

# **Blinker Splitter**

## **Deluxe**

### **Installation Manual V1.0**

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**ICOS Technology**

# **ICOS Technology Blinker Splitter.**

## **Introduction.**

The ICOS Blinker Splitter has been designed for converting USA Specification car rear lights to European Standard. The American system of direction indication is by blinking the brake lights, which is not allowed in Europe, as all direction indicators must be Amber. Prior to the invention of the ICOS Blinker Splitter the most common method of converting the lights was to wire from the front indicators all the way to the rear. This entails a lot of work concelling wires, and also creates a problem with the lamp fault indicators, and the brake lights.

Now with the ICOS Blinker Splitter it is possible to modify the cars without all this wiring. To achieve this it is necessary to monitor the brake lights to determine when they are indicating left or right turn. When a turn signal is detected the power to the brake light is diverted to either new amber lights or to amber bulbs in the reversing light. By diverting the supply from the Brake light to a new lamp, the problem of fault indication is also solved.

One Blinker Splitter covers both Left and Right turn and Hazard indication, so there is no need of any other relays or parts.

## **Power Rating.**

The Blinker Splitter is rated to supply up to 2 X 27watt bulbs for each side brake light and 1 X 27watt bulb for the indicator light, but it may be necessary to check that the original supply to the lights is adequate, for example when the turn indicator is on and the brake is applied the center (eye level) brake light supplies power to the brake light that would otherwise be flashing. Likewise, with hazard lights on and brake applied, the supply for the brake lights comes from the center (eye level) brake light when the hazard lights are in the OFF cycle. Therefore if there are 2 bulbs in either side brake lights the center light supply would be required to power 4 X 27watts extra to the original. This is not excessive (only additional 8 Amps) but should be remembered when wiring the Blinker Splitter.

## **Installation.**

Note.

Before carrying out any work on the electrics, it is advisable to disconnect the battery.

First locate a suitable position to install the Blinker Splitter, remember that it is not waterproof so should be sited inside the vehicle. There is also a very low level clicking noise from the unit when operating, so it is best placed in a position outside of the sound proofing i.e. between sound proofing and outer skin of the vehicle. An ideal position would be either under the boot carpet or inside one of the rear light access panels. It is not necessary to screw the unit in place, simply wedge it with some foam or similar material after wiring.

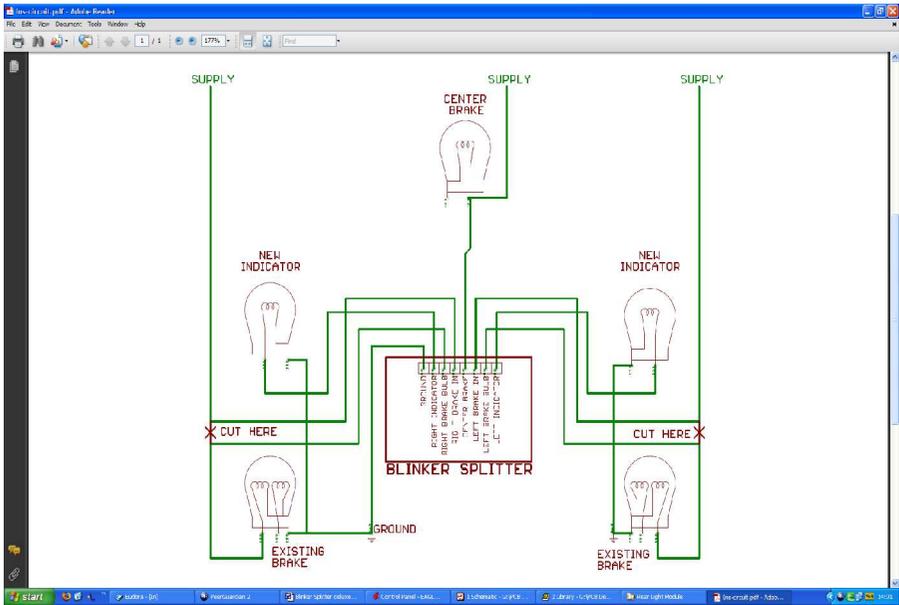
Having decided on the best position, next locate the supply to the center (eye level) brake light. Connect a wire from this capable of carrying the required load (depending on how many bulbs per side either 4 or 8 amps), and route it behind the upholstery to the Blinker Splitter and connect to the appropriate terminal (see back page)

Next find a good earth point, this does not need to carry much load (less than 1 amp) but does need to be a good connection, generally the best point to pick up is from one of the rear lights. Connect from there to the Blinker Splitter earth terminal (see back page).

Now locate the wire to the brake lights on either side of the vehicle. Cut this wire and using a 2 way terminal block connect each of the cut ends to one side of this terminal block. Do this for both sides of the vehicle.

Next connect wires from the terminal blocks at each brake light to the appropriate connection on the Blinker Splitter i.e. from the brake light power feed to the input of the Splitter and from the output of the Splitter to the brake light bulb terminal.

Finally connect wires from the Indicator output of the Splitter to the new Amber light i.e. amber bulb in the reversing light or new amber light fitting.



## Hints and Tips

Always use good quality new wire, and terminal blocks.

## Problems and Solutions

P. No brake lights or indicators at all .  
S. Check Ground (Earth) connection.

P. Left or Right hand Indicator not working.  
S. Check bulb, Check wire to non working lamp, check incoming connection for non working side.

P. Left or Right hand brake light not working.  
S. Check bulb Check wiring from Splitter to non working lamp,

P. Incorrect signalling.  
S. Check all input wiring and ground connection.

P. Lights Blinking too fast.  
S. Check bulbs not blown or incorrect wattage.

Additional information and solutions to problems will be added to these pages, please check the website for updates, which can be downloaded when available.

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