



Installation Manual

**Krista Kit (Dimmable)
Suzuki DR650E**



**clearwater
LIGHTS™**

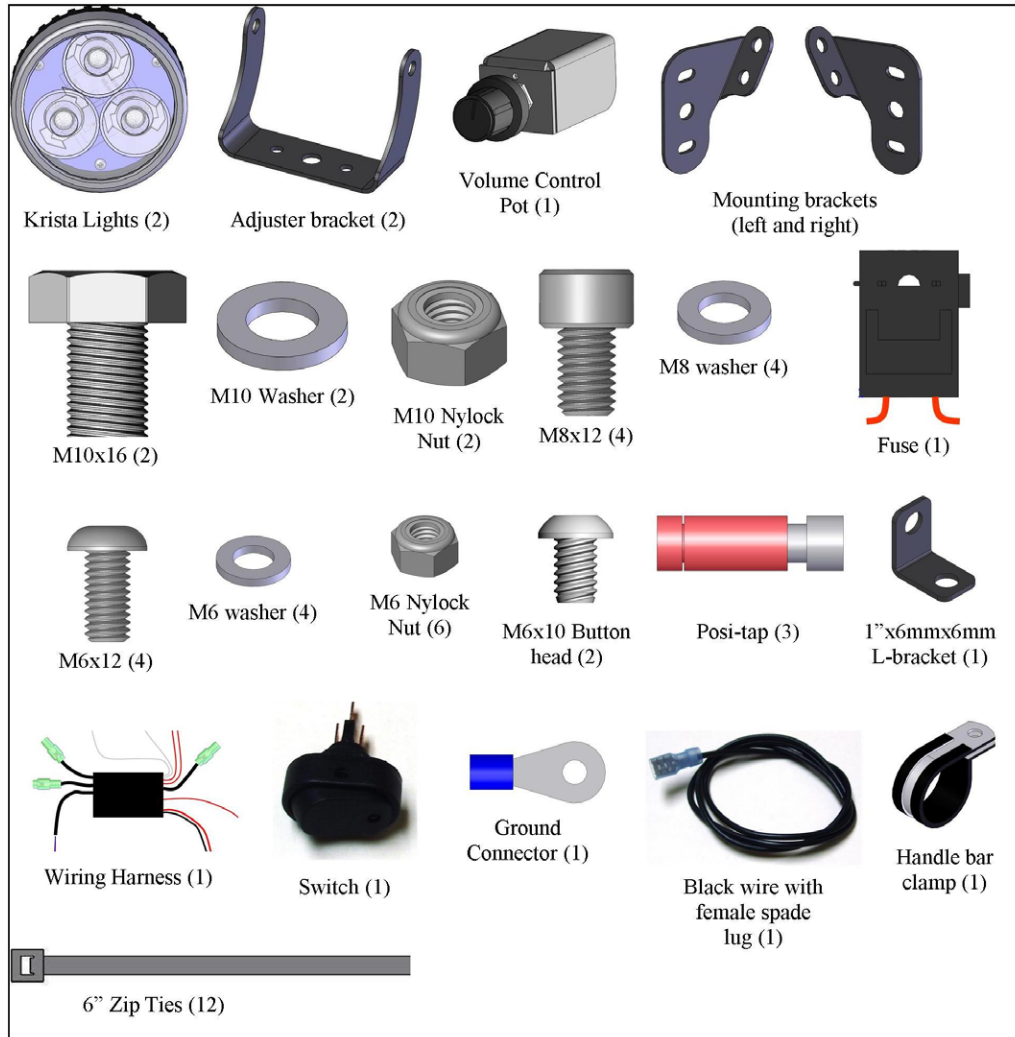


Made in USA

The Clearwater Company
2546 Mercantile Dr. Ste B
Rancho Cordova, CA 95742
P:916.852.7029 F:916.852.9410
www.clearwaterlights.com

Please be sure to read our instructions thoroughly before attempting installation.

- Check Parts list below with your kit to be sure all parts are handy. If something is missing, please call us at (916) 852-7029.



4/27/11

Please take the time to review the included instructions. Installation of the new Clearwater KRISTA is straightforward. But, be sure to follow some of the suggestions to keep the installation safe and reliable. If you have any questions or comments, please feel free to contact us.

Thank you!

- First, park the motorcycle on hard pavement or concrete to insure the bike will be stable during the installation. If you can mount the bike on a stand with tie-down straps, this will help secure the motorcycle
- Follow the manufacturers guidelines for disconnecting the battery. This is important to prevent damage to the electrical system.
- **Note:** The green connectors are sometimes difficult to disconnect. For your convenience, do not connect until the proper stage of installation. Please see the instructions at the end of this booklet on how to disconnect them if you should need to unplug them.

- Krista is a very bright LED auxiliary light. It uses advanced digital circuits to monitor and control light output. Do not use these with on coming traffic unless the dimmer is turned down all the way. Krista is designed as an off road only light due to it's light output and beam pattern. The wide circular pattern is very useful in mountain roads on a motorcycle as it keeps light on the road and in the tree canopy. As the bike leans, light is still focused on the road. Be certain to use the lights in a manner that does not blind oncoming traffic. Use these with caution. Ride safe.

KRISTA TECHNICAL

Krista is a very bright LED light that uses digital drivers to produce very efficient light from (3) 12 watt LEDs. By using a proprietary digital volume control, we can “dim” the lights via a remote mount volume control. This rotary knob sends a digital signal to our microprocessor that changes the pulses of electricity to the LEDs. As we increase the time that the lights are “off” the human eye perceives this as dimming. We switch our lights on and off at a rate of 250 times per second, every second. Increased efficiency occurs with the dimming as well. Krista can also be used in a “low” beam mode and a “high” beam mode. The factory handlebar high beam switch is used to select the two different Krista modes. Light output approaches that of a 150 watt halogen bulb while only using 35 watts of power. Krista is easy to install and has many, many uses. Krista is also serving overseas as an emergency operating room light on a remote island hospital.

STEP 1: MOUNTING LIGHTS

- Install the lights one side at a time to ensure fork components don't come loose.
- Attach the mounting bracket to the two bolts on the fork just below the headlight as shown below.
- Next, attach the adjuster bracket to this mounting bracket.
- Attach the Krista light to this adjuster bracket.
- Repeat for the other side.



Step 2: Mounting the Pot

Mounting Pot Bracket

- Mount “volume control” to handlebar by using supplied bracket, bolt and clamp.
- Route wires from lights and pot bracket to area under the headlight cover. Connections can be made here and be kept weatherproof.



Step 3: Wiring

Wire routing:

- Be sure to route wires so that they cannot become tangled or caught in either a suspension part or steering part. Check movement of both steering and suspension before riding the bike.
- It is sometimes helpful to follow existing wire routing.

Electrical:

- Run the Red and Black power wires directly to the battery. The fuse will protect the system in the event of a short.
- Locate the power relay box in a safe location. Secure with a zip tie. It is a good idea to face the relay box with the wires coming out the bottom. This helps keep everything dry.
- Route the two Green connectors for the lights to a convenient location where they will not interfere with steering or any other moving parts.
- Install the switch in a convenient location. Connect the two red wires from the relay box to their corresponding tabs on the switch. Refer to the sticker on the switch for proper placement. Trim the grounding wire for the switch (black wire with female spade lug) to desired length, crimp on ground connector, and connect to a good ground point. If you are doing a dual Glenda-Krista installation, you can also tie this wire into the black wire posi-twist junction.
- Install connectors as shown in the wiring diagram on page 6.
- Note: extra crimp on connectors provided in connection kit for if you would like to shorten the wires.



Relay box mounting location suggestion.

Connections:

Turn on wire goes to yellow wire with white stripe
Switch ground goes to black wire with white stripe
High beam wire goes to solid yellow wire
Horn not shown above.

High Beam Feature

- Locate your bike's High Beam headlight hot (+) lead. This will make your lights go to full power when you turn on your high beam. Use a posi-tap to connect one of the white wires from the relay box to this wire. It does not matter which white wire you use; both trigger the same way. If you do not want to use this feature, simply tuck the white wire away in a neat fashion.

Horn Feature:

- Locate the Horn's hot (+) lead. This will make your lights flash to full when you sound your horn. Use a posi-tap to connect one of the white wires from the relay box to this wire. It does not matter which white wire you use; both trigger the same way. If you do not want to use this feature, simply tuck the white wire away in a neat fashion.

STEP 4: ALIGNMENT

As Krista is designed as an auxiliary light, adjustment is up to the user depending on his needs. Ask an assistant to help you with this procedure. Make sure the bike is on level ground and have an assistant sit on the bike. With a right angle board or object, position the board on the floor and slide it up to the light. The goal is to adjust the lights so that the light is level with the ground. Passengers and luggage may alter the alignment of the light, so further adjustments may be needed. You may find that a slight downward angle (5 degrees) is helpful. Often times it is helpful to angle the Right side light toward the right side of the road. This helps with identifying road terrain and potential critters.

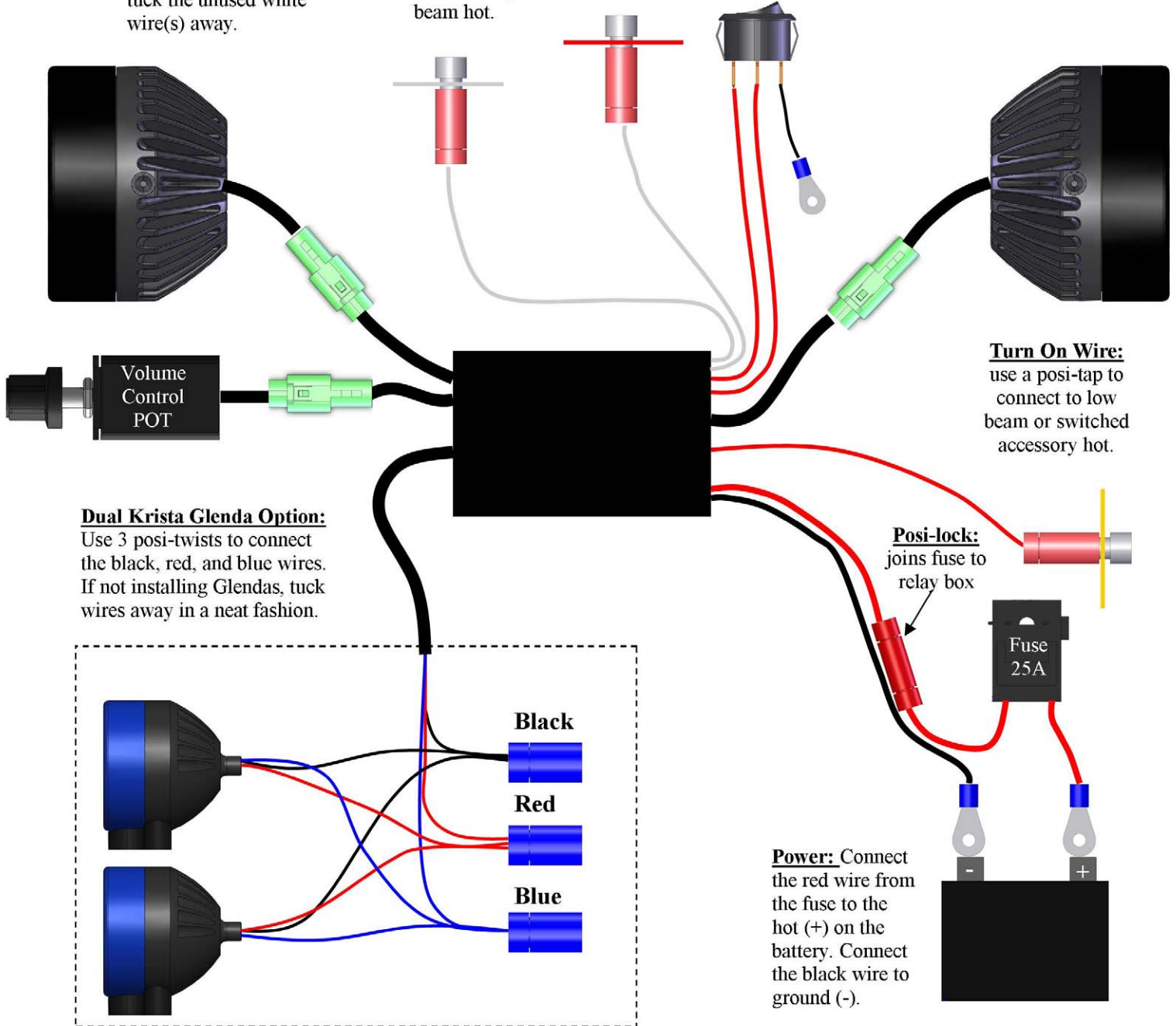
Wiring Diagram for Regular Krista

Note: it does not matter which white wire you hook up to the horn or high beam. Both trigger the same way. If you do not want the high beam or horn option, just simply tuck the unused white wire(s) away.

High Beam Option: use a posi-tap to connect one of the white wires to the high beam hot.

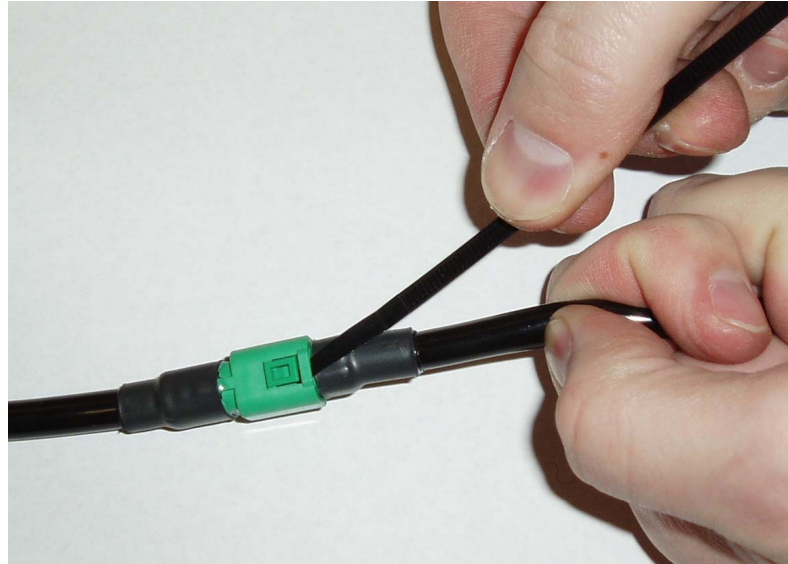
Horn Option: use a posi-tap to connect the other white wire to the horn hot.

Switch: Connect the red wire marked "Load" to the load terminal on the switch. Connect the "12V+ to switch" wire to the "supply" terminal of the switch. Connect the black grounding wire to the "earth" terminal of switch and attach to a good ground point. Extra crimp on connectors are provided if you wish to shorten the wires.



Connector Removal:

If during the course of assembly you need to disconnect the green connectors, gently lift the tab shown on the diagram on the right using a zip-tie while pulling on the plug. Be careful that you do not break this tab off or else the connector will not lock together.



Thank you for purchasing your Clearwater lights. We hope this product will help make you a safer rider. Please feel free to send us comments or suggestions at any time. We learn from you. Keep checking our website for more new exciting products to help you see better at night.

Ride safe!

Sincerely,

Glenn and the guys at Clearwater.



The Clearwater Company
2546 Mercantile Dr. Suite B
Rancho Cordova, CA 95742
Ph:916.852.7029 Fx:916.852.9410
www.clearwaterlights.com

June 22, 2011