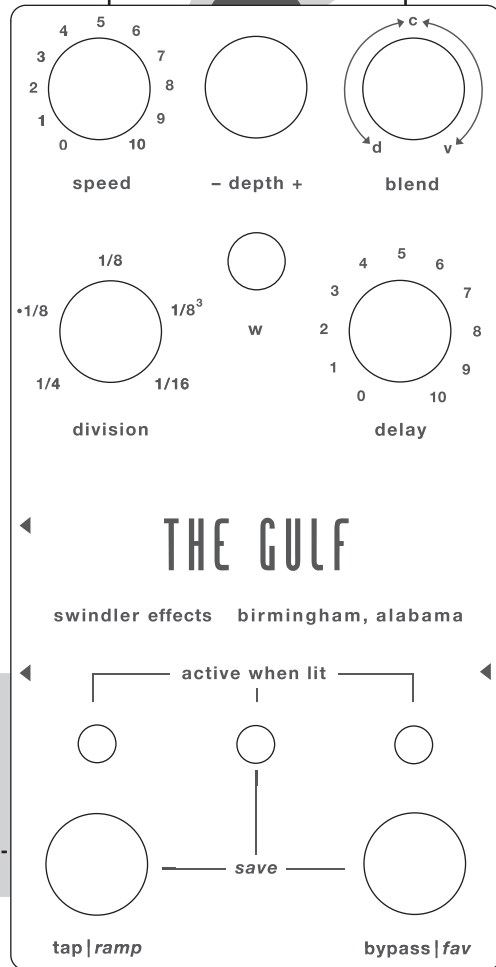


9V Center Negative  
85 mA

External Tap  
(normally open)

TRS Expression



Right Out

Left Out (mono)

Hold to  
ramp

Mono In

Hold to  
access  
favorite

Hold both to save favorite

## CONTROLS

**SPEED** - Manually controls the speed of the modulation. Turning clockwise increases the speed.

**DEPTH** - Controls the strength of the modulation. Clockwise is more prominent.

**BLEND** - Blends affected signal with the dry path. Can go from dry (full counterclockwise) to full wet vibrato (full clockwise), with a range of chorus sounds between.

**DIVISION** - Controls the tempo subdivision used, typically with the tap footswitch. Available subdivisions: Quarter, dotted eighth, eighth, triplet, and sixteenth.

**DELAY** - Used to time-shift the modulated signal to increase warble.

## WAVEFORM SWITCH w

**LEFT** - Sine wave modulation.

**MIDDLE** - Triangle wave modulation.

**RIGHT** - Square wave modulation.

## Expression Configuration (TRS/MIDI)

Upon every power up, the LED's will blink to indicate which Expression Configuration is currently enabled.

- 1] Bypass LED - Blinking 3 times = External Favorite Mode
- 2] Tap LED - Blinking 3 times = Expression Mode
- 3] Center LED - Blinking = MIDI Mode. For MIDI Mode, the number of blinks indicates the current MIDI Input Channel selected.

NOTE: If none of the expression options are used, we recommend powering on the pedal while holding the TAP footswitch for a few seconds and then releasing. This will disable all below expression options and ensure correct operation if nothing is plugged into the TRS expression jack.

1] **EXPRESSION MODE:** This mode allows you to control either the SPEED or DEPTH parameter using an external expression pedal / knob.

### TO SET UP EXPRESSION MODE:

- a] Power up the pedal while holding the TAP footswitch
- b] Continue to hold the TAP footswitch and turn the speed or depth knob to configure that knob for external control.
- c] The center LED will flash while turning the knobs to indicate the change.
- d] Release the TAP footswitch to begin normal operation in EXPRESSION MODE.

2] **EXTERNAL FAVORITE MODE:** This mode allows you to access your onboard FAVORITE setting remotely with an external switch.

### TO SET UP EXTERNAL FAVORITE MODE:

- a] Power up the pedal while holding the BYPASS footswitch.
- b] Hold the BYPASS footswitch for a few seconds (but less than 5 seconds - see DETERMINE CURRENT FIRMWARE VERSION section for more details).
- c] Release the BYPASS footswitch to begin normal operation in EXTERNAL FAVORITE MODE.

NOTE: This mode disables access of the onboard FAVORITE by holding the BYPASS switch.

3] **MIDI MODE:** This mode allows you to control any parameter, access your FAVORITE setting as well as ADDITIONAL presets using an external MIDI controller.

### TO SET UP MIDI MODE:

- a] Power up the pedal while holding the TAP AND BYPASS footswitches. Hold for a few seconds.
- b] Release to begin operation in MIDI MODE.

NOTE: For full details on MIDI operation, please see the corresponding MIDI manual.

## RAMPING INSTRUCTIONS

Holding the TAP footswitch will initiate a tempo / speed ramping feature. This is indicated by the center LED lighting up. This feature is configurable, as described below.

The speed of the ramping, or how quickly the speed increases / decreases can be adjusted by changing the SPEED knob WHILE holding the TAP footswitch (while actively ramping). The center LED will blink to indicate that a change was received.

There are 3 Different MODES of ramping that can be configured. These are selected by changing the center toggle switch in the direction referenced below WHILE holding the TAP footswitch (while actively ramping). The center LED will blink to indicate that a change was received.

NOTE: If the toggle is already in the position that you are trying to set it to, you will need to flip it off that position and back again while holding the TAP footswitch to indicate a configuration change and register the new mode.

### RAMP MODES:

1] Toggle Switch left: The modulation speed will continually SLOW DOWN as long as the TAP footswitch is held down. Once the TAP footswitch is released, the speed will return to where it was before ramping was initiated.

## RAMP MODES (continued):

2] Toggle Switch Middle: The modulation speed alternates between slowing down and speeding up on each subsequent TAP footswitch hold.

On first hold, the speed will continually SLOW DOWN. Once released, it will stay at the new SLOWER speed. On the next hold, the speed will continually SPEED UP, and on release it will stay at the new FASTER speed.

This pattern will continue on each hold.

3] Toggle Switch Right: The modulation speed will continually SPEED UP as long as the TAP footswitch is held down. Once the TAP footswitch is released, the speed will return to where it was before ramping was initiated.

## FAVORITES / PRESETS

This pedal has ONE onboard FAVORITE setting that can be accessed by holding the BYPASS footswitch or through an external switch depending on the expression configuration. The center LED will turn on to indicate the FAVORITE or a preset is active.

Additional presets can be saved and accessed by using an external MIDI controller. See the corresponding MIDI manual for more details.

TO SAVE YOUR ONBOARD FAVORITE, simply hold both the TAP and BYPASS footswitches for a couple seconds and then release. The center LED will blink to indicate the save.

TO ALTER YOUR FAVORITE SETTING, activate the FAVORITE, alter the parameters that you wish to change, and then re-save the settings as you did the first time. A similar procedure applies to saving MIDI presets.

Some notes about the onboard FAVORITE / PRESETS:

- 1] ALL knob locations are saved per preset.
- 2] Toggle Switch location is saved per preset.
- 3] Ramping Speed and Mode are saved per preset.

Below are additional settings that AREN'T saved in each individual preset but ARE saved in the global settings of the pedal and are retained / reloaded during power up:

- 1] Previous ON / OFF bypass state.
- 2] TRS Expression Mode.
- 3] Expression pedal mapping (if applicable).
- 4] MIDI Channel.
- 5] Ramping speed and mode used for "live" mode.

## DETERMINE CURRENT FIRMWARE VERSION

Since these pedals support customer firmware updates through the built-in micro-USB port, it can be useful to know what firmware the pedal is currently running to determine if an update is necessary.

To determine your firmware version:

- 1] Power the pedal on while holding the BYPASS footswitch.
- 2] Hold the BYPASS footswitch for MORE THAN 5 SECONDS.
- 3] The center LED will then blink a certain number of times corresponding to the current firmware version. It will repeat the firmware blink every 5 seconds as long as the BYPASS footswitch is held.
- 4] Release the BYPASS footswitch to resume normal operation.

NOTE: Holding the BYPASS footswitch for more than 5 seconds at power up has no effect on the configuration of the pedal (external favorite, expression mode etc.).

If a firmware update is needed, please see the DOCUMENTATION page at [SwindlerEffects.com](http://SwindlerEffects.com) for downloads and instructions.