



# Stem Third-Party API Controls

Stem Third-Party API Controls command strings  
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# Table of Contents

<b>Stem Third-Party API Controls</b>	<b>3</b>	<b>Mute Status</b>	<b>3</b>
<b>STEM Third-Party API Controls</b>	<b>3</b>	<b>Volume Status</b>	<b>4</b>
<b>Subscribing a Controller to a Device</b>	<b>3</b>	<b>Device Status Information</b>	<b>4</b>

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## Stem Third-Party API Controls

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### STEM Third-Party API Controls

This outlines the API created to allow third-party companies to query some device information, allow volume control, and subscribe for device status changes.

**Encryption:** None, clear string text as described.

**Transmission Protocol:** UDP

**Port:** 8888

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## Subscribing a Controller to a Device

This feature allows push notifications from a device to reach a third-party controller. It sets the IP of the controller, subscribing it to that device's notifications and status changes.

Important: Devices need to be subscribed individually. Only one third-party controller can be set and subscribed to a specific device.

### Set Third-Party Controller IP

- Send - STEM\_EXTERNAL\_CTRL\_SET\_REQ;
  - Example: STEM\_EXTERNAL\_CTRL\_SET\_REQ:192.168.1.100;
- Response - STEM\_EXTERNAL\_CTRL\_SET\_RSP:[status]
  - [status]: "0" - Fail. "1" - Success.

### Statuses pushed to the IP once set

#### Volume Changes

- STEM\_VOL\_STATUS\_GET\_RSP:[volume]
  - [volume]: Volume level ranges 0 to 100

#### Mute Status Changes

- STEM\_MIC\_MUTE\_STATUS\_RSP:[status]
  - [status]: "0" - Unmuted. "1" - Muted.

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## Mute Status

These commands get/set the device's mute status. Status: 0 is unmuted, 1 is muted.

### Mute

- Send - STEM\_MIC\_MUTE\_REQ;
- Response - STEM\_MIC\_MUTE\_STATUS\_RSP:[status]

## Unmute

- Send - STEM\_MIC\_UNMUTE\_REQ:
- Response - STEM\_MIC\_MUTE\_STATUS\_RSP:[status]

## Mute Toggle

- Send - STEM\_MIC\_MUTE\_TOGGLE\_REQ:
- Response - STEM\_MIC\_MUTE\_STATUS\_RSP:[status]

## Mute Status

- Send - STEM\_MIC\_MUTE\_STATUS\_REQ:
- Response - STEM\_MIC\_MUTE\_STATUS\_RSP:[status]

# Volume Status

These commands get/set the device's volume. If the USB is plugged into a computer, these commands increment the volume up/down. Volume level ranges 0 to 100.

## Volume Up

- Send - STEM\_VOL\_UP\_REQ:
- Response (will be pushed to the Controller Set) - STEM\_VOL\_STATUS\_GET\_RSP:[volume]

## Volume Down

- Send - STEM\_VOL\_DOWN\_REQ:
- Response (will be pushed to the Controller Set) - STEM\_VOL\_STATUS\_GET\_RSP:[volume]

## Volume Status

- Send - STEM\_VOL\_STATUS\_GET\_REQ:
- Response - STEM\_VOL\_STATUS\_GET\_RSP:[volume]

# Device Status Information

## Device Status

This provides the status of a device in a room. It is used to make sure all units are still online and connected.

- Send - STEM\_DEVICE\_STATUS\_GET\_REQ:
- Response - STEM\_DEVICE\_STATUS\_GET\_RSP:[status]

[status]: "0" - not all devices are connected in a room. "1" - everything is connected and working.

## Room Name

This provides the name of the room the device is currently in.

- Send - STEM\_ROOM\_NAME\_GET\_REQ:
- Response - STEM\_ROOM\_NAME\_GET\_RSP:[roomname]

[roomname]: "-1" - Device does not belong to a room, otherwise it will provide the string of the room name.

## Call Status

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This provides the call status of the device or the room.

- Send - STEM\_CALL\_STATUS\_GET\_REQ:
- Response - STEM\_CALL\_STATUS\_GET\_RSP:[status]

[status]: "0" - not in a call. "1" - in a call.

**Device Serial** This provides the device's serial number.

- Send - STEM\_DEVICE\_SERIAL\_GET:
- Response - STEM\_DEVICE\_SERIAL\_GET\_RSP:[serial]

[serial]: "0" - no serial number set, otherwise provides the string of the serial number.