# VT No. 33-0713, 33-0815, 33-0816, 33-0817, 33-1192 BADLANDS Illuminator RUN-BRAKE-TURN Module with built in LOAD EQUALIZER

Thank you for purchasing a Badlands Illuminator Module! We're sure that you will be completely satisfied with the performance and ease of installation of your new module. Before you get started, PLEASE read these instructions and helpful tips so that you understand how to install your module correctly. An improper installation will <u>void</u> the warranty.

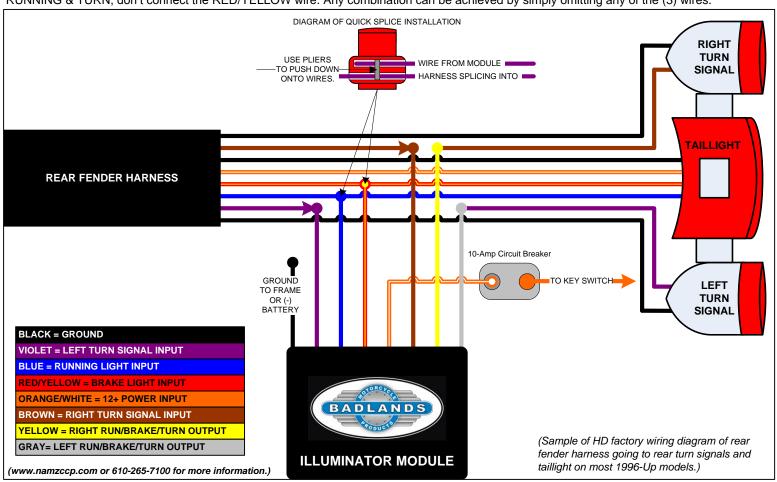
**FEATURES:** All Badlands Illuminator Modules are designed to provide you running light, brake light and turn signal functions to each rear turn signal all on (1) wire per side. Whether you have a Plug-n-Play module or the hard-wired version, Illuminator Modules all work the same. These modules also have a built-in Load Equalizer which is perfect when switching out factory turn signals to Halogen or LED versions. This feature will prevent a "rapid-flash" which is caused by the factory turn signal module not seeing the specific amperage draw that the factory 1156/1157 bulbs provided. Now you understand the features of our Illuminator Module, let's talk about how it works.

WIRING OF NON PLUG-N-PLAY MODULES ONLY: The wiring colors on our Illuminator Modules are defined in the color chart below. The ORANGE/WHITE wire on our module needs 12-volt switched or battery power. (NOTE, if you use our ILL-01, we recommend to connect the ORANGE/WHITE (+) wire directly to the battery with a 7.5 fuse or to a circuit breaker. The BLACK (-) wire should be grounded to the frame or to the ground (-) post on the battery.)

**PLUG-N-PLAY INSTALLATION:** Most of our modules offer Plug-n-Play technology, making installation quick and easy. Simply remove your seat or left side cover on FL Models, unplug the **rear fender harness** connectors, plug our module in between and you're done. (see back for fitment)

**FIRST!** We package this version with butt connectors and quick splices but recommend using connectors and terminals whenever possible. Now let's talk about the input and output wires. When we say "INPUT" we are referring to the wires that are currently running to your REAR left and right turn signals and your taillight, (*running and brake light*). This is called your rear fender harness and these wires are needed to feed the input wires on the module. Once hooked up, (*see wiring diagram below*) the input wires will provide all of the functions the module needs to process RUN/BRAKE/TURN signal functions onto the OUTPUT wires. The objective of the diagram below is to show you to "splice into" the running light, and brake light wires using quick splices while still keeping these wires attached as they were from the factory. Only the VIOLET (*left turn signal*) and BROWN (*right turn signal*) wires should be cut. The feed side of these wires (*from the front of the bike*) should be attached to the VIOLET and BROWN wires on the module using supplied butt connectors. The other half of the cut violet and brown wires should be connected to the GRAY and YELLOW wires on the module using supplied butt connectors. Be sure to test when complete.

**CUSTOM INSTALLATION:** If you are using an Illuminator Module with custom lighting of any kind, read this section. Some lighting can have (2) wires or (3) wires depending on the manufacturer and the specifications. Since the Illuminator provides RUN/BRAKE/TURN signal functions on one wire LEFT and one wire RIGHT, you may want to twist the "hot" wires together on (3) wire LED's to have the entire LED operate as RUN/BRAKE/TURN. This will be the case for any dual filament bulb as well. Also note that each of the (3) inputs on our Illuminator do not have to be connected depending on your application. If you only want BRAKE & TURN output on your lights, don't connect the BLUE wire. Only want RUNNING & TURN, don't connect the RED/YELLOW wire. Any combination can be achieved by simply omitting any of the (3) wires.



The wire colors in the drawing will not be the same on all models but do match most 1996-up factory HD motorcycles. If you have a pre-1996 model be sure to consult your bikes service manual for exact wiring diagrams and color descriptions to achieve proper installation.

FITMENT: Here is the list of Badlands Illuminator Modules and the fitment description for each part number.

#### 33-0713

**ILL-01:** Hard-wired module, universal fitment, comes complete with (1) 1/4" ring terminal if you decide to install the modules BLACK wire directly to frame ground or (-) battery post, (1) 1/4" ring terminal if you decide to install the modules ORANGE power wire directly to battery post with a 7.5-AMP fuse, (2) quick splices for RED and BLUE wires on the module for running and brake lights and (4) butt connectors for right and left turn signal inputs and outputs.

# 33-0816

ILL-01-A: Plug-n-Play module, fits ('97-Up, XL '99-'03, (EXCEPT: Rocker, '10-Up Street & Road Glides, '14-Up FL) This module comes with an 8-position male and female Multilock connector that connects in between your rear fender connection under the seat.

### 33-0815

**ILL-01-B:** Plug-n-Play module, fits ('85-'90 FL, '86-'95 FXST & FXR, '95-'96 Dyna, '86-'90 XL models.) This module comes with a 6-position male and female Mate-n-lock connector and terminals that connects in between your rear fender connection under the seat or side cover.

## 33-0817

**ILL-01-C:** Plug-n-Play module, fits ('04-Up XL models ONLY.) This module comes with a 6-position male and female Multilock connector that connects in between your rear fender connection under the seat or side cover.

#### 33-1192

**ILL-01-D:** Plug-n-Play module, fits ('91-'96 FL models ONLY.) This module comes with an 8-position male and female Deutsch connector that connects in between your rear fender connection under the seat or side cover.