

# Custom Dynamics® SMART Rear LEDs with Brake Strobe Installation Instructions

We thank you for purchasing the Custom Dynamics® SMART Rear LEDs with Brake Strobe. Our products utilize the latest technology and high quality components to ensure you the most reliable service. We offer one of the best warranty programs in the industry and we back our products with excellent customer support, if you have questions before or during installation of this product please call Custom Dynamics® at 1(800) 382-1388.

Part Numbers: CD-STS-BRK

#### Package Contents:

- Amber/Red LED Clusters with Lens (1 pair)
- Smart Turn Signal Controller (1)

**Fits:** 2011-2013 US Model Harley-Davidson® Softail Blackline (FXS), 2012-2017 Slim (FLS), 2016-2017 Slim-S (FLSS), 2013-2017 Breakout (FXSB).

Does not fit International or Canadian models.



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## **ATTENTION**



Please read all Information below before Installation

<u>Warning</u>: Disconnect negative battery cable from battery; refer to owner's manual. Failure to do so may result in electrical shock, injury, or fire. Secure negative battery cable away from positive side of battery and all other positive voltage sources on vehicle.

<u>Safety First</u>: Always wear appropriate safety gear including safety glasses when performing any electrical work. It is highly recommended that safety glasses be worn throughout this installation process. Be sure vehicle is on level surface, secure and cool.

<u>NOTE</u>: Turn Signals are DOT Compliant when used behind Custom Dynamics® smoked motorcycle turn signal lens

<u>NOTE</u>: This product is designed for dual intensity rear turn signal fitment only. They will not function properly in the front. For proper color output, use a smoked lens.

<u>Important:</u> Dial should be maneuvered by hand only. Do not use any tool such as a screwdriver that could damage waterproof covers.

Important: Smart Turn Signal Controller must be secured after installation. Find safe area away from any moving parts and out of the way of normal operation of the bike. Use tie-wraps or other means to secure. Custom Dynamics® is not liable for damage as a result of improperly securing or failing to secure the module.

Important: The Smart Turn Signal Controller will not work properly if the settings in your BCM (body control module) have been modified from its stock factory configuration.

<u>Important</u>: The Smart Turn Signal Controller will not work properly if another brake strobe module is installed on the bike.

<u>Caution</u>: A stuck brake switch may cause this unit to overheat and fail . Unplug module immediately if this condition occurs.

Note: Although this device has been designed to significantly increase your braking visibility, flash/strobe patterns may not be street legal in your area. This Device is not DOT approved.

### **Turn Signal Installation:**

- 1. Remove the existing lens and bulb from the turn signal housing.
- 2. Remove any corrosion or dielectric grease from the socket contacts.
- Confirm the proper orientation of the socket base and insert the base into the socket. If it seems hard to twist the base in the socket or hard to remove, it is probably orientated the wrong way.
- Twist the LED turn signal a few rotations to coil wire from the turn signal to the socket base. Insert LED turn signal into housing and install new lens.

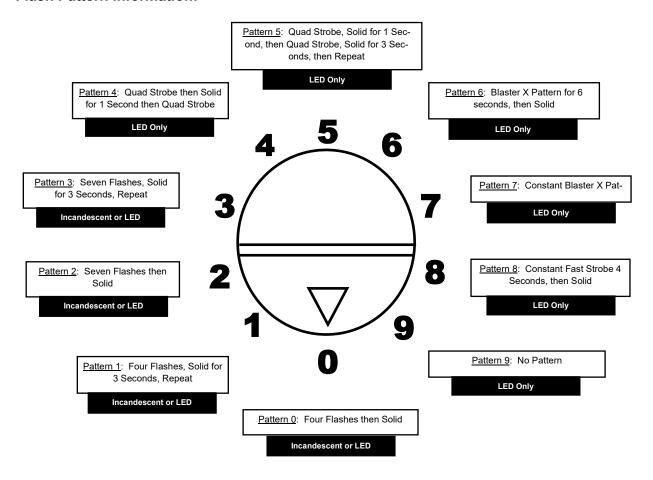
### **Smart Control Module Installation:**

- 5. Locate and unplug the lighting connector to the rear fender.
- 6. Plug the Smart Turn Signal Controller, in-line, into the rear lighting harness and into the bike's wiring harness.
- 7. Locate a secure place for the Smart Turn Signal Controller that will not interfere with the secure placement of the seat or side cover. Use tie wraps or tape if needed.
- 8. Select the desired strobe setting listed on Page 2 with the power off. Always turn power off before changing settings.
- Turn power on and test for function of the turn signals, running and brake signals with desired setting. Confirm that the turn signal will override the brake signal when the brakes are applied.

Questions? Call us at: 1 (800) 382-1388 M-TH 8:30AM-5:30PM / FR 9:30AM-5:30PM EST

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### Flash Pattern Information:



### Important Tips and Troubleshooting:

- 1. Dielectric grease does not need to be used with this LED product, it can actually prevent them from working.
- 2. Make sure you have the base orientation correct before inserting the base. If it seems hard to twist in the socket, it's probably in the wrong way.
- 3. Harley Davidson® Bullet turn signals may require trimming of black gasket to fully seat lens.
- 4. If you experience issues with function, clean the bottom contacts, then re-insert. Also, try in the other turn signal socket.
- 5. No load equalizer or Smart Signal Stabilizer™ is needed for these models.
- 6. This LED Product is BCM Compliant but, the BCM will need to be synced for the new turn signals.

### To sync the BCM, perform the following steps:

- 1.Turn Ignition on, but do not start the bike.
- 2. Turn on 4 way hazards by pressing the hazard button on the controls. Count 10 flashes and deactivate.
- 3. Turn on 4 way hazards for another 10 flashes and deactivate.
- 4. Clear Diagnostic Trouble Codes (DTC's)
- 5. Turn Ignition, OFF then back ON. Check Turn Signals for proper operation.

#### Clear Diagnostic Trouble Codes (DTCs)

- 1.To enter diagnostic mode, press and hold the trip odometer reset switch located on the left handlebar control, while turning the IGN ON.
- 2. Release the trip odometer reset switch when "DIAG" appears on the ODOMETER DISPLAY.
- 3. Press and release the trip odometer reset switch until "BCM" is displayed on the odometer display. "BCM Y" = Yes DTC set. "BCM N" = No DTC set.
- 4. If "BCM Y" is displayed, press and hold the trip odometer reset switch.
- 5. If any DTCs (diagnostic trouble codes) are stored in the module, the odometer will display the DTC. Quickly pressing and releasing the trip odometer reset switch will cycle through the stored DTCs.
- 6. When all the DTCs have been cycled the odometer will display "END". Continue to quickly press and release the trip odometer reset switch to cycle through the DTCs again.
- 7. To clear the DTCs listed above, press and hold the odometer reset switch while the DTC is displayed until "CLEAR" appears on odometer display.
- 8. Press and release the trip odometer reset switch again to continue to the next module. Repeat for any other code listed above.
- 9. Turn the IGN OFF to exit the diagnostic mode. Wait for any security lights to flash and repeat the procedure to ensure that the DTCs have been cleared.

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