OWNER'S MANUAL

Congratulations on purchasing **SIXY™** by *Molten Voltage*

     SIXY™ is a programmable PedalBoard **Tempo Controller** for Line 6 Devices, Behringer Devices; T-Rex's Replica Delay, and Free The Tone's Flight Time Delay that connects to the MIDI IN Jack of compatible Line 6 Devices and sends Line 6 tempo data to sync your effect with the incoming MIDI Clock at one of nine (9) musical ratios.

Key Features

- Synchronize your PedalBoard's **Line 6**, **Behringer**, **T-Rex**, and **Free The Tone** Devices to MIDI Clock

- Works with numerous Line 6 Devices including POD, Vetta II, and Flextone III

- Ratio control multiplies or divides the output against the incoming clock into one of nine (9) musical ratios

- **Tap "One-Shot" Button** sends tempo data when no MIDI Clock is present

- Stores and recalls distinct Output Ratio for each of 128 MIDI programs

- Simple to program - hold down the button!

- Optically Isolated Connection ensures 100% electrical isolation of audio and digital signals

- Compact design for modular PedalBoard layouts

- Solid, Professional-Grade construction, including Riveted Steel MIDI Jacks

- Molten Voltage MIDI technology allows remote, synchronized self-programming

- Robust, 128 program storage

COMPATIBILITY

Per the *Line 6 MIDI Continuous Controller Reference guide*, **SIXY is compatible with** Floor POD Plus, POD 2.0, POD Pro, POD XT, Bass POD XT, POD X3 Live, POD X3 Pro, Vetta II, Vetta II HD, Flextone III, HD 147, Pocket POD, and Gear Box Software.

SIXY also works with works with Behringer V-Amp, T-Rex Replica Delay, and Free The Tone Flight Time Delay.

All MIDI data is sent on Channel 1, so set your devices to receive MIDI on that channel. *Please refer to your device's documentation for more information.*

CONNECTING

Plug in a *separate or isolated* 9 volt, 2.1mm, 100mA minimum, ***tip negative*** DC Power supply into the DC9V jack (B). **Never power SIXY using a "daisy chained" power supply that is also connected to audio effects.**

(A) MIDI OUT Jack
(B) DC Power Jack
(C) MIDI IN Jack
(D) RATIO Control
(E) Tempo LED
(F) TAP/SAVE Button

MIDI Input

Connect a standard 5-pin MIDI cable from the device sending MIDI Clock to the MIDI IN Jack (C) on SIXY.

Maximum incoming MIDI Clock interval = 2.5 seconds (24 bpm)

Minimum incoming MIDI Clock interval = 0.25 seconds (240 bpm)

MIDI Output

Connect a standard 5-pin MIDI cable from the MIDI OUT Jack (A) to the MIDI IN Jack on your compatible Line 6 device.

SIXY transmits Tap Tempo data which is synchronized to the incoming MIDI Clock.

Note: Tap Tempo Data is only sent while MIDI Clock data is being received, or when the Tap Button (F) is pressed, as discussed below.

Note: Connected devices may have a noticeable time lag before adjusting to a new switched tempo, as it takes at least 2 data "taps" to set a new tempo, which corresponds to 2 quarter notes.

Selecting Tap Tempo MIDI CC Controller Number

In order to change the CC Controller Number that is sent in sync with MIDI Clock, hold down the button while powering on SIXY.

Keep holding the button, and turn the knob to select the Controller Number.

Knob Position	LED	Controller	Device
Full Left	One flash	CC 20	T-Rex Replica Delay
Center	2 Flashes	CC 62	Free The Tone Flight Time Delay
Full Right	3 Flashes	CC 64	Line 6 and Behringer Devices

Release the button to save the Controller Number. Default is Line 6 (CC 64).

Note: This feature is only available on units manufactured after December 10, 2014. Please email us with questions. Earlier units only send CC 64 for Line 6 and Behringer.

RATIO Control

The RATIO Control (D) multiplies or divides the speed of the outgoing Line 6 Tap Tempo data relative to the incoming MIDI Clock.

The Output Ratios are based on nine (9) musical subdivisions:

- sixteenth note (1:4 ratio)
- eighth note triplet (1:3 ratio)
- eighth note (1:2 ratio)
- quarter note triplet (2:3 ratio)
- quarter note (tap speed)
- half note triplet (4:3 ratio)
- half note (2:1 ratio)
- whole note (4:1 ratio)
- two whole notes (8:1 ratio)

As a result, synchronized devices can switch at different yet complimentary rates.

The default Output Ratio is quarter note, which corresponds to the knob pointing to the top of the pedal. Sixteenth note is full left, while two whole notes is full right.

> *Note: Ratio changes affect only the current Program and are not stored unless the Program is saved, as described below.*

> *Note: SIXY reads the position of the RATIO Control on power up.*

TAP Button

Pressing the TAP Button (F) sends a single packet of Tap Tempo data. As such, setting a tempo using the TAP Button requires at least 2 presses.

The TAP Button is designed for use when no MIDI Clock is present.

Program Storage

SIXY stores the distinct Output Ratio for each of 128 programs.

Holding down the first press of the TAP/SAVE Button (F) for more than 2.5 seconds causes SIXY to save the current ratio at the current Program location.

Once the TAP Button has been held long enough, the LED flashes *long-short, long-short, long-short* confirming the program was stored. Release the button once the flashing ends.

> *Note: MIDI output will stop while the program is stored. As such, it will usually be necessary to restart MIDI Clock after storing a ratio.*

> Programs can also be stored upon a self-programming command from the Molten Voltage MASTER CONTROL or Molten Voltage TEMPODE (PedalBoard MIDI Clock Injector).

Program Recall

SIXY stores the Output Ratio associated with each of 128 Programs as described above.

Programs are recalled upon receipt of MIDI Program Change messages on MIDI Channel 1 or 15.

> *Note: MIDI Program Change messages on Channel 15 are always re-transmitted on Channel 1.*

Upon receipt of a Program Change message, the Output Ratio for that Program is recalled. If MIDI Clock is being sent, any new clock speed is used immediately.

> *Note: SIXY responds to discrete Program Change messages, as well as those sent using the "running status" data format.*

<u>**Factory Preset Values**</u>

- 1:1 (Quarter Note) Ratio

- CC64 (Line 6 and Behringer Output)

- MIDI Channel 1 or 15

  Note: the primary MIDI channel for the Molten Voltage system is MIDI Channel 15, but Program Change messages on that channel are re-transmitted on Channel 1 which is the common Line 6 MIDI Channel.

<u>**MIDI Phantom Power**</u>

SIXY does not use MIDI Phantom Power.

MIDI IMPLEMENTATION CHART

Function	Filtered	Generated	Comment
Note On	O	X	
Note Off	O	X	
Aftertouch	O	X	
Control Change	Y	Y	CC64 data filtered on all channels. All other CC data passed through. Only Tap Tempo data generated on Channel 1.
Program Change	Y	Y	Program Change data received on channel 15 is re-transmitted on channel 1. All other Program Change data is passed through.
Channel Pressure	O	X	
Pitch Bend	O	X	
System Common	Y	X	All System Common messages filtered except Song Select.
System Exclusive	X	X	SIXY responds to Molten Voltage self-program commands.
System Realtime	O	X	

O = YES, X = NO, Y = See Comment

TROUBLESHOOTING

Problem	Solution
SIXY will not turn on.	Plug in 9 volt DC, 2,1mm Tip <u>Negative</u> Power Supply.
Clicking or Noise	Use a *separate* or *isolated* Power Supply for SIXY
SIXY is not receiving MIDI Clock	Make sure your other MIDI device is configured to send MIDI Clock. Consult the User's Guide for that device. If it cannot send MIDI Clock, consider the Molten Voltage devices MASTER CONTROL or TEMPODE.
SIXY not receiving MIDI Program Change messages	Set your MIDI device to send MIDI Program Change messages on MIDI Channel 1 or 15.
Connected Device is not synchronized	Make sure the connected device is set to receive MIDI data on Channel 1. Make sure incoming MIDI Clock and Ratio do not exceed the input limits of the Line 6 device.

General Guidelines

- Keep MIDI cables as short as possible. Long cables cause errors. If you need more length, consider using a MIDI repeater.

- If you are daisy chaining MIDI devices, the total MIDI cable length must be considered if any MIDI devices do not amplify the data signal.

Support

questions@MoltenVoltage.com

Related Products

- Molten Voltage MASTER CONTROL (MV-58 and MV-58B)

- Molten Voltage TEMPODE, the MIDI Clock Injector

- Molten Voltage MIDI Splitty - MIDI Pedalboard Splitter / Repeater

  Many more available soon!

Warranty

Molten Voltage is proud of its products and warrants this unit for a period of two (2) years from the date of purchase to be free from defects in materials and workmanship under normal use and service, as long
as the unit is used with an approved power supply, and consistent with these instructions.

Contact *Service@MoltenVoltage.com* regarding repairs. Any user repair attempts void the warranty. PROOF OF PURCHASE IS REQUIRED FOR WARRANTY REPAIRS.

Molten Voltage
MIDI PedalBoard Devices

Sturdy
Scalable
Simple™

*streamline your sound**™***

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