



# MXA-MUTE

## Command Strings

Shure MXA Network Mute Button command strings for third-party control systems, such as AMX, Crestron, or Extron. Includes all supported programming commands.

Version: 1 (2020-E)

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# MXA-MUTE

## Command Strings

### Using a Third-Party Control System

This device can be controlled using a third-party control system with the appropriate command string.

#### Common applications:

- Mute
- LED color and behavior
- Loading presets
- Adjusting levels

The device is connected via Ethernet to a control system, such as AMX, Crestron or Extron.

- **Connection:** Ethernet (TCP/IP; select “Client” in the AMX/Crestron program)
- **Port:** 2202

If using static IP addresses, set the Shure Control and the Audio Network settings to Manual in Designer. Use the Control IP address for TCP/IP communication with Shure devices.

See below for all supported command strings. This list is updated with each firmware release.

#### Get All

<b>Parameter Name:</b>	ALL
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	Responds with <b>REP</b> for all device-specific properties and <b>ALL</b> channel-related properties.
<b>Example(s):</b>	< GET ALL >

#### Model

<b>Parameter Name:</b>	MODEL
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a

<b>Value(s):</b>	<b>model</b> is a 32 character quoted string. The value is padded with spaces to ensure that 32 characters are reported.
<b>Example(s):</b>	< GET MODEL > :  < REP MODEL model >

## Serial Number

<b>Parameter Name:</b>	SERIAL_NUM
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<b>serial_num</b> is a 32 alphanumeric character string. Response is padded to ensure that 32 characters are always returned
<b>Example(s):</b>	< GET SERIAL_NUM >  < REP SERIAL_NUM serial_num >

## Firmware Version

<b>Parameter Name:</b>	FW_VER
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	Where <b>ver</b> is an 18 character literal string:  The value is 3 versions separated by a period. Each version shall be able to take on a value from 0 to 65535. <b>ver</b> has an "*" if the firmware is invalid. <b>Example:</b> 65535.65535.65535
<b>Example(s):</b>	< GET FW_VER > :  < REP FW_VER ver >

## Control MAC Address

<b>Parameter Name:</b>	CONTROL_MAC_ADDR
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<b>addr</b> is a 17 character literal string formatted as 6 octets, each separated by a colon. <b>Example:</b> 00:0E:DD:FF:F1:63
<b>Example(s):</b>	< GET CONTROL_MAC_ADDR > : < REP CONTROL_MAC_ADDR addr >  < REP ERR >

## Device ID

<b>Parameter Name:</b>	DEVICE_ID
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	Response is a text string. Most devices allow device ID to be up to 31 characters. Value is padded with spaces as needed to ensure that 31 characters are always reported
<b>Example(s):</b>	< GET DEVICE_ID > :  < REP DEVICE_ID string >

## Flash

<b>Parameter Name:</b>	FLASH
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a

<b>Value(s):</b>	<b>flash_state</b> takes on values ON OFF
<b>Example(s):</b>	< GET FLASH > < SET FLASH flash_state > < REP FLASH flash_state > < REP ERR >

## Presets

<b>Parameter Name:</b>	PRESET
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	## is the preset number and takes on values 1-10.
<b>Value(s):</b>	n/a
<b>Example(s):</b>	< GET PRESET > < SET PRESET ## > < REP PRESET ## > < REP ERR >

## Restore Default Settings

<b>Parameter Name:</b>	DEFAULT_SETTINGS
<b>Command Types Supported:</b>	SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	## = 00 if restore is successful
<b>Example(s):</b>	< SET DEFAULT_SETTINGS > < REP DEFAULT_SETTINGS ## > < REP ERR >

## View Preset Name

<b>Parameter Name:</b>	PRESET_NAME
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<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	1-10: specific preset identifier
<b>Value(s):</b>	<b>name</b> is a literal string 25 alphanumeric characters long, special characters allowed except blank spaces, {} and < >.  Note that if a preset is empty, <b>name</b> will say {empty}
<b>Example(s):</b>	< GET PRESET_NAME nn > < REP PRESET_NAME nn name > < REP ERR >

## Reboot

Note: This command does not send acknowledgement.

<b>Parameter Name:</b>	REBOOT
<b>Command Types Supported:</b>	SET
<b>Indexing:</b>	n/a
<b>Value(s):</b>	n/a
<b>Example(s):</b>	< SET REBOOT >

## Get Error Events

<b>Parameter Name:</b>	LAST_ERROR_EVENT
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	Sends the last error logged on the device, as represented by {str}. {str} is up to 128 characters long.
<b>Example(s):</b>	< GET LAST_ERROR_EVENT > < REP LAST_ERROR_EVENT {str} > < REP ERR >

## Mute LED State

<b>Parameter Name:</b>	DEV_MUTE_STATUS_LED_STATE
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<p><b>sts</b> is current mute LED state that takes on these values:</p> <p>ON = MUTED OFF = UNMUTED</p>
<b>Example(s):</b>	<pre>&lt; GET DEV_MUTE_STATUS_LED_STATE &gt; &lt; REP DEV_MUTE_STATUS_LED_STATE sts &gt; &lt; REP ERR &gt;</pre>

## LED Brightness

<b>Parameter Name:</b>	LED_BRIGHTNESS
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<p><b>level</b> is the desired brightness level and takes on values:</p> <p>0: Disabled 1: 20% 2: 40% 3: 60% 4: 80% 5: 100%</p>
<b>Example(s):</b>	<pre>&lt; GET LED_BRIGHTNESS &gt; &lt; SET LED_BRIGHTNESS level &gt; &lt; REP LED_BRIGHTNESS level &gt; &lt; REP ERR &gt;</pre>

## LED Mute Indication

<b>Parameter Name:</b>	LED_COLOR_UNMUTED
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a



<b>Value(s):</b>	<b>color:</b> RED, ORANGE, GOLD, YELLOW, YELLOWGREEN, GREEN, TURQUOISE, POWDERBLUE, CYAN, SKYBLUE, BLUE, PURPLE, LIGHTPURPLE, VIOLET, ORCHID, PINK, WHITE
<b>Example(s):</b>	<pre>&lt; GET LED_COLOR_UNMUTED &gt; &lt; SET LED_COLOR_UNMUTED color &gt; &lt; REP LED_COLOR_UNMUTED color &gt; &lt; REP ERR &gt;</pre>

## LED Color Muted

<b>Parameter Name:</b>	LED_COLOR_MUTED
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<b>color:</b> RED, ORANGE, GOLD, YELLOW, YELLOWGREEN, GREEN, TURQUOISE, POWDERBLUE, CYAN, SKYBLUE, BLUE, PURPLE, LIGHTPURPLE, VIOLET, ORCHID, PINK, WHITE
<b>Example(s):</b>	<pre>&lt; GET LED_COLOR_MUTED &gt; &lt; SET LED_COLOR_MUTED color &gt; &lt; REP LED_COLOR_MUTED color &gt; &lt; REP ERR &gt;</pre>

## LED State Muted

<b>Parameter Name:</b>	LED_STATE_MUTED
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<b>state:</b> ON, FLASHING, OFF
<b>Example(s):</b>	<pre>&lt; GET LED_STATE_MUTED &gt; &lt; SET LED_STATE_MUTED state &gt; &lt; REP LED_STATE_MUTED state &gt; &lt; REP ERR &gt;</pre>

## LED State Unmuted

<b>Parameter Name:</b>	LED_STATE_UNMUTED
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<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<b>state:</b> ON, FLASHING, OFF
<b>Example(s):</b>	<pre>&lt; GET LED_STATE_UNMUTED &gt; &lt; SET LED_STATE_UNMUTED state &gt; &lt; REP LED_STATE_UNMUTED state &gt; &lt; REP ERR &gt;</pre>

## Device LED In State

<b>Parameter Name:</b>	DEV_LED_IN_STATE
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<p><b>sts</b> indicates device's LED-In state:</p> <ol style="list-style-type: none"> <li>1. OFF = Mute</li> <li>2. ON = Unmute</li> </ol>
<b>Example(s):</b>	<pre>&lt; GET DEV_LED_IN_STATE &gt; &lt; SET DEV_LED_IN_STATE sts &gt; &lt; REP DEV_LED_IN_STATE sts &gt; &lt; REP ERR &gt;</pre>

## Mute Button Status

<b>Parameter Name:</b>	MUTE_BUTTON_STATUS
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<b>sts</b> is current mute button press status and takes on values: ON, OFF, or UNKNOWN
<b>Example(s):</b>	<pre>&lt; GET MUTE_BUTTON_STATUS &gt; &lt; REP MUTE_BUTTON_STATUS sts &gt; &lt; REP ERR &gt;</pre>

## Device Switch Out State

<b>Parameter Name:</b>	EXT_SWITCH_OUT_STATE
<b>Command Types Supported:</b>	GET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<p><b>sts</b> indicates device's switch out state:</p> <ol style="list-style-type: none"> <li>1. Off = Mute</li> <li>2. On = Unmute</li> </ol>
<b>Example(s):</b>	<pre>&lt; GET EXT_SWITCH_OUT_STATE &gt; &lt; REP EXT_SWITCH_OUT_STATE sts &gt; &lt; REP ERR &gt;</pre>

## Mute Control Function

<b>Parameter Name:</b>	MUTE_CONTROL_FUNC
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<p><b>sts</b> indicates device's mute control setting:</p> <p>ENABLED DISABLED</p>
<b>Example(s):</b>	<pre>&lt; GET MUTE_CONTROL_FUNC &gt; &lt; SET MUTE_CONTROL_FUNC sts &gt; &lt; REP MUTE_CONTROL_FUNC sts &gt; &lt; REP ERR &gt;</pre>

## Mute Control Mode

<b>Parameter Name:</b>	MUTE_CONTROL_MODE
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<p><b>mode</b> is:</p> <p>TOG: Toggle</p>

	PTT: Push-to-talk PTM: Push-to-mute
<b>Example(s):</b>	<pre>&lt; GET MUTE_CONTROL_MODE &gt; &lt; SET MUTE_CONTROL_MODE mode &gt; &lt; REP MUTE_CONTROL_MODE mode &gt; &lt; REP ERR &gt;</pre>

## Default Toggle State

<b>Parameter Name:</b>	DEFAULT_TOGGLE_STATE
<b>Command Types Supported:</b>	GET, SET, REP
<b>Indexing:</b>	n/a
<b>Value(s):</b>	<b>state is:</b> Muted Unmuted
<b>Example(s):</b>	<pre>&lt; GET DEFAULT_TOGGLE_STATE &gt; &lt; SET DEFAULT_TOGGLE_STATE state &gt; &lt; REP DEFAULT_TOGGLE_STATE state &gt; &lt; REP ERR &gt;</pre>