How do I use an expression pedal or external footswitch to control the speed of my Pinwheel Pedal?

Your Pinwheel pedal has a special function jack on its right side near the stereo input jacks. This jack is for connection of an Expression Pedal or an external device for either continuous control of the speed or remote control of the Slow/Fast footswitch.



EXP/FS Jack



FS SELECT Switch On Rear Panel

Speed Control using Expression Pedal

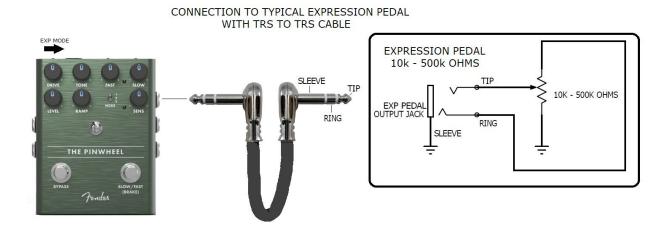
To connect an Expression Pedal, start by moving the rear panel FS SELECT switch to EXP mode and ensure that the pedal is in SLOW mode using the onboard speed switch.

There are many commercially available Expression Pedals and they do not all follow the same standard. For use with the Pinwheel, you'll need one with a dedicated TRS (Tip, Ring, Sleeve) Expression Output jack that connects the pot wiper to the TIP of the TRS cable. We recommend an expression pedal with a potentiometer impedance between 10k and 500k Ohms.

Connect a ¼" TRS to TRS cable from the EXP/FS jack to the Expression Pedal output jack. Heel down is SLOW. Toe down is FAST. The SLOW and FAST limits are still set by the controls on the pedal.

BRAKE mode and FAST mode are still available by way of the onboard SLOW/FAST footswitch when using an Expression Pedal.

Hold the SLOW/FAST switch to engage BRAKE mode, which stops the spinning of the virtual speaker simulation. Note that the DRIVE, TONE and LEVEL controls are remain active so you'll still hear the overall tone of the pedal including the power amp distortion, which is a great sound on its own.



Speed Control using Passive Volume Pedal

To connect a Volume Pedal, start by moving the rear panel FS SELECT switch to EXP mode and ensure that the pedal is in SLOW mode using the onboard speed switch.

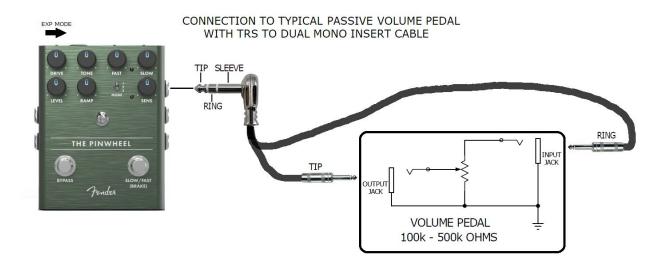
There are many commercially available Volume Pedals and they come in several different impedances, generally 250k or 500k Ohms. For our purposes either one will work as expected. Note you will need a PASSIVE volume pedal. Passive means it does not require external power. An active Volume Pedal will NOT work with Pinwheel.

To use a Volume Pedal with the Pinwheel, you'll need a $\frac{1}{4}$ " TRS to Dual Mono Insert Cable. This cable will have a TRS plug on one end and split out to two $\frac{1}{4}$ " mono plugs at the other. Typically, these mono plugs are labeled TIP and RING.

Connect the TRS plug to the Pinwheel's EXP/FS jack. Connect the RING plug to the Input jack on the Volume Pedal. Connect the TIP plug to the Output jack on the Volume Pedal.

As above with an Expression Pedal, Heel down is SLOW and Toe down is FAST. The SLOW and FAST limits are still set by the controls on the pedal.

BRAKE mode and FAST mode are still available by way of the onboard SLOW/FAST footswitch when using a Volume Pedal.



Remote Control of SLOW/FAST Speed Modes

To remotely control the Pinwheel's SLOW/FAST speed switch, start by moving the rear panel FS SELECT switch to FS mode.

The easiest way to remotely control the SLOW/FAST function is to connect a simple latching footswitch with a standard mono guitar cable. The Footswitch should use a Latching type switch and NOT have an LED. An LED will prevent the switch from working as expected.

Alternatively, the speed switch can be controlled by many commercially available pedalboard or rackmounted switching systems that offer Latching Type control functions (Momentary will NOT work). Again, a standard mono guitar cable should be connected between the Pinwheel's EXP/FS jack and the control jack on your switching system.

Note that the onboard SLOW/FAST switch will NOT function when in remote control mode. Also note that only SLOW/FAST are selectable via remote control. The BRAKE mode is NOT selectable via remote control.

