N26x2S Devices

HControl Protocol Document

HARMAN Pro HControl

Third parties can use the HControl protocol to query certain aspects of the supported AVoIP product. HControl is a text-based protocol with a JSON-like syntax. Simple commands can be used to query specific parameters.

CONNECTION SETUP

The devices require opening a telnet connection using port 4197 to the device to be controlled.

```
telnet 192.168.10.135 4197
```

GET

The GET command is used to obtain information from the device. A simple get command has the following syntax:

```
get {"path":"$endpoint"}\n
```

All get commands have responses. A response has the following syntax:

```
@get {"path":"$endpoint","value":"$value"}
```

You can use telnet to experiment with the command/response values. An example is shown below:

```
telnet 192.168.10.135 4197

get {"path":"/configuration/device/name"}\n
@get {"path":"/configuration/device/name","value":"Test Varia 15"}

get {"path":"/configuration/device/location"}\n
@get {"path":"/configuration/device/location","value":"Test Bench"}
```

Booleans will return true/false (case sensitive) by default, if no specific format is specified. The format can be specified to return alternate values:

```
get {"path":"/varia/display/wakeonapproach"}\n
@get {"path":"/varia/display/wakeonapproach","value":true}

get {"path":"/varia/display/wakeonapproach","format":"string"}\n
@get {"path":"/varia/display/wakeonapproach","value":"true"}
```

Enumerations can return either the string value or the index value of the enumerated value. Returns will depend on the format requested. By default the index value is returned:

1 minute:

```
get {"path":"/varia/display/screentimeout"}\n
@get {"path":"/varia/display/screentimeout","value":3}

get {"path":"/varia/display/screentimeout","format":"string"}\n
@get {"path":"/varia/display/screentimeout","value":"1 minute"}
```

SET

Parameters are set via the SET command. SETs generally have an immediate impact. The following command will change the LED color. The SET response will confirm the value that was set.

```
set {"path":"/varia/hardware/sideled/rgb", "value":"#ff00ff"}\n
@set {"path":"/varia/hardware/sideled/rgb","value":"#ff00ff"}
```

Booleans use true/false (case sensitive) in SETs by default, if no specific format is specified. The format can be specified for alternate values:

```
set {"path":"/varia/display/wakeonapproach","value":true}\n
@set {"path":"/varia/display/wakeonapproach","value":true}

set {"path":"/varia/display/wakeonapproach","value":"true","format":"string"}\n
@set {"path":"/varia/display/wakeonapproach","value":"true"}
```

Enumerations can use either the string value or the index value of the enumerated value. The following are equivalent SET commands:

30 seconds:

```
set {"path":"/varia/display/screentimeout","value":2 }\n
@set {"path":"/varia/display/screentimeout","value":2}

set {"path":"/varia/display/screentimeout","value":"30 seconds","format":"string"}\n
@set {"path":"/varia/display/screentimeout","value":"30 seconds"}
```

In some instances, the SET response may not match the value requested. This is generally due to scaling factors or out-of-range values in things like brightness, audio volume, etc. If the sending app is keeping state, then the local value should be updated to the value in the SET response.

```
set {"path":"/varia/display/brightness","value":101}\n
@set {"path":"/varia/display/brightness","value":100}
```

HControl	Description	Data Type	Event	Command	Get	Set	Example
Encoder							
/encoder/streamSetup/encodeMode	Encoder Mode	Enum [0:'Single Stream', 1:'Multi Stream']			X	X	set {"path": "/encoder/streamSetup/encodeMode","value":"Multi Stream"} @set {"path":"/encoder/streamSetup/encodeMode","value":1}
/encoder/streamSetup/playMode	Play Mode	Enum [0:'Live', 1:'Default Playlist 1', 2:'Default Playlist 2', 3:'Default Playlist 3', 4:'Default Playlist 4', 5:'Default Playlist 5', 6:'Default Playlist 6', 7:'Default Playlist 7', 8:'Default Playlist 8']			X	X	set {"path": "/encoder/streamSetup/playMode","value":"Default Playlist 1"} @set {"path":"/encoder/streamSetup/playMode","value":1}
/encoder/streamSetup/mwcStream/videoSource	Video Source Selection	Enum [0:'Auto', 2:'HDMI1', 3:'HDMI2']			X	X	set {"path": "/encoder/streamSetup/mwcStream/videoSource","value":"HDMI1"} @set {"path":"/encoder/streamSetup/mwcStream/videoSource","value":1}
/encoder/streamSetup/mwcStream/videoStreamNumber	Video Stream	Integer 1-32767			X	X	set {"path": "/encoder/streamSetup/mwcStream/videoStreamNumber","value":418} @set {"path":"/encoder/streamSetup/mwcStream/videoStreamNumber","value":418}
/encoder/streamSetup/mwcStream/txEnable	MWX TX Enable	Boolean			X	X	set {"path": "/encoder/streamSetup/mwcStream/txEnable","value":false} @set {"path":"/encoder/streamSetup/mwcStream/txEnable","value":false}
/encoder/streamSetup/mwcStream/videoMute	Video Mute	Boolean			X	X	set {"path": "/encoder/streamSetup/mwcStream/videoMute","value":true} @set {"path":"/encoder/streamSetup/mwcStream/videoMute","value":true}

HControl	Description	Data Type	Event	Command	Get	Set	Example
/encoder/streamSetup/mwcStream/hdcpSupport	HDCP Support	Enum [0:'2.x', 1:'1.x', 2:'None']			X	X	set {"path": "/encoder/streamSetup/mwcStream/hdcpSupport","value":"1.x"} @set {"path":"/encoder/streamSetup/mwcStream/hdcpSupport","value":1}
/encoder/streamSetup/mwcStream/previewImage	Preview Image	Boolean			X	X	set {"path": "/encoder/streamSetup/mwcStream/previewImage","value":false} @set {"path":"/encoder/streamSetup/mwcStream/previewImage","value":false}
/encoder/streamSetup/h.26xStream/txEnable	H.26x TX Enable	Boolean			X	X	set {"path": "/encoder/streamSetup/h.26xStream/txEnable","value":true} @set {"path":"/encoder/streamSetup/h.26xStream/txEnable","value":true}
/encoder/streamSetup/h.26xStream/h26xMode	H.26x Mode	Enum [0:'H.264', 1:'H.265']			X	X	set {"path": "/encoder/streamSetup/h.26xStream/h26xMode","value":"H.265"} @set {"path":"/encoder/streamSetup/h.26xStream/h26xMode","value":1}
/encoder/streamSetup/h.26xStream/h264Profile	H.26x Profile	Enum [0:'YouTube-RTMP', 2:'YouTube-RTMPS', 2:'Panopto-RTMP', 3:'Panopto-RTMPS', 4:'HARMANDevice-UDP', 5:'HARMANDevice-RTP', 6:'Custom-RTMP', 7:'Custom-RTMPS',8:'Custom-UDP', 9:'Custom-RTP', 10:'Custom-RTSP']			X	X	set {"path": "/encoder/streamSetup/h.26xStream/h264Profile","value":"Panopto"} @set {"path":"/encoder/streamSetup/h.26xStream/h264Profile","value":1}
/encoder/hdmiPassThru/enable	HDMI Pass Thru	Boolean			X	X	set {"path": "/encoder/hdmiPassThru/enable","value":false} @set {"path":"/encoder/hdmiPassThru/enable","value":false}
/encoder/hdmiPassThru/yuvOutput	YUV Output	Enum [0:'Auto', 1:'On', 2:'Off']			X	X	set {"path": "/encoder/hdmiPassThru/yuvOutput","value":"Off"} @set {"path":"/encoder/hdmiPassThru/yuvOutput","value":2}
/encoder/hdmiPassThru/videoMute	Video Mute	Boolean			X	X	set {"path": "/encoder/hdmiPassThru/videoMute","value":true} @set {"path":"/encoder/hdmiPassThru/videoMute","value":true}
/encoder/edid/HDMI1	HDMI 1 EDID	Byte Array			X		
/encoder/edid/HDMI2	HDMI 2 EDID	Byte Array			X		
/encoder/edid/Pass-thru Display	HDMI Pass-Thru EDID	Byte Array			X		

HControl	Description	Data Type	Event	Command	Get	Set	Example
/encoder/audioInput/audioSource	Audio Source	Enum [0:'HDMI', 1:'Analog'			X	X	set {"path": "/encoder/audioInput/audioSource","value":"ANALOG"} @set {"path":"/encoder/audioInput/audioSource","value":1}
/encoder/audioInput/audioMute	Mute	Boolean			X	X	set {"path": "/encoder/audioInput/audioMute","value":true} @set {"path":"/encoder/audioInput/audioMute","value":true}
/encoder/audioInput/analogAudioIn/lineInGain	Line In Gain	Integer -12-12			X	X	set {"path": "/encoder/audioInput/analogAudioIn/lineInGain","value":-8} @set {"path":"/encoder/audioInput/analogAudioIn/lineInGain","value":-8}
/encoder/audioInput/hdmiAudioIn/downmixEnable	HDMI Downmix Enable	Boolean			X	X	set {"path": "/encoder/audioInput/hdmiAudioIn/downmixEnable","value":true} @set {"path":"/encoder/audioInput/hdmiAudioIn/downmixEnable","value":true}
/encoder/audioInput/hdmiAudioIn/centerGain	Center Gain	Integer -50-50			X	X	set {"path": "/encoder/audioInput/hdmiAudioIn/centerGain","value":-25} @set {"path":"/encoder/audioInput/hdmiAudioIn/centerGain","value":-25}
/encoder/audioInput/hdmiAudioIn/frontGain	Front Gain	Integer -50-50			X	X	set {"path": "/encoder/audioInput/hdmiAudioIn/frontGain","value":25} @set {"path":"/encoder/audioInput/hdmiAudioIn/frontGain","value":25}
/encoder/audioInput/hdmiAudioIn/surroundGain	Surround Gain	Integer -50-50			X	X	set {"path": "/encoder/audioInput/hdmiAudioIn/surroundGain","value":15} @set {"path":"/encoder/audioInput/hdmiAudioIn/surroundGain","value":15}
/encoder/audioInput/hdmiAudioIn/rearSurroundGain	Rear Surround Gain	Integer -50-50			X	X	set {"path": "/encoder/audioInput/hdmiAudioIn/rearSurroundGain","value":-10} @set {"path":"/encoder/audioInput/hdmiAudioIn/rearSurroundGain","value":-10}
/encoder/audioInput/hdmiAudioIn/downmixSource	HDMI Downmix Source	Enum [0:'Channel 0 FL/FR', 1:'Channel 1 Center/LEF', 2:'Channel 2 SL/SR', 3:'Channel 3 RL/RR', 4:'Downmix All Channels']			X	X	set {"path": "/encoder/audioInput/hdmiAudioIn/downmixSource","value":"Downmix All Channels"} @set {"path":"/encoder/audioInput/hdmiAudioIn/downmixSource","value":4}
/encoder/serial/baudRate	RS232 Baud Rate	Enum [0:'1200', 1:'4800', 2:'9600', 3:'19200', 4:'38400', 5:'57600', 6:'115200']			X	X	set {"path": "/encoder/serial/baudRate","value":"19200"} @set {"path":"/encoder/serial/baudRate","value":3}

HControl	Description	Data Type	Event	Command	Get	Set	Example
/encoder/serial/dataBits	RS232 Data Bits	Integer 7-8			X	X	set {"path": "/encoder/serial/dataBits","value":7} @set {"path":"/encoder/serial/dataBits","value":7}
/encoder/serial/stopBits	RS232 Stop Bits	Integer 1-2			X	X	set {"path": "/encoder/serial/stopBits","value":2} @set {"path":"/encoder/serial/stopBits","value":2}
/encoder/serial/parity	RS232 Parity	Enum [0:'None', 1:'Even', 2:'Odd']			X	X	set {"path":"/encoder/serial/parity","value":2} @set {"path":"/encoder/serial/parity","value":2}
/encoder/serial/serCommands	Serial Recall	String			X	X	set {"path": "/encoder/serial/serCommands/2/serialCodeName","value":"test2"}, {"path":"/encoder/serial/serCommands/2/serialData","value":"hello world"} @set {"path":"/encoder/serial/serCommands/2/serialCodeName","value":"test2"}
/encoder/serial/deleteSer	Delete Serial Name	String		X			exec {"path": "/encoder/serial", "command":"deleteSer", "arguments":{"data":"test2"}}
/encoder/serial/sendser	Send Serial Data	String		X			exec {"path": "/encoder/serial", "command":"sendser", "arguments":{"data":"test"}}
/encoder/serial/sendserraw	Raw Serial	String		X			exec {"path": "/encoder/serial", "command":"sendserraw", "arguments":{"data":0f 00 aa 3d}}
/encoder/serial/responseser	Serial Response	Byte Array	X				subscribeevent {"path": "/encoder/serial/responseser"} @subscribeevent {"path":"/encoder/serial/responseser"}
/encoder/serial/serialPassthru/serialMainEnable	Serial Main Enable	Boolean			X	X	set {"path": "/encoder/serial/serialPassthru/serialMainEnable","value":true} @set {"path":"/encoder/serial/serialPassthru/serialMainEnable","value":true}
/encoder/serial/serialPassthru/serialSecondaryAddress	Serial Secondary Address	String			X	X	set {"path": "/encoder/serial/serialPassthru/serialSecondaryAddress","value":"169.254.10.10"} @set {"path":"/encoder/serial/serialPassthru/serialSecondaryAddress","value":"169.254.10.10"}
/encoder/ir/irCommands	IR Command	String			X	X	get {"path": "/encoder/ir/irCommands/1"} @get [{"path":"/encoder/ir/irCommands/1/irCodeName","value":"SHARP"},{"path": "/encoder/ir/irCommands/1/irCode","value": "MDAwMCAwMDZkIDAwMDAgMDAyMCAwMDA5IDAwNDYgMDAwOSAwMDFlIDAw MDkgMDAxZSAwMDA5IDAwMWUgMDAwOSAwMDFlIDAwMDkgMDAxZSAw MDA5IDAwNDYgMDAwOSAwMDQ2IDAwMDkgMDAxZSAwMDA5IDAwNDYgMD AwOSAwMDFlIDAwMDkgMDAxZSAwMDA5IDAwMWUgMDAwOSAwMDQ2IDAwM DkgMDAxZSAwMDA5IDA2YzAgMDAwOSAwMDQ2IDA"}]
/encoder/ir/deleteir	Delete IR Command	String		X			exec {"path": "/encoder/ir", "command":"deleteir", "arguments":{"data":"SHARP"}} @exec
/encoder/ir/sendir	Send IR Command	String		X			exec {"path": "/encoder/ir", "command":"sendir", "arguments":{"data":"SHARP"}} @exec

HControl	Description	Data Type	Event	Command	Get	Set	Example
/encoder/ir/sendirraw	Send Raw IR (PRONTO)	String		X			exec {"path": "/encoder/ir", "command":"sendir", "arguments":{"data":00 01 45 23 98}} @exec
/encoder/ir/irPassthru/irPasshruEnable	IR Passthrough Enable	Boolean			X	X	set {"path": "/encoder/ir/irPassthru/irPassthruEnable","value":true} @set {"path":"/encoder/ir/irPassthru/irPassthruEnable","value":true}
/encoder/ir/irPassthru/irClientIP	IR Client IP	String			X	X	set {"path": "/encoder/ir/irPassthru/irClientIP","value":"169.254.10.10"} @set {"path":"/encoder/ir/irPassthru/irClientIP","value":"169.254.10.10"}
/encoder/kvm/enable	KVM Enable	Boolean			X	X	set {"path": "/encoder/kvm/enable","value":true} @set {"path":"/encoder/kvm/enable","value":true}
/encoder/usb20route/enable	USB 2.0 Enable	Boolean			X	X	set {"path": "/encoder/usb20Route/enable","value":true} @set {"path":"/encoder/usb20Route/enable","value":true}
/encoder/security/forceHTTPS	Force HTTPS	Boolean			X	X	set {"path": "/encoder/security/forceHTTPS","value":true} @set {"path":"/encoder/security/forceHTTPS","value":true}
/encoder/logging/startDebugLog	Start Debug Log			X			exec {"path": "/encoder/logging", "command":"startDebugLog"}
/encoder/logging/stopDebugLog	End Debug Log			X			exec {"path": "/encoder/logging", "command":"stopDebugLog"}
/encoder/generalSetup/igmpv3Support	IGMPv3 Support	Boolean			X	X	set {"path": "/encoder/generalSetup/igmpv3Support","value":true} @set {"path":"/encoder/generalSetup/igmpv3Support","value":true}
/encoder/generalSetup/sendStatusEnable	Enable Send Status	Boolean			X	X	set {"path": "/encoder/generalSetup/sendStatusEnable","value":true} @set {"path":"/encoder/generalSetup/sendStatusEnable","value":true}
/encoder/generalSetup/statusIP	Send Status Address	String			X	X	set {"path": "/encoder/generalSetup/statusIP","value":"169.254.10.10"} @set {"path":"/encoder/generalSetup/statusIP","value":"169.254.10.10"}
/encoder/generalSetup/statusInterval	Status Interval	String 10-500 (Intervals of 10)			X	X	set {"path": "/encoder/generalSetup/statusInterval","value":"380"} @set {"path":"/encoder/generalSetup/statusInterval","value":37}
/encoder/generalSetup/gratARPEnable	Gratuitous ARP	Boolean			X	X	set {"path": "/encoder/generalSetup/gratARPEnable","value":false} @set {"path":"/encoder/generalSetup/gratARPEnable","value":false}
/encoder/generalSetup/gratARPInterval	ARP Interval	String 10-500 (Intervals of 10)			X	X	set {"path": "/encoder/generalSetup/gratARPInterval","value":"170"} @set {"path":"/encoder/generalSetup/gratARPInterval","value":16}
/encoder/generalSetup/enableDiscoveryPackets	Discovery Packet Transmit	Boolean			X	X	set {"path": "/encoder/generalSetup/enableDiscoveryPackets","value":true} @set {"path":"/encoder/generalSetup/enableDiscoveryPackets","value":true}
/encoder/generalSetup/discoveryIntervalSec	Discovery Interval	String 1-60			X	X	set {"path": "/encoder/generalSetup/discoveryIntervalSec","value":54} @set {"path":"/encoder/generalSetup/discoveryIntervalSec","value":54}
/encoder/generalSetup/dscp	DSCP	Enums [0:"0", 1:"8",			X	X	set {"path": "/encoder/generalSetup/dscp","value":"24"} @set {"path":"/encoder/generalSetup/dscp","value":9}

HControl	Description	Data Type	Event	Command	Get	Set	Example
		2:"10", 3:"12", 4:"14", 5:"16", 6:"18", 7:"20", 8:"22", 9:"24", 10:"26", 11:"28", 12:"30", 13:"32", 14:"34", 15:"36", 16:"38", 17:"40", 18:"46", 19:"48", 20:"56"]					
/encoder/managementSetup/settingsLock	Settings Lock	Boolean			X	X	set {"path": "/encoder/managementSetup/settingsLock","value":true} @set {"path":"/encoder/managementSetup/settingsLock","value":true}
/encoder/managementSetup/LowPowerMode	Low Power Mode	Boolean			X	X	set {"path": "/decoder/managementSetup/LowPowerMode","value":true} @set {"path":"/decoder/managementSetup/ LowPowerMode ","value":true}
/encoder/managementSetup/osdMenuEnable	OSD Menu	Boolean			X	X	set {"path": "/encoder/managementSetup/osdMenuEnable","value":true} @set {"path":"/encoder/managementSetup/osdMenuEnable","value":true}
/encoder/managementSetup/multicastAddressOverride	Multicast Address Override	Boolean			X	X	set {"path": "/encoder/managementSetup/multicastAddressOverride","value":true} @set {"path":"/encoder/managementSetup/multicastAddressOverride","value":true}
/encoder/managementSetup/multicastAddress	Multicast Address	String			X	X	set {"path": "/encoder/managementSetup/multicastAddress","value":"229.15.0.0"} @set {"path":"/encoder/managementSetup/multicastAddress","value":"229.15.0.0"}
/encoder/managementSetup/allowMulticast/mediaP0	Allow Multicast P0	Boolean			X	X	set {"path": "/encoder/managementSetup/allowMulticast/mediaP0","value":true} @set {"path":"/encoder/managementSetup/allowMulticast/mediaP0","value":true}
/encoder/managementSetup/allowMulticast/mediaP1	Allow Mulitcast P1	Boolean			X	X	set {"path": "/encoder/managementSetup/allowMulticast/mediaP1","value":false} @set {"path":"/encoder/managementSetup/allowMulticast/mediaP1","value":false}
/encoder/managementSetup/allowMulticast/shutdownP1	Disable P1	Boolean			X	X	set {"path": "/encoder/managementSetup/allowMulticast/shutdownP1","value":true} @set {"path":"/encoder/managementSetup/allowMulticast/shutdownP1","value":true}

HControl	Description	Data Type	Event	Command	Get	Set	Example
/encoder/systemStatus/hdmi1Status	HDMI 1 Status	Enum [0:“Disconnected”, 1:“Connected”]			X		@get {"path":"/encoder/systemStatus/hdmi1Status","value":1}
/encoder/systemStatus/hdmi1Resolution	HDMI 1 Input Resolution	String			X		@get {"path":"/encoder/systemStatus/hdmi1Resolution","value":"3840x2160p@60"}
/encoder/system/hdcp1Status	HDMI 1 HDCP Status	String			X		@get {"path":"/encoder/systemStatus/hdcp1Status","value":"Disabled"}
/encoder/systemStatus/hdmi1ResolutionChanged			X				subscribeevent {"path": "/encoder/systemStatus/hdmi1ResolutionChanged"} @subscribeevent {"path":"/encoder/systemStatus/hdmi1ResolutionChanged"} event {"path":"/encoder/systemStatus/hdmi1ResolutionChanged","arguments":{"data ":"3840x2160p@60"}}
/encoder/systemStatus/hdmi1CableStatusChanged			X				subscribeevent {"path": "/encoder/systemStatus/hdmi1CableStatusChanged"} @subscribeevent {"path":"/encoder/systemStatus/hdmi1CableStatusChanged"} event {"path":"/encoder/systemStatus/hdmi1CableStatusChanged","arguments":{"data":0}}
/encoder/systemStatus/hdmi2Status	HDMI 2 Status	Enum [0:“Disconnected”, 1:“Connected”]			X		@get {"path":"/encoder/systemStatus/hdmi2Status","value":0}
/encoder/systemStatus/hdmi2Resolution	HDMI 2 Input Resolution	String			X		@get {"path":"/encoder/systemStatus/hdmi2Resolution","value":"disconnect"}
/encoder/system/hdcp2Status	HDMI 2 HDCP Status	String			X		@get {"path":"/encoder/systemStatus/hdcp2Status","value":"Disabled"}
/encoder/systemStatus/hdmi2ResolutionChanged					X		subscribeevent {""path"": ""/encoder/systemStatus/hdmi2ResolutionChanged""} @subscribeevent {""path"":""/encoder/systemStatus/hdmi2ResolutionChanged""} event {""path"":""/encoder/systemStatus/hdmi2ResolutionChanged"",""arguments"": {""data"":""3840x2160p@60""}}
/encoder/systemStatus/hdmi2CableStatusChanged					X		subscribeevent {""path"": ""/encoder/systemStatus/hdmi2CableStatusChanged""} @subscribeevent {""path"":""/encoder/systemStatus/hdmi2CableStatusChanged""} event {""path"":""/encoder/systemStatus/hdmi2CableStatusChanged"",""arguments"":{""data"":0}}

HControl	Description	Data Type	Event	Command	Get	Set	Example
/encoder/datetime/ntp/serverManager	NTP Server				X	X	get {"path": "/encoder/datetime/ntp/serverManager/1"} @get [{"path":"/encoder/datetime/ntp/serverManager/1/select","value":false}, {"path":"/encoder/datetime/ntp/serverManager/1/serverName","value":"pool.ntp.org"}, {"path":"/encoder/datetime/ntp/serverManager/1/ipHostName","value":"debian.pool.ntp.org"}, {"path":"/encoder/datetime/ntp/serverManager/1/description","value":"pool.ntp.org"}, {"path":"/encoder/datetime/ntp/serverManager/1/authType","value":1} ,{"path":"/encoder/datetime/ntp/serverManager/1/authKeyID","value":0}, {"path":"/encoder/datetime/ntp/serverManager/1/authSecret","value":""}]
/encoder/datetime/timezone	Time Zone	See Appendix A			X	X	set {"path": "/encoder/datetime/timezone","value":"(UTC-06:00) Central Time (US & Canada)"} @set {"path":"/encoder/datetime/timezone","value":9}
/encoder/datetime/datetime	Date / Time				X		get {"path": "/encoder/datetime/datetime"} @get {"path":"/encoder/datetime/datetime","value":"Tue May 14 20:31:11 2024"}
/configuration/commands/reset	Reboot/Default Settings						For Reboot: exec {"path": "/configuration/commands", "command":"reset", "arguments":{"level":"System"}} For Factory Restore: exec {"path": "/configuration/commands", "command":"reset", "arguments":{"level":"Factory"}}

Hcontrol	Description	Data Type	Event	Command	Get	Set	Example
Decoder							
/decoder/datetime/ntp/serverManager	NTP Server	[Boolean, String, String, String, Enum, Integer, String]			X	X	get {"path": "/decoder/datetime/ntp/serverManager/1"} @get [{"path":"/decoder/datetime/ntp/serverManager/1/select","value":false}, {"path":"/decoder/datetime/ntp/serverManager/1/serverName","value":"pool.ntp.org"}, {"path":"/decoder/datetime/ntp/serverManager/1/ipHostName","value":"debian.pool.ntp.org"}, {"path":"/decoder/datetime/ntp/serverManager/1/description","value":"pool.ntp.org"}, {"path":"/decoder/datetime/ntp/serverManager/1/authType","value":1}, {"path":"/decoder/datetime/ntp/serverManager/1/authKeyID","value":0}, {"path":"/decoder/datetime/ntp/serverManager/1/authSecret","value":""}]
/decoder/datetime/timezone	Time Zones	See Appendix A			X	X	set {"path": "/decoder/datetime/timezone","value":"(UTC-06:00) Central Time (US & Canada)"} @set {"path":"/decoder/datetime/timezone","value":9}
/decoder/datetime/datetime	Date / Time	String			X		get {"path": "/decoder/datetime/datetime"} @get {"path":"/decoder/datetime/datetime","value":"Tue May 14 20:31:11 2024"}
/decoder/streamSetup/playMode	Play Mode	Enum [0:'Live', 1:'Default Playlist 1', 2:'Default Playlist 2', 3:'Default Playlist 3', 4:'Default Playlist 4', 5:'Default Playlist 5', 6:'Default Playlist 6', 7:'Default Playlist 7', 8:'Default Playlist 8']			X	X	set {"path": "/decoder/streamSetup/playMode","value":"Default Playlist 1"} @set {"path":"/decoder/streamSetup/playMode","value":1}
/decoder/streamSetup/receiveSource	Receive Source	Enum [0:"MWC", 1:"H.26x"]			X	X	set {"path": "/decoder/streamSetup/receiveSource","value":"H.26x"} @set {"path":"/decoder/streamSetup/receiveSource","value":1}
/decoder/streamSetup/videoStreamNumber	Video Stream Number	Integer 0-3276			X	X	"set {""path"": ""/decoder/streamSetup/mwcStream/videoStreamNumber"",""value"":418} @set {""path"":""/decoder/streamSetup/mwcStream/videoStreamNumber"",""value"":418}"
/decoder/streamSetup/audioStreamNumber	Audio Stream Number	Integer 0-3276			X	X	set {"path": "/decoder/streamSetup/audioStreamNumber","value":327} @set {"path":"/decoder/streamSetup/audioStreamNumber","value":327}
/decoder/streamSetup/audioFollowVideo	Audio Follows Video	Boolean			X	X	set {"path": "/decoder/streamSetup/audioFollowVideo","value":false} @set {"path":"/decoder/streamSetup/audioFollowVideo","value":false}

Hcontrol	Description	Data Type	Event	Command	Get	Set	Example
/decoder/streamSetup/streamURL	H.26x Stream URL	String			X	X	set {"path": "/decoder/streamSetup/streamURL","value":"udp://@239.254.3.9:18888"} @set {"path":"/decoder/streamSetup/streamURL","value":"udp://@239.254.3.9:18888"}
/decoder/streamSetup/previewImage	Preview Image	Boolean			X	X	set {"path": "/decoder/streamSetup/mwcStream/previewImage","value":false} @set {"path":"/decoder/streamSetup/mwcStream/previewImage","value":false}
/decoder/hdmiOut/enable	HDMI Enable	Boolean			X	X	set {"path": "/decoder/hdmiOut/enable","value":false} @set {"path":"/decoder/hdmiOut/enable","value":false}
/decoder/hdmiOut/scalerEnable	Scaler Enable	Boolean			X	X	set {"path": "/decoder/hdmiOut/scalerEnable","value":true} @set {"path":"/decoder/hdmiOut/scalerEnable","value":true}
/decoder/hdmiOut/outResolution	Output Resolution	Enums [0:"AUTO", 2:"1080p24", 3:"1080p50", 4:"1080p60", 5:"1400x1050p60", 6:"1920x1200p60", 7:"2160p25", 8:"2160p30", 9:"2160p50", 10:"2160p60", 11:"2560x1440p60", 12:"2560x1600p60", 13:"720p50", 14:"720p60", 15:"1440x900p60", 16:"1366x768p60]			X	X	set {"path": "/decoder/hdmiOut/outResolution","value":"1080p60"} @set {"path":"/decoder/hdmiOut/outResolution","value":3}
/decoder/hdmiOut/yuvOutput	YUV Output	Enums [0:"AUTO", 1:"ON", 2:"OFF"]			X	X	set {"path": "/decoder/hdmiOut/yuvOutput","value":"On"} @set {"path":"/decoder/hdmiOut/yuvOutput","value":1}
/decoder/hdmiOut/videoMute	Video Mute	Boolean			X	X	set {"path": "/decoder/hdmiOut/videoMute","value":true} @set {"path":"/decder/hdmiOut/videoMute","value":true}
/decoder/hdmiOut/hdmiOff	HDMI Off on Stream Loss	Boolean			X	X	set {"path": "/decoder/hdmiOut/hdmiOff","value":true} @set {"path":"/decoder/hdmiOut/hdmiOff","value":true}
/decoder/hdmiOut/hdmiOffDelay	HDMI Off on Stream Loss Delay	Integer 0-1800			X	X	set {"path": "/decoder/hdmiOut/hdmiOffDelay","value":120} @set {"path":"/decoder/hdmiOut/hdmiOffDelay","value":120}

Hcontrol	Description	Data Type	Event	Command	Get	Set	Example
/decoder/hdmiOut/cecPower	CEC Power	Enums [0:"ON", 1:"OFF"]			X	X	set {"path": "/decoder/hdmiOut/cecPower","value":"On"} @set {"path":"/decoder/hdmiOut/cecPower","value":0}
/decoder/audioOutput/audioMute	Audio Mute	Boolean			X	X	set {"path": "/decoder/audioOutput/audioMute","value":true} @set {"path":"/decoder/audioOutput/audioMute","value":true}
/decoder/audioOutput/audioDelay	Audio Delay	Integer 0-400			X	X	set {"path": "/decoder/audioOutput/audioDelay","value":100} @set {"path":"/decoder/audioOutput/audioDelay","value":100}
/decoder/audioOutput/enableHDMIAudio	HDMI Audio Enable	Enums [0:"AUTO", 1:"OFF"]			X	X	set {"path": "/decoder/audioOutput/enableHDMIAudio","value":"Off"} @set {"path":"/decoder/audioOutput/enableHDMIAudio","value":1}
/decoder/audioOutput/analogAudioOut/lineOutVolume	Analog LineOut Volume	Integer 0-100			X	X	set {"path": "/decoder/audioOutput/analogAudioOut/lineOutVolume","value":25} @set {"path":"/decoder/audioOutput/analogAudioOut/lineOutVolume","value":25}
/decoder/audioOutput/analogAudioOut/leftVolume	Analog Left Volume	Integer 0-100			X	X	set {"path": "/decoder/audioOutput/analogAudioOut/leftVolume","value":75} @set {"path":"/decoder/audioOutput/analogAudioOut/leftVolume","value":75}
/decoder/audioOutput/analogAudioOut/rightVolume	Analog Right Volume	Integer 0-100			X	X	set {"path": "/decoder/audioOutput/analogAudioOut/rightVolume","value":100} @set {"path":"/decoder/audioOutput/analogAudioOut/rightVolume","value":100}
/decoder/serial/baudRate	RS232 Baud Rate	Enum [0:'1200', 1:'4800', 2:'9600', 3:'19200', 4:'38400', 5:'57600', 6:'115200']			X	X	set {"path": "/decoder/serial/baudRate","value":"19200"} @set {"path":"/decoder/serial/baudRate","value":3}
/decoder/serial/dataBits	RS232 Data Bits	Integer 7-8			X	X	set {"path": "/decoder/serial/dataBits","value":7} @set {"path":"/decoder/serial/dataBits","value":7}
/decoder/serial/stopBits	RS232 Stop Bits	Integer 1-2			X	X	set {"path": "/decoder/serial/stopBits","value":2} @set {"path":"/decoder/serial/stopBits","value":2}
/decoder/serial/parity	RS232 Parity	Enum [0:'None', 1:'Even', 2:'Odd']			X	X	set {"path":"/decoder/serial/parity","value":2} @set {"path":"/decoder/serial/parity","value":2}

Hcontrol	Description	Data Type	Event	Command	Get	Set	Example
/decoder/serial/serCommands	Serial Recall	String			X	X	set {"path": "/decoder/serial/serCommands/2/serialCodeName","value":"test2"},{"path":"/decoder /serial/serCommands/2/serialData","value":"hello world"} @set {"path":"/decoder/serial/serCommands/2/serialCodeName","value":"test2"}
/decoder/serial/deleteSer	Delete Serial Name	String		X			exec {"path": "/decoder/serial", "command":"deleteSer", "arguments":{"data":"test2"}}
/decoder/serial/sendser	Send Serial Data	String		X			exec {"path": "/decoder/serial", "command":"sendser", "arguments":{"data":"test"}}
/decoder/serial/sendserraw	Raw Serial	Byte_Array		X			exec {"path": "/encoder/serial", "command":"sendserraw", "arguments":{"data":0f 00 aa 3d}}
/decoder/serial/responseser	Serial Response	Byte_Array	X				subscribeevent {"path": "/decoder/serial/response"} @subscribeevent {"path":"/decoder/serial/response"}
/decoder/serial/serialPassthru/serialMainEnable	Serial Main Enable	Boolean			X	X	set {"path": "/decoder/serial/serialPassthru/serialMainEnable","value":true} @set {"path":"/decoder/serial/serialPassthru/serialMainEnable","value":true}
/decoder/serial/serialPassthru/serialSecondaryAddress	Serial Secondary Address	String			X	X	set {"path": "/decoder/serial/serialPassthru/serialSecondaryAddress","value":"169.254.10.10"} @set {"path":"/decoder/serial/serialPassthru/serialSecondaryAddress","value":"169.254.10.10"}
/decoder/ir/irCommands	IR CMD	String			X	X	get {"path": "/decoder/ir/irCommands/1"} @get [{"path":"/decoder/ir/irCommands/1/irCodeName","value":"SHARP"},{"path":"/encoder/ir /irCommands/1/irCode","value":"MDAwMCAwMDZkIDAwMDAgMDAyMCAwMDA5IDAwNDYgMDAwOSAwMDFlIDAwMDkgMDAxZSAwMDA5IDAwMWUgMDAwOSAwMDFlIDAwMDkgMDAxZSAwMDA5IDAwNDYgMDAwOSAwMDQ2IDAwMDkgMDAxZSAwMDA5IDAwNDYgMDAwOSAwMDFlIDAwMDkgMDAxZSAwMDA5IDAwMWUgMDAwOSAwMDQ2IDAwMDkgMDAxZSAwMDA5IDA2YzAgMDAwOSAwMDQ2IDA"}]
/decoder/ir/deleteir	Delete IR CMD	String		x			exec {"path": "/decoder/ir", "command":"deleteir", "arguments":{"data":"SHARP"}} @exec
/decoder/ir/sendir	Send IR CMD	String		x			exec {"path": "/decoder/ir", "command":"sendir", "arguments":{"data":"SHARP"}} @exec
/decoder/ir/sendirraw	Send Raw IR -PRONTO	String		x			
/decoder/ir/irPassthru/irPasshruEnable	IR Passthrough Enable	Boolean			X	X	set {"path": "/encoder/ir/irPassthru/irPassthruEnable","value":true} @set {"path":"/encoder/ir/irPassthru/irPassthruEnable","value":true}
/decoder/ir/irPassthru/irClientIP	IR Client IP	String			X	X	set {"path": "/encoder/ir/irPassthru/irClientIP","value":"169.254.10.10"} @set {"path":"/encoder/ir/irPassthru/irClientIP","value":"169.254.10.10"}
/decoder/usbConnection/kvm/enable	KVM Enable	Boolean			X	X	set {"path": "/decoder/usbConnection/kvm/enable","value":true} @set {"path":"/decoder/ usbConnection/kvm/enable","value":true}
/decoder/usbConnection/usb20route/enable	USB 2.0 Enable	Boolean			X	X	set {"path": "/decoder/ usbConnection/usb20Route/enable","value":true} @set {"path":"/decoder/ usbConnection/usb20Route/enable","value":true}

Hcontrol	Description	Data Type	Event	Command	Get	Set	Example
/decoder/usbConnection/usbEncoderIP	KVM/USB 2.0 IP	String			X	X	set {"path": "/decoder/ usbConnection/usbEncoderIP ","value":"169.254.10.10"} @set {"path":"/decoder/ usbConnection/usbEncoderIP","value":"169.254.10.10"}
/decoder/security/forceHTTPS	Force HTTPS	Boolean			X	X	set {"path": "/decoder/security/forceHTTPS","value":true} @set {"path":"/decoder/security/forceHTTPS","value":true}
/decoder/logging/startDebugLog	Start Debug Log			X			exec {"path": "/decoder/logging", "command":"startDebugLog"}
/decoder/logging/stopDebugLog	End Debug Log			X			exec {"path": "/decoder/logging", "command":"stopDebugLog"}
/decoder/generalSetup/igmpv3Support	IGMPv3	Boolean			X	X	set {"path": "/decoder/generalSetup/igmpv3Support","value":true} @set {"path":"/decoder/generalSetup/igmpv3Support","value":true}
/decoder/generalSetup/igmpJoinOnStreamLoss	IGMP Join On Stream Loss	Boolean			X	X	set {"path": "/decoder/generalSetup/igmpJoinOnStreamLoss", "value":false} @set {"path":"/decoder/generalSetup/igmpJoinOnStreamLoss","value":false}
/decoder/generalSetup/igmpJoinInterval	IGMP Join Interval	Integer 1-4			X	X	set {"path": "/decoder/generalSetup/igmpJoinInterval", "value":2} @set {"path":"/decoder/generalSetup/ igmpJoinInterval ","value":2}
/decoder/generalSetup/sendStatusEnable	Enable Send Status	Boolean			X	X	set {"path": "/decoder/generalSetup/sendStatusEnable","value":true} @set {"path":"/decoder/generalSetup/sendStatusEnable","value":true}
/decoder/generalSetup/statusIP	Send Status Address	String			X	X	set {"path": "/decoder/generalSetup/statusIP","value":"169.254.10.10"} @set {"path":"/decoder/generalSetup/statusIP","value":"169.254.10.10"}
/decoder/generalSetup/statusInterval	Status Interval	String 10-500			X	X	set {"path": "/decoder/generalSetup/statusInterval","value":"380"} @set {"path":"/decoder/generalSetup/statusInterval","value":37}
/decoder/generalSetup/gratARPEnable	Gratuitous ARP	Boolean			X	X	set {"path": "/decoder/generalSetup/gratARPEnable","value":false} @set {"path":"/decoder/generalSetup/gratARPEnable","value":false}
/decoder/generalSetup/gratARPInterval	ARP Interval	String 10-500			X	X	set {"path": "/decoder/generalSetup/gratARPInterval","value":"170"} @set {"path":"/decoder/generalSetup/gratARPInterval","value":16}
/decoder/generalSetup/enableDiscoveryPackets	Discovery Packet Transmit	Boolean			X	X	set {"path": "/decoder/generalSetup/enableDiscoveryPackets","value":true} @set {"path":"/decoder/generalSetup/enableDiscoveryPackets","value":true}
/decoder/generalSetup/discoveryIntervalSec	Discovery Interval	String 1-60			X	X	set {"path": "/decoder/generalSetup/discoveryIntervalSec","value":54} @set {"path":"/decoder/generalSetup/discoveryIntervalSec","value":54}

Hcontrol	Description	Data Type	Event	Command	Get	Set	Example
/decoder/generalSetup/dscp	DSCP	Enums ["0", "8", "10", "12", "14", "16", "18", "20", "22", "24", "26", "28", "30", "32", "34", "36", "38", "40", "46", "48", "56"]			X	X	set {"path": "/decoder/generalSetup/dscp","value":"24"} @set {"path":"/decoder/generalSetup/dscp","value":9}
/decoder/managementSetup/settingsLock	Settings Lock	Boolean			X	X	set {"path": "/decoder/managementSetup/settingsLock","value":true} @set {"path":"/decoder/managementSetup/settingsLock","value":true}
/decoder/managementSetup/osdMenuEnable	OSD Menu	Boolean			X	X	set {"path": "/decoder/managementSetup/osdMenuEnable","value":true} @set {"path":"/decoder/managementSetup/osdMenuEnable","value":true}
/decoder/managementSetup/multicastAddressOverride	Multicast Address Override	Boolean			X	X	set {"path": "/decoder/managementSetup/multicastAddressOverride","value":true} @set {"path":"/decoder/managementSetup/multicastAddressOverride","value":true}
/decoder/managementSetup/multicastAddress	Multicast Address	String			X	X	set {"path": "/decoder/managementSetup/multicastAddress","value":"229.15.0.0"} @set {"path":"/decoder/managementSetup/multicastAddress","value":"229.15.0.0"}
/decoder/managementSetup/allowMulticast/mediaP0	Allow Multicast P0	Boolean			X	X	set {"path": "/decoder/managementSetup/allowMulticast/mediaP0","value":true} @set {"path":"/decoder/managementSetup/allowMulticast/mediaP0","value":true}
/decoder/managementSetup/allowMulticast/mediaP1	Allow Mulitcast P1	Boolean			X	X	set {"path": "/decoder/managementSetup/allowMulticast/mediaP1","value":false} @set {"path":"/decoder/managementSetup/allowMulticast/mediaP1","value":false}
/decoder/managementSetup/allowMulticast/shutdownP1	Disable P1	Boolean			X	X	set {"path": "/decoder/managementSetup/allowMulticast/shutdownP1","value":true} @set {"path":"/decoder/managementSetup/allowMulticast/shutdownP1","value":true}

Hcontrol	Description	Data Type	Event	Command	Get	Set	Example
/decoder/systemStatus/hdmiOutStatus	HDMI Out Status	Enums ["Disconnected", "Connected"]			X		get {"path": "/decoder/systemStatus/hdmiOutStatus"} @get {"path":"/decoder/systemStatus/hdmiOutStatus","value":1}
/decoder/systemStatus/hdmiOutResolution	HDMI Out Resolution	String			X		get {"path": "/decoder/systemStatus/hdmiOutResolution"} @get {"path":"/decoder/systemStatus/hdmiOutResolution","value":"1920x1080p60"}
/decoder/systemStatus/hdcpStatus	HDCP Output Status	String			X		get {"path": "/decoder/systemStatus/hdcpStatus"} @get {"path":"/decoder/systemStatus/hdcpStatus","value":"None"}
/decoder/systemStatus/hdmiOutResolutionChanged			X				subscribeevent {"path": "/decoder/systemStatus/hdmiOutResolutionChanged"} @subscribeevent {"path":"/decoder/systemStatus/hdmiOutResolutionChanged"}
/decoder/systemStatus/hdmiOutCableStatusChanged			X				subscribeevent {"path": "/decoder/systemStatus/hdmiOutCableStatusChanged"} @subscribeevent {"path":"/decoder/systemStatus/hdmiOutCableStatusChanged"} event {"path":"/decoder/systemStatus/hdmiOutCableStatusChanged","arguments":{"data":0}}

Appendix A: Time Zone Parameters

Type: Enum

Date: [

0:"(UTC-12:00) International Date Line West",
1:"(UTC-11:00) Midway Island, Samoa",
2:"(UTC-10:00) Hawaii",
3:"(UTC-09:00) Alaska",
4:"(UTC-08:00) Pacific Time (US & Canada & Tijuana)",
5:"(UTC-07:00) Arizona",
6:"(UTC-07:00) Chihuahua, La Paz, Mazatlan",
7:"(UTC-07:00) Mountain Time (US & Canada)",
8:"(UTC-06:00) Central America",
9:"(UTC-06:00) Central Time (US & Canada)",
10:"(UTC-06:00) Guadalajara, Mexico City, Monterrey",
11:"(UTC-06:00) Saskatchewan",
12:"(UTC-05:00) Bogota, Lima, Qutio",
13:"(UTC-05:00) Eastern Time (US & Canada)",
14:"(UTC-05:00) Indiana (East)",
15:"(UTC-04:00) Atlantic Time (Canada)",
16:"(UTC-04:00) Caracas, La Paz",
17:"(UTC-04:00) Santiago",
18:"(UTC-03:30) Newfoundland",
19:"(UTC-03:00) Brasilia",
20:"(UTC-03:00) Buenos Aires, Georgetown",
21:"(UTC-03:00) Greenland",
22:"(UTC-02:00) Mid-Atlantic",
23:"(UTC-01:00) Azores",
24:"(UTC-01:00) Cape Verde Is",
25:"(UTC) Casablanca, Monrovia",
26:"(UTC) Greenwich Mean Time (Dublin & Edinburgh & Lisbon & London)",
27:"(UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna",
28:"(UTC+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague",
29:"(UTC+01:00) Brussels, Copenhagen, Madrid, Paris",
30:"(UTC+01:00) Sarajevo, Skopje, Warsaw, Zagreb",
31:"(UTC+01:00) West Central Africa",
32:"(UTC+02:00) Athens, Beirut, Istanbul, Minsk",
33:"(UTC+02:00) Bucharest",
34:"(UTC+02:00) Cairo",

35:"(UTC+02:00) Harare, Pretoria",
36:"(UTC+02:00) Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius",
37:"(UTC+02:00) Jerusalem",
38:"(UTC+03:00) Baghdad",
39:"(UTC+03:00) Kuwait, Riyadh",
40:"(UTC+03:00) Moscow, St. Petersburg, Volgograd",
41:"(UTC+03:00) Nairobi",
42:"(UTC+03:30) Tehran",
43:"(UTC+04:00) Abu Dhabi, Muscat",
44:"(UTC+04:00) Baku, Tbilisi, Yerevan",
45:"(UTC+04:30) Kabul",
46:"(UTC+05:00) Ekaterinburg",
47:"(UTC+05:00) Islamabad, Karachi, Tashkent",
48:"(UTC+05:30) Chennia, Kolkata, Mumbai, New Delhi",
49:"(UTC+05:45) Kathmandu",
50:"(UTC+06:00) Almaty, Novosibirsk",
51:"(UTC+06:00) Astana, Dhaka",
52:"(UTC+06:00) Sri Jayawardenepura",
53:"(UTC+06:30) Rangoon",
54:"(UTC+07:00) Bangkok, Hanoi, Jakarta",
55:"(UTC+07:00) Krasnoyarsk",
56:"(UTC+08:00) Beijing, Chongqing, Hong Kong, Urumgi",
57:"(UTC+08:00) Taipei",
58:"(UTC+08:00) Irkutsk, Ulann Battar",
59:"(UTC+08:00) Kuala Lumpur, Singapore",
60:"(UTC+08:00) Perth",
61:"(UTC+09:00) Osaka, Sapporo, Tokyo",
62:"(UTC+09:00) Seoul",
63:"(UTC+09:00) Yakutsk",
64:"(UTC+09:30) Adelaide",
65:"(UTC+09:30) Darwin",
66:"(UTC+10:00) Brisbane",
67:"(UTC+10:00) Canberra, Melbourne, Sydney",
68:"(UTC+10:00) Guam, Port Moresby",
69:"(UTC+10:00) Hobart",
70:"(UTC+10:00) Vladivostok",
71:"(UTC+11:00) Magadan, Solomon Is, New Caledonia",
72:"(UTC+12:00) Auckland, Wellington",
73:"(UTC+12:00) Fiji, Kamchatka, Marshall Is",

```
        74:"(UTC+13:00) Nuku'alofa"
]
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