

User Manual

General

The relay unit functionality described in this manual corresponds to the firmware version 1.1.0. If you upgraded device to the later version, find the actual manual at help.starline.bz

The digital micro relay unit **StarLine R6 ECO** is intended to protect from a car theft by means of engine blocking. **StarLine R6 ECO** provides following benefits:

- compact size allows to hide it in a car original wiring
- waterproof housing and high quality components let it fit in any place of engine compartment in a high moisture and temperature conditions
- communication with a security system main unit is carried out via Bluetooth Smart (BLE) hack-proof secured protocol
- embedded accelerometer detects a motion to activate engine blocking.

The micro relay unit can be used with the following security systems: StarLine X96/X66, A96/B96/D96, StarLine AS96, StarLine E96/E66, StarLine S96/S66, StarLine i96CAN

StarLine R6 ECO has 2 integrated relays. For each relay a blocking interval and delay can be configured. It makes possible to perform an engine blocking with 2 independent circuits interruption. The unit is always in wireless connection with a main security system unit and receives commands on engine blocking from it. In case of connection loss for any reason in a guard mode the relay unit shall independently block an engine.

Registration of Relay unit into security system

If **StarLine R6 ECO** is supplied separately from security systems, so it should be registered into main unit memory.

Up to 4 relays can be registered to one main unit

Registration is carried out via wireless Bluetooth Smart (BLE) channel in following steps:

1. Disconnect input power from relay unit
2. Interconnect the white-black and yellow-red wires
3. Switch the security system into registration mode

4. Connect input power to the relay unit
5. Confirmation on successful registration will follow within 10 sec from security system
6. Disconnect the white-black and yellow-red wires

Registration into security systems StarLine A96, AS96, B96, D96, E96, E96BT, S96, X96(v2)

1. Disconnect input power from relay unit
2. Interconnect the white-black and yellow-red wires
3. Press the service button 7 times
4. Turn ignition On
5. 7 LED flashes and siren signals will confirm enter to registration mode
6. Connect input power to the relay unit
7. In 10 sec the successful registration will be confirmed with 2 LED flashes and siren signals
8. Disconnect the white-black and yellow-red wires

Technical specification

Input voltage	5 – 18 V
Current consumption	1 mA
Power consumption with relays On	28 mA
Permissible each relay load current	up to 500 mA
Maximum permitted switched current via relay contacts	10 A
Operating temperature range	- 40 ... +105 °C
Protection rate	IP54
Dimensions	62,5×14×10,5 mm

General installation requirements

StarLine R6 ECO is dedicated to fit in vehicles with 12V onboard power supply. Place it in a hidden place (for example, inside original wiring in engine compartment), avoiding contact with the moving parts of a vehicle.

Fix the unit with straps.

Power circuits connection

The red (+12V) and black (ground) wires are used for power supply connection.

The black ground wire must be connected first to the factory screw or nut on the body. The wire should be crimped into the matching size electric clamp before fixing under screw or nut. Do not use tapping screws and other non-original fasteners for the ground wire connection.

Cover the place of connection with anti-rust grease.

Connect the red +12V wire to original constant power supply circuits wires with cross section not less than 2 sq.mm or connect directly to the main battery clamp.

The red wire should be connected through the fuse from delivery set.

Connection diagram

