

## Wampler Terraform Updates

### Introduction

As part of the onwards development of our Digital Signal Processor based pedals, we have updated the software on a number of the recent production run of Terraform line. These changes are to bring it in line with the functionality of the Metaverse as well as to address a few other issues we wanted to fix.

To identify if you have the latest version of the pedal hold down the bypass footswitch whilst the pedal is powered on. If the LED indicator turns red, you have the latest version and the following should be noted:

### Changes

Upon booting up the device, the pedal will load the current knob settings instead of reverting to preset 1.

When changing programs using the *Program* knob, the Terraform will maintain the current knob positions instead of loading program specific defaults. This feature allows a seamless transition between different programs while retaining preferred settings.

The *Variable* knob on the Chorus program is now a tone control (instead of a low cut).

To initiate and step through the setup process for an expression pedal, follow these steps:

- a. Hold both the *Bypass* and *Tap Tempo* switches simultaneously for one second.
- b. The setup process will be activated, and you can configure the range and function of your expression pedal.

### Added Features

**Phaser:** The Variable knob controls Phaser Tone, *Alt + Blend* controls feedback

**Alt-Control:** Holding *Alt + Preset* selects Tap Tempo subdivision

**MIDI:** full MIDI CC control (see table on next page), full MIDI Clock compatibility, Presets 1-128 now available via MIDI messages

### Bug Fixes

Changing Right Footswitch Mode from Preset Increment to Tap Tempo no longer increments the preset.

For warranty information and support, please visit our website or contact our customer support team at [help@wamplerpedals.com](mailto:help@wamplerpedals.com). We are dedicated to assisting you with any technical issues or inquiries you may have.

Thank you for choosing the Wampler Terraform. We hope you enjoy your experience with our product, and we are committed to providing you with the best possible support for your technical needs.

## MIDI Reference

MIDI CC Messages				
CC Function	CC Number (0-127)	Value (0-127)	Description	Notes
Bypass State	1	0=off, 1-127=on	Turns the device on/off	
Program	2	0-10	Selects the mod program ->	0 = Autowah 1 = Envelope Filter 2 = Flanger 3 = Phaser 4 = UVibe 5 = Rotary 6 = Autoswell 7 = Tremolo 8 = Harmonic Tremolo 9 = Chorus 10 = Dimension
Mod Rate (knob)	3	0-127	Emulates the Mod Rate knob, 0.1 Hz to 10 Hz	
Mod Depth (knob)	4	0-127	Emulates the Mod Depth knob	
Variable (knob)	5	0-127	Emulates the Variable knob	
Output Mix (knob)	6	0-127	Emulates the Output Mix knob	0 = dry 100% + wet 0%, 63 = dry 100% + wet 100%, 127 = dry 0% + wet 100%
Output Level (knob)	7	0-127	Emulates the Output Level knob	Rotary: blend between woofer and horn Tremolo: phase: 0 = 0°, 63 = 90°, 127 = 180°
Phaser Feedback	8	0-127	Emulates the Phaser Feedback alt-param	Harmonic Tremolo: crossover filter frequency: 0 = 100 Hz, 63 = 700 Hz, 127 = 2500 Hz
Rotary Speed	9	0=fast, 1-127=slow	set the rotary speed between fast (tremolo) and slow (chorale)	0 = script, 63 = block, 127 = beyond 0 = fast (tremolo) 1-127 = slow (chorale)
Subdivision	11	0-14	Sets the tap tempo subdivision -> (0-7 are accessible via the front panel)	0 = Quarter 1 = Dotted Eighth 2 = Eighth 3 = Sixteenth 4 = Half 5 = Whole 6 = Dotted Quarter 7 = Triplet Quarter 8 = Dotted Sixteenth 9 = Dotted Half 10 = Dotted Whole 11 = Triplet Sixteenth 12 = Triplet Eighth 13 = Triplet Half 14 = Triplet Whole
Mod Rate (high ms)	12	0-15	A Time High message followed by a Time Low message will set the Mod Rate period to a specific ms value.	ms = 1000 / Hz 1 Hz -> 1000 / 1 Hz = 1000ms 4 Hz -> 1000 / 4 Hz = 250ms
Mod Rate (low ms)	13	0-127	Each message is a 7-bit value, and sent together will be interpreted as a 14-bit value.	High = ms / 128, keep integer (left of decimal point) Low = ms % 128 (divide by 128, remove integer, multiply by 128) example: 0000111 1101000 (binary) -> High=7, Low=104 (decimal) -> 1000ms example: 0000001 1111010 (binary) -> High=1, Low=122 (decimal) -> 250ms
Tap Tempo	81	0	Emulates the tap tempo function of the tap tempo switch	
Preset Decrement	82	0-127	Decrements the preset number by <value>	Special case: value=0 will reload the current preset
Preset Increment	83	0-127	Increments the preset number by <value>	Special case: value=0 will reload the current preset
Tempo Switch Mode	84	0=tap tempo 1-127=preset inc	Selects the mode of the tempo switch	0 = Tap Tempo Switch will trigger tap tempo 1-127 = Tap Tempo Switch will increment the preset
Routing Mode	85	0 = normal (stereo) 1-127 = pre/post (mono)	Sets the routing mode	
MIDI Clock Enable	99	0=off, 1-127=on	0 = ignore MIDI Clock 1-127 = follow MIDI clock	
Expression Pedal	100	0-127	Emulates the expression pedal input	
MIDI PC Messages				
PC Function	PC Number			
Load a preset	0-127		Loads preset of matching PC number	
Save a preset	0-127		When in preset-write mode, sending a PC number will save the current settings to that preset number	
MIDI Realtime Messages				
Realtime Message	Number			
MIDI Clock Start	248	250	Will set the Mod Rate based on received MIDI Clock, multiplied by the subdivision Sync the tap tempo LED	BPM = 60 * (Mod Rate Hz) Mod Rate Hz = BPM / 60