INSTALLATION INSTRUCTIONS

GLOWSHIFT®
PERFORMANCE GAUGES & PODS

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Elite 10 Color Series – 140 MPH - In-Dash 3 ¾" Speedometer w/ Warning Light

For Product Number: GS-ET17

1. Power Wire Harness
2. Power Wire Harness
3. Sensor Wire Harness
4. Warning Light (optional)
5. Speed Sensor Selection Switch
6. Speed Sensor Adjustment

Power Wire Harness (Slot 1 or 2)

- Black
- Red
- White
- Orange

Sensor Wire Harness (Slot 3)

Speed Sensor Signal: Square Pulse Wave Output

Power Wire Harness Color Code			
Black:	Vehicle / Engine Ground (-)	**Orange:**	12v Dimmer (switched) Source (+) (optional)
Red:	12v Constant (un-switched) Source (+)	**White:**	12v Ignition (switched) Source (+)

Daisy Chain Power Connections: Simply plug one end of the included daisy chain harness into the first gauge that is connected to the power and ground sources. Next, plug the other end into the second gauge and repeat for the third & fourth. Max 4 gauges.

1. Disconnect the negative battery cable.

2. Using automotive grade wiring (18 gauge), connect the **red wire** to a positive 12 volt constant (un-switched) source, either directly to the battery or to a fuse panel on the vehicle.

- *If wiring to an un-fused source, install a 3 amp fuse inline within 20 inches of the sources connection. You may obtain an optional "add a circuit" accessory. This component easily fits into your fuse panel and provides an additional fused power wire for accessories such as gauges. This is available at www.GlowShift.com or a local auto parts store.*

3. Using automotive grade wiring (18 gauge), connect the **white wire** to a positive 12 volt ignition (switched) source. It may be connected to the fuse panel, an accessory wire, or any positive 12 volt source that turns on and off with the ignition switch of the vehicle.

4. (Optional) The dimming feature of the Elite Series decreases the brightness of the gauge face by 30%. Using automotive grade wiring (18 gauge), connect the **orange wire** to a positive 12 volt switched source. The most common installation is to splice and connect to the 12 volt positive headlight source.

5. Using automotive grade wiring (18 gauge), connect the **black wire** from the gauge to any good (unpainted) ground connection. You may also route a wire directly to the negative side of the vehicle's battery.

6. Run the **sensor wire harness (slot #3)** on the back of the gauge, through the firewall to the location of the speedometer signal wire.

- *Be sure to use a grommet when routing wires through the firewall to protect them from stripping and damage.*

7. Locate your vehicle's speedometer signal wire. Cut or splice the wire so that the GlowShift Speedometer signal wire can be connected inline to receive the speed signal. Make sure all connections are covered, fastened or sealed correctly to ensure proper operation and accuracy.

- *If your vehicle has a cable driven speedometer, an electronic speed sensor may be required.*

8. Speed Range Selection:
- Adjust the dial switch on the back of the gauge (#5 on diagram) to an approximate range.
  - Move the switch from 0,9,8,7,6,5,4,3,2,1 to narrow the speed range.
  - Move the switch from 1,2,3,4,5,6,7,8,9,0 to widen the speed range.
- Once you have an approximate setting, you can fine tune the gauge by using the adjustment knob on the back of the gauge itself (#6 on diagram). Turn the knob left and right to pinpoint the exact MPH by using your stock gauge. If you cannot get the MPH correct you will have to adjust the switch.

9. Reconnect the negative battery cable.
- *You may use the supplied daisy chain power wire harness to connect and power multiple GlowShift Elite Gauges from one set of power supply wires. (MAX 4 GAUGES)*
- *Be sure all of your wiring is correct for proper gauge operation.*

Operating Instructions

2. **10-Color Mode:**
   - Press the **COLOR** button to cycle between the colors.
   - The sequence of display colors are: Blue – Green – Red – Yellow – White – Light Blue – Purple – Pink – Orange – Amber
   - After Amber there are two (2) automatic color changing functions on the gauge that begin with the color Blue. They are the 10 Color Cycle Mode and the 10 Color Slow Fade Mode.

3. **Digital LED Display:**
   - There are 3 display modes on the LED Display. There is a **Trip A**, **Trip B**, and a **Speedometer**.
     - Press the **FUNC** button to enter the Trip A mode which will display **TRIP A** on the LED display.
       1. Press the SET button for 3 seconds to rest the trip meter.
     - Press the **FUNC** button to enter the Trip B mode which will display **TRIP B** on the LED display.
       1. Press the SET button for 3 seconds to rest the trip meter.
     - Press the **FUNC** button to enter the Speedometer mode which will display **MPH** on the LED display.

4. **Peak Mode:**
   - Press the **SET** button to recall the peak value and enter into the peak setting mode. The word **PEAK** will turn blue and the word **PEAK** will be displayed on the LED display when you are in the peak setting mode.
   - When the peak value is displayed, press the **FUNC** button to clear the previous peak value. When the Peak Blue LED is not flashing, the gauge is operating in normal mode.

5. **High-Warning Mode 1:**
   - Hold the **FUNC** button for 5 seconds to enter into the High-Warning 1 setting mode. It will display **WARN 1** in the LED Display.
   - When the needle and the warning light are flashing, you can now program the High-Warning Mode 1 Value. Pressing the **COLOR** button will move the needle clockwise while pressing the **SET** button will move the needle counter-clockwise.
   - Holding either the **COLOR** button or the **SET** button will move the needle in major increments in the button's respective direction.
   - After 5 seconds of no button activity, the gauge will return to its normal operating mode.

6. **High-Warning Mode 2:**
   - Press the **FUNC** button again to enter into the High-Warning 2 setting mode. It will display **WARN 2** in the LED display.
   - When the needle is flashing and the warning light is on, you can now program the High-Warning Mode 2 Value. Pressing the **COLOR** button will move the needle clockwise while pressing the **SET** button will move the needle counter-clockwise.
   - Holding either the **COLOR** button or the **SET** button will move the needle in major increments in the button's respective direction.
   - After 5 seconds of no button activity, the gauge will return to its normal operating mode.

7. **Opening Sound Mode:**
   - Press the **FUNC** button until you get into the opening sound mode. The gauge backlight will flash and the LED display will read **SD. SCAN ON/OFF.**
   - Press the **COLOR** and **SET** buttons to turn on and off the opening sound mode.
   - When the **PEAK** word is off, the sound will be disabled. Likewise when the **PEAK** word is on, the sound will be enabled.
   - When the opening sound is on, you will hear two beeps when the gauge goes through its start up calibration.

8. **Key Sound Mode:**
   - To hear the key sound when either button is pressed, press the **FUNC** button until the lights on the button words flash and the LED display reads **SD. KEY ON/OFF**.
   - Press the **COLOR** and **SET** buttons to turn on and off the opening sound mode.
   - When the **PEAK** word is off, the sound will be disabled. Likewise when the **PEAK** word is on, the sound will be enabled.
   - When the Key sound is on, you will hear a beep while pressing the buttons.

9. **Warning Mode Sound**
   - To turn the warning sound on, press the **FUNC** button until the warning light is flashing and **SD. WARN 1 ON/OFF** is displayed in the LED display.
   - Press the **COLOR** and **SET** buttons to turn on and off the opening sound mode.
   - When the **PEAK** word is off, the sound will be disabled. Likewise when the **PEAK** word is on, the sound will be enabled.
   - When the warning value is reached you will hear a tone.
   - Whatever setting is set for Warning 1 Warning 2 will be automatically set as the same.

Additional Installation Information & Material Requirements

- **GlowShift Gauges Approved Conductor Wires:** Successfully installing GlowShift Gauges may require lengths of wire (sizes and quantity depend on vehicle, gauge type, gauge location and / or sensor location). For correct and proper GlowShift Gauge installation and operation, the use of 18 Gauge (wire diameter) automotive grade conductor wire with sheathing is recommended for one or more gauges per vehicle. When installing and routing wires from the engine compartment, to inside the vehicle cabin, always employ the use of a rubber grommet. This will prevent and deter the stripping of power supply and / or sensor wires that is necessary to deliver vital statistics about your engine to your GlowShift engine monitoring instruments. Never use wire nuts to fasten or bound vehicle / gauge or sensor wiring. Always use securing crimp connectors or solder individual wire junctions together for optimum gauge installation and operation.

- **GlowShift Gauges Approved Installation Accessories:** GlowShift Gauges may require the installer or user to provide additional products, accessories or adapters for the correct installation and operation of a gauge or sensor, as per the GlowShift Installation Instructions. When installing and routing hoses to or from the engine compartment, to inside the vehicle cabin, always employ the use of a rubber grommet. This will prevent and deter the stretching or pinching of hoses that is necessary to deliver vital statistics about your engine to your GlowShift engine monitoring instruments.

- • **GlowShift Gauges Installation Instructions:** Installation documents are solely to provide a guide for individuals that are mechanically and electronically able to install products. If you are unsure about the correct procedure of installation for a product or device, you should consult a professional mechanic or an Authorized GlowShift Installer.

ONE YEAR NON-TRANSFERRABLE LIMITED WARRANTY AND DISCLAIMER

GlowShift Gauges, LLC ("GlowShift") warrants to the original retail consumer purchaser, and not any other purchaser or subsequent owner, that this Product will be free from defects in material or workmanship for a period of **one (1) year** from the purchase date.

For a period of **one (1) year** from the date of purchase, at no charge to the Purchaser, GlowShift will repair or replace this Product if it is determined by GlowShift to be defective. After the warranty period, the Purchaser must pay all charges for parts and labor.

Coverage under this warranty is only valid within the United States, including its territories, as well as in certain other countries. Purchasers should check our website, www.GlowShift.com, to determine the warranty coverage in the countries in which they are located.

GlowShift does **not warrant the installation** of the Product, which is the sole responsibility of the Purchaser. Installation should be done by licensed professionals. Improper installation may cause damage to the Product and any vehicle in which it is installed, and may cause burns and electrical injury to individuals. GlowShift's warranty does not cover any expenses incurred in removing Products that are defective or re-installing replacement Products in their place.

During the warranty period, to have the Product repaired or replaced, the Purchaser must return the Product, freight prepaid by the Purchaser, to GlowShift (but for customers in the contiguous United States, GlowShift will pay the shipping charges if any Product fails during the first thirty (30) days after purchase). The Product must be returned in its original carton or in a similar package affording an equal degree of protection. GlowShift will return the repaired or replaced Product, freight prepaid, to the Purchaser. GlowShift does not provide Purchasers with temporary replacement units during the warranty period or at any other time.

This limited warranty is non-transferrable and will automatically terminate if the original retail consumer purchaser resells the Product or transfers the vehicle in which the Product is installed. An "original retail consumer purchaser" is a person who originally purchases the Product, or a gift recipient of a new Product that is in its original packaging and unopened.

This limited warranty is subject to all of the following terms and conditions:

TERMS AND CONDITIONS

1. **NOTIFICATION OF CLAIMS; WARRANTY SERVICE**: If Purchaser believes that a Product is defective in material or workmanship, written notice with an explanation of the claim shall be given promptly by Purchaser to GlowShift. All warranty claims must be made within the warranty period, and any Products returned to GlowShift must be shipped in accordance with GlowShift's procedures (including use of RMA numbers supplied by GlowShift after notification). The repair or replacement of any Product or part thereof shall not extend the original warranty period. The specific warranty on the repaired part only (not including gauge sensors) shall be in effect for a period of ninety (90) days following the repair or replacement of that part, or the remaining period of the Product warranty, whichever is greater. GlowShift does not provide a warranty on replacement gauge sensors.

2. **EXCLUSIVE REMEDY; ACCEPTANCE**: Purchaser's exclusive remedy and GlowShift's sole obligation is to supply (or pay for) all labor necessary to repair any Product found to be defective within the warranty period and to supply new or rebuilt replacements for defective parts. GlowShift will refund the purchase price for such Product only if repair or replacement fails to remedy the defect. Purchaser's failure to make a claim as provided in paragraph 1 above or continued use of the Product shall constitute an unqualified acceptance of such Product and a waiver by Purchaser of all claims thereto.

3. **EXCEPTIONS TO LIMITED WARRANTY**: GlowShift shall have no obligation to Purchaser with respect to any Product that is subjected to any of the following: abuse, improper use, negligence, accident, modification, failure to follow the operating procedures outlined in the user's manual, failure to follow the maintenance procedures in the service manual for the Product, attempted repair by non-qualified personnel, operation of the Product outside of the published environmental and electrical parameters, or if the Product's original identification (trademark, serial number) markings have been defaced, altered, or removed. GlowShift excludes from warranty coverage Products sold AS IS and/or WITH ALL FAULTS. GlowShift also excludes from warranty coverage any consumable items such as fuses and batteries.

All software and accompanying documentation furnished with, or as part of the Product is furnished "AS IS" (i.e., without any warranty of any kind), except where expressly provided otherwise in any documentation or license agreement furnished with the Product.

4. **PROOF OF PURCHASE; REGISTRATION**: The Purchaser's dated bill of sale must be retained as evidence of the date of purchase and to establish warranty eligibility. Registration of any Product or of this limited warranty is voluntary, and failure to register will not diminish any rights available under this warranty.

DISCLAIMER OF WARRANTY

EXCEPT FOR THE FOREGOING WARRANTIES, GLOWSHIFT HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY WITH REGARD TO ANY CLAIM OF INFRINGEMENT THAT MAY BE PROVIDED IN SECTION 2-312(3) OF THE UNIFORM COMMERCIAL CODE OR IN ANY OTHER STATE STATUTE.

LIMITATION OF LIABILITY

THE LIABILITY OF GLOWSHIFT, IF ANY, AND PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR DAMAGES FOR ANY CLAIM OF ANY KIND WHATSOEVER, REGARDLESS OF THE LEGAL THEORY AND WHETHER ARISING IN TORT OR CONTRACT, SHALL NOT BE GREATER THAN THE ACTUAL PURCHASE PRICE OF THE PRODUCT FOR WHICH SUCH CLAIM IS MADE. IN NO EVENT SHALL GLOWSHIFT BE LIABLE TO PURCHASER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION, REIMBURSEMENT OR DAMAGES ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS OR FOR ANY OTHER REASON WHATSOEVER.

GOVERNING LAW: This non-transferrable limited warranty shall be governed by the law of the State of New Jersey, U.S.A., and the United States of America, excluding their conflicts of laws principles. The courts of Camden County, New Jersey, shall have the exclusive jurisdiction over any legal action with respect to this warranty.

This limited warranty gives specific legal rights. You may also have other rights that may vary from state to state or from country to country. Some states or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you. You are advised to consult applicable state or country laws for a full determination of rights.