

**SIMPLWINDOWS
NAME:**

Mackie DX8 Full Control

CATEGORY:

Mixer

VERSION:

1.0

SUMMARY:

Controls all standard functions on a Mackie DX8 Mixer

GENERAL NOTES:

This module will control all standard functions on a Mackie DX8 Mixer. These functions are:

1. Input level up/down/mute with feedback
2. Output level up/down/mute with feedback
3. Preset selection
4. Output level meter monitoring
5. Selectable input level meter monitoring

Since this device operates at a baud rate of 115200, it should only be used with a CNMSX-AV or CNMSX-PRO control system.

Controls are provided for level up/down/mute for each of the sixteen input channels, as well as for the two output channels. Both buttons and a slider control can be used to make adjustments. When the system is first powered on, or after a preset selection, it is necessary to poll the Mackie for the current levels. This is done by pulsing the REQUEST-UPDATE input. The module will automatically poll for the current levels after a preset selection. So you should only need to use this input upon start up of the system.

If it is desired to have changes made on the front panel of the Mackie reflected on the Crestron system, you must pulse the AUTO-LEVEL-UPDATE-ON input. Once this has been activated, all changes made on the front of the Mackie will be reported to the Crestron. If it is desired to deactivate this function, pulse the AUTO-LEVEL-UPDATE-OFF input.

Controls are also provided to select any of the sixteen available presets. When activated, the preset will be recalled, and all of the input and output levels will be polled for their new settings.

This module also allows you to monitor three separate meters. It allows you to monitor both output levels, and a selectable (1-8) input level. It is not recommended to monitor more than three meters due to the large amount of traffic being processed by the control system, and sent over the network to a touchpanel. The meter levels being sent from the Mackie can be enabled and disabled using the METER-MONITOR-ENABLE/DISABLE inputs. It is recommended that you only enable meter monitoring while on a touch screen that is displaying the meters.

In general, for most systems, the meter monitoring and auto level updating should be turned off at all times except for when the touchpanel is on the Mackie control screen. Upon entering the Mackie control screen, you can pulse the METER-MONITOR-ENABLE, AUTO-LEVEL-UPDATE-ON, and REQUEST-UPDATE inputs to get the current levels and begin monitoring. When exiting the screen, you should pulse the METER-MONITOR-DISABLE and AUTO-LEVEL-UPDATE-OFF inputs.

All digital inputs should be momentary - as if coming from buttons on a touchpanel.

HARDWARE REQUIRED: Internal CNMSX com ports only

SETUP OF CRESTRON HARDWARE: Baud Rate - 115200
Parity - None
Data Bits - 8
Stop Bits - 1

VENDOR FIRMWARE: None

VENDOR SETUP: None

CABLE NUMBER: CNSP-121

CONTROL:

OUT-A-IN- *-UP/DOWN	D	Press and hold to ramp the desired input channel for output A up or down
OUT-A-IN- *-MUTE- *	D	Pulse to mute/unmute/toggle mute of the desired input channel for output A
OUT-B-IN- *-UP/DOWN	D	Press and hold to ramp the desired input channel for output B up or down
OUT-B-IN- *-MUTE- *	D	Pulse to mute/unmute/toggle mute of the desired input channel for output B
OUTPUT-A- *	D	Press desired function to control for output channel A
OUTPUT-B- *	D	Press desired function to control for output channel B
OUT- *-IN- *-SLIDER	D	Can be connected to a slider object on a touchpanel to allow level control of the desired input
OUTPUT- *-SLIDER	A	Can be connected to a slider object on a touchpanel to allow level control of the desired output
PRESET- *	D	Pulse to select the desired preset on the Mackie system
MONITOR-INPUT- *	D	Pulse to select which input channel to receive meter information for.
METER-MONITOR-ENABLE/DIS	D	Pulse to enable/disable the reporting of meter level information
AUTO-LEVEL-UPDATE-ON/OFF	D	Pulse to enable/disable the reporting of front panel changes on the Mackie system
REQUEST-UPDATE	D	Pulse to request all of the current input and output levels
MACKIE-RX\$	S	Serial signal to be routed from a 2-way RS232 port

FEEDBACK:

*-MUTE-FB	D	High when the corresponding input/output is muted
*-LEVEL	A	Analog signal indicating the relative level of the corresponding input or output channel. Can be routed to a bargraph or slider on a touchpanel
MONITOR-INPUT- *-FB	D	Indicates which input has been selected for meter monitoring
OUTPUT-A/B-METER	A	Analog signal indicating the meter level of outputs A and B. Should be routed to bargraphs on a touchpanel

Analog signal indicating the meter level of

INPUT-METER	A	the input selected for monitoring. Should be routed to a bargraph on a touchpanel
MACKIE-TX\$	S	Serial signal to be routed to a 2-way RS232 port

.UPZ FILE USED FOR TESTING: 5.11.65x.upz
COMPILER USED FOR TESTING: SimplWindows Version 1.51.06
SAMPLE PROGRAM: Mackie DX8 Sample Program
REVISION HISTORY: None