

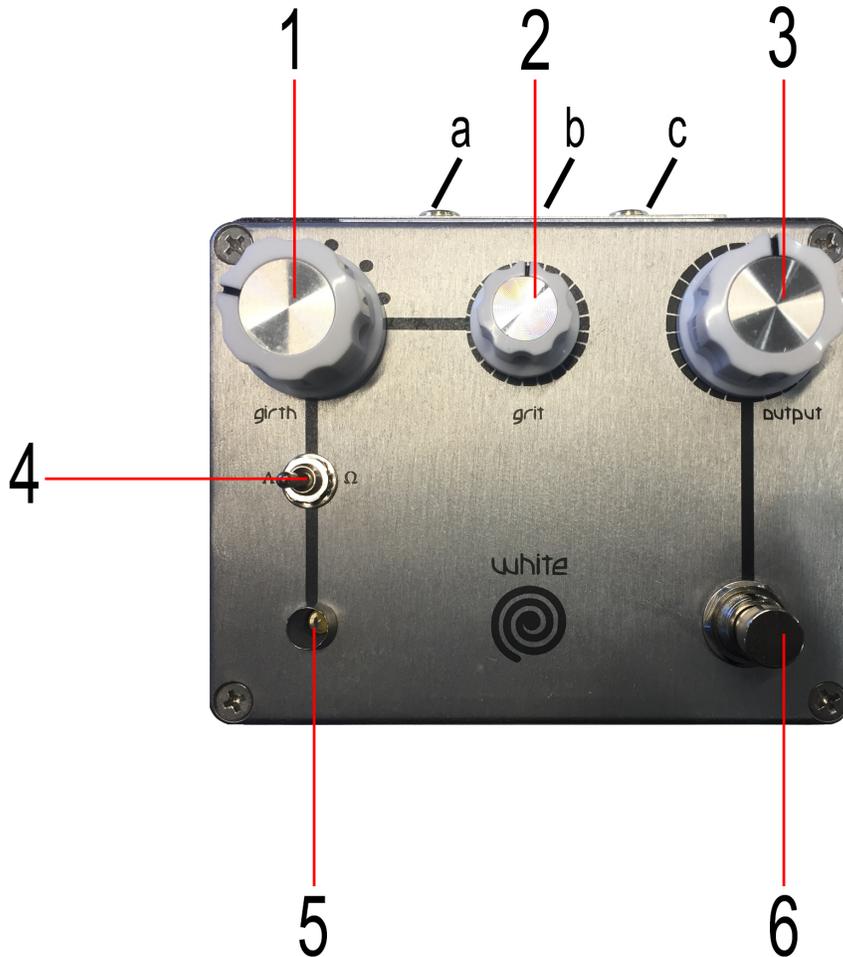
Spiral Electric FX **Cool Things**

- Family Shop started by Tom Cram, July 2018 (The day after Summer NAMM)
- Designed, Hand Made, Hand Wired, in the USA - All metal work, wood work, assembly, soldering/wiring, etc. is done in-house
- Committed to having every step touched by a human

White Spiral Boost **Cool Things**

- Dual JFET Boost circuit
- Selectable Pre/Post Girth capacitor network
- Grit tailored to complement/supplement amp gain
- +18v High-Headroom Internal Operation
- Warm White LED
- Hand-Brushed Natural Aluminum Top
- Laser-Glazed Graphics
- True Bypass
- Designed, Hand-Soldered, and Assembled by Tom Cram

White Spiral Boost Manual



1. GIRTH: Clockwise increases bass, counter-clockwise decreases bass
2. GRIT: Clockwise increases gain, counter-clockwise decreases gain
3. OUTPUT: Clockwise increases output, counter clockwise decreases output
4. ORDER TOGGLE:

A (Alpha). Girth is placed pre-Grit section

Ω (Omega). Girth is placed post-Grit section

5. LED: Indicates whether pedal is engaged or not
6. FOOTSWITCH: Soft-Click true-bypass footswitch, the quietest 3PDT we could find.

- a. OUTPUT JACK: Connect to the input of amplifier
- b. POWER JACK: Connect power here (9v DC Center-Negative)
- c. INPUT JACK: Connect guitar cable here

WHAT IS IT?

The White Spiral Boost is designed to boost crunchy amp channels that are either already breaking-up, or on the verge of breakup. It acts as a “sonic stimulator,” adding sparkle and liveliness to your pick attack, and thump to your lows. The White makes your notes jump, and can easily tip your crunch channel into roaring distortion. It also has enough output to be used as a boost for solos, or with lower Grit settings as a clean-ish boost. While the White Spiral Boost is designed to be used to supplement an already cooking amp channel, the Grit control when maxed can attain some pretty aggressive gain tones on it's own.

HOW CAN I USE THIS THING?

The White Spiral has a wide variety of uses: “Always On” tone sweetener, lead boost, dirty boost, low-gain distortion, amp input punisher, clean-ish enhancer, it also works well both before and after other dirt pedals.

THE WHY'S AND WHEREFORE'S:

The White Spiral Boost is the result of my exploration of various JFET circuits initially inspired by Jimmy Page's use of the Barcus Berry Preamp. While Page is only known to have used it on acoustic, I found that the BB 1330-1, and the simpler BB 1330S, work great with electric guitars that have low-output pickups and as a general boost circuit. The White Spiral circuit has evolved over time to become a hybrid circuit with bits of the BB 1330S, National Semiconductor Mu-Amp, and the Yellow Spiral. The White Spiral uses a dual JFET for amplification, the Grit is a combination of JFET and Silicon clipping, the Girth control comes from the Yellow Spiral but with a twist, the White also has 18v internal operation to provide increased headroom.

The rotary Girth control is unlike regular tone controls, it is a rotary capacitor network that increases lows while still retaining your pick attack. With the White Spiral, the Girth Control's location in the circuit is able to be changed to goose the Grit section. Alpha provides a bass boost, and changes clipping and compression characteristics. Omega provides a more neutral boost with low-end control. A good rule of thumb for the Order Toggle is to use Alpha position for single-coils, and Omega position for humbuckers.

Two-Way Order Toggle:

A (Alpha). Girth is placed pre-Grit section

Ω (Omega). Girth is placed post-Grit section

While it is tempting to have the Girth control set fully clockwise, I find that my favorite settings are consistently 3 and 4 for guitar. In Alpha Mode these settings give a decent bass boost and a little more compression to help single-note leads have extra “weight.” In Omega Mode you have less bass and a cleaner more open sound for chording and rhythm. So you basically have two very different sounds at the convenient flick of the toggle. It is also tempting to crank the Grit, but I have found that turning up the Grit until you hear the bass increase, then turning up the Output to ~2:00 is a nice balance of boost and harmonic content. That said, feel free to experiment since different pickups require different settings.

Always On Tone Sweetener:

GIRTH POSITION: 4
GRIT: 11:00
OUTPUT: 1:00
ORDER TOGGLE: Ω (Omega)

Clean-ish Boost:

GIRTH POSITION: 2
GRIT: 10:00
OUTPUT: MAX
ORDER TOGGLE: A (Alpha)

Dirty Boost:

GIRTH POSITION: 4
GRIT: 1:00
OUTPUT: 2:00
ORDER TOGGLE: Ω (Omega)

Low-Gain Distortion:

GIRTH POSITION: 6
GRIT: 2:00
OUTPUT: 1:30
ORDER TOGGLE: A (Alpha)

Amp Input Punisher:

GIRTH POSITION: 5
GRIT: 1:00
OUTPUT: MAX
ORDER TOGGLE: A (Alpha)

GO FORTH AND EXPRESS YOURSELF!

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SPECIFICATIONS:

Input: 1/4" TS Unbalanced
Output: 1/4" TS Unbalanced
Current Draw: 20 mA
Bypass: True Bypass
Power: 9VDC Center Negative

Note: The White Spiral Boost utilizes an internal charge pump, DO NOT use any power supply that exceeds 9v DC. Voltage exceeding 9v DC will damage the pedal and void the warranty.