



4K / UHD Four-Input HDMI Switcher with Auto-Switching and Return Optical Audio

Application Programming Interface

AT-JUNO-451
AT-JUNO-451-HDBT

Atlona Manuals
Switchers

Version Information

Version	Release Date	Notes
3	Jul 2023	- New color format. - Added note that JUNO-451-HDBT has been discontinued; recommended replacement is OPUS-RX41.

Commands

The following tables provide an alphabetical list of commands available for both the AT-JUNO-451 and AT-JUNO-451-HDBT. Commands are case-sensitive. 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).



NOTE: The AT-JUNO-451-HDBT has been discontinued. The recommended replacement product is the AT-OPUS-RX41.

Command	Description
AudioSRC	Sets the audio source for the OPTICAL port
AutoSW	Sets the auto-switching mode
Blink	Enables or disables blinking of the POWER LED indicator on the front panel
Broadcast	Enables or disables broadcast mode
CSpara	Sets the baud rate, data bits, parity bit, and stop bits for the serial port
EDIDCopy	Saves the downstream EDID to the specified internal memory location on the unit
EDIDMSet	Assigns an EDID to the specified input.
HDCPSet	Set the HDCP reporting mode of the specified HDMI input port
HDMIAud	Enables or disables audio on the HDMI output
help	Displays the list of available commands
InputBroadcast	Invokes the InputStatus command when enabled
InputStatus	Displays the state of each input
IPAddUser	Adds a user for Telnet and webGUI access
IPCFG	Displays the current network settings for the unit
IPDelUser	Deletes the specified user
IPDHCP	Enables or disables DHCP mode on the unit
IPLogin	Enables or disables login credentials when starting a Telnet session
IPPort	Sets the Telnet listening port for the unit
IPQuit	Closes the current Telnet session
IPStatic	Sets the static IP address, subnet mask, and gateway for the unit
IPTimeout	Specifies the time interval of inactivity before a Telnet session is closed
IROFF	Disables the IR receiver on the unit
IRON	Enables the IR receiver on the unit
Lock	Locks the buttons on the front panel
Mreset	Resets the unit to factory-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
RAtIMac	Displays the MAC address of the unit
Status	Displays the routing state of the unit
System	Displays information about the system status
Toslink	Enables or disables the OPTICAL port on the back panel
Type	Displays the model of the unit
Unlock	Unlocks the buttons on the front panel
Version	Displays the current firmware version of the unit
xYAVx1	Routes the specified input to the output

Commands

AudioSRC

Sets the audio source for the **OPTICAL** port on the AT-JUNO-451. HDMI audio is de-embedded and heard on the specified source. Use the sta argument to display the current setting

Syntax

AudioSRC X

Parameter	Description	Range
X	Source	SPDIF, ARC, sta

Example

AudioSRC SPDIF

Feedback

AudioSRC SPDIF

AutoSW

Enables or disables auto switching between INPUT ports. Use the sta argument to display the current setting.

Syntax

AutoSW X

Parameter	Description	Range
X	Value	on, off, sta

Example

AutoSW on

Feedback

AutoSW on

Blink

Enables or disables blinking of the **POWER** LED indicator on the front panel. When set to on, the **POWER** LED indicator button will flash, alternating between blue and red, and can be used to physically identify the unit on a network. The **POWER** LED indicator will flash until the Blink off command is executed. on = enables blinking; off = disables blinking. Use the sta argument to display 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

Commands

Broadcast

Enables or disables broadcast mode. By default, broadcast mode is set to ON. When set to ON, any system changes will be broadcast 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.

Syntax

Broadcast X

Parameter	Description	Range
X	Value	on, off, sta

Example

Broadcast on

Feedback

Broadcast on

CSpara

Sets the baud rate, data bits, parity bit, and stop bits for the serial port. Use the sta argument to display the current serial port settings. Each argument must be separated by a comma; no spaces are permitted. Brackets must be used when executing this command.

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]

EDIDCopy

Saves the downstream EDID to the specified internal memory location on the unit. Do not use a space between the command and the first argument.

Syntax

```
EDIDCopyX Y
```

Parameter	Description	Range
X	Input	1 ... 4
Y	Memory location	1 ... 8

Example

```
EDIDCopy1 4
```

Feedback

```
EDIDCopy1 4
```

EDIDMSet

Assigns an EDID to the specified input. The EDID can be either one of the internal preprogrammed EDIDs or a custom EDID that can be stored in one of the eight memory locations. A brief description of each preprogrammed EDID is listed in the table below. For a detailed summary of each EDID, refer to the User Manual for more information. Use arguments 1 through 8 to store the EDID in any of eight memory locations. To display the EDID assigned to an input, use the sta argument.

Syntax

```
EDIDMSetX Y
```

Parameter	Description	Range
X	Input	1 ... 2
Y	EDID preset	1 ... 24
Z	Memory location	1 ... 8

Example

```
EDIDMSet2 3 1
EDIDMSet1 sta
```

Feedback

```
EDIDMSet2 3 1
EDIDMSet1 default
```

EDID (parameter Y)	Description	EDID (parameter Y)	Description
1	Default	13	1280x800 DVI
2	1080p 2CH	14	1920x1200 2CH
3	1080p MCH	15	3840x2160@60 4:2:0 2CH
4	1080p DD	16	3840x2160@60 4:2:0 MCH
5	1080p 3D 2CH	17	3840x2160@30 4:4:4 2CH
6	1080p 3D MCH	18	3840x2160@60 4:4:4 MCH
7	1080p 3D DD	19	4096x2160@60 4:2:0 2CH
8	720p 2CH	20	4096x2160@60 4:2:0 MCH
9	720p DD	21	3840x2160@60 4:4:4 2CH
10	1280x800 2CH	22	3840x2160@60 4:4:4 MCH
11	1366x768 2CH	23	4K 60 4:2:0 HDR 2CH
12	1080p DVI	24	4K 60 4:2:0 HDR MCH*

* HD multichannel audio (lossless).

HDCPSet

Set the HDCP reporting mode of the specified **HDMI** input port. Some computers will send HDCP content if an HDCP-compliant display is detected. Setting this value to off, will force the computer to ignore detection of HDCP-compliant displays. Disabling this feature will *not* decrypt HDCP content. on = enables HDCP detection; off = disables HDCP detection; sta = displays the current setting. No space should exist between the first argument and the command.

Syntax

```
HDCPSetX Y
```

Parameter	Description	Range
X	Input	1 ... 4
Y	Reporting status	on, off, sta

Example

```
HDCPSet1 off
```

Feedback

```
HDCPSet1 off
```

HDMIAud

Enables or disables audio on the HDMI output. on = enables HDMI audio output; off = disables HDMI audio output; sta = displays the current setting.

Syntax

```
HDMIAud X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

```
HDMIAud off
```

Feedback

```
HDMIAud off
```

Commands

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

```
Command List
```

```
-----
```

```
Help  
IPCFCG  
IPDHCP
```

```
...
```

```
...
```

InputBroadcast

Enabling this feature will invoke the InputStatus command, when a new source is connected, and will return the state of all inputs. This also applies when auto-switching occurs. on = enable; off = disable; sta = displays the current setting.

Syntax

```
InputBroadcast X
```

Parameter	Description	Range
X	State	on, off, sta

Example

```
InputBroadcast on
```

Feedback

```
InputBroadcast on
```

Commands

InputStatus

Displays the state of each input. 0 = no source connected; 1 = source connected. Optionally specify the number of the input, as an argument, to return the state of that input.

Syntax

```
InputStatus [X]
```

Parameter	Description	Range
X	Input (optional)	1 ... 4

Examples

```
InputStatus
InputStatus1
```

Feedback

```
InputStatus 0100
InputStatus1 0
```

IPAddUser

Adds a user for Telnet control. This command performs the same function as adding a user within the **Config** page of the web GUI. Refer to the User Manual for more information.

Syntax

```
IPAddUser X Y
```

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

Example

```
IPAddUser BigBoss b055man
```

Feedback

```
IPAddUser BigBoss b055man
TCP/IP user was added
```

IPCFG

Displays the current network settings for the unit.

Syntax

```
IPCFG
```

This command does not require any parameters

Example

```
IPCFG
```

Feedback

```
Mac Addr: B8:98:B0:05:DF:F7
IP Addr: 10.0.1.101
Netmask: 255.255.255.0
Gateway: 10.0.1.1
Telnet Port: 23
HTTP Port: 80
```

Commands

IPDelUser

Deletes the specified TCP/IP user. This command performs the same function as removing a user within the **Config** page of the web GUI. Refer to the User Manual for more information.

Syntax

```
IPDelUser X
```

Parameter	Description	Range
X	User	User name

Example

```
IPDelUser MinionTwo
```

Feedback

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

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
```

IPLogin

Enables or disables the use of login credentials when starting a Telnet session on the unit. If this feature is set to on, then the unit will prompt for both the username and password. Use the same credentials as the web GUI. on = login credentials required; off = no login required. Use the sta argument to display the current setting.

Syntax

```
IPLogin X
```

Parameter	Description	Range
X	Value	on, off, sta

Example

```
IPLogin off
```

Feedback

```
IPLogin off
```

Commands

IPPort

Sets the Telnet listening port for the unit. Use the sta argument to display the current setting.

Syntax

IPPort X

Parameter	Description	Range
X	Port	0 ... 65535, sta

Example

IPPort 23

Feedback

IPPort 23

IPQuit

Closes the current Telnet session.

Syntax

IPQuit

This command does not require any parameters

Example

IPQuit

Feedback

Connection lost...

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

IPTimeout

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

Syntax

```
IPTimeout X
```

Parameter	Description	Range
X	Interval (in seconds)	1 ... 60000

Example

```
IPTimeout 300
```

Feedback

```
IPTimeout 300
```

IROFF

Disables the IR receiver on the AT-JUNO-451.

Syntax

```
IROFF
```

This command does not require any parameters

Example

```
IROFF
```

Feedback

```
IROFF
```

IRON

Enables the IR receiver on the AT-JUNO-451.

Syntax

```
IRON
```

This command does not require any parameters

Example

```
IRON
```

Feedback

```
IRON
```

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

Mreset

Resets the unit to factory-default settings.

Syntax
Mreset

This command does not require any parameters

Example

Mreset

Feedback

Mreset

PWOFF

Executing this command will power-off the AT-JUNO-451. Use the PWON command to power-on the unit.

Syntax
PWOFF

This command does not require any parameters

Example

PWOFF

Feedback

PWOFF

Commands

PWON

Executing this command will power-on the AT-JUNO-451. 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 AT-JUNO-451.

Syntax
PWSTA

This command does not require any parameters

Example

PWSTA

Feedback

PWON

RAtIMac

Displays the MAC address of the unit.

Syntax
RAtIMac

This command does not require any parameters

Example

RAtIMac

Feedback

b8-98-b0-00-56-c9

Commands

Status

Displays the which input is routed to the output. The routing state is returned as xyAVx1, where the y is the input.

Syntax

Status

This command does not require any parameters

Example

Status

Feedback

x3AVx1

System

Displays the current configuration of the AT-JUNO-451. The sta argument must be specified.

Syntax

System X

Parameter	Description	Range
X	Constant	sta

Example

System sta

Feedback

Model: AT-JUNO-451
MAC Addr: b8-98-b0-00-3b-f9
Address Type: DHCP
IP: 10.20.20.121
Netmask: 255.255.255.0
Gateway: 10.20.20.1
Http Port: 80
Telnet Port: 23
Firmware: 1.2.10
On/Up Time <dd HH:mm:ss>: 0 23:39:40
Power Status: PWON

Toslink

Enables or disables the OPTICAL port on the back of the unit. Use the sta argument to display the current setting.

Syntax

Toslink X

Parameter	Description	Range
X	State	on, off, sta

Example

Toslink off

Feedback

Toslink off

Commands

Type

Displays the model information of the unit.

Syntax
Type

This command does not require any parameters

Example

Type

Feedback

AT-JUNO-451

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

1.2.10

Commands

xYAVx1

Routes the specified input to the output.

Syntax

xYAVx1

Parameter	Description	Range
Y	Input	1 ... 4

Example

x2AVx1

Feedback

x2AVx1

