

# CUSTOM LED 2009-2012 YZF-R1 BLASTER-X INTEGRATED LED TAIL LIGHT COMPLETE UNIT INSTALLATION INSTRUCTIONS

*CONGRATULATIONS ON YOUR PURCHASE OF THE CUSTOM LED 2009-2012 YZF-R1 INTEGRATED LED TAIL LIGHT WHICH FEATURES OUR PATENTED BLASTER-X TECHNOLOGY, BRAKE ALERT, STROBE MODE AND PROGRAMMING INTERFACE!*

## INSTALLATION

THIS PRODUCT IS DESIGNED TO DIRECTLY REPLACE THE FACTORY TAIL LIGHT WITH NO MODIFICATIONS NECESSARY. SIMPLY REMOVE YOUR EXISTING TAIL LIGHT AND REPLACE IT WITH THIS UNIT. YOU MAY NEED TO REMOVE A MOUNTING BRACKET AND/OR GROMMETS FROM YOUR OEM TAIL LIGHT AND ATTACH IT TO THE CUSTOM LED UNIT. TAKE NOTE OF THE ORIENTATION OF THIS BRACKET BEFORE REMOVING IT SO YOU CAN INSTALL IT PROPERLY.

## RUNNING LIGHT AND BRAKE LIGHT FUNCTION

THE THREE WIRE HARNESS WILL PLUG DIRECTLY INTO THE MOTORCYCLE HARNESS WHERE THE OEM TAIL LIGHT PLUGS IN. THIS THREE WIRE HARNESS CONTROLS THE RUN AND BRAKE FUNCTIONS. CAREFULLY TRACE THE OEM TAIL LIGHT HARNESS TO THIS CONNECTOR AND DISCONNECT IT.

## BLINKER FUNCTION

TURN SIGNAL FUNCTIONALITY IS OPTIONAL. TO UTILIZE THE TURN SIGNAL FUNCTION OF THE CUSTOM LED TAIL LIGHT, YOU WILL NEED TO CONNECT THE BROWN AND GREEN TURN SIGNAL WIRES TO YOUR MOTORCYCLE. THE GREEN AND BROWN WIRES HAVE CONNECTORS ATTACHED WHICH WILL PLUG DIRECTLY INTO YOUR MOTORCYCLES HARNESS WITH NO MODIFICATIONS NECESSARY. IF YOU HAVE NOT YET REMOVED YOUR OEM SIGNALS, SIMPLY FOLLOW THE WIRES FROM THE REAR SIGNALS TO LOCATE THIS CONNECTOR. THE GREEN WIRE CONTROLS THE RIGHT BLINKER OPERATION, AND THE BROWN WIRE CONTROLS THE LEFT BLINKER OPERATION. MAKE SURE YOU CONNECT THEM PROPERLY. THE MOTORCYCLE WIRES WILL BE THE SAME COLORS.

## STROBE MODE FUNCTION

YOUR CUSTOM LED TAIL LIGHT IS EQUIPPED WITH A STROBE MODE FEATURE. THIS FEATURE IS ENGAGED BY GROUNDING THE GRAY WIRE (TO ANY COMMON GROUND POINT: BATTERY (-) OR FRAME). THIS WIRE SHOULD BE CONNECTED TO A TOGGLE SWITCH TO CONTROL STROBE MODE OPERATION. FOR NORMAL TAIL LIGHT OPERATION, THIS WIRE SHOULD NOT BE CONNECTED TO ANYTHING. WE SELL A BLASTER-X CONTROL SWITCH AT [HTTP://WWW.CUSTOMLED.COM](http://www.customled.com) IF YOU ARE INTERESTED.

**NOTE: STROBE MODE OVERRIDES ALL OTHER FUNCTIONS OF THE TAIL LIGHT AND IS NOT INTENDED FOR STREET USE!**

---

## TROUBLESHOOTING

YOU MAY FIND THAT YOUR BLINKERS BLINK FASTER NOW THAT YOU HAVE REMOVED THE STOCK TURN SIGNALS IN THE REAR OF THE BIKE. THIS IS THE DESIGNED RESPONSE OF THE OEM FLASHER RELAY – AND IT IS OK TO LEAVE IT THIS WAY. IF YOU WISH TO SLOW YOUR BLINK RATE, YOU MUST REPLACE YOUR FLASHER RELAY. THE CUSTOM LED ELECTRONIC FLASHER RELAY IS THE PERFECT SOLUTION! SEE [HTTP://WWW.CUSTOMLED.COM](http://www.customled.com) AND CLICK ON OUR F.A.Q. SECTION FOR MORE INFORMATION.

IF YOU HAVE REPLACED THE FRONT TURNS SIGNALS WITH LEDS ALSO, YOU MAY FIND THAT YOUR BLINKERS DON'T BLINK AT ALL - YOU MUST REPLACE YOUR FLASHER RELAY FIX THIS PROBLEM. THE CUSTOM LED ELECTRONIC FLASHER RELAY IS THE PERFECT SOLUTION! SEE [HTTP://WWW.CUSTOMLED.COM](http://www.customled.com) AND CLICK ON OUR F.A.Q. SECTION FOR MORE INFORMATION.

IF YOU FIND THAT THE TAIL LIGHT ITSELF IS "STUCK" IN BLINKER MODE, AND DOESN'T WANT TO BLINK, THIS IS AN INDICATION THAT THE FRONT SIGNALS IMPROPERLY WIRED, AND ARE ALLOWING RUNNING LIGHT VOLTAGE TO BACK-FLOW INTO THE TURN SIGNAL CIRCUIT. THE SOLUTION IS TO RE-CONFIGURE THE WIRING OF THE FRONT SIGNALS SO THEY DO NOT US THE BLINKER CIRCUIT AS A GROUND, AND/OR ADD SOME RESISTIVE LOAD TO THE SYSTEM. OUR STAGE I LOAD EQUALIZERS HAVE BEEN EFFECTIVE FOR MOST APPLICATIONS. YOU CAN TEST THIS BY CONNECTING THE OEM TURN SIGNAL LAMPS (OR ANY INCANDESCENT LAMP) TO THE FRONT TURN SIGNAL CIRCUITS.

IF YOUR TAIL LIGHT IS NOT FUNCTIONING PROPERLY, CHECK YOUR CONNECTIONS CAREFULLY! THE CUSTOM LED INTEGRATED TAIL LIGHTS ARE TESTED "GOING INTO THE BOX." YOU CAN SAVE YOURSELF A LOT OF AGGRAVATION BY SIMPLY DOUBLE AND TRIPLE CHECKING YOUR CONNECTIONS AND FUSES.

IN THE EVENT THAT YOU MAY HAVE A FAULTY UNIT, PLEASE CONTACT YOUR VENDOR FOR ASSISTANCE OR E-MAIL [SUPPORT@CUSTOMLED.COM](mailto:support@customled.com).

---

## DISCLAIMER

BY SELLING YOU THIS PRODUCT, WE MAKE NO GUARANTEE THAT THE USE OF THIS PRODUCT CAN OR WILL HELP REDUCE THE CHANCE OF ACCIDENTS IN ANY WAY, NOR ARE WE LIABLE IN ANY WAY. IT IS YOUR RESPONSIBILITY TO VERIFY PROPER FUNCTIONALITY OF THIS PRODUCT EVERY TIME YOU START YOUR MOTORCYCLE. FURTHERMORE, IT IS YOUR RESPONSIBILITY TO FOLLOW THE LAWS OF YOUR LOCAL JURISDICTIONS AS FAR AS D.O.T. REQUIREMENTS FOR MARKER LIGHT AND BLINKER LIGHT SHAPE, COLOR AND INTENSITY.

**THIS PRODUCT IS SOLD "FOR OFF-ROAD USE ONLY."**

# CUSTOM LED TAIL LIGHT PROGRAMMING INSTRUCTIONS

YOUR TAIL LIGHT IS EQUIPPED WITH A UNIQUE INTERFACE THAT ALLOWS YOU TO CUSTOMIZE CERTAIN FEATURES OF THE TAIL LIGHT. THIS INTERFACE IS ACCESSED AND CONTROLLED VERY SIMPLY THROUGH THE GRAY STROBE MODE CONTROL WIRE. (NOTE: ONLY TAIL LIGHTS WITH "\_PI1" IN THE PART NUMBER HAVE THIS FEATURE.)

YOU WILL NEED TO HAVE THE STROBE MODE CONTROL WIRE CONNECTED TO GROUND (-) THROUGH A TOGGLE SWITCH FOR EASY PROGRAMMING, AND THE TAIL LIGHT WILL HAVE TO BE PROPERLY INSTALLED AND FUNCTIONING ON THE MOTORCYCLE.

FOR SIMPLICITY, THE GRAY WIRE WILL BE CALLED THE "CONTROL WIRE" AND IT WILL BE ASSUMED THAT YOU HAVE THE CONTROL WIRE CONNECTED TO A TOGGLE SWITCH WITH AN "ON" (GROUNDED) AND "OFF" (UNGROUNDED) POSITION. THIS WILL BE CALLED THE CONTROL SWITCH FROM NOW ON.

## ACCESSING THE PROGRAMMING INTERFACE

**A) WITH THE CONTROL SWITCH ON, TURN ON THE MOTORCYCLES IGNITION, THEN TURN OFF THE CONTROL SWITCH (YOU HAVE SUCCESSFULLY ENTERED PROGRAM MODE IF THE TAIL LIGHT REMAINS LIT DIMLY YELLOW)**

*NOTE: ANY INPUTS TO THE TAIL LIGHT (BRAKE OR TURN) WILL PULL THE TAIL LIGHT OUT OF PROGRAM MODE FOR SAFETY REASONS.*

## CUSTOMIZING FEATURES

ONCE YOU HAVE ACCESSED THE PROGRAMMING INTERFACE, YOU CAN CUSTOMIZE THE FOLLOWING MENUS.

- 1) TURN THE STARTUP SEQUENCE ON/OFF.
- 2) SET THE NUMBER OF BRAKE ALERT PULSES FROM 0 TO 19, OR CONSTANT WHILE BRAKES APPLIED.
- 3) SET THE RUNNING LIGHT BRIGHTNESS WITHIN A PRESET RANGE.
- 4) SET THE BRAKE LIGHT BRIGHTNESS WITHIN A PRESET RANGE.
- 5) ENTER DEMO MODE. (USEFUL FOR BIKE SHOWS AND DISPLAYS)
- 6) RESET FACTORY DEFAULTS (SAME AS WHEN THE TAIL LIGHT WAS MANUFACTURED).

SELECT THE MENU ITEM YOU WISH TO ACCESS AND MODIFY. ENTER THE MENU BY DOING THE FOLLOWING:

**B) TURN THE CONTROL SWITCH ON AND OFF THE NUMBER OF TIMES CORRESPONDING TO THE MENU NUMBER YOU WISH TO ENTER.**

FOR INSTANCE, TO SET THE NUMBER OF BRAKE ALERT PULSES YOU WOULD TURN THE CONTROL SWITCH ON AND OFF TWICE. FOR EXAMPLE: ON, OFF, ON, OFF. (NOTE: YOU MUST COMPLETE THE ON-OFF SEQUENCE WITHIN 10 SECONDS.)

AFTER APPROXIMATELY 5 SECONDS, THE TAIL LIGHT WILL "READ BACK" THE MENU NUMBER BY BLINKING ON AND OFF THE CORRESPONDING NUMBER OF TIMES YOU HAVE SELECTED. THE TAIL LIGHT WILL THEN ENTER THE CUSTOMIZATION MODE FOR THAT MENU ITEM.

FOR THE BRAKE ALERT EXAMPLE ABOVE, THE TAIL LIGHT WILL NOW DISPLAY HOW MANY BRAKE ALERT PULSES ARE CURRENTLY SET (THIS WILL HAPPEN IMMEDIATELY AFTER THE READ-BACK).

**C) TO CUSTOMIZE THE MENU ITEM YOU HAVE ACCESSED, SIMPLY USE THE CONTROL SWITCH TO ADVANCE THE FEATURE TO THE NEXT VALUE.**

EACH TIME THE CONTROL SWITCH IS TURNED ON AND OFF, THE ITEM WILL ADVANCE TO THE NEXT VALUE AND EVENTUALLY CYCLE BACK AROUND TO THE FIRST SETTING.

**D) WHEN YOU HAVE SELECTED THE VALUE YOU WANT, SIMPLY TURN OFF THE TAIL LIGHT.**

THE SETTING YOU CHOSE WILL BE STORED INTO THE NON-VOLATILE MEMORY WHICH MEANS IT SHOULD STAY THE SAME UNTIL THE NEXT TIME YOU CHANGE IT!

ONLY ONE MENU ITEM CAN BE ACCESSED AT A TIME. TO CHANGE ANOTHER MENU ITEM, REPEAT THIS PROGRAMMING PROCEDURE FROM THE BEGINNING.