



RallySafe Tracking and Car to Car Status Alerts

Pacific Forest Rally, Kananaskis Simplified Rally, Big White Rally

About the System

RallySafe is a vehicle to vehicle communication system that automatically transmits warnings and vehicle status data from car to car and to Race Control as quickly and efficiently as possible. We urge you to educate yourself on the system by watching the training video at

https://youtu.be/41iwe92_kR0

The use of RallySafe for these events was based on their use of a reliable satellite radio network, the system's ability to relay status and location through following cars if needed, the ability of the units to give advance warning to oncoming cars of an incident on stage, and the 'push to pass' feature that will let a slower car know you are behind them and want by.

Installation of the System

There is a detailed installation guide attached, here are some KEY items you should be aware of.

Installation Kit: You will receive a kit that consists of external and internal antennas, the wiring needed, and a 'roll cage' mount. This needs to be installed in the car before tech inspection. The units use a standard 1" RAM ball mount if you want to prepare your car ahead of time and use a better mounting location.

FULL TIME Power: The units need to run full time power, not switched power. The power lead for the unit is about a half metre long, and relatively small wire, so you may have to run power wires before final fitting of the unit. ***If you are planning on entering either of the other events running Rally Safe, you probably want to install a power lead with a proper connector in your car and then just add the connector to the RallySafe power lead.***

Unit Placement: The ideal location for the unit is in the centre of the car, but that may not be possible with a roll cage mount. **It is crucial that the unit is visible to the co-driver while on stage.** Placement should be above the top of their pace note books when reading them, but not so high that their helmet visor blocks the display.

Understanding the Display

It is important to understand that RallySafe does NOT replace the normal triangle procedure. You must still display an OK sign if you are OK and you must still SEE and OK sign before continuing past a car stopped on stage. When you approach a car stopped on stage, here are the warnings you will see.

OK (Green): This means the car is not blocking the stage, and the crew are OK. You need to see the crew display an OK sign before continuing.

Hazard (Yellow): This means there is a Hazard on the stage ahead. **This COULD mean the stage is completely blocked** and you may have to stop. You need to see the crew display an OK sign before continuing. *This is the default status when a car stops on stage.*

S.O.S. (Red): This means the crew is **NOT OK and needs help. YOU MUST STOP.** The SOS is automatically selected in a high energy impact. **If you are the first car to stop at a SOS and confirm it is a RED CROSS situation, manually upgrade to SOS status on your unit as well.** Select Fire or Medical as required by the incident. Continue following normal Red Cross procedures and send information on to the next radio point.

Pass Request (Blue): A car has caught up to you and is requesting that you let them by. Use common sense and move over when it is safe to let them by.

Returning The Units

We will collect the units at the end of the event. Please be prepared to disconnect the power wires to the unit and help us remove the antenna wiring. It will be dark, and we may not instantly know where the cables are routed.

Following Online

The events will be displayed on the RallySafe Website at <http://rallysafe.com.au>, as well as on their smart phone app. Unofficial stage times will be shown on the site as well.

Specific URLs will be distributed on Social Media closer to the event.

Disclaimer

This manual, the specifications and the material contained in it, as released by Status Awareness Systems and Rallysafe, is for the purpose of information only. Due to continuous ongoing development; information and specifications may change at any time without notice. Rallysafe and the companies that have contributed to it, shall not be liable for any use of the manual or information supplied.

The material contained in this manual is protected by copyright and other types of Intellectual Property Rights. The commercial exploitation of the material contained in this specification requires a license to such Intellectual Property Rights.

This manual may be utilized or reproduced without any modification, in any form or by any means, for informational purposes only. For any other purpose, no part of the specification may be utilized or reproduced, in any form or by any means, without permission in writing from Rallysafe.

The word Rallysafe and the Rallysafe logo are registered trademarks.

Rallysafe® Fitting Kit Components

The Rallysafe Fitting Kit includes:

- Rallysafe Installation and Fitting Kit Instruction Sheet;
- 2 in 1 Antenna with Leads (options for stick on or bolt on and lead length to be selected when ordering), with the bolt on type being the preferred method.
- Internal Wifi Antenna with lead (options of lead length to be selected when ordered)
- 6 – 24v hard wiring loom with plug (length selected when ordering to include 300mm spare cable at mounting point.)
- 1 Roll Cage Mount or 1 flat mount with 25mm ball joint (to be bolted through dash)
- 1 adjustable mount connector/knuckle (short of long to be selected when ordering).



(Contents may not be identical to the picture shown)

(The Rallysafe Display Unit is not a part of the fitting kit and will be available at documentation or scrutiny)

12 Volt Power Supply (Please read this carefully)

Rallysafe requires a continual reliable power supply from 9 to 28 volts DC, for your safety and continuity of service, it is imperative that the unit is connected to an un-switched supply on the battery positive terminal or the battery positive side of the isolation switch, insure that power is supplied to the unit at all times. Do not use an ignition switched power supply.

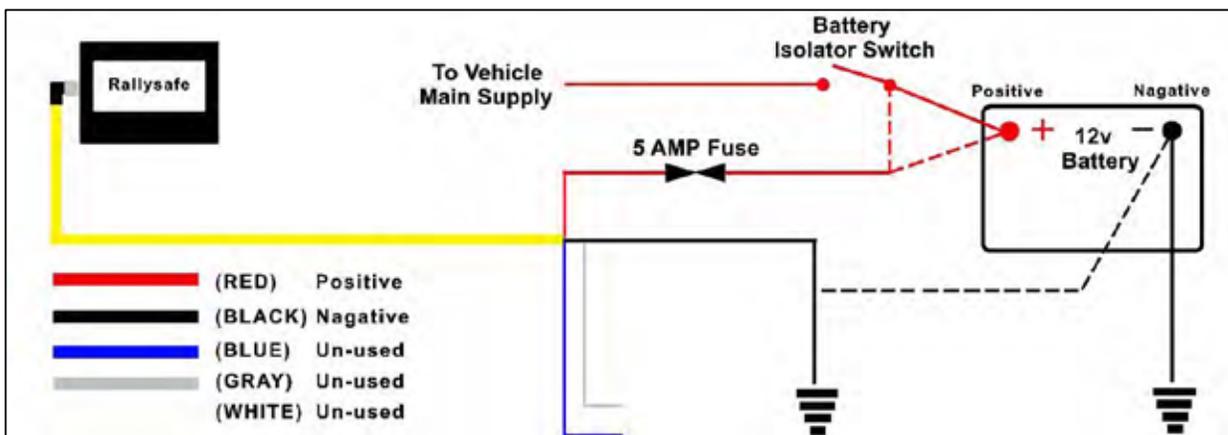
We recommend that a 5 amp (Max) blade type or similar quality fuse is used at the battery supply end of the Rallysafe power lead.

0 volts or Battery negative can be picked up at any suitable earthing point providing the isolation switch does not switch the negative side of the battery.

The Rallysafe unit has an internal battery that is kept charged via the cars power supply, it is only there as a reserve supply to power the unit in an accident situation where the cars power supply is interrupted. ie: car battery smashed or dislodged.

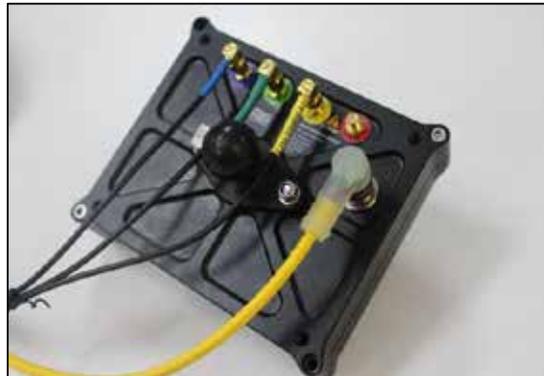
As the Rallysafe unit is aware of movement and its location; it will automatically go into power save/sleep mode 5 minutes after no movement is detected, however, the unit will continue to function is when it is sending Hazard type signals while on stage. The unit will be "woken" up by pressing any button or by movement of the car.

Connection Diagram.



Photos of Connections and Terminals

(Please note: Types of units may change; Aerial Leads/Colour Coding will always be the same)



A minimum of 300mm of Rallysafe Power Supply Cable and Antenna Leads should be left at the unit mounting bracket location for connection to the unit.



The Antenna leads are connected as follows. (There may be variations with the type and number of leads)

- 1: On the Internal Wifi Antenna, the lead labelled by the colour "Blue" is connected to the terminal labelled "WiFi" on the Rallysafe unit, (it is Right Hand Thread), terminals may be on the side or rear of the unit and or colour coded Blue.
- 2: The Satellite Antenna lead is connected to the centre or rear terminal labelled "IRI". It may also be colour coded Yellow; this may be not marked on the 2 in 1 antenna and is Left Hand Thread.
- 3: The GPS Antenna lead labelled "GPS", is connected to the terminal labelled "GPS" on the Rallysafe unit, (it is Right Hand Thread), terminals may be on the side or rear of the unit and or colour coded Green.
- 4: GSM, if optioned will have a small stick antenna supplied with the Rallysafe unit, and is connected to corresponding terminal labelled "GSM" on the Rallysafe unit, (it is Left Hand Thread), the terminal may be on the side or rear of the unit and or colour coded Red.

(Note: Internal WiFi is only marked by the colour "Blue", it is to be connected to the uppermost or rear terminal labelled "WiFi" on the RallySafe Unit).

Unit Mounting

The preferred mounting method for the RallySafe unit is on a Ram style 50mm x 75mm flat base with ball, bolted through the dash (with a 3mm aluminium backing plate), in a protected central location, easily seen and accessible by both the driver and co-driver/nav. Photographs of the best mounting options and positioning are below.

An alternative mounting method for the Rallysafe unit is on the roll cage forward leg on the Co-Driver's side on a Right Angle Rollcage Bracket with ball and Connector Clamp (also shown in photos above and below).

The Rallysafe unit should be mounted in a vertical (preferred) position where peripheral vision will catch screen warnings etc. Some Drivers prefer to have visual contact with the unit others prefer to let the Co-Driver view the screen and call the warnings as required.

These photos are an example of Preferred Method, Dash Board positioning.



These photos are an example Alternative Method of Roll Cage positioning.



Antenna installation

2 in 1 Bolt On: Preferred (see photo's below)

The antenna is mounted through a 12mm hole in a central location on the ROOF of the vehicle, preferably 50mm forward of the main Roll bar hoop allowing the cabling to pass through the roof and follow the cage bars back to the RallySafe unit location. In certain circumstances, an alternative style of antenna can be ordered that does not require a hole to be made through the roof. It is highly recommended that the normal 2 in 1 antenna be used, as it significantly improves communications. The antenna is a fully watertight unit which seals against the roof surface.

2 in 1 Stick on: Alternative

The antenna is to be mounted in a location on the ROOF of the vehicle preferably within easy cable reach of the final RS unit mounting position allowing the cabling to then pass through the door seal and follow the cage bars back to the RS unit location. The antenna is a fully watertight unit which seals against the roof surface. Cabling will need to be suitably taped and protected to the outside of the car.

Internal WiFi:

The Internal WiFi should be placed on the inside of the ROOF preferably 100mm behind the main hoop. The internal WiFi Antenna has a magnetic base with a double sided tape for adhesion, the cable is then to be run to the Rallysafe unit. *(Please keep cable inside roll cage so not to be crushed in the event of an accident.)*

Bolt On: (12mm Hole)



Stick On



Internal WIFI



Please don't hesitate to [contact](#) us if you have any questions regarding the installation and fitment of any components or the RallySafe unit.

Power Cable Conductor Specifications		Unit Power Consumption at 12 volts	
Number of Conductors	5	Power On – Transit Mode	0.200A
External Diameter	2.5mm	Power On – Transit Mode - Charging	0.300A
Material	Copper	Power Down – Sleep Mode	0.002A
Current Rating	5A	Transmitting Incident on Stage	0.250A

Good luck and safe racing from the team at RallySafe.