

ZENITH

AMPLITUDE CONTROLLER

DETAILED ONLINE MANUAL

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FEATURES

+20dB of clean and transparent gain

Active 3 band EQ voiced to have an amp like and natural feel

Switchable mid frequency and Q for powerful tone shaping

Incredibly transparent compression circuit with a low noise floor

Blend control to dial in the feel of the compression

Order switch for the EQ and Comp circuits with a Parallel mode

Secret Switching to give full control over the EQ and Comp circuits independently

Control input for switching via an external footswitch such as GigRig G2/3

MAIN CONTROLS & SWITCHES PART 1



THE COMPRESSOR

COMP

Controls amount of compression from subtle level balancing to hard compression and long sustain. Up to the around the 12 o'clock position the Compressor acts more like a limiter, and from 12 o'clock to fully clockwise begins to really grab the note and increase sustain.

BLEND

Blends between your uncompressed signal when fully anti-clockwise, to 100% of the compressed signal when fully clockwise. The Blend control can be used to dial in the feel of the compression by mixing in some of the dry signal to bring back pick attack while keeping increased sustain.

LEVEL

The master output level. Use as a subtle boost or cut to balance the level to unity or boost up to 20dB. Level controls only the EQ circuit when in Parallel and is bypassed when in 'Comp Only' mode.

MAIN CONTROLS & SWITCHES PART 2



THE EQ CIRCUIT

BASS

15dB of Bass frequency boost or cut

MIDDLE

15dB of Mid frequency boost or cut

TREBLE

15dB of Treble frequency boost or cut

MID Q

Using the Q switch sets the bandwidth of the Middle control to wide, medium or narrow.

MID FREQUENCY

Sets the Mid frequency to 500Hz, 800Hz or 1.2KHz

CIRCUIT ORDER SWITCH PART 1



CIRCUIT ORDER SWITCH

Changing the order of Compressors and EQs is a very common studio practice, but this is the first time it has been featured in a compact guitar pedal.

C+EQ

Placing the Compressor before the EQ is the most standard order of the circuits when using guitar pedals. In this mode the full frequency range of your instrument hits the Compressor unaffected, meaning that your playing dynamics have a direct relationship with how the Compressor reacts.

PARALLEL

In Parallel mode, the input signal is split by a buffer so 100% goes to the EQ circuit and 100% to the compressor, meaning the two circuits are completely unaffected by each other. There are lots of ways to use parallel compression and EQ, but here are two interesting options.

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CIRCUIT ORDER SWITCH PART 2

PARALLEL Continued

The Compressor will react to the full frequency range as in C→EQ mode, but then a specific frequency bandwidth that is uncompressed can be blended in via the EQ circuit. A great example is to cut the Bass and Treble to allow the Mids to push through only when louder dynamics are played. The amount of mids 'let through' can be set by the Level knob and can be engaged or bypassed using the OptoKick in 'Comp Only' mode.

As the two circuits are unaffected by each other, it is possible to run two separate tones in Parallel. Even with the compressor set low or off all together, your standard tone will be sent through the Comp signal path, and the EQ signal path can be either subtly or extremely sculpted. This can achieve a 'two amp' feel and also works very well when Zenith is placed after drive pedals to blend two tonal characters.

EQ+C

Running the EQ before the Compressor opens up some interesting options. Any changes you make to the EQ, will directly affect how the compressor reacts.

There are two main uses for having an EQ pre Compressor:

To fix or adjust the tone before the compressor emphasises anything. This could be for example to cut a prominent frequency that might trigger the compressor unnaturally.

You can sculpt an EQ setting to change the sound of your guitar and then have the compressor react to that new tone. An example of this would be cutting bass on a guitar with humbuckers to achieve a more Strat like tone, then the compressor would not react to the low end frequencies as much.

CONTROL INPUT PART 1



CONTROL

This input allows independent switching of the EQ and Compression circuits by an external latching footswitch or controller. There are two ways to use control switching:

1. REMOTE SWITCHING OPERATION

Zenith can be used with a switching system such as a GigRig G2 / G3 / Atom, Boss ES-5 / ES-8 or RJM Mastermind with a TRS cable.

Consult your switching system's manual for how to operate its Remote Switch Output (G2 / G3 / Atom), EXT CTL Output (Boss ES-5 / ES-8) or Func Sw (RJM Mastermind).

Using the remote outputs can then control Zenith's EQ and Compression circuits independently and also access either circuit via presets.

2. SINGLE OR DUAL LATCHING FOOTSWITCH OPERATION

When using a Dual footswitch, use a TRS cable to the connect the switch to the control input and the Comp and EQ circuits will be switchable via the external footswitch.

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CONTROL INPUT PART 2

2. SINGLE OR DUAL LATCHING FOOTSWITCH Continued When using a Single footswitch, you can use a TRS or Mono cable. See 'Programming Control Mode' below for how to set up Single footswitch operation.

Compatible switches include:

- Boss FS-5L / FS-6 / FS-7
- Bright Onion Pedals (UK) Latching Footswitch (Single & Dual options available)
- Saturnworks (USA) Latching Footswitch (Single & Dual options available)
- Loopi Pedals (AUS) Latching Footswitch (Single & Dual options available)

PROGRAMMING CONTROL MODE

Zenith ships as standard to operate with a Remote Switcher or Dual footswitch. When using a Single footswitch, you can select which circuit is controlled by the External footswitch in Boot Programming Mode.

- Hold down the OptoKick while powering up to enter Boot Programming Mode.
- Both LEDs will flash to indicate that you have entered programming mode, then push the OptoKick to select either Comp or EQ (indicated by the LEDs) to be switched by the External Footswitch in normal operation.
- To return to Dual / Remote mode, cycle through the Comp and EQ options to the third option where both LEDs are off.
- After a four second pause, the LEDs will flash quickly to indicate that you have left programming mode.

INPUTS & SPECIFICATION

INPUTS

Power: DC ONLY +- @--

(centre negative)

9V 280mA 12V 200mA 18V 160mA

Zenith has it's own internal power supply that boosts the internal voltage up to 30v for very high headroom operation. It does this regardless of whether it is being powered at 9, 12 or 18V so there is no change in tone or character running at a higher voltage. The internal power supply is also fully isolated for quiet operation and increased reliability.

In: Mono instrument input

Out: Mono signal output

SPECIFICATION

All-analogue design with digital control

Dimensions: 70w x 130d x 65h mm (excludes feet)

Weight: 550g / 1.2lbs

Input impedance: 600k Ohms

Output Impedance: < 300 Ohms

Zenith features silent optical switching and The GigRig's OptoKick footswitch for excellent reliability.

SECRET SWITCHING PART 1



SECRET SWITCHING

Zenith features 'Secret Switching' for independent control of the EQ and Compression circuits. With many pedalboards now incorporating loopers or switching systems we wanted to bring back functionality to the OptoKick and adding two switches to a compact pedal makes both difficult to operate on a tightly packed pedalboard.

Secret Switching is accessed by holding down the OptoKick for 2 seconds until the two LEDs flash. Pushing the OptoKick then scrolls through the 5 modes:

- 1. Standard Both LEDs on = Bypass // EQ On + Comp On
- 2. Flip Flop LEDs flash alternately = EQ On // Comp On
- 3. Comp Always On Comp LED on = Comp On // EQ On + Comp On
- 4. EQ Always On EQ LED on = EQ On // EQ On + Comp On
- 5. **Cycle** Comp LED on + EQ LED flashing = Bypass // Comp On // EQ On // Both On

Use the OptoKick to scroll to the desired mode and then after a four second pause, the LEDs will flash quickly to indicate that you have left programming mode.

SECRET SWITCHING PART 2

RECOMMENDED APPLICATIONS

1. Standard

In this mode Zenith operates as a normal stand alone pedal switching from Bypass to having both EQ + Comp On. This is how it ships from us and what we recommend if you want the pedal to function in its most standard form.

2. Flip Flop

This mode is great if you use a looping system and will use either the Compressor or EQ alone. The switch on the looper is your bypass as usual, and then the OptoKick on Zenith becomes the selector between the Comp and EQ circuits.

3. Comp Always On

If you like to run a compressor 'always on' then this setting fulfils that purpose. The Comp circuit will always be engaged and the OptoKick will switch the EQ in or out.

4. EQ Always On

EQ Always On is great if you like to sculpt the sound of your rig with the EQ and then have the flexibly to switch the Comp in or out.

5. Cycle

The Cycle mode gives access to all of the circuit combinations via one OptoKick. This can be used either with a looper or without and pressing the OptoKick scrolls through the four options of Bypass, Comp On, EQ On and Both On.

INTERNAL CONTROL



INTERNAL TRIM POT

Sets the master level of the Compressor circuit. This can be used as make up gain on certain compressor settings if necessary.