

Besides producing a "lightning bolt" - the PLASMA COIL generates a unique kind of distortion with many distinctive qualities:

# - UNUSUAL HARMONIC SATURATION

When audio signal is driven by a step-up transformer, all the harmonics and overtones that are present in the original signal become very pronounced. There is also a certain amount of "noise pollution" that is created by the transformer and gas-tube system - it could be described as "crackle" or "buzz", and it adds an electric quality to the sound.

## - NOISE-GATING PROPERTIES

By playing around with the VOLTAGE Knob you can adjust the amount of current sent to the PLASMA COIL'S discharge tube. On lower settings - only heavy signals will create sufficient power to connect the electrodes, and you will hear a distinctly gated sound. As the signal drops beneath a certain threshold, the electrical passage within the gas-filled tube is interrupted, and the pedal will not produce any output signal at all. This feature allows you to achieve extreme contrasts between individual notes, by eliminating all of the in-between noises created by the intsrument's pick-ups or by humming strings.

The Gating effect can also be used to significantly alter how the instrument responds to various picking and strumming techniques & how the instrument sustains notes.

# - EXTREMELY WIDE EQ

As mentioned above - the PLASMA COIL discharges the original DRY input between the PLASMA Tube's electrodes and creates a new audio signal from fluctuations in the electromagnetic field surrounding the transformer and the gas-discharge tube. This allows to bring out an extremely wide range of frequencies that are often beyond the instrument's capabilities. Take a Telecaster, plug it into the PLASMA COIL and crank the LOW end - you will hear twice as much bass, than the instrument can produce under normal circumstances.

# THANK YOU FOR PURCHASING THE PLASMA Coil - the ultimate high-voltage distortion unit!

We congratulate you on your excellent taste and we would like to thank you from the bottom of our hearts for making this Tesla-Coil experiment possible!

The PLASMA Coil is a special edition of Gamechanger Audio's PLASMA Pedal - the world's first commercial high voltage analog audio processor. Our job is to invent exciting music technology that inspires you to create new music. We are certain that the 3.5 kV of raw Rock'n'Roll power, packed into this pedal will do you a world of good. Thank you, and:

~ Keep on Rockin' in the Gluten-free world! ~

## HOW THE PLASMA COIL WORKS

Instead of using LED circuits, transistors or traditional vacuum tubes, the PLASMA COIL achieves distortion by converting your instrument's signal into a series of electrical impulses that are sent to a step-up fly-back transformer. The transformer amplifies these electrical bursts to thousands of Volts and the current is discharged in special gas-filled tube.

The discharge produced by the transformer creates strong electro-magnetic waves that can be picked up with an special antenna or pick-up, de-modulated and re-formed back into an audio signal. This is how PLASMA COIL is able to convert instrument level signal into thousands of volts, and then turn these bursts of electrical energy back into audio signal.

The discharge tube is essentially a glass chamber housing a pair of electrodes and filled with Xenon gas. Xenon is one of the so-called noble gasses, and when it comes in contact with electrical current, a process called ionization occurs. Ionized gas becomes partially conductive and essentially it "helps" electricity to travel between the electrodes. As a byproduct of ionization, the gas converts a tiny part of the electrical energy into visible light. Thanks to the tinted plexi-glass the Xenon discharges appear yellow.

Enjoy your brand new PLASMA COIL!

# KNOBS AND CONTROLS



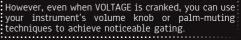
Lets you adjust the amount of current sent to the Xenon tube - effectively increasing or decreasing the threshold necessary for achieving a discharge in the tube.

Optimal setting that will give you a reasonable amount of sustain, while still preserving a very pronounced noise-gating effect.

Only loud, powerful signals will pass through the xenon tube strong gating effect, a lot of breakup and almost no sustain.



More like a cranked fuzz with lots of sustain and lots of feedback.





Standard Master Volume control - set to unity volume when turned to the 12 o'clock position, but may vary depending on the EQ knob Settings.

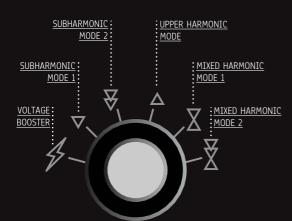


EQ section that allows you to shape and mold your tone - these controls are very wide and can be used to achieve extreme settings.









### SUBHARMONICS:

The PLASMA COIL's subharmonics are produced by modulating the Xenon tube's Voltage with multiple divisions of the instruments fundamental frequency. The result is a glitchy, distorted octave-down sound that is somewhere between a ring-mod and a bit-crush effect.

#### **UPPER HARMONICS:**

The PLASMA COIL's upper harmonics are produced by using a full-wave rectifier and band-pass filter. The result is an octa-fuzz type sound with a distinct 2nd harmonic enhancement which is perceived as an octave up effect.





Momentary or latching footswitch that activates the PLASMA COIL'S special effect (middle knob).

Back panel toggle adjusts the effect switch from latching to momentary.

1/4" Unbalanced TS
1MΩ
7Vpp (+10dBu)
1/4" Unbalanced TS
100Ω
7Vpp (+10dBu)
Center negative 2.1 x 5.5 mm barrel plug (the standard 9V)
20Hz to 22kHz
±9dB, 600Hz corner freq.
±10dB, 1.5kHz corner freq.
Check indicator white LED
IN, OUT, DC input
300mA, 9VDC
2.7 W
1 W
0.025 W
148mm*96mm*70mm
840 g / 1.8 lbs

## WARRANTY & RETURNS

You have a 30 day return period when you may return the product and receive a full refund. You will only be responsible for return shipping charges.

Each PLASMA Pedal manufactured by Gamechanger Audio and distributed by Third Man Records is warranted to be free from defects in materials and workmanship for one year from the date of shipping or longer if required by the relevant legislation.

This warranty shall not apply to any unit which in the opinion of the manufacturer has been used improperly or has been mechanically or otherwise damaged by accident, misuse or negligence or has been altered or repaired in such a way to impair performance, nor shall it apply to cosmetic defects (considered normal wear and tear)

Other parts, such as knobs, rubbers, cable connectors, are non replaceable. The manufacturer reserves the right to make changes in design or construction of this equipment without obligation to install similar changes in equipment already sold.

## OTHER EFFECTS

We encourage you to experiment using the PLASMA COIL together with tremolo and delay based effects. By putting a hard tremolo in front of the PLASMA COIL you will achieve a satisfying flicker that sounds fantastic. This also goes for arpeggiators and other rhythm-based effects.

By setting up a delay unit before the PLASMA COIL you will get a wide variety of break-up sounds, as the delay's trails begin to get softer.

#### TIPS

There is a lot of room for experimentation, when it comes to combining PLASMA Coil with other drive and distortion effects - When PLASMA Pedal is placed before other drive and distortion pedals the noise-gating effect is transferred to the rest of the signal-chain, and you can achieve very explosive flavors of distortion.

PLASMA COIL sounds great without reverb. That way the noise-gating effect is very pronounced and you get total silences between notes.

Although primarly designed for guitarists, PLASMA Coil is also a great distortion for synth and bass players - the low-end is massive and the high-end sizzle cuts trough anything.

It can also be used to crush a snare or kick drum, or even a whole beat.

For studio use - please make sure that the input signal is INSTRUMENT LEVEL.

## WARNING!

The PLASMA COIL DOES NOT support 9V batteries, and it should always be powered with a standard 9V DC guitar pedal power supply with a center negative connector (OneSpot, Boss, Snark, etc.).

NEVER operate the PLASMA COIL near water or on outdoor stages in rainy conditions. DO NOT play your PLASMA COIL in the shower!

The XENON Tube contained within the PLASMA COIL will run an estimated 10 000 hours - In case of a broken tube or a faulty unit, please contact your PLASMA COIL Dealer or info@gamechangeraudio.com. For all other inquiries, please reach out to Gamechanger Audio or Third Man Records.

Gamechanger Audio and Thrid Man Records will not be liable for any injury, material damage, or any other loss, caused by the incorrect operation of PLASMA COIL, or breach of the warnings and instructions laid out in this manual.

#### FOR THE US:

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. this equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- connect equipment into an outlet or a circuit different from that to which the receiver is connected.

- consult the dealer or an experienced radio / TV technician for help.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to the system can void the users Authority to operate this equipment. this equipment require shielded interface cables in order to meet FCC Class B limit.

#### FOR EUROPE:

This product complies with the requirements of Electromagnetic Compatibility Directive 2014 / 30 / EU.

#### FOR CANADA:

NOTICE: This class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations

AVIS: cet appareil numérique de la classe B respecte tout les exigences du règlement sur le matériel brouilleur du Canada.



No user servicable parts inside

THIRD MAN <u>records</u>

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