



INSTALLATION INSTRUCTIONS FOR DIGITAL GAUGE MIRRORS

A. Connections

1. 5 Volt Power Supply

- Black to Ground
- Orange to 12 volt on/off with key
- Grey will be connected to Grey on both Gauges, see Step 3 and Step 4 below.
- Blue will be connected to Blue on both Gauges, and to the Remote Button, see Steps 2, 3 and 4 below.

***** It is critical that a good ground connection exists for proper gauge operation. Connect to bare metal or directly to negative side of battery*****

2. Remote Button

- Green to Green on left gauge
- Blue to Blue on 5 volt power supply

3. Left Gauge

- Blue to Blue on 5 volt power supply.
- Grey to Grey on 5 volt power supply.

***** It is critical that the Blue and Grey wires are connected ONLY to the 5V supply, NOT to 12V directly! Direct connection to 12V will destroy the gauges and VOID THE WARRANTY. *****

- Violet/White to left directional
- Orange/White to Neutral Switch
- White/Red to speed sensor
(See Speed Sensor Custom Application section at end of these instructions.)
- White to High Beam

4. Right Gauge

- Blue to Blue on 5 volt power supply
- Grey to Grey on 5 volt power supply
- Orange to 12 volts on/off with key
- Brown/White to right directional
- Pink to Oil Pressure sending unit
- Brown and Yellow are twisted together and connected to the tach signal feed

Where available, attach twisted Brown and Yellow wires to tach feed at ECM or ignition module.

You may read a tach signal from the low side of the coil, but the coil is an electrically noisy location and may produce a jumpy readout on a digital tach. It is best to use an ignition system with a tach feed, but if a tach feed will not be available:

- **If you have a DUAL FIRE ignition (single coil, only TWO input terminals), you may connect the twisted Brown and Yellow wires directly to the low (ignition side) terminal.**
- **If you have a SINGLE FIRE ignition (two coils, or a single coil with THREE input terminals), you will need to use a tach adaptor, available from Badlands or numerous other sources.**

B. MPH or KLM

1. Press and hold remote button
2. Turn on power to motorcycle
3. Release button. Left gauge should now say “**setup**”.
4. Press to toggle standard/metric mode (A dot in the upper left corner indicates metric)

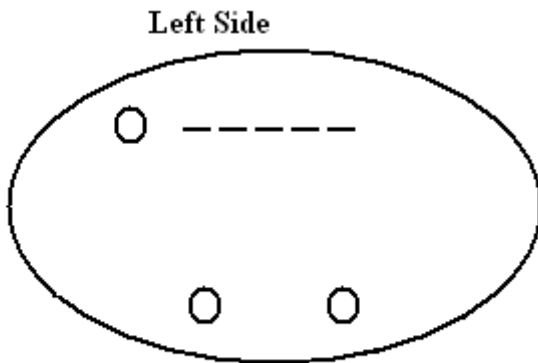


5. Once mph/klm selection has been made, wait 6 seconds without pressing the button and the gauge will go into normal operation mode **OR the gauges can be calibrated by pressing and holding the button for 6 seconds.**

C. Calibration

Note: Calibration process requires an ACCURATE measured distance of exactly 1.00 mile. Most Interstates and many State highways have periodic speedometer check areas, which are perfect for this process. ACCURACY OF THE MEASURED MILE DETERMINES ACCURACY OF THE SPEEDOMETER READ-OUT. Be sure that the area chosen is safe and allows you the opportunity to be safely stopped both at the beginning and end of the measured mile. DO NOT START THE FOLLOWING CALIBRATION PROCESS UNTIL YOU ARE AT THE BEGINNING OF THE MEASURED MILE AND ARE READY TO GO, WITH CONFIRMATION OF SOME SPEED SIGNAL BEING RECORDED ON THE WAY TO THE MEASURED MILE. See box below. Iso note that your gauge has been given an initial bench calibration which records a small amount of mileage on the odometer, usually less than 1 mile. Your distance driven to the measured mile will also be recorded, although it will not be accurate until after calibration. For this reason it is best to limit the distance driven to the measured mile.

1. Beginning in the “**setup**” mode as noted above, by pressing and holding the button for 6 seconds “**CAL**” will be shown on the display. Release button.
2. Press and release the button and a dash will appear in the right most section of the display. Press the button repeatedly until all 5 dashes are displayed and looks like the following figure.



***** IF ON THE WAY TO THE MEASURED MILE YOU DO NOT SEE ANY SPEED SIGNAL, DO NOT CALIBRATE,
-CHECK CONNECTIONS TO THE SPEED SENSOR
-CHECK THE GAP OF THE SPEED SENSOR (.030” - .050”)
-CHECK FOR METAL DEBRIS ON SPEED SENSOR MAGNET
-CHECK SPEED SENSOR FOR AN OUTPUT SIGNAL (SEE “TO TEST A SPEED SENSOR” NOTE BELOW)**

You are now ready to calibrate.

3. Drive the measured mile then come to a safe stop at exactly the 1.00 mile mark, but **LEAVE THE GAUGES ON**. Note that your speed while covering the measured mile is not important... It is only the accurate distance that matters.
4. Press and release the button and the gauges will go into normal operation.

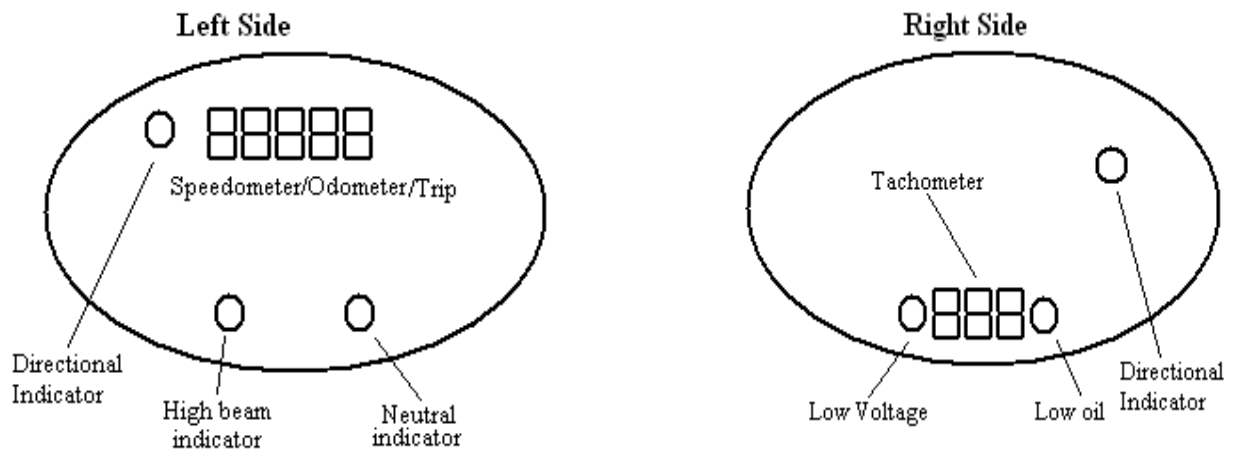
SPEED SENSOR CUSTOM APPLICATION

- 04 to present Harley speed sensors red wire must be connected to a 5 volt power supply, preferably the factory ECM output. If no factory ECM is available, the red wire may be connected to the provided 5V supply's grey wire.
NOTE: Be sure to verify the voltage output of the 5V supply with ALL devices connected. If this voltage falls below 4.60V, contact Badlands.
- Most aftermarket speed sensors red wire should be connected to 12 volts on/off with key.
- Black wire is ground on both aftermarket and Harley speed sensors.
- White, Green, or White/Green stripe wire is the speed sensor signal wire on both aftermarket and Harley speed sensors. This is connected to the red/white stripe wire on the left gauge.

TO TEST A SPEED SENSOR: Attach the black lead of a voltmeter to ground on the speed sensor, the red lead of a voltmeter to the speed signal (white or green or white/green wire) from the speed sensor. Jack the bike up, spin the rear wheel very slowly and the volt meter should read between zero to six volts sweeping up and down. If no signal is found, then check the sensor gap, check for metal debris on the magnet, and check the connections. To check the voltage at the speed sensor, attach the black lead of a voltmeter to the black wire of the speed sensor, the red lead of a voltmeter to the red wire of the speed sensor making sure that the appropriate twelve or five volts is connected.

D. Gauge Functions

Slimline-X / Saber-X / Eliminator-X Functions



E. Operation of Odometer and Trip Odometer

- To display the odometer press the button once, it will appear in place of the speedometer
- To go back to displaying the speedometer, wait 6 seconds
- To display the trip odometer, press the button twice
- To go back to displaying the speedometer, wait 6 seconds
- To reset the trip odometer, while viewing the trip odometer, press the button once.
- To go back to displaying the speedometer, wait 6 seconds