

**ELECTRONIC TRAILER Wiring**  
**With Isolator, 4 to 5 and 5 to 4 convertor**  
**INSTALLATION INSTRUCTIONS**  
**Pt # TWC003**

**NOTE 1:** This Isolator **WILL NOT work on 2018 and newer Honda Gold Wing** and some other newer models with CANBUS wiring. It **WILL NOT function correctly on 2014 and newer Harley Davidson's when set on the 4 to 5 wire mode**. ON these HD models you will also need a #HD007-50 4 to 5 wire decoder. On Indian Models it also requires the use of a CANBUS module #VCC007-50. Please contact us for fitment or if your model is in questions as we do have Isolators and convertors for these models.

**NOTE 2:** The motorcycles you are installing the Isolator on will have either a 4 or 5 wire tail light system. The trailer you will be connecting to will also have either a 4 or 5 wire tail light system. The Isolator can be set to work with any combination of 4 or 5 wire lighting using the setting button and colored LED's on the isolator. Pushing and hold the button in for several seconds until the next LED is lit changing the mode.

**NOTE 3:** It is STRONGLY recommended to use an electronic trailer wiring isolator which is designed to draw the additional 7-10 amps of power needed for the trailer's lighting directly from the battery, not thru the brake, tail or turn signal circuits of the motorcycle. The isolator senses when power is applied to these circuits and activates the trailer lighting accordingly. It is a solid-state electronic device that will protect the motorcycle's advanced electronic and CAN-BUS, systems, prevents warning and error codes as well as provides full power to the trailers lighting.

RED LED = Converts a 4 wire from the motorcycle to a 5 wire out to the trailer

GREEN LED = Straight thru i.e. 4 wire from the motorcycle = 4 wire out to trailer or 5 wire from the motorcycle = 5 wire out to the trailer.

YELLOW LED = Converts a 5 wire from the motorcycle to a 4 wire out to trailer

1. The isolator comes with a connector which can be plugged in to one of our sub harness connectors (see our website for model application) which will plug directly into the motorcycles wire harness. On other models you can cut off this plug and use Scotch-Loc wire tap connectors to connect the wires from the motorcycles tail/brake and turn signal wires to those on the isolator.

2. Install the sub harness using the instructions supplied with it.

3. Find a suitable location to mount the isolator near the sub harness plug or where you will be using wire tap connectors plug for the tail/brake and turn signal wires. Usually

this will be under the seat where the wires from the taillight connect to the main wire harness.

4. Plug the isolator into the sub harness. Secure the isolator to the motorcycle using the adhesive tape supplied or cable ties. Clean the surface with rubbing alcohol to ensure good adhesion of the mounting tape.

5. Find a suitable location to attach the BLACK ground wire to the frame (be sure to remove any paint from the metal to ensure a good ground) or battery ground (-) terminal.

6. Connect the RED power wire from the isolator to the Positive terminal of the accessory fuse (usually located at the main fuse box). The accessory fuse should have a 10 amp fuse, if it does not replace it with a 10 amp one. If you already have other accessories connected here or do not have an accessory fuse you may connect it to the battery positive (+) terminal using the provided fuse holder

**NOTE 4: If connecting the red power wire to the battery it is recommended to add a relay (not supplied, available at most auto parts stores) as shown in the supplied wiring diagram to provide power to the isolator only when the ignition is ON. Without a relay and connecting directly to the battery the mode LED on the isolator will stay ON at all times. This will result in a very small power draw. Over a 3-6 month period the battery could become discharged if the motorcycle were not run for an extended period (winter storage) without charging.**

Turn the ignition on and look at the three LED's on the isolator to see which is lighted. Set the isolators mode (Led light color) by pressing and holding the mode button for several seconds. The

7. Turn the ignition on and using a test light on the appropriate colored wires at the trailer plug check each of the lighting functions.

8. Route the isolator wire loom and plug to the rear of the motorcycle and the receiver or hitch, secure with the provided cable ties. The 5 wire Trailer plug provided will fit any flat 4 or 5 wire plug. For others you will need to cut this plug off and use the one of your choice.

9. Connect your trailers lighting plug and test all light functions again.

***BEFORE EVERY RIDE, MAKE SURE THAT THE TRAILER LIGHTS ARE FUNCTIONING PROPERLY.***

