

# RALLY SAFETY SYSTEM

## INSTRUCTION AND FITTING MANUAL

### TABLE OF CONTENT

1.	OVERVIEW .....	2
2.	FUNCTIONS .....	2
3.	TECHNICAL DETAILS.....	3
4.	POWER SUPPLY .....	3
5.	CONNECTORS.....	4
6.	MOUNTING.....	4
7.	INSTALLATION POSITION .....	4

## 1. OVERVIEW

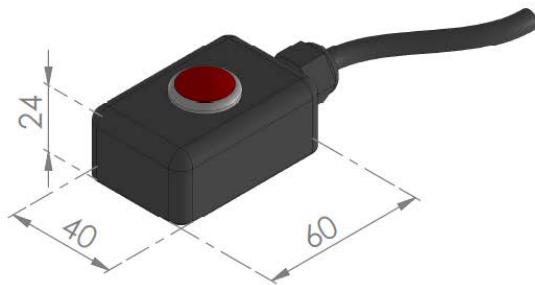
- 1.1. Complete rally monitoring system based on GPS and GLONASS satellite positioning technology, GPRS data transfer and advanced cloud server data processing.
- 1.2. Online solutions for rally control and interactive dispatch of services.
- 1.3. The GEOTRAQ system is developed, maintained and operated by active rally drivers and co-drivers.
- 1.4. The system is rented at the administrative check and it is installed and sealed by the organizer at the scrutineering.
- 1.5. The system will be dismantled at the end of the rally or if the competitor is “Out of race” only by a member of the organization.
- 1.6. The “RALLY SAFETY SYSTEM” consists of the following units:
  - “Tracker box” – 73x73x27mm (WxDxH)
  - “Alarm button” – 40x60x24mm (WxDxH)
- 1.7. The devices have built in battery providing back up power if the external power is lost.
- 1.8. The devices have waterproof housing (IP67).
- 1.9. It is forbidden to unseal, disassemble, and remove the external power supply for the devices. Checks will be carried out during the event.

## 2. FUNCTIONS

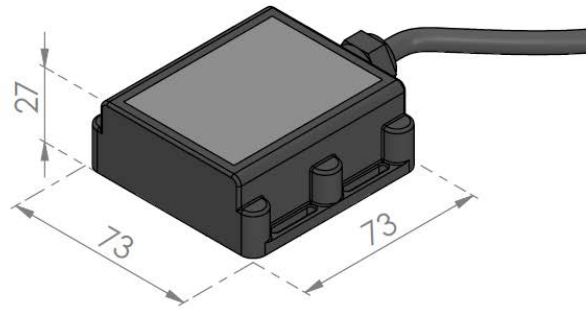
- 2.1. The “Tracker box” records the competitor’s progress on the rally legs at each second. Additionally it provides real time data to the rally server for live tracking and timing purposes.
- 2.2. The device starts working at the moment the power supply is provided at the scrutineering at the beginning of the rally.
- 2.3. The “Alarm button” provides direct transfer of the current coordinates of the vehicle via SMS messaging to the Rally Control for direct alarm signal. Triggering the alarm is done when pressing and holding for over 5 seconds the alarm button. After sending the alarm signal, prepare your mobile phone for communication with Rally Control!

### 3. TECHNICAL DETAILS:

#### 3.1. Dimensions( in mm):



Alarm button (dimensions under change)



Tracker box

#### 3.2. Electrical details:

- The allowed range of voltage is 6V to 30V DC.
- The nominal voltage is 12V.
- Energy consumption (at 12.6V power supply ): 110mA r.m.s.
- Maximal power consumption – 2W

### 4. POWER SUPPLY

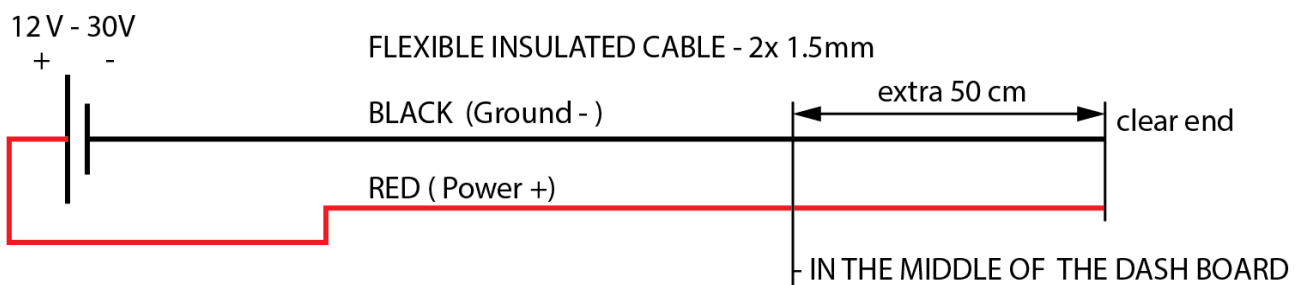
**4.1. IMPORTANT !!! The battery master cut-off (kill) switch MUST NOT DISCONNECT the power supply for the tracking system.**

**4.2. It is the responsibility of the competitors alone to provide, DIRECT POWER SUPPLY from the vehicle's battery according to the drawings provided.**

**4.3. The power cables must be "flexible" ( multi wire ), insulated cables – 2 x 1.5mm<sup>2</sup> – RED and BLACK colored.**

**4.4. The connection may have an IN-LINE FUSE - "BLADE TYPE" of 5A.**

#### VEHICLE'S BATTERY



**4.5. The wires must be prepared in advance and connected to the vehicle's battery when the vehicle is presented for scrutineering.**

**4.6. The cable must have minimum 50cm extra usable length from the middle of the dash (See installation position).**

**4.7. The connection to the Rally Safety System will be done with a simple connector terminals supplied by the organizer.**

## 5. CONNECTORS

5.1. The power supply cables (Power+ and Ground-) must be equipped with **FULLY INSULATED FEMALE Crimp Spade Terminal Connector - 6.3 x 0.8mm.**

5.2. See the graphic bellow for example:



## 6. MOUNTING:

6.1. The mounting of the system will be done by the organizer at the scrutineering.

6.2. The mounting of the alarm box and the tracker box will be according to the specifics of each vehicle using the following ( supplied by the organizer):

- Cable / zip ties;
- 3M Velcro tape;
- Electrical connectors

6.3. It is the responsibility of the competitors alone to provide enough space for the Alarm button and the Tracker box in the places shown bellow.

## 7. INSTALLATION POSITION

7.1. The position of the alarm button should give access to both driver and co-driver with fastened harnesses. If this is not applicable, then the alarm button should be positioned on an easy to see location.

7.2. Overview of correctly positioned Tracker box and Alarm button:

