

Command	Serial String	Valid Range	Description
<b>Contact Closure (Audio Override)</b>			
Contact Closure Type	[U#CC#T#A##B##]	U1-4, CC1-2, T0-1 (0 audio override, 1 scene preset), A1-10 (the number of the audio override or scene preset), B0-10 (the number of the scene preset to trigger when contact closure is released, or 0 for none)	Set the effect of the audio override contact closure inputs on the back panel of the unit. By default, the contact closure inputs activate the matching audio override (contact closure 1 activates audio override 1, contact closure 2 activates audio override 2). Alternatively, the contact closures can be used to load one or two scene presets. On contact closure, argument A scene will be loaded. On contact closure open, argument B scene will be loaded, or if the scene number is specified to be 0, nothing will happen; this allows a scene to be loaded on closure and one to be loaded (or nothing to happen) on release.
Contact Closure Mode	[U#CC#M#]	U1-4, CC1-2, M0-1 (0 momentary, 1 toggle)	Sets the mode of the audio override contact closure inputs on the back panel of the unit. Momentary mode causes the action when the contacts are closed and opened. Toggle mode requires a close and open for each action.
<b>Ethernet</b>			
Commit	[U#EC]	U1-4	Commit changes that have occurred to the Ethernet settings. This command must be issued after you have finished changing DHCP, IP, Gateway, or Netmask settings in order to cause them to become active. Note that any Telnet client connected will be disconnected when this command is issued.
DHCP	[U#DHCP#]	U1-4, DHCP0-2 (0 off, 1 on, 2 toggle)	Change the dynamic host configuration protocol (DHCP) setting. This protocol is used to allow the device to receive IP address settings automatically from a properly enabled network. Note that a commit is required after changing this setting.
Gateway	[U#GW###.###.###.###]	U1-4, GW (0.0.0.0 - 255.255.255.255)	Change the gateway setting. The gateway is used to communicate with devices that are not inside the subnet (devices external to the router or switch). Note that a commit is required after changing this setting.
IP Address	[U#IP###.###.###.###]	U1-4, IP (0.0.0.0 - 255.255.255.255)	Set the static IP address; DHCP off required. Note that a commit is required after changing this setting.
Network Mask	[U#NM###.###.###.###]	U1-4, NM (0.0.0.0 - 255.255.255.255)	Set the subnet mask; DHCP off required. Note that a commit is required after changing this setting.
Query	[U#QE]	U1-4	Query the current Ethernet settings - DHCP, IP Address, subnet mask, gateway, mac address, commit status.
<b>Front Panel</b>			
Dim	[U#DIM#]	U1-4, DIM0-3 (0 = 100%, 1 = 75%, 2 = 50%, 3 = 25%)	Sets the brightness level of the front panel display and lights.
IR	[U#FPIR#]	U1-4, FPIR0-2 (0 off, 1 on, 2 toggle)	Enable/disable the front panel IR sensor.
Lock	[U#FPL#]	U1-4, FPL0-2 (0 off, 1 on, 2 toggle)	Front panel lock. Locks out front panel input (keyboard, knob) to prevent changing system settings from the front panel. In the event that it is not convenient to turn the lock off via serial or telnet, there is an escape sequence that you can press on the keyboard to unlock the unit - press menu, back, dim, back, dim, dim.
Sleep	[U#SLEEP#]	U1-4, SLEEP (0, 1, 2, 5 in minutes)	Sets the front panel VFD sleep timer time, in minutes. A time of 0 never sleeps.
<b>Groups</b>			
Add	[U#G##O##A]	U1-4, G1-10, O1-16	Adds a single output or stereo pair to a group.
Mute	[U#G##M#]	U1-4, G1-10, M0-2 (0 off, 1 on, 2 toggle)	Sets the mute status of a group. Toggling mute status will result in all the members of the group being set to same mute status as the first member; if that member is muted, all will be unmuted, and vice versa.
Name	[U#G##N"@"]	U1-4, G1-10, N (16 characters a-z, A-Z, 0-9, -,./!?)	Names the specified group.
Power	[U#G##P#]	U1-4, G1-10, P0-2 (0 off, 1 on, 2 toggle)	Sets the power status of a group. Toggling power status will result in all the members of the group being set to the same power status as the first member; if that member is powered off, all will be powered on, and vice versa.
Query	[U#G##Q]	U1-4, G1-10	Query a group, which displays group membership and name.
Remove	[U#G##O##R]	U1-4, G1-10, O1-16	Removes a single output or stereo pair from a group.
Remove All	[U#GR]	U1-4	Clears the group membership of every group.
Switch	[U#G##I##]	U1-4, G1-10, I1-20	Switch the outputs in the group to the specified input, based upon the mono/stereo status of the input(s) and output(s).
Volume	[U#G##V##]	U1-4, G1-10, V-80-0 (dB)	Sets the output volume of a group.
Volume Down	[U#G##VD]	U1-4, G1-10	Decrements the output volume of all members in the group from their current volume setting. This way it is possible to set different members of the group to different volumes and retain the difference while turning them all up or down.
Volume Up	[U#G##VU]	U1-4, G1-10	Increments the output volume of all members in the group from their current volume setting. This way it is possible to set different members of the group to different volumes and retain the difference while turning them all up or down.

### Input Specific Commands

Gain	[U##G##]	U1-4, I1-20, G-10-10 (dB)	Set the level of digital input gain on a stereo pair or mono input channel. This feature is designed to equalize the input volumes of sources that do not have volume control.
Gain All	[U#XG##]	U1-4, G-10-10 (dB)	Set the level of digital input gain on all inputs.
Name	[U#I#N"@"]	U1-4, I1-20, N (16 characters a-z, A-Z, 0-9, -,./!?)	Names the specified input stereo pair or mono source for front panel display.
Stereo	[U#I##STEREO#]	U1-4, I1-20, STEREO0-2 (0 off, 1 on, 2 toggle)	Sets an input pair as stereo or mono, which defines how stereo or mono outputs will connect to the input. For example, a stereo input of (1,2) will be selected by a stereo output as (1,2), but a mono output as (1+2). A mono input of 1 will be selected by a mono output as 1, but a stereo output as (1,1).

### Output Specific Commands

Balance	[U#O##BAL##]	U1-4, O1-16, BAL-40-0 (dB)	Set the balance level of an output. This setting is a negative volume offset applied each time the volume level is set for the output.
Balance Left	[U#O##BALL]	U1-4, O1-16	Adjust the balance level for the specified output pair to the left (decreasing the output volume of the right output).
Balance Right	[U#O##BALR]	U1-4, O1-16	Adjust the balance level for the specified output pair to the right (decreasing the output volume of the left output).
Mute	[U#O##M#]	U1-4, O1-16, M0-2 (0 off, 1 on, 2 toggle)	Change the mute status of an output.
Mute All Global	[XM#]	M0-2 (0 off, 1 on, 2 toggle)	Change the mute status of all outputs.
Mute All	[U#XM#]	U1-4, M0-2 (0 off, 1 on, 2 toggle)	Change the mute status of all the outputs of the specified unit.
Name	[U#O#N"@"]	U1-4, O1-16, N (16 characters a-z, A-Z, 0-9, -,./!?)	Name the specified single output or stereo pair.
Power	[U#O#P#]	U1-4, O1-16, P0-2 (0 off, 1 on, 2 toggle)	Set the power status of a single output or stereo pair. An output that is powered from off to on will be checked to confirm that the output volume level fits into allowed limits and may be adjusted.
Power All Global	[XP#]	P0-2 (0 off, 1 on, 2 toggle)	Set the power status of all outputs. If power status is toggled, each output will be toggled individually, where outputs that are off will be turned on and outputs that are on will be turned off.
Power All	[U#XP#]	U1-4, P0-2 (0 off, 1 on, 2 toggle)	Set the power status of all outputs in the specified unit. If power status is toggled, each output will be toggled individually, where outputs that are off will be turned on and outputs that are on will be turned off.
Query	[U#O##Q]	U1-4, O1-16	Query a specified output, which displays all settings related to that particular output.
Stereo	[U#O##STEREO#]	U1-4, O1-16, STEREO0-2 (0 off, 1 on, 2 toggle)	Enables or disables the pairing of outputs. Stereo mode causes two outputs to track each other when performing all functions, and also controls the manner in which inputs are connected to the outputs. For example, consider a pair of stereo outputs (1,2), a mono output (3), a pair of stereo inputs (5,6) and a mono input (7). Valid connections will be (1,2) = (5,6) or (7,7), and (3) = (5+6) or (7).
Switch	[U#O##I##]	U1-4, O1-16, I1-20	Switches the single output or stereo pair to the specified single input or stereo pair.
Switch All Global	[XI##]	I1-20	Switches all outputs to the specified input observing mono/stereo connection rules.
Switch All	[U#XI##]	U1-4, I1-20	Switches all outputs of a unit to the specified input observing mono/stereo connection rules.
Volume	[U#O##V###]	U1-4, O1-16, V-80-0(dB)	Set the output volume of a single output or stereo pair.
Volume Down	[U#O##VD]	U1-4, O1-16	Increment the volume of a single output or stereo pair.
Volume Up	[U#O##VU]	U1-4, O1-16	Decrement the volume of a single output or stereo pair.
Volume All Global	[XV###]	V-80-0 (dB)	Set the output volume level of all outputs.
Volume All Down Global	[XVD]		Increments the output volume level of all outputs from their current setting.
Volume All Up Global	[XVU]		Decrements the output volume level of all outputs from their current setting.
Volume All Unit	[U#XV###]	U1-4, V-80-0 (dB)	Set the output volume level of all outputs of a unit as specified.
Volume All Unit Down	[U#XVD]	U1-4	Increments the output volume level of all outputs of a unit from their current setting.
Volume All Unit Up	[U#XVU]	U1-4	Decrements the output volume level of all outputs of a unit from their current setting.
Volume Max	[U#O##MV###]	U1-4, O1-16, MV-80-0 (dB)	Sets the maximum volume level of an output. Note that this setting also directly affects the nominal output volume, the current 'live' output volume, override levels, the maximum turn on volume, the minimum turn on volume, and scene preset volumes. If any of these contain a level that exceeds the maximum, they will be set to the maximum.
Volume Max Turn On	[U#O##MXTO###]	U1-4, O1-16, MXTO-80-0 (dB)	Sets the maximum turn on volume. After a power cycle or return from standby, the desired output volume will be checked against this, and any levels exceeding will be set to the maximum.
Volume Min Turn On	[U#O##MNTO###]	U1-4, O1-16, MNTO-80-0 (dB)	Sets the minimum turn on volume. After a power cycle or return from standby, the desired output volume will be checked against this, and will be set to this level if too low.

Basic DSP			
Bass	[U#O##BASS##]	U1-4, O1-16, BASS-15-15 (dB)	Set the bass boost level of a single output or stereo pair. This requires that the output biquad filter 1 is a low shelf filter.
Bass Down	[U#O##BASSD]	U1-4, O1-16	Decrement the bass boost level of a single output or stereo pair. This requires that the output biquad filter 1 is a low shelf filter.
Bass Up	[U#O##BASSU]	U1-4, O1-16	Increment the bass boost level of a single output or stereo pair. This requires that the output biquad filter 1 is a low shelf filter.
Loudness	[U#O##LD#]	U1-4, O1-16, LD0-2 (0 off, 1 on, 2 toggle)	Turns on or off loudness for a single output or stereo pair. This requires that output biquad filter 3 is a low shelf and biquad filter 4 is a high shelf.
Treble	[U#O#TREB##]	U1-4, O1-16, TREB-15-15 (dB)	Set the treble boost level of a single output or stereo pair. This requires that the output biquad filter 2 is a high shelf filter.
Treble Down	[U#O#TREBD]	U1-4, O1-16	Decrement the treble boost level of a single output or stereo pair. This requires that the output biquad filter 2 is a high shelf filter.
Treble Up	[U#O#TREBU]	U1-4, O1-16	Increment the treble boost level of a single output or stereo pair. This requires that the output biquad filter 2 is a high shelf filter.
Advanced DSP			
Bypass Filter	[U#O##B#BYPASS]	U1-4, O1-16, B1-7	Bypass the biquad filter on the single output or stereo pair.
Highpass Filter	[U#O##B#HPF#####]	U1-4, O1-16, B1-7, HPF1-20,000 (Hz)	Enables a high pass filter in the specified biquad and single output or stereo pair. The filter is a second order filter, resulting in a -3 dB pass band at the crossover frequency and dropping at -40 dB per decade below.
Highshelf Filter	[U#O##B#HS##F#####]	U1-4, O1-16, B1-7, HS-15-15 (dB), F1-20,000 (Hz)	Enable a high shelf filter in the specified biquad and single output or stereo pair.
Lowpass Filter	[U#O##B#LPF#####]	U1-4, O1-16, B1-7, LPF1-20,000 (Hz)	Enables a low pass filter on the specified biquad and single output or stereo pair. The filter is a second order filter, resulting in a -3 dB pass band at the crossover frequency and dropping at -40 dB per decade above.
Lowsshelf Filter	[U#O##B#LS##F#####]	U1-4, O1-16, B1-7, LS-15-15 (dB), F1-20,000 (Hz)	Enable a low shelf filter in the specified biquad and single output or stereo pair.
Peaking Filter	[U#O##B#P##F#####]	Unit 1-4, Output 1-16, Biquad 1-7, Peaking Boost (-15 to 15 dB), Frequency (1-20000 Hz)	Enable a peaking filter in the specified biquad and single output or stereo pair. A peaking filter is basically a parametric equalizer, allowing a boost or cut at the frequency of interest.
Override			
Audio Override			
Action	[U#AO##A#]	U1-4, AO1-10, A0-2 (0 off, 1 on, 2 toggle)	Perform an audio override action, which causes an override to turn on or off. Turning an override off causes the outputs that are a member of the override to be set back to their default output level and input connection. Turning an override on connects the output(s) that are members of the audio override to be set to the override input and volume level. Outputs that are muted or powered off will be turned on and unmuted for the duration of the override.
Add	[U#AO##O##V###A]	U1-4, AO1-10, O1-16, V-80-0 (dB)	Add a single output or a stereo pair to an audio override.
Input	[U#AO##I###]	U1-4, AO1-10, I1-20	Set the input(s) that are connected when the audio override is activated.
Priority	[U#AO##P##]	U1-4, AO1-10, P1-14	Set the priority level of the audio override. Lower numbers equal a higher priority (priority 1 is the highest). Multiple overrides can have the same priority. Overrides of the same priority will override each other.
Query	[U#AO##Q]	U1-4, AO1-10	Query an audio override, which displays membership, levels, input, and priority.
Remove	[U#AO##O##R]	U1-4, AO1-10, O1-16	Remove a single output or a stereo pair from an audio override.
Remove All	[U#AOR]	U1-4, AO1-10	Clear the membership status of all overrides.
Flexport Override			
Action	[U#FPO#A#]	U1-4, FPO1-4, A0-6 (0 off, 1 on stereo, 2 on mono, 3 on mix, 4 toggle stereo, 5 toggle mono, 6 toggle mix)	Perform a flex-port override action, which causes an override to turn on or off. Turning an override off causes the outputs that are a member of the override to be set back to their default output level and input connection. Turning an override on causes a variety of results depending upon on command. Consider stereo outputs (1,2) and mono output (3), as well as flex port input (17), which is override 1. Action on stereo connects (1,2) to (17,18), and (3) to (17+18). Action on mono connects (1,2) to (17,17), and (3) to (17). Action on mix connects (1,2) to (17+18,17+18), and (3) to (17+18). Note that outputs that are a member of the override and are powered off or muted will be powered on and unmuted for the duration of the override.
Add	[U#FPO#O##V###A]	U1-4, FPO1-4, O1-16, V-80-0 (dB)	Add a single output or stereo pair to a flexport override. This output will be set to the override defined input and the specified volume level when the override is activated.
Priority	[U#FPO#P#]	U1-4, FPO1-4, P1-14	Set the priority level of the flexport override. Lower numbers equal a higher priority (priority 1 is the highest). Multiple overrides can have the same priority. Overrides of the same priority will override each other.
Query	[U#FPO#Q]	U1-4, FPO1-4	Query an audio override.
Remove	[U#FPO#O##R]	U1-4, FPO1-4, O1-16	Remove an output from an audio override. This output will be ignored by the override when it is activated.
Remove All	[U#FPOR]	U1-4	Remove all outputs from all audio overrides.

Query			
Query All	[U#XQ]	U1-4	Query all settings for the unit. Note that while displaying the settings the unit will be unresponsive.
Query All Square Brackets	[U#XQSB]	U1-4	Query all settings, but return them in square brackets []. This would allow one to copy/paste the settings into a text file for editing. Note that the unit will be unresponsive while displaying the settings. WARNING - if you have units looped out, this could cause them to act on any unit unspecific commands.
Scene Presets			
Add	[U#SP##O##V##A]	U1-4, SP1-10, O1-16, I1-20, V-80-0 (dB)	Add a single output or stereo pair to a scene preset, by specifying the volume level and input(s) to connect to when the scene preset is loaded. When an output is added to a scene using this command, mute for the output is set to off, and power for the output is set to on.
Load Global	[SP##LOAD]	SP1-10	Set the input, volume level, mute, and power status of the output(s) which are members of the scene preset.
Load	[U#SP##LOAD]	U1-4, SP1-10	Set the input, volume level, mute, and power status of the output(s) in the unit which are members of the scene preset.
Mute	[U#SP##O##M#]	U1-4, SP1-10, O1-16, M0-2 (0 off, 1 on, 2 toggle)	Set the mute status of a single output or stereo pair in a scene preset.
Name Global	[SP##N"@"]	SP1-10, N (16 characters a-z, A-Z, 0-9, -,./!?)	Specify the name of the scene preset.
Name	[U#SP##N"@"]	U1-4, SP1-10, N (16 characters a-z, A-Z, 0-9, -,./!?)	Specify the name of a scene preset on a per-unit basis.
Power	[U#SP##O##P#]	U1-4, SP1-10, O1-16, P0-2 (0 off, 1 on, 2 toggle)	Specify the power status of a single output or stereo pair in a scene preset.
Query	[U#SP##Q]	U1-4, SP1-10	Query a scene preset, which lists all members, their settings, and the name of the preset.
Remove	[U#SP##O##R]	U1-4, SP1-10, O1-16	Remove an output from a scene preset.
Remove All	[U#SPR]	U1-4	Remove all outputs from all scene presets.
Remote Save	[SPRS#]	SPRS0-2 (0 off, 1 on, 2 toggle)	Turn the ability to remotely save scene presets on or off.
Save	[SP##SAVE]	SP1-10	Save the current output levels, input levels, and mute status to the specified preset.
Save Unit	[U#SP##SAVE]	U1-4, SP1-10	Save the current output levels, input levels, and mute status to the preset in the specified unit.
Standby			
Standby Global	[SBY#]	SBY0-2 (0 off, 1 on, 2 toggle)	Places all units in standby or releases them from standby. Turning on standby causes all outputs to be disabled, the DSP to stop running, and the screen to be turned off. Returning from standby turns on the DSP and the outputs.
Standby	[U#SBY#]	U1-4, SBY0-2 (0 off, 1 on, 2 toggle)	Places a unit in standby or releases it from standby.
Trigger	[U#TRIG#]	U1-4, TRIG0-2 (0 off, 1 on, 2 toggle)	Sets the way the system trigger input on the back panel functions. By default, the unit will auto-mute and power down the channel blocks in groups of 8 based on the detection of input signals. In addition to this power saving feature, the system trigger input can force the entire unit into standby or out of standby based on a voltage present on the system trigger input. Once the trigger mode is set to on, a high to low transition on the trigger input will place the unit into standby. Once in standby, a low to high transition will release the unit from standby.
State			
Load	[U#LOAD]	U1-4	Load the system state from memory.
Reset	[U#RESET]	U1-4	Reset the state of the system to factory defaults.
Save	[U#SAVE]	U1-4	Save the system state to memory. There is an auto-save that saves the state 60 seconds after the last change.

