4K / UHD
Five-Input HDMI Switcher

Application Programming Interface
1.4.14

Version Information

Version	Release Date	Notes
1	Feb 2021	New format

Commands

The following tables provide an alphabetical list of commands available for AT-UHD-SW-51. 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 or Telnet. There should be a 500 millisecond delay between each command sent to the unit. The default port for Telnet 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).

Command	Description
ARC	Enables or disables the Audio Return Channel (ARC)
AudioOut	Enables or disables the audio on the **AUDIO OUT** port
AutoSW	Enable or disables auto switching or display auto switching status
Blink	Enables or disables blinking of the **POWER** button 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	Sets the HDCP reporting mode for the specified input
help	Displays the available list of commands
InputBroadcast	Enables or disables broadcast mode
InputStatus	Displays the status for each input
IPAddUser	Adds a user for Telnet and web server login
IPCFG	Displays the current network settings for the AT-UHD-SW-51
IPDelUser	Deletes the specified Telnet and web server user
IPDHCP	Enables or disables DHCP mode on the AT-UHD-SW-51
IPLogin	Enables or disables login credentials when starting a Telnet session
IPPort	Sets the Telnet listening port for the AT-UHD-SW-51
IPQuit	Closes the current Telnet session
IPStatic	Sets the static IP address, subnet mask, and gateway for the AT-UHD-SW-51
IPTimeout	Specifies the time interval of inactivity before the Telnet session is closed
IROFF	Disables the IR receiver on the AT-UHD-SW-51
IRON	Enables the IR receiver on the AT-UHD-SW-51
Lock	Locks the buttons on the front panel
Mreset	Resets the AT-UHD-SW-51 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
REBOOT	Performs a soft boot of the AT-UHD-SW-51

Command	Description
Status	Displays which inputs are routed to the outputs
System	Displays the status of the AT-UHD-SW-51
Type	Displays the model of the transmitter
Unlock	Unlocks the buttons on the front panel
Version	Displays the current firmware version of the unit
VOUTMute1	Mutes / unmutes the output audio
x1AVx1	Routes the specified input to the HDMI output

ARC

Enables or disables the Audio Return Channel (ARC). Specify the sta argument to display the current setting.

Syntax
ARC X

Parameter	Description	Range
X	State	on, off, sta

Example
AudioOut on

Feedback
AudioOut on

AudioOut

Enables or disables the audio on the **AUDIO OUT** port. Specify the sta argument to display the current setting.

Syntax
AudioOut X

Parameter	Description	Range
X	State	on, off, sta

Example
AudioOut on

Feedback
AudioOut on

AutoSW

Enables or disables auto switching or display auto switching status. Specify 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** button on the front panel. When set to on, the **POWER** button will flash, alternating between red and 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

Broadcast

Enables or disables broadcast mode. By default, broadcast mode is set to off. When set to on, changes in the web server will also be affected on the control system (if connected), via TCP/IP. To separate control between web server and Telnet, set this feature off. on = enables broadcast mode; off = disables broadcast mode; sta = displays 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 **RS-232** 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	Output	1 ... 2
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 breif 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 ... 5
Y	EDID preset	1 ... 17
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	STD	9	ATL 720P DD
2	ATL 1080P 2CH	10	ATL 1280x800 RGB 2CH
3	ATL 1080P Multi CH	11	ATL 1366x768 RGB 2CH
4	ATL 1080P DD	12	ATL 1080P DVI
5	ATL 1080P 3D 2CH	13	ATL 1280x800 RGB DVI
6	ATL 1080P 3D Multi CH	14	ATL 2160P 2CH
7	ATL 1080P 3D DD	15	ATL 2160P Multi CH
8	ATL 720P 2CH 2CH	16	ATL 4K420 (4:2:0) 2CH

HDCPSet

Set the HDCP reporting mode of the specified port. Some computers will send HDCP content if an HDCP-compliant display is detected. on = reports to the source device that the display (sink) is HDCP-compliant, off = reports to the source device that the display (sink) is not HDCP-compliant (HDCP content will not be sent), auto = uses the attributes of the display device to accept or not accept HDCP content. Setting this value to off *does not* decrypt HDCP content. Use the sta argument to display the current setting.

Syntax
HDCPSet X

Parameter	Description	Range
X	Value	on, off, auto, sta

Example
HDCPSet 1 on

Feedback
HDCPSet 1 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
Command list

PWON
PWOFF
PWSTA
...
...

InputBroadcast

Enables or disables broadcast mode. The default setting is off.

Syntax
InputBroadcast X

Parameter	Description	Range
X	State	on, off, sta

Example
InputBroadcast on

Feedback
InputBroadcast on

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
InputStatusX

Parameter	Description	Range
X	User name	20 characters (max)

Example
InputStatus1

Feedback
InputStatus1 1

IPAddUser

Adds a user for web server login and Telnet sessions. This command performs the same function as adding a user within the web server. Refer to 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 AT-UHD-SW-51.

Syntax
IPCFG

This command does not require any parameters

Example
IPCFG

Feedback
IP Addr 192.168.11.176
Netmask 255.255.255.0
Gateway 192.168.11.1
IP Port 23

IPDelUser

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

Syntax
IPDelUser X

Parameter	Description	Range
X	User	User name

Example
IPDelUser Minion2

Feedback
IPDelUser Minion2
TCP/IP user was deleted

IPDHCP

Enables or disables DHCP mode on the AT-UHD-SW-51. on = DHCP mode ON; off = DHCP mode OFF; sta = displays the current setting. If this feature is disabled, then a static IP address must be specified. The default setting is DHCP = ON.

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 initiating a Telnet session on the AT-UHD-SW-51. If this feature is set to on, then the AT-UHD-SW-51 will prompt for both the username and password. Use the same credentials as the web server. on = login credentials required; off = no login required. Specify the sta argument to display the current setting. The default setting is on.

Syntax
IPLogin X

Parameter	Description	Range
X	Value	on, off, sta

Example
IPLogin off

Feedback
IPLogin off

IPPort

Sets the TCP/IP listening port for the AT-UHD-SW-51.

Syntax
IPPort X

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

Example
IPPort 230

Feedback
IPPort 230

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 AT-UHD-SW-51. Before using this command, DHCP must be disabled on the AT-UHD-SW-51. 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 of the AT-UHD-SW-51 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 TCP/IP session is terminated. When terminated, both the Telnet and web server session will be closed. The default setting is 300 seconds.

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-UHD-SW-51.

Syntax
IROFF

This command does not require any parameters

Example
IROFF

Feedback
IROFF

IRON

Enables the IR receiver on the AT-UHD-SW-51.

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 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 AT-UHD-SW-51 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-UHD-SW-51. 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 AT-UHD-SW-51. Execute 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-UHD-SW-51.

Syntax
PWSTA

This command does not require any parameters

Example
PWSTA

Feedback
PWON

REBOOT

Performs a soft reboot of the AT-UHD-SW-51.

Syntax
REBOOT

This command does not require any parameters

Example
REBOOT

Feedback
REBOOT

Status

Displays which inputs are routed to the outputs.

Syntax
Status

This command does not require any parameters

Example
Status

Feedback
x2AVx1

System

Displays the status of the AT-UHD-SW-51. The sta argument must be specified.

Syntax
System X

Parameter	Description	Range
X	Request	sta

Example
Status sta

Feedback
Model: AT-UHD-SW-51
MAC Addr: b8-98-b0-00-60-79
Address Type: DHCP
IP: 10.20.40.35
Netmask: 255.255.255.0
Gateway: 10.20.40.1
HTTP Port: 80
Telnet Port: 23
Firmware: 1.4.14
On/Up Time <dd HH:mm:ss>: 01 01:22:23
Power Status: PWON
Hostname:SW51-006079

Type

Displays the SKU of the AT-UHD-SW-51.

Syntax
Type

This command does not require any parameters

Example
Type

Feedback
AT-UHD-SW-51

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. Do not add a space between the X parameter and the command.

Syntax
VersionX

This command does not require any parameters

Example
Version

Feedback
1.2.45

VOUTMute1

Mutes / unmutes the audio. on = enables muting; off = disables muting; sta = displays the current setting.

Syntax
VOUTMute1 X

Parameter	Description	Range
X	State	on, off, sta

Example
VOUTMute1 on

Feedback
VOUTMute1 on

x1AVx1

Routes the specified input to the specified output.

Syntax
xYAVxZ

Parameter	Description	Range
Y	Input	1 ... 5
Z	Output	1, 2

Example
x2AVx1

Feedback
x2AVx1