

An SVSI system is comprised of Encoders, Decoders, and other available accessories including Network Video Recording (NVR) solutions, Window Processing (WP) units, and Audio Transceivers (ATCs). The system allows you to distribute HD video and audio across a Gigabit Ethernet network. Each device is controllable via TCP/IP direct socket using device IP addresses and port 50002. Port 50002 supports a single connection at one time and rejects all other connection attempts until the established connection is closed. Refer to this document to find the commands needed for your NMX-ATC-N4321 application.

*NOTE: This information is considered current as of the date of publication. AMX reserves the right to add/modify/remove commands and change the standard response packet as needed.*

*NOTE: In the Example sections of this document, <CR> indicates a carriage return as defined by your control method (e.g., \x0d, \$0d, 00x0d, 0x0d, 0dH, \r). <CRLF> is also supported, but not required.*

Command	Description	Variables	Example
seta	Switches output audio source stream.	<stream number>	seta:212 <CR>
mute	Disables audio output.		mute <CR>
unmute	Enables audio output.		unmute <CR>
txdisable	Disables audio stream output.		txdisable <CR>
txenable	Enables audio stream output.		txenable <CR>
mastervol	Sets the master volume, both left and right channels (0-100%).	<volume number>	mastervol:50 <CR>
mastervolleft	Sets the ATC's master volume level, left channel only (0-100%).	<volume number>	mastervolleft:50 <CR>
mastervolright	Sets the ATC's master volume level, right channel only (0-100%).	<volume number>	mastervolright:50 <CR>
hpvol	Sets the ATC's headphone jack volume level, both left and right channels (0-100%).	<volume number>	hpvol:50 <CR>
hpvolleft	Sets the headphone jack volume level, left channel only (0-100%).	<volume number>	hpvolleft:50 <CR>
hpvolright	Sets the headphone jack volume level, right channel only (0-100%).	<volume number>	hpvolright:50 <CR>
lovol	Changes output volume of line out, both left and right channels (0-100%).	<volume number>	lovol:50 <CR>
lovolleft	Changes output volume of line out, left channel only (0-100%).	<volume number>	lovolleft:50 <CR>
lovolright	Changes output volume of line out, right channel only (0-100%).	<volume number>	lovolright:50 <CR>
rxdisable	Disables the receive stream.		rxdisable <CR>
rxenable	Enables the receive stream.		rxenable <CR>
cmdhistreset	Resets the history log of commands.		cmdhistreset <CR>
getStatus	Returns current status of device.		get status <CR>
resetport	Resets a port of <type> TCP or UDP (or resets ALL).	<type>, <port number>	resetport ALL <CR>
help	Shows this API command list/descriptions.		help <CR>

Command	Description	Variables	Example
Changing Settings on the Unit: All commands in this section require a prefix of <b>setSettings</b> . For example, to change the name, the following would be sent: <b>setSettings:name:My New Name</b>			
name	Changes name of unit.	<name>	setSettings:name:My New Name <CR>
txName	Sets the unit's name for N-Able (transmit side).	<name>	setSettings:txName:My New Name <CR>
rxName	Sets the unit's name for N-Able (receive side).	<name>	setSettings:rxName:My New Name <CR>
inputType	Sets input type to balanced or unbalanced audio. bal = balanced audio se = unbalanced audio	bal   se	setSettings:inputType:bal <CR>
inputGainLeft	Changes input gain (pre-encoding cut) for the left channel. Valid entries for <gain> include 0, -1.5, -3, -4.5, -6, -7.5, -9, -10.5, and -12.	<gain>	setSettings:inputGainLeft:-4.5 <CR>
inputGainRight	Changes input gain (pre-encoding cut) for the right channel. Valid entries for <gain> include 0, -1.5, -3, -4.5, -6, -7.5, -9, -10.5, and -12.	<gain>	setSettings:inputGainRight:7.5 <CR>
audioDelay	Sets an audio <delay> in milliseconds. The valid <delay> range is 0-2000000.	<delay>	setSettings:audioDelay:150000 <CR>
outAudioDelay	Sets an audio <delay> for output in milliseconds. The valid <delay> range is 0-1000000.	<delay>	setSettings:outAudioDelay:9000 <CR>
setStream	Sets the output stream number. The valid <stream number> range is 1-32767.	<stream number>	setSettings:setStream 211 <CR>
vlanNumber	Sets the VLAN ID. The valid <vlan number> range is 1-4095.	<vlan number>	setSettings:vlanNumber:240 <CR>
ttl	Sets the time to live (TTL) counter. The valid <ttl count> range is 1-255.	<ttl count>	setSettings:ttl:255 <CR>
dscp	Sets a value for DSCP. The valid <dscp value> range is 0-255.	<dscp value>	setSettings:dscp:55 <CR>
mediaPort0	Controls multicast traffic on media port 0. on = multicast traffic can leave port off = no multicast traffic can leave port	on   off	setSettings:mediaPort0:on <CR>
mediaPort1	Controls multicast traffic on media port 1. on = multicast traffic can leave port off = no multicast traffic can leave port	on   off	setSettings:mediaPort1:off <CR>
shutdownPort1	Turns port 1 on and off.	on   off	setSettings:shutdownPort:on <CR>
sample	Sets the audio sample rate. Valid entries for <rate> include 32000, 44100, and 48000.	<rate>	setSettings:sample:44100 <CR>
TXenableUnicast	Enables/disables unicast mode on the transmit side.	on   off	setSettings:TXenableUnicast:on <CR>
TXunicastDestIP	Specifies the destination for the first unicast stream.	<ipaddress>	setSettings:TXunicastDestIP:169.254.120.2 <CR>
TXunicastDestIP2	Specifies the destination for the second unicast stream.	<ipaddress>	setSettings:TXunicastDestIP2:169.254.120.5 <CR>
RXenableUnicast	When on, multicast join is disabled.	on   off	setSettings:RXenableUnicast:on <CR>
lineoutLeftGain	Sets gain on the lineout (left channel). The valid <gain> range is 0-9 dB.	<gain>	setSettings:lineoutLeftGain:3 <CR>
lineoutRightGain	Sets gain on the lineout (right channel). The valid <gain> range is 0-9 dB.	<gain>	setSettings:lineoutRightGain:3 <CR>

Command	Description	Variables	Example
ipset	Sets the device's network IP settings. <ip addr> = IP address to go to <netmask> = Network mask <gateway> = Gateway router number	<ip address>, <netmask>, <gateway>	setSettings:ipset:169.254.120.2, 255.255.0.0, 169.254.1.1 <CR>
ipdhcp	TCP only command. Sets the unit in DHCP mode and reboots.		setSettings:ipdhcp <CR>
ipautoip	TCP only command. Sets the unit in AutoIP mode and reboots.		setSettings:ipautoip <CR>
ipsave	Saves the IP settings		setSettings:ipsave <CR>
reboot	Forces the N4321 to reboot.	reboot	setSettings:reboot:reboot <CR>
factoryRestore	Restores all settings back to factory settings.	factoryRestore	setSettings:factoryRestore:factoryRestore <CR>
factoryRestoreIP	Restores the unit's IP settings to the factory defaults.		setSettings:factoryRestoreIP <CR>
enableDiscoveryPackets	Enables/disables transmission of the discovery packet (which allows the device to be auto-discovered on the network).	on   off	setSettings:enableDiscoveryPackets:on <CR>
discoveryIntervalSec	Determines how often discovery packets are transmitted. The valid <seconds> range is 1-255.	<seconds>	setSettings:discoveryIntervalSec:10 <CR>
discoveryPort	Sets a destination port for discovery packets. The valid range is 10000-65535.	<port number>	setSettings:discoveryPort:50019 <CR>
discoveryIP	Sets a destination IP address for discovery packets.	<ip address>	setSettings:discoveryIP:239.254.12.16 <CR>
gratuitousARP	Enables/disables gratuitous ARP requests.	on   off	setSettings:gratuitousARP:on <CR>
gratuitousARPInterval	Determines how often gratuitous ARP packets are transmitted. The valid interval (in <seconds>) range is 10-2550.	<seconds>	setSettings:gratuitousARPInterval:200 <CR>
unsolicitedStatus	Enables/disables the reporting on unsolicited status. Default is on.	on off	setSettings:unsolicitedStatus: off <CR>
unsolicitedStatusInterval	Determines how often unsolicited status reporting takes place. The valid interval (in <seconds>) range is 10-2550.	<seconds>	setSettings:unsolicitedStatusInterval:600 <CR>
downmix	Enables/disables 7.1-to-stereo downmixing.	on   off	setSettings:downmix:on <CR>
downmixCenter	Sets downmix level for the center channels. The valid <level> range is 0-63.	<level>	setSettings:downmixCenter:50 <CR>
downmixFront	Sets downmix level for the front channels. The valid <level> range is 0-63.	<level>	setSettings:downmixFront:0 <CR>
downmixSurround	Sets downmix level for the surround channels. The valid <level> range is 0-63.	<level>	setSettings:downmixSurround:40 <CR>
relay1State	Closes/opens relay 1.	close   open	setSettings:relay1State:close <CR>
relay2State	Closes/opens relay 2.	close   open	setSettings:relay2State:close <CR>
relayInterlock	When on, only one relay can be closed at a time.	on   off	setSettings:relayInterlock:on <CR>
phantomPower	Enables/disables microphone power. <i>WARNING: Only enable when in use.</i>	on   off	setSettings:phantomPower:off <CR>
gpiHighEventDelay	Sets the delay between an open event and the N-Act response. The valid <seconds> range is 0-86400.	<seconds>	setSettings:gpiHighEventDelay:80000 <CR>
gpiLowEventDelay	Sets the delay between a close event and the N-Act response. The valid <seconds> range is 0-86400.	<seconds>	setSettings:gpiLowEventDelay:10 <CR>

Command	Description	Variables	Example
IGMPJoinsEnable	Enables/disables unit to periodically send IGMP join requests when receive stream is lost.	on   off	setSettings:IGMPJoinsEnable:on <CR>
IGMPJoinsInterval	Determines how often IGMP join requests are sent. The valid <seconds> range is 1-60.	<seconds>	setSettings:IGMPJoinsInterval:15 <CR>

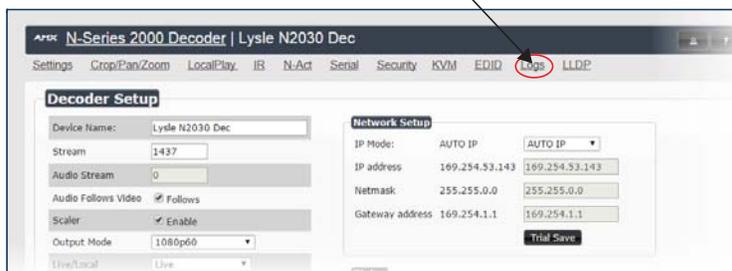
Command	Description	Variables	Example
N4321 Test Tone Generation: All commands in this section affect the test tone that can be generated by the N4321.			
streamTone	Enables/disables tone generation into stream instead of capturing audio.	on   off	streamTone:on <CR>
playTone	Enables/disables local play of tone (instead of from stream values).	on   off	playTone: on <CR>
toneType	Sets the test tone to be an actual tone or white noise.	tone   noise	toneType:tone <CR>
leftTone	Turns left channel tone on or off.	on   off	leftTone:on <CR>
rightTone	Turns right channel tone on or off.	on   off	rightTone:on <CR>
tonePct	Sets the tone volume level (0 to 100%).	<volume>	tonePct:50 <CR>
toneFreq	The valid <frequency> range (in Hz) is 100-5000.	<frequency>	toneFreq:200 <CR>

# API Command Discovery

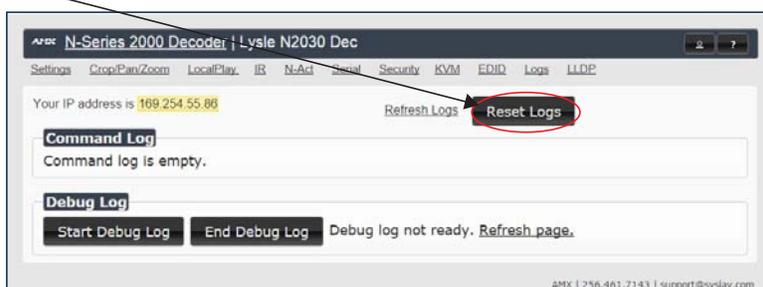
Follow these steps to discover API commands using the web interface's **Log** page.

*NOTE: This example features an SVSI system Decoder, but the steps also apply to most SVSI system products.*

1. Log in to your unit's web interface and click the **Logs** link at the top of the page.



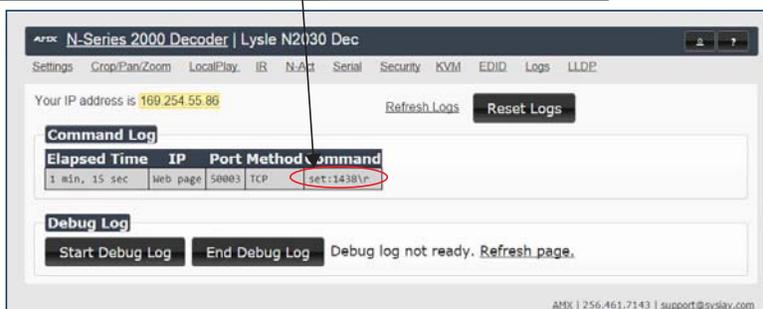
2. Click the **Reset Logs** button.



3. Change a setting. For this example, we are discovering the API command used to change the **Stream** setting.



4. Return to the **Logs** page. The API command for the change displays here.



Please contact SVSI technical support at [svsitechs@harman.com](mailto:svsitechs@harman.com) or 256.461.7143 x9900 for any installation issues. Visit our support webpage at [support.svsiv.com](http://support.svsiv.com).



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