

# CARL MARTIN



Carl got a call from an old guitar playing friend who said he didn't want to use his wah all the time, but wanted to have some of those effects available. Enter the Classic Optical Envelope....essentially a classic envelope filter (auto-wah utilizing the same opto-technology as the Opto-compressor) for guitar or bass, with a bunch of cool options. The first footswitch is for fx on/off (buffered), and the second to select between the three modes (High Pass, Band Pass and Low Pass). Add to this the Level control for overall volume, Drive for how hard the auto-wah will function, Q for adjusting the size of the bandwidth, and Tone which acts as a separate Hi-pass filter, and you have complete control over your fx...from vocal like tones to funky quacks and fat wows! Housed in the cool new diecast housing with mini-knobs and cool retro colour, the Classic Optical Envelope can be powered by a 9v battery, but we always recommend a regulated power supply for optimum response!

Please note that on the Classic Optical Envelope, all the controls are very interactive.



The Drive knob adjusts the sensitivity of the Classic Optical Envelope to your style of playing. As the effect is touch sensitive you will find that the Envelope will respond to your attack on the strings...from a softer darker wah when you play softly to a more dynamic and dramatic wah (with a higher pitch) when you become more aggressive. The Drive knob allows you to adjust how sensitive the effect will be for your personal style of playing. The control goes from no effect at counter clockwise to full sensitivity at full clockwise settings.



The Tone knob on the Classic Optical Envelope, is a high cut filter. With the knob set at full clockwise, you enjoy the full bandwidth of frequencies, so as you turn the knob counter clockwise, you start to filter out the high frequencies. On this effect, the Tone control works interactively with the Drive control, so as you adjust the Drive, you may find that you have to 'tweak' the Tone control to achieve your optimum tone.



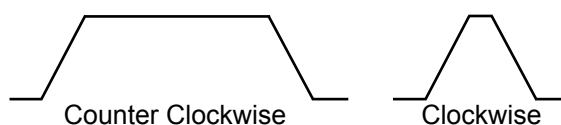
The Level knob adjusts the overall level of the Classic Optical Envelope. By adjusting this knob you can match or exceed the bypass signal.



Our Bypass button on the Classic Optical Envelope simply switches the effect on and off. This is a high quality buffered bypass (NOT True Bypass) which ensures silent switching and no loss of high frequencies due to long cables or multiple pedals....a critical feature for envelope filters which rely on full bandwidth.

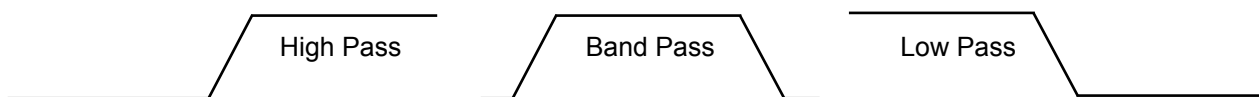


The Q knob adjusts the bandwidth for the Classical Optical Envelope. At full counter clockwise you have a very wide bandwidth which provides you with a soft, round and warm wah effect. At full clockwise, the opposite is true....the bandwidth is very narrow and provides you with a sharp, ear-ripping effect. The setting of the Q knob is very interactive with both the Drive and Tone knobs, and you may find that you have to adjust the Level as well, depending on your other settings.



The Select switch offers three different presets....HP (high Pass), BP (Band Pass) and LP (Low Pass). These presets give you everything from the deepest growling 60's wah effect to the sharpest 70's disco sounds...and everything in between. With the Low Pass setting, the Classic Optical Envelope is also suitable to be used with bass guitar.

PLEASE NOTE: After the power has been disconnected, you must press the select switch a few time to activate the circuitry.



**The Battery** is located inside the pedal. To install or replace the 9V battery, loosen the screws on the bottom and remove the bottom plate. Be careful not to scratch the unit.

Always remember to unplug your cables from the pedal to conserve battery life. Some battery drain will take place when the line cables are connected to the pedal, regardless if the pedal is engaged or not.

**Power Requirements**

Battery: Standard 9V Alkaline battery

Power consumption: max. 14 mA

Power supply: 9 V DC (regulated), 30 mA minimum, 2.1 mm female plug, center negative (-)

ATTENTION: Please Use DC Power Supply Only! Failure to do so may damage the unit and void the warranty.

**Specifications**

Input..... 1M Ohm

Output..... 330 Ohm

S/N Ratio..... 56 dB

Dimensions ..... 120 (W) x 95 (D) x 56 (H) mm    4.72" (W) x 3.74" (D) x 2.2" (H)

Weight..... 420g/ 0.94lbs

**Warranty:** Carl Martin Research warrants the manufacturing, material and proper operation for a period of one year from date of purchase. Carl Martin will replace defective parts, make necessary repairs or replace the unit at the discession of our technicians. The warranty applies only to the original purchaser of this product, and excludes any damage or faulty operation resulting from misuse, neglect or unauthorized service.

Manufactured in China

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