

MIDI CONFIGURATION

Thermae™ allows all of its parameters to be controlled via control change messages, as well as it's presets to be saved and recalled with program change messages.

To use MIDI with your Thermae, you'll have to do the following:

- **1.** Using a standard ¼" TRS patch cable, connect a Chase Bliss Midibox port to the TAP/MIDI jack on your Thermae. The Midibox is not included with the Thermae. If you do not have a modified Empress Midibox, but a standard one from Empress, you need to use a custom TRS cable that flips the tip and the ring. See **chaseblissaudio.com** to purchase the items described here.
- 2. Thermae is set to MIDI channel 2 by default, but it is easy to change if you need to. If you want to change it, simply hold down both stomp switches when you provide power to the pedal (hold down TAP and BYPASS switches simultaneously) and then you can let go. The pedal is now looking for the first "Program Change" message it sees, and it will set itself to whatever channel it gets that first message from, permanently (until you change it again).

MIDI CONTROL CHANGE CHANNELS

Parameter	CC#	Description
Mix LPF Regen Glide Int 1 (Speed) Int 2 (Depth) Ramp	14 15 16 17 18 19 20	Sending a value 0 would be equivalent to the knob being completely counter clock-wise, sending 127 is equivalent to fully clock-wise. All numbers in between correspond to knob positions in between those extremes.
L Toggle Select M Toggle Select R Toggle Select	212223	Sending value 1 selects the left toggle position. Sending value 2 selects the middle toggle position. Sending value 3 selects the right toggle position. The functions of these CC messages will vary depending on what mode the pedal is in.
"Hold" function	24	Simulates "hold" function. Sending a value of 127 enacts runaway oscillation, sending a value of 0 makes pedal resume regen knob position.
"Slowdown Mode" in Sequence Mode / Set Tap Tempo in Step Mode	25	In sequence mode, sending a value of 127 enacts "slowdown mode", sending a value of 0 puts it back to normal. This does a different thing in step mode. If you send a value of 127 you can enter a new base tap tempo, sending a value of 0 turns back to regular step mode.
Midi Clock Ignore	51	Sending a value of 0 causes the pedal to ignore MIDI Clock messages. Sending a value of 127 causes the pedal to listen for MIDI Clock messages. (by default, the pedal listens for MIDI Clock messages)
Tap Switch	93	You can send any value with this CC#, it will simulate pressing down the tap switch. It's a way to set tap tempo via midi.
Expression	100	Sending a value 0 would be equivalent to an expression pedal being completely "off", sending 127 is equivalent to a fully depressed expression pedal. All numbers in between correspond to knob positions in between those extremes. As always, the dip switches on the pedal select which parameter(s) are being controlled via expression.
Bypass Switch	102	Sending a value of 127 engages the pedal, sending a value of 0 bypasses the pedal. Furthermore, sending a value of 127 with the pedal already engaged will reset any ramping that is happening, if any ramping is happening.

Recalling a preset via MIDI

You can activate a preset by sending a MIDI Program Change message. For example, sending a Program Change message of 1 activates preset 1. There are 122 total preset slots available. Slots 1 and 2 are the presets that can be saved and activated directly from the pedal via the preset toggle. Slot 1 is the right slot. Slot 2 is the left slot. Sending a Program Change message of 0 puts the pedal in "Live" mode which is identical to when the preset toggle switch is in the middle position, in normal pedal operation. If you do not save something into presets 3 through 122, nothing will be recalled. There are no factory presets besides the two that come loaded in slots 1 and 2. The idea is for you to create your own.

Saving a preset via MIDI

You save a preset by sending a MIDI Program Change message while holding down both the TAP and BYPASS stomp switches. For example, sending a Program Change message of 45 while holding down both the TAP and BYPASS stomp switches will save your current settings to preset 45. There are 122 total slots. Slots 1 and 2 are the presets that can be saved and activated directly from the pedal via the preset toggle. Slot 1 is the right slot. Slot 2 is the left slot.

MIDI Clock (aka MIDI Beat Clock)

Thermae will respond to MIDI Clock messages. MIDI Clock specifies quarter notes, subdivided into 24 MIDI Messages. By using the tap selection toggle, you can select different types of notes divisions including quarter note, dotted eighth note, eighth note triplet, eighth note sextolet, and sixteenth note.

Control Change Messages

Thermae can be controlled with MIDI control change messages.

The table on the left shows which MIDI control change channel controls each Thermae $^{\text{TM}}$ parameter.



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