



WAVE Wireless Presentation Platform

Application Programming Interface

AT-WAVE-101

Atlona APIs
Presentation

Version Information

Version	Release Date	Notes
1	Aug 2021	Initial release
2	Sept 2021	BYOD.PINEnable now enables for Miracast Infrastructure and P2P
3	Nov 2021	Added display commands for OCS-900N control
4	Dec 2021	Removed Instructor.Audio command
5	July 2023	Added PanelControl.Play command

Commands

The following is a list of JSON commands for the AT-WAVE-101. Commands are case-sensitive. Do not change spacing or lettering. Each command is terminated with a carriage return. If the command fails or is entered incorrectly, then the feedback is “Unknown command”.

IMPORTANT: Each command must be in JSON RPC 2.0 structure: `{"jsonrpc":"2.0","id":1}`. Id is optional but is recommended, as it will allow the difference between commands to be seen because it gives the ID in the response.

JSON Commands

Command	Description
<code>Audio.Get</code>	Displays the current audio settings
<code>Audio.Subscribe</code>	Sets the unit to provide a feedback message whenever an audio parameter is changed
<code>Audio.Unsubscribe</code>	Turns off the feedback messages for audio parameters
<code>Audio.Mute</code>	Mutes the audio output
<code>Audio.Volume</code>	Set the volume to a specific level
<code>Auth.Save</code>	Enable or disable password protection for Admin and/or instructors
<code>BYOD.Get</code>	Displays the current status of BYOD devices
<code>BYOD.Subscribe</code>	Sets the unit to provide a feedback message whenever a BYOD parameter is changed
<code>BYOD.Unsubscribe</code>	Turns off the feedback messages for BYOD parameters
<code>BYOD.BluetoothUpdate</code>	Sets the port that the unit can be updated through
<code>BYOD.PINEnabled</code>	Enables and disables PIN protection on Airplay and Miracast (Infrastructure & P2P)
<code>BYOD.SetProtocolState</code>	Enables and disables the different casting protocols
<code>Display.Get</code>	Displays the current status of the connected display
<code>Display.Subscribe</code>	Sets the unit to provide a feedback message whenever a display setting is changed
<code>Display.Unsubscribe</code>	Turns off the feedback messages for display parameters
<code>Display.SetResolution</code>	Sets the unit to output a specific resolution to the display
<code>Display.GetEquipment</code>	Displays the information for all the devices within the commands database
<code>Display.ControlMode</code>	Sets the unit to be controlled by RS-232 or IP
<code>Display.ControlCommands</code>	Sets the command string to send to the display
<code>Display.ControlCommandSend</code>	Triggers the unit to send the command string to the display
<code>Display.Schedule</code>	Sets the unit to turn the display on and off at specific times of the day
<code>Display.IPSettings</code>	Sets the IP parameters for the unit to send commands to the display
<code>Display.RS232Settings</code>	Sets the RS-232 parameters for the unit to send commands to the display
<code>Display.OccSensorAdd</code>	Adds the OCS-900N as a sensor
<code>Display.OccSensorDelete</code>	Removes the OCS-900N as a sensor
<code>Display.OccSensorIdentify</code>	Will blink the LEDs of the OCS-900N to help identify a specific unit when there are more than one
<code>Display.OccSensorSettings</code>	Enable/Disable and set the days/times the motion detection of the OCS-900N will send auto on/off commands
<code>Instructor.Get</code>	Displays the current settings for the instructor page
<code>Instructor.Subscribe</code>	Sets the unit to provide a feedback message whenever an instructor setting is changed
<code>Instructor.Unsubscribe</code>	Turns off the feedback messages for instructor parameters
<code>Instructor.Enable</code>	Enables or disables the ability to auto queue content
<code>Instructor.On</code>	Turns the auto queuing function on/off
<code>Instructor.SetLayoutStyle</code>	Sets the current layout of displayed content
<code>Instructor.Video</code>	Mutes or unmutes streams on the Instructor Page

Commands

Command	Description
Instructor.Kick	Kicks the specified content out of queue
Instructor.KickAll	Kicks all the current content out of queue
Instructor.HideAll	Hides all the content in queue
Instructor.MuteAll	Turns off the video output of all videos
Instructor.AddYouTube	Adds a YouTube video to queue
Instructor.YouTubeLive	Enables/disables YouTube Live streaming
Log.Get	Displays the current log for the WAVE
Log.Subscribe	Sets the unit to provide a feedback message whenever a log change occurs
Log.Unsubscribe	Turns off the feedback messages for log changes
Maintenance.Get	Displays the current maintenance schedule and settings
Maintenance.Subscribe	Sets the unit to provide a feedback message whenever a maintenance setting is changed
Maintenance.Unsubscribe	Turns off the feedback messages for maintenance changes
Maintenance.Save	Enables/Disables maintenance backups and sets the time the backup will occur
Network.Get	Displays the current network settings
Network.Subscribe	Sets the unit to provide feedback messages any time a network setting is updated
Network.Unsubscribe	Turns off the feedback messages for network settings
Network.Wired	Allows the current Ethernet network settings to be altered
Network.Wireless	Allows the current Wi-Fi network settings to be changed
Network.SetHostname	Sets the WAVE's host name
Network.WifiNetworks	Displays the current Wi-Fi settings
PanelControl.Play	Disable or Enable video looping
Platform.Get	Displays the current settings for the WAVE
Platform.Subscribe	Sets the unit to provide feedback messages any time a WAVE setting is changed
Platform.Unsubscribe	Turns off the feedback messages for unit settings
Platform.Reboot	Reboots the WAVE
Platform.FactoryReset	Factory resets the WAVE
Portal.Get	Displays the current webGUI settings
Portal.Subscribe	Sets the unit to provide feedback messages whenever anything is changed in the webGUI
Portal.Unsubscribe	Turns off the feedback messages for the webGUI
Portal.Save	Updates the portal/room name
Portal.DeleteUserCert	Deletes any user uploaded PXF file
Portal.RestartWebServer	Restarts the webGUI
System.Get	Displays the current system settings
System.Subscribe	Sets the unit to provide feedback messages whenever system settings are changed
System.Unsubscribe	Turns off system feedback messages
Thumbnail.Subscribe	Sets the unit to provide feedback whenever a thumbnail is updated
Thumbnail.Unsubscribe	Turns off thumbnail feedback messages
Time.Get	Displays the current time settings of the WAVE
Time.Subscribe	Sets the unit to provide feedback whenever the time settings are changed
Time.Unsubscribe	Turns off the time settings feedback
Time.SetTime	Sets the unit to the specified timestamp
Time.SetTimeZone	Sets the unit to a specific time zone
Time.SetNTPSettings	Enables/disables and sets the NTP settings
Time.GetDeviceTime	Provides the current time for the WAVE

Commands

Command	Description
VideoControl.Get	Displays the settings of the video currently playing
VideoControl.Subscribe	Sets the unit to provide feedback whenever video information is changed
VideoControl.Unsubscribe	Turns off the video settings feedback
VideoControl.VidReady	Sets the specified video up to play
VideoControl.Play	Starts the currently queued video
VideoControl.SeekTo	Jumps the current video to the specified time
WelcomeAdmin.Get	Displays the current welcome screen settings
WelcomeAdmin.Subscribe	Sets the unit to provide feedback whenever the welcome screen settings have changed
WelcomeAdmin.Unsubscribe	Turns off welcome screen feedback messages
WelcomeAdmin.Save	Changes the settings of the welcome screen / digital signage
Welcome.Get	Displays the current welcome screen system settings
Welcome.Subscribe	Sets the unit to provide feedback whenever the welcome screen system settings have changed
Welcome.Unsubscribe	Turns off welcome screen system feedback messages
YouTubeLive.Get	Displays the current settings of YouTube Live
YouTubeLive.Subscribe	Sets the unit to provide feedback anytime YouTube Live settings are altered
YouTubeLive.Unsubscribe	Turns off YouTube Live feedback messages
YouTubeLive.Settings	Sets the key and URL for the YouTube Live stream

Audio.Get

Displays the current audio settings.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Audio.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Audio.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "ready": true,
    "muted": false,
    "volume": 5
  },
  "jsonrpc": "2.0"
}
```

Audio.Subscribe

Sets the unit to provide a feedback message whenever an audio parameter is changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Audio.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with audio changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Audio.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
  "method": "UserSpecParam",
  "params": {
    "ready": true,
    "muted": false,
    "volume": 100
  },
  "jsonrpc": "2.0"
}
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Audio.Unsubscribe

Turns off the feedback messages for audio parameters.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Audio.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Audio.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Audio.Mute

Mutes the audio output.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Audio.Mute", "params": Y}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	true, false

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Audio.Mute", "params": false}
```

Feedback

```
{
  "jsonrpc": "2.0",
  "id": "User1",
  "method": "Audio.Mute",
  "params": false
}
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Audio.Volume

Set the volume to a specific level.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Audio.Volume", "params": Y}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	0-100

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Audio.Volume", "params": 10}
```

Feedback

```
{
    "method": "10",
    "params": {
        "ready": true,
        "muted": false,
        "volume": 5
    },
    "jsonrpc": "2.0"
}
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

Auth.Save

Enable or disable password protection for Admin and/or instructors.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Auth.Save","params":{"Y","Y"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	*Optional* adminEnabled:(true, false), adminPassword:"(user created string)", instructEnabled:(true, false), instructPassword:"(user created string)"

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Auth.Save","params":{"adminEnabled":true,"adminPassword":"UserCreated"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Once enabled, only authorized requests will be able to access the settings via websocket or web UI. The Wave uses Cookie-based authentication where HTTP cookies are used to authenticate client requests and maintain session information on the server over the stateless HTTP protocol.

Prior to establishing a web-socket connection, first authenticate the user via /login/{role}. Upon success, the authentication cookie will be returned. Now the web-socket can be established with the proper authentication via ws://<ip address>/ws.

Example

```
const role = "admin"; // roles: admin or instructor
const pwd = "password";
```

```
const requestOptions = {
  method: 'POST',
  body: pwd,
};

fetch(`http://<ip address>/login/ + role`, requestOptions)
  .then(response => response.text())
  .then(result => console.log(result))
  .catch(error => console.log('error', error));
```

For users that do not use REST, simply log into the webGUI of WAVE-101 to receive the authentication cookie (browser must be set to accept cookies) and open the web socket add-on/extension in another tab.

BYOD.Get

Displays the current status of BYOD devices.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"BYOD.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"BYOD.Get"}
```

Feedback

```
{
    "id": "User1",
    "result": {
        "ready": true,
        "protocols": {
            "airplay": true,
            "chromecast": true,
            "miracast": true,
            "miracast_overinfrastructure": true
        },
        "settings": {
            "BYOD/PIN/Airplay": "6870",
            "BYOD/PIN/Miracast": "00007643",
            "BYOD/PIN/State": "false",
            "BYOD/VideoModeSupport": "true",
            "Bluetooth/Airplay/Enabled": "true",
            "Bluetooth/Airplay/Interface": "ethernet"
        }
    },
    "jsonrpc": "2.0"
}
```

BYOD.Subscribe

Sets the unit to provide a feedback message whenever a BYOD parameter is changed.

Structure	
{ "jsonrpc": "2.0", "id": " X ", "method": "BYOD.Subscribe", "params": " Y " }	

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with BYOD changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "BYOD.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "ready": true,
        "protocols": {
            "airplay": true,
            "chromecast": true,
            "miracast": true,
            "miracast_overinfrastructure": true
        },
        "settings": {
            "BYOD/PIN/Airplay": "6870",
            "BYOD/PIN/Miracast": "00007643",
            "BYOD/PIN/State": "false",
            "BYOD/VideoModeSupport": "true",
            "Bluetooth/Airplay/Enabled": "true",
            "Bluetooth/Airplay/Interface": "ethernet"
        }
    },
    "jsonrpc": "2.0"
}
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

BYOD.Unsubscribe

Turns off the feedback messages for BYOD parameters.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "BYOD.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "BYOD.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

BYOD.BluetoothUpdate

Sets the port that the unit can be updated through.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "BYOD.BluetoothUpdate", "params": {"Y", "Z"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Enable:(true, false)
Z	params	Interface:"(wifi, ethernet)"

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "BYOD.BluetoothUpdate", "params": {"Enable": true, "Interface": "ethernet"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

BYOD.PINEnabled

Enables and disables PIN protection on Airplay and Miracast (Infrastructure and P2P).

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "BYOD.PINEnabled", "params": Y}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	true, false

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "BYOD.PINEnabled", "params": true}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

BYOD.SetProtocolState

Enables and disables the different casting protocols.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "BYOD.SetProtocolState", "params": {"Y": Z, "Y": Z}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	*Optional* airplay, chromecast, miracast, miracast_overinfrasructure
Z	params	true, false

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "BYOD.SetProtocolState", "params": {"airplay": true, "miracast": false}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.Get

Displays the current status of the connected display.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Display.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Display.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "ready": true,
    "cableStatus": true,
    "monitorId": "SAM-2945-810240844-U28D590-HTPF701320",
    "resolutions": [
      {
        "resolution": "3840x2160",
        "refreshrate": 30,
        "preferred": true,
        "active": true
      },
      {
        "resolution": "3840x2160",
        "refreshrate": 25
      },
      {
        "resolution": "3840x2160",
        "refreshrate": 24
      },
      {
        "resolution": "3840x2160",
        "refreshrate": 29.97
      },
      {
        "resolution": "3840x2160",
        "refreshrate": 23.98
      },
      {
        "resolution": "2560x1440",
        "refreshrate": 59.95
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 60
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 59.91
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 59.94
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 30
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 24
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 29.97
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 23.98
      },
      {
        "resolution": "1680x1050",
        "refreshrate": 59.88
      },
      {
        "resolution": "1600x900",
        "refreshrate": 60
      },
      {
        "resolution": "1280x1024",
        "refreshrate": 75.02
      },
      {
        "resolution": "1280x1024",
        "refreshrate": 60.02
      },
      {
        "resolution": "1440x900",
        "refreshrate": 59.9
      },
      {
        "resolution": "800x600",
        "refreshrate": 72.19
      },
      {
        "resolution": "800x600",
        "refreshrate": 75
      }
    ]
  }
}
```

```

},
{
  "resolution": "800x600",
  "refreshrate": 60.32
},
{
  "resolution": "800x600",
  "refreshrate": 56.25
},
{
  "resolution": "720x576",
  "refreshrate": 50
},
{
  "resolution": "720x480",
  "refreshrate": 60
},
{
  "resolution": "720x480",
  "refreshrate": 59.94
},
{
  "resolution": "640x480",
  "refreshrate": 75
},
{
  "resolution": "640x480",
  "refreshrate": 72.81
},
{
  "resolution": "640x480",
  "refreshrate": 66.67
},
{
  "resolution": "640x480",
  "refreshrate": 60
},
{
  "resolution": "640x480",
  "refreshrate": 59.94
},
{
  "resolution": "720x400",
  "refreshrate": 70.08
}
],
"settings": {
  "DisplayControl/command/off": "\\x08\\x22\\x00\\x00\\x00\\x01\\xD5",
  "DisplayControl/command/on": "\\x08\\x22\\x00\\x00\\x00\\x02\\xD4",
  "DisplayControl/controlmethod": "RS232",
  "DisplayControl/ip/address": "192.168.XX.XX",
  "DisplayControl/ip/port": "1111",
  "DisplayControl/schedule/enabled": "true",
  "DisplayControl/schedule/endtime": "20:00",
  "DisplayControl/schedule/friday": "true",
  "DisplayControl/schedule/monday": "true",
  "DisplayControl/schedule/saturday": "true",
  "DisplayControl/schedule/starttime": "9:00",
  "DisplayControl/schedule/sunday": "false",
  "DisplayControl/schedule/thursday": "false",
  "DisplayControl/schedule/tuesday": "false",
  "DisplayControl/schedule/wednesday": "true",
  "RS232/Device/Detect": "false",
  "RS232/Settings/Bitrate": "9600",
  "RS232/Settings/Databits": "8",
  "RS232/Settings/Parity": "N",
  "RS232/Settings/Stopbits": "1"
},
  "jsonrpc": "2.0"
}
}

```

Display.Subscribe

Sets the unit to provide a feedback message whenever a display setting is changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
  "method": "UserSpecParam",
  "params": {
    "ready": true,
    "cableStatus": true,
    "monitorId": "SAM-2945-810240844-U28D590-HTPF701320",
    "resolutions": [
      {
        "resolution": "3840x2160",
        "refreshrate": 30,
        "preferred": true,
        "active": true
      },
      {
        "resolution": "3840x2160",
        "refreshrate": 25
      },
      {
        "resolution": "3840x2160",
        "refreshrate": 24
      },
      {
        "resolution": "3840x2160",
        "refreshrate": 29.97
      },
      {
        "resolution": "3840x2160",
        "refreshrate": 23.98
      },
      {
        "resolution": "2560x1440",
        "refreshrate": 59.95
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 60
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 50
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 59.94
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 30
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 24
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 29.97
      },
      {
        "resolution": "1920x1080",
        "refreshrate": 23.98
      },
      {
        "resolution": "1680x1050",
        "refreshrate": 59.88
      },
      {
        "resolution": "1600x900",
        "refreshrate": 60
      },
      {
        "resolution": "1280x1024",
        "refreshrate": 75.02
      },
      {
        "resolution": "1280x1024",
        "refreshrate": 60.02
      },
      {
        "resolution": "1440x900",
        "refreshrate": 59.9
      },
      {
        "resolution": "1280x800",
        "refreshrate": 59.91
      },
      {
        "resolution": "1152x864",
        "refreshrate": 75
      },
      {
        "resolution": "1280x720",
        "refreshrate": 60
      },
      {
        "resolution": "1280x720",
        "refreshrate": 50
      },
      {
        "resolution": "1280x720",
        "refreshrate": 59.94
      },
      {
        "resolution": "1024x768",
        "refreshrate": 75.03
      },
      {
        "resolution": "1024x768",
        "refreshrate": 70.07
      },
      {
        "resolution": "1024x768",
        "refreshrate": 60
      },
      {
        "resolution": "832x624",
        "refreshrate": 74.55
      },
      {
        "resolution": "800x600",
        "refreshrate": 72.19
      },
      {
        "resolution": "800x600",
        "refreshrate": 75
      }
    ]
  }
}
```

```

        },
        {
        "resolution": "800x600",
        "refreshrate": 60.32
    },
    {
        "resolution": "800x600",
        "refreshrate": 56.25
    },
    {
        "resolution": "720x576",
        "refreshrate": 50
    },
    {
        "resolution": "720x480",
        "refreshrate": 60
    },
    {
        "resolution": "720x480",
        "refreshrate": 59.94
    },
    {
        "resolution": "640x480",
        "refreshrate": 75
    },
    {
        "resolution": "640x480",
        "refreshrate": 59.94
    },
    {
        "resolution": "640x480",
        "refreshrate": 72.81
    },
    {
        "resolution": "640x480",
        "refreshrate": 66.67
    },
    {
        "resolution": "640x480",
        "refreshrate": 60
    },
    {
        "resolution": "640x480",
        "refreshrate": 59.94
    },
    {
        "resolution": "720x400",
        "refreshrate": 70.08
    }
],
"settings": {
    "DisplayControl/command/off": "\\x08\\x22\\x00\\x00\\x00\\x01\\xD5",
    "DisplayControl/command/on": "\\x08\\x22\\x00\\x00\\x00\\x02\\xD4",
    "DisplayControl/controlmethod": "RS232",
    "DisplayControl/ip/address": "192.168.XX.XX",
    "DisplayControl/ip/port": "1111",
    "DisplayControl/schedule/":

```

Display.Unsubscribe

Turns off the feedback messages for display parameters.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.SetResolution

Sets the unit to output a specific resolution to the display.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.SetResolution", "params": {"resolution": "Y", "refreshrate": "Z"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	specific resolution
Z	params	specific refreshrate

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.SetResolution", "params": {"resolution": "3840x2160", "refreshrate": 30}}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "resolution": "3840x2160",
    "refreshrate": 30
  },
  "jsonrpc": "2.0"
}
```

Display.GetEquipment

Displays the information for all the devices within the commands database.

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Display.GetEquipment"}
```

Feedback

Feedback example cut off for space constraints

Display.ControlMode

Sets the unit to be controlled by RS-232 or IP.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.ControlMode", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	IP, RS232

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.ControlMode", "params": "RS232"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.ControlCommands

Sets the command string to send to the display.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.ControlCommands", "params": {"Y": "Z"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	on, off
Z	params	Type in the command string exactly as it is found in the display's user manual

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.ControlCommands", "params": {"on": "0xd"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.ControlCommandSend

Triggers the unit to send the command string to the display.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Display.ControlCommandSend","params":"Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Type in the command string exactly as it is found in the display's user manual

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Display.ControlCommandSend","params":"0xd"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.Schedule

Sets the unit to turn the display on and off at specific times of the day.

Structure

```
{"jsonrpc":"2.0","id":"V","method":"Display.Schedule","params":{"enabled":W,"X","Y","Z"}}
```

Identifier	Request Object	Parameters
V	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
W	params	true, false
X	params	"monday":(true, false), "tuesday":(true, false), "wednesday":(true, false), "thursday":(true, false), "friday":(true, false), "saturday":(true, false), "sunday":(true, false)
Y	params	start(time - HH:MM 24 hour format)
Z	params	end(time - HH:MM 24 hour format)

Example

```
{"jsonrpc":"2.0","id":"UserSpecID","method":"Display.Schedule","params":{"enabled":true,"monday":true,"tuesday":false,"wednesday":true,"thursday":true,"friday":true,"saturday":false,"sunday":false,"start":"09:00","end":"17:00"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.IPSettings

Sets the IP parameters for the unit to send commands to the display.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.IPSettings", "params": {"ipaddress": "Y", "port": Z}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	ipaddress
Z	params	port

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.IPSettings", "params": {"ipaddress": "192.168.50.110", "port": 23}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.RS232Settings

Sets the RS-232 parameters for the unit to send commands to the display.

Structure

```
{"jsonrpc": "2.0", "id": "V", "method": "Display.RS232Settings", "params": {"W", "X", "Y", "Z"}}
```

Identifier	Request Object	Parameters
V	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
W	params	bitrate (9600, 19200, 38400, 57600, 115200)
X	params	databits (7, 8)
Y	params	parity (N, E, O) -- None, Even, Odd
Z	params	stopbits (1, 2)

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.RS232Settings", "params": {"bitrate": "115200", "databits": "8", "parity": "N", "stopbits": "1"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.OccSensorAdd

Adds the OCS-900 as a sensor. Up to three AT-OCS-900Ns can be added.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.OccSensorAdd", "params": {"host": "Y", "port": "Z"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	IP address or hostname
Z	params	port

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.OccSensorAdd", "params": {"host": "192.168.50.110", "port": 9000}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.OccSensorDelete

Removes the AT-OCS-900N as a sensor.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.OccSensorDelete", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	OCS Sensor ID

 **NOTE:** OCS sensor ID can be found in the feedback of the Display.Get command.

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.OccSensorDelete", "params": "OCS4567"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Display.OccSensorIdentify

Will blink the LEDs of the AT-OCS-900N to help identify a specific unit when there are more than one.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Display.OccSensorIdentify", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Type in the command string exactly as it is found in the display's user manual

 **NOTE:** OCS sensor ID can be found in the feedback of the Display.Get command.

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.ControlCommandSend", "params": "OCS4567"}
```

Feedback

```
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

Display.OccSensorSettings

Enable/Disable and set the days/times the motion detection of the AT-OCS-900N will send auto on/off commands.

Structure

```
{"jsonrpc": "2.0", "id": "W", "method": "Display.OccSensorSettings", "params": {"OccupancySensor/enable/on": "X", "OccupancySensor/enable/off": "X", "OccupancySensor/schedule/starttime": "Y", "OccupancySensor/schedule/endtime": "Y", "OccupancySensor/schedule/monday": "Z", "OccupancySensor/schedule/tuesday": "Z", "OccupancySensor/schedule/wednesday": "Z", "OccupancySensor/schedule/thursday": "Z", "OccupancySensor/schedule/friday": "Z", "OccupancySensor/schedule/saturday": "Z", "OccupancySensor/schedule/sunday": "Z",}}
```

Identifier	Request Object	Parameters
W	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
X	params	true, false
Y	params	time - HH:MM 24 hour format
Z	params	true, false

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Display.OccSensorSettings", "params": {"OccupancySensor/enable/on": "true", "OccupancySensor/enable/off": "false", "OccupancySensor/schedule/starttime": "05:01", "OccupancySensor/schedule/endtime": "17:01", "OccupancySensor/schedule/monday": "true", "OccupancySensor/schedule/tuesday": "true", "OccupancySensor/schedule/wednesday": "false", "OccupancySensor/schedule/thursday": "true", "OccupancySensor/schedule/friday": "true", "OccupancySensor/schedule/saturday": "false", "OccupancySensor/schedule/sunday": "false"}}
```

Feedback

```
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

Instructor.Get

Displays the current settings for the instructor page.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Instructor.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Instructor.Get"}
```

Feedback

```
{
    "id": "User1",
    "result": {
        "ready": true,
        "layout": {
            "id": "dynamic",
            "maxvisiblemanagedpanels": 4,
            "nonce": 10,
            "screen": {
                "w": 3840,
                "h": 2160
            },
            "panels": {
                "Portal-youtube-0e1ddaa0-5243-4784-a869-b531c430f1dd": {
                    "name": "Dog Reviews Food With Little Brother | Tucker Taste Test 21",
                    "owner": "HtmlPanel",
                    "position": 0,
                    "hints": [
                        "thumbHeight:360",
                        "type:youtube",
                        "thumbWidth:480",
                        "Stream",
                        "videoid:itEvPUCMehw"
                    ],
                    "visible": true,
                    "managed": true,
                    "zorder": 0,
                    "paneldepth": 1,
                    "streamdimension": {
                        "w": 200,
                        "h": 113
                    },
                    "audio": {
                        "mute": false,
                        "volume": 100
                    },
                    "posrectangle": {
                        "x": 0,
                        "y": 0,
                        "w": 0,
                        "h": 0
                    }
                }
            }
        }
    }
}
```

```

        "panelrectangle": {
            "x": 8,
            "y": 0,
            "w": 3823,
            "h": 2160
        },
        "timestamp_created": 1625847504768,
        "timestamp_changedvisible": 1625847504768
    },
    "settings": {},
    "timestamp_ms": 1625847504774
},
"layoutStyles": {
    "dualoverunder": {
        "name": "Dual - Over Under",
        "description": "Dual - Over Under",
        "maxvisiblemanagedpanels": 2,
        "order": 400,
        "validsettings": [
            "SingleFullScreen"
        ]
    },
    "dualsidebyside": {
        "name": "Dual - Side by Side",
        "description": "Dual - Side by Side",
        "maxvisiblemanagedpanels": 2,
        "order": 300,
        "validsettings": [
            "SingleFullScreen"
        ]
    },
    "dynamic": {
        "name": "Dynamic (Recommended)",
        "description": "Dynamic (Recommended)"
    }
}
}
```

```
},
"staticquad": {
  "name": "Quad View",
  "description": "Quad View",
  "maxvisiblemanagedpanels": 4,
  "order": 800,
  "validsettings": [
    "SingleFullScreen"
  ]
}
},
"settings": {
  "Moderator/Enabled": "true",
  "Moderator/On": "false",
  "Moderator/Streams/Max": "8",
  "YouTubeLive/Enabled": "false",
  "YouTubeLive/Started": "false",
  "YouTubeLive/Streaming": "false",
}
},
"network/wifi	mode": "DISABLED"
},
"jsonrpc": "2.0"
}
```

Instructor.Subscribe

Sets the unit to provide a feedback message whenever an instructor setting is changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Instructor.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Instructor.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{  
    "method": "UserSpecParam",  
    "params": {  
        "ready": true,  
        "layout": {  
            "id": "dynamic",  
            "maxvisiblemanagedpanels": 4,  
            "nonce": 10,  
            "screen": {  
                "w": 3840,  
                "h": 2160  
            },  
            "panels": {  
                "Portal-youtube-0e1ddaa0-5243-  
4784-a869-b531c430f1dd": {  
                    "name": "Dog Reviews Food  
With Little Brother | Tucker Taste Test  
21",  
                    "owner": "HtmlPanel",  
                    "position": 0,  
                    "hints": [  
                        "thumbHeight:360",  
                        "type:youtube",  
                        "thumbWidth:480",  
                        "Stream",  
                        "videoid:itEvPUCMehw"  
                    ],  
                    "visible": true,  
                    "managed": true,  
                    "zorder": 0,  
                    "paneldepth": 1.  
                }  
            }  
        }  
    }  
}
```

```
"streamdimension": {
    "w": 200,
    "h": 113
},
"audio": {
    "mute": false,
    "volume": 100
},
"posrectangle": {
    "x": 0,
    "y": 0,
    "w": 0,
    "h": 0
},
"panelrectangle": {
    "x": 8,
    "y": 0,
    "w": 3823,
    "h": 2160
},
"timestamp_created": 1625847504768,
"timestamp_changedvisible": 1625847504768
},
"settings": {},
"timestamp_ms": 1625847504774
},
"layoutStyles": {
    "dualoverunder": {
        "name": "Dual - Over Under",
        "description": "Dual - Over Under",
        "maxvisiblemanagedpanels": 2,
        "order": 400,
        "validsettings": [
            "SingleFullScreen"
        ]
    },
    "dualsidebyside": {
        "name": "Dual - Side by Side",
        "description": "Dual - Side by Side",
        "maxvisiblemanagedpanels": 2,
        "order": 300,
        "validsettings": [
            "SingleFullScreen"
        ]
    },
    "dynamic": {
        "name": "Dynamic (Recommended)",
        "description": "Dynamic (Recommended)",
        "maxvisiblemanagedpanels": 4,
        "order": 120,
        "validsettings": []
    },
    "primarywithpreviewbelow": {
        "name": "Triple - Preview Below",
        "description": "Triple - Preview Below",
        "maxvisiblemanagedpanels": 4.
```

```

    "order": 600,
    "validsettings": [
        "SingleFullScreen"
    ],
},
"primarywithpreviewright": {
    "name": "Triple - Preview Right",
    "description": "Triple - Preview
Right",
    "maxvisiblemanagedpanels": 8,
    "order": 700,
    "validsettings": []
},
"single": {
    "name": "Static Full Screen",
    "description": "Static Full
Screen",
    "maxvisiblemanagedpanels": 1,
    "order": 200,
    "validsettings": [
        "SingleFullScreen"
    ],
},
"staticcip": {
    "name": "Dual - Picture in
Picture",
    "description": "Dual - Picture in
Picture",
    "maxvisiblemanagedpanels": 2,
    "order": 500,
    "validsettings": [
        "SingleFullScreen"
    ],
},
"staticquad": {
    "name": "Quad View",
    "description": "Quad View",
    "maxvisiblemanagedpanels": 4,
    "order": 800,
    "validsettings": [
        "SingleFullScreen"
    ],
},
"settings": {
    "Moderator/Enabled": "true",
    "Moderator/On": "false",
    "Moderator/Streams/Max": "8",
    "YouTubeLive/Enabled": "false",
    "YouTubeLive/Started": "false",
    "YouTubeLive/Streaming": "false",
    "network/wifi	mode": "DISABLED"
}
},
"jsonrpc": "2.0"
}
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
}

```

Instructor.Unsubscribe

Turns off the feedback messages for instructor parameters.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Instructor.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Instructor.Unsubscribe"}
```

Feedback

```
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

Instructor.Enable

Enables or disables the ability to auto queue content.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Instructor.Enable","params":Y}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	true, false

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Instructor.Enable","params":true}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Instructor.On

Turns the auto queuing function on/off.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Instructor.On","params":Y}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	true, false

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Instructor.On","params":true}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Instructor.SetLayoutStyle

Sets the current layout of displayed content.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Instructor.SetLayoutStyle", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	layoutstyle (string)

 **NOTE:** Layout style names can be found in the feedback of Instructor.Get under layout styles.

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Instructor.SetLayoutStyle", "params": "dualoverunder"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Instructor.Video

Mutes or unmutes streams on the Instructor Page.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Instructor.Video", "params": ["Y", "Z"]}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	panelId (string)
Z	params	*Optional* "mute":(true, false)

 **NOTE:** Panel ID names can be found in the feedback of Instructor.Get under "panels".

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Instructor.Video", "params": {"panelId": "Portal-youtube-0e1ddaa0-5243-4784-a869-b531c430f1dd", "mute": false}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Instructor.Kick

Kicks the specified content out of queue.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Instructor.Kick", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	panelId (string)

 **NOTE:** Panel ID names can be found in the feedback of Instructor.Get under "panels".

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Instructor.Kick", "params": "Portal-youtube-0e1ddaa0-5243-4784-a869-b531c430f1dd"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Instructor.KickAll

Kicks all the current content out of queue.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Instructor.KickAll"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Instructor.KickAll"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Instructor.HideAll

Hides all the content in queue.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Instructor.HideAll"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Instructor.HideAll"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Instructor.MuteAll

Turns off the video output of all videos.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Instructor.MuteAll"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Instructor.MuteAll"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Instructor.AddYouTube

Adds a YouTube video to queue.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Instructor.AddYouTube","params":Y}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	YouTube video URL

 **NOTE:** Panel ID names can be found in the feedback of Instructor.Kick under "panels".

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Instructor.AddYouTube","params":"https://www.youtube.com/watch?v=j-3nl88O7ul"}
```

Feedback

```
{
  "id": "User1",
  "result": "Portal-youtube-6f824db0-e71c-42a4-937f-0bab843fb4bf",
  "jsonrpc": "2.0"
}
```

Instructor.YouTubeLive

Enables/disables YouTube Live streaming.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Instructor.YouTubeLive","params":Y}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	true, false

 **NOTE:** Panel ID names can be found in the feedback of Instructor.Kick under "panels".

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Instructor.YouTubeLive","params":false}
```

Feedback

```
{
  "id": "User1",
  "error": {
    "code": -32050,
    "message": "Streaming is disabled"
  },
  "jsonrpc": "2.0"
}
```

Log.Get

Displays the current log for the WAVE.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Log.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Log.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": [
    {
      "level": "I",
      "line": "Original enabled HID = false",
      "meta": "Platform",
      "module": "Platform",
      "timems": 1625819420464
    },
    {
      "level": "E",
      "line": "no subscribers to handle message \'Platform/HIDEnabled\'",
      "meta": "Portal",
      "module": "Portal",
      "timems": 1625819420500
    },
    {
      "level": "I",
      "line": "Function Get()",
      "meta": "WifiRegulations",
      "module": "WifiRegulations",
      "timems": 1625819420506
    },
    {
      "level": "I",
      "line": "Found country = US",
      "meta": "WifiRegulations",
      "module": "WifiRegulations",
      "timems": 1625819420516
    },
    {
      "level": "I",
      "line": "Set enabled HID = false changed = false",
      "meta": "Platform",
      "module": "Platform",
      "timems": 1625819420530
    },
    {
      "level": "I",
      "line": "Folder created: /home/atlona/app/volatile/wave/platform/loopdevices/PortalUserContent",
      "meta": "SysCall",
      "module": "SysCall",
      "timems": 1625819420544
    },
    {
      "level": "I",
      "line": "Folder deleted: /home/atlona/app/data/wave/browsermgr/chromium",
      "meta": "SysCall",
      "module": "SysCall",
      "timems": 1625819420564
    },
    {
      "level": "I",
      "line": "Showing Splash Screen",
      "meta": "Splash",
      "module": "Splash",
      "timems": 1625819420569
    },
    {
      "level": "I",
      "line": "Showing kiosk (name = 'AtlonaSplash')",
      "meta": "BrowserMgr",
      "module": "BrowserMgr",
      "timems": 1625819420570
    },
    {
      "level": "I",
      "line": "File deleted: /home/atlona/app/data/wave/platform/loopdevices/PortalUserContent.img",
      "meta": "SysCall",
      "module": "SysCall",
      "timems": 1625819420610
    }
  ]
}
```

```
{
  "level": "I",
  "line": "Folder created: /home/atlona/app/data/wave/platform/loopdevices",
  "meta": "SysCall",
  "module": "SysCall",
  "timems": 1625819420614
},
{
  "level": "I",
  "line": "Folder created: /home/atlona/app/volatile/wave/platform/loopdevices/PortalUserContent",
  "meta": "SysCall",
  "module": "SysCall",
  "timems": 1625819420719
},
{
  "level": "I",
  "line": "File deleted: /home/atlona/app/data/wave/platform/loopdevices/PortalFirmwareUpload.img",
  "meta": "SysCall",
  "module": "SysCall",
  "timems": 1625819420802
},
{
  "level": "I",
  "line": "Created loop device PortalUserContent",
  "meta": "Platform",
  "module": "Platform",
  "timems": 1625819420784
},
```

Feedback example cut off for space constraints

Log.Subscribe

Sets the unit to provide a feedback message whenever a log change occurs.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Log.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Log.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
  "method": "UserSpecParam",
  "params": [
    {
      "level": "I",
      "line": "Original enabled HID = false",
      "meta": "Platform",
      "module": "Platform",
      "timems": 1625819420464
    },
    {
      "level": "E",
      "line": "no subscribers to handle message \\\"Platform/HIDEnabled\\\"",
      "meta": "Portal",
      "module": "Portal",
      "timems": 1625819420500
    },
    {
      "level": "I",
      "line": "Function Get()",
      "meta": "WifiRegulations",
      "module": "WifiRegulations",
      "timems": 1625819420506
    },
    {
      "level": "I",
      "line": "Found country = US",
      "meta": "WifiRegulations",
      "module": "WifiRegulations",
      "timems": 1625819420516
    },
    {
      "level": "I",
      "line": "Set enabled HID = false changed = false",
      "meta": "Platform",
      "module": "Platform",
      "timems": 1625819420530
    },
    {
      "level": "I",
      "line": "Folder created: /home/atlona/app/volatile/wave/platform/loopdevices/PortalUserContent",
      "meta": "SysCall",
      "module": "SysCall",
      "timems": 1625819420544
    },
    {
      "level": "I",
      "line": "Folder deleted: /home/atlona/app/data/wave/browsermgr/chromium",
      "meta": "SysCall",
      "module": "SysCall",
      "timems": 1625819420564
    },
    {
      "level": "I",
      "line": "Showing Splash Screen",
      "meta": "Splash",
      "module": "Splash",
      "timems": 1625819420569
    },
    {
      "level": "I",
      "line": "Showing kiosk (name = 'AtlonaSplash')",
      "meta": "BrowserMgr",
      "module": "BrowserMgr",
      "timems": 1625819420570
    },
    {
      "level": "I",
      "line": "File deleted: /home/atlona/app/data/wave/platform/loopdevices/PortalUserContent.img",
      "meta": "SysCall",
      "module": "SysCall",
      "timems": 1625819420610
    }
  ]
}
```

```
{
  "level": "I",
  "line": "Folder created: /home/atlona/app/data/wave/platform/loopdevices",
  "meta": "SysCall",
  "module": "SysCall",
  "timems": 1625819420614
},
{
  "level": "I",
  "line": "Folder created: /home/atlona/app/volatile/wave/platform/loopdevices/PortalUserContent",
  "meta": "SysCall",
  "module": "SysCall",
  "timems": 1625819420719
},
{
  "level": "I",
  "line": "File deleted: /home/atlona/app/data/wave/platform/loopdevices/PortalFirmwareUpload.img",
  "meta": "SysCall",
  "module": "SysCall",
  "timems": 1625819420802
},
```

Feedback example cut off for space constraints

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Log.Unsubscribe

Turns off the feedback messages for log changes.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Log.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Log.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Maintenance.Get

Displays the current maintenance schedule and settings.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Maintenance.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Maintenance.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "ready": true,
    "enabled": true,
    "startTime": "03:30",
    "lastExecuted": "2021-07-09T08:30:01Z",
    "actions": {
      "CleanUserFiles": true,
      "DiskSpaceCheck": true,
      "Reboot": true,
      "ScanDisk": true
    }
  },
  "jsonrpc": "2.0"
}
```

Maintenance.Subscribe

Sets the unit to provide a feedback message whenever a maintenance setting is changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Maintenance.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Maintenance.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "ready": true,
        "enabled": true,
        "startTime": "03:30",
        "lastExecuted":
        "2021-07-09T08:30:01Z",
        "actions": {
            "CleanUserFiles": true,
            "DiskSpaceCheck": true,
            "Reboot": true,
            "ScanDisk": true
        }
    },
    "jsonrpc": "2.0"
}
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

Maintenance.Unsubscribe

Turns off the feedback messages for maintenance changes.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Maintenance.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Maintenance.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Maintenance.Save

Enables/Disables maintenance backups and sets the time the backup will occur.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Maintenance.Save", "params": {"enable": Y, "scheduledTime": Z}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	true, false
Z	params	HH:MM (24 Hour Format)

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Maintenance.Save", "params": {"enable": true, "scheduledTime": "13:30"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Network.Get

Displays the current network settings.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Network.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Network.Get"}
```

Feedback

```
{
    "id": "User1",
    "result": {
        "ready": true,
        "country": "US",
        "settings": {
            "Bluetooth/Airplay/Enabled": "true",
            "Bluetooth/Airplay/Interface": "ethernet",
            "network/ethernet/address": "192.168.50.134",
            "network/ethernet/dns1": "192.168.50.1",
            "network/ethernet/dns2": "",
            "network/ethernet/error": "",
            "network/ethernet/gateway": "192.168.50.1",
            "network/ethernet/interface_name": "eth",
            "network/ethernet/ipv4mode": "DHCP",
            "network/ethernet/mac_addr": "B8:98:B0:05:93:E6",
            "network/ethernet/prefix": "24",
            "network/ethernet/state": "activated",
            "network/firewall/rules": "allow 80/tcp,allow 137:139/tcp,allow 137:139/udp,allow 443/tcp,allow 1900/udp,allow out 1900/udp,allow 4000:4005/udp,allow 5350:5353/udp,allow 5000/tcp,allow 5000/udp,allow 7250/tcp,allow 47000/tcp,allow 8008/tcp,allow 8009/tcp,allow 7000/tcp,allow 7100/tcp,allow 49159:49163/udp,allow 32768:61000/udp,allow 7200:17210/udp,allow 7200:17210/tcp,allow 9001/tcp,allow in proto udp to 224.0.0.0/3,allow 319:320/udp",
            "network/firewall/state": "true",
            "network/hostname": "wave"
        }
    }
}
```

```

        "band": "2.4"
    },
    {
        "bandwidth": 20,
        "channel": 11,
        "start": 2451,
        "end": 2473,
        "band": "2.4"
    },
    {
        "bandwidth": 20,
        "channel": 12,
        "start": 2456,
        "end": 2478,
        "band": "2.4"
    },
    {
        "bandwidth": 20,
        "channel": 13,
        "start": 2461,
        "end": 2483,
        "band": "2.4"
    },
    {
        "bandwidth": 20,
        "channel": 32,
        "start": 5150,
        "end": 5170,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 36,
        "start": 5170,
        "end": 5190,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 40,
        "start": 5190,
        "end": 5210,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 44,
        "start": 5210,
        "end": 5230,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 48,
        "start": 5230,
        "end": 5250,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 149,
        "start": 5735,
        "end": 5755,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 153,
        "start": 5755,
        "end": 5775,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 157,
        "start": 5775,
        "end": 5795,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 161,
        "start": 5795,
        "end": 5815,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 165,
        "start": 5815,
        "end": 5835,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 169,
        "start": 5835,
        "end": 5855,
        "band": "5.0"
    }
],
},
"jsonrpc": "2.0"
}
    
```

Network.Subscribe

Sets the unit to provide feedback messages any time a network setting is updated.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Network.Subscribe","params":"Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Network.Subscribe","params":"UserSpecParam"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "ready": true,
        "country": "US",
        "settings": {
            "Bluetooth/Airplay/Enabled": "true",
            "Bluetooth/Airplay/Interface": "ethernet",
            "network/ethernet/address": "192.168.50.134",
            "network/ethernet/dns1": "192.168.50.1",
            "network/ethernet/dns2": "",
            "network/ethernet/error": "",
            "network/ethernet/gateway": "192.168.50.1",
            "network/ethernet/interface_name": "eth",
            "network/ethernet/ipv4mode": "DHCP",
            "network/ethernet/mac_addr": "B8:98:B0:05:93:E6",
            "network/ethernet/prefix": "24",
            "network/ethernet/state": "activated",
            "network/firewall/rules": "allow 80/tcp,allow 137:139/tcp,allow 137:139/udp,allow 443/tcp,allow 1900/udp,allow out 1900/udp,allow 4000:4005/udp,allow 5350:5353/udp,allow 5000/tcp,allow 5000/udp,allow 7250/tcp,allow 47000/tcp,allow 8008/tcp,allow 8009/tcp,allow 7000/tcp,allow 7100/tcp,allow 49159:49163/udp,allow 32768:61000/udp,allow 7200:17210/udp,allow 7200:17210/tcp,allow 9001/tcp,allow in proto udp to 224.0.0.0/3,allow 319:320/udp",
            "network/firewall/state": "true",
            "network/hostname": "wave-93e6",
            "network/wifi/ap/band": "BG",
            "network/wifi/ap/channel": "3",
            "network/wifi/ap/firewall": "BLOCK_ALL",
            "network/wifi/ap/passwd": "12345678",
            "network/wifi/ap/ssid": "wave",
            "network/wifi/connect/gw_priority": "ETHERNET",
            "network/wifi/connect/ipv4mode": "DHCP",
            "network/wifi/connect/passwd": "",
            "network/wifi/connect/ssid": "",
            "network/wifi/dongle": "false",
            "network/wifi/interface_name": "",
            "network/wifi/mac_addr": "",
            "network/wifi	mode": "DISABLED"
        },
        "wifiChannels": [
            {
                "bandwidth": 20,
                "channel": 1,
                "start": 2401,
                "end": 2423,
                "band": "2.4"
            },
            {
                "bandwidth": 20,
                "channel": 2,
                "start": 2406,
                "end": 2428,
                "band": "2.4"
            },
            {
                "bandwidth": 20,
                "channel": 3,
                "start": 2411,
                "end": 2433,
                "band": "2.4"
            },
            {
                "bandwidth": 20,
                "channel": 4,
                "start": 2416,
                "end": 2438,
                "band": "2.4"
            },
            {
                "bandwidth": 20,
                "channel": 5,
                "start": 2421,
                "end": 2442,
                "band": "2.4"
            },
            {
                "bandwidth": 20,
                "channel": 6,
                "start": 2426,
                "end": 2448,
                "band": "2.4"
            },
            {
                "bandwidth": 20,
                "channel": 7,
                "start": 2431,
                "end": 2453,
                "band": "2.4"
            },
            {
                "bandwidth": 20,
                "channel": 8,
                "start": 2436,
                "end": 2458,
                "band": "2.4"
            },
            {
                "bandwidth": 20,
                "channel": 9,
                "start": 2441,
                "end": 2463,
                "band": "2.4"
            }
        ]
    }
}
```

```

},
{
    "bandwidth": 20,
    "channel": 10,
    "start": 2446,
    "end": 2468,
    "band": "2.4"
},
{
    "bandwidth": 20,
    "channel": 11,
    "start": 2451,
    "end": 2473,
    "band": "2.4"
},
{
    "bandwidth": 20,
    "channel": 12,
    "start": 2456,
    "end": 2478,
    "band": "2.4"
},
{
    "bandwidth": 20,
    "channel": 13,
    "start": 2461,
    "end": 2483,
    "band": "2.4"
},
{
    "bandwidth": 20,
    "channel": 32,
    "start": 5150,
    "end": 5170,
    "band": "5.0"
},
{
    "bandwidth": 20,
    "channel": 36,
    "start": 5170,
    "end": 5190,
    "band": "5.0"
},
{
    "bandwidth": 20,
    "channel": 40,
    "start": 5190,
    "end": 5210,
    "band": "5.0"
},
{
    "bandwidth": 20,
    "channel": 44,
        "start": 5210,
        "end": 5230,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 48,
        "start": 5230,
        "end": 5250,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 149,
        "start": 5735,
        "end": 5755,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 153,
        "start": 5755,
        "end": 5775,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 157,
        "start": 5775,
        "end": 5795,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 161,
        "start": 5795,
        "end": 5815,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 165,
        "start": 5815,
        "end": 5835,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 169,
        "start": 5835,
        "end": 5855,
        "band": "5.0"
    }
],
},
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
]
},
"jsonrpc": "2.0"
}
}

```

Network.Unsubscribe

Turns off the feedback messages for network settings.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Network.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Network.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Network.Wired

Allows the current Ethernet network settings to be altered.

Structure

```
{"jsonrpc":"2.0","id":"T","method":"Network.Wired","params":{"U","V","W","X","Y","Z"}}
```

Identifier	Request Object	Parameters
T	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
U	params	ipv4mode (DHCP, STATIC, FACTORY_STATIC)
V	params	address
W	params	prefix
X	params	gateway
Y	params	dns1
Z	params	dns2

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Network.Wired","params":{"ipv4mode": "STATIC", "address": "192.168.50.134", "prefix": "24", "gateway": "255.255.255.0", "dns1": "4.4.4.4", "dns2": "8.8.8.8"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Network.Wireless

Allows the current Wi-Fi network settings to be changed.

Structure

```
{"jsonrpc":"2.0","id":"I","method":"Network.Wireless","params":{"J","K","L","M","N","O","P","Q","R","S","T","U","V","W","X","Y","Z"}}
```

Identifier	Request Object	Parameters
I	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
J	params	mode (DISABLED, CONNECT, AP)
K	params	ssid (name as it appears on the network)
L	params	passwd (network password)
M	params	band (BG, A)
N	params	channel (1,2,3,4,5,6,7,8,9,10,11,36,40,44,48,149,153,157,161,165)
O	params	ap_mode (INTERNET_ONLY, INTERNAL_ONLY, BLOCK_ALL, NONE)
P	params	ipv4mode (DHCP, STATIC, FACTORY_STATIC)
Q	params	address
R	params	prefix
S	params	gateway
T	params	dns1
U	params	dns2
V	params	sec_8021x (true, false)
W	params	sec_8021x_identity (username)
X	params	gatewayPriority (WIFI, ETHERNET)
Y	params	bluetoothPriority (wifi, ethernet)
Z	params	sec_8021x_pass (password)

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Network.Wireless", "params": {"mode": "CONNECT", "SSID": "wave", "passwd": "ABC123!", "band": "BG", "channel": "7", "ap_mode": "INTERNET_ONLY", "ipv4mode": "STATIC", "address": "192.168.50.134", "prefix": "24", "gateway": "255.255.255.0", "dns1": "4.4.4.4", "dns2": "8.8.8.8", "sec_8021x_identity": "User1", "gatewayPriority": "ETHERNET", "bluetoothPriority": "wifi", "sec_8021x_pass": "ABC123!"}}
```

Feedback

```
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

Network.SetHostname

Sets the WAVE's host name.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Network.SetHostname", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	user created host name, nil (nil will reset to default)

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Network.SetHostname", "params": "nil"}
```

Feedback

```
{
    "id": "User1",
    "result": {
        "hostname": "",
        "success": false
    },
    "jsonrpc": "2.0"
}
```

Network.WifiNetworks

Displays the current Wi-Fi settings.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Network.WifiNetworks"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Network.WifiNetworks"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "ready": true,
    "country": "US",
    "settings": {
      "Bluetooth/Airplay/Enabled": "true",
      "Bluetooth/Airplay/Interface": "ethernet",
      "network/ethernet/address": "192.168.50.134",
      "network/ethernet/dns1": "192.168.50.1",
      "network/ethernet/dns2": "",
      "network/ethernet/error": "",
      "network/ethernet/gateway": "192.168.50.1",
      "network/ethernet/interface_name": "eth",
      "network/ethernet/ipv4mode": "DHCP",
      "network/ethernet/mac_addr": "B8:98:B0:05:93:E6",
      "network/ethernet/prefix": "24",
      "network/ethernet/state": "activated",
      "network/firewall/rules": "allow 80/tcp,allow 137:139/tcp,allow 137:139/udp,allow 443/tcp,allow 1900/udp,allow out 1900/udp,allow 4000:4005/udp,allow 5350:5353/udp,allow 5000/tcp,allow 5000/udp,allow 7250/tcp,allow 47000/tcp,allow 8008/tcp,allow 8009/tcp,allow 7000/tcp,allow 7100/tcp,allow 49159:49163/udp,allow 32768:61000/udp,allow 7200:17210/udp,allow 9001/tcp,allow in proto udp to 224.0.0.0/3,allow 319:320/udp",
      "network/firewall/state": "true",
    }
  }
}
```

```

  "network/hostname": "wave-93e6",
  "network/wifi/ap/band": "BG",
  "network/wifi/ap/channel": "3",
  "network/wifi/ap/firewall": "BLOCK_ALL",
  "network/wifi/ap/passwd": "12345678",
  "network/wifi/ap/ssid": "wave",
  "network/wifi/connect/gw_priority": "ETHERNET",
  "network/wifi/connect/ipv4mode": "DHCP",
  "network/wifi/connect/passwd": "",
  "network/wifi/connect/ssid": "",
  "network/wifi/dongle": "false",
  "network/wifi/interface_name": "",
  "network/wifi/mac_addr": "",
  "network/wifi	mode": "DISABLED"
}

{
  "wifiChannels": [
    {
      "bandwidth": 20,
      "channel": 1,
      "start": 2401,
      "end": 2423,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 2,
      "start": 2406,
      "end": 2428,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 3,
      "start": 2411,
      "end": 2433,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 4,
      "start": 2416,
      "end": 2438,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 5,
      "start": 2421,
      "end": 2442,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 6,
      "start": 2426,
      "end": 2448,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 7,
      "start": 2431,
      "end": 2453,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 8,
      "start": 2436,
      "end": 2458,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 9,
      "start": 2441,
      "end": 2463,
      "band": "2.4"
    },
    {
      "bandwidth": 20,
      "channel": 10,
      "start": 2446,
      "end": 2468,
      "band": "2.4"
    }
  ]
}

```

```

"channel": 10,
"start": 2446,
"end": 2468,
"band": "2.4"
},
{
"bandwidth": 20,
"channel": 11,
"start": 2451,
"end": 2473,
"band": "2.4"
},
{
"bandwidth": 20,
"channel": 12,
"start": 2456,
"end": 2478,
"band": "2.4"
},
{
"bandwidth": 20,
"channel": 13,
"start": 2461,
"end": 2483,
"band": "2.4"
},
{
"bandwidth": 20,
"channel": 32,
"start": 5150,
"end": 5170,
"band": "5.0"
},
{
"bandwidth": 20,
"channel": 36,
"start": 5170,

```

```

        "end": 5190,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 40,
        "start": 5190,
        "end": 5210,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 44,
        "start": 5210,
        "end": 5230,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 48,
        "start": 5230,
        "end": 5250,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 149,
        "start": 5735,
        "end": 5755,
        "band": "5.0"
    },
    {
        "bandwidth": 20,
        "channel": 153,
        "start": 5755,
        "end": 5775,
        "band": "5.0"
    }
},
{
"bandwidth": 20,
"channel": 157,
"start": 5775,
"end": 5795,
"band": "5.0"
},
{
"bandwidth": 20,
"channel": 161,
"start": 5795,
"end": 5815,
"band": "5.0"
},
{
"bandwidth": 20,
"channel": 165,
"start": 5815,
"end": 5835,
"band": "5.0"
},
{
"bandwidth": 20,
"channel": 169,
"start": 5835,
"end": 5855,
"band": "5.0"
}
],
},
"jsonrpc": "2.0"
}

```

PanelControl.Play

Enables and disables video looping.

Structure

```
{"jsonrpc":"2.0","id":"W","method":"PanelControl.Play","params":{panelID":"X","playing":Y,"looped":Z}
```

Identifier	Request Object	Parameters
W	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
X	params	Enter in the video ID received from the Instructor.Get command
Y	params	true or false
Z	params	true or false

Example

```
{"jsonrpc":"2.0","id":"User1","method":"PanelControl.Play","params": {"panelID":"Portal-media-8d32267d-886d-401b-8160-3a450def0980","playing":true,"looped":true}}
```

Feedback

```
{ "id": "User1", "result": true, "jsonrpc": "2.0" }
```

Platform.Get

Displays the current settings for the WAVE.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Platform.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Platform.Get"}
```

Feedback

```
{
    "id": "User1",
    "result": {
        "platformReady": true,
        "updateReady": true,
        "country": "US",
        "countries": [
            {
                "Code": "AF",
                "Name": "Afghanistan"
            },
            {
                "Code": "AX",
                "Name": "Åland Islands"
            },
            {
                "Code": "AL",
                "Name": "Albania"
            },
            {
                "Code": "DZ",
                "Name": "Algeria"
            },
            {
                "Code": "AS",
                "Name": "American Samoa"
            },
            {
                "Code": "AD",
                "Name": "Andorra"
            },
            {
                "Code": "AO",
                "Name": "Angola"
            },
            {
                "Code": "AI",
                "Name": "Anguilla"
            },
            {
                "Code": "AQ",
                "Name": "Antarctica"
            },
            {
                "Code": "AG",
                "Name": "Antigua and Barbuda"
            },
            {
                "Code": "AR",
                "Name": "Argentina"
            },
            {
                "Code": "AM",
                "Name": "Armenia"
            },
            {
                "Code": "AW",
                "Name": "Aruba"
            },
            {
                "Code": "AU",
                "Name": "Australia"
            },
            {
                "Code": "AT",
                "Name": "Austria"
            },
            {
                "Code": "AZ",
                "Name": "Azerbaijan"
            },
            {
                "Code": "BS",
                "Name": "Bahamas"
            },
            {
                "Code": "BH",
                "Name": "Bahrain"
            },
            {
                "Code": "BD",
                "Name": "Bangladesh"
            },
            {
                "Code": "BB",
                "Name": "Barbados"
            },
            {
                "Code": "BY",
                "Name": "Belarus"
            },
            {
                "Code": "BE",
                "Name": "Belgium"
            },
            {
                "Code": "BZ",
                "Name": "Belize"
            },
            {
                "Code": "BJ",
                "Name": "Benin"
            },
            {
                "Code": "BM",
                "Name": "Bermuda"
            },
            {
                "Code": "BT",
                "Name": "Bhutan"
            },
            {
                "Code": "BO",
                "Name": "Bolivia, Plurinational State of"
            },
            {
                "Code": "BQ",
                "Name": "Bonaire, Sint Eustatius and Saba"
            }
        ]
    }
}
```

Feedback example cut off for space constraints

Platform.Subscribe

Sets the unit to provide feedback messages any time a WAVE setting is changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Platform.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Platform.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
  "method": "UserSpecParam",
  "params": {
    "platformReady": true,
    "updateReady": true,
    "country": "US",
    "countries": [
      {
        "Code": "AF",
        "Name": "Afghanistan"
      },
      {
        "Code": "AX",
        "Name": "Åland Islands"
      },
      {
        "Code": "AL",
        "Name": "Albania"
      },
      {
        "Code": "DZ",
        "Name": "Algeria"
      },
      {
        "Code": "AS",
        "Name": "American Samoa"
      },
      {
        "Code": "AD",
        "Name": "Andorra"
      },
      {
        "Code": "AO",
        "Name": "Angola"
      },
      {
        "Code": "AI",
        "Name": "Anguilla"
      },
      {
        "Code": "AQ",
        "Name": "Antarctica"
      },
      {
        "Code": "AG",
        "Name": "Antigua and Barbuda"
      },
      {
        "Code": "AR",
        "Name": "Argentina"
      },
      {
        "Code": "AM",
        "Name": "Armenia"
      },
      {
        "Code": "AW",
        "Name": "Aruba"
      },
      {
        "Code": "AU",
        "Name": "Australia"
      },
      {
        "Code": "AT",
        "Name": "Austria"
      },
      {
        "Code": "AZ",
        "Name": "Azerbaijan"
      },
      {
        "Code": "BS",
        "Name": "Bahamas"
      },
      {
        "Code": "BH",
        "Name": "Bahrain"
      },
      {
        "Code": "BD",
        "Name": "Bangladesh"
      },
      {
        "Code": "BB",
        "Name": "Barbados"
      },
      {
        "Code": "BY",
        "Name": "Belarus"
      },
      {
        "Code": "BE",
        "Name": "Belgium"
      },
      {
        "Code": "BZ",
        "Name": "Belize"
      },
      {
        "Code": "BJ",
        "Name": "Benin"
      },
      {
        "Code": "BM",
        "Name": "Bermuda"
      },
      {
        "Code": "BT",
        "Name": "Bhutan"
      },
      {
        "Code": "BO",
        "Name": "Bolivia, Plurinational State of"
      },
      {
        "Code": "BQ",
        "Name": "Bonaire, Sint Eustatius and Saba"
      },
      {
        "Code": "BW",
        "Name": "Botswana"
      },
      {
        "Code": "BV",
        "Name": "Bouvet Island"
      },
      {
        "Code": "CV",
        "Name": "Cabo Verde"
      },
      {
        "Code": "CR",
        "Name": "Costa Rica"
      },
      {
        "Code": "CI",
        "Name": "Côte d'Ivoire"
      },
      {
        "Code": "HR",
        "Name": "Croatia"
      },
      {
        "Code": "CY",
        "Name": "Cyprus"
      },
      {
        "Code": "DK",
        "Name": "Czechia"
      },
      {
        "Code": "DO",
        "Name": "Dominican Republic"
      },
      {
        "Code": "DZ",
        "Name": "Djibouti"
      },
      {
        "Code": "EG",
        "Name": "Egypt"
      },
      {
        "Code": "GQ",
        "Name": "Equatorial Guinea"
      },
      {
        "Code": "ER",
        "Name": "Eritrea"
      },
      {
        "Code": "SI",
        "Name": "Eslovenia"
      },
      {
        "Code": "ES",
        "Name": "Spain"
      },
      {
        "Code": "LK",
        "Name": "Sri Lanka"
      },
      {
        "Code": "ME",
        "Name": "Montenegro"
      },
      {
        "Code": "PS",
        "Name": "State of Palestine"
      },
      {
        "Code": "SD",
        "Name": "Sudan"
      },
      {
        "Code": "SL",
        "Name": "Sierra Leone"
      },
      {
        "Code": "SS",
        "Name": "South Sudan"
      },
      {
        "Code": "TA",
        "Name": "Tajikistan"
      },
      {
        "Code": "TN",
        "Name": "Tunisia"
      },
      {
        "Code": "TR",
        "Name": "Turkey"
      },
      {
        "Code": "UA",
        "Name": "Ukraine"
      },
      {
        "Code": "UZ",
        "Name": "Uzbekistan"
      },
      {
        "Code": "VU",
        "Name": "Vanuatu"
      },
      {
        "Code": "YE",
        "Name": "Yemen"
      },
      {
        "Code": "ZW",
        "Name": "Zimbabwe"
      }
    ]
  }
}
```

Feedback example cut off for space constraints

Platform.Unsubscribe

Turns off the feedback messages for unit settings.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Platform.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Platform.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Platform.Reboot

Reboots the WAVE.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Platform.Reboot"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Platform.Reboot"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Platform.FactoryReset

Factory resets the WAVE.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Platform.FactoryReset"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Platform.FactoryReset"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Portal.Get

Displays the current webGUI settings.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Portal.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Portal.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "ready": true,
    "settings": {
      "Portal/RoomName": "Wave",
      "Portal/WebServer/protocol": "both"
    }
  },
  "jsonrpc": "2.0"
}
```

Portal.Subscribe

Sets the unit to provide feedback messages whenever anything is changed in the webGUI.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Portal.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Portal.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "ready": true,
        "settings": {
            "Portal/RoomName": "Wave",
            "Portal/WebServer/protocol": "both"
        }
    },
    "jsonrpc": "2.0"
}
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

Portal.Unsubscribe

Turns off the feedback messages for the webGUI.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Portal.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Portal.Unsubscribe"}
```

Feedback

```
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

Portal.Save

Updates the portal/room name.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Portal.Save", "params": {"Portal/RoomName": "Y"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Portal/RoomName

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Portal.Save", "params": {"Portal/RoomName": "Wave"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Portal.DeleteUserCert

Deletes any user uploaded PXF file.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Portal.DeleteUserCert"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Portal.DeleteUserCert"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Portal.RestartWebServer

Restarts the webGUI.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Portal.RestartWebServer"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Portal.RestartWebServer"}
```

Feedback

N/A

System.Get

Displays the current system settings.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"System.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"System.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "timezone": "America/Chicago",
    "timeformat": "12hr",
    "version": "1.0.0-RC-340 (wave)",
    "mode": "PROD",
    "auth": {
      "admin": false,
      "instructor": false
    },
    "rebooting": false,
    "updating": {
      "error": "",
      "filePath": "",
      "rollingBack": "false",
      "status": "",
      "updating": "false"
    },
    "network": {
      "hostname": "nil",
      "wired": {
        "macaddress": "B8:98:B0:05:93:E6",
        "ipaddress": "192.168.50.134"
      },
      "wireless": {
        "donglepresent": false,
        "enabled": false,
        "macaddress": "",
        "ipaddress": ""
      }
    },
    "jsonrpc": "2.0"
  }
}
```

System.Subscribe

Sets the unit to provide feedback messages whenever system settings are changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "System.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "System.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "timezone": "America/Chicago",
        "timeformat": "12hr",
        "version": "1.0.0-RC-340 (wave)",
        "mode": "PROD",
        "auth": {
            "admin": false,
            "instructor": false
        },
        "rebooting": false,
        "updating": {
            "error": "",
            "filePath": "",
            "rollingBack": "false",
            "status": "",
            "updating": "false"
        },
        "network": {
            "hostname": "nil",
            "wired": {
                "macaddress":
                    "B8:98:B0:05:93:E6",
                "ipaddress": "192.168.50.134"
            },
            "wireless": {
                "donglepresent": false,
                "enabled": false,
                "macaddress": "",
                "ipaddress": ""
            }
        }
    },
    "jsonrpc": "2.0"
}
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

System.Unsubscribe

Turns off system feedback messages.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "System.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "System.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Thumbnail.Subscribe

Sets the unit to provide feedback whenever a thumbnail is updated.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Thumbnail.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Thumbnail.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Thumbnail.Unsubscribe

Turns off thumbnail feedback messages.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Thumbnail.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Thumbnail.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Time.Get

Displays the current time settings of the WAVE.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Time.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Time.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "ready": true,
    "timezones": [
      {
        "name": "Africa/Abidjan",
        "offset": 0,
        "zone": "GMT",
        "dst": false,
        "soff": 0,
        "szone": "GMT",
        "woff": 0,
        "wzone": "GMT"
      },
      {
        "name": "Africa/Algiers",
        "offset": 3600,
        "zone": "CET",
        "dst": false,
        "soff": 3600,
        "szone": "CET",
        "woff": 3600,
        "wzone": "CET"
      },
      {
        "name": "Africa/Cairo",
        "offset": 7200,
        "zone": "EET",
        "dst": false,
        "soff": 7200,
        "szone": "EET",
        "woff": 7200,
        "wzone": "EET"
      }
    ]
  }
}
```

Feedback example cut off for space constraints

Time.Subscribe

Sets the unit to provide feedback whenever the time settings are changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Time.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Time.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "ready": true,
        "timezones": [
            {
                "name": "Africa/Abidjan",
                "offset": 0,
                "zone": "GMT",
                "dst": false,
                "soff": 0,
                "szone": "GMT",
                "woff": 0,
                "wzone": "GMT"
            },
            {
                "name": "Africa/Accra",
                "offset": 0,
                "zone": "GMT",
                "dst": false,
                "soff": 0,
                "szone": "GMT",
                "woff": 0,
                "wzone": "GMT"
            },
            {
                "name": "Africa/Algiers",
                "offset": 3600,
                "zone": "CET",
                "dst": false,
                "soff": 3600,
                "szone": "CET",
                "woff": 3600,
                "wzone": "CET"
            },
            {
                "name": "Africa/Bissau",
                "offset": 0,
                "zone": "GMT",
                "dst": false,
                "soff": 0,
                "szone": "GMT",
                "woff": 0,
                "wzone": "GMT"
            }
        ],
        "szone": "GMT",
        "woff": 0,
        "wzone": "GMT"
    }
}
```

```

        "szone": "GMT",
        "woff": 0,
        "wzone": "GMT"
    },
    {
        "name": "Africa/Cairo",
        "offset": 7200,
        "zone": "EET",
        "dst": false,
        "soff": 7200,
        "szone": "EET",
        "woff": 7200,
        "wzone": "EET"
    },
    {
        "name": "Africa/Casablanca",
        "offset": 3600,
        "zone": "+01",
        "dst": false,
        "soff": 3600,
        "szone": "+01",
        "woff": 3600,
        "wzone": "+01"
    },
    {
        "name": "Africa/Ceuta",
        "offset": 7200,
        "zone": "CEST",
        "dst": true,
        "soff": 7200,
        "szone": "CEST",
        "woff": 3600,
        "wzone": "CET"
    },
    {
        "name": "Africa/El_Aaiun",
        "offset": 3600,
        "zone": "+01",
        "dst": false,
        "soff": 3600,
        "szone": "+01",
        "woff": 3600,
        "wzone": "+01"
    }
},
{
    "name": "Africa/Johannesburg",
    "offset": 7200,
    "zone": "SAST",
    "dst": false,
    "soff": 7200,
    "szone": "SAST",
    "woff": 7200,
    "wzone": "SAST"
},
{
    "name": "Africa/Juba",
    "offset": 10800,
    "zone": "EAT",
    "dst": false,
    "soff": 10800,
    "szone": "EAT",
    "woff": 10800,
    "wzone": "EAT"
},
{
    "name": "Africa/Khartoum",
    "offset": 7200,
    "zone": "CAT",
    "dst": false,
    "soff": 7200,
    "szone": "CAT",
    "woff": 7200,
    "wzone": "CAT"
}
}
```

Feedback example cut off for space constraints

Time.Unsubscribe

Turns off the time settings feedback.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Time.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Time.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Time.SetTime

Sets the unit to the specified timestamp.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Time.SetTime", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	timestamp

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Time.SetTime", "params": 1625369340}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Time.SetTimeZone

Sets the unit to a specific time zone.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Time.SetTimeZone", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	timestamp

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Time.SetTimeZone", "params": "America/Los_Angeles"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Time.SetNTPSettings

Enables/disables and sets the NTP settings

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Time.SetNTPSettings", "params": "Y", "Z"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	enabled
Z	params	hostname (when enabled is true)

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Time.SetNTPSettings", "enabled": false}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Time.GetDeviceTime

Provides the current time for the WAVE.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Time.GetDeviceTime"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Time.GetDeviceTime"}
```

Feedback

```
{
  "id": "User1",
  "result": 1626077567000,
  "jsonrpc": "2.0"
}
```

VideoControl.Get

Displays the settings of the video currently playing.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "VideoControl.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "VideoControl.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "ready": true,
    "videos": {
      "Portal-youtube-2e2c0fcb-595b-4bc3-bf00-5b5cb58ba59f": {
        "ready": true,
        "playing": true,
        "playedInSec": 6,
        "duration": 202,
        "userLastSeek": -1
      }
    }
  },
  "jsonrpc": "2.0"
}
```

VideoControl.Subscribe

Sets the unit to provide feedback whenever video information is changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "VideoControl.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "VideoControl.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
  "method": "UserSpecParam",
  "params": {
    "ready": true,
    "videos": {
      "Portal-youtube-2e2c0fcb-595b-4bc3-bf00-5b5cb58ba59f": {
        "ready": true,
        "playing": false,
        "playedInSec": 14,
        "duration": 202,
        "userLastSeek": -1
      }
    }
  },
  "jsonrpc": "2.0"
}
```

VideoControl.Unsubscribe

Turns off the video settings feedback.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "VideoControl.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "VideoControl.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

VideoControl.VidReady

Sets the specified video up to play.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "VideoControl.VidReady", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	panelId

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "VideoControl.VidReady", "params": "Portal-youtube-0e1ddaa0-5243-4784-a869-b531c430f1dd"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "ready": true,
        "videos": {
            "Portal-youtube-2e2c0fcb-595b-4bc3-bf00-5b5cb58ba59f": {
                "ready": true,
                "playing": false,
                "playedInSec": 14,
                "duration": 202,
                "userLastSeek": -1
            }
        }
    },
    "jsonrpc": "2.0"
}
```

VideoControl.Play

Starts the currently queued video.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "VideoControl.Play", "params": {"panelId": "Y", "playing": "Z"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	panelId
Z	params	playing (true, false)

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "VideoControl.Play", "params": {"panelId": "abc", "playing": false}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

VideoControl.SeekTo

Jumps the current video to the specified time.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "VideoControl.SeekTo", "params": {"Y", "Z"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	panelId
Z	params	seekToSec

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "VideoControl.SeekTo", "params": {"panelId": "Portal-youtube-0e1ddaa0-5243-4784-a869-b531c430f1dd", "seekToSec": "156"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

WelcomeAdmin.Get

Displays the current welcome screen settings.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"WelcomeAdmin.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"WelcomeAdmin.Get"}
```

Feedback

```
{
    "id": "User1",
    "result": {
        "ready": true,
        "welcomeType": "default",
        "settings": {
            "DisplayResolution": "3840x2160",
            "Welcome/UserUploadPath": "",
            "Welcome/default/TimeFormat": "12hr",
            "Welcome/default/qr/message": "Scan to get to the web UI",
            "Welcome/default/qr/title": "Office",
            "Welcome/default/qr/url": "",
            "Welcome/default/showssid": "true",
            "Welcome/external/delay": "0",
            "Welcome/external/enabled": "false",
            "Welcome/external/footer": "false",
            "Welcome/external/url": "",
            "Welcome/user/enabled": "false",
            "Welcome/user/indexFile": "index.html",
            "network/ethernet/address": "192.168.50.134",
            "network/wifi	mode": "DISABLED"
        }
    },
    "jsonrpc": "2.0"
}
```

WelcomeAdmin.Subscribe

Sets the unit to provide feedback whenever the welcome screen settings have changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "WelcomeAdmin.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "WelcomeAdmin.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "ready": true,
        "welcomeType": "default",
        "settings": {
            "DisplayResolution": "3840x2160",
            "Welcome/UserUploadPath": "",
            "Welcome/default/TimeFormat":
            "12hr",
            "Welcome/default/qr/message":
            "Scan to get to the web UI",
            "Welcome/default/qr/title":
            "Office",
            "Welcome/default/qr/url": "",
            "Welcome/default/showssid":
            "true",
            "Welcome/external/delay": "0",
            "Welcome/external/enabled":
            "false",
            "Welcome/external/footer": "false",
            "Welcome/external/url": "",
            "Welcome/user/enabled": "false",
            "Welcome/user/indexFile": "index.html",
            "network/ethernet/address":
            "192.168.50.134",
            "network/wifi	mode": "DISABLED"
        }
    },
    "jsonrpc": "2.0"
}
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

WelcomeAdmin.Unsubscribe

Turns off welcome screen feedback messages.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"WelcomeAdmin.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"WelcomeAdmin.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

WelcomeAdmin.Save

Changes the settings of the welcome screen / digital signage.

Structure

```
{"jsonrpc":"2.0","id":"Q","method":"WelcomeAdmin.Save","params":{"R","S","T","U","V","W","X","Y","Z"}}
```

Identifier	Request Object	Parameters
Q	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
R		Portal/Welcome/default/qr/message
S	params	Portal/Welcome/default/qr/title
T	params	Portal/Welcome/default/qr/url
U	params	Portal/Welcome/external/delay
V	params	Portal/Welcome/external/enabled (in seconds)
W	params	Portal/Welcome/external/footer
X	params	Portal/Welcome/external/url
Y	params	Portal/Welcome/user/enabled
Z	params	Portal/Welcome/user/indexFile

Example

```
{"jsonrpc":"2.0","id":"User1","method":"WelcomeAdmin.Save","params":{"Portal/Welcome/default/qr/message":"Scan to navigate to ","Portal/Welcome/default/qr/title":"Welcome","Portal/Welcome/default/qr/url":"https://welcome.atlona.com","Portal/Welcome/external/delay":"35","Portal/Welcome/external/footer":"Contact Admin","Portal/Welcome/user/enabled":false,"Portal/Welcome/user/indexFile":"index.html"}}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

Welcome.Get

Displays the current welcome screen system settings.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Welcome.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Welcome.Get"}
```

Feedback

```
{
    "id": "User1",
    "result": {
        "nonce": 12,
        "settings": {
            "BYOD/PIN/Airplay": "4085",
            "BYOD/PIN/Miracast": "00002564",
            "BYOD/PIN/State": "true",
            "DisplayResolution": "3840x2160",
            "Platform/Version/Product": "1.0.0-RC-340 (wave)",
            "Portal/RoomName": "Wave",
            "PortalURL": "http://192.168.50.134",
            "ReadyToStream": "true",
            "Time/TimeZone": "America/Los_Angeles",
            "Welcome/UserUploadPath": "",
            "Welcome/default/TimeFormat": "12hr",
            "Welcome/default/qr/message": "Scan to get to the web UI",
            "Welcome/default/qr/title": "Office",
            "Welcome/default/qr/url": "",
            "Welcome/default/showssid": "true",
            "Welcome/external/delay": "0",
            "Welcome/external/enabled": "false",
            "Welcome/external/footer": "false",
            "Welcome/external/url": "",
            "Welcome/user/enabled": "false",
            "Welcome/user/indexFile": "index.html",
            "network/ethernet/address": "192.168.50.134",
            "network/ethernet/mac_addr": "B8:98:B0:05:93:E6",
            "network/hostname": "nil",
            "network/wifi/ap/passwd": "12345678",
            "network/wifi/ap/ssid": "wave",
            "network/wifi/dongle": "false",
            "network/wifi/mac_addr": "",
            "network/wifi	mode": "DISABLED"
        },
        "debugSettings": {
            "videosDisabled": false,
            "textDisabled": false,
            "debugMessages": false
        },
        "videos": [
            "Video Project Fade In And Out 1080p fps30 H264-1.mp4"
        ],
        "jsonrpc": "2.0"
    }
}
```

Welcome.Subscribe

Sets the unit to provide feedback whenever the welcome screen system settings have changed.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "Welcome.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "Welcome.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
  "method": "UserSpecParam",
  "params": {
    "nonce": 13,
    "settings": {
      "BYOD/PIN/Airplay": "4085",
      "BYOD/PIN/Miracast": "00002564",
      "BYOD/PIN/State": "true",
      "DisplayResolution": "3840x2160",
      "Platform/Version/Product": "1.0.0-RC-340 (wave)",
      "Portal/RoomName": "Wave",
      "PortalURL": "http://192.168.50.134",
      "ReadyToStream": "true",
      "Time/TimeZone": "America/Los_Angeles",
      "Welcome/UserUploadPath": "",
      "Welcome/default/TimeFormat": "12hr",
      "Welcome/default/qr/message": "Scan to get to the web UI",
      "Welcome/default/qr/title": "Office",
      "Welcome/default/qr/url": "",
      "Welcome/default/showssid": "true",
      "Welcome/external/delay": "0",
      "Welcome/external/enabled": "false",
      "Welcome/external/footer": "false",
      "Welcome/external/url": "",
      "Welcome/user/enabled": "false",
      "Welcome/user/indexFile": "index.html",
      "network/ethernet/address": "192.168.50.134",
      "network/ethernet/mac_addr": "B8:98:B0:05:93:E6",
      "network/hostname": "nil",
      "network/wifi/ap/passwd": "12345678",
      "network/wifi/ap/ssid": "wave",
      "network/wifi/dongle": "false",
      "network/wifi/mac_addr": "",
      "network/wifi	mode": "DISABLED"
    },
    "debugSettings": {
      "videosDisabled": false,
      "textDisabled": false,
      "debugMessages": false
    },
    "videos": [
      "Video Project Fade In And Out 1080p fps30 H264-1.mp4"
    ]
  },
  "jsonrpc": "2.0"
}
```

Welcome.Unsubscribe

Turns off welcome screen system feedback messages.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"Welcome.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"Welcome.Unsubscribe"}
```

Feedback

```
{
  "id": "User1",
  "result": true,
  "jsonrpc": "2.0"
}
```

YouTubeLive.Get

Displays the current settings of YouTube Live.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"YouTubeLive.Get"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc":"2.0","id":"User1","method":"YouTubeLive.Get"}
```

Feedback

```
{
  "id": "User1",
  "result": {
    "ready": true,
    "settings": {
      "YouTubeLive/Enabled": "false",
      "YouTubeLive/Started": "false",
      "YouTubeLive/Stream/Key": "",
      "YouTubeLive/Stream/URL": "",
      "YouTubeLive/Streaming": "false",
      "network/wifi	mode": "DISABLED"
    }
  },
  "jsonrpc": "2.0"
}
```

YouTubeLive.Subscribe

Sets the unit to provide feedback anytime YouTube Live settings are altered.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "YouTubeLive.Subscribe", "params": "Y"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	Provide a name that will display with display changes

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "YouTubeLive.Subscribe", "params": "UserSpecParam"}
```

Feedback

```
{
    "method": "UserSpecParam",
    "params": {
        "ready": true,
        "settings": {
            "YouTubeLive/Enabled": "false",
            "YouTubeLive/Started": "false",
            "YouTubeLive/Stream/Key": "",
            "YouTubeLive/Stream/URL": "",
            "YouTubeLive/Streaming": "false",
            "network/wifi	mode": "DISABLED"
        }
    },
    "jsonrpc": "2.0"
}
```

YouTubeLive.Unsubscribe

Turns off YouTube Live feedback messages.

Structure

```
{"jsonrpc": "2.0", "id": "X", "method": "YouTubeLive.Unsubscribe"}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands

Example

```
{"jsonrpc": "2.0", "id": "User1", "method": "YouTubeLive.Unsubscribe"}
```

Feedback

```
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

YouTubeLive.Settings

Sets the key and URL for the YouTube Live stream.

Structure

```
{"jsonrpc":"2.0","id":"X","method":"YouTubeLive.Settings","params":{"YouTubeLive/Stream/Key":"Y","YouTubeLive/Stream/URL":"Z"}}
```

Identifier	Request Object	Parameters
X	id	*Optional* Type in a user id, this will return with each feedback, to provide a way to see the difference between commands
Y	params	YouTubeLive/Stream/Key
Z	params	YouTubeLive/Stream/URL

Example

```
{"jsonrpc":"2.0","id":"User1","method":"YouTubeLive.Settings","params":{"YouTubeLive/Stream/Key":"0e1ddaa0-5243-4784-a869-b531c430f1dd","YouTubeLive/Stream/URL":"https://www.youtube.com/watch?v=itEvPUCMehw"}}
```

Feedback

```
{
    "id": "User1",
    "result": true,
    "jsonrpc": "2.0"
}
```

