RALLYSAFE COMPETITOR USER MANUAL

Welcome

The SAS System is designed to increase competition safety by providing safety notifications to inform event management, improve response times and provide accurate and reliable event times.

The following document outlines the basic features and functions of the RallySafe unit. Please note that the unit must be fitted and connected in all competitor's car, in accordance with the SAS Fitting Kit Manual – RALLY CAR.

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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 in the competition car 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 or if withdrawal, return the RallySafe Tracking Unit, and any other equipment supplied, immediately to a SAS team member.

1. Powering The Unit On

The unit is pre-loaded with all of the stage coordinates and is activated when powered on. Please power the unit on early before the event to give it time to run checks.

When powered on the unit will display the transport mode, the details of which are specified in section 2.1 of this document.

The unit does not need to be powered off at any stage during the event as it will go to sleep within a few minutes of inactivity but can be re-woken by either moving the vehicle or pressing any of the four buttons.

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 pressed.

It is recommended that the unit is not powered off during the event, to ensure the internal battery stays fully charged for emergencies.

Do not connect the power plug if this indicator light is not green. Contact a SAS team member if this light is Red. If there is no light in the connector, this means you do not have power supply. Therefore, may require further checks with wiring.

2. Unit Modes

The unit has two modes:

- When not in a competitive stage, the unit will be in **transport mode**, as described in 2.1.
- When in a competitive stage, the unit will go into **stage mode,** as described in 2.2.

2.1. Transport Mode

SCREEN 1 – The transport mode displays, from the top down, the following information: the name of the next point you are travelling to, the time in transit, current time, accumulative and intermediate distances and speed, average speed.

The unit has four physical buttons. Their functions are reported on the screen right above the button's location.

Starting from the far left button, moving to the right, you have the following options:

- OPTIONS: Operation described in section 5 of this document (Transport Menu).
- BRIGHT: Increase the screen brightness (Note that the screen must always be clearly readable, so full brightness is recommended for daytime).
- DIM: Decrease the screen brightness,
- RESET: Intermediate trip meter.

SCREEN 1. Transport Mode

2.2. Stage Mode

SCREEN 2 – When the start official assigns each individual competitor a due start time, a countdown will display on the unit as shown in the white field below. Also shown in the white field is the stage number and the due start time.

SCREEN 2. Countdown to Stage Start

SCREEN 3 – Once the start time is reached, the screen will turn green as shown below and the competitor should proceed into stage.

SCREEN 3. Stage Start

SCREEN 4 – Once the competitor has started the stage, the unit will automatically switch to on stage mode. The unit will start timing and the button on the bottom left of the unit will change to 'PASS.' This is a function of the 'Push to Pass' feature detailed in section 5 (Push to Pass) of this document.

SCREEN 4. Stage mode

SCREEN 5 – If the start is postponed for whatever reason and the start time is cancelled, the unit will return to the Transport Screen. Once it is clear to send cars again the official will re-issue a new start time.

SCREEN 5. Start Time Cancelled

3. Hazard Alerts

The unit's primary function is to help alert race control of incidents on the course. The incident is notified to race control with different levels of hazard depending on the severity.

SCREEN 6 – If you stop during a stage for longer than 3 seconds, the unit will automatically transmit a HAZARD notification; this can either be upgraded to SOS or downgraded to OK by pressing the corresponding button to the text. A timer counts to 60 seconds as an indication to press either the OK or SOS button.

SCREEN 6. HAZARD Notification

SCREEN 7 – If you select OK after the HAZARD alert, then the following screen will appear, showing that you and the car are OK. If the road is **fully blocked**, you then have the option to upgrade to road blocked with button 2.

SCREEN 7. OK Acknowledgment

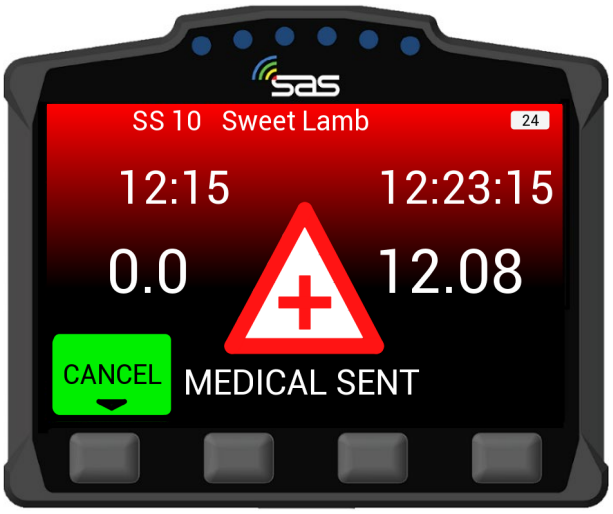
SCREEN 7A – If you selected “Road Blocked” the following screen will appear, showing that you and the car are OK, but the competition road is BLOCKED. Race Control will be notified that the crew is OK but the course is obstructed.

SCREEN 7A. OK – Road Blocked

SCREEN 8 – If the SOS button is pressed, it must be confirmed as either a fire or medical SOS by pressing one of the two middle buttons It can also be cancelled if pressed by mistake.

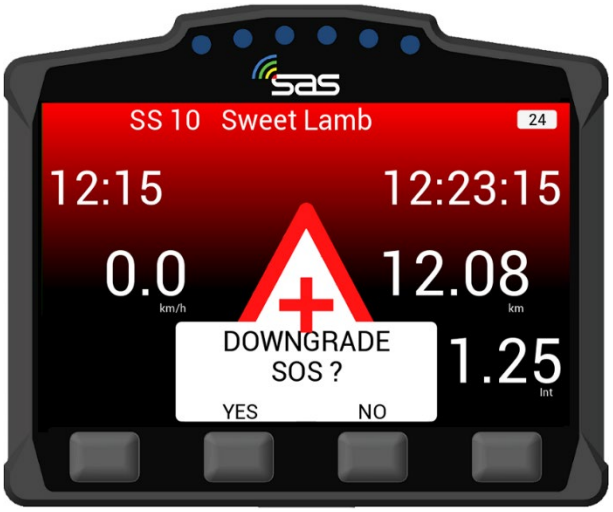
SCREEN 8. Confirm Fire SOS or Medical SOS

SCREEN 9 – When the SOS is confirmed, the screen 9 will display. Even once confirmed, the hazard can be changed to OK. Pressing CANCEL and confirming the downgrade will inform race control that the crew are OK and do not require medical assistance.



SCREEN 9. Downgrade SOS

SCREEN 9A – If you select the cancel button on the SOS screen, you will be asked to confirm the downgrade. Once confirmed, the device will downgrade to an OK status.



SCREEN 9A. Downgrade SOS

4. Accident Proximity Warnings

If you are approaching a stopped car on a competitive stage, the tracking unit will display a warning with a countdown (in meters) to the stopped car ahead. The screen will display the status of the stopped car ahead, depending on the situation, utilizing colors to indicate differing levels of the hazard.

- Green – OK. This indicated there is a car stopped, but the crew have reported that they are OK and the road as clear.
- Yellow – the Course blocked or the status unknown.
- Red – the crew of the stopped vehicle have reported an SOS (either fire or Medical).

This is an automated feature that does not require input from the crew of the stopped car. The warning will remove itself once your vehicle has passed the accident location.

SCREEN 10 – If a car is stopped ahead and they have pressed OK, screen 10 will display indicating that the car is OK and the course is clear with the green background, also indicating the car number (Car123) and the distance to the stopped car (140m). Any OK warning will not display any warning on the Remote LED Display (RLD)

SCREEN 10. OK proximity warning

SCREEN 11 – If a car is stopped ahead and they have indicated road blocked or have not confirmed their status, screen 11 will display indicating that the car is a HAZARD and the course not clear or has not been indicated as clear from the stopped crew, via the yellow background. This screen is also indicating the car number (Car123) and the distance to the stopped car (140m). While the Hazard proximity warning is displayed, the Remote LED Display (RLD) with flash YELLOW at 2htz.

The crew must always confirm the full status of the warning on the tracker display.

SCREEN 11. HAZARD proximity warning

SCREEN 12 – If a car is stopped ahead and they have pressed SOS (either fire or medical), screen 12 will display indicating that the car is requesting SOS assistance, via the red background. This screen is also indicating the car number (Car123) and the distance to the stopped car (140m). For SOS proximity alarms, the warning will remain on the screen after the accident. While the SOS proximity warning is displayed, the Remote LED Display (RLD) with flash YELLOW at 2htz.

The crew must always confirm the full status of the warning on the tracker display.

SCREEN 12. SOS proximity warning

5. Push to Pass

The Push to Pass function operates as an overtake warning system between two cars.

The Push to Pass functionality allows the crew in a vehicle that is approaching a slower vehicle, of their intention to overtake. When the button below the blue 'PASS' is pressed to request an overtake, a broadcast message will be sent out. All vehicles within radio distance of the vehicle that has selected the PASS function will process the request.

The warning will only be activated and displayed on the units of the relevant vehicles if both of the following parameters are met

- the slower-moving vehicle is within the radio range of the transmitting vehicle and
- the two vehicles are within a pre-defined distance of each other.

Note: This function is NOT a confirmation of a competitor allowing you to pass or that the vehicle you are approaching has received the message.

Overtaking Vehicle – While on stage, the (Pass) option will be displayed above button 1 *(Screen 13)*. When you approach a slower-moving car and cannot get any closer without it being unsafe, you can request an overtake by pressing button 1.

SCREEN 13. On Stage Screen

Overtaking Vehicle – Once the 'Pass' button is pressed, your tracking unit will display a blue gradient *(Screen 13A)* for 10 seconds. If the overtake is not completed in 10 seconds, the 'Pass' button can be re-pressed.

SCREEN 13A. Sending Overtake Request

Vehicle being overtaken (Receive Overtake) – If you are the vehicle being overtaken and the vehicle behinds press the 'pass' button, your screen will illuminate blue if the message has been successfully received *(Screen 14)* and will display the number of the vehicle requesting to overtake (car 24) and the distance the vehicle is behind (220m). In addition, the Remote LED Display (RLD) will flash BLUE.

SCREEN 14. Receiving Overtake Request

6. Special Zones

Special Zones may be added to the data in the RallySafe Unit for the purpose of speed management and road conditions. These zones will be in your roadbook, however the RallySafe unit will also display a warning as you approach the zone. (If the event has elected to have RallySafe monitor these)

Please note the Remote LED Display ONLY supports the function of a Virtual Chicane, due to its nature of competition.

It is the responsibility of the competitor to understand the regulations in the event of these zones.

VIRTUAL CHICANE

SCREEN 15 – Virtual Chicane (VC) when approaching a VC, a yellow banner will display on the top of the screen, providing you with the distance too the start of the zone and target speed. The Remote LED Display (RLD) will display the 2 outer LED's YELLOW

SCREEN 15 Chicane Ahead

SCREEN 15A – Virtual Chicane (VC) Once in the zone, the screen will display a white banner with the distance to the end of the zone and the target speed. The Remote LED Display (RLD) will display the 2 outer LED's WHITE.

SCREEN 15A Within Chicane

SCREEN 15B – Virtual Chicane (VC) Once the target speed has been achieved, the screen will display a green banner with GO. The Remote LED Display (RLD) will display the 2 outer LED's GREEN.

SCREEN 15B Speed Achieved GO

RESTRICTED SPEED ZONE

SCREEN 16 – Restricted Speed Zone (RSZ) when approaching a RSZ, a yellow banner will display on the top of the screen, providing you with the distance to the start of the zone and maximum speed.

SCREEN 16 Restriction Speed Zone Ahead

SCREEN 16A – Restricted Speed Zone (RSZ) Once in the zone, the screen will display a white banner with the distance to the end of the zone and the maximum speed.

SCREEN 16A Within Restricted Speed Zone

RESTRICTED TIME ZONE

SCREEN 17 – Restricted Time Zone (RTZ) when approaching a RSZ, a yellow banner will display on the top of the screen, providing you with the distance to the start of the zone.

SCREEN 17 Restriction Time Zone Ahead

SCREEN 17A – Restricted Time Zone (RTZ) Once in the zone, the screen will display a white banner with the distance to the end of the zone and remaining time required in the zone (bottom right of white).

SCREEN 17A Within Restricted Speed Zone

SCREEN 17B – Restricted Time Zone (RTZ) Once you have completed the required time in the zone, the screen will display a green banner with ACHIEVED.

SCREEN 17B Restriction Time Zone Achieved

NEUTRAL ZONE

SCREEN 18 – Neutral Zone (NZ) when approaching a NZ, a yellow banner will display on the top of the screen, providing you with the distance to the start of the zone an maximum speed.

SCREEN 18 Neutral Zone Ahead

SCREEN 18A – Neutral Zone (RTZ) Once in the zone, the screen will display a white banner with the distance to the end of the zone and maximum speed.

SCREEN 18A Within Neutral Zone

TRANSPORT QUIET ZONE

SCREEN 18 – Quiet Zone (QZ) may be implemented in a transport section of the event. On approach to the QZ, a yellow banner will display on the top of the screen, providing you with the distance to the start of the zone and target speed.

SCREEN 18A – Once in the Quiet Zone, the screen will display a white banner providing you with the distance to the finish of the zone and target speed.

SCREEN 18 Quiet Zone Ahead

SCREEN 18A Quiet Zone Ahead

7. Red Flag

SCREEN 19– In the case of a serious incident, a stage may be red flagged from Race Control. The red flag will display a full screen warning, and the Remote LED Device (RLD) will flash RED until it is acknowledged. To acknowledge the flag the far-left button must be pressed.

Please note that the Red Flag functionality is only available at certain event. Please refer to the Supp Reg's on further confirmation.

SCREEN 10. RED FLAG Acknowledge

SCREEN 11 – Once the red flag has been acknowledged, normal stage functions will display with a warning still at the top of the screen.

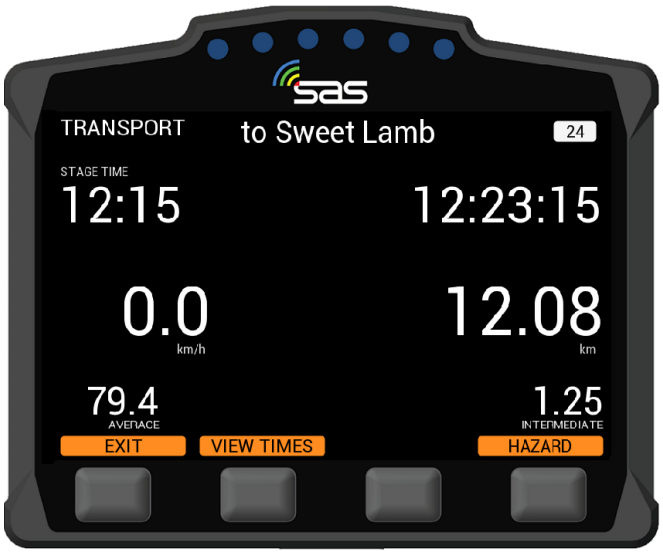
SCREEN 11. RED FLAG in Stage Mode

8. Transport Menu

SCREEN 12 – In transport mode, the unit has a menu that can be accessed by pressing the options button.

SCREEN 12. Transport Mode

SCREEN 13 – The option menu will allow the crew to view stage time's "VIEW TIMES" (section 7.1) or send a manual hazard/SOS "SEND HAZARD"(section 7.2).



SCREEN 13. Transport Mode – View times/Send Hazard

8.1. Stage Times

SCREEN 14 – By pressing the “VIEW TIMES” button, provisional transit and competitive stage times will display. You can select times for any of the completed stages with the next and previous buttons.

SCREEN 14. Times of completed stages

8.2. Manual Hazard

SCREEN 15 – If manual hazard is sent in transport mode, this can be upgraded or downgraded the same way as a stage hazard. If the hazard is no longer required, it can also be cancelled by pressing either of the two middle buttons “PRESS TO CANCEL”.

SCREEN 15. Manual Hazard in Transport Mode

9. References

RallySafe Fitting Kit Installation Manual

RallySafe Fitting Kit Installation Manual (Off-Road Racing)

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.
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
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.
Iridium (IRI)	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.
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.
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.

Contact us:

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

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

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