

## GPS TRACKING

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An Android smartphone is used for GPS tracking. The system requires some preparation in the rally car before the start of the rally so that the system can be mounted safely. These are described below. If there are any questions, we are happy to help!

With the GPS tracking system we have better and faster communication between Rally HQ and rally participants. SOS or OK messages can be passed on to the right officials as quickly as possible. In the event of an accident or breakdown, officials can determine exactly where the rally vehicle is located much more quickly.

## CHARGING THE DEVICE

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The tracking app "RACELIVE" is already installed on the smartphone. The tracking app only works when the display is turned on. To do this, the participant must ensure that the battery does not get empty. There are two ways to charge the phone via the USB-C port, **one of which must be provided by participants:**

- Via a standard USB Type A socket for 5V power. The socket must be within a radius of 80 cm from the planned installation location of the device. (see installation location requirements below). The connection can be part of the main circuit of the vehicle, so that the battery is not discharged if the main power is switched off, for example overnight in the parc fermé.
- It is also possible to use a power bank for charging. The power bank must have a minimum capacity of 20,000 mAh and be fully charged at the start of the rally.

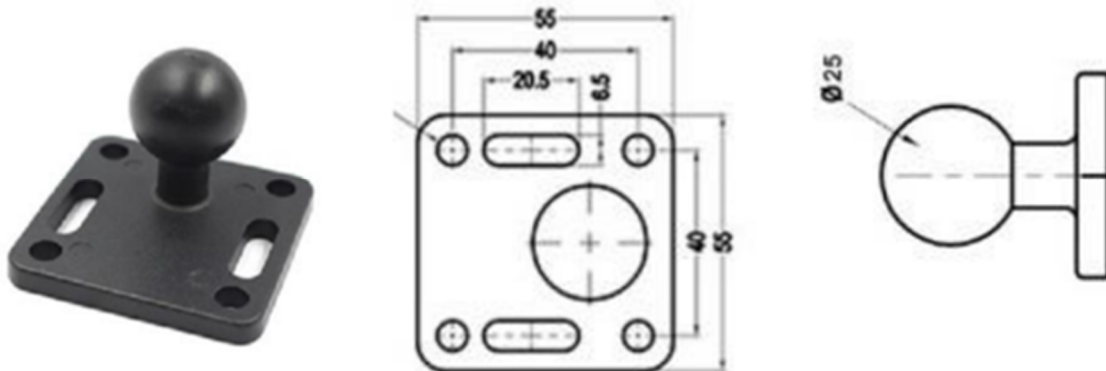
## INSTALLING THE DEVICE IN THE RALLY CAR

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It is an absolute must that the device is placed as follows:

- Either driver or co-driver must be able to reach the touchscreen without unfastening their seat belts
- Either driver or co-driver must be able to see the screen while driving on the special stage

NOTE: at international events BOTH driver and co-driver must be able to see and reach the touchscreen!



The device will be attached to a 1 inch ball head as shown in the picture above. This ball mount must be attached to the vehicle with tight screws at a location as described above. The diameter of the screw holes is 6.5mm and the distance between the holes is 40mm. When mounting on the dashboard, a support plate must be attached to the back to prevent the screws from breaking through the plate in the event of an accident to prevent the holder from flying around freely in the vehicle.

The holder and smartphone are attached to the ball with a double base arm clamp. This allows the device to be oriented so that it is easily seen by drivers.



Overall, the GPS tracking system consists of the following parts:

- Smartphone with "RACELIVE" app installed
- Stable smartphone holder with 1 inch ball mount
- 1 inch ball mount for fixed installation in the rally vehicle
- Base arm clamp with wing nut to connect the two ball heads
- USB Type A to USB Type C charging cable



# GPS Safety Tracking - INSTRUCTIONS

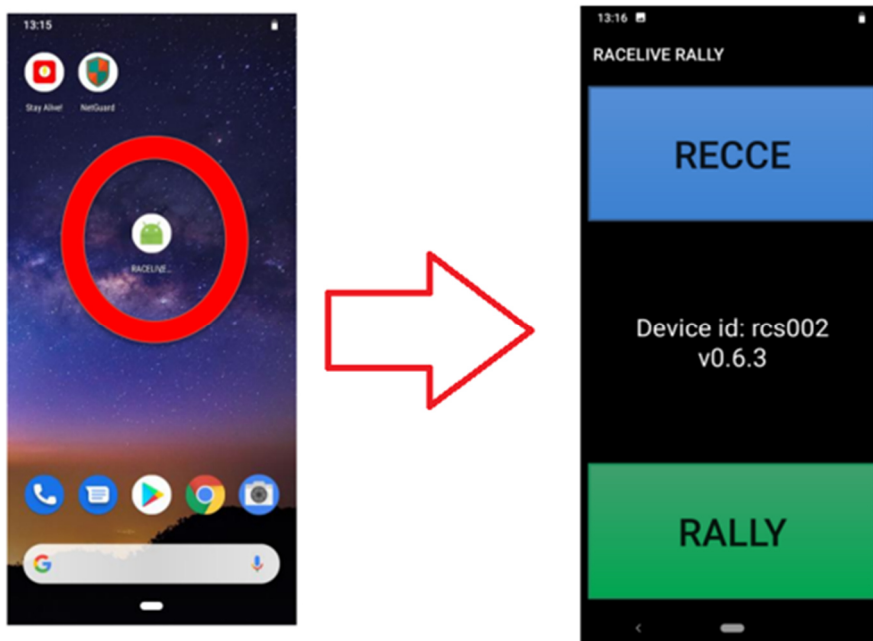
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All vehicles are equipped with a GPS tracking system, which is operated by AMF and ORM promoter together with the developer Traxmeet. The location is tracked by this unit and the installed "RACELIVE" app. Below you will find the most important functions and operating instructions.

If the device is switched off, start the device with the lower button on the right side of the device.

Start screen: If the RACELIVE app does not start automatically, start the RACELIVE app by tapping the symbol circled in red in the picture below.

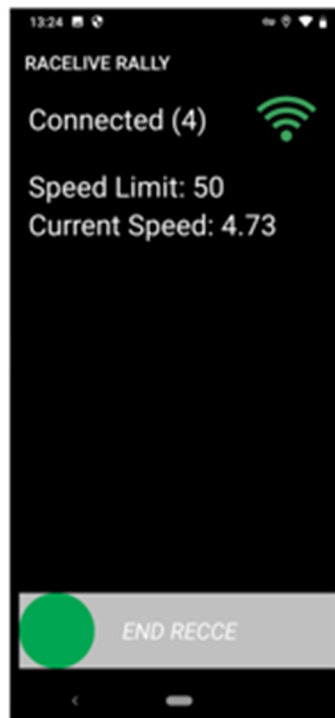
When the application opens, select the correct mode: RECCE or RALLY.



## RECCE TRACKING

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If you press RECCE on the home screen, the view shown on the next page opens and the device searches for a connection. Please fix the device in the viewing vehicle so that the screen is visible and any messages received can be easily recognized. Always keep the screen on! Supply power to the device so that the battery does not run out during the event!



Once the device finds a connection, it will show a possible speed limit set by regulations or organizer for a specific area, as well as your current speed.

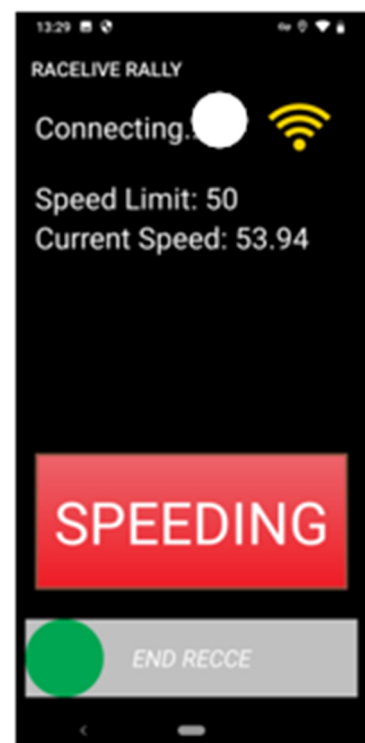
All movements of the device are recorded in the database and can therefore be used to monitor speeds and to check how often a special stage has been completed.

If you exceed the maximum speed set by the organizer, the device will display a red warning (SPEEDING).

### The device does not show general speed limits!

Any overspeeding is automatically saved in the application and system database.

When you have finished the recce, you can stop tracking by sliding the green dot at the bottom of the screen to the right. To save battery life, close the app during the night and after the recce is finished.

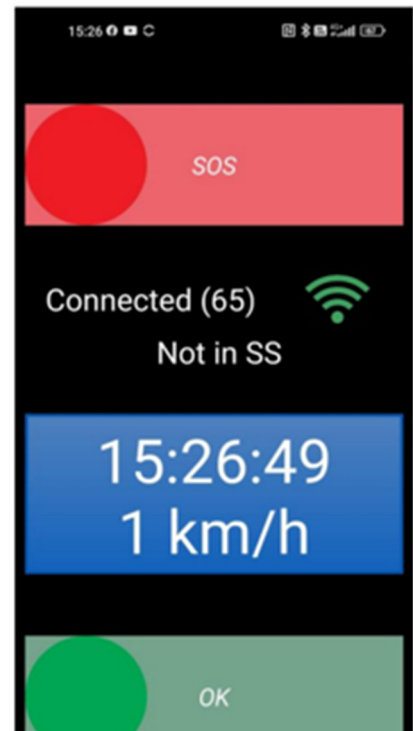


## RALLY TRACKING

If you have selected RALLY mode on the screen, the first thing the device will do is search for a connection.

Once connected, the device will display the screen as shown on the right:

- SOS button in the red box
- Connection status
- Information about which special stage (SS) you are on
- Time and current speed in the blue box
- OK button in the green box



## STOPPING ON A SPECIAL STAGE (SS)

If you stop on a special stage during the rally e.g. due to a technical problem or to change a tire, the screen changes to the view shown below on the right and the countdown for an automatic SOS message begins.

If you do NOT need medical help or fire brigade, press the OK button on the GPS unit.

If you need medical help or fire service, press the SOS button – this means the stage will be stopped!

If you don't press anything, an automatic alarm will be triggered 20 seconds after stopping which means the stage will be stopped! The time until the automatic alarm is triggered is displayed on the SOS button (see example image: 17 seconds until the alarm is triggered). This only happens on special stages, not on road sections!

By pressing the OK button, the automatic alarm is deactivated until you are moving at least 60 km/h on the special stage again. It makes work in Rally HQ much easier if you press the OK button as quickly as possible when stopping on a special stage so that no false alarm is triggered.

**OK or SOS can be pressed at any time, even when driving slowly on special stages or on road sections.**

However, the emergency services are only alerted immediately if there is an SOS on a special stage. In the event of an SOS on a connecting stage, the rally HQ will contact you.



**After an SOS message, additional buttons appear on the display** to quickly inform rally HQ and emergency services about incidents:

- FIRE – when assistance is needed to put out a fire
- MEDICAL – when medical attention is needed
- ROAD BLOCKED – when subsequent participants cannot drive past
- FALSE SOS – if SOS was pressed incorrectly

**Likewise, after an OK message, additional buttons appear on the display** to inform the rally management about details:

- MECHANICAL (RETIRED) – to report a retirement due to a technical problem
- OFF ROAD (RETIRED) – to report a retirement due to going off road
- MECHANICAL – Technical problem but continuation planned, e.g. tire change
- OFF ROAD – off road but continuation planned, e.g. with spectator help
- ROAD BLOCKED - when subsequent participants cannot drive past

## COMMUNICATION WITH RALLY HQ

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Rally HQ has the option to send questions to individual devices to obtain further information.

The screen then turns blue with the word INFO and the question underneath. You can only answer with YES or NO. The Rally HQ may ask more than one question in a row.



## RED FLAG

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The rally HQ can send RED FLAG messages to individual or multiple devices and thus neutralize the current special stage.

**If you receive a RED FLAG message on your screen, you must confirm receipt by clicking OK at the bottom of the screen.**

The RED FLAG message remains visible on the screen even after pressing the OK button and only disappears when it is deactivated again by the rally HQ.

If you receive a RED FLAG message, the same rules apply as with conventional red flags: reduce speed immediately, continue driving slowly, stop at the scene of the accident if necessary and follow the instructions from the nearest radio point.

If you receive a RED FLAG message, the rally HQ will assign you a notational time for the stage in question. RED FLAG messages on the GPS device are never triggered automatically, but only manually by the rally HQ.

### **ATTENTION:**

**Both classic red flags from the radio points along the stage and RED FLAG messages on the GPS device are valid!**



## DEPOSIT AND CONTRIBUTION TO COSTS

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A deposit of € 200,- is required for the GPS device. The deposit must be paid in cash at the road book issued. The road book will not be issued without this deposit. The deposit will be returned in cash after the rally after the undamaged equipment has been returned, minus a € 40,- contribution to the costs of using the system.

Other one-off costs:

- € 10,- for the purchase of the 1 inch ball that is installed in the rally car
- € 40,- for the purchase of the smartphone holder
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Alternatively, the smartphone holder can be rented for € 30,- per event

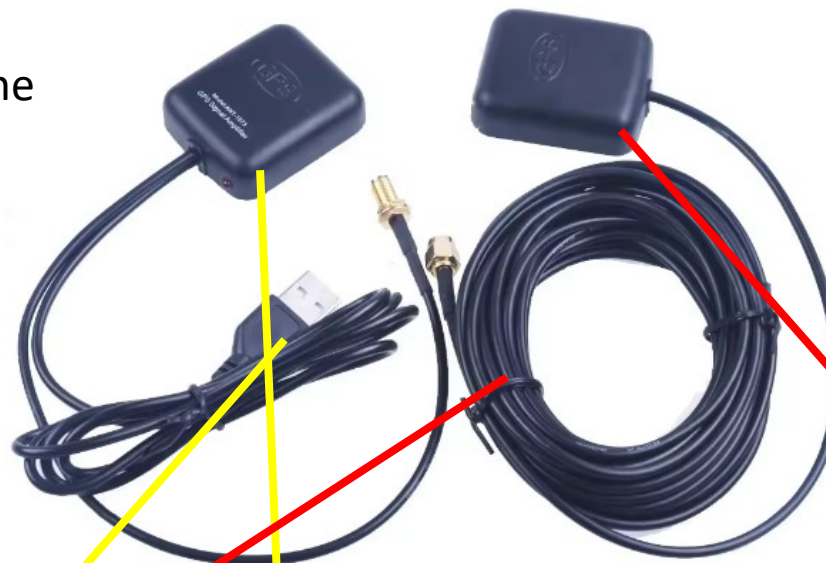
# GPS-antenna installation

GPS repeater installed indoors close (within 1meter) to the transponder

USB connected to 5V power source (yellow line shows where repeater wire should be taken).

GPS antenna to be installed on the roof (or back window inside).

Wire goes through the roof inside and easiest is to take it to the co-driver side and from there to front and where repeater is where SMA connectors are connected to each other.



**NOTE!!!**

- It is not allowed to take the outer GPS antenna wire through the door
- Inner repeater and outer GPS antenna has to be minimum 2meters apart from each other

