



## SAS Tracker Competitor User Manual

## Welcome

For your and other competitor's safety, it is important that you are familiar with the use of the WRC tracking unit, herein referred to as "the unit" or "the WRC tracking unit".

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 WRC tracking unit. Please note that the WRC Tracking 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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# 1. Powering The Unit On

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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.

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

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## 2. Unit Modes

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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.

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### 2.1. Transport Mode

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**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. **Important - The countdown on the Start Clock on the side of the start line shall remain as the official starting device, the countdown on the tracking unit shall only be used as the official start time when advised by the start marshal.**



### 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. **Please note this is only a secondary starting method as explained on the previous page.**



### 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

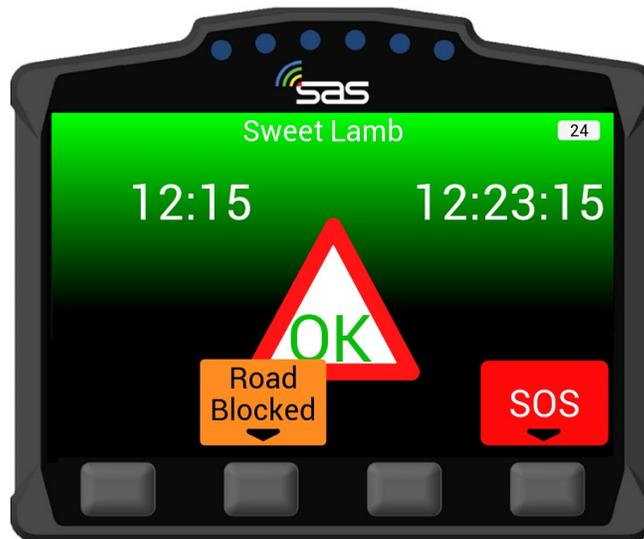
The unit's primary function is to help alert race control of incidents on the course. The incident is notified to race control with different levels of hazard depending on the severity.

**SCREEN 6** – If a car stops 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.



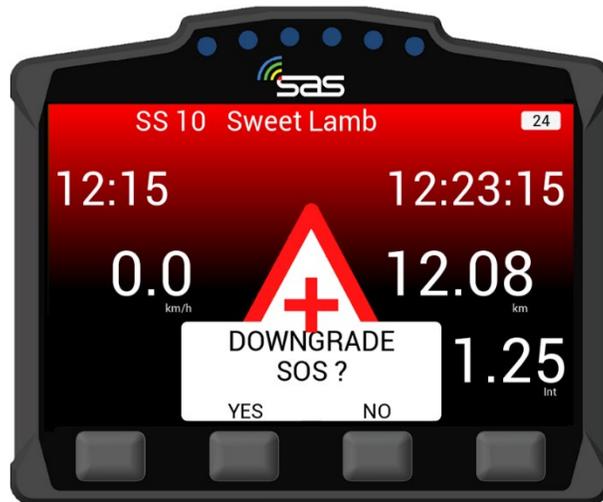
SCREEN 8. Confirm Fire SOS or Medical SOS

**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 need 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 500m 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** – 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. Red Flag

**SCREEN 10** – 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.



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

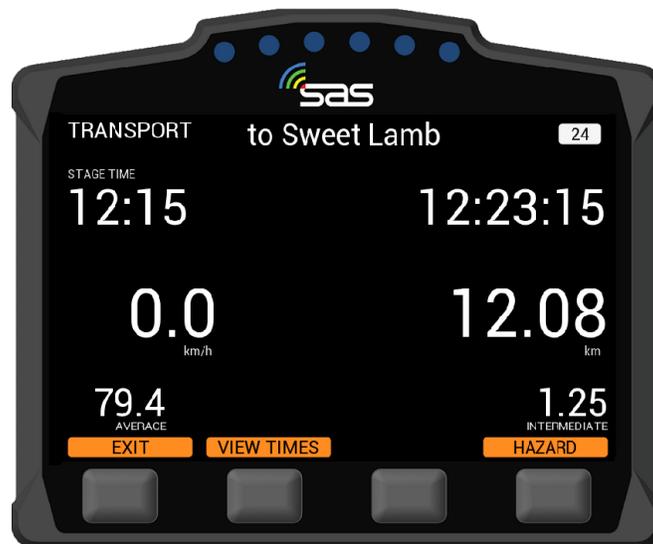
## 7. Transport Menu

**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

## 7.1. Stage Times

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**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

## 7.2. Manual Hazard

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**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

## 8. Contact us

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