



# SCM820

## Command Strings

Third-party commands for Shure SCM820  
Version: 3 (2019-l)

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# SCM820

## Command Strings

### Command Strings for External Controller

The SCM820 mixer can be connected via Ethernet to a control system, such as AMX<sup>®</sup>, Crestron<sup>®</sup> or Extron<sup>®</sup>.

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

The SCM820 has 4 types of strings, as follows:

1. GET – The GET command is used to find the status of a parameter. After the AMX/Crestron sends a GET command, the SCM820 responds with a REPORT string.
2. SET – The SET command is used to change the status of a parameter. After the AMX/Crestron sends a SET command, the SCM820 will respond with a REPORT string to indicate the new value of the parameter.
3. REP – When the SCM820 receives a GET or SET command, it will reply with a REPORT command to indicate the status of the parameter. REPORT is also sent by the MXW System when a parameter is changed via the front panel or via the GUI.
4. SAMPLE – Used for metering audio levels.

All messages sent and received are ASCII. Level indicators and gain indicators are also in ASCII. The SCM820 will send a REPORT command when any of these parameters change.

**Note:** This document is the most popular commands. There are many more commands available. If you need to control/monitor other parameters, please contact us at [support@shure.com](mailto:support@shure.com) and we will be able to assist you.

A Crestron macro (written by Shure) [can be downloaded here](#).

## Channels

The character “x” in all of the following strings represents the channel of the mixer and can be ASCII numbers 0 through 19 as in the following table:

ASCII Character	SCM820 Channel
0	All Channels
1 through 8	Input Channels
9	Aux Input
10 through 17	Direct Outputs
18	Output A
19	Output B

# Device Commands

<b>View Device ID</b>	Command String:	< GET DEVICE_ID >	<i>The Device ID command does not contain the x channel character, as it is for the entire device.</i>
	SCM820 Response:	< REP DEVICE_ID {yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy} >	<i>Where yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy is 31 characters of the device ID. The SCM820 always responds with a 31 character device ID.</i>
<b>Set Device ID</b>	Command String:	< SET DEVICE_ID {yyyyyyyy} >	<i>Where yyyyyyy is 31 characters of the device ID. The device ID can be 1 to 31 characters long.</i>
	SCM820 Response:	< REP DEVICE_ID {yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy} >	<i>Where yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy is 31 characters of the device ID. The SCM820 always responds with a 31 character device ID.</i>
<b>Flash Lights on SCM820</b>	Command String:	< SET FLASH ON > < SET FLASH OFF >	<i>Send one of these commands to the SCM820. The flash automatically turns off after 60 seconds.</i>
	SCM820 Response:	< REP FLASH ON > < REP FLASH OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Set Auto Link Mode</b>	Command String:	< SET AUTO_LINK_MODE ON > < SET AUTO_LINK_MODE OFF >	<i>This set of commands forces a channel to be ON. If this is OFF, the channel would typically be in Automix mode.  Mix A and Mix B have different commands. Send one of these commands, depending on the mix.</i>
	SCM820 Response:	< REP AUTO_LINK_MODE ON > < REP AUTO_LINK_MODE OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Get Auto Link Mode</b>	Command String:	< GET AUTO_LINK_MODE >	
	SCM820 Response:	< REP AUTO_LINK_MODE ON >	<i>The SCM820 will respond with one of these strings.</i>

		< REP AUTO_LINK_MODE OFF >	
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## Audio Commands

<b>Get Audio Gain</b>	Command String:	< GET x AUDIO_GAIN_HI_RES >	Where x is ASCII channel number: 0 through 19 (see Channels table).
	SCM820 Response:	< REP x AUDIO_GAIN_HI_RES yyyy >	Where yyyy takes on the ASCII values of 0000 to 1280. yyyy is in steps of one-tenth of a dB.
<b>Set Audio Gain</b>	Command String:	< SET x AUDIO_GAIN_HI_RES yyyy >	Where yyyy takes on the ASCII values of 0000 to 1280. yyyy is in steps of one-tenth of a dB.
	SCM820 Response:	< REP x AUDIO_GAIN_HI_RES yyyy >	Where yyyy takes on the ASCII values of 0000 to 1280.
<b>Increase Audio Gain by n dB</b>	Command String:	< SET x AUDIO_GAIN_HI_RES INC nn >	Where nn is the amount in one-tenth of a dB to increase the gain. nn can be single digit (n), double digit (nn), triple digit (nnn).
	SCM820 Response:	< REP x AUDIO_GAIN_HI_RES yyyy >	Where yyyy takes on the ASCII values of 0000 to 1280.
<b>Decrease Audio Gain by n dB</b>	Command String:	< SET x AUDIO_GAIN_HI_RES DEC nn >	Where nn is the amount in one-tenth of a dB to decrease the gain. nn can be single digit (n), double digit (nn), triple digit (nnn).
	SCM820 Response:	< REP x AUDIO_GAIN_HI_RES yyyy >	Where yyyy takes on the ASCII values of 0000 to 1280.
<b>Get Audio Mute</b>	Command String:	< GET x AUDIO_MUTE >	Where x is ASCII channel number: 0 through 19 (see Channels table).

	SCM820 Response:	< REP x AUDIO_MUTE ON > < REP x AUDIO_MUTE OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Mute Audio</b>	Command String:	< SET x AUDIO_MUTE ON >	
	SCM820 Response:	< REP x AUDIO_MUTE ON >	
<b>Unmute Audio</b>	Command String:	< SET x AUDIO_MUTE OFF >	
	SCM820 Response:	< REP x AUDIO_MUTE OFF >	
<b>Toggle Audio Mute</b>	Command String:	< SET x AUDIO_MUTE TOGGLE >	
	SCM820 Response:	< REP x AUDIO_MUTE ON > < REP x AUDIO_MUTE OFF >	<i>The SCM820 will respond with one of these strings.</i>

## Channel Commands

<b>View Channel Name</b>	Command String:	< GET x CHAN_NAME >	<i>Where x is ASCII channel number: 0 through 19.</i>
	SCM820 Response:	< REP x CHAN_NAME {yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy} >	<i>Where yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy is 31 characters of the user name. The SCM820 always responds with a 31 character name.</i>
<b>Set Channel Name</b>	Command String:	< SET x CHAN_NAME {yyyyyyyy} >	<i>Where yyyyyyy is 31 characters of the channel name. The channel name can be 1 to 31 characters long. Each channel must have a unique name.</i>

	SCM820 Response:	< REP x CHAN_NAME {yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy} >	Where yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy is 31 characters of the channel name. The SCM820 always responds with a 31 character name.
<b>Get Channel Forced On</b>	Command String:	< GET x ALWAYS_ON_ENABLE_A > < GET x ALWAYS_ON_ENABLE_B >	This set of commands forces a channel to be ON. If this is OFF, the channel would typically be in Automix mode.  Mix A and Mix B have different commands. Send one of these commands, depending on the mix.
	SCM820 Response:	< GET x ALWAYS_ON_ENABLE_A OFF > < GET x ALWAYS_ON_ENABLE_B OFF > < GET x ALWAYS_ON_ENABLE_A ON > < GET x ALWAYS_ON_ENABLE_B ON >	The SCM820 will respond with one of these strings.
<b>Set Channel Forced On</b>	Command String:	< SET x ALWAYS_ON_ENABLE_A OFF > < SET x ALWAYS_ON_ENABLE_A ON > < SET x ALWAYS_ON_ENABLE_A TOGGLE > < SET x ALWAYS_ON_ENABLE_B OFF > < SET x ALWAYS_ON_ENABLE_B ON > < SET x ALWAYS_ON_ENABLE_B TOGGLE >	This set of commands forces a channel to be ON. If this is OFF, the channel would typically be in Automix mode.  Mix A and Mix B have different commands. Send one of these commands, depending on the mix.
	SCM820 Response:	< GET x ALWAYS_ON_ENABLE_A OFF > < GET x ALWAYS_ON_ENABLE_B OFF >	The SCM820 will respond with one of these strings.

		<p>&lt; GET x ALWAYS_ON_ENABLE_A ON &gt;</p> <p>&lt; GET x ALWAYS_ON_ENABLE_B ON &gt;</p>	
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## Digital Signal Processing Commands

<b>Set IntelliMix® Mode</b>	Command String:	<p>&lt; SET x INTELLIMIX_MODE CLASSIC &gt;</p> <p>&lt; SET x INTELLIMIX_MODE SMOOTH &gt;</p> <p>&lt; SET x INTELLIMIX_MODE EXTREME &gt;</p> <p>&lt; SET x INTELLIMIX_MODE CUSTOM &gt;</p> <p>&lt; SET x INTELLIMIX_MODE MANUAL &gt;</p> <p>&lt; SET x INTELLIMIX_MODE CUSTOM_PRESET &gt;</p>	<p>Where x is ASCII channel number: 18-19.</p> <p>Send only one of these commands.</p>
	SCM820 Response:	<p>&lt; REP x INTELLIMIX_MODE CLASSIC &gt;</p> <p>&lt; REP x INTELLIMIX_MODE SMOOTH &gt;</p> <p>&lt; REP x INTELLIMIX_MODE EXTREME &gt;</p> <p>&lt; REP x INTELLIMIX_MODE CUSTOM &gt;</p> <p>&lt; REP x INTELLIMIX_MODE MANUAL &gt;</p> <p>&lt; REP x INTELLIMIX_MODE CUSTOM_PRESET &gt;</p>	<p>The SCM820 will respond with one of these strings.</p>
<b>Get IntelliMix Mode</b>	Command String:	<p>&lt; GET x INTELLIMIX_MODE &gt;</p>	<p>Where x is ASCII channel number: 18-19</p>
	SCM820 Response:	<p>&lt; REP x INTELLIMIX_MODE CLASSIC &gt;</p>	<p>The SCM820 will respond with one of these strings.</p>



		<p>&lt; REP x INTELLIMIX_MODE SMOOTH &gt;</p> <p>&lt; REP x INTELLIMIX_MODE EXTREME &gt;</p> <p>&lt; REP x INTELLIMIX_MODE CUSTOM &gt;</p> <p>&lt; REP x INTELLIMIX_MODE MANUAL &gt;</p> <p>&lt; REP x INTELLIMIX_MODE CUSTOM_PRESET &gt;</p>	
<b>Set Assign DFR 1</b>	Command String:	< SET DFR1_ASSIGNED_CHAN x >	<i>Where x is ASCII channel number: 1-8, 18-19 (see Channels table). x is 20 for Unassigned.</i>
	SCM820 Response:	< REP DFR1_ASSIGNED_CHAN xxx >	<i>Where x is ASCII channel number: 001-008, 018-019 (see Channels table). x is 020 for Unassigned.</i>
<b>Set Assign DFR 2</b>	Command String:	< SET DFR2_ASSIGNED_CHAN x >	<i>Where x is ASCII channel number: 1-8, 18-19 (see Channels table). x is 20 for Unassigned.</i>
	SCM820 Response:	< REP DFR2_ASSIGNED_CHAN xxx >	<i>Where x is ASCII channel number: 001-008, 018-019 (see Channels table). x is 020 for Unassigned.</i>
<b>Get Assign DFR 1</b>	Command String:	< GET DFR1_ASSIGNED_CHAN >	
	SCM820 Response:	< REP DFR1_ASSIGNED_CHAN xxx >	<i>Where x is ASCII channel number: 001-008, 018-019 (see Channels table). x is 020 for Unassigned.</i>
<b>Get Assign DFR 2</b>	Command String:	< GET DFR2_ASSIGNED_CHAN >	
	SCM820 Response:	< REP DFR2_ASSIGNED_CHAN xxx >	<i>Where x is ASCII channel number: 001-008, 018-019 (see Channels table). x is 020 for Unassigned.</i>

<b>Set DFR 1 Bypass</b>	Command String:	< SET DFR1_BYPASS ON > < SET DFR1_BYPASS OFF >	<i>Send one of these commands to the SCM820.</i>
	SCM820 Response:	< REP DFR1_BYPASS ON > < REP DFR1_BYPASS OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Set DFR 2 Bypass</b>	Command String:	< SET DFR2_BYPASS ON > < SET DFR2_BYPASS OFF >	<i>Send one of these commands to the SCM820.</i>
	SCM820 Response:	< REP DFR2_BYPASS ON > < REP DFR2_BYPASS OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Get DFR 1 Bypass</b>	Command String:	< GET DFR1_BYPASS >	
	SCM820 Response:	< REP DFR1_BYPASS ON > < REP DFR1_BYPASS OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Get DFR 2 Bypass</b>	Command String:	< GET DFR2_BYPASS >	
	SCM820 Response:	< REP DFR2_BYPASS ON > < REP DFR2_BYPASS OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Clear DFR 1 Filters</b>	Command String:	< SET DFR1_CLEAR_ALL_FILTERS ON >	<i>There is no need to send an OFF command</i>
	SCM820 Response:	< REP DFR1_CLEAR_ALL_FILTERS ON >	
<b>Clear DFR 2 Filters</b>	Command String:	< SET DFR2_CLEAR_ALL_FILTERS ON >	<i>There is no need to send an OFF command</i>

	SCM820 Response:	< REP DFR2_CLEAR_ALL_FILTERS ON >	
<b>Set DFR 1 Freeze</b>	Command String:	< SET DFR1_FREEZE ON > < SET DFR1_FREEZE OFF >	<i>Send one of these commands to the SCM820.</i>
	SCM820 Response:	< REP DFR1_FREEZE ON > < REP DFR1_FREEZE OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Set DFR 2 Freeze</b>	Command String:	< SET DFR2_FREEZE ON > < SET DFR2_FREEZE OFF >	<i>Send one of these commands to the SCM820.</i>
	SCM820 Response:	< REP DFR2_FREEZE ON > < REP DFR2_FREEZE OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Get DFR 1 Freeze</b>	Command String:	< GET DFR1_FREEZE >	
	SCM820 Response:	< REP DFR1_FREEZE ON > < REP DFR1_FREEZE OFF >	<i>The SCM820 will respond with one of these strings.</i>
<b>Get DFR 2 Freeze</b>	Command String:	< GET DFR2_FREEZE >	
	SCM820 Response:	< REP DFR2_FREEZE ON > < REP DFR2_FREEZE OFF >	<i>The SCM820 will respond with one of these strings.</i>

## Monitoring Commands

<b>Get Gate Status, Mix A</b>	Command String:	< GET x INPUT_AUDIO_GATE_A >	<p><i>Where x is ASCII channel number: 0 through 19 (see Channels table).</i></p> <p><i>It is not necessary to continually send this command. The SCM820 will send a</i></p>
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			<i>REPORT</i> message whenever the status changes.
	SCM820 Response:	<p>&lt; REP x INPUT_AUDIO_GATE_A ON &gt;</p> <p>&lt; REP x INPUT_AUDIO_GATE_A OFF &gt;</p>	<i>The SCM820 will respond with one of these strings.</i>
<b>Get Gate Status, Mix B</b>	Command String:	< GET x INPUT_AUDIO_GATE_B >	<p>Where x is ASCII channel number: 0 through 19 (see Channels table).</p> <p>It is not necessary to continually send this command. The SCM820 will send a <i>REPORT</i> message whenever the status changes.</p>
	SCM820 Response:	<p>&lt; REP x INPUT_AUDIO_GATE_B ON &gt;</p> <p>&lt; REP x INPUT_AUDIO_GATE_B OFF &gt;</p>	<i>The SCM820 will respond with one of these strings.</i>
<b>Get Limiter Engaged Status</b>	Command String:	< GET x LIMITER_ENGAGED >	<p>Where x is ASCII channel number: 0 through 19 (see Channels table).</p> <p>It is not necessary to continually send this command. The SCM820 will send a <i>REPORT</i> message whenever the status changes.</p>
	SCM820 Response:	<p>&lt; REP x LIMITER_ENGAGED ON &gt;</p> <p>&lt; REP x LIMITER_ENGAGED OFF &gt;</p>	<i>The SCM820 will respond with one of these strings.</i>
<b>Get Input Clip Status</b>	Command String:	< GET x AUDIO_IN_CLIP_INDICATOR >	<p>Where x is ASCII channel number: 0 through 9 (see Channels table).</p> <p>It is not necessary to continually send this command. The SCM820 will send a</p>

			<i>REPORT</i> message whenever the status changes.
	SCM820 Response:	<pre>&lt; REP x AUDIO_IN_CLIP_INDICATOR ON &gt;  &lt; REP x AUDIO_IN_CLIP_INDICATOR OFF &gt;</pre>	<i>The SCM820 will respond with one of these strings.</i>
<b>Get Output Clip Status</b>	Command String:	<pre>&lt; GET x AUDIO_OUT_CLIP_INDICATOR &gt;</pre>	<p>Where <i>x</i> is ASCII channel number: 10 through 19 (see Channels table).</p> <p><i>It is not necessary to continually send this command. The SCM820 will send a REPORT message whenever the status changes.</i></p>
	SCM820 Response:	<pre>&lt; REP x AUDIO_OUT_CLIP_INDICATOR ON &gt;  &lt; REP x AUDIO_OUT_CLIP_INDICATOR OFF &gt;</pre>	<i>The SCM820 will respond with one of these strings.</i>
<b>Turn Metering On</b>	Command String:	<pre>&lt; SET METER_RATE sssss &gt;</pre>	<p>Where <i>sssss</i> is the metering speed in milliseconds.</p> <p><i>Setting sssss=0 turns metering off. Minimum setting is 100 milliseconds. Metering is off by default.</i></p>
	SCM820 Response:	<pre>&lt; REP METER_RATE sssss &gt;  &lt; SAMPLE aaa bbb ccc ddd eee fff ggg hhh iii jjj kkk lll mmm nnn ooo ppp qqq rrr sss &gt;</pre>	<p>Where <i>aaa</i>, <i>bbb</i>, etc is the value of the audio level received and is 000-120.</p> <p><i>aaa = input 1</i></p> <p><i>bbb = input 2</i></p> <p><i>ccc = input 3</i></p> <p><i>ddd = input 4</i></p>

			<i>eee = input 5</i> <i>fff = input 6</i> <i>ggg = input 7</i> <i>hhh = input 8</i> <i>iii = aux input</i> <i>jjj = direct out 1</i> <i>kkk = direct out 2</i> <i>lll = direct out 3</i> <i>mmm = direct out 4</i> <i>nnn = direct out 5</i> <i>ooo = direct out 6</i> <i>ppp = direct out 7</i> <i>qqq = direct out 8</i> <i>rrr = mix out A</i> <i>sss = mix out B</i>
<b>Stop Metering</b>	Command String:	< SET METER_RATE 0 >	<i>A value of 00000 is also acceptable.</i>
	SCM820 Response:	< REP METER_RATE 00000 >	

## Error Codes

There is a < REP ERR > error string that indicates the command is not able to be implemented. This is usually due to a typo or a command that does not exist.