

SmartSwap

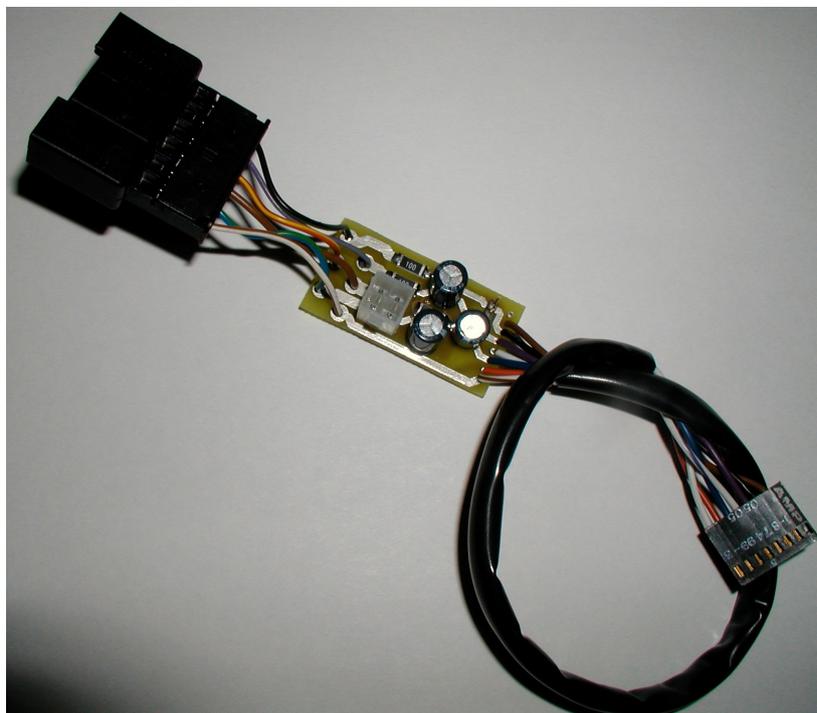
LED Tail Light Retro Fit Kit (Fits BMW E46 Models)

The SmartSwap retrofit kit allows you to connect OEM LED Taillights to your LCM without replacement or re-flash, AND LIGHTS THE OUTER RING FOR THE BRAKE LIGHTS!

Now, you can upgrade the look of your E46 to LED taillights without having to buy a new LCM or have it reprogrammed. This kit also prevents the dash light errors (idiot lights) from coming on, as well as the ghost strobing or quick flashing of the lights when the key is turned on.

Typical kit includes adapter cables (connects to your old harness and converts to the new plug style on the LED taillights), remote mount resistor packs, outer brake light ring controller, mounting hardware and instructions.

If you have done an upgrade to LEDs and still have problems, this will fix your problems! You will also get the extra outer ring lights to come on during braking. If you want to upgrade, but have been confused about what you need, see details below for more information.



Typical adapter module shows with cables (basic unit)

Background on LED TailLights:

2004 up M3's (E46) cars have a new style rear taillight using ALL LEDs. Unlike the older style taillights, the new ones are completely sealed (there are no bulbs to replace). The running lights, brake and turn signal lights are all illuminated using individual LEDs. In addition, the new style taillights have a progressive brake light safety feature. Under normal and mild braking, only the center section of the taillight will illuminate. Under hard braking, the outer ring will ALSO illuminate. The outer ring is slightly brighter and pronounces hard braking to the drivers behind you.

Although the new style lights are the same size and shape as the old style, the new style requires a different connector and a new backing plate (which is the trunk interior light holder). All cars produced before 8/1/01 will also need a new LCM (light control module). Cars produced after 8/1/01 may not need a new LCM, but will have to be taken to a BMW dealer to have the LCM reprogrammed (re-flash). Unfortunately, most dealers struggle to do this or just don't know how to do it at all!

Even after the LCM is re-programmed, the progressive lighting feature (outer brake light ring) will not engage. The wiring to the rear of the car for this feature is simply not there. Most E46 models don't have provisions for the inputs to the LCM for the progressive lighting feature. Retrofitting using factory (OEM) parts would be very expensive.

Although BMW makes retrofit cable that allows you to connect the new style lights to the existing wiring harness, it does not cure the LCM issues or allow you to use the progressive brake light feature; the outer ring on the taillights will not work. In addition, if you simply purchase the new taillights and retrofit cables, you will get dashboard error lights (idiot lights), indicating the rear taillights are out. Also, your turn signals will not work correctly; the red portion of the taillight will flash, not the yellow (no kidding)!!

Another problem with the retrofit cable is you will get ghost strobing or flickering in the taillights whenever the key is on. This is because the LCM sends several pulses to each light every few minutes to determine if the light is burned out or not. With the old style incandescent lights you do not see this occur.

Solution:

We manufacture the SmartSwap retrofit kit. It allows you to connect the OEM taillights to your car using existing wiring. It will prevent dashboard error lights and ghost strobbing from the LCM. The SmartSwap uses OEM matting connectors for the wiring harness to ensure a perfect fit.

All modules are potted (encapsulated) in electronic grade epoxy to seal out moisture and protect from damage. Wiring is color-coded and connectors are clearly identified. Installation is simple and requires 30 to 45 minutes to install. Directions are included.

Depending on your needs, we offer four different kits.

SmartSwap PRI **\$ 169.95**

Use this kit if you do not want to reprogram your LCM AND you want progressive braking. This kit includes two adapter cable modules, two remote mount resistor packs and one progressive brake sensor/driver module. Includes all wiring, hardware and instructions.

SmartSwap RI **\$ 119.95**

Use this kit if you do not want to reprogram you LCM and you don't want the progressive braking. The outer ring of the light will light anytime the brake lights come on. There is no progressive feature as defined above. This kit includes two adapter cable modules, two remote mount resistor packs. Includes all wiring, hardware and instructions.

SmartSwap PL **\$89.95**

Use this kit if you already have a re-programmed LCM (or plan to have yours reprogrammed) and have installed your OEM lights and you want to add the progressive braking feature. This kit includes two adapter cable modules, and one progressive brake sensor/driver module. Includes all wiring, hardware and instructions.

SmartSwap BO **\$59.95**

Use this kit if you already have a re-programmed LCM (or plan to have yours reprogrammed) and want to add the outer ring light to your standard brake light. This will light the outer ring whenever the normal brake lights come on. This kit includes two adapter cable modules. Includes all wiring, hardware and instructions.

Cadent Technologies, Inc

www.cadentech.com

42244 Remington Ave - Temecula CA 92590

mmihld@earthlink.net

Frequently asked questions:

a. Wow that's a lot of money! Why so much?

Sorry, this is a low volume product. We use quality 2 sided circuit boards, the best electronic components, and there is a lot of labor involved! In addition, we buy original BMW (OEM) cables with connectors to make these. That is about 30% of the material cost in the basic unit!

b. Is it hard to install?

Depends on your ability. Review the installation guide and decide if it is something you want to do. If not, contact someone in your area that does automotive electrical work. Have them review the documents and provide you a quotation. We don't offer technical support for the installation, so it is something you will have to have done if you are not able to do it yourself.

c. I think the cost of BMW adapters and LCM Reprogramming is cheaper?

Yes and no. The cost for the adapter cables from BMW is approximately \$30.00. The cost to reprogram the LCM IF you have a later model is anywhere from \$50.00 to 150.00 depending on the dealership. In addition, if you use the factory adapter cables and have the stock LCM reprogrammed, you still will not have the outer ring light up! Our product gives you the option to have it light with the normal brake lights or in a progressive manor. That can not be done with a BMW reprogram or re-flash.

d. When Can I get mine?

Depends on when you order and what we have in stock. We make them in temecula California. Because of the low volume, we make them to order and configure them based on what you order. Minimum ship time is 1 week. Up to 3 weeks. Depends on the BMW OEM Parts and how long it takes to get them in!!! We stock all other parts.

e. How do I order?

Decide which kit you want. Call in your order or email me. I can email you a paypal invoice or you can send in your payment by mail.

f. Can I buy the OEM Tail Lights from you?

Yes, I work with two dealerships closely and we can order them for you. The pricing has been changing from BMW, so I can not quote a price until you are ready to buy. I can put all the parts you need in one kit and ship it together with your order. But you need to make a 50% deposit at the time of order and final payment when the items are ready to ship.

g. To save some time and money, can I reuse some of the parts form my old tail lights:

You will need to replace the taillight backing with the new style. The old and new are not interchangeable. You can reuse the dress piece/gasket. But it doesn't seem to fit right after you take it off the old light. I highly recommend buying new ones with the taillights.

h. What if I change my mind, can I add the progressive feature later?

Yes, you can buy the progressive sensor/driver module and add it to our adapters any time.