Copyright gig-fx inc. Patents applied for.

Contact customer service at **www.gig-fx.com** for further information

gig-fx Inc. 1050 Winter Street, Suite 1000 Waltham, MA 02451



#### **KILOWAH**<sup>TM</sup>

Operating Manual

PATENTS PENDING WORLDWIDE



# Try the gig-fx CHOPPER:

- Tremolo

All effects are STEREO and pedal - controlled Check it out now on www.gig-fx.com

#### Safety first.

#### Electrical faults can kill you.

In the music world, the most common form of electrical shock is when the musician forms a path for an electrical current between two different circuits where one of them is faulty. Usually this is precipitated by holding a guitar plugged into one circuit and touching a microphone which is plugged into a different circuit. If one of the circuits (or a piece of equipment in the path) is faulty, there is a real danger of electrical shock.

Make sure electrical outlets are wired correctly. Use a 'mains tester' from an electrical or hardware store. It should show you that the 'Live' (Hot), Neutral and Ground are all present on the correct pins. DO NOT USE outlets which are not wired correctly. If in ANY doubt, please call an experienced electrician.

In addition to the above, make sure your amplifiers are wired correctly and have not been modified by inexperienced personnel. Beware of amplifiers that have switches that reverse polarity or lift ground connections.

#### The KILOWAH is four Wah's in one pedal

- Classic Wah: The original classic Wah sound
- MEGAWAH: More OOOMPH in the resonant peaks giving a
- wailing soloing wah, or even a synth-like character • Trig-Wah: A FUNKY Envelope Wah sound triggered by a
- Auto-wah: Set the Wah to frequency of choice

#### Features:

- Easy to use. No programming or scrolling through patches
- All analog circuitry. Warm, full range sound
- Transparent bypass achieved by a FET switch. Open frequency response • Reliable, wear-free, noise-free optical operation. Bypassed
- when pedal is all the way back • 9V operating voltage, 40mA current consumption
- Will accept standard 2.1mm power supply plug center
- Flashing blue and red LED's to show modulation rates
- Compact Size: 9" x 4" (228mm x 103mm) • Lightweight, high-quality aircraft aluminum casting and

rugged construction, only 2.2lbs (1.1kg).

#### How it works

The KILOWAH effect is bypassed when the pedal is all the way back. To use the effect, just press down on the pedal and the optical linkage will automatically and noiselessly turn the unit on and then provide the Wah of choice. There is a short turn-off delay when rocking the pedal all the way back. This is to prevent the effect by-passing in error while rocking the pedal.

Please note, even when by-passed, the pedal will draw current as long as there is a jack plug inserted in the input jack socket so to preserve battery life, remove jack plug when pedal is not in use. The nature of the bypass is a silicon switch which has an open bandwidth and will not affect the integrity of your signal.

#### Hooking it up

ergonomics

The best position for the KILOWAH in a chain of effects depends on the other effects you use and your playing style. If you use the most common effects such as delay, compressor, distortion, chorus, we recommend that you put the KILOWAH first in the chain. This is our subjective preference because the sound 'fits in the track.' Placing the KILOWAH last in the chain provides a dominant Wah sound.

## Powering it up - AC Adapter

The preferred power supply is a regulated 9V DC supply class 2 adapter with minimum 100mA output current capability. Beware of cheap off-the-shelf power adapters not designed for audio effects, they will probably be unregulated and noisy. Not all commercially available power supplies can deliver enough current to power the *KILOWAH* as well as all of your other effects. Please check the output current capability of your power adapter. The KILOWAH employs a standard 2.1mm diameter plug. No harm will come to the unit if the power supply jack has the wrong polarity, but double check that the center-pin of the power jack is negative polarity. The unit will only be on if there is a jack plug inserted into input socket.

## **Battery Power**

The unit can be operated temporarily on a single 9V battery and will be 'on' and drawing current as long as there is a 1/4" jack plug inserted into the input jack. To replace battery, unscrew smaller base panel as indicated underneath the unit. To preserve battery life, always unplug the input jack when pedal is not in use.

The KILOWAH draws up to 30mA making it unsuitable for using battery power for important gigs or long sessions. This is because the KILOWAH has a lot of Wah power and we chose to use higher voltage circuits to improve signal clarity.

# Pedal Board Mounting

Attach strips of self-adhesive Velcro sufficient to cover the rubber pads on the base plate of the pedal. Cover your pedal board with the other side of the Velcro and, Voilà! Do not put Velcro in the middle of the base cover as it will stress and possibly bend when the unit is pulled up off the Velcro.



Place Velcro on these areas only Compartment

# Indicates Autowah rate Controls the frequency of Autowah rate

Controls

12

# Mode Selector Switch (top left)

- **CRY MODE** • This puts the KILOWAH into classic wah mode. Adjust the gain and resonance to get the desired sound. The most 'classic' sound is usually found with the Resonance turned to around two O'clock.
- **MEGA MODE:** • This mode kicks the wah up a notch, boosts the bass to make unique fat and funky MEGAWAH sounds.
- In this mode, an incoming note will trigger the wah to give an envelope / synth wah sound.
- **AUTO MODE:** • This mode allows the pedal to become an Autowah, the frequency of which is controlled by the rate control knob.

# Troubleshooting

All gig-fx pedal products are tested three times - once with a scope looking for correct waveforms, one electrical test on the bench before assembly, and then a final full audio test and visual examination prior to packaging. Having said all this, some components can change characteristics or fail without our permission so if you have a problem, please let us know.

## Adjusting pedal resistance

gig-fx pedals can be adjusted for resistance to movement. If the pedal is too loose or too tight for you, you can adjust to your liking. Having said this, if the pedal is too loose, it can cause the bypass not to work if it does not stay in the back position.

To adjust the pedal resistance, you will need a 10mm crescent wrench and a Philips screwdriver. Most wrenches can fit in the cavity so that they can hold the locking nuts, but some are too fat and the wings need to be filed or ground a bit in order to fit in the limited space. If you do not have one, gig-fx will send you a wrench free of charge. Insert the wrench into the cavity under the pedal from the back and locate the locking nut into the jaw of the wrench so that the nut is held. Now use the screwdriver to tighten or loosen the screw to provide the resistance of choice. Be careful to tighten both sides evenly. If you have a spring-scale, such as those used for weighing fish, the correct uplift force need to lift the front of the pedal is in the range of 1kg (2lbs), but if not, just set it so that is tight enough to stay in the off position or any other position, but not so tight it is stiff to move with your foot. Let your foot be the judge, as it is much stronger than your hand. DO NOT OVERTIGHTEN as the locking mechanism might get damaged.

# Signal to noise

All *gig-fx* products have low noise circuits, but as with any WAH effect, the KILOWAH circuit will contribute some noise when the pedal is in use. To minimize this noise, use relatively high guitar volume levels with relatively low amplifier volume levels according to the room. Turning the amplifier volume high with the guitar volume low will degrade the signal to noise ratio.

# Safety, EMI

This unit is compliant with:

- FCC requirements for conducted and radiated emissions
- EMI as described in CISPR 22 • EMI requirements as described in EN55013
- UL listing not required if used with class 2 (limited current) power supply or 9V battery
- CE norms

15

13