

RALLYSAFE COMPETITOR USER MANUAL

STATUS AWARENESS SYSTEMS 14 Short St, Ulverstone, 7315 Tasmania, Australia

Contents

| 1. | Purpose | 3 |
|----|------------------|---|
| 2. | Scope | 3 |
| 3. | Responsibilities | 3 |
| 4. | Procedure | 3 |
| 5. | References | 9 |
| 6. | Definitions | 9 |
| 7. | Contact us | 9 |

1. Purpose

The purpose of this document is to detail the general use and functions of a RallySafe tracking unit for competitors. Also included are links to FAQ's and the RallySafe Unit fitting guide.

2.Scope

This document has been prepared for competitors who are competing at an event where the RallySafe system is being used for vehicle tracking and safety communication.

3. Responsibilities

It is the competitor's responsibility at each and every event to do the following -

- Purchase and have installed a RallySafe Fitting Kit prior to attending event.
- Collect RallySafe Tracking Unit during the allocated time. (See event Supp. Reg's.)
- Install the RallySafe Tracking Unit as soon as possible.
- Contact a SAS team member if there seems to be any issues with your RallySafe Tracking Unit or RallySafe Fitting Kit.
- Upon completion of the event, return the RallySafe Tracking Unit, and any other equipment supplied, immediately to a SAS team member.

4. Procedure

4.1 Powering the Unit On

Please power the unit on early before the event to give it time to run checks and allow a check of the full system. Once you have received the unit please install and powerup. This will allow the RallySafe representative time to check all systems are good to go and will ensure you are not delayed getting to your first-time control.

The RallySafe Tracking unit is pre-loaded with all the stage coordinates and is activated when powered on.

To power on the unit, you must do the following:

- Confirm the RallySafe Power Plug has a green indicator light on the connector.
 NOTE: Do not connect the power plug if this indicator light is not green. Contact a SAS team member if this light is Red.
- 2. Install the antenna connectors to the corresponding colour-coded connections.
- 3. Connect the Power plug to the RallySafe unit.
- 4. The RallySafe unit will now "boot up". (This can take a minute.)

The unit should NOT be powered off at any stage during "boot up".

The unit will go into sleep mode within a few minutes of inactivity but will re-wake when the vehicle moves or when any button on the unit is is pressed.

4.2 Unit Modes

Transport Mode

When powered on the unit will display the transport screen.

While on a transport stage the unit will display your car number (top corner), time in transit, current time, speed, average speed, and accumulative and intermediate distances (Screen 1).





The name of the next point you are travelling to is displayed and whether it is a service or a competitive stage.

The unit has four white buttons where you can reset the intermediate and main trip meter and dim or brighten the screen. **Full brightness is recommended for daytime.**

For details of functions available under the 'options' button see Section 4.7 'Transport Mode' below.

Stage Mode

Once you have checked in and the unit is within 20meters of the start line the unit will then proceed to stage start mode indicated by "Ready to start" (Screen 2).



Screen 2

On commencement of the stage the unit will then switch to on stage mode (Screen 3)

The unit will start timing and the push to pass option will appear (this function is event dependant).



Screen 3

Speed Monitoring

In events or categories that have a speed limit there is a warning that displays when approaching the speed limit (Screen 4)



Screen 4

4.3 Safety Notifications

Sending Slow

The unit will automatically transmit a SLOW CAR message if your speed falls below pre-defined limits when you are on stage. This will show on your screen as "Sending Slow" (Screen 5).

Cars approaching you will be altered of a "Slow Car" (Screen 6). In this case there is a slow car (#101) that is 123 meters ahead.

If the "Slow Car" speeds up to above 30kp/h they will return to stage mode but **be aware they may** still be travelling significantly slower than you.



(Screen 5)

(Screen 6)

4.4 Hazard Alerts

Sending Hazards

The unit's primary function is to alert competitors and race control of Incidents and Hazards

An incident is conveyed to race control and approaching cars with different levels of hazard depending on the severity of the incident.



When Stationary on a competition section, the RallySafe unit will automatically transmit a "Hazard" (Screen 7). Even if you select OK, as you are stopped, it will still notify approaching vehicles of your "OK" status.

If you are "OK" and do not require the "Hazard" alert, press the button under 'OK' (Screen 7), this will be confirmed by the system as acknowledged (Screen 8).

To upgrade the "Hazard", press the button under the 'SOS' (Screen 7).

You will then need to confirm "FIRE" or "MEDICAL" by selecting the corresponding button (Screen 9).

You can downgrade or upgrade the hazard status at any time.

If assistance is not required, you downgrade the "Hazard" by selecting "OK".

If your vehicle is involved in a high G-Force impact, the "SOS" screen will automatically display (Screen 9).

If you stop at a situation where help is required, press your SOS button as well. If they have their OK boards showing, get the competitor to downgrade their hazard status to an OK. Otherwise Race Control may neutralise the stage.

Receiving a Hazard

The RallySafe unit will notify you of upcoming hazards as you approach an incident.

A Green **OK** Hazard indicates the vehicle and crew ahead are "OK" and you may proceed at speed (screen 10). In this example the hazard is 270m ahead.



Screen 10

A Yellow HAZARD indicates that the crew involved in the hazard ahead are OK, but the hazard indicates their vehicle is stopped and may be partially, or fully blocking the road, proceed with caution (screen 11).



Screen 11

A Red **SOS** indicates that the crew involved in the hazard ahead have signalled that they require emergency assistance (screen 12).

Please activate the event emergency proceedings for SOS situations. (See event Supp. Reg's.)



Screen 11

The RallySafe Hazard notification system run in conjunction with existing event safety systems.

You must still show OK and SOS boards as per event regulations.

4.5 Push to Pass

The "Push to Pass" function allows a vehicle behind to alert a vehicle in front that they have caught them on stage and wish to overtake safely.

To activate this function, press the white button under the "PASS" section. (screen 13)



Screen 13

This will enable the Push to Pass function for 10 seconds which will be indicated by a blue screen (screen 14). This is not a confirmation of a competitor allowing you to pass – it is only showing your request to pass.





The screen in the vehicle ahead (to be overtaken) will also turn blue (Screen 15). (In this example the car requesting to overtake is Car 123 and is 290m behind.)



Screen 15

4.6 Speed Zones

The RallySafe System can be used by event/race control officials for speed monitoring - both on stage and in transport.

These zones will be in your roadbook, but the RallySafe unit will also display a warning as you approach the zone.

Virtual Chicane

Virtual chicanes are often used by events to break up long straights in competitive stages.

They work by designating a zone in which you must slow down and hit a target speed. This means you can hit that speed at any point within the zone and then accelerate back to competition speed.





(Screen 17)



The procedure of a virtual chicane is as follows:

- 1. As you near the virtual chicane you will receive a warning of the upcoming zone you will be advised of the distance to the zone and the speed required within the zone (Screen 16).
- 2. After entering the virtual chicane, the speed required to achieve will be displayed (Screen 17).
- 3. Once you have achieved this speed the display will turn green, continue racing (Screen 18).

Quiet and Restriction Zones

The RallySafe unit will provide a countdown to the start of Quiet and Restricted Zones.

In these zones the speed limit <u>MUST</u> be maintained for the duration of the zone.

Restricted Speed Zone

You are required to remain below the speed limit for the specified length of the zone. Speed limit is displayed continuously.

A countdown to the zone is given (Screen 19) and you are advised once you are in the restricted zone (Screen 20).



(Screen 19)

(Screen 20)

Restricted Time Zone

You are required to remain in the zone for a specified time.

You are advised of the upcoming zone (Screen 21), the remaining time of the zone is shown in the white banner as a countdown (Screen 22). On completion of the zone you will be advised (Screen 23).



Transport Quiet Zone

This is an "off stage" Quite Zone. You are required to remain below the speed limit for the duration of the zone. You are advised of the approaching zone and speed limit (Screen 24) and once on the zone the speed limit is displayed continuously (Screen 25).



(Screen 24)

(Screen 25)

4.7 Transport Menu

In "Transport Mode" the unit has a menu that can be accessed by pressing the options button.

In this menu you can send a allows you to send a manual hazard or view your stage times.

Manual Hazard

To manually send a Hazard Message during a transport stage:

1. Select Options (Button 1) on the transport screen (Screen 26)





- 2. Select "Send Hazard" (Button 4) (Screen 27)
- 3. You are now Sending out a "Hazard" Message.
- 4. To send an SOS, select "SOS" (Button 4) (Screen 28)
- 5. To Cancel the "Hazard Status" either start driving or select "Press to Cancel" (Button's 2 or 3)



(Screen 27)



Stage Times

To view stage times from completed stages, do the following:

- 1. Select Options (Button 1) on the transport screen,
- 2. Select "View Times" (Button 2) (Screen 27 above),
- 3. The display now shows the stage time for SS1 (Screen 29),





- 4. To see times from other stages, select "NEXT" (Button 2), or "PREV" (Button 3) to cycle between stages,
- 5. When finished viewing stage times, select "EXIT" (Button 1) to return to the normal transport display.

Note – It is not possible to view times when near a Time Control or a Stage Start.

5.References

RallySafe Fitting Kit Installation Manual

RallySafe Fitting Kit Installation Manual (Off-Road Racing)

6. Definitions

| Phrase | Definition |
|--------------------------------|--|
| 3-in-1 Antenna | GPS, IRI, WIFI all included in 1 box antenna |
| Beam | A timing beam that is used as either the primary or back up timing system at an event |
| Competition | The event that a competitor has entered and is actively competing in. |
| Entry | A vehicle involved within a competition event. |
| EventManager | Program used to upload course and competitor information to a RallySafe Unit. |
| FIA | Federation Intentionale de l'Automobile, the world-wide governing body for motorsport. |
| Flying Finish | GPS precise point where the car finished the stage without stopping |
| Geoff | Program used to update unit code and pull log files off a RallySafe unit. |
| GPS | Global Positioning System, is a satellite-based radio navigation system owned and operated by the United States Government |
| GSM | Global System for Mobile Communications, most seen as 3G, 4G, LTE and 5G as used by your mobile phone. |
| Hazard | Vehicle stopped on any section of a special stage. |
| IRI | See Iridium. |
| Iridium | The Iridium satellite constellation provides data information to be transferred worldwide and in remote locations. |
| Knuckle | The short arm between the RallySafe unit's ball mount and the ball mount secured to your vehicle. |
| Log | See Log file. |
| Log File | All data recorded on the units SD card |
| Mobile Device | Your personal mobile phone, Status Awareness Systems supports both iPhone (iOS) and Android Devices. |
| MT | Satellite command message from Race Control Web App to a RallySafe unit or RSLite enabled device. |
| Polylines | A digital trace of a competition stage |
| Push-to-Pass | RallySafe's advising system for requesting the vehicle in front to let you pass during a special stage. |
| Quite Zone | A Quiet Zone is a speed monitored zone used only on transport sections of a rally. |
| Race Control Web App | RallySafe's interface where all the data is readable and reviewable. |
| Race Control/ Rally Control | The main office where event officials will be monitoring and managing the event. Can also refer to the people working in race control. |
| RaceCommander | program used to upload control times to a competitors RallySafe unit. |

| RallySafe | The world's most advanced Rally Management System |
|-----------------------------|---|
| RallySafe App | The publicly available mobile application where you can track the location and times of all the rally competitors at any time during the event. |
| RAM [®] Mount | Ram® Mounts is the industry leader in rugged motorcycle and car mounting solutions and is used by Status Awareness Systems as the preferred mounting solution for their products. |
| RC | Acronym of Race Control, mostly referring to our Race Control Web Application |
| Restriction Speed Zone | A Restricted Speed Zone is used on a stage to control vehicle speed over a section of road for a designated length or speed, as required. |
| Restriction Time Zone | A Restricted Time Zone is similar to a Restricted Speed Zone, but rather than controlling speed in a designated zone, the car must spend a set amount of time within the Restricted Time Zone parameters. |
| RSLite | RallySafe lite, a mobile phone application that monitors and reports your tracking information during a competition event. |
| SAS | Acronym of Status Awareness Systems |
| Slow Car | A car the drops below the pre-defined SLOW limit |
| SOS | A serious incident occurring during the event, requiring additional support from Fire or Medical teams. |
| Special Stage | A competitive section of an event, normally timed for competitive results. |
| Start Control | The officials and crew working at the start of a competition stage, issuing start times and confirming that each vehicle is starting in a safe manner. |
| Status Awareness Systems | The parent company of RallySafe |
| Stop Point | The point at the end of a special stage where to car stops |
| Time Control | A control where a car his required to hand over a time card and check in |
| Transport | The distance between one competition stage and another. |
| Unit | The RallySafe device, most commonly referred to as 'the unit' or 'the RallySafe Unit'. |
| Virtual Chicane | A Virtual Chicane is used to help reduce average speeds and terminal speeds on high-speed parts of rallies. Competitors must reduce speed to a pre-set speed within the designated area given. |
| Zero Point | A Zero Point was designed for use when a vehicle, in an endurance type event, has to come to a complete stop prior to crossing a live/open road. |

7.Contact us:

For assistance, please contact the RallySafe Support Team by emailing: info@statusas.com

Please be as descriptive as you can when describing the problem. It would help us is you provide the following information at a minimum:

• Name of event.

- Vehicle or feature affected.
- Stage of incident.
- Time of incident.Any additional details.