

Tip-Blink-Relay



E24 10R - 02 0193
ECE type approval

..... simply tip the direction indicator-control - and the blinkers will flash few times instead of once only

According to traffic rules drivers must indicate any change of the traffic lane, and the direction indicators must flash minimum twice, even in case of quick overtaking or..... Thanks to *Tip-Blink-Relay* drivers now can simply tip the direction blinker control - since it results in a sequence of 3 or 6 additional blinker flashes (as chosen at installation).

If need be, driver can stop at soon that running sequence of additional flashes by....

- ...tipping once more the same blinker control (thus ceasing all blinker-flashes), or
- ...tipping the other side's blinker control (thus activating those side's blinkers).

And at any time, of course, the driver can normally activate the direction indicators.

INSTALLATION AND ELECTRICAL CONNECTIONS

Tip-Blink-Relay is suited for blinker systems which are fed by +12V or by ground, if all blinkers (front, back, side) of each side of the vehicle are fed together.

Fasten the *Tip-Blink-Relay* by ties or tape in a dry place, by preference close to the blinker relay (where usually all electrical connections are possible) or control lever.

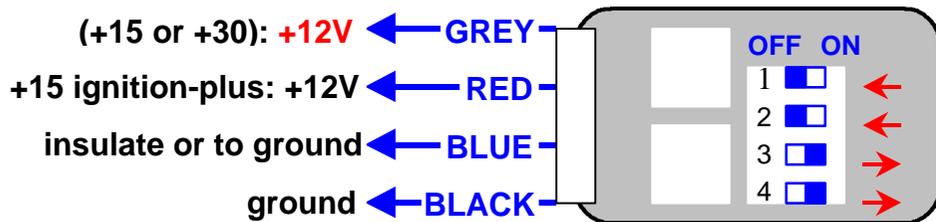
1. **Identify the 2 blinker wires** of the car, which feed the blinkers left resp. right

2. **Identify the polarity and voltage**, by which the blinkers are triggered:

NOTE: In order to check and adjust the 4 dip-switches inside the central unit, remove carefully (by means of screw driver or....) the bottom plate of its box (being clipped to the upper casing), - and finally put together the box.

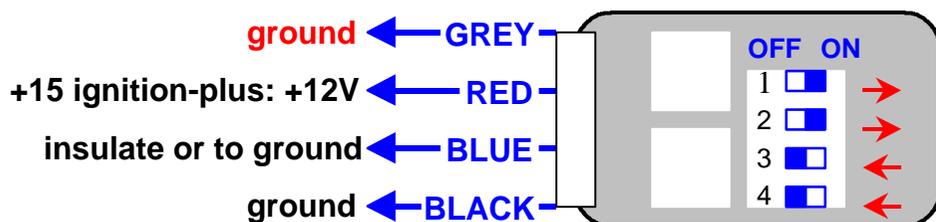
2a **If the blinker flashlights are triggered by POSITIVE +12V,**

- adjust the 4 dip-switches to: 1 and 2 = OFF, 3 and 4 = ON, and connect
- GREY → to +12V ignition or battery plus (and insert a 10A fuse)



2b **If the blinker flashlights are triggered by NEGATIVE (ground / earth),**

- adjust the 4 dip-switches to: 1 and 2 = ON, 3 and 4 = OFF, and connect
- GREY → to ground (earth, -31) (and insert a 10A fuse)



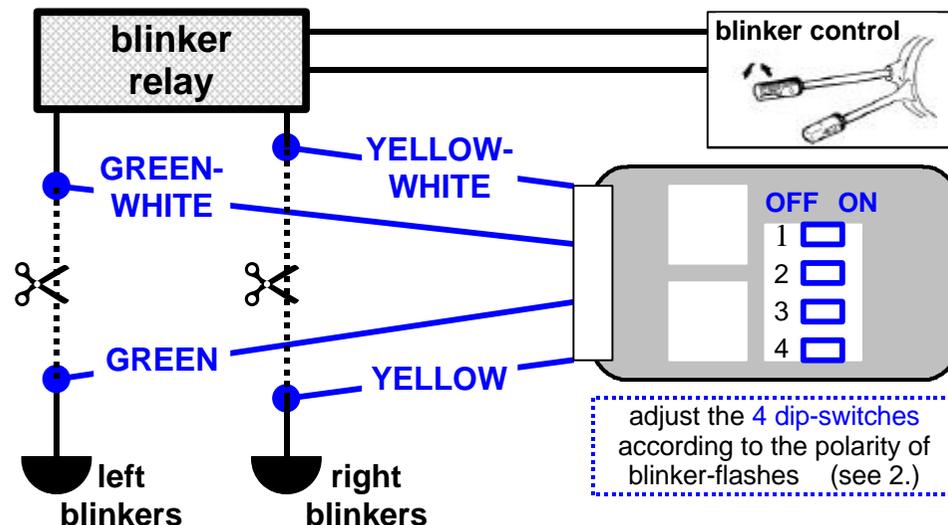
In case (2a) as well as (2b) feed the electronics of *Tip-Blink-Relay* by connecting:
BLACK to a valid ground (-31)
RED to +12V ignition-plus (+15)

3. **Select the number of additional blinker flashes:-**

- BLUE → to ground, in order to get 6 additional blinker flashes
- or → to be insulated, in order to get 3 additional blinker flashes

4. **Cut the 2 blinker wires (see 1.), and loop them in the *Tip-Blink-Relay* :**

- GREEN-WHITE to wire's end leading to the blinker relay left side
- GREEN to wire's end leading to the blinker flashlight left side
- YELLOW-WHITE to wire's end leading to the blinker relay right side
- YELLOW to wire's end leading to the blinker flashlight right side



GENERAL SECURITY DIRECTIONS: Let *Tip-Blink-Relay* be installed by an expert shop. Verify electrical voltages and polarities **only** by digital testers (voltmeter). When starting to install, disconnect car battery's negative pole, if possible (NOTE that transitory memories hence may require a new adaptation: clock, radio, heater,...). Electrical connections must be soldered or pinched tightly (to resist mechanical vibrations) and insulated. Security directions and injunctions prescribed by car's producer and handicraft must be observed.

Manufacturer's liability will not cover any defect or malfunction of the device or the vehicle's electrics due to incorrect installation or exceeding of the technical data.

RECYCLING DIRECTIONS: Ensure to deposit harmful or recyclable electr(on)ical components according to the regulations. In case of doubt, contact the supplier.

TECHNICAL DATA

power feeding:	10.5 up to 14 Volt DC
current drain:	max. 10 A (quiescent current: 0.8 mA)
delay of the blink-sequence:	appr. 1 second after activation
length and interval of the blinker-pulses:	0.4 seconds each
initial delay:	3 seconds after switching on ignition