

LIGHT PEDAL IS THE WORLD'S FIRST

INFRA-RED OPTICAL SENSORS TO HARVEST THE FULL TIMBRAL

AND HARMONIC RANGE

ANALOG OPTICAL SPRING REVERB SYSTEM

THAT USES

OF A SPRING REVERB TANK

HOW IT WORKS

The LIGHT PEDAL's foundation is a traditional spring reverb system a combination of three elements:

> INPUT TRANSDUCER (spring exciter)

SPRINGS

However, due to the spring's elasticity, by the time vibrations travel

OPTICAL SENSORS

To capture the **full range of** the spring's movements, the LIGHT Pedal uses multiple sets of special Infra-Red optical sensors

resonant frequencies. This is why all spring reverbs

have such a particular sound.

that act as photoelectric pickups. Each set of IR sensors is directed at a different point on the moving spring's surface, thus giving access to a whole range of

by switching them on and off. **CONTROLS**

MIXING DRY SIGNAL WITH REVERB

for the traditional SPRING signal

The TONE control will affect both

while leaving the DRY signal as is.

the SPRING and the OPTICAL signals

and the OPTICAL Signal.

Three separate volume levels for your DRY signal,

(produced by the spring tank's Output Transducer)

2 sweep,

4 reflect,

3 trem,

additional reverb textures / tones.

as well as a much wider frequency response,

including subharmonics and overtones.

Additionally, some amazing modulation and tremolo effects can be achieved by scrolling through the optical sensors or

latch to a few different playing modes: optics 1 optics,

reflect

feedback

harmonic

ctrl

want to use.

2 SWEEP

Sweep is a modulation mode

that rhythmically scrolls back

This is an optical tremolo mode,

sensors on and off rhythmically.

Feedback is a self-oscillation

mode that lets you create

that will start switching the optical

5 feedback, 6 harmonic.

1 OPTICAL

special and rich type of reverb/chorus. 3 TREM

4 REFLECT into the reverb tank

5 FEEDBACK

with three repeats.

very special sound effects and "wall-of-sound" type distorted reverb pads.

6 HARMONIC

Octavia-inspired circuit,

within the spring tank. Think of it as a shimmer reverb effect, but only produced naturally within the spring tank. With these effect modes, you can either use the optical signal on its own, or also combine it with the spring tank's output for a multi-layered effect.

which produces a huge amount

of overtones and harmonics

Lets you to choose the exact pair of optical sensors that you

motion.

EFFECT MODES + CTRL KNOB

and forth through the different optical sensor pairs. The resulting sound is a very

will produce warmer and richer reverb textures.

This mode is a lo-fi delay that will send all signal back

drive

Envelope is another parameter that affects all effect modes. At 12 o'clock it is neutral, and does not affect the Pedal's sound. To the left, all reverb is gated - the more you play, the more reverb. As soon as you stop, the reverb gets cut out. To the right, all reverb sounds are ducked - no reverb while you play, as soon as you stop, the trails appear.

turn the LIGHT Pedal off. while preserving the reverb's natural decay trails. When switched OFF, the reverb trails will be cut as soon as the LIGHT Pedal is shut off.

SHOCK SENSOR

As we all know, spring reverbs

can be sensitive to shaking stages,

heavy stomping and earthquakes.

With TAILS switched ON,

you will be able to smoothly

Powered by an accelerometer chip, the LIGHT Pedal can instantly detect physical impact (measured as G force) and instantly shut off the audio output, as soon as a blow or a shaking motion is detected! The sensor offers three levels of shock protection: Off, Soft and Hard. **INPUTS & OUTPUTS** The LIGHT Pedal is a MONO pedal with a 1/4' jack INPUT and OUTPUT.

Product Dimensions

Product Weight

Input Impedance

Spring Tank

Lots of potential uses when paired with an expression pedal. the shimmer effect's range and In harmonic mode the Spring in many cases to dial in a specific Tank is driven by an analog

optical spring reverb system

on

off

(H)

TAILS

latch

(H)

LATCH

When LATCH is ON

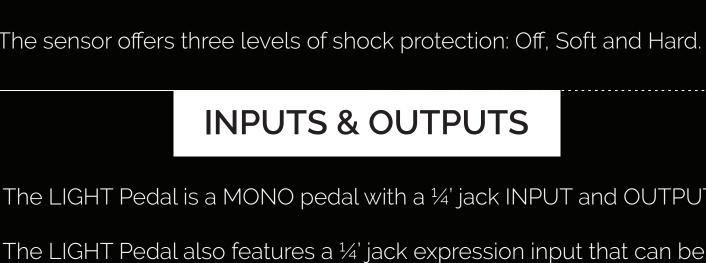
will act as a standard

the LIGHT Pedal's footswitch

latching on/off footswitch.

ENV (ENVELOPE)

That is why the LIGHT Pedal features a special shock-sensor mode!





Max Input Level +6.8dBu Output Impedance 100Ω Max Output Level +6.8dBu Peak Power Consumption 4W Mean Power Consumption 0.9W 500mA min

1ΜΩ

assigned to multiple potentiometers (default setting is CTRL knob).

1060 g (2.3 lbs)

the circuit by converting mechanical impulses from the vibrating spring back into audio signal. **OUTPUT TRANSDUCER** (pickup) There can be a lot of complexity in the movement patterns that occur in the spring during the reverberation process, especially near the input transducer.

The Output Transducer completes

The reverb's sound depends largely on the tension and length of the springs.

Much like a speaker driver, the Input Transducer turns audio signal into mechanical impulses, thus sending vibrations along the length of the springs.

to the output transducer we are mostly hearing the spring's own Also, the optical sensors are able to detect much finer movements

than the output transducer which makes longer decays possible, optical spring \bigcirc spring

optical This 6-way selector switch gives you access

In each of the modes the CTRL knob adjusts different parameters to further fine-tune your sound. Use the CTRL knob to scroll through the optical pairs. As a general rule, moving towards the middle of the spring Use the CTRL knob to adjust the rate of the sweeping

Use the CTRL knob to adjust the rate from slow swooshing tremolo to an intense strobe-ing sound. Use the CTRL knob to adjust the rate of the delay. Use the CTRL knob to adjust the amount of self-oscillation: from subtle trails to complete out-of-control madness. Use the CTRL knob to adjust

from clean guitars to brutally distorted Sawtooth Synths. For example: Fast Optical Tremolo + constant Spring Tank Reverb. Determines the amount of signal being sent into the spring tank in all playing modes. When turned to minimum there will be no Reverb at all. Placing it at 12 o'clock is the safe bet. When maxed out, the spring tank

desired harmonic. It is a very

works amazingly well with

all melodic instruments -

DRIVE

will start gently breaking into distortion,

as well as affecting the textures

of all optical signals.

special and unique sound that

When LATCH is OFF the LIGHT Pedal's footswitch will act as a momentary effect switch. For example - set your LIGHT Pedal to feedback mode, turn the CTRL knob all the way up, and use the momentary footswitch to add occasional bursts of feedback into your solos... Just an idea..;)

3 Springs Type, 100mm

9VDC center negative 2.1 x 5.5 mm plug

Power Requirements Ν G