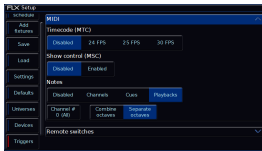


A MIDI signal can be connected to your console using 5 pin DIN connectors, inserted into the MIDI Input port. There is also a MIDI Thru port, which can be used for daisy chaining other MIDI devices in your system. ZerOS does not support MIDI over USB protocols, and therefore to connect to software packages you may need a USB to MIDI interface box.

The Zero 88 team use the [MOTU FastLane USB MIDI interface](#) for testing and demonstrations using [QLab](#).



ZerOS supports the MIDI Notes protocol input. In the Triggers tab of Setup, you can define whether these Note commands trigger Channels, Cues or Playbacks.

After choosing **Channels**, **Cues**, or **Playbacks**, select the MIDI Notes **Channel #**. This is essentially your console's MIDI address, so that if you have multiple devices listening to a MIDI Notes source, your console can be unique.

You can then use a MIDI Notes source, to send a Note Number, and that Note's velocity. MIDI Notes sources could be a software package running on a computer (with an appropriate USB to MIDI interface), or could be a MIDI button bank, or MIDI keyboard.

Combine Octaves

When MIDI Notes Octaves are combined, only the first 11 Channels, Cues or Playbacks can be triggered. For example, if MIDI Notes is set to trigger channels:

- Note 1 thru Note 11 triggers Fixture 1 thru 11
- Note 13 thru Note 23 triggers Fixture 1 thru 11
- Note 25 triggers Fixture 1, and so on.

Separate Octaves

When MIDI Notes Octaves are separate, the first 127 Channels, Cues, or Playbacks can be triggered. The "First Note" field can be used to set a MIDI Notes offset. For example, if MIDI Notes is set to trigger channels:

- When First Note = 0 : Note 1 triggers Fixture 1
- When First Note = 1 : Note 2 triggers Fixture 1

Channels

MIDI Note-On and Note-Off commands can be used to turn fixture intensities on or off respectively. MIDI Notes intensity control is mixed HTP with ZerOS outputs. Velocity information from the Note-On commands is used to determine the fade up time, and velocity information from the Note-Off commands is used to determine the fade down time. The Note Number controls the console fixture number. A Velocity of 0 will not trigger the channel. A velocity of 1 will give a 5 second fade time to full, and as the velocity is increased, this will shorten the fade time, until you reach a velocity of 127 which will Snap.

Cues

A MIDI Note On command, will trigger the same cue number as the note number. For example a MIDI Note On of Note Number 10, will trigger cue 10. The playback used is the currently viewed/selected playback. Programmed Fade times are used, and velocity information is ignored.

MIDI Notes only allows for whole note numbers. Therefore if you have point cues you wish to trigger, you will need to renumber the cues in the playback. To do this hold **Setup** and tap the playback's button, and from the settings choose Advanced -> Renumber.

If you wanted to simply emulate a Go button press with the same MIDI Note command, you can do this through programming a Macro.

Firstly, program a macro that presses your Go button. You can do this by tapping RECORD MACRO x ENTER (where x is an empty macro number) -> Keys -> Press your Playback's Go button -> MACRO. Now, view an empty playback, and program an empty cue. Go into this cue's settings -> Macros... -> Macro Add -> Choose your Macro -> OK -> OK. Now, whenever you send a MIDI Note 1 command and you are viewing this playback with a single macro trigger, it will emulate a Go button press of your main cue stack.

Playbacks

MIDI Note-On and Note-Off commands can be used to turn playbacks on or off respectively. Playback levels are mixed HTP with physical fader positions to control the level of the playback. Velocity information from the Note-On messages is used to determine the fade up time, and velocity information from the Note-Off commands is used to determine the fade down time. MIDI Notes are mapped 1 to 1 with playbacks. Therefore, MIDI Note 0 will trigger the Master Playback, MIDI Note 1 will trigger playback 1, and so on. Velocity of 0 will not trigger the playback. A velocity of 1 will give a 5 second fade time to full, and as the velocity is increased, this will shorten the fade time, until you reach a velocity of 127 which will Snap.