

FOXROX ELECTRONICS

Aquavibe is an opto-based phasor shifter based on the classic Vibe* effect. The full-blown vintage vibe circuitry is squeezed into a small space. In various places the circuit has been optimized for maximum control range, clear tone, low noise and total reliability. Modern parts are used throughout.

Something that sets Aquavibe apart from other Vibe clones is the addition of the CENTER control. Most vibe pedals sound a little different from one another, both originals and clones/reissues. This is largely due to an internal bias setting in the sweep circuit. Aquavibe brings that setting to the front panel. By carefully setting the WIDTH and CENTER knobs, you can dial in just about any familiar "univibe sound", plus new sounds that other vibe pedals are not capable of making. If you have a classic vibe sound in your head, you can find with an aquavibe.

Features:

Speed knob - Sets the speed of the sweep. Speed range is both faster and slower than vintage units. It also sets the maximum speed when using an external pedal

Center knob - See other side

Width knob - Same as "Intensity" on vintage units. This knob controls how wide the sweep is. Typical settings are between 10:00 and 3:00.

Internal Input trimmer - Dial in "vintage" to "modern" sounds by changing the input impedance, effecting brightness as the signal enters the vibe circuitry.

Internal output volume trimmer - Preset at unity gain, can be adjusted for level boost or cut.

Speed jack - uses standard, keyboard expression pedal. When using speed pedal, the speed knob acts as max speed setting when pedal is floored. BOSS EV-5 works well.

Flashing LED - Indicates speed setting - always flashing, not effected by Width and Center settings.

9 Volts DC - Incoming voltage is regulated, filtered and boosted for maximum headroom and performance.

CH/VB Switch - Choose between watery phasing sound (chorus) and warm vibrato.

Technical Information:

Dimensions: Width = 3.85" Depth = 5.15" Height = 2.85"

Weight: 1.7 lbs.

Voltage: 9 Volts DC (external) Aquavibe's current draw is too high for running it on a 9 Volt battery. It would die too in a matter of minutes. You can power Aquavibe with voltage ranging from 7 Volts to 15 Volts. Since the voltage is internally regulated at 5 Volts, feeding it higher voltages does not have any effect on performance.

Current draw: 250mA This is important - to be on the safe side, make sure your power adaptor can supply at least 300mA. See other side for more information on powering Aquavibe.

Power connection: 2.1mm, Center = NEG (FX standard)

Signal switching: True bypass with LED.

AquaVibe



Temperature - Always allow Aquavibe to achieve room-temperature for best results. The photocells used for phase shifting and speed control are affected by temperature. If you bring Aquavibe in from the freezing cold it might not sound right until it's allowed to warm up.

*Note - The term "Vibe" is used in this manual in reference to the original Uni-Vibe effect from the late 1960's and early 1970's. It was produced by Unicord/Univibe/Shin-ei. The trade name now belongs to Jim Dunlop Manufacturing.

Foxrox Vibe history

1989 - Started building custom vibe pedals and rack mounts.

1992 - Introduced the "Foxrox Provibe", large model.

1993 - Introduced the "Foxrox Provibe", small model.

2000 - Original Captain Coconut, with Provibe section

2001 - Captain Coconut 2, with Provibe section

2008 - Aquavibe



Notes on hooking it up and troubleshooting

Voltage - Aquavibe will run on voltage ranging from 7 to 18 volts DC. Incoming voltage gets regulated down to 5 volts, so running at higher voltages will not effect performance. It then gets converted to 24 Volts which is then further regulated.

Noise - If you notice ticking noise or pulsing hum, it means the power supply is not delivering enough current. Make sure it's rated for at least 300ma. 500ma or higher is best. Also, make sure you're not daisy chaining, or sharing the power with other effects. This could take away available current and cause noisy interaction. Power adaptors that use digital switching (the small ones) are often problematic in guitar rigs, and will probably act up with Aquavibe. Stick to linear (standard) power adaptors.

Dirt - before or after, or both? Some people like to put dirt (fuzz/distortion/OD) after their vibe. Others like them before. You should experiment to find what you like. If you like to stack overdrives, try inserting Aquavibe between two of them. You'll love the sound!

Going into a FuzzFace - Original vibes and most clones have a resistor network at the output of the effect that results in a very high impedance output signal. This causes a big drop in drive when going into a FuzzFace. Aquavibe has the same output resistor section, but the values have been changed to provide a lower output impedance. This means an overall clearer sound and negligible tone/level loss when driving a load such as a Fuzz Face. The sustain doesn't die when you kick in your vibe.

Expression pedal - When using an expression pedal, the SPEED knobs acts as a max-speed control. If you use a pedal that has a minimum setting adjustment you can dial in any range you want.

The CENTER knob and the vibe sweep

The classic Vibe sweep is famous for it's varying degrees of irregular wobble. The wobble is created by the back-and-fourth sweep of the four phase shift stages. At the middle of the sweep, there is a sort of cross-over point, or a notch. It's a point at which the sound thins out and a magical, psychedelic swirl is heard. On each side of the swirl point, there is a low side and a high side. If the swirl point is in the center it will sound even. If it is offset to either side, it will sound irregular. This characteristic is dependent on the Center setting (or where the internal lamp trimmer is set on other vibes). Since there has never been a "correct setting", it's a useful parameter to be able to control. You can experiment with different sounds, or you can find your one setting and leave it there.

The Center knob can also be used as a tunable filter. Turn the WIDTH knob all the way down and slowly turn the CENTER. You will hear it sweep through it's range, and you will hear the swirl point at around the 11:00 - 1:00 settings. Try leaving it in different positions and play. This could be useful for recording tracks. Now, try dialing in a very mild sweep. Sometimes the more subtle effects say the most... and Aquavibe makes them easy to dial in.

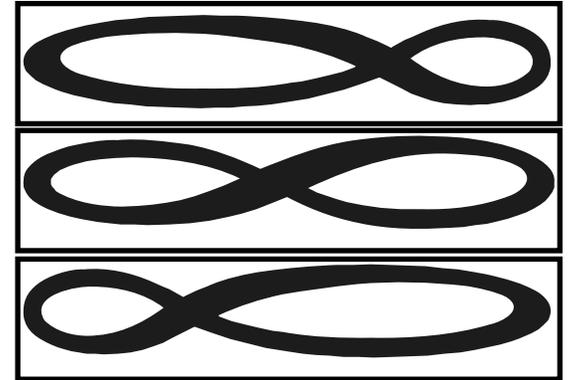
Wobble and Center

Use these images and descriptions to envision how the Center knob effects the sweep

The top image shows a low-biased wobble. The upper part of the sweep is very quick. Center= 7:00 - 11:00

The middle image is an even sweep. There is an even back-and-fourth sway to the sound. Center: 11:00 - 1:00.

The bottom image shows a high-biased wobble. This setting has an almost wah-wah sound. Center: 1:00 - 5:00



Input Loading Trimmer

This trimmer is used to adjust the input impedance. This has a subtle effect on the brightness and volume of the signal entering the vibe. Full CCW matches "vintage" impedance, Full CW conforms more to modern input impedance standards. This is a subtle but noticeable adjustment.

Output Volume Trimmer

Use this trimmer to match your bypassed level. Or boost/cut it, whatever you wish. Also, use it to compensate for settings on the Input Loading Trimmer. Both trimmers effect the volume.

Speed Taper Trimmer

(Informational only, you should not need to touch this setting).

This trimmer is used to set the taper of the Speed control. Electronically, it adds some resistance between ground and the bottom of the Speed pot. This sets the point at which the speed starts to increase when you turn the knob. To adjust (if you must!): Set the speed knob at 10:00

Turn trimmer CCW until speed just starts to sound faster. NOTE - This adjustment must be made in darkness so that the photocells don't pick up ambient light.

