

# MIDI CONFIGURATION

Gravitas allows all of its parameters to be controlled via control change messages, it's presets to be saved and recalled with program change messages, and its tempo controlled with MIDI clock messages.

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

**1.** Attach a Chase Bliss Audio Modified Empress Midibox "Ring Active" port using a standard 1/4" TRS patch cable to the TAP/MIDI jack on your Gravitas. The Midibox is not included with the Gravitas. 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](http://chaseblissaudio.com) to purchase these items.

**2.** Gravitas is set to MIDI channel 4 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).

## 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.

## MIDI CONTROL CHANGE CHANNELS

Parameter	CC#	Description
Drive	14	Sending a value 0 would be equivalent to the knob Volume being completely counter clockwise, sending 127 is equivalent to fully clock-wise. All numbers in between correspond to knob positions in between those extremes.
Volume	15	
Tone	16	
Rate	17	
Depth	18	
Sway	19	
Ramp	20	
Midi Note Divisions	21	Sending value 0 sets divisions for whole notes, 1 for half notes, 2 for quarter note triplets, 3 for quarter notes, 4 for eighth notes, and 5 for sixteenth notes.
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.

## 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)

Gravitas 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 so that they correspond to 1 period of tremolo's waveform. On the tap division toggle first bank: 1 = whole note, 2 = half note, 4 = quarter. On the tap division toggle second bank: 3 = quarter note triplet, 6 = eighth, and 8 = sixteenth note.

## Control Change Messages

Gravitas can be controlled with MIDI control change messages.

*The table on the left shows which MIDI control change channel controls each Gravitas parameter.*



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