



SMARTLOOP

Disaster Area Designs

www.disasterareadesigns.com

SMARTLoop Operation Manual

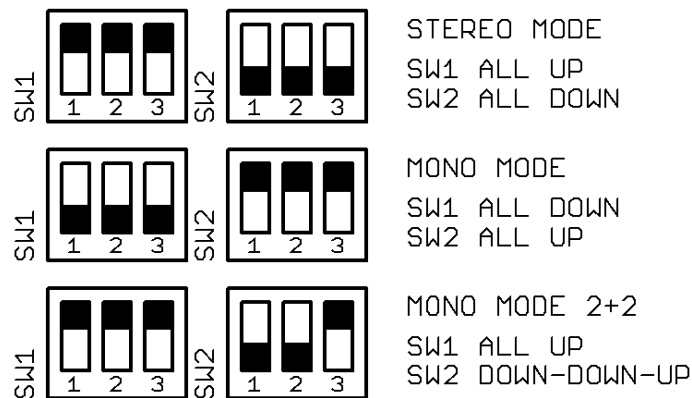
Firmware revision 1.06 Sept 2013

Thank you for purchasing the Disaster Area SMARTLoop. The SMARTLoop is a compact effects switching system with built-in MIDI control. It is designed to switch two stereo loops or four mono loops.

CONNECTIONS:

DIP SWITCH SETUP:

The SMARTLoop has internal DIP switches that reconfigure the processor and signal path to operate the left and right bypass relays separately. The DIP switches are accessible by removing the SMARTLoop rear lid.

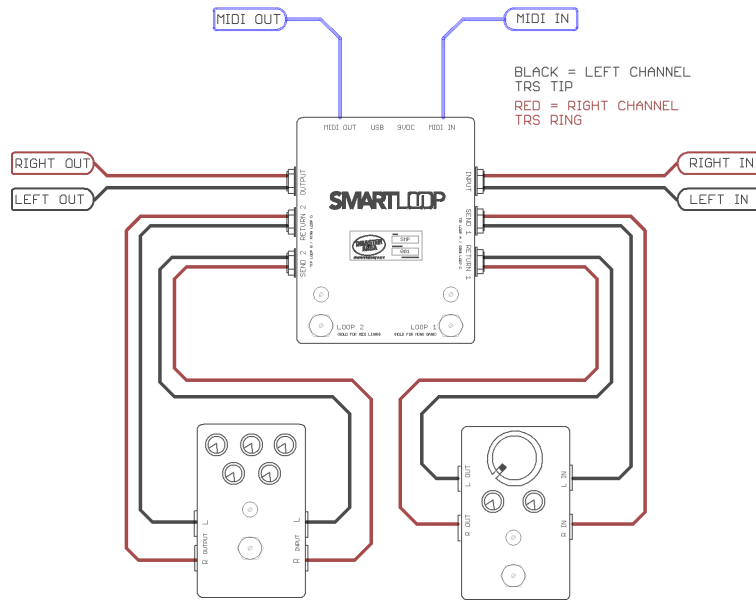


DIP Switch Settings

Stereo Mode:

In stereo mode, the SMARTLoop switches the left and right bypass relays for each loop together. The footswitches directly select Loop 1 or Loop 2.

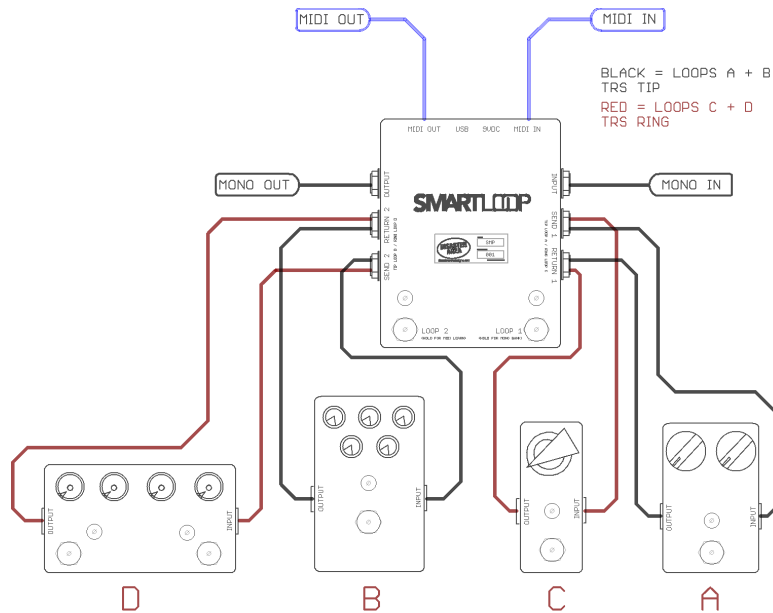
Stereo mode may also be used for two mono pedals, ignoring the “ring” channels.



Dual Stereo / Dual Mono Connection Diagram

Mono Mode:

In mono mode, the SMARTLoop switches each bypass relay separately. In addition, the “tip” channels are connected in series with the “ring” channels internally. In this mode connections to the loops should be made with TRS Y-cables, but the Input and Output connections may be made with standard mono guitar cables.



EFFECT ORDER
A -> B -> C -> D

Mono Mode Connection Diagram

Mono Mode 2+2:

In 2+2 mono mode, the SMARTLoop switches each bypass relay separately as in mono mode. 2+2 mono mode differs in that the “tip” and “ring” channels are not connected together internally. All connections should be made using TRS Y-cables. In 2+2 mono mode, the “tip” and “ring” channels may be split and connected at different points in the signal chain. As an example, the “tip” channels could be used to bypass two pedals connected to the amplifier’s input, while the “ring” channels could be used to bypass two effects in the amplifier’s effects loop. The SMARTLoop is completely passive and can handle line or pedal level signals with no problems.

The USB-Mini-B jack is used for firmware update and customization. The MIDI jacks will not be functional if the USB is connected. Additionally, the USB connection can cause noise or interference with the guitar signal when connected.

The power jack is 2.1mmID, center negative, 9V DC 120mA minimum. The SMARTLoop may be powered by one of the standard outputs on the Voodoo Labs Pedal Power series power supplies, or with an optional DC power supply.

MIDI Configuration and Presets:

Initial Setup: The SMARTLoop defaults to using MIDI Channel 1 from the factory. To change its MIDI channel assignment, press-hold the Loop 1 button at power-on. The Loop 1 LED will blink red / green. While the LED is blinking, send the SMARTLoop a MIDI continuous controller 99 (MIDI CC) message with the value corresponding to the channel the SMARTLoop should use. For example, to set the SMARTLoop to MIDI Channel 3, send CC99, 03 while the SMARTLoop is in config mode.

Switching Loops: The Loop 1 and Loop 2 footswitches on the SMARTLoop will instantly turn on Loops 1 and 2 respectively. If the SMARTLoop is set to mono mode (either standard or 2+2,) the Loop 1 and Loop 2 footswitches will select Loops A and B. To access Loops C and D, press-hold the Loop 1 button to change the mono bank. Loop C may be activated with the Loop 1 button, and Loop D is accessed using the Loop 2 button.

Saving Presets: To save a preset, first enable the loops that should be engaged in that preset. Once the correct loops are on, press-hold the Loop 2 footswitch to enter MIDI learn mode. While the SMARTLoop is in MIDI learn mode, send a MIDI program change message (MIDI PC) from your controller or other MIDI device connected to the SMARTLoop MIDI in. The SMARTLoop LEDs will flash to indicate the command was received and the preset will be stored.

To exit MIDI learn mode without saving a preset, tap either footswitch.

To set the SMARTLoop to ignore a particular preset, press-hold the Loop 2 button while in MIDI learn mode, then send a MIDI program change message (MIDI PC) from your controller. The SMARTLoop will not change its settings if the “ignore” preset is received.

To factory-reset all programs and parameters, press hold both buttons at power-on.

To access the loops individually via MIDI, send the following MIDI CC commands to the SMARTLoop:

CC60	00-63	Loop A bypass (mono mode)
		Loop 1 bypass (stereo mode)
	64-127	Loop A engage (mono mode)
		Loop 1 engage (stereo mode)
CC61	00-63	Loop B bypass (mono mode)
		Loop 2 bypass (stereo mode)
	64-127	Loop B engage (mono mode)
		Loop 2 engage (stereo mode)
CC62	00-63	Loop C bypass (mono mode)
	64-127	Loop C engage (mono mode)
CC63	00-63	Loop D bypass (mono mode)
	64-127	Loop D engage (mono mode)