

Suhr[®]

microMIDI CONTROL

User Guide



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Thank you for purchasing the Suhr microMIDI Control.

Please take the time to read this User Guide to get the most out of the microMIDI Control. The more you familiarize yourself with the features of this unit, the more you will enjoy its benefits and maximize its potential.

Overview

The Suhr microMIDI Control is a MIDI controllable footswitch replacement, making it an alternative to the mechanical footswitches that are used to control amplifiers, pedals, or any device that has a footswitch input. Common examples include amp channel switching (such as the PT15), amp reverb/boost bypass, delay tap tempo for pedals, and more. Easily control the two switches on the TRS jack using MIDI from your MIDI foot controller, your DAW, or other MIDI devices.

The microMIDI Control can accept either Program Change or Control Change commands and has the ability for momentary, latching, pulse switching, and predetermined combinations of the two switches. The microMIDI Control is the smallest of its kind available today, making it easy to add to a pedalboard or hidden behind an amplifier.



The Suhr microMIDI can be used in many ways. Here is a short list of possible uses and features.

Uses & Features

- Silent and reliable MIDI controllable footswitch replacement for Amps, pedals, and other devices.
- Optically isolated, preventing ground loops in systems whose switch control jacks aren't isolated from the switcher.
- Ability to switch amplifier channels with computer DAW for instant silent switching during recording.
- Adds control jack to MIDI switchers with no available control jacks.
- Compatible with Program Change (PC) and Control Change (CC) commands.
- Latching, Momentary (using CC), and pulse options of both switches.
- 4 internal switches to change MIDI Channel (1-16) available on the bottom of PCB when the bottom lid is opened.
- MIDI IN and THRU. The THRU jack is a hardware copy of the MIDI IN jack, eliminating latency from software THRU methods.
- Powered by standard center-negative 9V DC 2.1mm connector power supplies common to guitar pedals.
- Less than 12mA current draw.
- The smallest solution currently available on the market.



9VDC Power & LED

9VDC Center negative, 2.1mm x 5.5mm
(Standard connector for pedals).

TRS Output

Plug in TRS cable or Mono cable (See page 7)
to device that you wish to switch.

TIP LED

Blue LED indicator for
TIP switch (On when
closed, Off when open).

RING LED

Red LED indicator for
RING switch (On when
closed, Off when open).

MIDI IN

Plug in 5-pin MIDI cable from MIDI
device that will be used to send MIDI
messages to microMIDI.

MIDI THRU

This MIDI output allows MIDI to pass
through to other devices that receive
MIDI. THRU jack is a hardware copy
of the MIDI IN jack, eliminating latency
from software THRU methods.

MIDI Send/Receive LED

This green LED indicator pulses when
receiving MIDI messages.

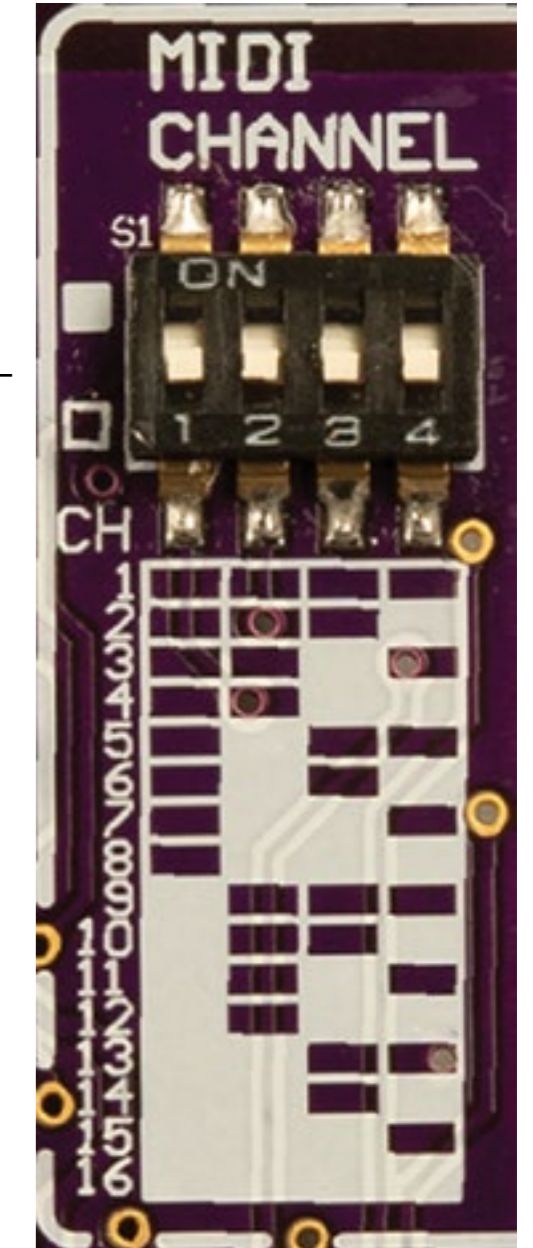
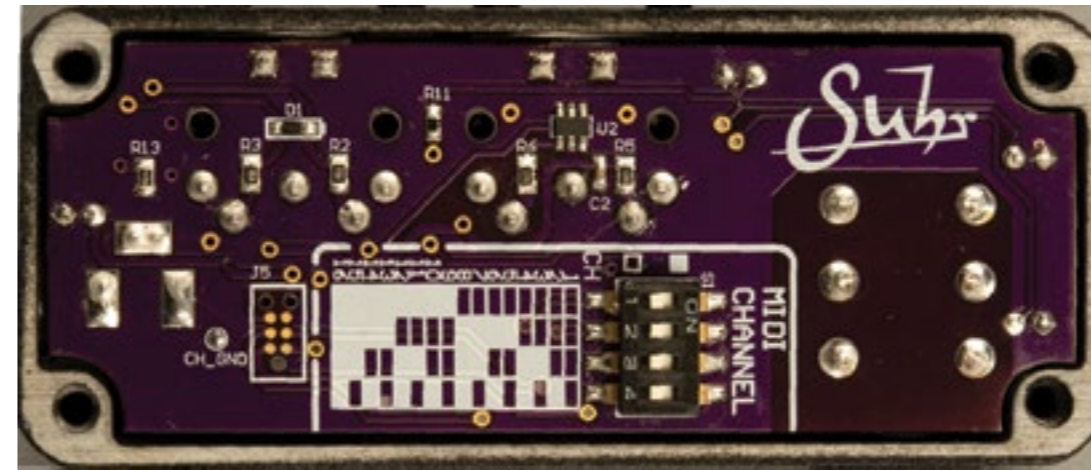



Setting MIDI Channel


This section will explain how to set the MIDI channel for the microMIDI. All microMIDIs will be set from the factory to receive messages on MIDI channel 1.

Steps:

1. Remove the 4 screws on back of microMIDI.
2. Review the diagram showing the key of MIDI channels and their corresponding setting for the 4 DIP switches.
3. Arrange the 4 DIP switches.
4. Reinstall the rear cover and 4 screws.
5. After the MIDI channel is changed, the unit needs to be power cycled to take on the new MIDI channel.

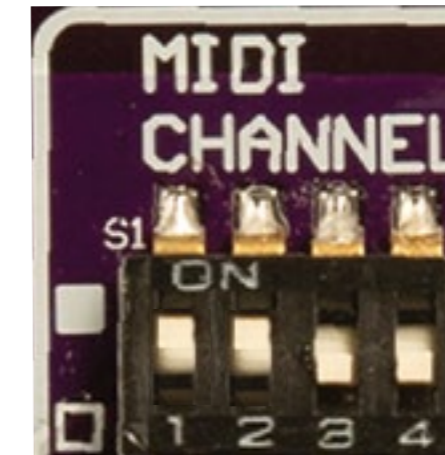


 **IMPORTANT NOTE:** Filled-in white square represents the switch in the ON position (UP)

 **HELPFUL TIP:** On the right side of this page you will see two examples of DIP switch settings for communicating on MIDI channel 9 and MIDI channel 13.



Example: MIDI Channel 9



Example: MIDI Channel 13

Factory Setting-MIDI Channel 1

How to connect microMIDI to an Amp (e.g. The Suhr PT15)

This guide will show the ways you can connect your microMIDI to a MIDI foot switcher.

Steps:

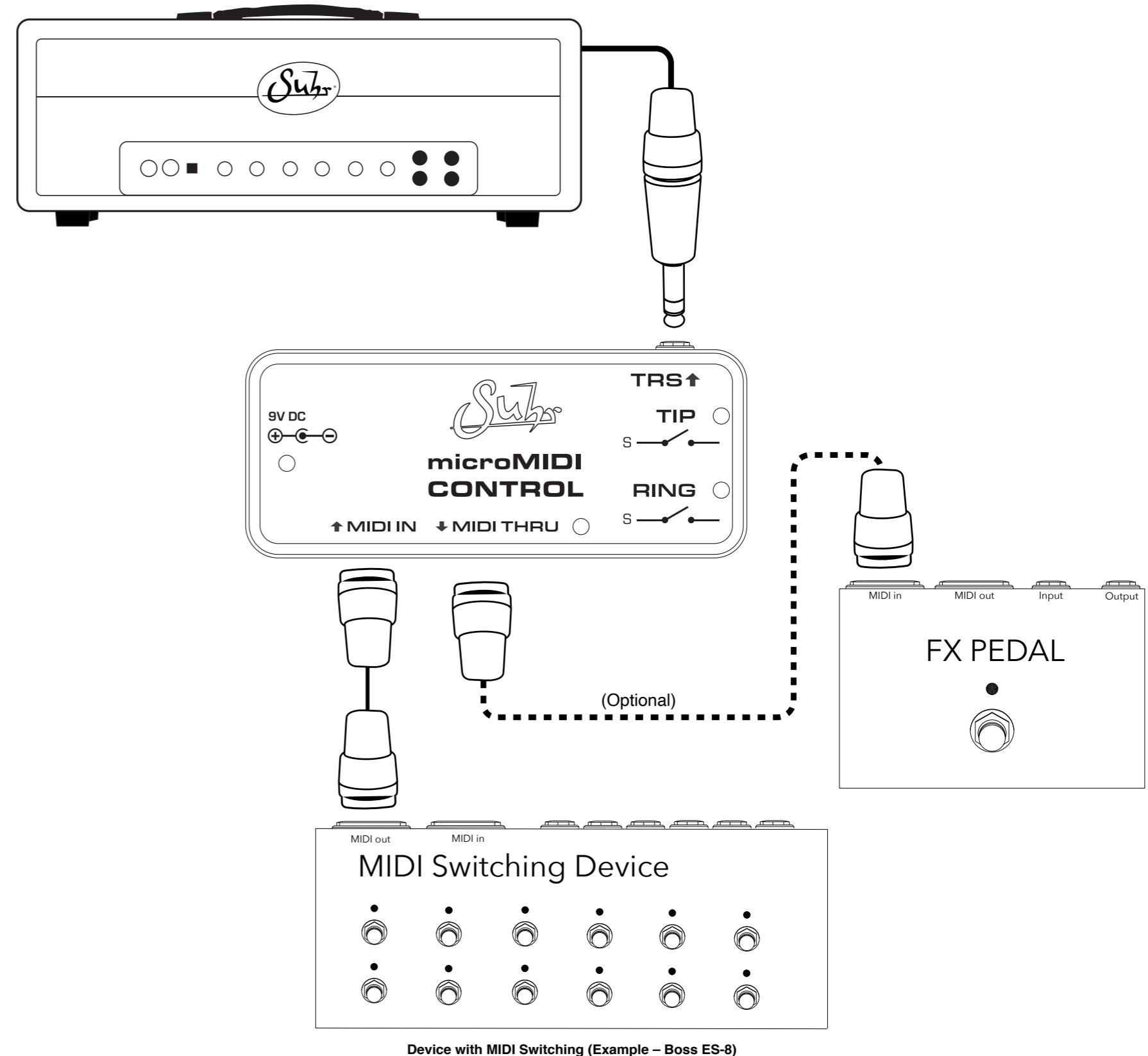
1. Plug in a 9VDC Center negative, 2.1mm x 5.5mm (Standard for pedals).
2. Connect your amplifier "**switch jack**" via 1/4" TRS cable or mono (TS) cable to microMIDI's **TRS** jack.
3. Connect a MIDI cable from the **MIDI OUT** of your master device to the **MIDI IN** of the microMIDI Control.
4. Be sure your MIDI interface or MIDI switching device is set to communicate on the same MIDI channel as your microMIDI (1-16).
5. Consult the MIDI table on page 10 to learn the Program Change/Controller Change numbers needed to correspond with the TRS or TS combinations of your amp's footswitch.

–Optional connections– (dotted lines on diagram)

6. Connect the **MIDI THRU** to pass MIDI through to next device.

! IMPORTANT NOTE: Mono (TS) cables can also be plugged into the microMIDI's TRS jack, in which case only the Tip switch will be functional. For example, this can be used for boost, tremolo, reverb switches for amps, etc.

! IMPORTANT NOTE: Be sure to consult your MIDI interface or MIDI switching device's manual/user-guide for the proper setup for sending MIDI.



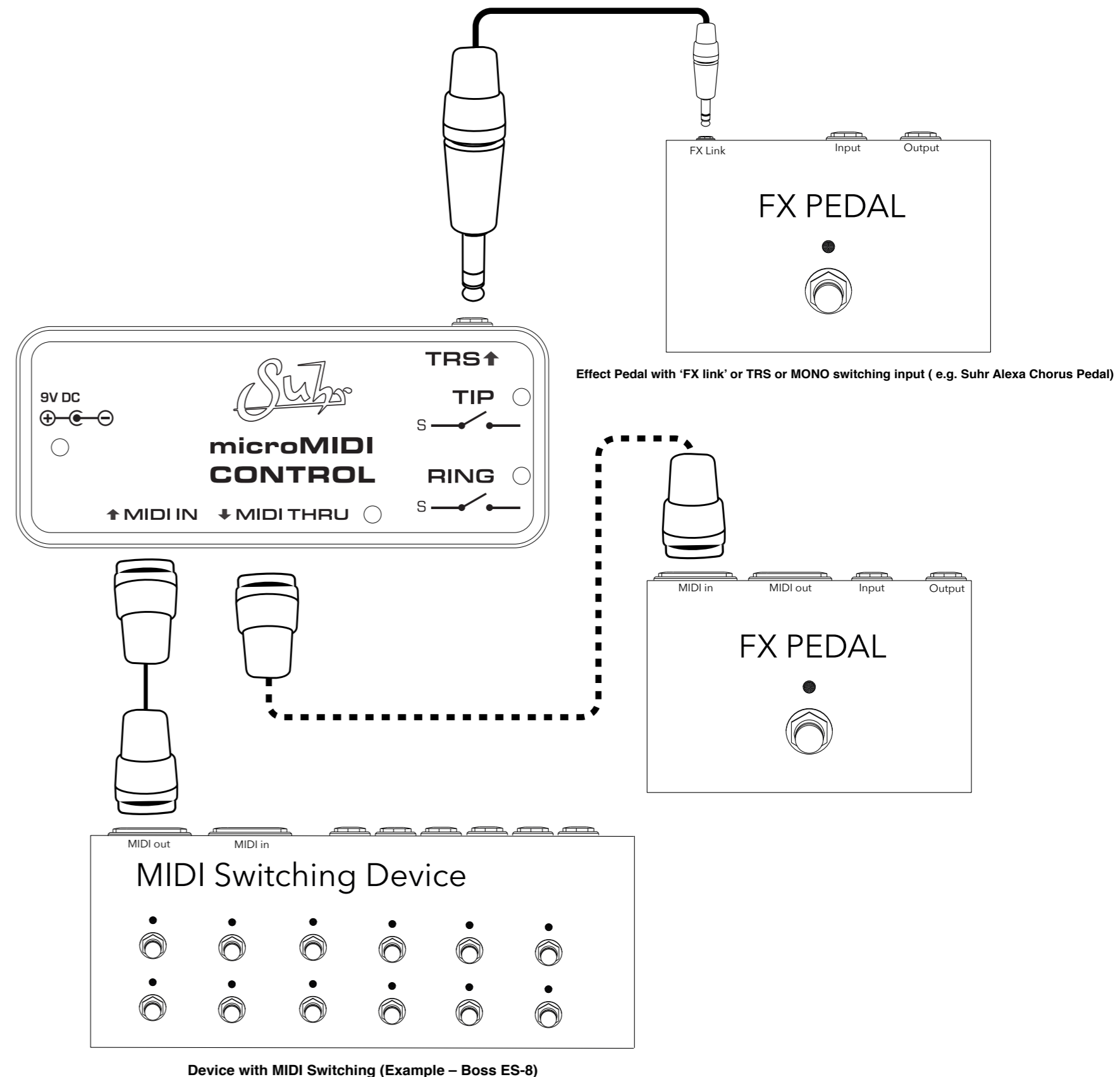
How to connect microMIDI to a Pedal (e.g. The Suhr Alexa)

This section will explain how to connect your microMIDI to the TRS/FX link of a pedal to change things such as tap tempo or modulation duration, channel selecting, and bypass.

Steps:

1. Plug in a 9VDC Center negative, 2.1mm x 5.5mm (Standard for pedals).
2. Connect your Suhr pedal's "FX Link" via 1/8" - 1/4" TRS cable to microMIDI's **TRS** jack.
3. Connect the **MIDI IN** to your MIDI interface or MIDI switching device with MIDI outs.
4. Be sure your MIDI interface or MIDI switching device is set to communicate on the same MIDI channel as your microMIDI (1-16).
5. Consult the MIDI table on page 10 to learn the Program Change numbers you need to correspond with the TRS combinations of your pedal.

IMPORTANT NOTE: You can also use microMIDI to switch your non-Suhr pedal's external switch functions (Such as tap tempo or channel select) using a TRS or mono (TS) cable.




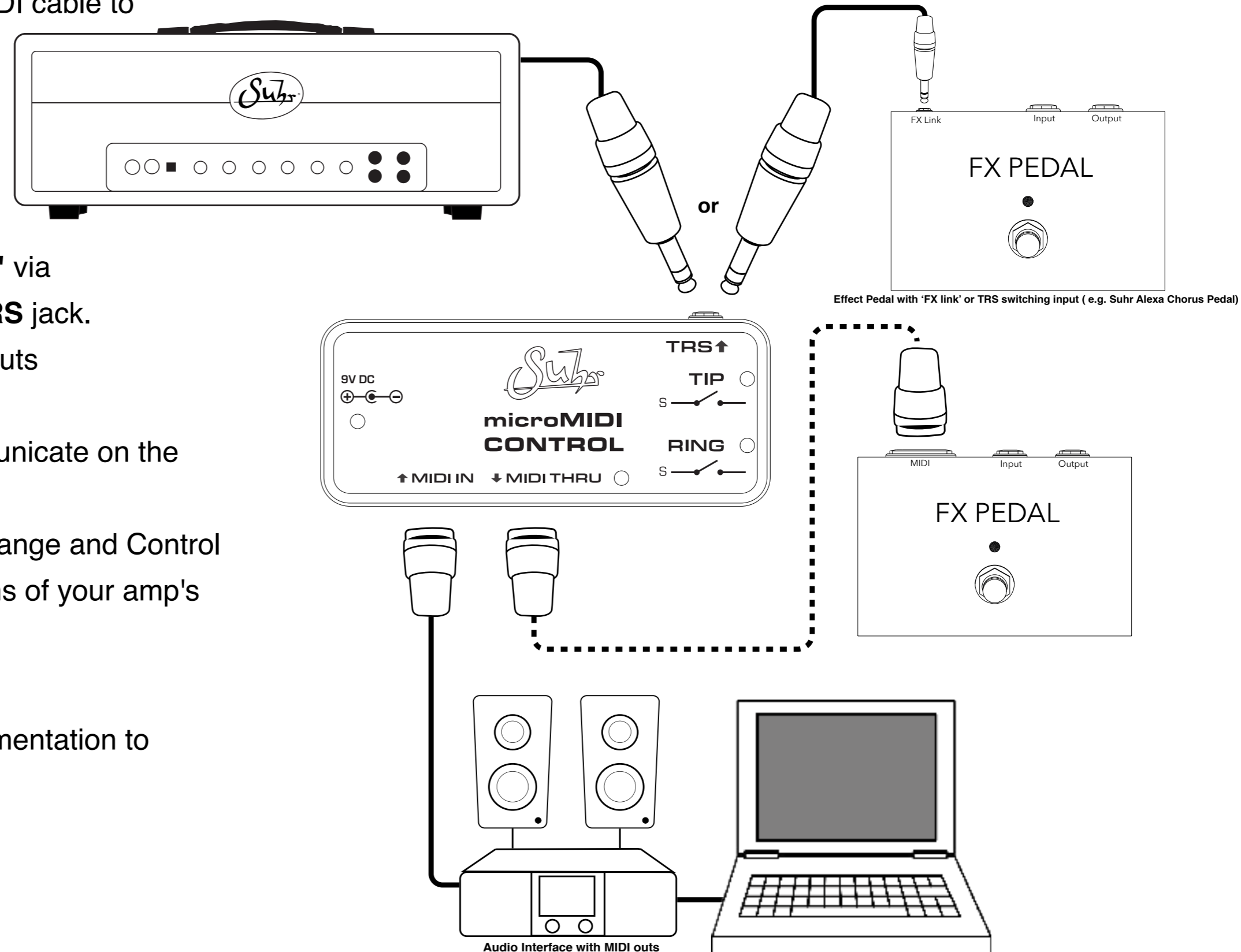
How to connect microMIDI to a DAW

This section will explain how to connect your microMIDI to a DAW (digital audio workstation) using a recording interface or a USB to MIDI cable to control an amp or the TRS/FX link of a pedal.

Steps:

1. Plug in a 9VDC Center negative, 2.1mm x 5.5mm (Standard for pedals).
2. Connect your amplifier's "**switch jack**" or pedal's "**FX Link**" via 1/8" - 1/4" TRS cable or mono (TS) cable to microMIDI's **TRS** jack.
3. Connect the **MIDI IN** to your recording interface with MIDI outs or to a computer using a USB to MIDI cable.
4. Be sure your DAW or MIDI switching device is set to communicate on the same MIDI channel as your microMIDI (1-16).
5. Consult the MIDI table on page 10 to learn the Program Change and Control numbers you need to correspond with the TRS combinations of your amp's footswitch or pedal's PC and CC numbers.

 **IMPORTANT NOTE:** Refer to your specific DAW's documentation to learn how to send MIDI PC or CC numbers.



MIDI Programing Table

PROGRAM CHANGE AND CONTINUOUS CONTROLLER TABLE

PROGRAM CHANGES (PC#)	TIP	RING
1	OPEN	OPEN
2	CLOSED	OPEN
3	CLOSED	CLOSED
4	OPEN	CLOSED
5	OPEN	X
6	CLOSED	X
7	X	OPEN
8	X	CLOSED
9	TOGGLE	X
10	X	TOGGLE
11	PULSE	X
12	X	PULSE

CONTINUOUS CONTROLLERS (CC#)	VALUE RANGE	TIP	RING
1	ANY VALUE (0-127)	OPEN	OPEN
2	ANY VALUE (0-127)	CLOSED	OPEN
3	ANY VALUE (0-127)	CLOSED	CLOSED
4	ANY VALUE (0-127)	OPEN	CLOSED
5	0 - 63	OPEN	X
5	64 - 127	CLOSED	X
6	0 - 63	X	OPEN
6	64 - 127	X	CLOSED
		TIP TOGGLE (LATCH)	
7	ANY VALUE (0-127)	CLOSED -> OPEN or OPEN -> CLOSED	
		RING TOGGLE (LATCH)	
8	ANY VALUE (0-127)	CLOSED -> OPEN or OPEN -> CLOSED	
		PULSE TIP FOR 50ms	
9	ANY VALUE (0-127)	CLOSED (for 50 ms) then OPEN	
		PULSE RING FOR 50ms	
10	ANY VALUE (0-127)	CLOSED (for 50 ms) then OPEN	

TABLE KEY

OPEN = SWITCH OPEN TO SLEEVE = 
LED will be OFF

CLOSED = SWITCH CLOSED TO SLEEVE = 
LED will be ON

X = EITHER CLOSED/OPEN

TOGGLE = Will switch to opposite state of what is currently set.

**(If it is currently CLOSED, it will switch OPEN)
(If it is currently OPEN, it will switch CLOSED)**

PULSE = CLOSED FOR 50ms, THEN OPEN

Technical Specifications

Power Connector: 9Vdc, center negative, 2.1mm x 5.5mm

Operating Voltage: 9Vdc

Maximum Voltage: 12Vdc

Current Consumption: <12mA @ 9VDC

Dimensions: 3.64" x 1.52" x 1.24"

Weight: 0.25 lbs.

***All specifications subject to change without prior notice**

Warranty

For warranty information on the Suhr microMIDI as well as all other Suhr products, please visit, [**www.Suhr.com/Warranty**](http://www.Suhr.com/Warranty)