

OMEGA4K / UHD
3x2 Matrix Switcher
for HDMI and USB-C with HDMI Outputs

Application Programming Interface

Version Information

Version	Release Date	Notes
1	Dec 2018	Release
2	Aug 2019	Added System sta and TrigCEC commands
3	Dec 2019	Removed System sta and TrigCEC commands Added IP802.1x RepCmdTime, and RepeatCmd
4	Jan 2021	Added RS-232 parameters

Introduction

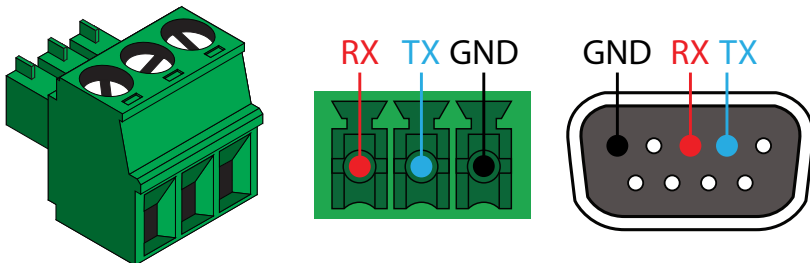
General

This document provides an alphabetical list of commands available for AT-OME-RX21. Commands are case-sensitive. If the command fails or is entered incorrectly, then the feedback is “Command FAILED”. Commands can be sent using RS-232, SSH, or Telnet. There should be a 500 millisecond delay between each command sent to the unit. The default port for Telnet is 23 and 22 for SSH.

! 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

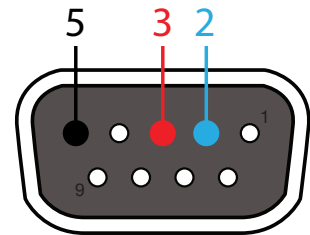
A 3-pin captive screw connector has been included for RS-232.



Pin out will be determined by the RS-232 cable and connect as RX (receive), TX (transmit) and \perp (Ground).

RS-232 is often connected through a DB 9-pin to captive screw connector. The pins will have functions associated with them, some will be unassigned.

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



Baud parameters must be met for control signals to pass. The parameters can be updated through the built in webGUI. The defaults for the RS-232 port is:

Port (unit/display control) - 115200, 8-bit, None, 1

Commands

The following tables provide an alphabetical list of commands available on the AT-OME-SW32.

Command	Description
Blink	Enable/Disable blinking of the front panel POWER LED
CommaWait	Enable/Disable a comma adding a 5 second delay between commands
DispBtn	Sets the command triggered through display control (set in the webGUI)
InputStatus	Displays the status for each input
IP802.1x	Sets the 802.1x security status
IPCFG	Displays IP address configuration
IPDHCP	Turns DHCP on / off
IPStatic	Sets a static IP address
Lock	Locks the buttons on the front panel
LRAUD	Turns on/off analog audio output
Mreset	Sets the unit back to default settings
PWOFF	Execute this command to power-off the unit
PWON	Execute this command to power-on the unit
PWSTA	Displays the power state of the unit
RepCmdTime	Sets how many times a display command is repeated when repeat is enabled
RepeatCmd	Enables/disables display command repeat
RS232zone	Displays the routing state of the unit
Status	Displays the routing state of the unit
Type	Displays the model of the unit
Unlock	Unlocks the buttons on the front panel
Version	Displays the current firmware version of the unit
VOUTMute	Mutes/Unmutes audio output volume
x?\$	Mutes/Unmutes AV signals for the specified output channel
x?AVx&	Switch a specific input to a specific output

Blink

Enable/Disable blinking of the front panel POWER LED.

Syntax

```
Blink X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

Blink on

Feedback

Blink on

CommaWait

Enable/Disable a comma adding a 5 second delay between commands. Default is on.

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).

Syntax

```
DispBtn X
```

Parameter	Description	Range
X	Setting	on, off, tog, mute, vol+, vol-, sta

Example

DispBtn on

Feedback

DispBtn on

InputStatus

Displays the status for each input.

Syntax

```
InputStatus
```

Examples

InputStatus

Feedback

InputStatus 011



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

IP802.1x

Sets the 802.1x security status.

Syntax

```
IP802.1x ?
```

Parameter	Description	Range
?	Value	disable, PEAP, TTLS, TLS, sta

Example

```
IP802.1x sta
```

Feedback

```
IP802.1x TTLS
```

IPCFG

Displays the current network settings for the unit.

Syntax

```
IPCFG
```

Example

```
IPCFG
```

Feedback

```
IP Addr 192.168.11.196
Netmask 255.255.255.0
Gateway 192.168.11.254
IP Port 23
```

IPDHCP

Turns DHCP on / off. Default is on.

Syntax

```
IPDHCP X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

```
IPDHCP on
```

Feedback

```
IPDHCP on
```

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
```

Lock

Locks the front panel of the matrix so no buttons are active.

Syntax

```
Lock
```

Example

```
Lock
```

Feedback

```
Lock
```

LRAUD

Turns on/off analog audio output. Default is on.

Syntax

```
LRAUD X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

```
LRAUD sta
```

Feedback

```
LRAUD on
```

Mreset

Sets matrix back to the default settings.

Syntax

```
MReset
```

Example

```
Mreset
```

Feedback

```
Mreset
```

PWOFF

Turns the unit off. Front panel LED will illuminate red when off.

Syntax

PWOFF

Example

PWOFF

Feedback

PWOFF

PWON

Turns the unit on. Front panel LED will illuminate blue when on.

Syntax

PWON

Example

PWON

Feedback

PWON

PWSTA

Displays the power status of the matrix.

Syntax

PWSTA

Example

PWSTA

Feedback

PWON

RepCmdTime

Sets how many times a display command is repeated when repeat is enabled.

Syntax

RepeatCmd **X**

Parameter	Description	Range
X	Amount	2 - 4, sta

Example

RepeatCmd sta
RepeatCmd 3

Feedback

RepeatCmd 2
RepeatCmd 3

RepeatCmd

Enables (on) / disables (off) display command repeat.

Syntax

```
RepeatCmd X
```

Parameter	Description	Range
X	State	on, off, sta

Example

```
RepeatCmd sta
```

Feedback

```
RepeatCmd on
```

RS232zone

Use to trigger the SW32's RS-232 port to send the specified command to the display.

Syntax

```
RS232zone[X]
```

Parameter	Description	Range
X	Command	String

Example

```
RS232zone[VOL23]
```

Feedback

```
RS232zone[VOL23]
```

Status

Displays the current route status.

Syntax

```
Status X
```

Example

```
Status
```

Feedback

```
x3Vx1, x1Vx2
```

Type

Brings up the model information.

Syntax

```
Type
```

Example

```
Type
```

Feedback

```
AT-OME-SW32
```

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

```
Version
```

Example

```
Version
```

Feedback

```
1.0.00
```

VOUTMute

Mutes/unmutes the output audio channels.

Syntax

```
VOUTMuteX Y
```

Parameter	Description	Range
X	Channel	1 - 2
Y	Value	on, off, sta

Example

```
VOUTMute1 sta
```

Feedback

```
VOUTMute1 on
```

x?\$

Mutes/Unmutes AV signals for the specified output channel.

Syntax

```
x?$ Y
```

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

Example

```
x2$ sta
```

Feedback

```
x2$ on
```

x?AVx&

Switch audio and video input to output.

Syntax

x?AVx&

Parameter	Description	Range
?	Input	1 - 3
&	Output	1 - 2

Example

x1AVx3

Feedback

x1AVx3

