



CAPRICORN

Rock Distortion



OWNER'S MANUAL

The Celestial Effects™ Capricorn Rock Distortion is a very versatile boost/overdrive/distortion effect. It can deliver anything from sweet creamy boost tones to gut wrenching all out, nearly uncontrollable distortion. Built like a tank and using the best components available, this pedal will keep you rocking for many years to come.

The Capricorn is a true bypass pedal and uses no buffers or inline tone circuits in its design. It features two independently controllable gain stages. The first section is a transistor based gain stage, similar to most fuzz type effects. This section's overall gain is controlled by the LIMIT knob on the front panel. This stage can be set from a one to one gain of your guitar signal to a ten to one gain. There is enough power in the section alone to push tube amps into overdrive by it's self. The tone developed in this transistor stage is bright and edgy with a hint of fuzz.

The second gain stage is achieved using single paralleled priority high fidelity opamp amplifier. This gain of this stage is controlled by the GAIN and EDGE knobs. This opamp section is darker and smoother sounding than the transistor gain section. The Capricorn does not take over your tone but enhances it transparently. With the gain set one to one of your guitar signal, you will notice a fuller, clearer tone. With all the controls set to 0, a crunchy, edgy, harmonically rich tone is produced. Rolling back the EDGE control will smooth out the tone to your exact preference.

There is very little noise filtering in the circuit which allows your guitar's entire signal to come through. The Capricorn is extremely touch sensitive and responds beautifully to every nuance of your guitar playing. The Capricorn features a clipping diode selector switch for immense versatility. Set to the left, symmetrical silicon diodes are placed in circuit which gives a nice smooth compressed tone with slightly less volume. Set the switch to the right for an asymmetrical MOSFET feature which produces a very nice crunchy tone. Place the switch in the middle to remove all diodes and let all the tone come through unclipped for a larger, more open and vocal tone. The Capricorn also cleans up nicely when you roll back the volume on your guitar.

All Celestial Effects™ pedals are hand built and individually tested in Hudson, MA by a company that cares about quality, durability and value.

CONTROLS

VOLUME: This knob controls the overall volume of the effect when the pedal is in use (not bypassed & LED is ON)

LIMIT: This knob controls the gain of the first amplifier section, the Transistor Gain Stage. Turning the knob clockwise will yield higher gains.

NOTE: Due to the nature of the circuit design, when setting the LIMIT control with the pedal active, a crackling sound will emit from your amplifier. This is normal and is found in many fuzz type circuits in which this circuit was derived. The crackling will be louder when setting in the higher gain settings.

GAIN: This knob controls the gain of the second amplifier section, the Opamp Gain Stage. Turning the knob clockwise will yield higher gains.

EDGE: This knob controls is essentially a second order gain control of the Opamp Gain Stage but also greatly effects the edge or attack of the signal. Turning the knob clockwise will yield an edgier or more biting sound and higher gain. Rolling the control counterclockwise will smooth out the “edge” or attack and also reduce the gain. It also creates a pseudo compression effect to the tone.

SWITCH: The three position switch on the front panel allows you to select the clipping diode arrangement in the opamp feedback section.

SWITCH SET TO THE LEFT:

Puts in circuit two symmetrical silicon rectifier diodes.
These diodes produce a smoother, more compressed tone.

SWITCH SET TO THE RIGHT:

Puts in circuit three asymmetrical MOSFETs.
These MOSFETS produce a slightly louder and more biting tone than the Silicon rectifier diodes.

SWITCH SET IN THE MIDDLE:

Removes all diodes from the feedback section of the opamp.
This yields a much louder, more open and vocal tone.

SPECIFICATIONS:

True Bypass Switching

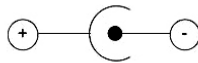
Input impedance: 1 Meg Ohm

Output impedance: 10K Ohm

Current Draw: Approximately 10 mA at full ON

Max Gain: Approximately 17.6 dB of gain

POWER REQUIREMENTS:



Internal 9 Volt battery (not included) or any HIGH QUALITY 9 VDC regulated power adapter with a 2.11 mm x 5.5mm barrel plug type connector which utilizes a “Center Negative” pin configuration as per the above diagram. Celestial Effects recommends the Carl Martin Powerjack 9VDC power supply or similar. This power supply is capable of providing 1000 mA of power and is noise free. The more the capacity of the power supply, the less chance of noise and hum due to a power supply being pushed to its current capability limits.