AT-OME-ST31A

Omega™ 3x1 TX with Analog Audio Output

API Command Reference

October 2026



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Version Information

This document lists the commands for controlling the AT-OME-ST31A over RS-232 and Telnet. Its version history follows the original command reference.

Version	Date	Notes
4	Jan 2024	Changed version of manual to match updated firmware release (1.1.0); no changes to document required.
HR 1.0	October 2026	Converted to the Hall Research document format. No command changes.

Sales & Customer Support

Item	Details
Main Office (US)	Hall Research, 1234 Lakeshore Dr Suite #150, Coppell, TX 75019
Support Hours	Monday – Friday, 8:00 a.m. – 6:00 p.m. (CST)
Website	https://www.hallresearch.com
Product Page (AT-OME-ST31A)	https://www.hallresearch.com/product/AT-OME-ST31A

IMPORTANT: Visit hallresearch.com/product/AT-OME-ST31A for the latest firmware updates and documentation.

Introduction

General

This document provides an alphabetical list of the commands available for the AT-OME-ST31A. Commands are case-sensitive. If a command fails or is entered incorrectly, the feedback is “Command FAILED”. Commands can be sent using RS-232 or Telnet. Allow a 500 millisecond delay between commands sent to the unit. The default Telnet port is 23.

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

RS-232

A 3-pin captive screw connector is included for RS-232. Wire it as TX (transmit), RX (receive), and GND (ground) according to the RS-232 cable; RS-232 is often connected through a DB9-to-captive-screw cable, where some DB9 pins are unassigned.

NOTE: Typical DB9 connectors use pin 2 for TX, pin 3 for RX, and pin 5 for ground. On some devices, the functions of pins 2 and 3 are reversed.

The baud parameters must match for control signals to pass. They can be changed in the built-in web interface. The default settings are:

Port	Default Settings
RS-232	9600 baud, 8 data bits, no parity, 1 stop bit

Command Quick Reference

Select a command name to go to its full description.

Command	Description
Blink	Enables or disables blinking of the POWER button on the front panel
CommaWait	Adds a 5 second delay between commands, when a comma is included
DispBtn	Sets the command triggered through display control (set in the webGUI)
help	Displays the list of available commands
InputStatus	Displays the status of the specified input as either a 0 or 1
IP802.1x	Sets the security setting for use with RADIUS server authentication
IPCFG	Displays the current network settings for the unit
IPDHCP	Enables or disables DHCP mode on the unit
IPStatic	Sets the static IP address, subnet mask, and gateway (router) address of the unit
Lock	Locks the buttons on the front panel
LRAUD	Enables / disables the audio on the analog audio output
Mreset	Resets the unit to factory-default settings
OutHdmi5vKeep	Enables or disables the HDMI +5V signal on the HDMI output port
PWOFF	Executing this command will power-off the unit
PWON	Executing this command will power-on the unit
PWSTA	Displays the current power state of the unit
RepCmdTime	Sets the number of time a command will be sent
RepeatCmd	Enables / disables the RepCmdTime feature
RHostName	Displays the hostname of the unit
RS232zone	Sends commands to the HDBaseT device
SHostName	Sets the hostname of the unit
Status	Displays which input is routed to which output
Type	Displays the model information of the unit
Unlock	Unlocks the buttons on the front panel
Version	Displays the current firmware version of the unit
VOUTMute	Mutes / unmutes the output volume for the specified output
xY$	Enables / disables video for the specified output
xYAVxZ	Switches the specified input to the specified output

Commands

Blink

Enables or disables blinking of the POWER button on the front panel. When set to on, the POWER button will flash blue, and can be used to physically identify the unit on a network. The POWER button will flash until the Blink off command is executed. on = enables blinking; off = disables blinking; sta = displays the current setting. The default setting is off.

Syntax

```
Blink X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

```
Blink on
```

Feedback

```
Blink on
```

CommaWait

Adds a 5 second delay between commands, when a comma is included

Syntax

```
CommaWait X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

```
CommaWait on
```

Feedback

```
CommaWait on
```

DispBtn

Sets the command triggered through display control (set in the webGUI).

NOTE: The feedback will display channel status: 0 is no signal detected and 1 is signal detected.

Syntax

```
DispBtn X
```

Parameter	Description	Range
X	State	on, off, tog, sta

Example

```
DispBtn on
```

Feedback

```
DispBtn on
```

help

Displays the list of available commands. To obtain help on a specific command, enter the help command followed by the name of the command.

Syntax

```
help [X]
```

Parameter	Description	Range
X	Command name (optional)	Command

Example

```
help
```

Feedback

```
Blink
CommaWait
DispBtn
System
IPCFG
IPStatic
...
...
```

InputStatus

Displays the status of the specified input as either a 0 or 1. If a source is detected on the input, then a 1 will be displayed. Inputs with no source connected will display a 0.

Syntax

```
InputStatus
```

This command does not require any parameters.

Example

```
InputStatus
```

Feedback

```
InputStatus 010
```

IP802.1x

Sets the security setting for use with RADIUS server authentication. Use the sta argument to display the current setting.

Syntax

```
IP802.1x X
```

Parameter	Description	Range
X	Security setting	disable, PEAP, TTLS, TLS, sta

Example

```
IP802.1x TTLS
```

Feedback

```
IP802.1x TTLS
```

IPCFG

Displays the current network settings for the unit.

Syntax

```
IPCFG
```

This command does not require any parameters.

Example

```
IPCFG
```

Feedback

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

IPDHCP

Enables or disables DHCP mode on the unit. on = enables DHCP mode; off = disables DHCP mode; sta = displays the current setting. If this feature is disabled, then a static IP address must be specified for the unit. Refer to the IPStatic command for more information.

Syntax

```
IPDHCP X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

```
IPDHCP on
```

Feedback

```
IPDHCP on
```

IPStatic

Sets the static IP address, subnet mask, and gateway (router) address of the unit. Before using this command, DHCP must be disabled on the unit. 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
```

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

Lock

Locks the buttons on the front panel. This feature is useful when the unit is installed in a rack environment or other remote location, to prevent unauthorized tampering or accidental pressing of the front-panel buttons. Also refer to the Unlock command.

Syntax

```
Lock
```

This command does not require any parameters.

Example

```
Lock
```

Feedback

```
Lock
```

LRAUD

Enables / disables the audio on the analog audio output.

Syntax

```
LRAUD
```

Parameter	Description	Range
X	Status	on, off, sta

Example

```
LRAUD off
```

Feedback

```
LRAUD off
```

Mreset

Resets the unit to factory-default settings.

Syntax

```
Mreset
```

This command does not require any parameters.

Example

```
Mreset
```

Feedback

```
Mreset
```

OutHdmi5vKeep

Enables or disables the HDMI +5V signal on the HDMI output port. Some downstream devices will detect the loss of an HDMI signal by looking for a +5V on the HDMI connection. The AT-OME-ST31A holds the +5V pin high by default, regardless of the output signal state. on = Holds the +5V high all the time (default); off = +5V signal follows the presence of video on the HDMI output port; sta = displays the current setting.

Syntax

```
OutHdmi5vKeep X
```

Parameter	Description	Range
X	State	on, off, sta

Example

```
OutHdmi5vKeep off
```

Feedback

```
OutHdmi5vKeep off
```

PWOFF

Executing this command will power-off the unit. Execute the PWON command to power-on the unit.

Syntax

```
PWOFF
```

This command does not require any parameters.

Example

```
PWOFF
```

Feedback

```
PWOFF
```

PWON

Executing this command will power-on the unit. Use the PWOFF command to power-off the unit.

Syntax

```
PWON
```

This command does not require any parameters.

Example

```
PWON
```

Feedback

```
PWON
```

PWSTA

Displays the current power state of the unit.

Syntax

```
PWSTA
```

This command does not require any parameters.

Example

```
PWSTA
```

Feedback

```
PWON
```

RepCmdTime

Sets the number of time a command will be sent. Specify the sta argument to display the current setting.

Syntax

```
RepCmdTime X
```

Parameter	Description	Range
X	Times to repeat command	2 ... 4, sta

Example

```
RepCmdTime 3
```

Feedback

```
RepCmdTime 3
```

RepeatCmd

Enables / disables the RepCmdTime feature. Specify the sta argument to display the current setting.

Syntax

```
RepeatCmd X
```

Parameter	Description	Range
X	Status	on, off, sta

Example

```
RepeatCmd on
```

Feedback

```
RepeatCmd on
```

RHostName

Displays the hostname of the unit.

Syntax

```
RHostName
```

This command does not require any parameters.

Example

```
RHostName
```

Feedback

```
RHostName OMEST31-010C90
```

RS232zone

Sends commands to the HDBaseT device. Refer to the User Manual of the display device for a list of available commands. Brackets must be used when specifying the command argument. The command line must not contain any spaces.

Syntax

```
RS232zone[X]
```

Parameter	Description	Range
X	Command	String

Example

```
RS232zone[command]
```

Feedback

```
RS232zone[command]
```

SHostName

Sets the hostname of the unit. The string name must not contain any spaces.

Syntax

```
SHostName X
```

Parameter	Description	Range
X	Name	String

Example

```
SHostName AT-OME-ST31A_Huddle1
```

Feedback

```
SHostName AT-OME-ST31A_Huddle1
```

Status

Displays which input is routed to which output. Refer to the xYAVxZ command for more information.

Syntax

```
Status
```

This command does not require any parameters.

Example

```
Status
```

Feedback

```
x2AVx1,x2AVx2
```

Type

Displays the model information of the unit.

Syntax

```
Type
```

This command does not require any parameters.

Example

```
Type
```

Feedback

```
AT-OME-ST31A
```

Unlock

Unlocks the buttons on the front panel. Also refer to the Lock command.

Syntax

```
Unlock
```

This command does not require any parameters.

Example

```
Unlock
```

Feedback

```
Unlock
```

Version

Displays the current firmware version of the unit.

Syntax

```
Version
```

This command does not require any parameters.

Example

```
Version
```

Feedback

```
1.0.05
```

VOUTMute

Mutes / unmutes the output volume for the specified output. The first argument references the output: 1 = HDMI, 2 = HDBaseT. No space should exist between the command and the first argument.

Syntax

```
VOUTMuteX Y
```

Parameter	Description	Range
X	Output	1, 2
Y	State	on, off, sta

Example

```
VOUTMute1 off
```

Feedback

```
VOUTMute1 off
```

xY$

Enables / disables video for the specified output. The first argument references the output: 1 = HDMI, 2 = HDBaseT.

Syntax

```
xY$ Z
```

Parameter	Description	Range
Y	Output	1, 2
Z	State	on, off, sta

Example

```
x2$ off
```

Feedback

```
x2$ off
```

xYAVxZ

Switches the specified input to the specified output. The first argument references the input: 1 = USB-C, 2 = HDMI 1, 3 = HDMI 2. The second argument must always be 1. Both HDMI and HDBaseT outputs will output the same source signal. Note that the feedback will display that the specified input is being routed to both output 1 (HDMI) and output 2 (HDBaseT), as shown below.

Syntax

```
xYAVxZ
```

Parameter	Description	Range
Y	Input	1 ... 3
Z	Output	1

Example

```
x3AVx1
```

Feedback

```
x3AVx1
```