

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](#).

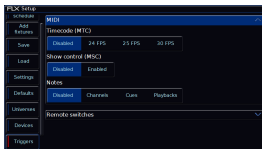
MIDI Timecode (MTC) is a clock signal, with time given in Hours:Minutes:Seconds:Frames. Any cue across any playback can be assigned a Time Code stamp, meaning that when this clock time is received from a MTC clock source, this cue will be triggered. This is configured by opening the settings of the cue you would like to trigger, and from the Trigger drop down menu choose MIDI. You can then define the time, and click OK.

[Click here to find out more.](#)

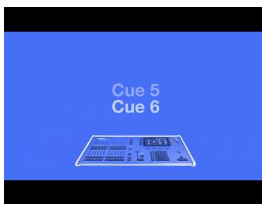
MTC has the option to be streamed in 24 fps (frames per second), 25 fps, and 30 fps. When a MTC signal is present, ZerOS will automatically detect the frame rate. If you wish to define timings before a clock signal is present, tap **Setup** -> **Triggers** -> Time Code, and choose the frame rate.

To see the incoming MIDI clock signal, view a playback, and along the bottom of the cue list you should see "Realtime" displayed in the status bar. Press this, and this will take you to your MIDI Time Code clock.

To use MIDI Timecode (MTC), there needs to be a MTC clock source, which is commonly a software package such as QLab running on a computer. The MTC clock source is typically started on a computer at the same time as an audio track, to allow lighting, sound, and other departments, to be synchronised.



The MIDI Timecode frame rate can be configured in the Triggers tab.



Watch this quick video for an introduction to time codes

<https://youtu.be/KgtmkD9K0co>

If you wish to Timecode cues to multiple songs, it is common to record each song as a separate playback, containing all the lighting states required for that song. In each cue's settings, you can then put the MTC time stamp this cue needs to run at. A common way to do this, is start each song at a new hour. Therefore track one outputs timecode at 1:00:00:00, song two at 2:00:00:00 and so on.