

# TRIPLING - MODULE FOR COMFORTABLE FLASHING OF DIRECTION INDICATORS • INSTALLATION MANUAL



WARNING: Carefully read following instructions and technical specifications in this manual before installation. The system must be installed and used only according to this manual. The system is designed for vehicles with 12V power supply. It has to be connected to 12V output and to the ground. Neither producer or seller of the system is responsible for damages caused by incorrect installation, using or operating of this product. Unprofessional operation or modification of the system can damage the system alone, or the electric system of the vehicle and leads to warranty loss. For proper working of the system we recommend the installation to be made by authorized service.

### SYSTEM DESCRIPTION

Tripling is an advanced function of comfortable flashing direction indicators of the vehicles. After briefly pressing the lever direction, indicators will automatically flash for 3 times.

Tripling unit is designed as an add-on module with a very simple participation for all vehicles with a positive control voltage of direction indicators and on-board voltage 12V. Main unit constantly monitors the indicator lamps. As light up from 100ms to one blinks, processor immediately estimate the remaining time for the first flash (unless it is the first full flash) and immediately blinks 2x.

If one side flashes and there is activation of the other side, current side stop blinking immediately and the other side is activated, which is followed by a triple blink again. If the lever is locked in ON position TRIPLING function does NOT respond. After turned OFF from locked position, TRIPLING even 2 seconds does NOT work. The module is equipped with improved resistance against activated warning lights and the activation reaction was increased.

#### I. SYSTEM INSTALLATION

Installation is through sophisticated design and unique program very simple and can be done by even moderately skilled technician. Just connect the unit to the power supply (10-16V) and connect the indicator lamps. For that which is right and left side in the diagram does not matter, but when programming it is necessary to be careful with it! Power should be connected where the voltage is only when the ignition is ON, that the unit was NOT constantly powered.

#### II. LEARNING MODE OF TPG UNIT

The unit contains TRIPLING LEARN button which is used for learning blinking by vehicle which the module is installed in. Module will measure how long light bulb for the turn signal lights. On this basis, it adjusted its internal time and also estimate the lights bulbs time running when lever is depressed shortly. The module then works as the original functions of the vehicle. To change the settings, follow these steps:

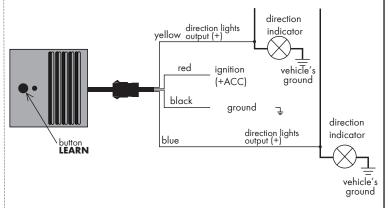
1. Connect the module according to wiring diagram.

**CAUTION:** light blue directional output wire is learner wire. Depending on which side you connect direction indicators (right / left), turning ON at learning directional light.

- 2. When indicator lamps OFF, press and hold the learn button on the learning controller.
- 3. Turn on the ignition, wait until all direction indicators flash (after about 1 sec.) and release the LEARN key. You are in a learning mode.
- 4. Activate the right or left turn signal depending on which side you join direction indicators blue wire. The module now reads and sets the turn signal lights flash. If the module has learned proper sequence of blinking, all direction lights light UP permanently and learning is done.
- 5. Turn OFF direction lights and ignition.

Note: if the lever was in locked position (ON) TRIPLING even 2 seconds does NOT work.

### **III. SCHEMATIC**



TECHNICAL PARAMETERS	
Power supply	10 - 16V
Operational temperature	-40°C to 60°C
Quiescent current	0,02 mA
Max. current load for 1 output	10A

# FN

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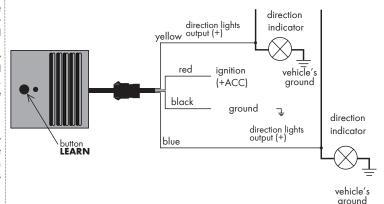
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