pathBlazer™

HEAD LIGHT MODULATOR

Goldwing Models

INSTALLATION GUIDE

Kisan ELECTRONICS

TECHNOLOGY for SAFETY

HEAD LIGHT MODULATORS ARE LEGAL

- in all of United States & Canada.

Below is a partial reprint of the Federal Standard 108, which makes modulators legal. No state can usurp Federal Authority, and therefore local Law Enforcement cannot issue citations for the use of modulators in their jurisdiction and expect to prevail in any Court of Law.

Department of Transportation
National Highway Traffic Safety Administration
Federal Motor Vehicle Safety Standards
49 CFR Parts 571
[Docket No. 97-57; Notice 1] Executive Order 12866

Motorcycle Headlamp Modulation System

s7.9.1 A headlamp on a motorcycle may be wired to either the upper or the lower beam from its maximum intensity to a lesser intensity provided that:
(a) The rate of modulation shall be 240 +/- 40 cycles per minute.
(b) The headlamp shall be operated at maximum power for 50 to 70 percent of each cycle
(c) The lowest intensity at any test point shall be not less than 17% of the maximum intensity measured at the same point.
(d) The modulator switch shall be wired in the power feed of the beam filament being modulated and not in the ground-side of the circuit.
(e) Means shall be provided so that both the lower beam and the upper beam remain operable in the event of a modulator failure.
(f) The system shall include a sensor mounted with the axis of its sensing element perpendicular to the horizontal plane. Headlamp modulation shall cease whenever the level of light . . . . less then 270 lux.

USA
Department of Transportation
National Highway Traffic Safety Administration
Federal Motor Vehicle Safety Standards

CANADA
Transport Canada
Motor Vehicle Standards and Research Branch
Road Safety Motor Vehicle Regulation Directorate

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P115W-H3-GL8:

Plug & Play

SPECIAL VERSION unit:

This unit has matched connectors for the 8-pin socket of newer GL1800 models with factory LED headlamp. It plugs inline with bikes wiring.

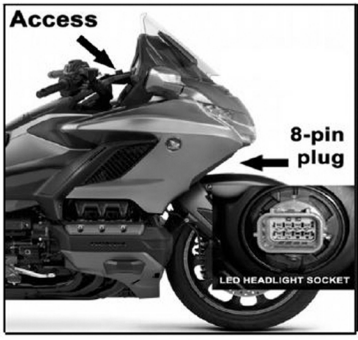
IN-LINE PLUG ADAPTERS

P115W-H3-GL8 ***pathBlazer*** application:

- Factory LED Head Lights – 8-pin plug
- Modulates in **HIGH-BEAM**, when selected in daytime
- Maximum load does not exceed 75W (14.5 v)
- Waterproof unit is compact and is mounted externally

- This is a special unit is designed to drive LED bulbs.
- The adapters plug between the 8-pin connector of the bike's wiring.

P115W-H3-GL8 INSTALLATION:



P115W-H3-GL8 has matching 8-pin plug and socket for the LED headlights.

❶ Gain access to the back of the LED headlight by reaching under the **dash, in front of handlebar. Headlight socket is as shown.**

❷ Install male/female connectors of ***pathBlazer*** in-line.

- Mate all connectors fully so they are latched
- Use the zip-tie to secure any loose wires and socket/plugs

The Daylight Sensor can be flush mounted or you can zip–tie it. Refer to the Instructions on following pages for:

- Choosing appropriate location for mounting the Daylight Sensor (pg-11)
- Programming Sensitivity Levels (pg-12)

The Daylight Sensor must be plugged-in for the ***pathBlazer*** to modulate. This is in accordance with the Sec108 requirement of the Federal DOT Standard.

P115W-H3-VK4:

Plug & Play

SPECIAL VERSION unit:

This unit has matched connectors for the 4-pin socket of newer Valkyrie models with factory LED headlamp. It plugs inline with bikes wiring.

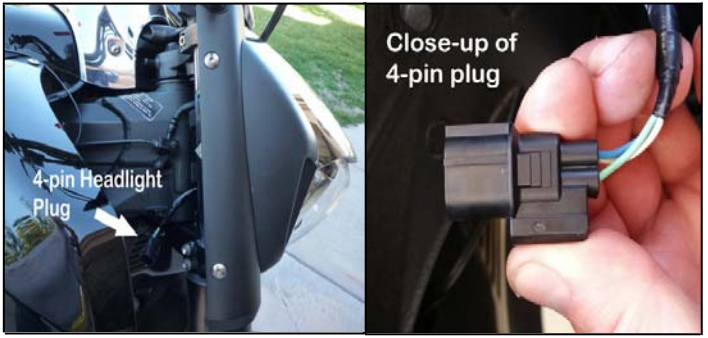
IN-LINE PLUG ADAPTERS

P115W-H3-WK4 *pathBlazer* application:

- Factory LED Head Lights – 4-pin plug
- Modulates in **HIGH-BEAM**, when selected in daytime
- Maximum load does not exceed 75W (14.5 v)
- Waterproof unit is compact and is mounted externally

- This is a special unit is designed to drive LED bulbs.
- The adapters plug between the 4-pin connector of the bike's wiring.

P115W-H3-VK4 INSTALLATION:



P115W-H3-WK4 has matching 4-pin plug and socket for the Valkyrie LED headlights.

❶ Gain access to the back of the LED headlight and remove the plug.

❷ Install male/female connectors of ***pathBlazer*** in-line.

- Mate all connectors fully so they are latched
- Use the zip-tie to secure any loose wires and socket/plugs

The Daylight Sensor can be flush mounted or you can zip–tie it. Refer to the Instructions on following pages for:

- Choosing appropriate location for mounting the Daylight Sensor (pg-11)
- Programming Sensitivity Levels (pg-12)

The Daylight Sensor must be plugged-in for the ***pathBlazer*** to modulate. This is in accordance with the Sec108 requirement of the Federal DOT Standard.

P115W-D:

Plug & Play

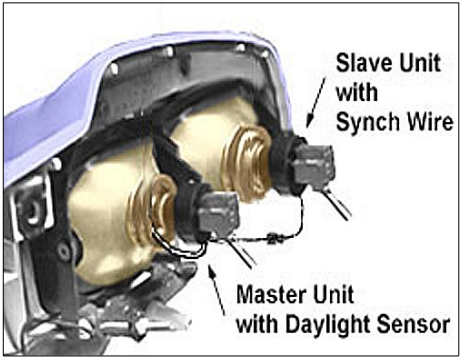
P115W-D *pathBlazer* application

- Dual Head Lights with 3-pin H4 bulbs or Japanese 2-pin H7 bulbs
- Modulates the HIGH-BEAM synchronized, when selected in daytime
- Maximum load is 100W (14.5 v) rated bulb for each unit

DO NOT EXCEED THE RATED WATTAGE.

Warranty coverage will be denied, if unit is damaged from overload.

P115W-D INSTALLATION:



On most models, access to the 3-pin connectors of the headlamp bulbs is possible simply by reaching it from underneath the front fairing or from behind the dash. There is usually a rubber splash cover over the pins of the bulb, which has to be peeled back.

Install both Master and Slave ***pathBlazer*** units on the headlamp bulbs then re-install the pin connectors. This unit is for dual Hi-beams, which are connected together, so Master can go on to either side.

Insert the 3-wire plug of the **Daylight Sensor into the Master unit.** Then insert the 1-wire plug of the Sensor harness into the Slave unit. If the Synch wire is not connected, the Slave unit WILL NOT OPERATE.

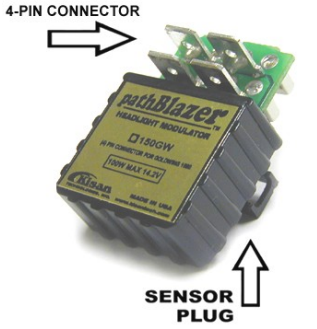
Next, you should plan on where to mount the daylight Sensor. It can be flush mounted or you can zip–tie it. Please refer to the Instructions on following pages for:

- Choosing appropriate location for mounting the Daylight Sensor (pg-11)
- Programming Sensitivity Levels (pg-12)

The Daylight Sensor must be plugged-in for the ***pathBlazer*** to modulate. This is in accordance with the Sec108 requirement of the Federal DOT Standard.

150GW:

Plug & Play



***SPECIAL VERSION unit*:**

This unit plugs inline with the 4-pin connector of the GL1500 headlight housing.

■ This plug-in unit is made to drive (2) headlamps together. If you have higher wattage bulbs or if you plan to install them in the future, use dual channel P115W-D unit.

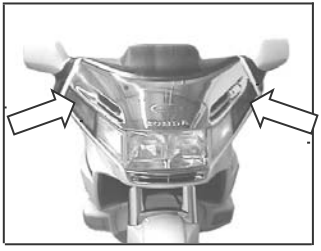
150GW *pathBlazer* application

- Dual Head Lights with 4-pin harness connector
- Modulates the **HIGH-BEAM**, when selected in daytime
- Maximum load is 75W (14.5 v) rated for each bulb

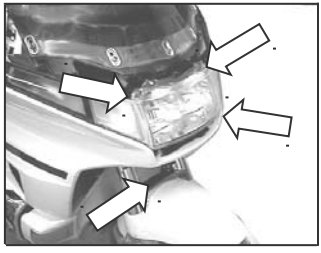
DO NOT EXCEED THE RATED WATTAGE.

Warranty coverage will be denied, if unit is damaged from overload.

150GW INSTALLATION:

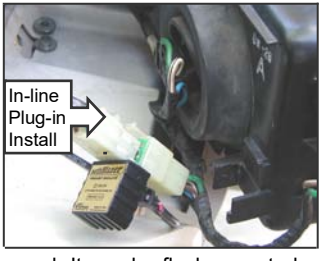


❶ **Remove (2) Phillips screws, which are hidden under the rubber covers of the side view mirrors**



❷ **Remove (4) 10mm screws & grille**

❸ **Headlight assembly moves out**



Remove the clip and **TWIST the 4-pin connector around** to plug the ***pathBlazer*** in-line. The female socket can only go in one-way.

Push the connectors in so that they are completely flush, as shown.

Feed the Daylight Sensor through the square opening toward the ignition key panel. It can be flush mounted near the Ignition Key. Otherwise it can be zip-tied.

Refer to the Instructions on the following pages for:

- Choosing appropriate location for mounting the Daylight Sensor (pg-11)
- Programming Sensitivity Levels (pg-12)

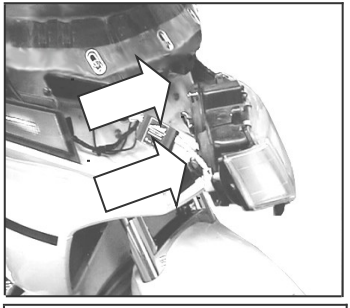
The Daylight Sensor must be plugged-in for the ***pathBlazer*** to modulate. This is in accordance with the Sec108 requirement of the Federal DOT Standard.

Honda Gold Wing Model	*pathBlazer* Application
GL1500	150GW
GL1500 with Hi-power OR LED Bulbs	P115W-D
GL1200 with Halogen OR LED bulb	P115W

GL-1500 HI-POWER BULBS: P115W-D

Install both Master and Slave ***pathBlazer*** units on the headlight bulbs then re-install the 3-pin sockets. Insert the connector end of the Synch wire from the Slave unit in to the 3rd empty position of the Sensor Plug – as shown for the P115W-D ***pathBlazer***.

Then plug the Daylight Sensor in the Master Unit. The 'eye' of the Daylight Sensor can be flush mounted or zip-tied.



Heavy-duty dual channel unit plugs directly on the back of each of the headlight bulbs

Gold Wing-1200 INSTALLATION: P115W

For GL1200 with single head light bulb assembly, the (3) Step removal procedure is similar to the GL1500. Please refer to the instructions in the 150GW ***pathBlazer*** section for removing the chrome facia and unbolting the headlight assembly.

Installation is simple: Unplug the headlamp, insert ***pathBlazer***, and then re-connect the plug on the 3-pin extension. Next, feed the Daylight Sensor through the opening in the bulkhead toward the left speaker. Daylight Sensor can be flush mounted or zip-tied.

MOUNTING DAY LIGHT SENSOR:

Day Light Sensor should be mounted on the dash or fairing. It ***should not be facing the front*** of the motorcycle, in order to avoid false triggers at night from on-coming vehicles.

You can zip-tie the Sensor to a brake cable or a bracket, as long as it receives unobstructed sunlight. The sense head is sealed to be waterproof.

You can also choose a permanent mount in fairing or side pockets.

FLUSH MOUNT

❶ Chose an appropriate location for the Daylight Sensor - it faces skyward and should receive unobstructed sunlight.

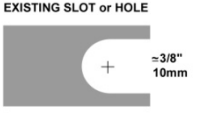
❷ Start with a small pilot hole. Finish with a 3/8" -enlarged a little- (10mm) hole.

❸ Feed the Sensor from behind the panel.

❹ Insert the Split Bushing around the cable, as shown.

❺ Move the Bushing up toward the threaded neck of the Sensor.

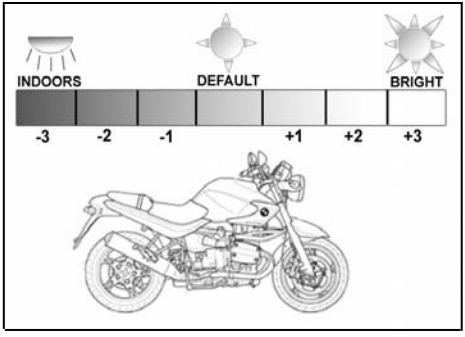
❻ Push the assembly firmly in the hole, until it locks-in - ***do not pull the cable.***



The sensitivity is adjustable for different levels of daylight. Depending on the location you have chosen to mount the Sensor. Or due to seasonal changes in weather conditions you may want to choose a different level. Instructions are described in more detail on the next page.

Note! Programming of Daylight Sensor's sensitivity IS NOT REQUIRED. In most cases the default factory setting will suit most common riding environment.

SENSITIVITY ADJUSTMENT:



pathBlazer circuitry has a microprocessor with an e^2prom to memorize different settings for the Daylight Sensor.

This procedure will set the sensitivity to match the available light at the time you perform it.

❶ Find a location or time of the day when you wish to **BEGIN** modulation
You can fine-tune the On/Off triggers from the default setting, as shown above.

❷ Turn the ignition ON, then flick the Hi-beam ON (3) times quickly
You have to begin this routine in the first 2 seconds after the ignition is turned on

❸ The confirmation of the new setting is: Hi-beam flashes 4 times
If you don't get this confirmation, try it once more – a little faster

■ Once set and confirmed by 4 flashes, the new Setting will remain in permanent memory of the processor. It is not affected even if the battery is disconnected or the ***pathBlazer*** unit is unplugged.

■ If you attempt the Sensitivity Adjustment in a very dark setting – beyond the DOT specified limits – the setting will revert back to default level.
This will be confirmed as: Hi-beam flashes 8 times.

Note! To avoid unintended reprogramming of Daylight Sensor's sensitivity, **DO NOT** start the engine with the hi-beam on.
■ During cranking, the battery voltage can drop out and simulate the 3-time ignition on sequence.

LIMITED WARRANTY

Kisan warrants this product to be free of manufacturing defects for a 1-year period after the original date of consumer purchase. A purchase receipt or other proof of original retail purchase will be required. This warranty does not include damage to the product resulting from accident, misuse, improper installation or operation or unauthorized repair or alteration. If the product should become defective within the warranty period, we will elect to repair or replace it free of charge at our option. Parts and/or replacement product supplied under the warranty may be new or rebuilt.

The consumer's sole remedy shall be such repair or replacement as is expressly provided above, and ***Kisan*** shall in no event be liable for any incidental or consequential damages arising out of the use of; or inability to use this product for any purpose whatsoever.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may have other rights, which vary from state to state.

If you have to return the product for warranty service, please contact our service department to obtain a R.M.A. (Return Merchandise Authorization) number and instructions on how to pack and ship the product to us.

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This Installation Guide is intended to provide you with general application related procedures. There are just too many different makes and models to be able to cover every specific condition you may encounter with your own motorcycle. We do our best to tell you how to handle most applications but we must depend on your good judgement for dealing with the rest.

Therefore, we strongly urge you to think carefully about what could happen to you and your bike if you use any tools, parts, fastening methods, routing or procedure not described in this Guide. Please read the manual in its entirety

For faster response, please visit the FAQ section in the **pathBlazer** product section of our website: www.kisantech.com

Kisan ELECTRONICS

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