GFI SYSTEM

USER MANUAL

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1. Inputs

Orca accepts mono input or stereo inputs. For mono input operation use a standard mono (TS) patch cable and for stereo operation use a stereo (TRS) cable. If the stereo input signals come from an equipment that has separate Left and Right channel output jacks you will need to use a splitter cable like this:

TS

TS

TRS
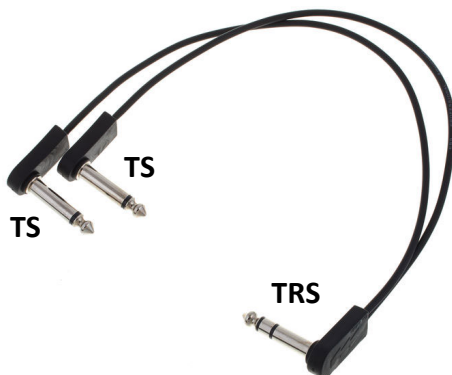
👉 To obtain the optimal sound quality, depending whether you use Mono or Stereo inputs, the pedal must be configured accordingly. This is done in **Global Settings**.

Hold the MODES button for 2 secs to enter global setting.

Globals
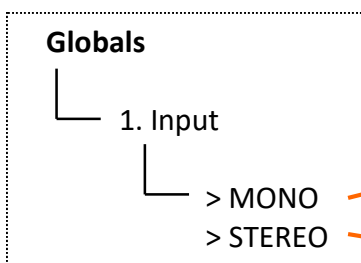
└─ 1. Input

      └─ > MONO ┈┈ Set to MONO when using mono input.
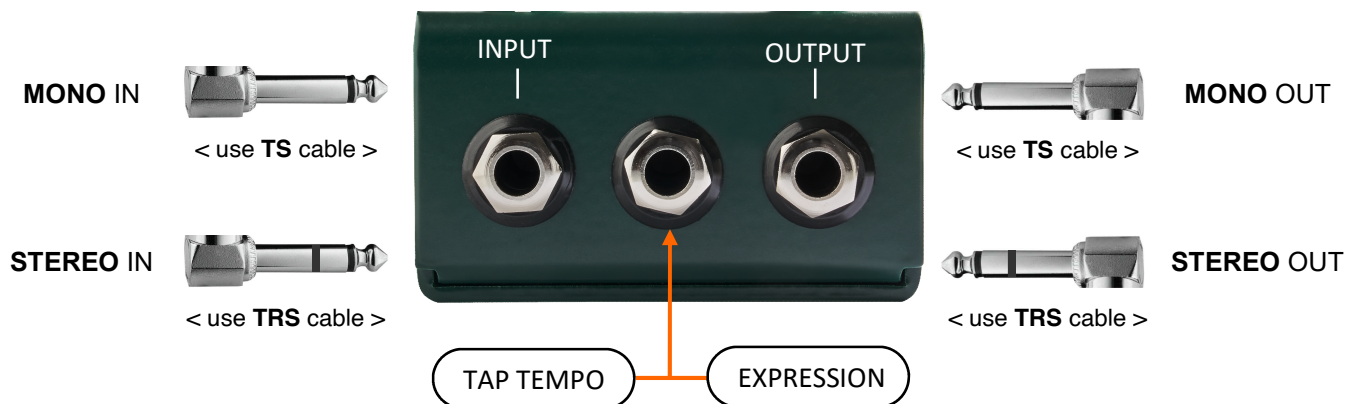
          > STEREO ┈┈ Set to STEREO when using stereo input.

2. Outputs

Orca may be used for mono output or stereo outputs. For mono output use a standard mono (TS) patch cable and for stereo outputs use a stereo (TRS) cable. If the stereo output signals are fed to an equipment that has separate Left and Right channel input jacks you will need to use a splitter cable like the one pictured above.

You do <u>not</u> need to configure anything for using mono or stereo outputs.

MONO IN
< use **TS** cable >

INPUT   OUTPUT

MONO OUT
< use **TS** cable >

STEREO IN
< use **TRS** cable >

STEREO OUT
< use **TRS** cable >

TAP TEMPO   EXPRESSION

3. Expression Input

An expression pedal may be used to control any one of the primary parameters, alternatively a tap tempo pedal may be used to remotely send tap tempo signal to the pedal.

Ring

Tip

wiper

Resistance value
10K Ohm
to
20K Ohm
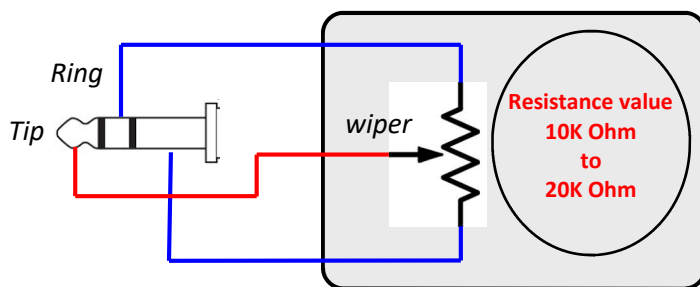
Expression Pedal requirement.
Some expression pedal on the market has its wiper connected to the Ring instead, this will not work with Orca. Make sure you get the suitable type : *Wiper-to-Tip*.
Wiper resistance value should be 10 to 20 KOhm.

4. Tap Tempo Input

A tap-tempo pedal may be connected to the EXP/TAP input to remotely tap in the tempo. The switch contact must be 'Normally-Opened' (NO) type.

TS cable & plug

TAP
PEDAL
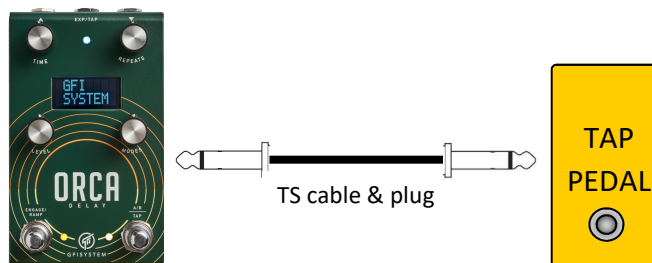
☞ **Auto detection**
Upon power up Orca will automatically detect the presence (or absence) of an expression pedal or a tap-tempo pedal. Therefore, after plugging/unplugging the external gear you need to recycle power to the Orca to let it detect the changes.

5. Knobs and Buttons

👉 **Every knob is also a button**. The following operations can be done on each knob :

TURN	PUSH or TAP	HOLD	TWIST (hold and turn)
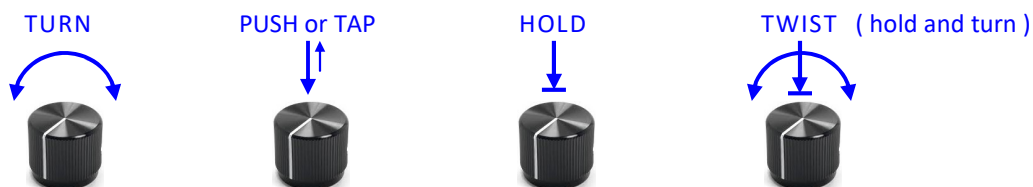
Here's a summary of what each knob and each switch does, this is just a quick reference, more detailed explanation will be given in the next chapter.

KNOB 1, 2, and 3

- **Turn** - adjust primary parameters.
- **Push** - toggle expression mapping for the parameter.
- **Hold** - enter expression *heel/toe* value setup.
- **Twist** - Adjust secondary parameter (see table below).

KNOB 4

- **Turn** - select modes.
- **Push** - Enter OPTIONS menu.
- **Hold** - enter GLOBALS setting menu.
- **Twist** - Adjust secondary parameter (see table below).

Modes	Primary Parameters			Secondary Parameters			
	knob 1	knob 2	knob 3	knob 1	knob 2	knob 3	knob 4
DIGITAL (1 sec)	Time	Repeats	Level	Mod Speed	Mod Depth	Tone	Ping-Pong
TAPE (1 sec)	Time	Repeats	Level	Wow	Flutter	Loss	Ping-Pong
DIFFUSE (1 sec)	Time	Repeats	Level	Verb	Decay	Tone	Ping-Pong
AMBIENTAL (840 ms)	Time	Repeats	Level	Mod Speed	Mod Depth	Glitter	Pitch

6. Footswitches and LEDs

TEMPO LED

ENGAGE / RAMP SWITCH

A/B - TAP SWITCH

TAP
-> bypass / engage

HOLD (when bypassed) for > 500 ms
-> engages momentarily

HOLD (when engaged) for > 500 ms
-> start parameter ramping.

TAP (at least 2x)
-> set a new tempo.

HOLD for 1 second
-> toggle between preset A and preset B*.

ON/OFF LED

PRESET LED
Orange: Preset A, **Green** : Preset B

Momentary Operation
< when bypassed > ~ Holding the Engage/Ramp button down for at least 1/2 sec triggers *momentary operation*, i.e pedal will revert to bypassed state when footswitch is released.

Ramping
< when engaged > ~ Holding the button for at least 1/2 sec triggers *ramping operation* : a mapped parameters is ramped from its initial value to pre-configured final value, and stays at that final value for as long as the footswitch is held down. When switch is released the parameter gradually returns to its initial value.

☞ **A/B - TAP switch Priority.**
Priority for the A/B-TAP footswitch can be reversed in Global setting (see page 6 for details).

7. Saving Presets

1 Press and Hold both buttons

~ *release the hold when the screen reads:*

> Save to:
> A <--> B

2 Tap the left button to save to preset A, or
Tap the right button to save to preset B.

👉 If, after entering the Preset-Save scene, you change your mind and would like to exit without saving any changes, you can do so by :

- Holding both buttons again for 2 seconds.

     OR

- Doing nothing for 5 seconds, you will automatically return to the main scene.

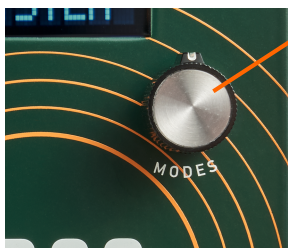## 8. Options   - options settings are specified on per/preset basis.
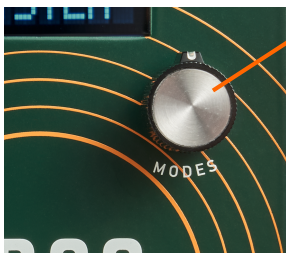
Tap/Push the MODES button to enter Options menu.

Use the MODES knob/button to navigate around the menu.

Options
- **1. Sub-Div**
  - 1/4
  - 3/4
  - 2/3
  - 1/8
  - 1/3
- **2. Ms/Bpm**
  - MS
  - BPM

9. Global Setting

Press and hold the MODES button for 2 secs to enter Globals menu.

Use the MODES knob/button to navigate around the menu.

Globals

1. Input — Mono : input signal is mono
        — Stereo : input signal is stereo.

2. SumMono — No : normal operation.
        — Yes : output signals are summed
            (use this to preserve stereo timing,
             e.g. pingpong, information when
             using mono output).

3. Tempo — Preset : use tempo as saved in preset.
        — Global : use global tempo.

4. Priority — A/B : Changing preset is priority.
        — Tap : Tap-tempo is priority.

☞ The Priority setting determines how the A/B-Tap button behaves.
Priority set to A/B

- Tapping the A/B-Tap button toggles between preset A and preset B.
- Holding the A/B-Tap button for 1 second enters tap-tempo mode where the button functions as tap-tempo button. The button reverts back its normal function as preset-change button after 2 seconds of non-activity on the button.

Priority set to Tap-Tempo (default)

- Tapping the A/B-Tap button sets a new tempo.
- Holding the A/B-Tap button for 1 second toggles between preset A and preset B.

10. Expression / Ramping Setup

Up to 3 primary parameters may be mapped to the expression pedal / ramping function.
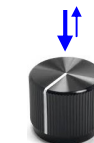
Push the knob's button to toggle the parameter mapping.

PUSH once

Exp Pedl
mapped

PUSH once

Exp Pedl
unmapped

Setting up the *Heel* and *Toe* values for expression pedal (and ramping function).
Suppose you want to map a parameter knob to the expression pedal or the ramping function :

- Turn the knob until you find the desired *Heel* value.
- Hold down the knob. After 2 seconds the screen will show the *Heel* / *Toe* information, <u>keep holding the knob down</u>.

Heel   20
Toe   80

- Now turn the knob (while still holding it down) to find the desired *Toe* value. When you find it, release the knob.

The parameter is now mapped to the expression pedal. Rocking the expression pedal will sweep the mapped parameter to any value within the range specified by *Heel* and *Toe* values.

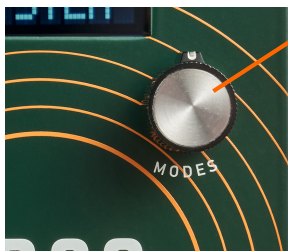*Heel* **position**   *Toe* **position**

☞ The *Toe* value set using the above procedure will also be the "*end value*" for the Ramping function. For ramping operation, the Heel value is not needed, the "*base value*" is effectively the 'current knob position'.

☞ Changes to the *Heel* and *Toe* values are automatically saved into the current preset.

11. Factory Reset

Press and hold the MODES button <u>while</u> powering up the pedal.

Keep holding until the screen reads:

```
Reset?
NO      YES
```

Turn the MODES knob to select No / Yes, then push the MODES button to confirm - if you select Yes factory reset will be performed and then pedal will start as normal.

Specifications :
- Input impedance   : 1 MOhm.
- Output impedance : 1K Ohm.
- DAC / ADC resolution : 24 bits.
- Current consumption : ~110 mA.
- Weight : 0.6 Kg (1.6 lbs).
- Dimension : 12 (L) x 7.2 (W) x 5.5 (H) cm
- Power source : 9VDC (negative center).

Key Features :
- 2 presets.
- 4 select delay algorithms.
- Mono / Stereo input and output.
- Expression pedal and tap-tempo input.
- Momentary action supported.

Visit the product page at our website for more demo videos, sound clips, FAQs, and updates.

This product is designed and manufactured by :

Email : info@gfisystem.com (inquiry)
          gfisys@gmail.com (support)
Web   : www.gfisystem.com
GFI System