 4K 60 4:4:4 8-bit / 2 channel
12: 4K 60 4:4:4 8-bit / multichannel (HD lossless)

EDIDOut

Saves the output EDID to memory.

Syntax

EDIDOut **X**

Parameter	Description	Range
X	Variable	1 to 4

Example

EDIDOut 1

Feedback

EDIDOut 1

HDCPSet

Sets HDCP mode of the HDMI input ports.

Syntax

HDCPSet **X Y**

Parameter	Description	Range
X	Input	1 to 4
Y	Variable	on, off, sta

Example

HDCPSet 1 on

Feedback

HDCPSet 1 on

IPAddUser

Add a user for TCP/IP control.

Syntax

IPAddUser **X Y**

Parameter	Description	Range
X	User name	20 characters (max)
Y	Password	20 characters (max)

Example

IPAddUser ABCd Y4n

Feedback

IPAddUser ABCd Y4n
TCP/IP user was added

IPCFG

Displays IP address configuration.

Syntax

```
IPCFG
```

Example

```
IPCFG
```

Feedback

```
IP Addr: 10.0.1.101
Netmask: 255.255.255.0
Gateway: 10.0.1.1
IP Port: 23
```

IPDelUser

Delete a user from TCP/IP.

Syntax

```
IPDelUser X
```

Parameter	Description	Range
X	User name	20 characters (max)

Example

```
IPDelUser ABCd
```

Feedback

```
IPDelUser ABCd
TCP/IP user was deleted
```

IPDHCP

Turns DHCP on / off.

Syntax

```
IPDHCP X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

```
IPDHCP on
```

Feedback

```
IPDHCP on
```

IPLogin

Enables / Disables IPLogin mode.

Syntax

IPLogin **X**

Parameter	Description	Range
X	Value	on, off, sta

Example

IPLogin off

Feedback

IPLogin off

IPPort

Set the TCP/IP port.

Syntax

IPPort **X**

Parameter	Description	Range
X	Port	1 to 65535, sta

Example

IPPort 23

Feedback

IPPort 23

IPQuit

Logs out of TCP/IP.

Syntax

IPQuit

Example

IPQuit

Feedback

IPQuit

IPStatic

Sets a static IP address.

Syntax

IPStatic **X Y Z**

Parameter	Description	Range
X	IP address	0 to 255 (per byte)
Y	Subnet mask	0 to 255 (per byte)
Z	Gateway (router)	0 to 255 (per byte)

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

Determines amount of seconds of inactivity before TCP/IP disconnects.

Syntax

IPTimeout **X**

Parameter	Description	Range
X	Interval (in seconds)	1 to 3600

Example

IPTimeout 300

Feedback

IPTimeout 300

IROFF

Disables all IR.

Syntax

IROFF

Example

IROFF

Feedback

IROFF

IRON

Enables all IR.

Syntax

IRON

Example

IRON

Feedback

IRON

IRSTA

Provides the current status of IR.

Syntax

IRSTA

Example

IRSTA

Feedback

IRON

Lock

Locks the front panel of the matrix so no buttons are active. The PWR led will blink blue when locked.

Syntax

Lock

Example

Lock

Feedback

Lock

Mreset

Sets matrix back to the default settings.

Syntax

MReset

Example

Mreset

Feedback

Mreset

PWOFF

Turns the unit off.

Syntax

PWOFF

Example

PWOFF

Feedback

PWOFF

PWON

Turns the unit on.

Syntax

PWON

Example

PWON

Feedback

PWON

PWSTA

Displays the power status of the matrix.

Syntax
PWSTA

Example
PWSTA

Feedback
PWON

Recall

Recalls saved I/O route settings for the chosen preset number

Syntax
RecallX

Parameter	Description	Range
X	Channel	1 to 4

Example
Recall3

Feedback
Recall3

Save

Saves I/O route settings for future use, preset options 1 to 8.

Syntax
SaveX

Parameter	Description	Range
X	Channel	1 to 4

Example
Save1

Feedback
Save1

Status

Displays which inputs are currently connected to which outputs.

Syntax
Status

Example
Status

Feedback
x1AVx2, x2AVx3, x3AVx2, x4AVx1

System

Displays system information about the AT-HDR-H2H-88MA.

Syntax
System X

Parameter	Description	Range
X	Status	sta

Example

System sta

Feedback

Model: AT-HDR-H2H-88MA
 MAC Addr: b8-98-b0-00-10-e6
 Address Type: DHCP
 IP Addr: 10.0.1.161
 Netmask: 255.255.255.0
 Gateway: 10.0.1.1
 HTTP Port: 80
 Telnet Port: 23
 Firmware: 1.1.28
 On/Up Time <dd HH:mm:ss>: 00 00:53:31

Telnet

Enables/Disables telnet daemon.

Syntax
Telnet X

Parameter	Description	Range
X	Value	on, off, sta

Example

Telnet sta

Feedback

Telnet off

TrigCEC

Triggers the stored CEC commands to control a display.

Syntax
TrigCEC X Y

Parameter	Description	Range
X	Output Channel	1 to 4
Y	Variable	on, off, vol+, vol-, mute

Example

TrigCEC on

Feedback

TrigCEC on

Type

Brings up the model information.

Syntax
Type

Example
Type

Feedback
AT-HDR-H2H-44M

Unlock

Unlocks the front panel of the matrix, enabling the buttons again.

Syntax
Unlock

Example
Unlock

Feedback
Unlock

Version

Brings up the current firmware version.

Syntax
VersionX

Parameter	Description	Range
X	Variable	MCU

Example
VersionMCU

Feedback
V1.0.00

VOU TMute

Mutes/Unmutes audio output volume by channel.

Syntax
VOU TMuteX Y

Parameter	Description	Range
X	Audio Output Channel	1 to 4
Y	Variable	on, off, sta

Example
VOU TMute3 sta

Feedback
VOU TMute3 on

x?All

Sets selected input to all outputs.

Syntax
x?All

Parameter	Description	Range
?	Input	1 to 4

Example

x3All

Feedback

x3All

x?\$

Turns HDMI signal on/off for the specified output channel.

Syntax
x?\$ Y

Parameter	Description	Range
X	Output	1 to 4
Y	Variable	on, off, sta

Example

x2\$ sta

Feedback

x2\$ on

x?AVx&

Switch input to output.

Syntax
x?AVx&

Parameter	Description	Range
?	Input	1 to 4
&	Output	1 to 4

Example

x1AVx3

Feedback

x1AVx3

