

RallySafe Competitor User Manual 2023

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APPENDIX

1. WELCOME

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

The RallySafe System is designed to increase competition safety by providing 'live' status awareness to all cars as well as safety notifications which inform event management and assist drivers to avoid secondary incidents, improve response times and provide accurate and reliable event times.

The following document outlines the basic features and functions of the RallySafe unit. Please take of the RallySafe Fitting-Kit manual. If you have any questions, please don't hesitate to contact the team from RallySafe.

Notes:

- **some features listed in this information may not be in use at your event,**
- **please take care of the German Rally Regulations 2023, Art. 53 – Competitor Safety.**

2. POWERING ON THE UNIT

The unit is pre-loaded with the stage information and is activated when powered on.

Important:

Before connecting power to the unit ensure there is a green light on the power connector.

Once you have received the unit, please power the unit on as soon as possible, to give it time to run checks and allow a check of the full system. 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.

You will most likely receive your unit at the administrative checks.

Installation tips:

- the connections and cables are color coded to the connections on the unit,
- note the yellow connection is Left Hand Thread; each connection is different to ensure no cross overs,
- the blue WiFi lead from the stick aerial inside the car is the correct one to fit to the unit [if you have 2 blue leads],
- If the unit has a short red color-coded aerial, ensure it is pointing up,
- ensure the connections are firm [do not over tighten],
- ensure joiner knuckle is tight.

When powered on the unit will display the transport screen (detailed information in chapter 3.1).

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. The unit 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 at any stage of the event to ensure the internal battery stays fully charged for emergencies.

3. DIFFERENT MODES

The unit has two modes:

1. **TRANSPORT-MODE:**
Outside a special stage the system is in Transport-Mode [s. chapter 3.1].
2. **STAGE-MODE:**
When in a competitive stage the unit will go into Stage-Mode [s. chapter 3.2].

3.1 Transport-Mode

In Transport-Mode the unit shows [SCREEN 1]:

- the name of the stage you are travelling to,
- current mode,
- transit time,
- current speed,
- average speed,
- car number [please check your number],
- current time,
- accumul. distance,
- interm. distance.



SCREEN 1: Transport-Mode



SCREEN 2: Options in Transport-Mode

The unit has four black buttons. In different screens those buttons can do different things, so their functions are listed on the screen above the button's location.

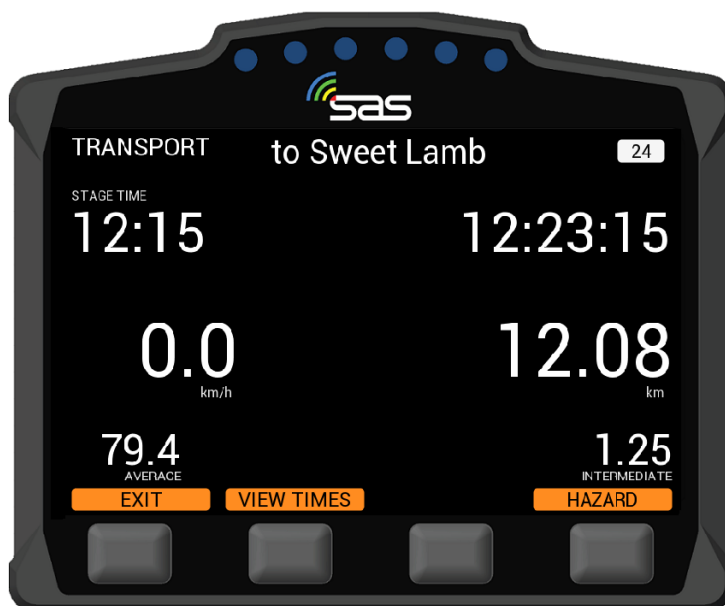
From left to right you have following possibilities:

- **OPTIONS:** choice between different functions,
- **BRIGHT:** brighten the screen
[Note that the screen must always be clearly visible so full brightness is recommended for daytime.],
- **DIM:** dim the screen,
- **RESET:** reset the Intermediate trip at any time to "0"
[When stationary, in transport, a second press of Reset will request confirmation to reset the Main Trip Meter. When the Main Trip is reset the Sector Time is also reset. This is useful for where Time Control locations have not been supplied for the event].

In transport mode the unit has a menu that can be accessed by pressing the “Options” button. This allows you to [SCREEN 2 & 3]:

1. view your stage times,
2. send a manual hazard / SOS.

Note: The button is not available when near a TC and may not be available at other times based on course layout.

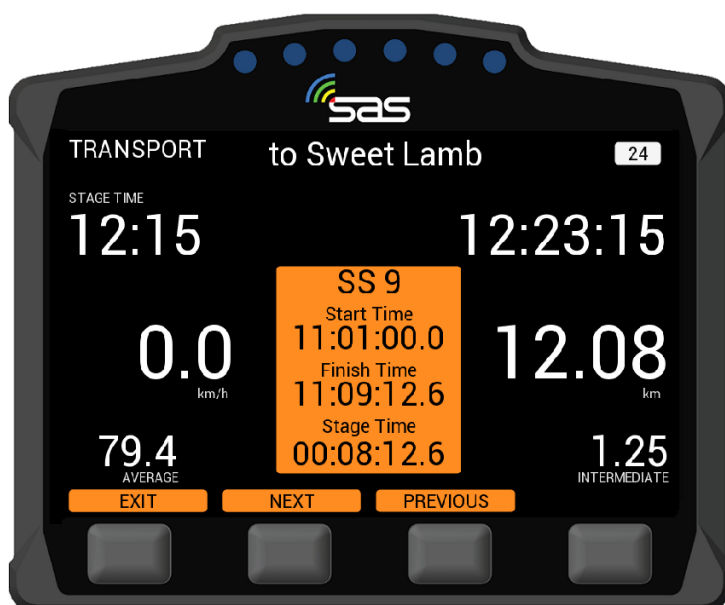


SCREEN 3: Transport-Mode – EXIT / VIEW TIMES / SEND A MANUAL HAZARD

3.1.1 View Times

You can press the button below „VIEW TIMES“. This gives you access to transit and competitive stage times.

By pressing the “NEXT” or „PREVIOUS“-Button you can scroll forward or back [SCREEN 4]. It is not possible to view times when you are near a Time Control or a Stage Start.



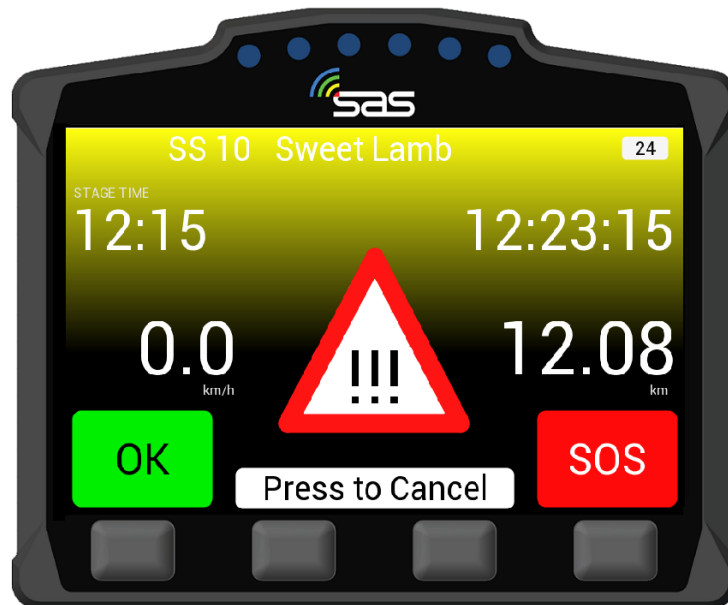
SCREEN 4: View Times

3.1.2 Send a manual Hazard / SOS

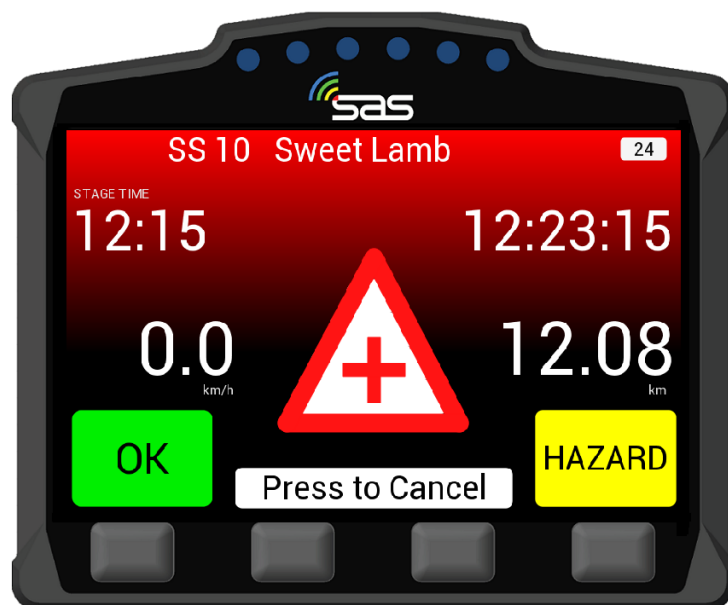
The Tracking System also provides an option to signal a hazard manually while in transport mode.

This is done in the Options menu and can then be upgraded to a **SOS** or downgraded to the relevant level the same way as a stage hazard.

Once the hazard is no longer required, it can be cancelled by pressing either of the two middle buttons („Press to Cancel“).



SCREEN 5: Manual Hazard



SCREEN 6: Manual SOS

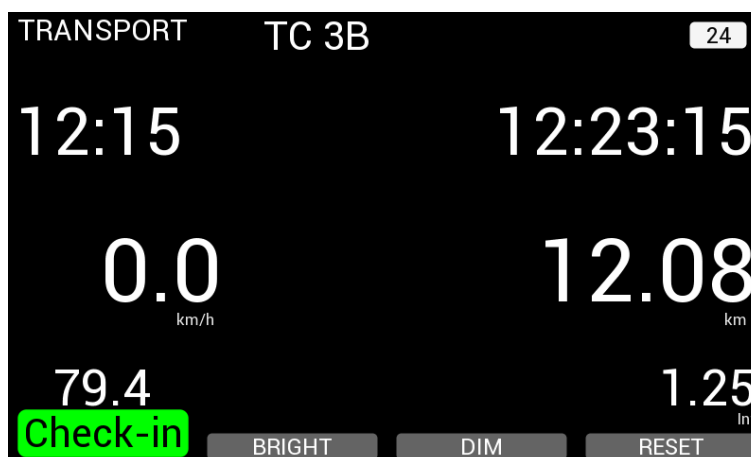
3.2 Stage-Mode

NOTICE:

The following informations / instructions must be considered if timing is taken with RallySafe [SCREEN 7 – SCREEN 12]

TC-Check-IN [SCREEN 7]

As you approach towards a time control (TC) there'll be displayed in the lower left side of the unit "Check-in". By pressing the button below "Check-in" you start the check-in process at the respective time control.



SCREEN 7: Display "Check-in" for the time control

ZK-Check-IN confirmation [SCREEN 8]

After you pressed the button below "Check-in" a white field with the following information appears on the display of the unit:

- the designation of the time control (e.g. TC 3B) and
- the current check-in time.

The time will be displayed on the screen until the test minute expires or the system detects a speed.

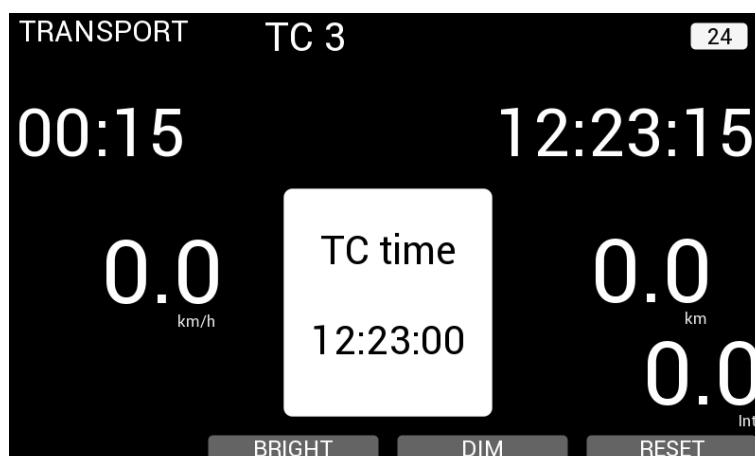


SCREEN 8: Display designated TC and check-in time – confirmation pending (Confirm)

By pressing the button below "Yes" you confirm the displayed check-in time. This is transmitted to the timekeeping (starter, tablet) as well as to Race-Control.

If you want to check-in at a different timer, press "No" and start the process again.

In addition, it is possible that an official, e.g. at TC 0 – Start, regrouping-out or similar assigns you a time from the timing tablet [s. **SCREEN 9**].



SCREEN 9: Anzeige der ZK-Zeit

Once you have passed the TC and the unit is within 20 meters of the start line the unit will then proceed to stage start mode (Ready to start) [**SCREEN 10**].



SCREEN 10: Ready to Start

You may be issued a start time by the official [e.g. Starter]. The countdown to the start of the special stage will be displayed on the screen. At the same time your start time and the stage number will be displayed in the white field of the screen-**{SCREEN 11}**.



SCREEN 11: Stage Start Countdown

At your special stage start time the screen changes to „Green“, shows „Go“ and you can start the special stage [**SCREEN 12**].



SCREEN 12: Start

After you have started, the screen changes to Stage-Mode. The unit starts with the timing and the **push to pass** option will appear (If applicable for the event) [**SCREEN 13**].



SCREEN 13: Stage-Mode

4. HAZARD ALERTS

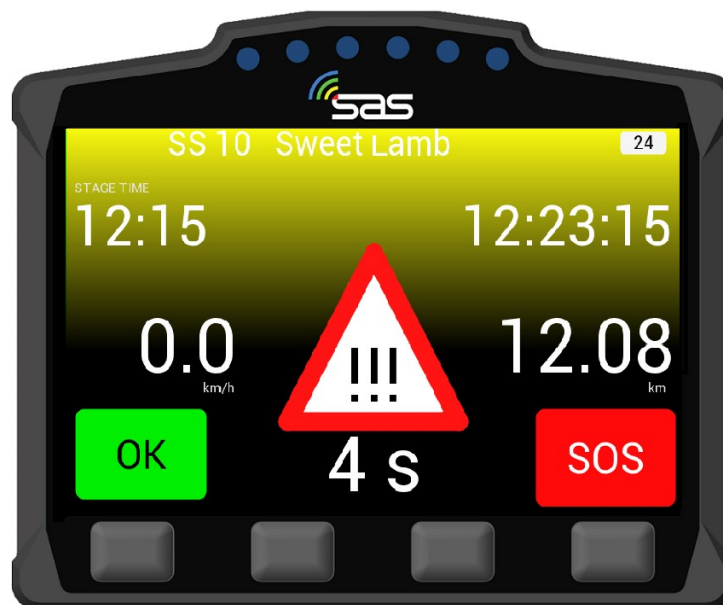
The unit's primary function is to help alert competitors and race control of incidents on the course. The incident is conveyed to race control and approaching cars with different levels of hazard depending on the severity.

If a car stops during a stage (e.g. for tyre changing or a technical failure) the unit will automatically transmit a **HAZARD** notification to Race Control and following competitors.

As the driver you have to react to this as quickly as possible (max. within 60 sec, s.timer) in order to inform Race Control and following competitors.

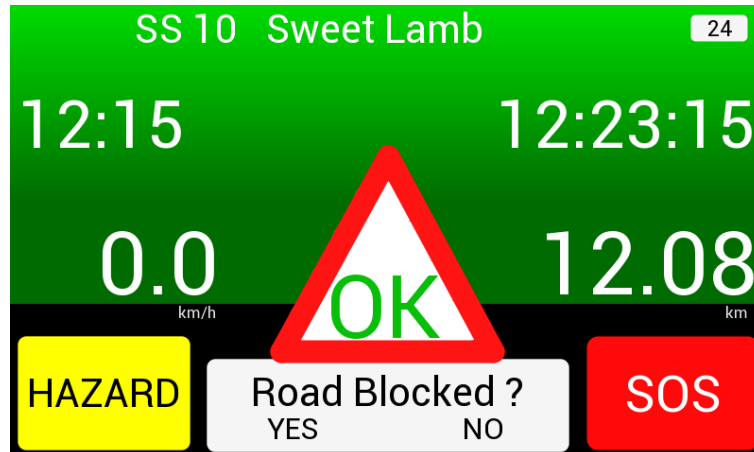
The unit will beep as a reminder until a button has been selected **[SCREEN 14]**:

1. Press the button below **OK [OK-Button]** or
2. Press the button below **SOS [SOS-Button]**.



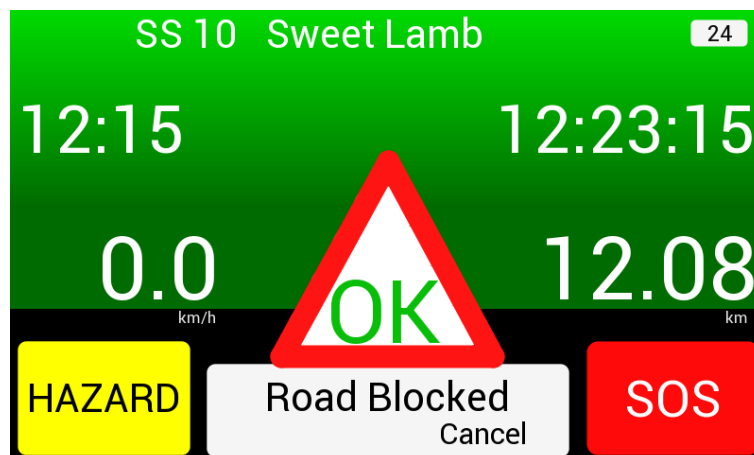
SCREEN 14: Alert (**HAZARD**) – **OK** or **SOS** muss be pressed

If you select „OK“ after a Hazard alert on your screen will be displayed „OK“ [SCREEN 15]. In this case you're showing that you and your vehicle are „OK“. The „Road Blocked“ prompt will appear automatically below. Select „YES“ if the vehicle is blocking the road. If the road is clear select „NO“.



SCREEN 15: Screen „OK“– Question: „Road Blocked?“ – „YES“ or „NO“ still to push

If you select „YES“ (Road Blocked) the following screen [SCREEN 16] will appear. In this case you're showing that you and your vehicle are „OK“ but the competition road is blocked. Race-Control will be informed automatically.

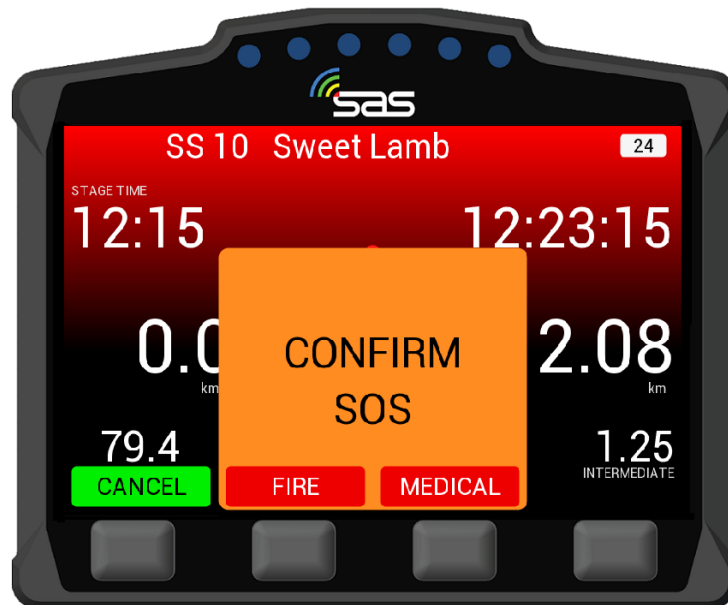


SCREEN 16: Screen „Yes“ – Road Blocked

If you require IMMEDIATE assistance the **SOS** function can be activated!
This will inform Race Control and following competitors.

After you pressed the **SOS**-button, you have to react again to inform Race Control about your individual situation [**SCREEN 17**]:

1. Press the button below **FIRE**
2. Press the button below **MEDICAL**

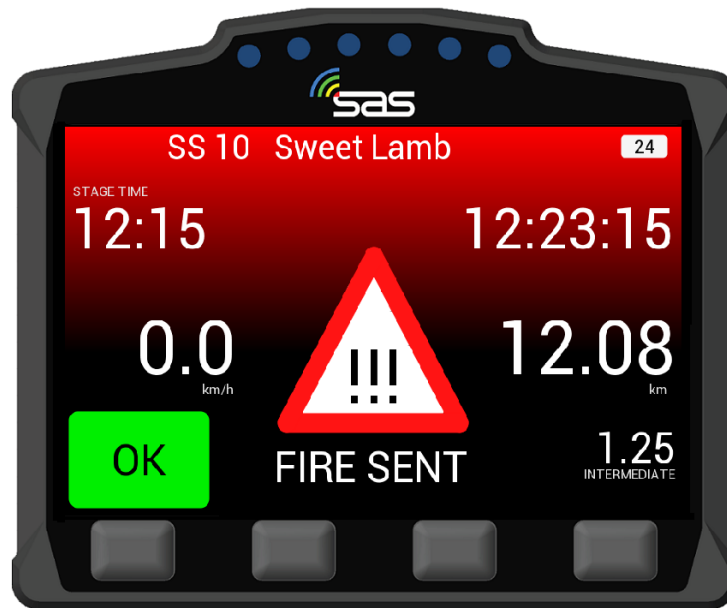


SCREEN 17: SOS confirmation (Fire or Medical)

If a SOS (Fire oder Medical) has been confirmed by the driver **Screen 18** (Medical Sent) or **Screen 19** (Fire Sent) will be displayed on your unit.



SCREEN 18: SOS confirmed, MEDICAL Assist required



SCREEN 19: SOS confirmed, FIRE Assist required

Regardless of whether you have pressed the **SOS**-, **FIRE**- or **MEDICAL**-Button it is always possible to lift the emergency again. All you have to do is to press the **“OK”**-Button [SCREEN 18 & 19].

After selecting **„OK“** you’ve to confirm again [SCREEN 20].



SCREEN 20: Question: “Downgrade SOS? – answer still necessary

The same applies if you first pressed the **OK**-Button. Here, too, an emergency can be activated retrospectively by pressing the **SOS**-Button [SCREEN 15 & 16].

If the vehicle is involved in an accident with high G-forces, an automatic SOS message is sent and displayed on the unit. This message can be cancelled by pressing the **„CANCEL“** -Button and thus can be converted to an **„OK“** [SCREEN 17].

5. CAR TO CAR COMMUNICATION

5.1 Receiving Hazards

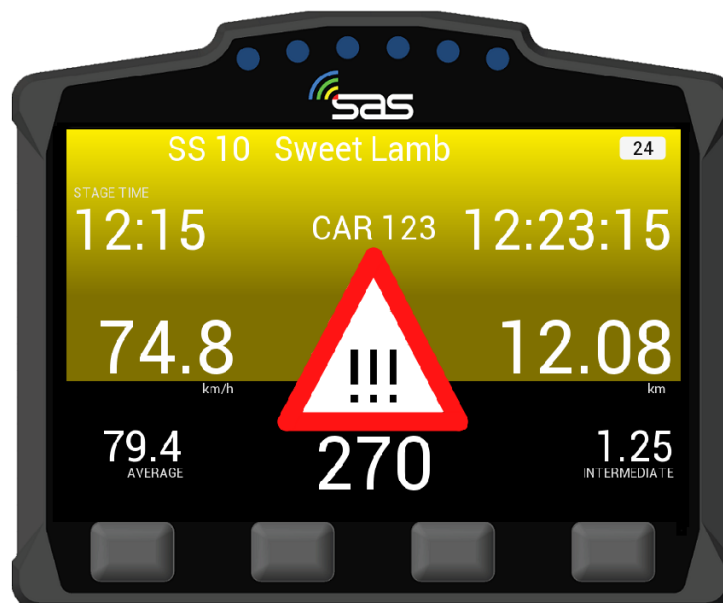
Approaching vehicles can receive following warnings:

1. Vehicle is on / next to the road – Status not confirmed **HAZARD** [SCREEN 21]
2. Vehicle is on / next to the road – Status **OK** [SCREEN 22]
3. Vehicle is on / next to the road – Status **SOS** [SCREEN 23]

If you approach to a vehicle that is in front of you and that's on or next to the route a warning triangle and the status of the vehicle are automatically displayed.

In this case, the drivers involved in the accident did not issue an „SOS“ or give an „OK“.

The vehicle may be blocking the road. Proceed with caution as you may come across a fully or partially blocked road [SCREEN 21].



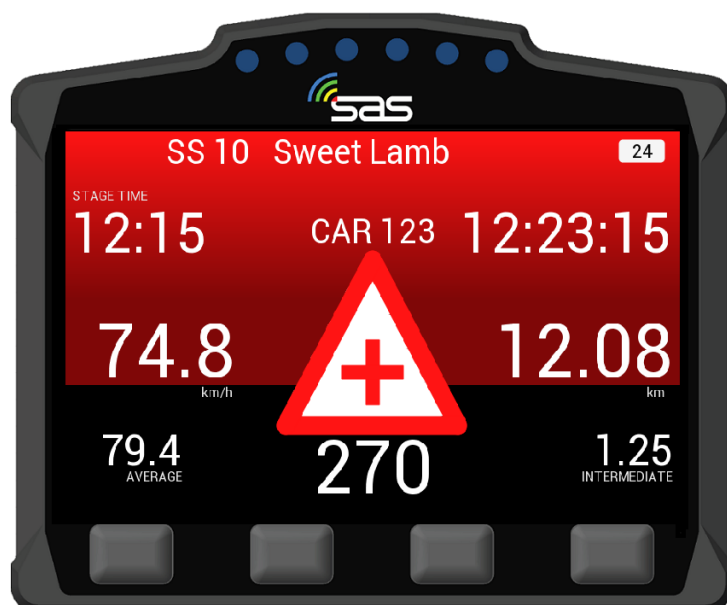
SCREEN 21: Hazard – Vehicle is on / next to the road – Status not confirmed **HAZARD**

If you approach to a vehicle that is in front of you and that's on or next to the route a warning triangle and the status of the vehicle are automatically displayed.
In this case, the drivers involved in the accident did send an „OK“.
The vehicle and crew ahead are OK and in a safe place, you may proceed [SCREEN 22].



SCREEN 22: Vehicle is on / next to the road – Status **OK**

If you approach to a vehicle that is in front of you and that's on or next to the route a warning triangle and the status of the vehicle are automatically displayed.
In this case, the drivers involved in the accident did send a „SOS“. The crew signaled that they and the vehicle are NOT OK and need assistance.
Please activate normal event emergency proceedings as per SOS situations [SCREEN 23].



SCREEN 23: Vehicle is on / next to the road – Status **SOS**

Note:

Hazard warnings run in conjunction with existing safety systems. **You must show OK and SOS boards and place the red triangle as written down in the regulations.**

5.2 Push to Pass

The push to pass function allows a car behind to alert a vehicle in front they have caught them on stage and wish to overtake safely. This function will only present if enabled for the event.

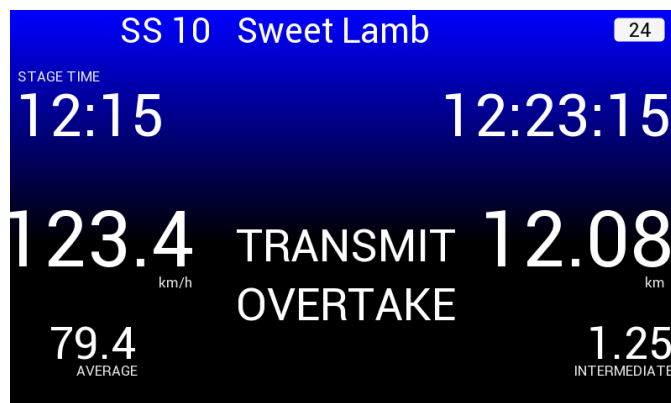
To activate this function you have to press the button under the **“PASS “** section [SCREEN 24].



SCREEN 24: Push to pass – send overtake

The unit of the vehicle that has chosen to overtake the preceding car will display **“Transmit Overtake”** [SCREEN 25]

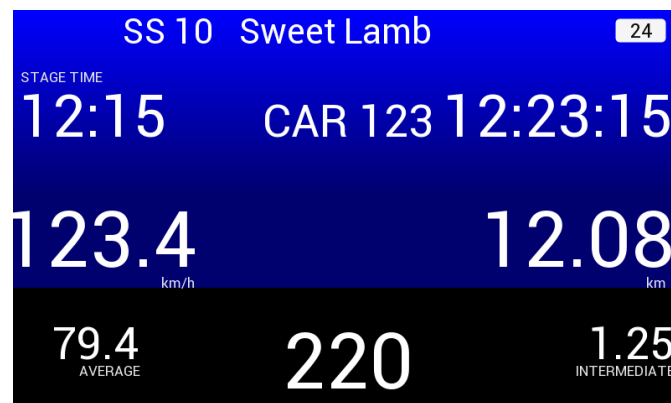
(NOTE: This will only function correctly when the vehicle ahead is within a preset range).



SCREEN 25: Transmitting Overtake

On the screen of the preceding vehicle's unit the competitor will see a blue colored unit, showing that a vehicle wishes to overtake them **[SCREEN 26]**.

In this case car 123 wants to overtake and is about 220 meters behind.



SCREEN 26: Receiving Overtake

The button should only be used when you are in the situation of requiring to pass. Seeing a car in the distance is not that situation. When receiving the Pass notification, check your mirrors!

The feature can be disabled remotely if it is abused.

6. STAGE RED FLAGGED

In case of a serious incident (e.g. accident with high G-forces), the special stage can be cancelled by Race Control.

The **RED FLAG** is displayed on the entire screen until it is confirmed by the driver.

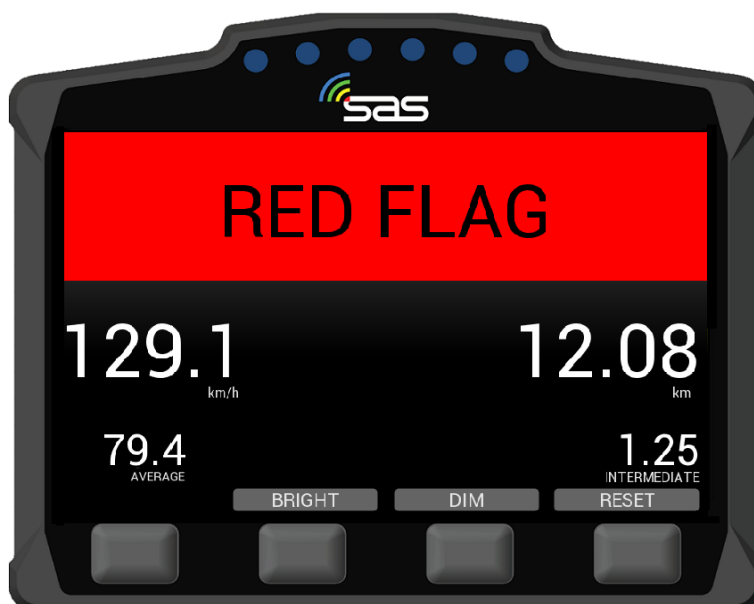
YOU MUST confirm the display of the RED FLAG by pressing the leftmost button under „**ACKNOWLEDGE**“ within one minute [SCREEN 27]!

If RED FLAG is displayed you must adapt your driving style and reduce speed in accordance the the DMSB Rally Regulations and / or the Supplementary Regulations.



SCREEN 27: RED FLAG & Acknowledgement)

After the RED FLAG is displayed the regular stage mode options are displayed on the screen with a red warning [SCREEN 28].



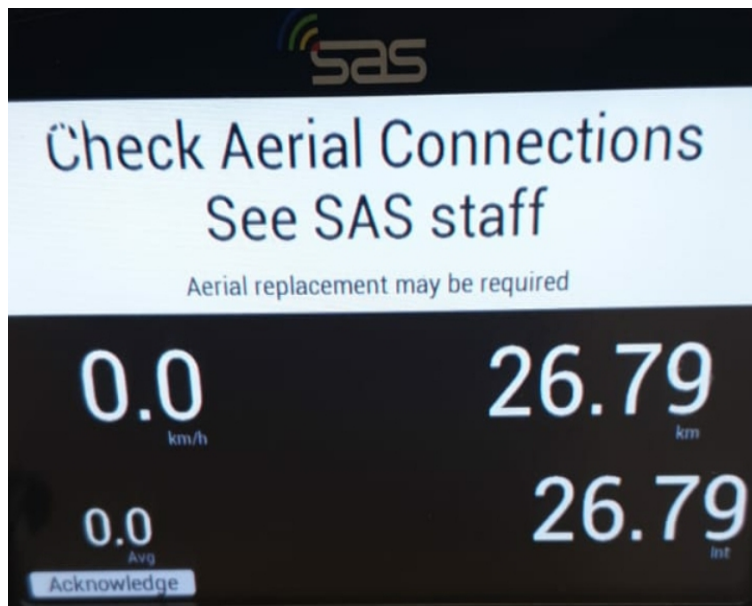
SCREEN 28: RED FLAG in a special stage mode

7. MISCELLANEOUS

In addition to any safety warnings and given information's mentioned above, other display can also appear on the unit. These provide you with instructions for the proper functioning of the system and thus for your own safety.

1. Automatically generated notices:

If messages according to **SCREEN 29** and **SCREEN 30** appear, please contact **immediately!** the RallySafe-Crew:



SCREEN 29: Contact RallySafe-Crew immediately!

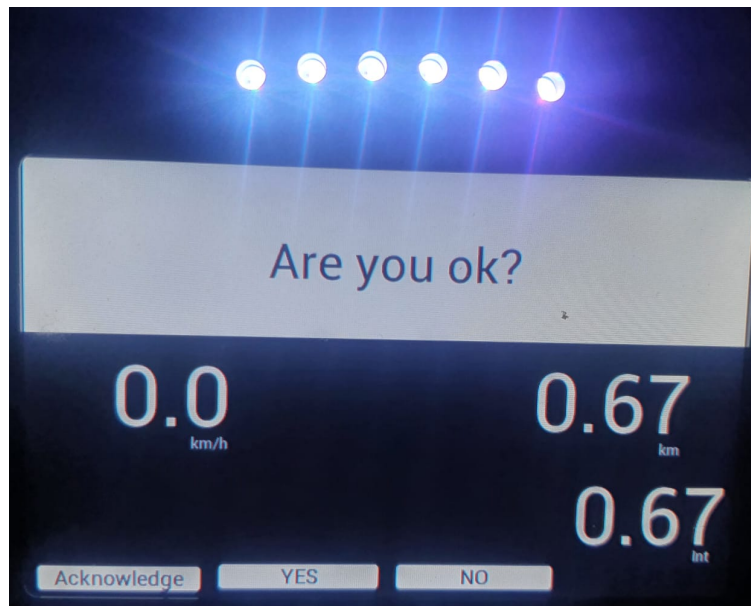


SCREEN 30: Contact RallySafe-Crew immediately!

In case of the „**Power Loss**“ display [**SCREEN 30**] the unit is operated by the internal battery. You must check as soon as possible why the unit has no external power supply and reconnect immediately! The internal battery has a short runtime.

2. Manually generated messages by Race-Control:

In addition to automatically generated messages Race-Control can also send you individually / manually generated short messages **[SCREEN 31]**.



SCREEN 31: Example for a individually / manually message
Question: „Are you OK?“ – answer still necessary

The individually / manually notifications are used for direct communication and normally take place in case of an incident.

Race-Control would like to use all the transmitted data / information's to get as comprehensive a picture of the situation as possible, so that appropriate measures can be taken quickly and efficiently.

Pleas also pay attention to the display of the unit after an incident / after leaving the vehicle / the location. Thank you very much!

APPENDIX

RallySafe – Introduction

<https://www.youtube.com/watch?v=tMHMg0E7XUk>