MAKING ADJUSTMENTS TO OPTICAL PEDALS

If you need additional assistance beyond these procedures, you can contact us via email at scott@morleypedals.com
Log onto www.morleypedals.com for complete product information.

They say you can't please everyone all the time. As true as this statement may be, we have noticed that with wah pedals, every player has a different interpretation of what a wah should sound like. There is really no right or wrong in this area and it can be a bit like thinking of the color blue (everyone will have a different shade in their mind).

This article outlines some of the general information needed to begin to alter the wah or volume on our Electro-Optical pedals and how to make adjustment to our optical switching for our switchless pedals (we call that the Trip Point). The average vision of how a wah sound or how a volume functions will vary from user to user. Giving you this information will put the control directly in your hands allowing you to achieve that sound in your head. Here's what you need to know to adjust the wah and volume.

Electro-Optical Circuitry Basics

Electro-Optical Circuitry functions by a Light Emitting Diode (LED) shining light through a Shutter and onto a Light Dependent Resistor (LDR – sometime referred to as a photocell). As the pedal is moved forward more light from the LED is allowed to shine through an opening in the shutter onto the LDR allowing the pedal to function electronically. On the newest versions of our switchless pedals (2010 or later) there is a Photo Transistor (PHT) used instead of an Light Dependant resistor (LDR).

Wah Adjustment

The two components that control the wah are an LED and an LDR. On the CLW, GLW, GLW2, KIKO, PBA-2, PDW-II, PWA-II, PWV-II and TMS they are labeled L4 and LDR3. On the MSW, VAI-1, VAI-2 and MARK 1 they are marked L2 and LDR2. On the MMW, MWV, PWO & PWOV they are marked L3 and LDR3. Basically, those components are moved in relation to one another (and to the shutter opening) to achieve a desired setting. The more direct light from the LED hitting the face of the LDR, the higher the wah frequency. For a more mid rangy wah tone point the two components slightly away from one another.

Each time the components are moved the pedal should be sound tested. Make sure to turn the pedal over to shield out the room light. Otherwise the pedal will give a false reading due to the room lighting. Once you understand this basic maneuver you can experiment with different settings until satisfied.

"Secret" Wah Adjustment

On the VAI-1, VAI-2, MARK 1, PWO and PWOV you can quickly and easily adjust the wah tone by tightening or loosening the nut that holds the inductor in place.

The inductor is a round component (about the diameter of a quarter) located just below the output jack. Slightly tightening or loosening the nut changes the air gap of the core and ultimately makes the wah brighter or more mid-ranged. You'll notice a small amount of glue on the nut, don't worry; this is a special glue that will stay on and hold the position of the nut.

NOTE: Just don't tighten down on this nut with any real force or you may crack the ceramic housing. A small amount of tension can go a long way in terms of wah tone.