



Smartronics^{hu} Ltd.
1171 Budapest, Strázsahegy u. 11.

<http://www.smartronics.hu>

TrackRace™ personal GPS for sports events

The field of application of the TrackRace™ device, developed and produced by Smartronics Co.Ltd., is the determination of the position as well as the tracking in open area. This device is the one of the mobile units of the SMARTWAY system, that we mainly developed for broadcasting of sports events. The small weight and the size of the „shirt holder”, prepared for this unit and the device itself make the sportsmen possible to use them without any difficulties on the competitions.



Fields of application :

- Analyse of individual trainings
- Tracking of handicapped persons
- Broadcasting of sports events

This device can be simply used. After the previous settings you just have to switch it on and it is ready to operation. The state of the device is indicated by 3 information LEDs.

The device communicates with the SMARTWAY server through a GPRS channel. The server supervises the operation of the device and can reconfigure the device to the operation, adequate for the given application mode.

Placing of SIM card and taking it out:

You must always place the SIM card when the device is OFF as well as you must always take the SIM card out when the device is OFF!

The SIM card has to be placed into the holder - in the way you can see on the picture - and it has to be pushed till clicking.

If you would like to take the SIM card off, please push it slightly.

Settings of SIM card (if the SIM card is not delivered by our company):

Before you place the SIM card into the device, you must set it in such a way that the request for PIN code is prohibited (the device must not wait for giving the PIN code).



Operating services of the device:

At the bottom of the device you can find – recessed – the switches on and off as well as the USB connector, through which the accumulator of the device can be loaded. The device must be loaded always when it is switched off!

LED signs:

The red LED shows the GSM connection as follows:

- Continuously gives light → GSM is OFF
- Lights on and off → GSM is not connected to network
- Flashes by fill of 50 % → GSM is connected to network
- Sometimes its light is on → GSM is connected to the server
- Quickly flashes → USB connection (GSM is OFF)

The green LED shows the power routing as follows:

In case of loading (USB connection):

- Continuously gives light → the device is loaded up
- Flashes by fill of 50 % → the accumulator is under loading
- It does not show any light → the accumulator is empty

During operation:

- Lights up → the accumulator is dead (the device can operate for further 20 minutes)
- Does not light → accumulator OK

The yellow LED shows the state of GPS as follows:

- Continuously gives light → GPS is OFF (GPS error)
- Lights on and off → GPS invalid coordinate
- Flashes up → GPS valid coordinate

Remark:

If the device was switched off for a longer period, after its switching on - with open, 360 degree view to the sky - the device shows valid coordinates within appr. 1 minute. In case of a switch off for a shorter period (for some hours) it shows the valid position within 5 to 10 seconds.

Setting of device:

This step is necessary, only if the device does not operate with the SMARTWAY system!

The device can be set up through USB port with the enclosed cable and program. (See the details on the description of the program.)

Loading of device:

You must load up the device exclusively by the enclosed charger and when it is switched off!

At the bottom of the device you have to connect the DC connector carefully until it clicks. The loading time of the device is appr. 3-4 hours. After this period the loading of the device is not necessary, and it does not cause any trouble.

GSM services:

In the device you can find a GSM module, independent from the services, thus you can use all kinds of SIM cards, sold in Hungary. The device automatically identifies the service and it connects to the adequate, open internet (telnet) GPRS service, thus to give the APN is not necessary at all.

Operational and cleaning instructions:

- Do not put the device close to radiant heat, avoid the effects of liquid and dust!
- Do not clean the device by chemicals!
- Protect the device from the mechanical effects!

Technical parameters:

GPS type:	Sirf III. chipset HI sensitivity (-159 dBm)
GPS operation:	continuous tracking mode
GPS antenna:	Aktiv geohelix antenna
GSM type:	SIM300D GPRS class 10
GSM antenna:	SMA bot antenna (gain:2dB±1dB@900MHz)
Accumulator:	1cell Lilon 880mAh
Charger voltage:	Max. 5V
Current consumption:	500µA/100mA/2A (min./nom./max.)
Size: L/W/H:	72mm/57mm/20mm
Enclosure:	ABS, RAL9005, IP40