

RaliTripp®

User Booklet

RaliTripp®

This User Booklet is for Version 203 of the RaliTripp software

RaliTripp Tripmeter



RaliTripp Overview

Summary



**RaliTripp cannot
display Average
Speed in any way on
any screen**

- RaliTripp is an easy to use, but sophisticated, modern rally tripmeter with multiple trip distance and stopwatch readouts shown on a 5" colour and touch sensitive TFT display. RaliTripp has 9 main modes, each with a dedicated screen, targetted at a particular type of rally or for different parts of the same rally:
 - **Road** – for general road navigation, road sections between stages etc
 - **Rally** – for road rallies
 - **Regularity** – for regularity rallies or regularity sections in other rallies
 - **Jogularity** – for jogularity rallies or jogularity sections in other rallies
 - **Stage** – for stage rallies
 - **Due Time** – for seeing how early/late it is from a set due time
 - **Time** – for a simple display of rally time
 - **Totals** – for a simple display of total distances accumulated
 - **Service** – for service area timing.
- RaliTripp can be configured to “lock out” the display of speed and/or the “nudging” of stopwatches, ensuring it can be used on events that do not allow such features.
- Up to 4 sensors can be wired to RaliTripp at once, each with its own calibration value (up to 99,999 pulses per mile/km) and the displays can be switched on-the-fly to show distances in miles or kilometres, and speeds in mph or kph, without changing calibration values.
- There is a comprehensive set of easy to use screens to configure, for example, rally time, sensors and their calibration values, screen features, colours etc.
- An external remote switch unit minimises the need to touch RaliTripp during competitive sections. Optional, driver-oriented, colour TFT displays and remote units are also available.

RaliTripp Overview

Main Components

Power

Main battery



Auxiliary battery*



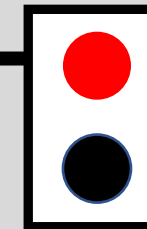
Main Display



Remote Display*

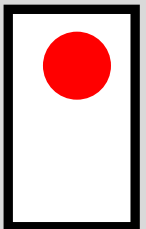


Remote Units



Navigator

and/
or



Driver*

Sensors (4 maximum)



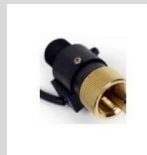
Sensor 1

Inductive Proximity



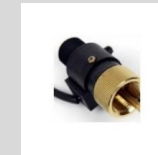
Sensor 2

Inductive Proximity



Sensor 3

Speedo/gearbox/pulse



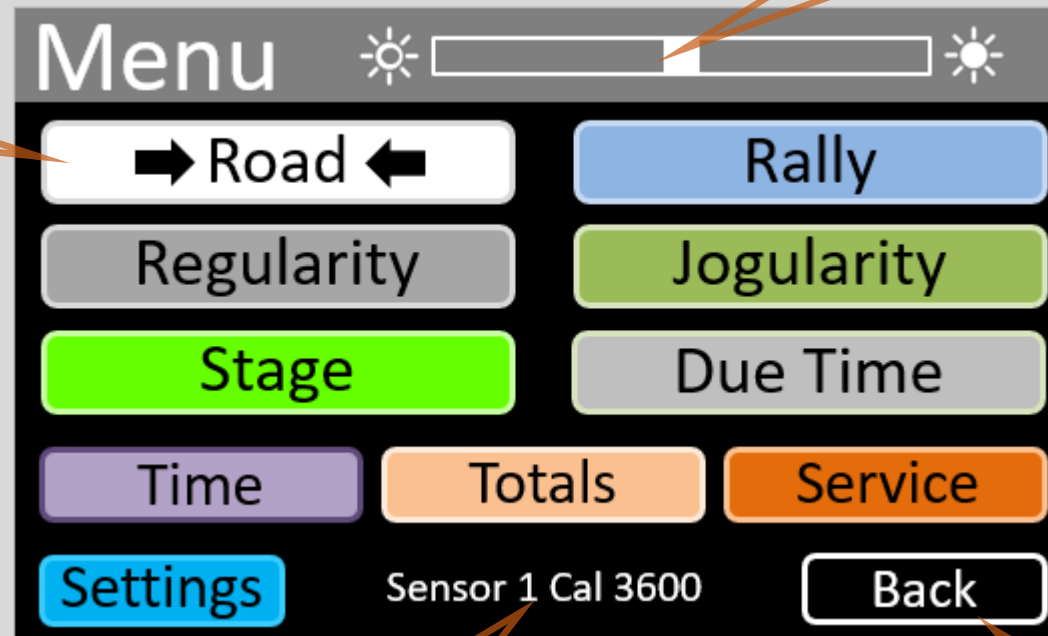
Sensor 4

Speedo/gearbox/pulse

(*) = optional

RaliTripp Overview

Menu



Press menu item to select current mode

Click/slide to change screen brightness

“Settings/Options - Menu”
can be used to select
which of the six top
modes are shown on the
menu

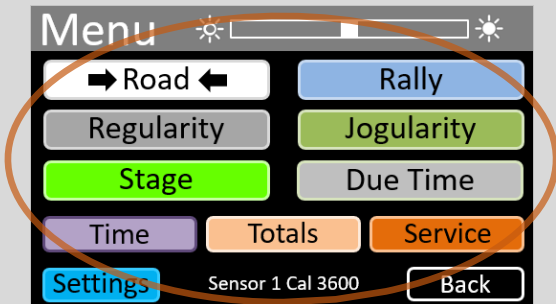
Current active sensor and
its calibration setting

Return to current mode

RaliTripp Overview

Current Mode

- RaliTripp always has a **current mode** – Road, Rally, Regularity, Jogularity, Stage, Due Time, Time, Totals or Service – which is selected from the main menu and indicated by the mode's menu button containing a pair of arrows
- The **current mode** always increments its trips (if it has any) when the vehicle moves, even if its main screen is not being displayed e.g. if the current mode is Road, and the rally time is being adjusted in the "Settings/Rally Time" screen, or the Service Setup screen is being used, the Road trips will continue to update in the background as the vehicle moves
- Modes other than the current mode** will also increment their trips when the vehicle moves, even if their main screen is not being displayed, if the "Mode is always active" option on their Options screen is set to yes. For example, if:
 - "Road Mode is always active" and "Stage Mode is always active" are both set to yes on their respective Options screens
 - ...then any distance accumulated on the Stage tripmeter, while it is the current mode, will also be accumulated on the Road trips even though they are not being displayed – and any distance accumulated on the Road trip, while it is the current mode, will also be accumulated on the Stage trip when it is active
- All stopwatches and clocks across the whole of RaliTripp run all the time, irrespective of which mode is current or which screen is being displayed



Common items - screen header

! Warning is for main battery only

Low main battery warning. Use "Settings/Options - General" to set low voltage value

Open the "Options" page relevant to the mode

! Simulated Speed is very useful in "getting to know" RaliTripp outside of the vehicle/an event. Toggling the speed between 0 and the set value can be used to simulate starting and stopping the vehicle

Simulated speed indicator. Use "Settings/Simulation" to turn on/off and set speed value. Press the button to toggle current simulated speed between 0 and the set value

Rally Time. Use "Settings/Options - Colours" to change between black and red

! Sensor input signals are ignored when in Simulated Speed mode

12:34:56     30 S1 mph

Current active sensor. Use "Settings/Select Active Sensor" to change OR press and hold to cycle around sensors S1/S2/S3/S4

FWD

!! A change of Trip direction affects all trips in all modes

HLD

A SHORT press on the remote unit BLACK button cycles the Trip direction for the whole of RaliTripp around FWD/HOLD/REV...

REV

!! ...unless the black button has been re-assigned in Regularity and Jogularity modes

Trip direction. Press on screen to cycle around FWD/HOLD/REV

! OR

Short press on remote unit black button to cycle around FWD/HOLD/REV



Current speed

!! RaliTripp can never display average speed

Current speed units. Use "Settings/Options - General" to change between mph/kph

Common items – main screen (1)

Long press on screen to
reset indicated values

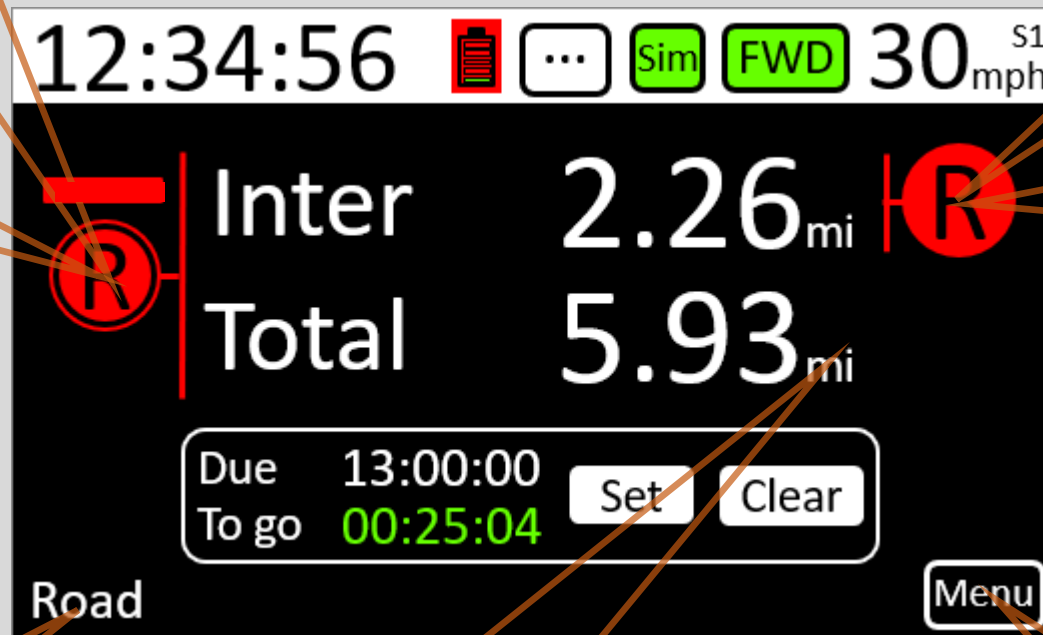
! OR

Long press on remote
unit red button to reset
indicated values



!! A LONG press on the remote
unit RED button activates any
“double ring” reset button

!! The red “countdown” bar
shows how long to go before
the reset takes place



Name of mode

Current distance units for trips.
Use “Settings/Options - General”
to change between mi/km

!! The sensors do not need to
be recalibrated when
changing between mi/km –
see FAQ

Short press on screen to
reset indicated values

! OR

Short press on remote
unit red button to reset
indicated values



!! A SHORT press on the remote
unit RED button activates
any “solid” reset button

Open “Menu” screen

Common items – main screen (2)

Trip values. Use **"Settings/Options - General"** to change between showing 1 or 2 decimal place. Use **"Settings/Options - Colours"** to change colour

Long press on screen to cycle around the sensors i.e. S1/S2/S3/S4

! Trip values go up to 999.99 then rollover to 0.00

! When Trip values go over 99.99 they are displayed to one decimal place

! Can also use **"Settings/Select Active Sensor"** to change the active sensor



"Function button". Press to perform the indicated function e.g. Zero the trip

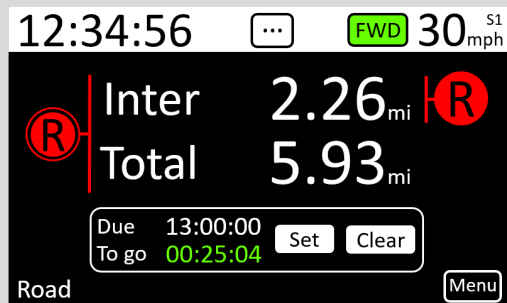
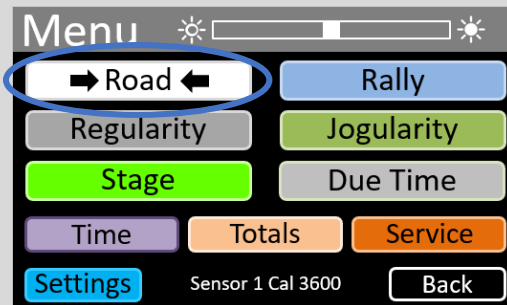
! Some function buttons e.g. **"Set"** open a new screen

Stopwatch values in mm:ss. Use **"Settings/Options - General"** to change between leading zeros being shown or not. Use **"Settings/Options - Colours"** to change colour

! Stopwatch values go up to 59:59, unless stated, then rollover to 00:00

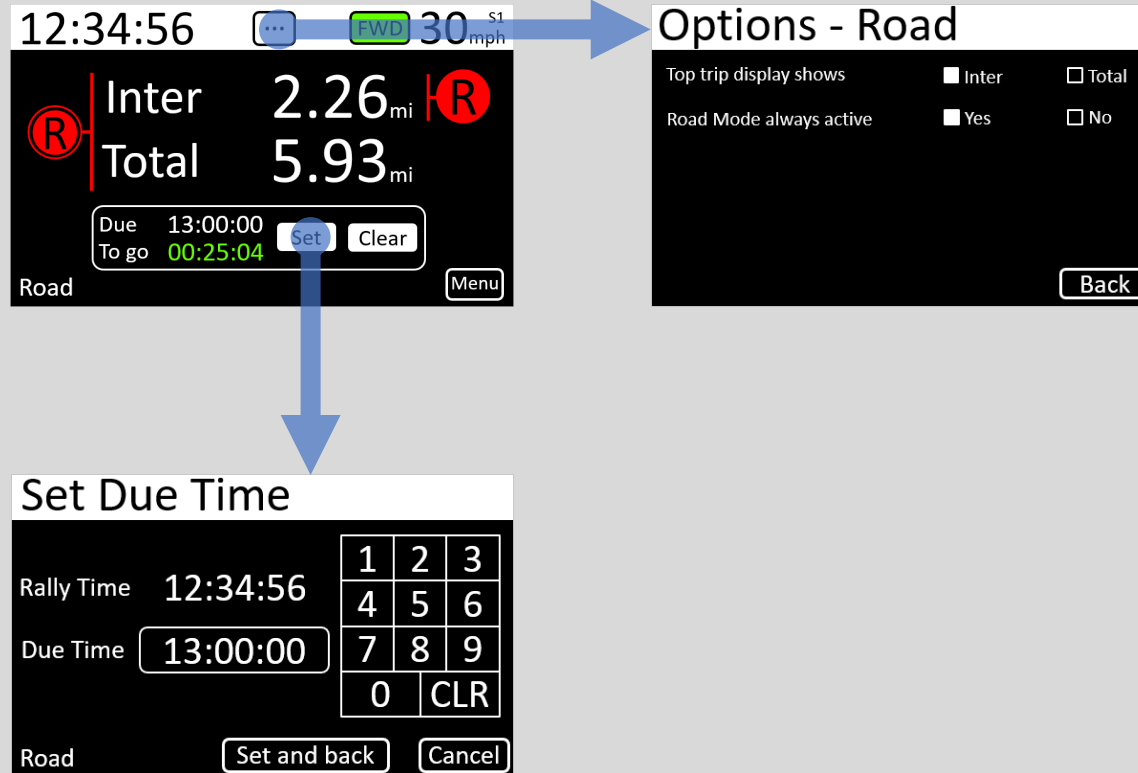
"Open button". Open a new screen relevant to current mode

Road Mode Overview



- **Road Mode** provides two independent trip distances and a countdown timer to a due time, for example, a stage arrival time, or a service park arrival time.
- The mode can be used on simple non-competitive touring events as well as between, for example, special stages on stage rallies, competitive sections on road rallies or regularity sections on regularity rallies.

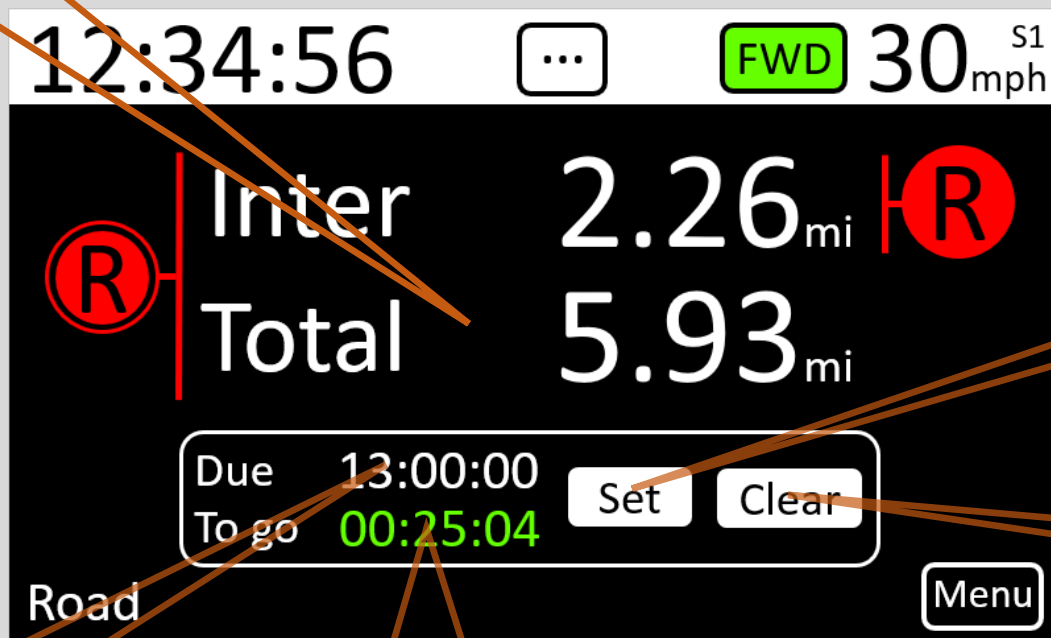
Road Mode Screen Navigation



Road Mode

Road

Use the "Options" screen to change the screen layout so that the Total trip is at the top



Open "Set Due Time" screen

Clear due and remaining times

Due Time – set in "Set Due Time" screen

Remaining Time i.e. Due Time – Rally Time

! Remaining Time is green if Due Time is "in the future", or red if Due Time is "in the past"

! If Due Time is not set, the lower part of the Road mode screen on the Remote Unit is not shown

Road Mode

Set Due Time

Set Due Time

Rally Time 12:34:56

Due Time 13:00:00

1	2	3
4	5	6
7	8	9
0	CLR	

Road

Set and back

Cancel

Rally Time

Enter Due Time via
keypad keys

! Rally Time is continuously
updated

Due Time value
set via keypad

Set Due Time
to --:--:--

! --:--:-- indicates due time not
set; 00:00:00 indicates a due
time of midnight

Return to "Road"
screen, setting Due
Time

Return to "Road"
screen without
setting Due Time

Road Mode Options

The top trip on the
"Road" screen shows
the Intermediate trip

The "Road" trip, and
the Road total on the
"Totals" page, always
accumulate distance,
even if Road is not the
current mode

Options - Road

Top trip display shows

☒

Inter

☐

Total

Road Mode always active

☒

Yes

☐

No

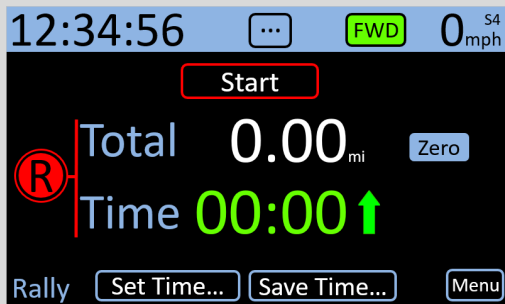
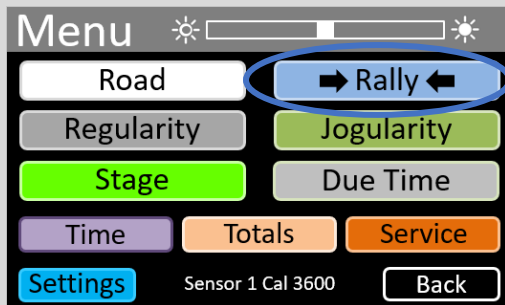
The top trip on the
"Road" screen shows
the Total trip

The "Road" trip, and
the Road total on the
"Totals" page, only
accumulate distance
when Road is the
current mode

Back

Return to "Road" screen

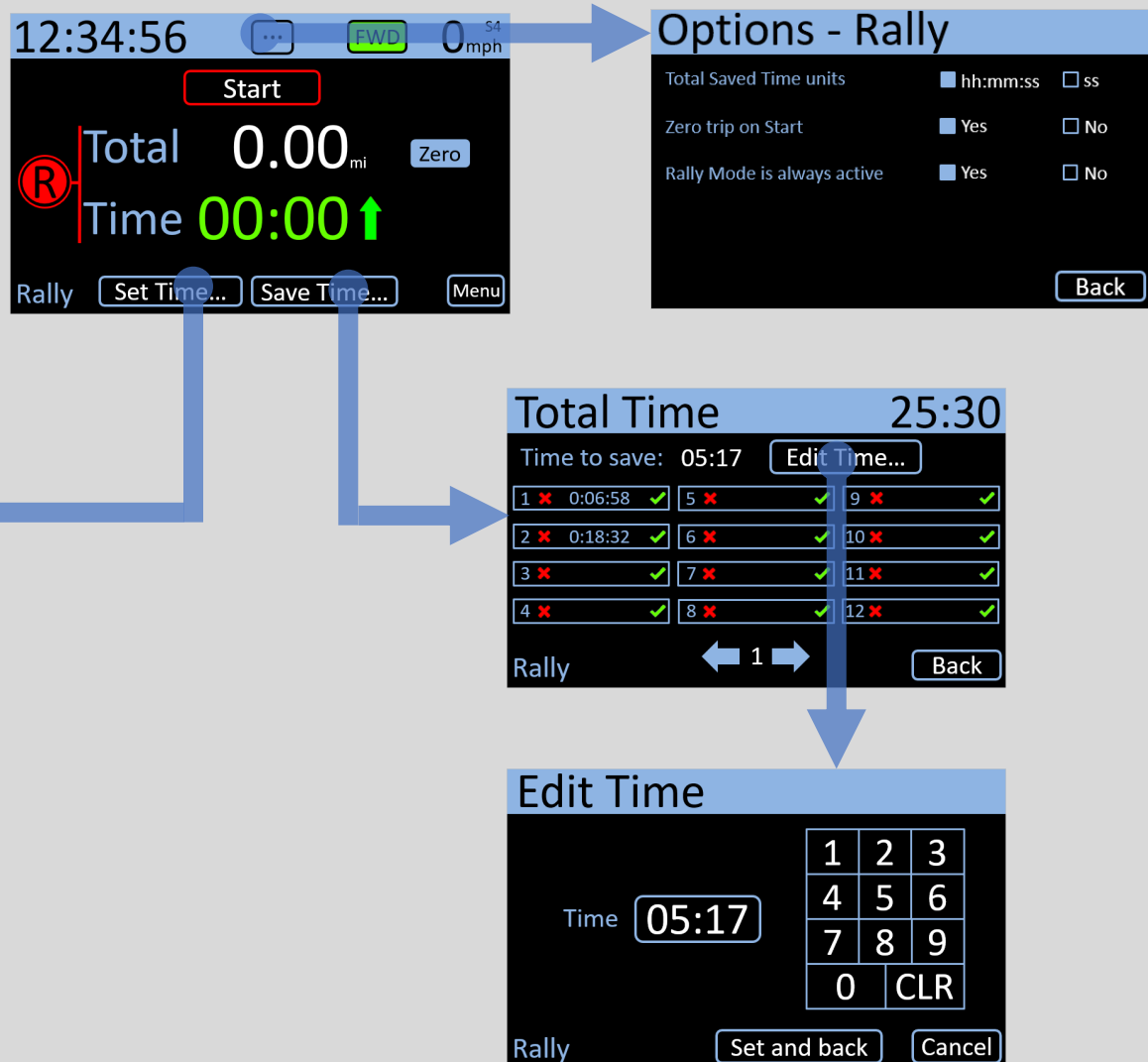
Rally Mode Overview



- **Rally Mode** provides a single tripmeter and stopwatch and is ideal for use on road rallies.
- The mode operates in a Start/Finish/Done cycle to allow easy timing of a competitive section.
- The stopwatch can be set to count down from a set time (e.g. the time allowed on a competitive section), or count up from zero.
- If the stopwatch is counting down and reaches zero, it then starts to count up (and is displayed in red), thus showing your “lateness” into the time allowed.
- The **Save...** button allows up to 36 stopwatch values to be saved, and auto-totaled on a separate screen.

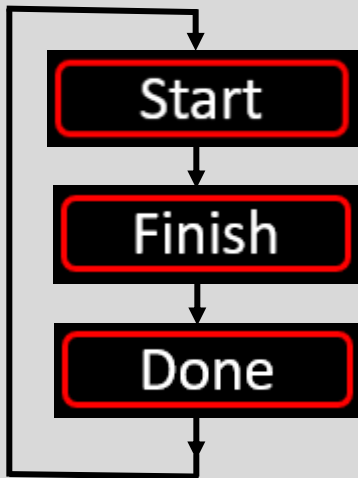
Rally Mode

Screen Navigation



Rally Mode

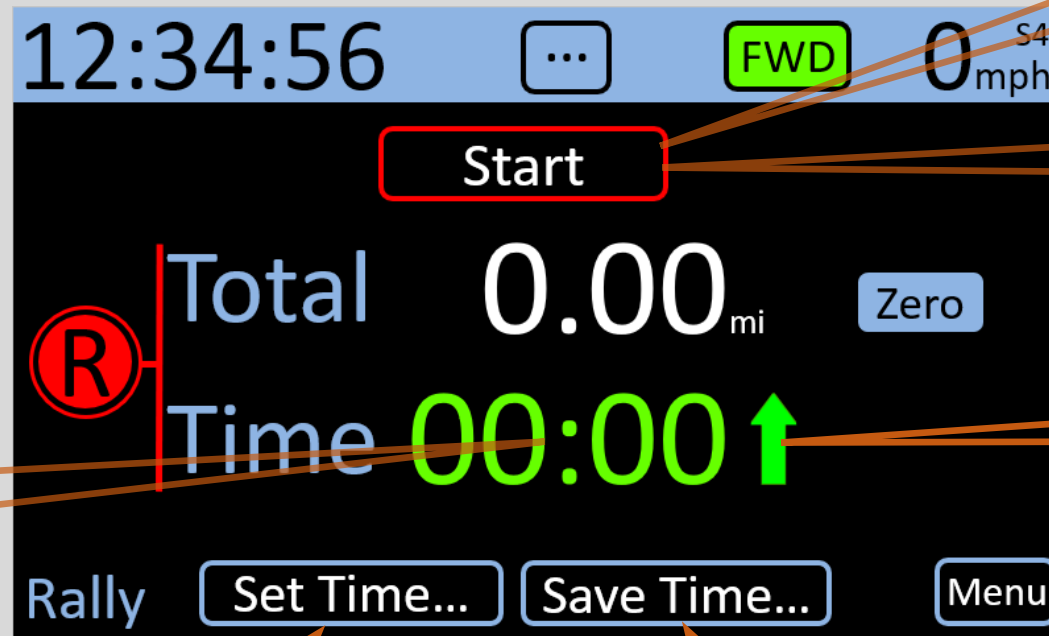
Rally



Start: Starts stopwatch, resets Total Trip if the corresponding option is set to “Yes”

Finish: Freezes Rally Time, Total Trip and Stopwatch*

Done: Unfreezes Rally Time, Total Trip and Stopwatch, zeroes Total Trip and Stopwatch



Stopwatch value.
Colour is red if
counting down and has
gone past 00:00:00

Open “Set Stopwatch” screen to
preset stopwatch value and
direction

Open “Save” screen to
save current stopwatch
value

Short press on screen to
cycle Start/Finish/Done

! OR

Short press on remote
unit red button to cycle
Start/Finish/Done

Stopwatch direction –
up or down

! Arrow is red if stopwatch has
gone past 00:00:00
(when counting down)

!! *Rally Time, Total Trip and
Stopwatch are light blue
when frozen

Rally Mode

Set Stopwatch

Set Time

Time **16:00**

Up ☒ Down ☐

Rally

1	2	3
4	5	6
7	8	9
0	CLR	

Set and back **Cancel**

Enter Stopwatch Time
via keypad keys

Stopwatch Time
value set via
keypad

Set Stopwatch
Direction to up

Set Stopwatch Time
to 0:00:00

Set Stopwatch
Direction to down

Return to **"Rally"** screen,
setting Stopwatch Time
and Direction

Return to **"Rally"** screen
without setting Stopwatch
Time or Direction

Rally Mode

Save Time

Initial stopwatch value from Rally mode main screen, or edited value after using "Edit Time" screen

Total of all saved times on all 3 pages i.e. total event time

Location/section number

Up to 36 saved times in 3 pages of 12

Delete time from location

Save time in location

Show previous 12 stored times

Show next 12 stored times

Open "Edit Time" screen to change time value to be saved

! "Edit Time" can be used to save real/notional/penalty times not measured on the Rally mode main screen

Return to "Rally" screen

Total Time 25:30

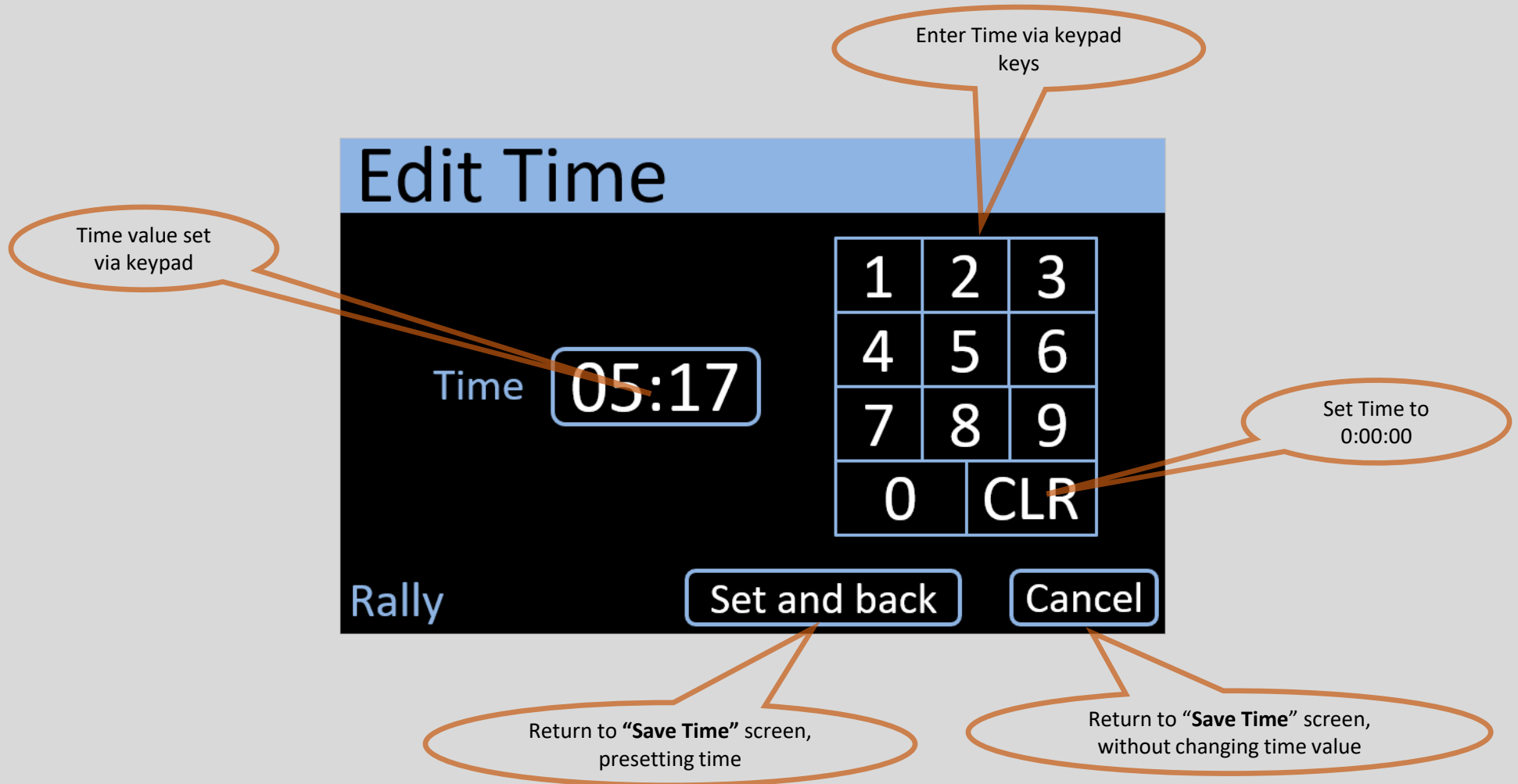
Time to save: 05:17 **Edit Time...**

1 ✖ 0:06:58 ✔	5 ✖ ✔	9 ✖ ✔
2 ✖ 0:18:32 ✔	6 ✖ ✔	10 ✖ ✔
3 ✖ ✔	7 ✖ ✔	11 ✖ ✔
4 ✖ ✔	8 ✖ ✔	12 ✖ ✔

Rally ← 1 → **Back**

Rally Mode

Edit Time



Rally Mode Options

Total time on "Save Time" screens is in hh:mm:ss

Trip is zeroed when Start is pressed on "Rally" screen

The "Rally" trip, and the Rally total on the "Totals" page, always accumulate distance, even if Rally is not the current mode

Total time on "Save Time" screens is in seconds

Trip is not zeroed when Start is pressed on "Rally" screen

The "Rally" trip, and the Rally total on the "Totals" page, only accumulate distance when Rally is the current mode

Return to "Rally" screen

Options - Rally

Total Saved Time units



hh:mm:ss



ss

Zero trip on Start



Yes



No

Rally Mode is always active



Yes

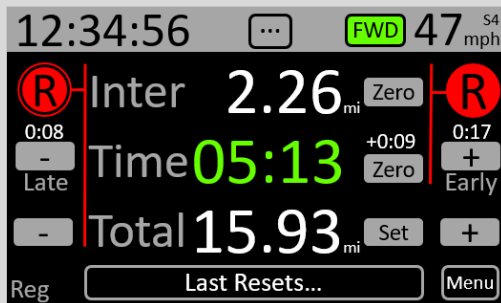
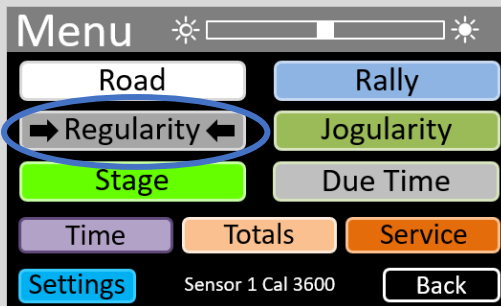


No

Back

Regularity Mode

Overview



- **Regularity Mode** is for regularity sections where one or more average speeds (calculated via displayed intermediate or total trips and stopwatch time, plus external “speed tables”) have to be maintained until a (normally “secret”) regularity time control or checkpoint is met.
- An intermediate stopwatch and an intermediate trip are shown, plus a total distance trip. The stopwatch and trip current values can be independently zero’d and frozen for a selectable time.
- On reaching a time control, the intermediate stopwatch and trip can be reset to zero at the same time and the intermediate stopwatch starts counting immediately, indicating the time taken for the next regularity section has already started. Optionally, the Rally Time and intermediate stopwatch can be frozen when reset is pressed, for a selectable preset time.
- The last 5 values of the intermediate stopwatch, the intermediate trip and the total trip are stored at the time of the reset and can be accessed from a “Last Resets” screen.
- The total trip and intermediate stopwatch can be “nudged” up or down to allow for roadbook or other measurement inaccuracies within a section. The total trip can also be set to a specific value if the number of “nudges” required to correct it are too large.

Regularity Mode Screen Navigation

12:34:56 FWD 47 ^{S4} mph

(R) Inter 0.00 mi **Rst** **(R)**

0:08 Late Time 0:00 **Rst** 0:17 Early

- Total 0.00 mi **Set** +

Reg Last Resets... Menu

Options - Regularity

Top trip display shows ☒ Inter ☐ Total

Rally Time freeze on reset 10

Inter freeze on Zero 0

Time freeze on Zero 0

Time reset value 0

← 1 → **Back**

Options - Regularity

Show Late and Early labels ☒ Yes ☐ No

Label order (left to right) ☒ E/L ☐ L/E

Regularity Mode is always active ☒ Yes ☐ No

Long Reset also acts on Road and Jogularity modes ☒ No ☐ Yes

← 2 → **Back**

12:34:56 30 ^{S4} mph

	Rally Time	Inter	Time	Total
3	12:22:11	4.95	08:11	6.00
2	12:14:10	1.05	02:10	1.05
1	12:12:00	0.00	00:00	0.00

Live Inter 1.03 Live Time 10:25 Live Total 7.03

(R) Last Resets **Back**

12:34:56 47 ^{S1} mph

Live Time 05:13

Live Total 15.93

Set New Total 16.10

1	2	3
4	5	6
7	8	9
0	CLR	

Reg **Set and back** **Cancel**

Options - Regularity

Remote button behaviour

(R) Restart Inter and Time from zero **(R)** Restart Inter from zero

(B) Rotate FWD/HLD/REV **(B)** Restart Time from zero

← 3 → **Back**

Regularity Mode

Main Screen



Number of seconds that the Intermediate Time will be set to. Use **"Options – Page 1"** to change the value

*Visual indications of time remaining until Rally Time, Inter trip and/or Intermediate Time unfreeze after reset. Use **"Options – Page 1"** screen to select the freeze time for each item*

!! The top to bottom order of the data is either Inter/Time/Total or Total/Inter/Time. Use **"Options-1"** to choose.

Number of minutes:seconds that Intermediate Time has been decreased by

Net number of seconds that Intermediate Time has been adjusted by

Number of minutes:seconds that Intermediate Time has been increased by

Manually decrease Intermediate Time by one second

Manually increase Intermediate Time by one second

Manually decrease Total Distance to next 0.01/0.1, depending on display settings

Manually increase Total Distance to next 0.01/0.1, depending on display settings

Open **"Last resets"** screen to show Rally Time, Intermediate Time and Intermediate Distance of last 5 resets

!! • The Rally Time, Inter trip and/or Intermediate Time will turn light blue during a freeze after a reset.

!! Stopwatch value goes up to 59:59 then rolls over to 00:00

!! The **"Last Resets"** label on the button changes to the Intermediate Trip and Time values on each **"reset"**. This allows reference to the key values for the last reset without pressing the button to go into the full Last Resets screen

Any freeze can be immediately removed by touching the screen near the frozen item

Main Screen – Nudge Lockout in place



When Nudge Lockout is in place, the buttons that manually increment/decrement the Intermediate Time, plus the indicators of how much the Intermediate Time has been changed are not available. However, there is an additional Stop/Go button that allows the Intermediate Time to be stopped and resumed from the same value



Stop/Go button for
Intermediate Time

Regularity Mode

Set Total Distance

Current value of
Intermediate Time on
"Regularity" screen

! Live Time is continuously
updated

Current value of
Total Trip on
"Regularity" screen

! Live Total is continuously
updated

New Total value
set via keypad

Enter New Total via
keypad keys

Set New Total to
000.00

Return to "Regularity" screen, setting Total
Trip Value to the New Total Trip value

Return to "Regularity" screen

12:34:56 47 S1 mph

Live Time 05:13

Live Total 15.93

Set New Total 16.10

Reg

1 2 3

4 5 6

7 8 9

0 CLR

Set and back Cancel

Regularity Mode

Last Resets

Intermediate Trip
Distance of last 5 resets

Intermediate Time of
last 5 resets

The left->right order of the
columns depends on the
top to bottom order
selected for the
"Regularity" screen

Rally Time of last 5
resets

	Rally Time	Inter	Time	Total
3	12:22:11	4.95	08:11	6.00
2	12:14:10	1.05	02:10	1.05
1	12:12:00	0.00	00:00	0.00

	Live Inter	Live Time	Live Total
R	1.03	10:25	7.03
Last Resets			
			Back

Reset Intermediate
Trip and
Intermediate Time

Use this to reset the
Intermediate Trip and
Intermediate Time without
having to return to the
"Regularity" screen

Current live value of
Total Trip on
"Regularity" screen

Current live value of
Intermediate Trip on
"Regularity" screen

Current live value of
Time on "Regularity"
screen

Return to "Regularity" screen

Regularity Mode

Options – Page 1

The top to bottom order of data on the Regularity screen is Inter/Time/Total

The top to bottom order of data on the Regularity screen is Total/Inter/Time

Amount of time that Intermediate Trip is frozen when "reset" is pressed

Amount of time that Intermediate Time is frozen when "reset" is pressed

Amount of time that Rally Time is frozen when "reset" is pressed

Options - Regularity

Top trip display shows	☒ Inter	☐ Total
Rally Time freeze on any reset	← 10	→
Inter freeze on reset	← 0	→
Time freeze on reset	← 0	→
Time reset value	← 0	→

← 1 →

Back

The value set into the Intermediate stopwatch when "reset" is pressed

Return to "Regularity" screen

Regularity Mode

Options – Page 2

"Late" and "Early" labels are shown – these are reminders for which watch nudge button to use if you are running Late or Early

"Early" label is shown on the left below the "-" nudge button; "Late" label is on the right

The "Regularity" trips, and the Regularity total on the "Totals" page, always accumulate distance, even if Regularity is not the current mode

A "Long Reset" in Regularity does not affect the trips on the Road and Jogularity screens

A "Long Reset" in Regularity also does a "Long Reset" on the trips on the Road and Jogularity screens

! Use this to manage a part of a rally where there is a Regularity and/or Jogularity section followed by a Road section but with one (continuing) set of total distances

"Late" and "Early" labels are not shown

"Late" label is shown on the left below the "-" nudge button; "Early" label is on the right

The "Regularity" trips, and the Regularity total on the "Totals" page, only accumulate distance when Regularity is the current mode

Return to "Regularity" screen

Options - Regularity

Show Late and Early labels	☒ Yes	☐ No
Label order (left to right)	☒ E/L	☐ L/E
Regularity Mode is always active	☒ Yes	☐ No
Long Reset also acts on Road and Jogularity modes	☒ No	☐ Yes

← 2 →

Back

Regularity Mode

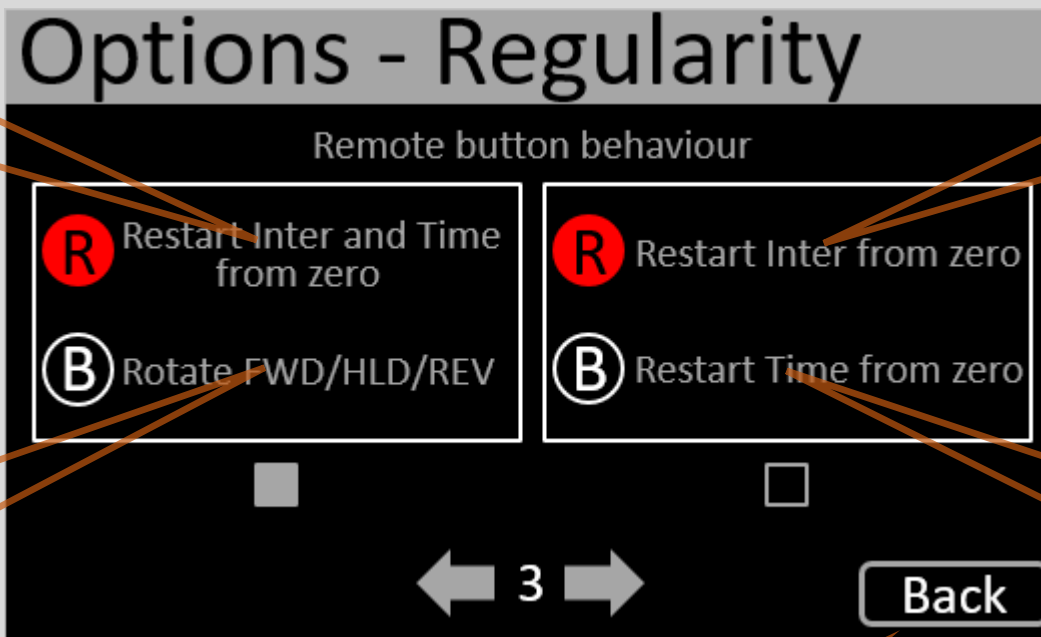
Options – Page 3

The remote buttons normally provide the same functionality as the screen buttons

This Option screen allows the remote buttons to have alternate functionality that may assist during a Regularity section

The remote unit red button does the same as pressing the short press red button on the Regularity screen

The remote unit red button restarts the Inter distance tripmeter from zero on the Regularity screen

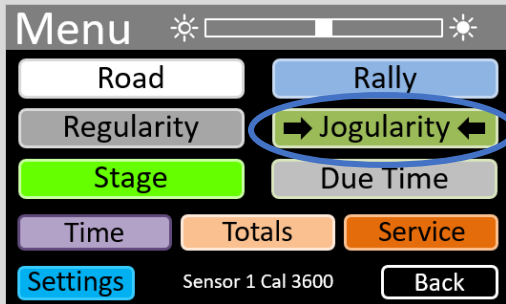


The remote unit black button does the same as pressing the FWD/HLD/REV button on the Regularity screen

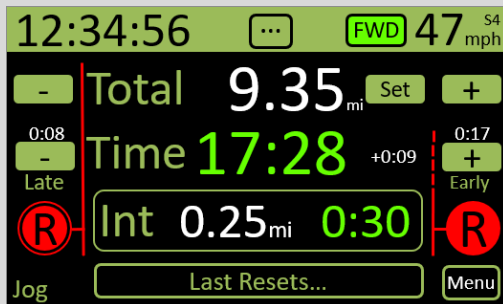
The remote unit black button restarts the Time stopwatch from zero on the Regularity screen

Return to "Regularity" screen

Jogularity Mode Overview



- **Jogularity Mode** is for jogularity sections where a table of distances, times and average speeds define how to travel across the jogularity section.
- A total trip and a total stopwatch are shown. An intermediate trip and stopwatch are also shown that can be used to help maintain the average speed according to the intermediate parts of the supplied jogularity table. Optionally, the Rally Time can be frozen when reset is pressed, for a selectable preset time.
- The last 5 values of the Rally Time, Total trip and total stopwatch are stored at the time of the reset and can be accessed from a “Last Resets” screen.
- The total trip and total stopwatch can be “nudged” up or down to allow for roadbook or other measurement inaccuracies within a section. The net and cumulative adjustments to the total stopwatch are shown to allow easy comparison with timing sheet entries. The total trip can also be set to a specific value if the number of “nudges” required to correct it are too large.



Jogularity Mode Screen Navigation

12:34:56 FW 47 ^{S4} mph

Total 9.35 ^{mi} Set **+**

0:08 **Time** 17:28 **+** 0:17
Late Early

Int 0.25 ^{mi} 0:30 **+**

Jog Last Resets... Menu

Options - Jogularity

Rally Time freeze on watch reset 10

Show Late and Early labels ☒ Yes ☐ No

Label order (left to right) ☒ E/L ☐ L/E

Remote display shows

- ☒ Total distance, Total time
- ☐ Inter distance, Inter time
- ☐ Total distance, Total time, Inter distance

← 1 → Back

Options - Jogularity

Jogularity Mode is always active ☒ Yes ☐ No

Long Reset also acts on Road and Regularity modes ☒ No ☐ Yes

← 2 → Back

12:34:56 ^{S4} 30 mph

	Rally Time	Total Distance	Total Time
3	12:22:11	4.95	08:11
2	12:14:10	1.05	02:10
1	12:12:00	0.00	00:00

Total 9.35 **Time** 17:28 **Int Total** 0.25 **Int Time** 0:30

Last Resets Back

12:34:56 ^{S4} 47 mph

Live Time 05:13

Live Total 15.93

Set New Total 16.10

Jog Set and back Cancel

Options - Jogularity

Remote button behaviour

After long red reset:
Restart Total and Inter Times from zero
Then:
Restart Inter Distance and Inter Time from Zero

After long red reset:
Restart Inter Distance from Zero
Then:
Restart Total and Inter Times from zero
Then:
Restart Inter Distance and Inter Time from Zero

← 3 → Back

Jogularity Mode

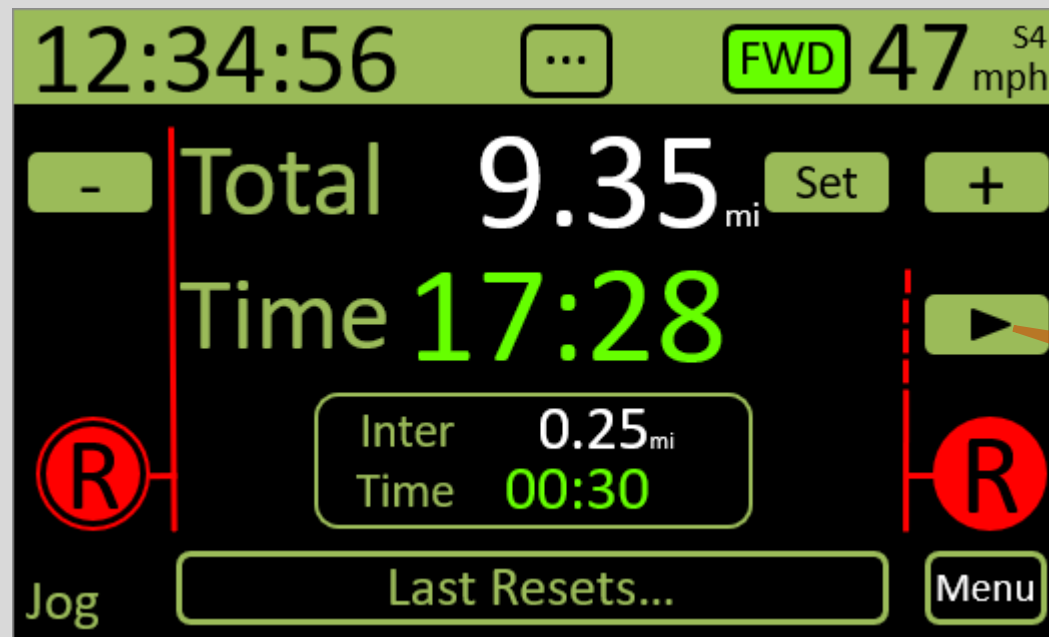
Main Screen



The "Last Resets" label on the button changes to the Total Trip and Time values on each "reset". This allows reference to the key values for the last reset without pressing the button to go into the full Last Resets screen

Main Screen – Nudge Lockout in place

- !! When Nudge Lockout is in place, the buttons that manually increment/decrement the Total Time, plus the indicators of how much the Total Time has been changed are not available.
- !! However, there is an additional Stop/Go button that allows the Total Time to be stopped and resumed from the same value



Jogularity Mode

Set Total Distance

Current value of Total Time
on "Jogularity" screen

Enter New Total Trip via
keypad keys

! Live Time is continuously
updated

Current value of
Total Trip on
"Jogularity" screen

! Live Total is continuously
updated

New Total value
set via keypad

12:34:56		47 ^{S4} mph												
Live Time	05:13	<table><tr><td>1</td><td>2</td><td>3</td></tr><tr><td>4</td><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td><td>9</td></tr><tr><td>0</td><td colspan="2">CLR</td></tr></table>	1	2	3	4	5	6	7	8	9	0	CLR	
1	2		3											
4	5		6											
7	8		9											
0	CLR													
Live Total	15.93													
Set New Total	16.10													
Jog	Set and back	Cancel												

Set New Total to
000.00

Return to "Jogularity" screen, setting Total
Trip Value to the New Total Trip value

Return to "Jogularity" screen

Jogularity Mode

Last Resets

Total Trip Distance of last 5 resets

Total Time of last 5 resets

Rally Time of last 5 resets

	12:34:56		30 ^{S4} mph
	Rally Time	Total Distance	Total Time
3	12:22:11	4.95	08:11
2	12:14:10	1.05	02:10
1	12:12:00	0.00	00:00
	Total	Time	Int Total
	9.35	17:28	0.25
			Int Time
			0:30
			Back

Reset Intermediate Trip and Intermediate Time

Use this to reset the Intermediate Trip and Intermediate Time without having to return to the "Jogularity" screen

Current live value of Intermediate Time on "Jogularity" screen

Current live value of Total Trip on "Jogularity" screen

Current live value of Total Time on "Jogularity" screen

Current live value of Intermediate Trip on "Jogularity" screen

Return to "Regularity" screen

Jogularity Mode

Options – Page 1

Amount of time that Rally Time and Total Time are frozen when "reset" is pressed

"Late" and "Early" labels are shown – these act as a reminder for which watch nudge button should be pressed if you are running Late or Early

"Early" label is shown on the left below the – nudge button; "Late" label is on the right

The remote display will show the Total trip and Total stopwatch

The remote display will show the Total trip, Total stopwatch and Inter trip

The remote display will show the Inter trip and Inter stopwatch

Options - Jogularity

Rally Time freeze on watch reset ← 10 →

Show Late and Early labels ☒ Yes ☐ No

Label order (left to right) ☒ E/L ☐ L/E

Remote display shows

- ☒ Total distance, Total time
- ☐ Inter distance, Inter time
- ☐ Total distance, Total time, Inter distance

← 1 →

Back

"Late" and "Early" labels are not shown

"Late" label is shown on the left below the – nudge button; "Early" label is on the right

Return to "Jogularity" screen

Jogularity Mode Options – Page 2

The “Jogularity” trips, and the Jogularity total on the “Totals” page, always accumulate distance, even if Jogularity is not the current mode

The “Jogularity” trips, and the Jogularity total on the “Totals” page, only accumulate distance when Jogularity is the current mode

Options - Jogularity

Jogularity Mode is always active ☒ Yes ☐ No

Long Reset also acts on Road and Regularity modes ☒ No ☐ Yes

← 2 →

Back

A “Long Reset” in Regularity does not affect the trips on the Road and Regularity screens

A “Long Reset” in Jogularity also does a “Long Reset” on the trips on the Road and Regularity screens

Use this to manage a part of a rally where there is a Jogularity and/or Regularity section followed by a Road section but with one (continuing) set of total distances

Return to “Jogularity” screen

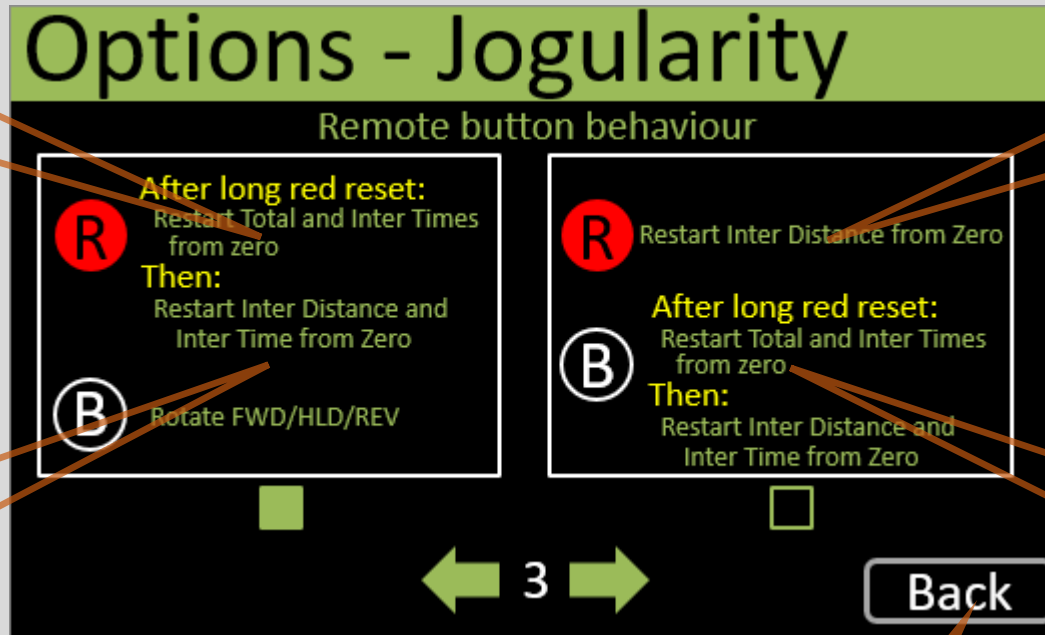
Jogularity Mode

Options – Page 3

The remote buttons normally provide the same functionality as the screen buttons

This Option screen allows the remote buttons to have alternate functionality that may assist during a Jogularity section

The remote unit red button does the same as pressing the short press red button on the Regularity screen



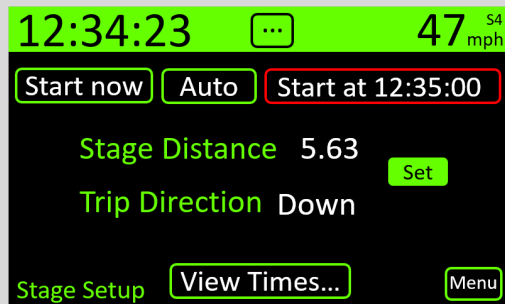
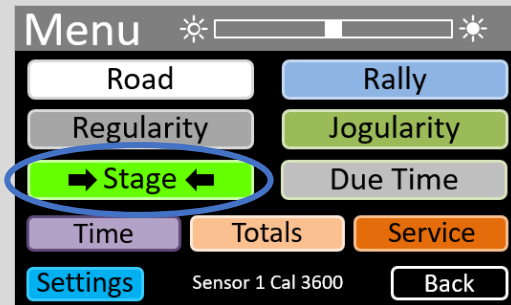
The remote unit red button restarts the Inter distance trip from zero on the Regularity screen

The remote unit black button does the same as pressing the FWD/HLD/REV button on the Regularity screen

The remote unit black button restarts the Time stopwatch from zero on the Regularity screen

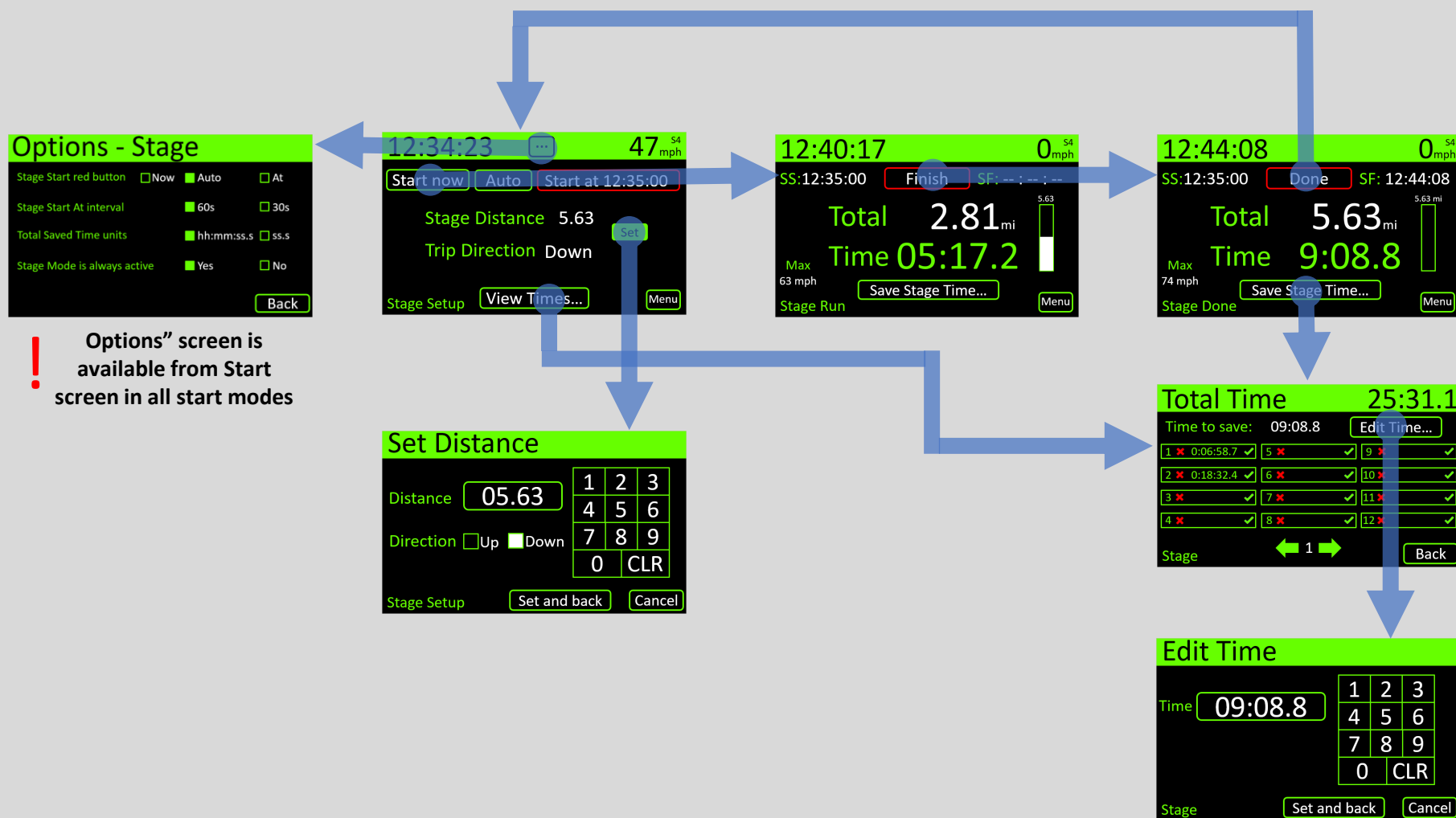
Return to "Jogularity" screen

Stage Mode Overview

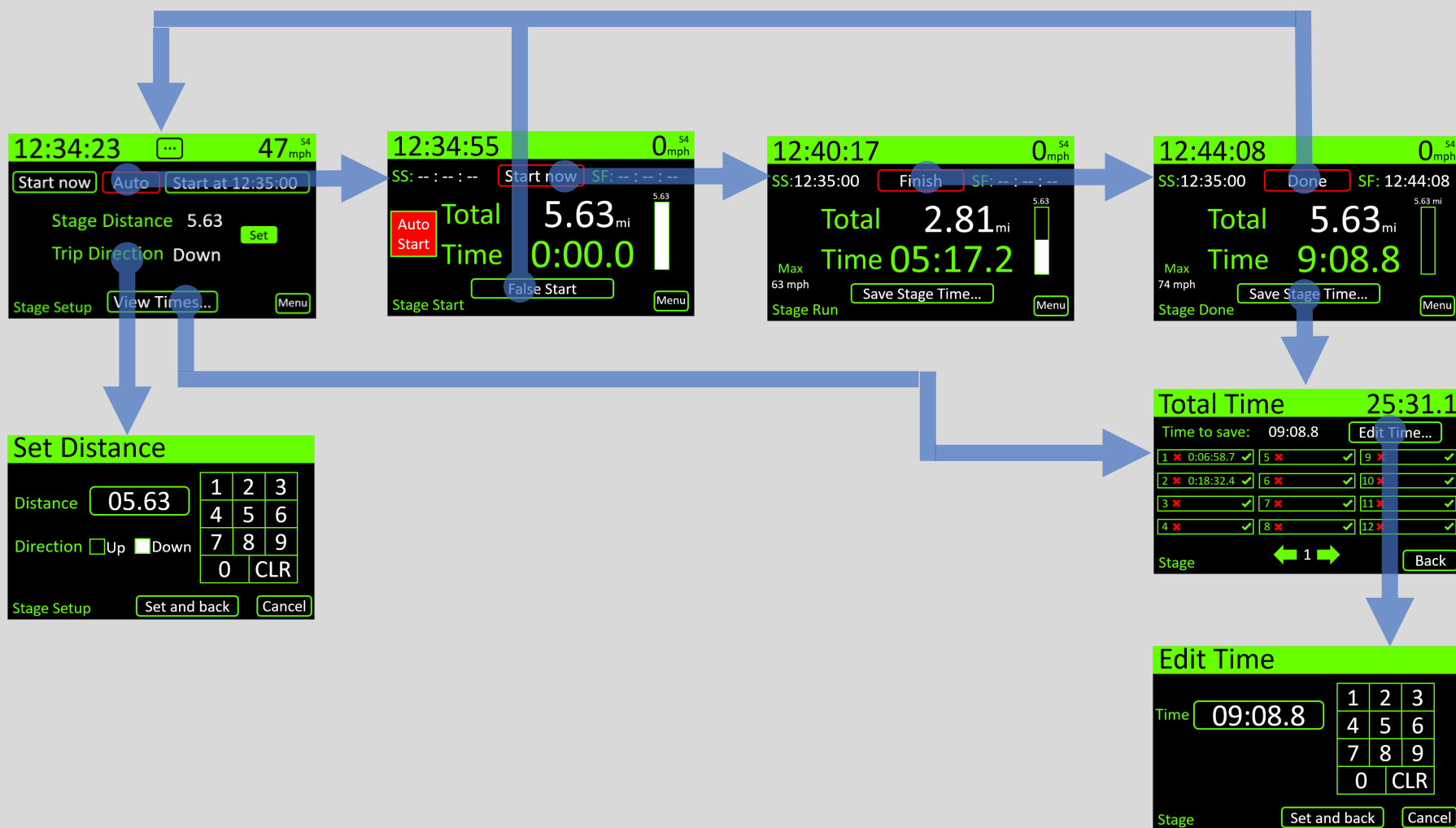


- **Stage Mode** provides a single trip distance and stopwatch for use on stage rally special stages. The mode is specially designed to be operated, optionally, via just the remote unit red button so that RaliTripp does not have to be touched at the start of the stage, while the stage is in progress or when crossing the flying finish line.
- The trip distance can count up from zero, or count down from the value indicated in the stage roadbook. The mode allows three ways for the stopwatch to be started – manually (“**Start Now**”), when the vehicle moves (“**Auto**”) or when a certain rally time is reached (“**Start At**”).
- If the vehicle “false starts” the stage timing can be abandoned any time within the first 10 seconds of the stage.
- Pressing the red button as the vehicle passes the flying finish will freeze the stopwatch, giving the measured stage time. The **Save...** button allows up to 36 stage times to be saved, and auto-totalled on a separate screen.

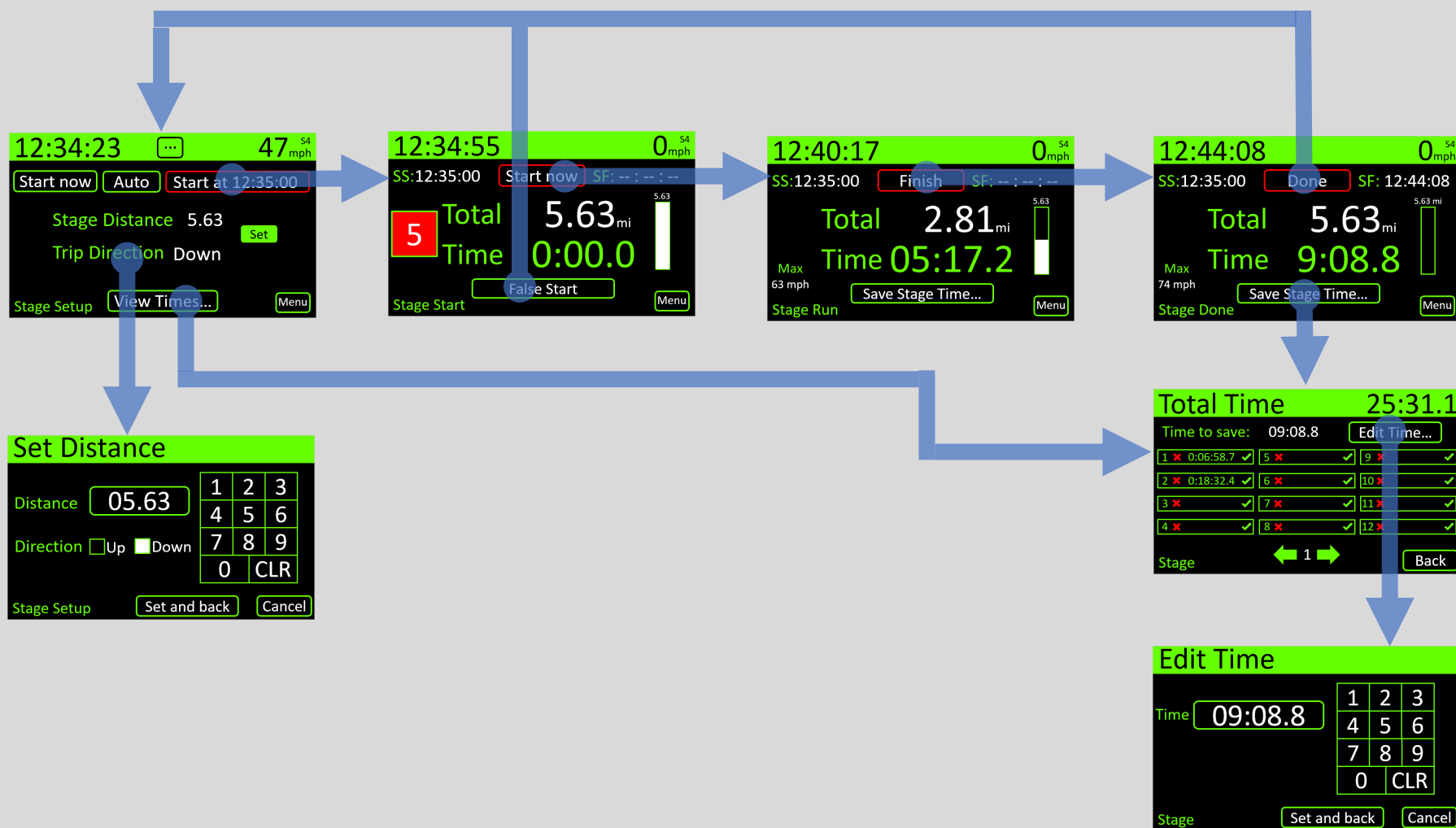
Screen Navigation – Start Now



Screen Navigation – Auto Start



Screen Navigation – Start At



Stage Mode Setup

Start the stage now - opens the "Stage in Progress" screen

Start the stage when the vehicle moves – opens the "Wait for Auto Start" screen

Start the stage stopwatch at the time shown – opens the "Wait for Start At" screen

The Start At time automatically changes to the next 30s/60s in front of Rally Time, depending on the value set in "Options"

Direction that the stage distance will change as the vehicle moves

The preset stage distance

Open the "Set Distance" screen to set the Stage Distance and Trip Direction

Optional – if not set, stage distance will be 0 and direction will be "up"

Open the "Save Time" screen

The button in the top line bordered in red can be actioned by pressing the screen or by a short press on remote unit red button. The button bordered in red can be changed in the "Options" screen

12:34:23 ... 47 S4 mph

Start now Auto Start at 12:35:00

Stage Distance 5.63

Trip Direction Down

Set

Stage Setup View Times... Menu

Stage Mode

Set Distance

Stage Distance value set
via keypad

Enter Stage Distance via
keypad keys

Set Distance

Distance

05.63

Direction

☐

Up

☒

Down

1

2

3

4

5

6

7

8

9

0

CLR

Set Stage Distance
to 000.00

Direction of Stage
Distance trip

Stage Setup

Set and back

Cancel

Return to "Start" screen,
setting Stage Distance and
Direction

Return to "Start" screen,
without setting Stage
Distance and Direction

Stage Mode

Wait for Auto Start



Start the stage now i.e. don't wait until vehicle moves - opens the "Stage in Progress" screen

Shows that the stopwatch will start when the vehicle moves

Preset stage distance

Shows that 100% of stage distance is still to go

Return to "Start" screen i.e. abandon the start

! The "Start now" button can be actioned by pressing the screen or by a short press on remote unit red button.

Stage Mode

Wait for Start Time

Stage start time – the time at which the stopwatch will start automatically

Start the stage now i.e. don't wait until the start time – opens the "Stage in Progress" screen



Preset stage distance

Timer showing the number of seconds to the stage start time

Shows that 100% of stage distance is still to go

When the timer reaches zero, the "Stage in Progress" screen opens automatically

The red background is only shown in the last 10 seconds of the countdown

Return to "Start" screen i.e. abandon the start

The "Start now" button can be actioned by pressing the screen or by a short press on remote unit red button.

Stage Mode

Stage in Progress



Stage start time

When the Rally Time is equal to the start time, the "Stage in Progress" screen opens automatically

Shows the maximum stage speed so far

Press when the stage is completed i.e. when passing the flying finish line – the distance and time are frozen and the "Stop Line" screen opens

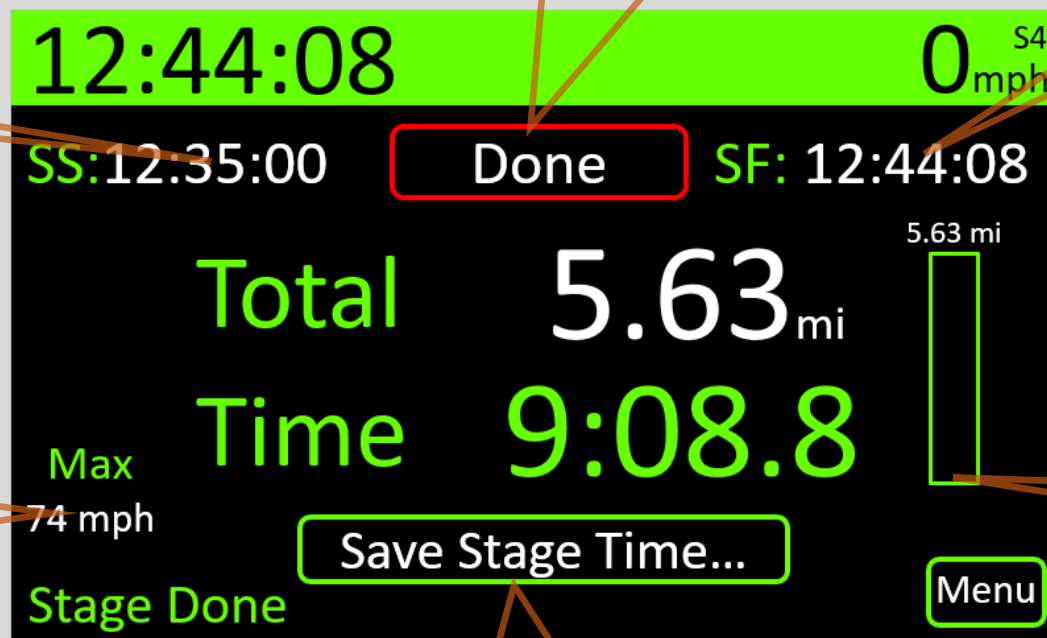
Shows that 50% of stage distance is still to go

Open the "Save Time" screen

The "False Start" label remains shown for the first 10 seconds, which if pressed, returns to "Start" screen i.e. abandons the stage start

The "Finish" button can be actioned by pressing the screen or by a short press on remote unit red button.

Stage Mode Stop Line



Open the "Save Time" screen

! The "Done" button can be actioned by pressing the screen or by a short press on remote unit red button.

Stage Mode

Save Time

Initial stopwatch value from Stage mode main screen, or edited value after using "Edit Time"

Total of all saved times on all 3 pages i.e. total event time. Use "Options" to show time in hh:mm:ss.t or ss.t

Location/stage number

Up to 36 saved times in 3 pages of 12

Delete time from location

Save time in location

Show previous 12 stored times

Show next 12 stored times

Open "Edit Time" to change time value to be saved

! "Edit Time" can be used to save real/notional/penalty times not measured on the Stage mode screen

Return to either the "Stage in Progress" or "Stop Line" screen

Total Time		25:31.1	
Time to save:		09:08.8	Edit Time...
1 ✖ 0:06:58.7 ✔	5 ✖	9 ✖	✔
2 ✖ 0:18:32.4 ✔	6 ✖	10 ✖	✔
3 ✖	7 ✖	11 ✖	✔
4 ✖	8 ✖	12 ✖	✔
Stage		1	Back

Stage Mode

Edit Time

Edit Time

Time **09:08.8**

Stage

1	2	3
4	5	6
7	8	9
0	CLR	

Set and back **Cancel**

Time value set
via keypad

Enter Time via keypad
keys

Set Time to
00:00:00

Return to the "Save Time"
screen, presetting time to
save

Return to the "Save Time"
screen without changing time
value to save

Stage Mode Options

The "Start Now" button on the Stage "Start" screen is highlighted in red

The "Auto Start" button on the Stage "Start" screen is highlighted in red

The "Start At" button on the Stage "Start" screen is highlighted in red

The next "Start at" time on the Stage "Start" screen adjusts to the nearest whole minute ahead of Rally time

The next "Start at" time on the Stage "Start" screen adjusts to the nearest whole minute or whole 30s ahead of Rally time

Total time on "Save Time" screens is in hh:mm:ss

Total time on "Save Time" screens is in seconds

The "Stage" trip, and the Stage total on the "Totals" page, always accumulate distance, even if Stage is not the current mode

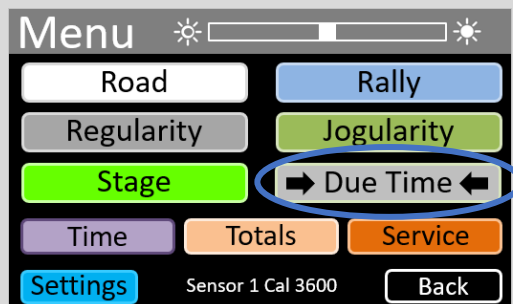
Return to "Start" screen

The "Stage" trip, and the Stage total on the "Totals" page, only accumulate distance when Stage is the current mode

Options - Stage

Stage Start red button	☐ Now	☒ Auto	☐ At
Stage Start At interval	☒ 60s	☐ 30s	
Total Saved Time units	☒ hh:mm:ss.s	☐ ss.s	
Stage Mode is always active	☒ Yes	☐ No	
Back			

Due Time Mode Overview



- **Due Time Mode** allows a hh:mm:ss due time to be easily entered/changed and shows how early/late it is from that due time. This mode is particularly useful for road rallies where successful results are achieved by arriving at controls on or at (but not before) a set of due times.
- The Up and Down screen arrows on the screen that set the due time can be pressed via the red and black buttons on the remote units, meaning the main unit rarely needs to be touched during competitive sections.

Due Time Mode Main Screen

Due Time

Focus indicator for the increase and decrease buttons

Press on the hours, minutes or seconds values to move the focus indicator

Stopwatch – shows the value of Rally Time minus Due Time (display only)

IF Due Time is greater than Rally Time, the Due Time/the stopwatch/the words “Early” are shown in green...
OTHERWISE
...the Due Time/the stopwatch/the words “Late” are shown in red

Hold/resume Rally Time, Due Time and Stopwatch

Displayed values are in light blue when held

Increase the Due Time value with the current focus

A SHORT press on the remote unit RED button can be used to operate this button. A LONG press will auto-increment the time value

Decrease the Due Time value with the current focus

A SHORT press on the remote unit BLACK button can be used to operate this button. A LONG press will auto-decrement the time value



Due Time Mode Examples

“Early”

i.e. Due Time is greater
than Rally Time



“Late”

i.e. Due Time is less than
or equal to Rally Time



The screen will automatically change from green
“early” times to red “late” times when the Due Time
is equal to Rally Time

Due Time Mode Options

If the stopwatch is showing "Early", the border is green

If the stopwatch is showing "Early", the border is red

If the stopwatch is showing "Late", the border is red

If the stopwatch is showing "Late", the border is green

If the stopwatch hours value is zero, the hours are shown as zeros

If the stopwatch hours value is zero, the hours are not shown

Options – Due Time

Border colour when EARLY

☒ Green ☐ Red

Border colour when LATE

☐ Red ☒ Green

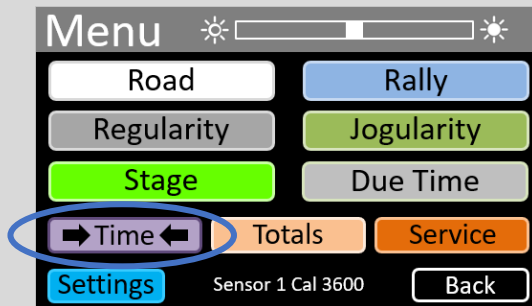
Suppress watch leading zero hours ☐ No

☐ Yes

Back

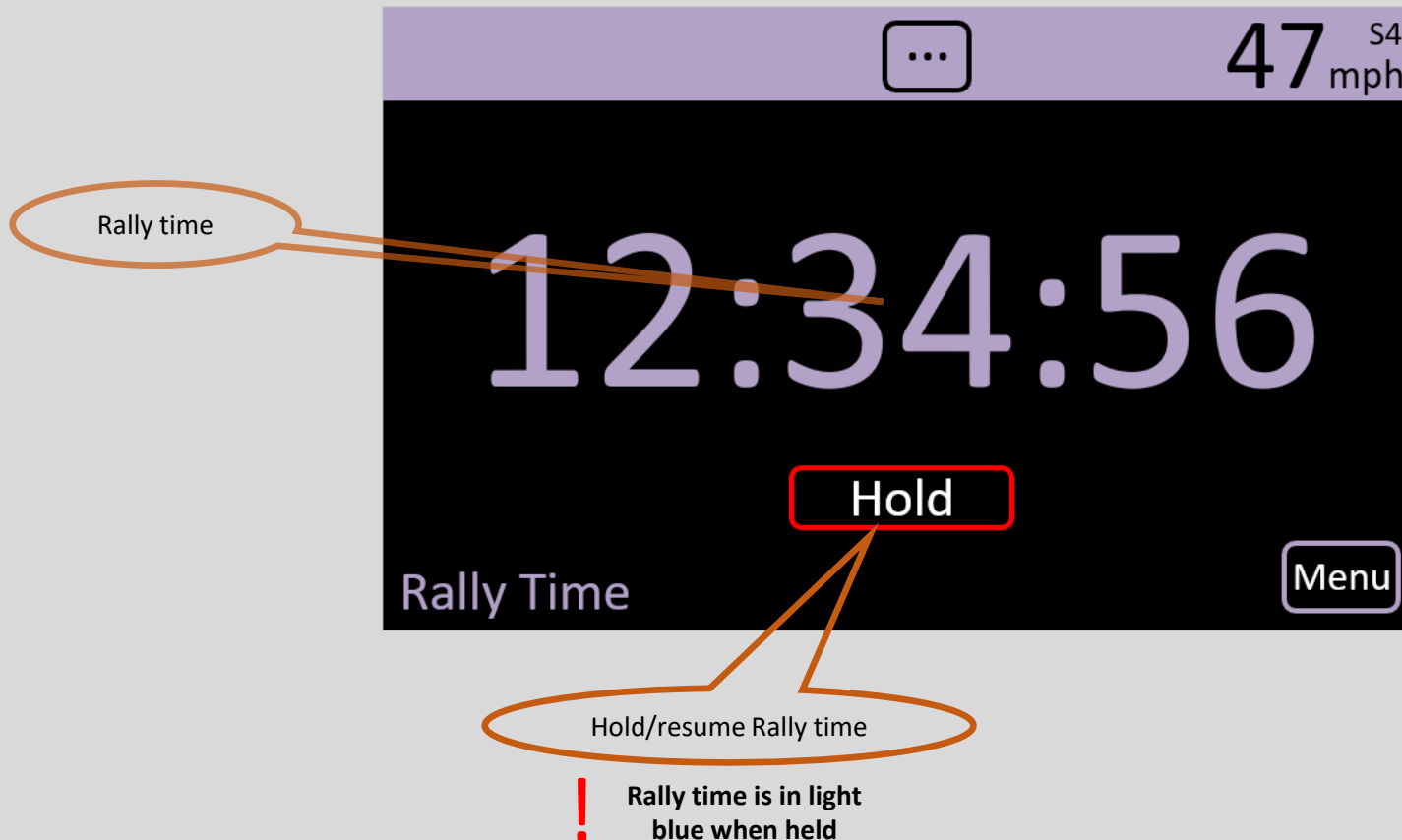
Return to "Main" screen

Time Mode Overview



- **Time Mode** provides a simple display of Rally Time, which can be held/resumed as required.
- A Quiet Mode is available that simplifies the screen so that only the Rally Time is shown

Main Screen – Normal Mode



Main Screen – Quiet Mode



Time Mode Options

Time Mode shows
the “Normal Mode”
screen

Options – Rally Time

Quiet mode

☒ No

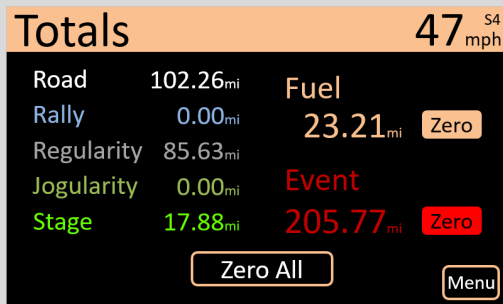
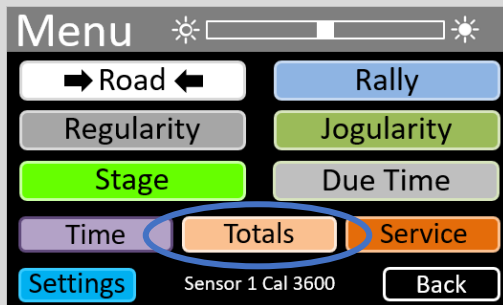
☐ Yes

Time Mode shows
the “Quiet Mode”
screen

Back

Return to “Main” screen

Totals Mode Overview



- **Totals Mode** shows the distances accumulated in each of the main modes plus two additional “overall distances” that show the distance travelled on the whole event and the distance travelled since the last re-fuel point.
- Individual distances can be reset to 0.00, or all distances can be reset at the same time.
- Totals mode is not shown on the remote display.

Totals Mode Main Screen

Total distance in each mode. Press individually to reset

Totals

47 ^{S4}
mph

Road	102.26 _{mi}
Rally	0.00 _{mi}
Regularity	85.63 _{mi}
Jogularity	0.00 _{mi}
Stage	17.88 _{mi}

Fuel
23.21_{mi} Zero

Event
205.77_{mi} Zero

Total distance since last fuel

! Zero this each time you fuel the vehicle

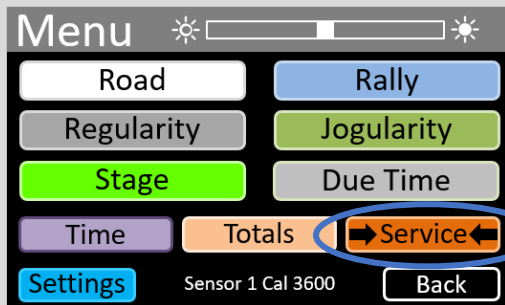
Total event distance

Zero All

Menu

Press to reset all totals

Service Mode Overview



- **Service Mode** provides a countdown timer to indicate the time remaining in a vehicle service scenario.
- The start of the service time can be set, together with the service duration. In this case, the countdown will start automatically when rally time matches the service start time. If the start of the service time is not specified, the countdown will start immediately.

Service Mode Screen Navigation

12:34:56 Sim

Start time 13:30:00 Duration 0:45:00

Time Remaining

0:45:00

Service Reset Setup... Menu



Service setup

Rally Time 12:34:56

Duration 00:45:00

Start time 13:30:00

Service Set and back Cancel

1	2	3
4	5	6
7	8	9
0	CLR	

Service Mode Service

Time at which stopwatch will start counting down or time that stopwatch started

Service duration/time



Service time remaining

Reset start time, duration and stopwatch

Open "Setup - Duration" screen

Service Mode Setup

Rally Time

! Rally Time is continuously updated

New Duration value set via keypad

! Press to enter via keypad

Start Time value set via keypad

! Press to enter via keypad

Enter Duration or Start Time via keypad keys

Service setup

Rally Time 12:34:56

Duration 0:45:00

Start time 13:30:00

Service

Set and back

Cancel

1	2	3
4	5	6
7	8	9
0	CLR	

Set Duration to 0:00:00 or set Start Time to --:--:--

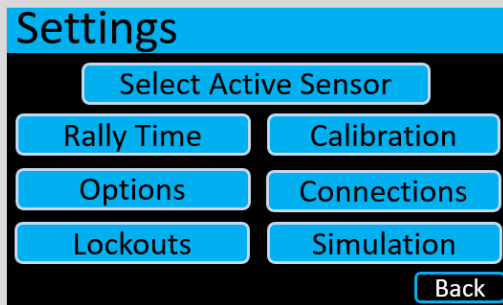
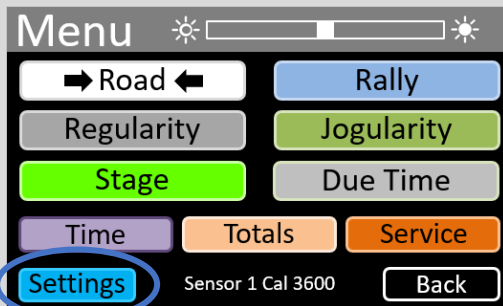
! --:--:-- indicates start time not set; 00:00:00 indicates a start time of midnight

Return to the "Service" screen, setting Duration and Start Time

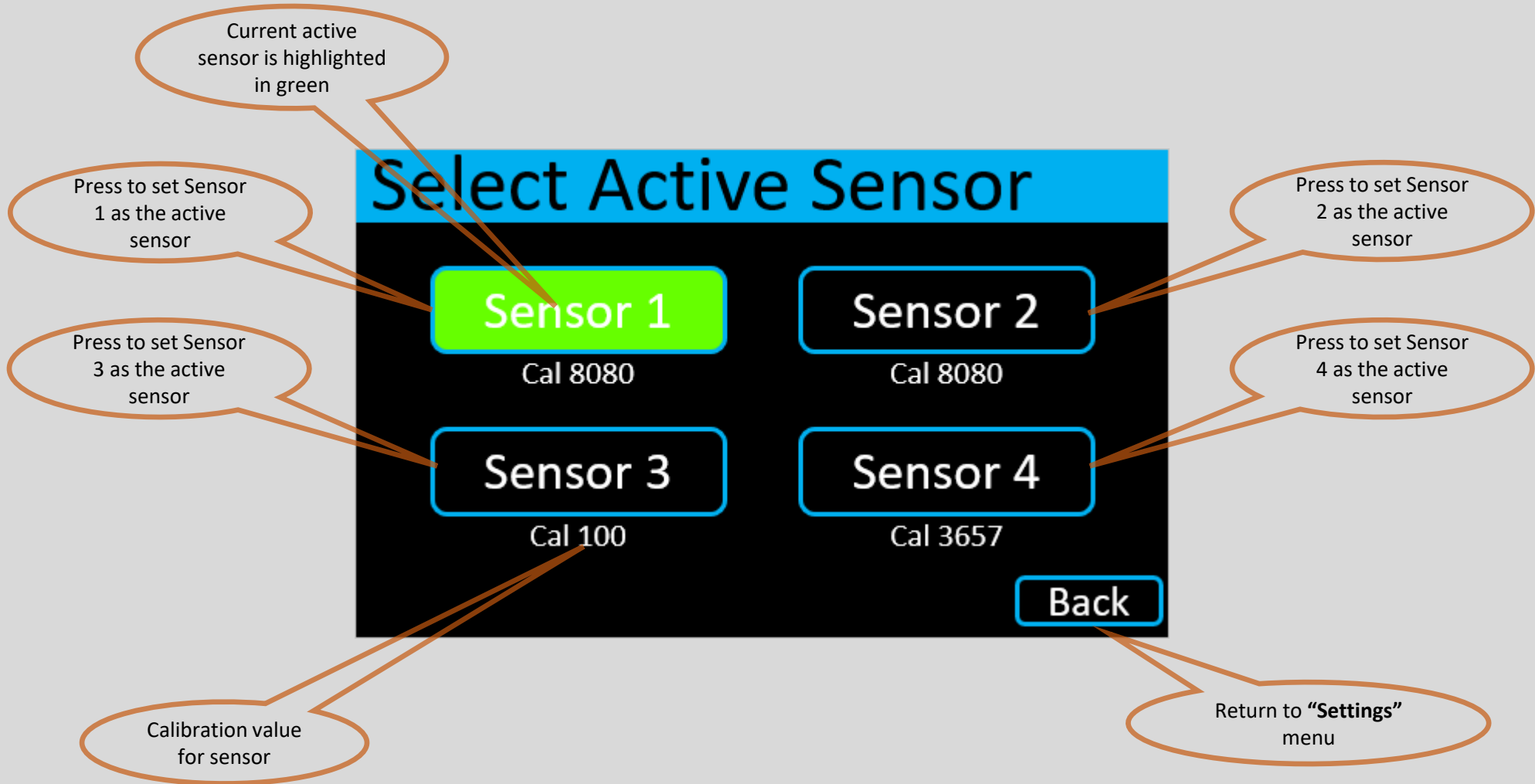
Return to the "Service" screen without setting Duration or Start Time

Settings Overview

- The **Settings** menu allows RaliTripp to be configured to operate as required:
 - Select Active Sensor** allows the active sensor to be quickly and easily selected
 - Rally Time** that allows the Rally Time to be set
 - Calibration** opens the calibration menu that allows the calibration values for the sensors to be set in three different ways
 - Options** allows access to four screens that allow the way that various aspects of how RaliTripp operates to be defined and gives a simple way of resetting all trips, stopwatches and saved values
 - Connections** allows the active sensor to be defined and shows the electrical status of the sensors, the power connections and the remote unit
 - Lockouts** allows the RaliTripp to be configured to not display speed and/or not allow “nudging” of stopwatches for a selectable number of days, allowing RaliTripp to be used on events not allowing such features
 - Simulation** makes RaliTripp operate with a simulated speed, allowing you to “get to know” RaliTripp outside of the vehicle/an event.



Select Active Sensor



Settings

Rally Time

Rally Time

! Rally Time is continuously updated

Adjust hours, minutes and seconds up or down

Rally Time

Current 12:34:01

New 12:34:01

↑ ↑ ↑

↓ ↓ ↓

Set Back

Set Rally Time time to new value

Return to "Settings" menu

Settings

Calibration Menu

Calibrate sensors by driving a measured distance

Calibration

Measured distance

Direct entry

Adjustment to match roadbook

Back

Calibrate sensors by entering calibration values directly

Adjust the calibration of sensors by making a trip value displayed by RaliTripp match a roadbook distance

Calibration Hints and Tips

Measured distance FWD

Zero S1 Trip Distance 1.23mi

Sensor	S1	S2	S3	S4
Count	00000	00000	08250	02468
Curr Cal	06000	00100	08150	00100
New Cal	06000	00100	08250	02468

Cal Distance 01.000

☒ mi ☐ km

Set Back

Direct entry

Sensor	S1	S2	S3	S4
Current	06000	00100	08150	00100
New	06000	00100	08150	00100

☒ mi ☐ km

Set Back

Adjustment

Roadbook value 018.99

RaliTripp display 019.21

Sensor	S1	S2	S3	S4
Curr Cal	00600	05000	04000	03000
New Cal	06061	05057	04046	03034

Set Back

- For sensor calibration by “Measured distance” :
 - Press **Zero All Counts**
 - Drive the measured distance – the counts on all connected sensors will increase
 - At the end of measured distance:
 - Optionally, press **Direction** until it indicates Hold and drive away from end of distance marker
 - Press **Distance** and enter the measured distance via the keypad
 - Ensure the units (mi/km) of the measured distance is correct
 - Press Set and confirm the new calibration values
- For sensor calibration by “Direct entry”:
 - Press the **New** entry field for the required sensor
 - Enter the sensor calibration value via the keypad
 - Ensure the units (mi/km) of the calibration value are correct
 - Press Set and confirm the new calibration values
- For sensor calibration by “Adjustment” :
 - Enter the Roadbook value and RaliTripp display values
 - Press Set and confirm the new calibration values
- If the units (mi/km) of the calibration value are not correct, then unexpected values can appear on the trip and speed displays when trip units are changed between mi/km and/or speed units are changed between mph/kph

Calibration – Measured Distance

Zero all sensor counts and the trip

! New Cal values for any sensor with a Count of 0 is set to the Current Cal value

A trip dedicated to this screen that uses the current sensor and its calibration

Cycle sensor count direction between FWD/HOLD/REV

!! A change of direction **ONLY** affects direction on this screen. A **SHORT** press on the remote unit **BLACK** button also cycles the direction between FWD/HOLD/REV

Live Count of pulses received by sensor

Current Calibration value for sensor

New Calibration value

! New Cal value is continually updated depending on sensor Count and cal Distance. New Cal value is kept between 100 and 99999 (inclusive)

The Measured Distance. Initial value is 1.000

* Use this trip to follow any total distances in the roadbook during the calibration run

Cal Distance units

Set new Calibration Values

! A confirm/cancel box appears over the keypad

Enter Measured Distance via keypad keys

Set Measured Distance to 00.000

! If Measured Distance is 00.000, all New Cal values are set to the Current Cal values

Return to "Calibration Menu" screen

! A confirm/cancel box appears over the keypad if changes have been made but not "Set"

Sensor	S1	S2	S3	S4
Count	00000	00000	08250	02468
Curr Cal	06000	00100	08150	00100
New Cal	06000	00100	08250	02468

Calibration – Direct Entry

Direct entry

Sensor	S1	S2	S3	S4
Current	06000	00100	08150	00100
New	06000	00100	08150	00100

Cal units: ☒ mi ☐ km

Keypad: 1 2 3, 4 5 6, 7 8 9, 0 CLR, Set, Back

Callouts:

- Current calibration value for sensor (points to 06000 in Current row)
- Enter 5-digit calibration value via keypad keys (points to keypad)
- Set calibration value 00000 (points to CLR key)
- New calibration value (points to 06000 in New row)
- Press to allow entry via keypad (points to mi checkbox)
- Cal units (points to mi/km selection)
- Set new Calibration Values (points to Set key)
- A confirm/cancel box appears over the keypad (points to Set key)
- Return to "Calibration Menu" screen (points to Back key)
- A confirm/cancel box appears over the keypad if changes have been made but not "Set" (points to Back key)

Calibration – Adjustment to match Roadbook

Distance indicated by Roadbook

! Press to allow entry via keypad

Distance indicated by RaliTripp

! Press to allow entry via keypad

Adjustment

Roadbook value 018.99

RaliTripp display 019.21

Sensor	S1	S2	S3	S4
Curr Cal	00600	05000	04000	03000
New Cal	06061	05057	04046	03034

1	2	3
4	5	6
7	8	9
0	CLR	

Set
Back

Set Roadbook or RaliTripp value via keypad keys

! As values are entered, each New Cal value is adjusted to:

$$\text{Curr Cal} \times \frac{\text{RaliTripp Display}}{\text{Roadbook value}}$$

...subject to minimum value of 100 and a maximum value of 99999

Set Roadbook or RaliTripp value to 000.00

Set new Calibration Values

! A confirm/cancel box appears over the keypad

Return to "Calibration Menu" screen

! A confirm/cancel box appears over the keypad if changes have been made but not "Set"

Settings

Options – Menu

Select which main modes are available on the “Menu” screen

Options - Menu

Show Road Mode	☒ Yes	☐ No
Show Rally Mode	☒ Yes	☐ No
Show Regularity Mode	☒ Yes	☐ No
Show Jogularity Mode	☒ Yes	☐ No
Show Stage Mode	☒ Yes	☐ No
Show Due Time Mode	☒ Yes	☐ No

← 1 →

Back

It is not possible to leave this screen with all mode selections set to “No”

Return to “Settings” menu

Options – General

Options - General

Main battery voltage warning ☒ 10.5 ☐

Distance decimal places ☒ 2 ☐ 1

Stopwatch leading zeros ☒ Yes ☐ No

Speed display units ☒ mph ☐ kph

Trips display units ☒ mi ☐ km

Long press duration (secs) ☒ 2 ☐ 3

Back

Decrease value

Main battery voltage
below which the battery
warning will be shown

Increase value

Trips for all modes
show 2 decimal
places e.g. 5.43Trips for all modes
shows 1 decimal
place e.g. 5.4The stopwatches for
all modes show
leading zeros e.g.
0:05:43The stopwatches for all
modes have leading
zeros suppressed e.g.
5:43The speed units for
all modes are in mphThe speed units for
all modes are in kphThe distance units
for all modes are in
milesThe distance units for
all modes are in
kilometresNumber of seconds that a
screen or remote "Long
reset" button has to be
pressed until it is actionedReturn to
"Settings" menu

Settings

Options – Colours

Colours of the trips and stopwatches in all relevant modes

Colour of Rally Time in the screen headers

Options - Colours

Tripmeter total colour



Tripmeter interval colour



Stopwatch total colour



Stopwatch interval colour



Rally Time Colour



! When Rally Time is frozen in the relevant modes, it will always be light blue



Back

Return to "Settings" menu

Options – Remote Display

How/where the speed is displayed on the remote screen

The colour of the speed on the remote display

!! Only applies when the speed location is set to "In Body" or "Full screen"

Options-Remote Display

**** Regularity and Jogularity modes only ****

Speed location ☒ Top ☐ In Body ☐ Full screen

Speed colour ☒ ☐ ☐ ☐ ☐

...when "In Body" or "Full screen"

← 4 →

Back

!! Screen only applies to the remote display in Regularity and Jogularity modes

Return to "Settings" menu

Settings

Options – Resets

The trips and watches for all modes are set to zero.
 All saved times for Rally and Stage are cleared.
 All Regularity Last Reset values are cleared

Resets trips, watches and saved times

Reset all data to factory settings

All data is zeroed/cleared and all options and display selections are set to their default value.
 All sensor calibration values are set to 3600.
 However, Rally Time is not changed

Options - Resets

Start new event

Reset all to factory settings

Reset trips, watches and saved times

Confirm

Cancel

(if "Reset trips..." is pressed)

Reset all to factory settings

Confirm

Cancel

(If "Reset all..." is pressed)

Confirm/Cancel the reset type selected

← 5 →

Back

Return to "Settings" menu

Settings Connections

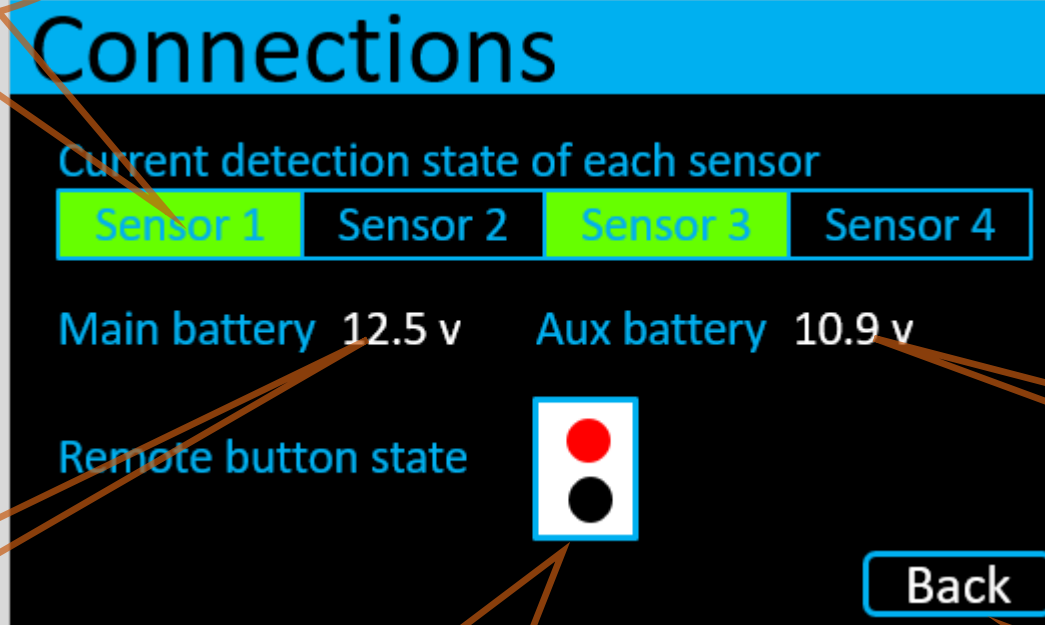
The black/green backgrounds for each sensor status show the ***current*** status. Just a green background does not necessarily mean that the sensor is correctly working – the background needs to be both black and green as the sensor sends/does not send a signal



Current detection state of each sensor – if sensor input is detected as “high” then green background else black background



Sensor 1/2 shows whether wheel bolt is being detected or not. For some sensors, symbol may be “green” if a wheel bolt is being sensed – other sensors may cause the symbol to be “green” when a wheel bolt is not being sensed



Main battery voltage (accurate to ~0.5v)

Main battery voltage (accurate to ~0.5v)

Button state on remote unit. Symbols change when buttons are pressed

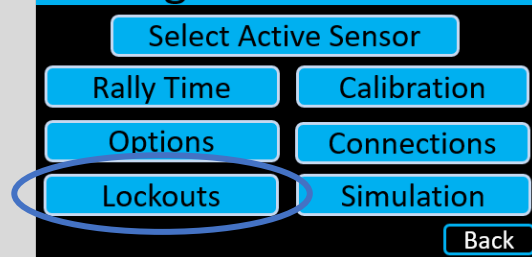
Return to “Settings” menu



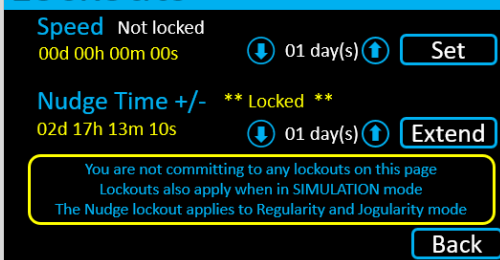
Useful during initial installation tests

Lockouts Overview

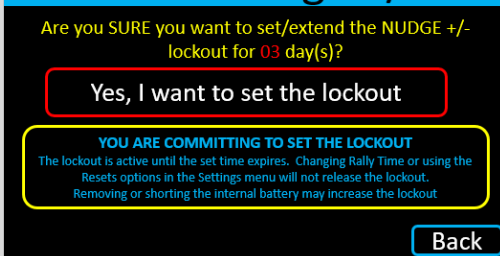
Settings



Lockouts



Lockout – Nudge +/-



- **Lockouts** provide the ability to suppress the display of speed on all relevant screens and/or the “nudge” of stopwatches in Regularity and Jogularity modes.
- These lockouts are used when event regulations prevent the use of either or both features. The two lockouts are independent of each other and be set for up to 40 days each.
- Each lockout can be extended when already in place up to a maximum of 40 days.
- The remaining time for any lockout is clearly shown and allows scrutineers to easily and quickly confirm that they are in place for the whole of the event.
- Lockouts apply in Simulation mode as well as normal operation on an event.
- It is not possible to defeat the lockouts. Changing Rally Time or using the Resets options in the Settings menu will not release either lockout. Removing the internal battery and/or shorting its connections together will stop the countdown of the lockout for the time that the battery is removed.
- **The only way to stop an in-progress lockout is to wait for it to expire or return the RaliTripp for re-programming.**

Screen 1 – Set/Extend the lockouts

The status of the lockout

Decrease value

The duration of the lockout – 1 to 40 days

Increase value

The time before the lockout is cleared

Lockouts

Speed Not locked
00d 00h 00m 00s



01 day(s)



Set

Nudge Time +/- ** Locked **
02d 17h 13m 10s



01 day(s)



Extend

You are not committing to any lockouts on this page
Lockouts also apply when in SIMULATION mode
The Nudge lockout applies to Regularity and Jogularity mode

Back

!! The button text will be Set or Extend, depending on whether there is an existing lockout in place

Extend the existing lockout duration

Return to "Settings" menu



When either lockout is in place, the background of the Speed Display on the Settings Menu button is red

Screen 2 – Confirm the lockout

Press to confirm that the lockout should be activated

Lockout type

Lockout duration/extension

Lockout – Nudge +/-

Are you SURE you want to set/extend the NUDGE +/- lockout for 03 day(s)?

Yes, I want to set the lockout

YOU ARE COMMITTING TO SET THE LOCKOUT

The lockout is active until the set time expires. Changing Rally Time or using the Resets options in the Settings menu will not release the lockout. Removing or shorting the internal battery may increase the lockout

Back

When the “Yes...” button is pressed, the lockout will be activated

THERE IS NO SECOND CHANCE TO CHANGE YOUR MIND

!! When the “Yes...” button is pressed a “Done” confirmation is shown. Pressing “OK” will return to “Lockouts – Screen 1”

Return to “Lockouts – Screen 1”

Settings

Simulation

Set Simulation On or Off

!! If simulation is On, the background of the button is red on both the Settings Menu and this screen

Current state of Simulation
i.e. On or Off

Simulation speed value. Selectable between 15/30/45/60

Decrease value

Increase value

Simulation speed is in mph

Simulation speed is in kph

Current software versions inside the tripmeter and status information

!! "Simulation speed units" controls the underlying simulated speed. It does not affect the mode speed display units set on "Settings/Options - General". So, for example, if the simulation speed is set to 60kph on this screen and "Settings/Options - General" specifies mph as the speed display units, the displayed speed will be 37mph. Similarly, if the simulation speed is set to 60mph on this screen and "Settings/Options - General" specifies kph as the speed display units, the displayed speed will be 96kph

Return to "Settings" menu

Frequent Questions

General

- **How do I/a scrutineer know that the speed/nudge lockouts are in place?**
 - Go to the Settings Menu. If the “Lockouts” button is in red, at least one lockout is in place
 - Press the Lockouts button. The next screen will clearly show which of the lockouts are in place, and if they are active, the amount of time before they expire.
- **Can I manually reduce or reset the lockouts?** No - actions such as turning RaliTripp off/on for any duration, changing the Rally Time one or more times, resetting the unit to factory defaults via the menus, or removing the internal battery of the unit will not reduce the lockout time. If you need the lockout time to be set to zero, either wait for the lockout time to pass or return the unit to The Basic Roamer Company for re-programming.
- **Can a RaliTripp show average speed?** No - average speed cannot be shown in any circumstances.
- **What is Simulation Mode?** Simulation mode allows you to practice using the unit as if the vehicle is moving, but outside of the vehicle or in a non-moving vehicle. Simulation mode is set in the **Settings/Simulation** screen. The simulated speed can be toggled between zero i.e. not moving and the selected speed, by pressing the simulated speed “button” that appears on most screens – this allows you, for example, to do practice starts/finishes in the main mode screens.

Frequent Questions Functional

- **What happens if the vehicle starts moving when I'm in Simulation mode?** The pulses from the external sensors are ignored and RaliTripp stays in Simulation mode.
- **What's the maximum speed shown?** 360mph/542kph. At or above these speeds, the speed display is constantly set at the maximum and the trip distances do not update.
- **What information is retained when RaliTripp is turned off?** All information is retained - trip distances, stopwatch values, calibration values, display settings, lockout durations etc. If any stopwatch is running when RaliTripp is turned off, then the value shown when RaliTripp is turned on will reflect, to within a second, the elapsed time that RaliTripp has been turned off.
- **Why does the low battery warning show when I only have an Auxiliary battery connected?** The low battery warning is for the main battery only – so if only the auxiliary battery is connected, the main battery voltage is measured as 0 volts, which is below the main battery warning voltage...so the low battery warning is shown.
- **How do I know what software versions are running in the tripmeter?** The current software versions are shown in the bottom left of the Simulation screen. If the first characters are not "D201/P201" you do not have the current version and some of this User Booklet will not apply. Contact The Basic Roamer Company to discuss a software update to both your main tripmeter and the remote display.

Frequent Questions

Electrical

- **How do I connect up a RaliTripp?** Please see the Installation Booklet.
- **What are the power supply min and max voltages?** The minimum supply voltage is 9v. The maximum is 18v. Some inductive proximity sensors require RaliTripp to be connected to a higher minimum supply voltage, ranging from 10v to 12v.
- **Why might I need an Auxiliary Battery?** An auxiliary battery is useful for two reasons:
 - To keep RaliTripp powered up when the main battery is disconnected by a battery master switch e.g. in a service area, where you want to use the Service Mode - alternatively, you can power RaliTripp with a wire that bypasses the master switch and is always “live”
 - As a backup to the main battery. If the main battery connections fail, or the voltage of the main battery falls below the auxiliary battery voltage, the auxiliary battery will power RaliTripp. There is no loss of data/display flicker when RaliTripp switches between the batteries.
- **How can I check the electrical installation?** Use the **Settings/Connections** screen. This shows the state of each sensor - bolt or metal detected/not detected for inductive proximity sensors S1 and S2, and pulse value (high or low) for speedo/gearbox/pulse sensors. Note that some inductive proximity sensors will show “on” when metal is detected, others, might show “off”. The **Settings/Connections** screen also shows the voltages for the main and auxiliary batteries and the button status for the remote control unit.

Frequent Questions

Sensors

- **How many sensors can I connect at once?** Up to 4 at once - up to 2 inductive proximity (“wheel”) sensors and up to 2 sensors that produce pulses. Only one sensor can drive RaliTripp at any one time and this is known as the “active sensor”. The active sensor is selected via the **Settings/Select Active Sensor** screen.
- **What’s the maximum sensor input pulse rate?** Each sensor input can handle up to 5000 pulses/per second. There will generally be no need for any external pulse divider circuitry.
- **Can each sensor have a different calibration value?** Yes – the **Settings/Calibration** screens allow the calibration value for each sensor to be set.
- **When I’ve completed a “measured distance” calibration run, what do I do if say the two front wheel sensors show slightly different pulse counts?** If the pulse counts are different, then one wheel has travelled further than the other (i.e. the measured distance was not, on average, a straight line). As the organisers are unlikely to tell you whether they used their left or right front wheel for the measured distance, then leave the pulse counts as they are, or set each one to the average of the two via the **Calibration/Direct Entry** screen.
- **When I’ve completed a “measured distance” calibration run, what do I do if say the two front wheel sensors show very different pulse counts?** Check the sensors/installation – it would be expected that the counts will be very similar.

Frequent Questions

Calibration and Units

- **What do I need to understand about sensor calibration?** When setting a calibration value for a sensor, make sure that the units of the calibration distance (i.e. miles or kilometres) is set appropriately.
- **What do I need to understand about the displayed speed and trip distances?** You can choose whether to see speed in mph or kph and distances in miles or kilometres via the **Settings/Options - General** screen. *There is no need to/do not change anything on the Settings/Calibration screens when you change the speed and/or distance display units.*
- **Why do you allow, for example, speed to be displayed in mph and distances in kilometres? Why not just have a single “imperial/metric” selection?** Some navigators in some locations (e.g. road rally navigators in the UK) like to see the speed in mph as it matches the (UK) speed limit units, and distances in kilometres as it matches the (metric) UK Ordnance Survey maps.
- **If I start an event in an “imperial country” and it then moves to a “metric country” or vice versa, what do I need to do?** If there is no new measured distance calibration run for the new country, do nothing on the **Settings/Calibration** screens – just choose whether to see speed in mph or kph and distances in miles or kilometres via the **Settings/Options - General** screen, If there is a new measured distance calibration run, then use the **Settings/Calibration** screens, making sure the correct units for the measured distance are set.

[illegible]

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.



RaliTripp Tripmeter

Road Mode

Rally Mode

Regularity Mode

Jogularity Mode

Stage Mode

Due Time Mode

Time Mode

Totals Mode

Service Mode

It's a Navigator's Thing