1.3.2023

# GPS Safety Tracking Device - Installation

We are using an app in GSM phone for safety tracking in rallyevents.
Operation instructions will be given later.

System requires some preparations in the rally cars before rally starts.
These are described below. Should you have any questions, we are happy to help.

With the system we will have better communication facilities between rally control centre and the rally cars in case of any accidents, as well as a more secure communiction channel between the cars and the rally control centre

## Charging Power

App works only if GSM display is on. This uses GSM battery alot, so it´s very important to charge phone while using app. There is two available opportunity to gharge phone.

1. **5V:** Car must have a female USB type-A power socket for 5V current. The socket must be within 80 cm of the planned installation location of the device. The connection may be part of the car's main circuit, so that when the main power is switched off it will not be discharging the battery e.g. in overnight parc fermé.

2. **12V:** You have to use GSM holder where is permanently installed converter from 12v to 5v. From this converter will come a permanently installed wire (USB type-A) 80-100cm which has to connet to female power socket 12V current USB type-A. GSM phone is connect to the holder converter for charging

## *Attaching the device to the car*

The device must be installed in the car with the equipment described in the following pictures. It is an absolute must that the device will be place so that:

- both the driver and the co-driver can reach the touch screen without opening safety belts
- both the driver and the co-driver can see the screen when driving on special stage

## *Device*

Tracking will be operated by mobile application, which is installed to the mobile phone. Instructions for application are included to these instructions.



**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

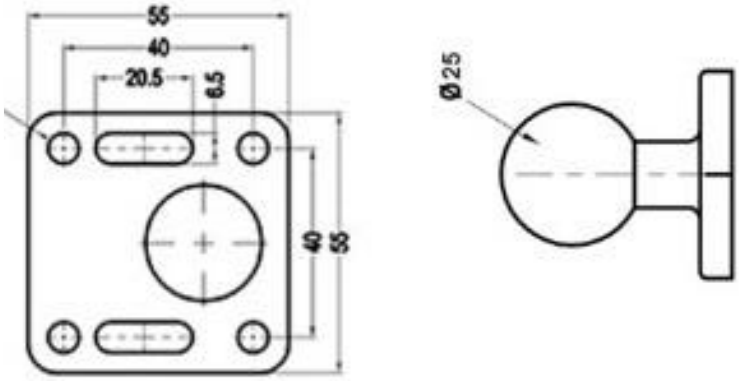
# Installation Equipment

The device will be installed with the RAM Mount ball. This ball mount must be attached to the car with solid screws, in a place as instructed above, in order for the drivers to be able to use the device. The installation measurements for the base of the ball can be seen here. Screw hole diameter is 6.5 mm and distance between the holes 40 mm.

The RAM Mount 25 mm ball base can be bought. Ask from the rally office.

**Price 10€**

.




The GSM holder and phone is attached to the ball with the double socket arm.



**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

**Holder version 1. 5V**

Phone, holder charging cable and mounting device.







**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

**<u>Holder version 2.</u> 12v**
Phone, wired holder, charging cable and mounting device.

In this device, there is included usb-converter, which allows connection directly to 12V system. Charging cable will be attached to this converter, and cable from the holder will be attached to cars power plug.



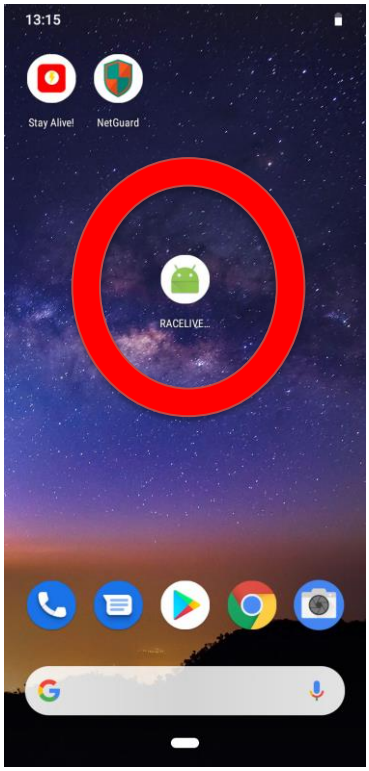


**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

# GPS Safety Tracking - User's Manual

In FRC events all cars will be equipped with a GPS safety tracking device, run by AKK Sports with Traxmeet. Tracking is done using the equipment and the installed application. Below you can find the main features and operation instructions, installation instructions have been given separately

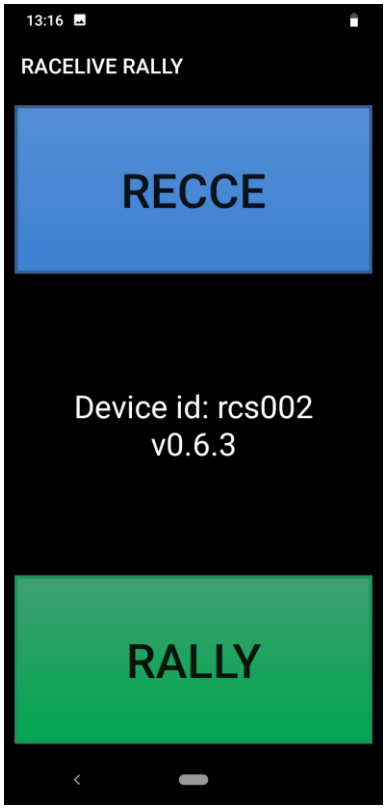
## *Opening Screen*




When the device opens, start the RaceLive application from the icon circled with red in the picture.

You may need to swipe to the left to access this desktop page.

→----------→----------→

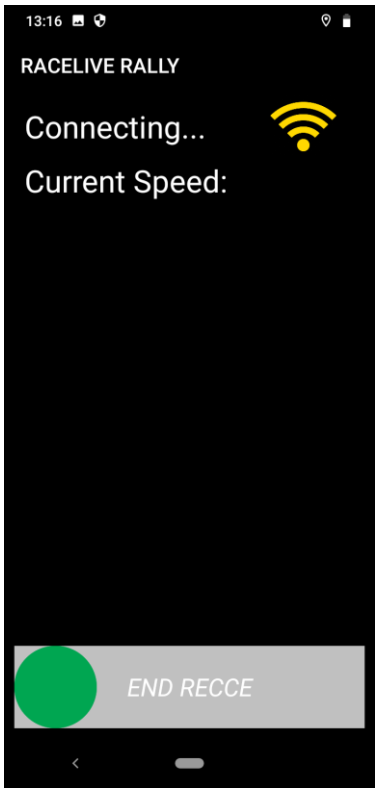



When the application opens,
you choose reconnaissance tracking (RECCE)
or (RALLY) tracking.



**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

# *Reconnaissance Tracking*




If you press **RECCE** on the start screen, the view pictured on the left will open, as the device is searching for connection.

Please place the device so, that the screen is visible and possible received message could be seen easily.

**Keep the screen always ON!**

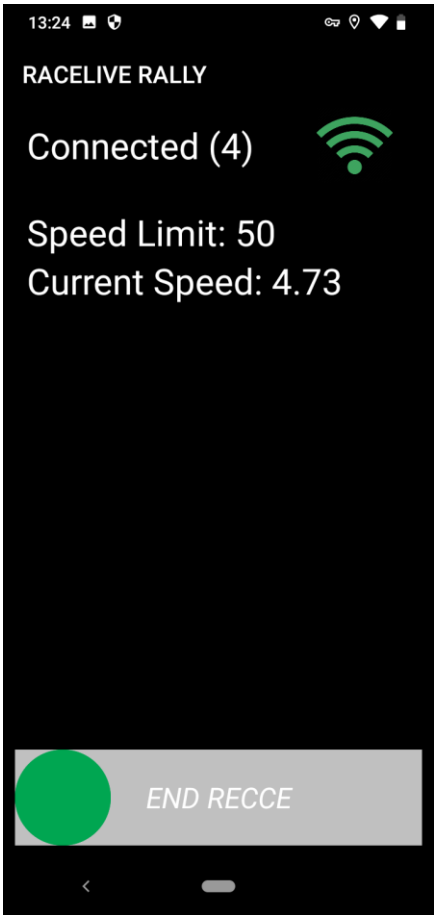
**Keep te device all the time at charger, so that it won´t sun out of battery during the event!**

Once connected, the device will show a possible speed limit set by the organiser for a certain area (e.g. a special stage) and the your current speed

All competitor movement within special stage areas will be registered in the application database and can be used afterwards to monitor speeds etc.

Once you finish reconnaissance, you can stop the tracking application by gliding the green dot at the bottom of the screen to the right.

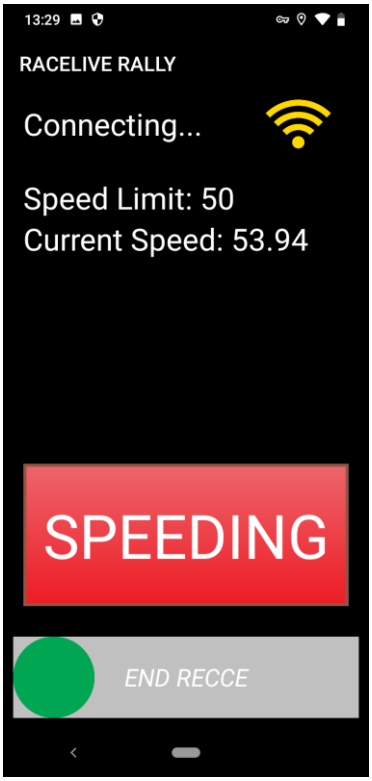
**Close the screen during the night, or when finishing reconnaissance to spare battery.**






**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

## *Reconnaissance Tracking continued...*




Should you go over the speed limit set by the organiser, the device will show this to the drivers **(SPEEDING).** The device will not show any speed limits set by the road authorities.

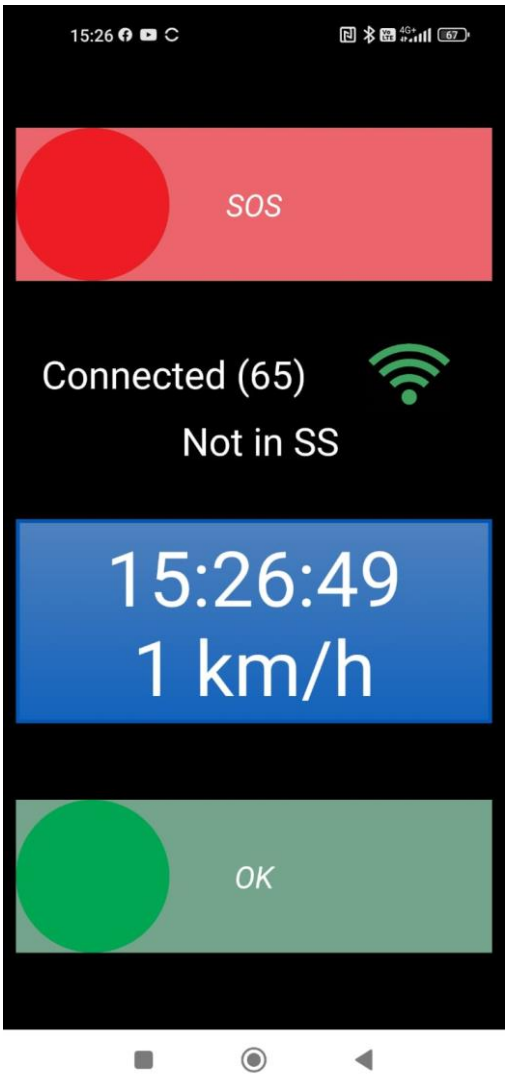
Any speeding will be stored in the application database.



**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

# ***Rally Tracking***

When you have chosen **RALLY** tracking from the start screen, the view pictured on the right will open to the screen, as the device is searching for connection.

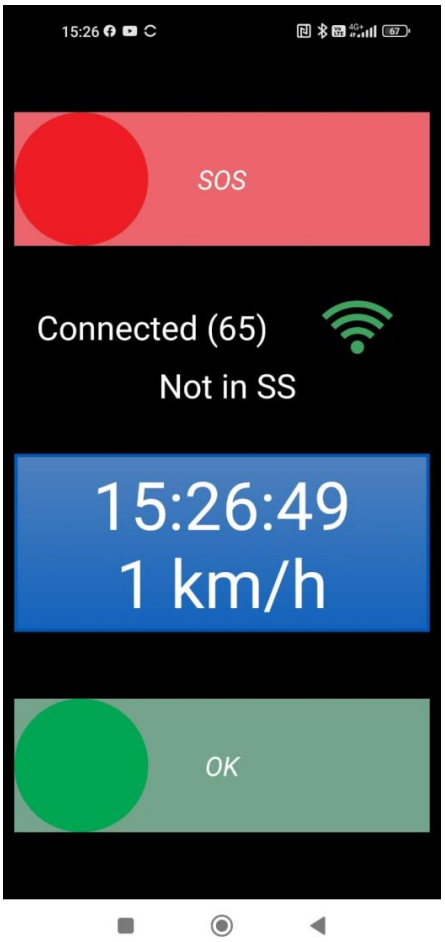



Once connected, the device will show the basic status with OK and SOS buttons, and the connection confirmation.



**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

## *Rally Tracking continued...*



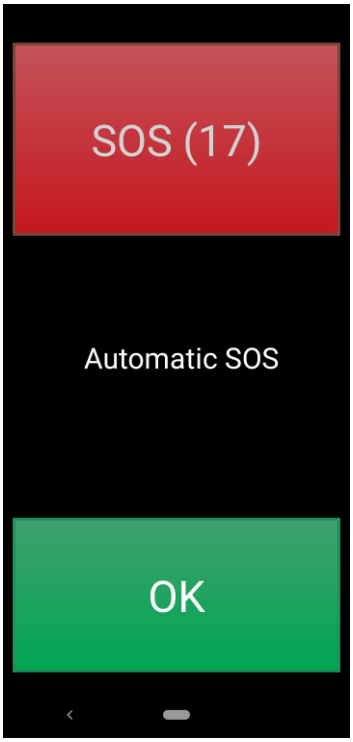

If you need to stop on stage to change a tyre or something, but there is no need for medical or fire assistance, not any danger to the surrounds, you must press OK and slide the ball on the basic status screen out of the screen to the right.


When OK is pressed, the screen goes green. It will automatically return to basic status after approx. 5 seconds after pressing the OK and the message having gone through to the system.



**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

## *Accidents - SOS*




If you stop during the rally e.g. to change a tyre, the device will automatically start an SOS alarm in about 20 seconds. This option won´t be active at road sections!

The time before the alarm is made can be seen on the SOS button (17 seconds remaining on the sample screen). It takes about 40 seconds from the moment of stopping to the time of sending the SOS.

You can dismiss the automatic SOS before it is sent by pressing OK.

The Auto-SOS re-activates once the car is moving again at a minimum speed of 60 kph at the special stage.

It will help the workload of the Rally Control significantly, if when stopping on a stage, you could press the OK before the alarm is sent off. Should the alarm be sent, the device will go back to basic status.

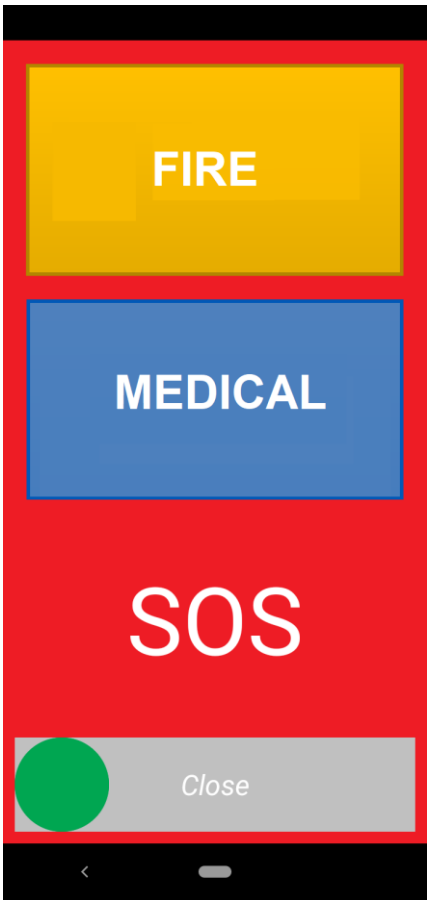
Should the alarm be sent, the device will go back to basic status.

Should a competitor have an accident where help is needed, he needs to press the SOS button on the RALLY screen.
(slide the SOS ball on the basic status screen out of the screen to the right.)

Pressing the SOS button will take the application to the mode seen on the right, with three options for the user:

1. Confirm the alarm and ask for extinguishing assistance by pressing FIRE.
2. Confirm the alarm and ask for medical assistance by pressing MEDICAL.
3. Cancel the alarm by sliding the green dot to the right.

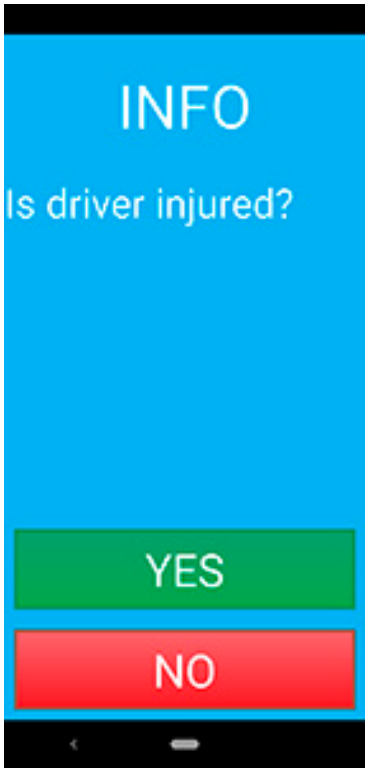
After pressing FIRE/MEDICAL the button will flash for a while and the device will return to basic status.






**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland

## *Accidents - Communication*



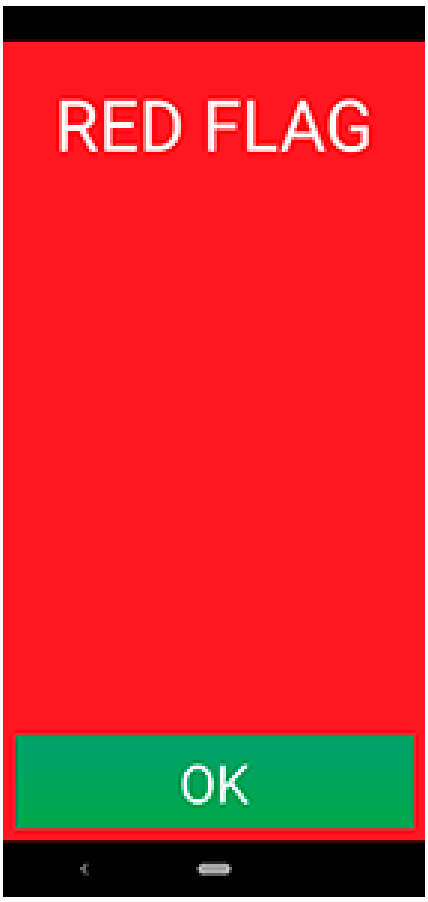

The Rally Control has an option to communicate with the car, e.g. to get more information on the seriousness of an accident, number of patients or their condition.

The screen will then show the INFO text, the question underneath and the answer options

YES
NO

The drivers must answer accordingly. There may be multiple questions following one after the other.

## *Accidents - Red Flag*




The application is equipped with an option for the Rally Control to send a Red Flag notification and thus stop the stage for these cars, e.g. in case of accident, road block or other reason.

**When getting a red flag on the device screen,
the competitor must confirm that he has seen the red flag by pressing it OK on the device screen,
and after that slow down the speed and as well prepare to stop at an special stage checkpoint
or at the place of the accident for further instructions.**

Red flag notification will be remove from screen by rally control in somepoint after SS



**autourheilu.fi**
AKK-Motorsport ry, AKK Sports Oy
P.O. Box 19 (Kellokukantie 7), 01301 Vantaa, Finland