

Subdecay Studios – Quasar- Phase Shifter- Rev 2.1

Your Quasar pedal was hand made in Dundee, Oregon with high quality components. Thank you for purchasing The Subdecay Quasar.

What is the Quasar?

The Quasar is a 4 stage phaser, or phase shift effect. At its core is an opamp/vactrol based circuit that will not add distortion to your guitar signal.

Features:

The Quasar Phase Shifter is hand made in Dundee, Oregon with the high quality components. Die cast metal enclosures for durability. 3PDT switches for true bypass switching. Powered by a 9 volt battery, or can be powered by a 9VDC adapter. 4 stage Vactrol based phaser circuit for distortionless operation. Controls: Rate, Feedback, Frequency, Depth and Mix. Red LED indicator.

Revision 2.1

As of September 2007, all Quasar phase shifters have an internal trim pot for volume control.

Technical Explanation:

There are a variety of ways to make a phase shifter effect. The Quasar uses TL074 Opamps, and Vactrols as variable resistors. The effect is created by using a number of stages to vary the phase shift of the signal. Of course our ears don't really hear phase very well unless we have something to compare it to. So after the signal is shifted, it is the combined back in to the input signal. The result is heard as notches in the audio spectrum. By themselves they can be kind of boring, but that's where the vactrols come in. They vary the frequencies that are phase shifted, and move the audio notches around as a control current LFO (low frequency oscillator) fluctuates, which is controlled by the Rate, Frequency, and Depth knobs. The Quasar also has a feedback stage, that sends some of the signal, or a mirror image of it back to the phase shifting stages. This results in deepening the audio notches to, turning them in to peeks.

Warranty:

Subdecay Studios offers a 3 year limited warranty from the purchase date to the original purchaser. This warranty does not cover misuse, or the neglect by the user. It also does not cover the finish, paint, or any exterior, or superficial damage. Any unauthorized repairs will void warranty. Subdecay Studios, Inc. will assume NO LIABILITY for this product.

About your Quasar:

Power:

The Quasar can be powered by standard 9 volt battery, or by a dedicated Class 2 regulated 9 volt DC power supply with a negative center 2.1mm barrel type plug.

Specifications:

Input impedance: 1 M
Output Impedance: Varies with MIX setting from 1K to 10K
Current draw is less than 20mA.

Operation and Care:

Keep away from extreme heat, cold and moisture.
Use only a dry towel to clean.
No user serviceable parts. Contact Subdecay Studios, Inc. for repair or maintenance.



Controls:

Rate: Controls the speed the LFO, which controls the Effect.

Feedback: Turn the knob to the left for deeper audio notching. Turn to the right for peeking or resonance. Set in the middle for no feedback.

Frequency: Sets the Center frequency for the effect. With the depth knob all the way down you can hear the frequency change as you turn it. With the frequency knob turned to the left, try turning the depth knob up a little... the LFO will become asymmetrical.

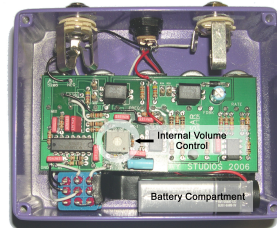
Depth: Controls the range of the LFO. Turn all the way to the left for a fixed filter sound.

Mix: Controls the overall level of the effect. Turn to the left for not audible effect. Turn to the right for completely wet.

Internal Volume Control: Sets the overall volume of the effect.

Note:

When using a battery always unplug the instrument input to conserve battery life. When a cable is plugged in the pedal is always on even when bypassed.



To change the battery you must first remove the 4 rear screws and the rear cover. The battery should be placed next to the switch in the battery compartment. The battery should be able to slide in and out with out any friction. If the battery needs to be forced in to place, it could damage the switch, or circuit board.

SUBDECAY

Subdecay Studios ©2007

subdecay.com

brian@subdecay.com

503 538 3632 M-F 9AM-6PM PST