1 Overview

This is a short version of the installation manual and contains the most important information about the placement of the device and the installation of the system connector. You can find the complete version at the website, at http://en.optin.hu/products-services/iris-base/.

1.1 Package Contents

Thank you for choosing the ON.GUARD web application and the IRIS.base on-board unit! Your package contains the following items (for each vehicle):

- IRIS.base or IRIS.base + BT on-board unit with a pre-installed SIM card
- 4 screws for the box lid
- GPS antenna with cable
- GSM antenna
- System Connector
- Short installation manual

Optional accessories can be bought in our webshop: en.optin.hu/shop/

2 Specifications

2.1 Dimensions

The device's dimensions are: 80x60x30 mm (L x W x H)

With the flange the width is 104 mm, and the size of the antenna and the system connector should also be taken into consideration when choosing the place of the device.

3 Placement

Choose a place in the car that's big enough and meets the following criteria:

- the device is in a stable position to avoid dislocation otherwise the data coming from the vibration sensor will not be accurate. If possible, place it horizontally.
- there should be enough room for the antennas and the connectors
- the cable of the GPS antenna reaches the device
- the GSM antenna should not be too close to the car's HIFI system to avoid interference
- the device is not water resistant, it should be in a dry location
- if it's possible it should be hidden in a place that's hard to reach in order to make any sabotage action more difficult

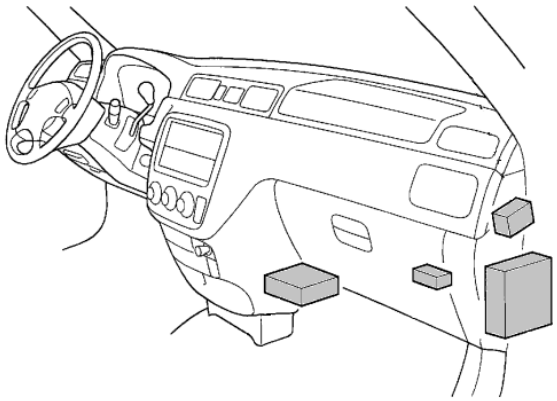


Figure 1: **Placement tips**

PLACEMENT TIPS IN A CAR:

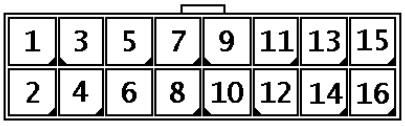
- behind the dashboard
- behind the glove compartment
- center console
- under the front seats
- under the carpet between the front seats
- in the trunk

3.1 PLACING OF THE GPS ANTENNA

The active receiver of GPS antenna should be placed in a way that it's the least shielded from the satellites. For example it can be fastened with a double-sided tape to the dashboard or the A-pillar where the carpet and the windshield adjoin. It can also be installed the same way at the rear window or outside of the roof if it's possible. Plastic components may shield the GPS receiver!

3.2 CONNECTING THE SYSTEM CONNECTOR

The system connectors from the rear view of the IRIS.base device:



System Connector

1	external power supply (8-30V DC)
3	digital output 1. (DO.1) (OD. max. 1A)
5	analogue input 1. (AI.1)
7	CAN-L
9	1Wire data cable
11	ignition signal (DI.1)
13	digital input 3. (DI.3) *see* optional functions
15	digital input 5. (DI.5) *see* optional functions

2	ground (GND)
4	digital output 2. (DO.2) (OD. max. 1A)
6	analogue input 2. (AI.2)
8	CAN-H
10	ground (GND)
12	digital input 2. (DI.2) *see* optional functions
14	digital input 4. (DI.4) *see* optional functions
16	digital input 6. (DI.6) *see* optional functions

NECESSARY CONNECTIONS

The following three cables must be connected:

- **External power supply**: the system connector's –RED– cable at the (1) slot must be connected to a fixed 12V (or 24V) point.
- **Ground**: the system's ground, the –BLACK– cable at the (2) slot.
- **Ignition signal**: the –BLACK– cable at the (11) slot. This should be connected to a point that only has 12V (or 24V) when the vehicle's ignition system is turned on. This controls the device's operation modes.

OPTIONAL CONNECTIONS

These connections are not obligatory but the ON.GUARD webapplication's certain functions are only available with the existence of the corresponding connections.

- **Business/personal usage switch**: the 2. digital input (DI.2) which is the –GREEN– cable in the (12) slot of the system connector.
- **Panic button**: the 3. digital input, the –YELLOW– cable at the (13) slot.
- **Digital inputs**: further digital inputs for general applications, –GREY– cables. In a security application the 4. digital input (DI.4) works as a door opener sensor, the 5. digital input (DI.5) works as a hidden button.
- **Analogue inputs**: through the -PINK- cable at the connector's (5) and (6) slot the device can measure a 0-5V voltage.
- **iButton identifier**: the -BLUE- cable at the (9) slot of the system connector should be connected to the iButton reader's central interface
- **CAN (FMS) connector**: -PURPLE- cables, can be connected to the vehicle's FMS system *(for further developments)*.
- **Switch outputs**: -ORANGE- cables, they provide the so-called "open-drain" outputs, that is capable of draining a maximum of 1A current. In a security application the 1. digital output (DO.1), which is the (3) slot of the system connector, should be connected to the solenoid starter's emergency stop relay. The 2. digital output (DO.2) - (4) slot - should be connected to the vehicle's alarm.

4 FIRST INSTALLATION

- After removing the 4 screws remove the lid from the box by lifting than twisting than pulling it backwards (towards the antenna) from the front panel.
- The SIM card is an essential part of the ON.GUARD service. It only works on this device and is only capable of data transmission. Don't remove it!
- If you have a device capable of Bluetooth connection you can connect the cable of the expansion board to the on-board unit's Bluetooth unit!
- If you would like to use an SD card just slide it into the microSD socket.
- Connect the three-pole battery (installed in the lid) to the indicated place!
- Screw back the lid. Be careful! Fastening the screws too hard may damage the plastic compartments.

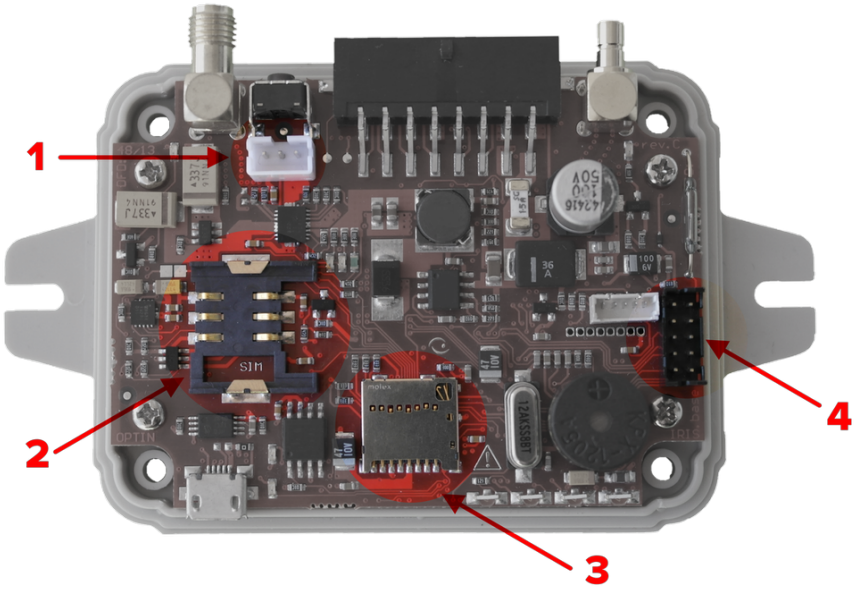


Figure 2: **IRIS.base inner view**

1. Battery connector, 2. SIM card,
3. microSD card, 4. expansion board

WARNING:

- The device's battery should only be connected if can be connected it to an external power supply within a short period, otherwise the battery charge may deplete!
- Only qualified, official personnel may repair the product. Troubleshooting and simple reapirs can only be made as described in the User Manual!
- To avoid any electrostatic discharge ground yourself with a bracelet or touch an unpainted metal surface frequently!
- Treat the components and the card carefully! Don't touch the card's components and interface! The card must be held on it's outer sides!

5 SUPPORT

If you are stuck somewhere, need help or just have some questions about the product, please, contact us at:
hwdev@optin.hu