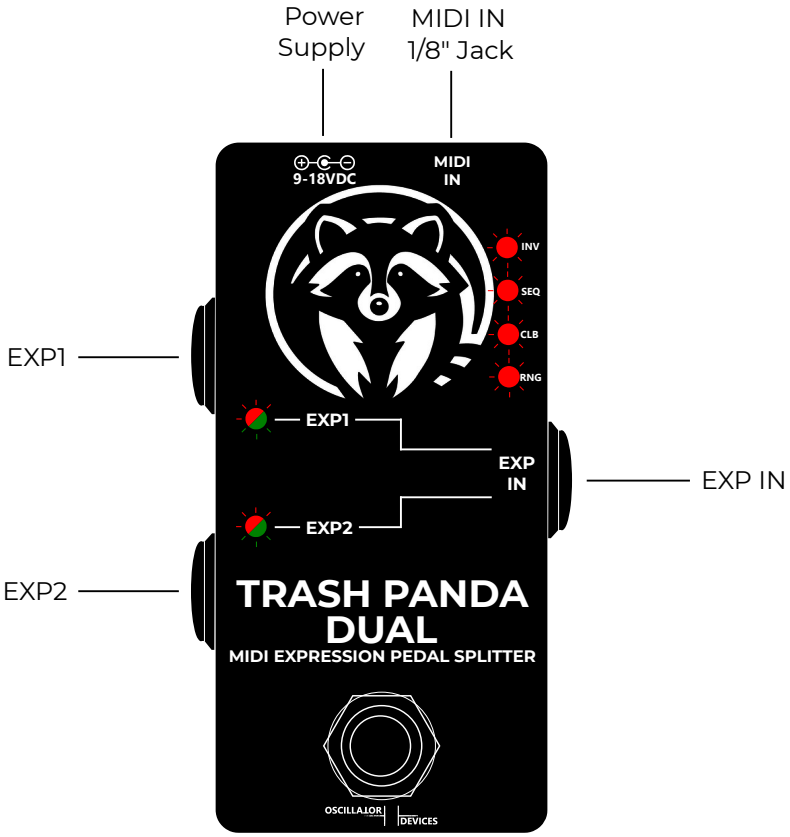
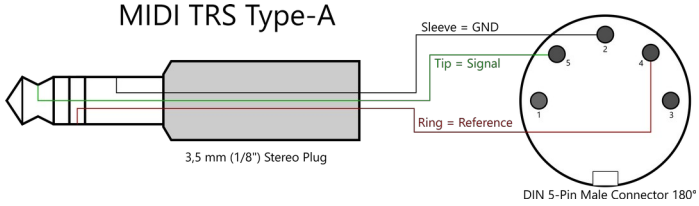
TRASH PANDA DUAL – Quick Start



Connections

- **EXP1/2:** Expression outputs. 1/4'' stereo jack sockets wired like a standard expression pedal with a 50k potentiometer and thus will fit most common pedals. Every ***EXP*** has a corresponding dual color LED to represent the state of the expression output. It lights green in the heel position, shifts to orange in the middle position and gradually fades to red towards the toe position.
- **EXP IN:** The expression pedal input. Connect a standard expression pedal (resistance does not matter) here to directly control one or more of the expression outputs.
- **Power Supply:** 9-18V. 2.1mm barrel connector, center negative. This corresponds to the standard “Boss-Style” power supply. Current consumption maximum 100mA.
- **MIDI In**: 1/8“ stereo jack sockets according to MIDI standard for MIDI TRS (**MIDI TRS-Type A**).



Please disconnect all devices from the power supply, before making any connections.

Caution: Under no circumstances should be more than +5V or any negative voltage be applied to any EXP.

Configuration

The Trash Panda Dual has a configuration mode, to set up various parameters. To get into configuration mode press and hold the footswitch for longer than 3s. The EXP1/2 LEDs will start flashing rapidly and so will one of the red LEDs.

The red LED shows which configuration mode is selected. Press the footswitch until the LED next to the desired configuration mode lights up. Press the footswitch four times to end the configuration mode.
Configuration Modes are: Inverting the Outputs, Setting the Sequence, Calibrating the Expression Pedal and Setting the Range. For more details refer to the full user manual at https://oscillatordevices.com/trash-panda

MIDI Implementation

Controlling the Expression Outputs

The expression output has 256 steps. The first two commands (20/40 and 21/41) distributes the entire range over 128 steps. The high-resolution commands (22/42 and 23/43) can be used to set a precise value.

CC			Function
EXP1	EXP2	#	
20	**40**	0-127	Expression out from heel (0) to toe (127)
21	**41**	0-127	Expression out from toe (0) to heel (127)
22	**42**	0-127	Expression out from heel (0) to middle position (127)
23	**43**	0-127	Expression out from middle position (0) to toe (127)

To set both expression outputs to the same value at the same time, use the following command.

CC	#	Function
102	0-127	All Expression outs from heel (0) to toe (127)

Controlling Active Expression Outputs

To control which expression outputs are routed to the expression pedal, use the following commands. An active output is routed to the expression pedal, a deactivated output is not.

CC	#	Function
103	0-1	Activate EXP1 (0), EXP2 (1)
104	0-1	Deactivate EXP1 (0), EXP2 (1)

With the following command, the expression value of only the active expression outputs can be set.

CC	#	Function
105	0-127	Set expression value from all active expression outs from heel (0) to toe (127)

To save on MIDI commands there are commands to activate/deactivate all expression outputs at the same time.

MIDI Channel

The ***Trash Panda Dual*** ships in omni mode (i.e. it responds to every channel). The MIDI channel can be set in two ways. With the footswitch, or with a MIDI command.

To change the MIDI channel using the footswitch, proceed as follows:

1. Disconnect the device from the power supply
2. Press and hold the footswitch and restore the power while the footswitch is pressed.
3. After the boot process is complete, the device starts to flash its LEDs. Press the footswitch according to the number of the desired channel (e.g. twice for channel 2). The ***Trash Panda Dual*** acknowledges this by emitting short flashing pulses corresponding to the number of the channel.
4. Once the desired channel is set, press the footswitch and hold it down. The LEDs stop flashing and eventually blink once more. The channel is saved.
5. Disconnect the supply voltage. On the next power up the ***Trash Panda Dual*** reacts to the selected channel.

To put the ***Trash Panda Dual*** in omni mode skip step 3.