

SPA Tyre Temperature Gauge instructions

The SPA Tyre Temperature Gauge takes accurate readings across the tyre width for all 4 tyres and views them all on a graphical screen. This gives immediate indication to the tyre engineer to the setup of the cards tyre pressures and wheel camber. The quick response probe is inserted to the required depth, and the reading can easily be stored on the screen.

Each car set (4 wheels) of data can be stored on a separate screen so that the user can save up to 50 screens for future reference. The cars number can be stored and viewed with the data if the gauge is to be used on more than one vehicle.

The tyre temperature gauge is very easy to use, requiring only single press to store, and navigate around the tyre regions and tyres, in either anti clockwise, or clockwise direction.

The gauge will switch itself off after a period time of inactivity, has an adjustable backlight which activates for a period when keys are pressed, and has adjustable contrast. All these features and more are easily accessed and programmable in the menu. When the battery is too low, a warning message will appear.

Quick guide:-

1) Press the Tyre- [On/Menu] button to switch on the tyre temp gauge.

2) Note the tyre and position shown on the display (EG Front Left, inner) and change if necessary with the Tyre+ and Tyre- buttons. (note: Tyre +/- buttons move according to the direction selected, EG Tyre + moves the tyre position clockwise if 'clockwise' is selected in the 'Display direction' menu item)

Insert the probe into the correct depth on that tyre and position.

Watch the temperature rise and when stable press and hold the Tyre+ [Store] button until the display shows 'Stored' and the next position is automatically incremented to.

Repeat 3 and 4 until all tyres and positions are measured.

The Tyre temperature gauge will switch itself off after a preset period (default 60 seconds).

Full guide:-

The text on top of the buttons shows their function when pressed momentarily. The text in brackets underneath shows the buttons function when held down. The Screen button only increments the screen number, but it will scroll up quickly if held down. The functions are listed below:-

Tyre+ Momentary: Increments the tyre position, then onto the next tyre.
 Hold down: Stores the current temperature reading.

The cursor arrow and tyre position icon show which tyre and tyre position are being measured. All other tyres and positions show their temperature values previously stored (if any). If you clear the memory these will all be zero.

If you wish to view all stored temperatures and no live temperature readings, click Tyre- past the first temperature in, Front, left tyre. Also clicking Tyre+ past the out, Front, right tyre will do the same. Click Tyre+ or Tyre- to show temperature readings again.

Tyre- Momentary: Decrements the tyre position, then back to the previous tyre.
 Hold down: Goes to the menu system. Also used to power on.

Screen Momentary: Increments the screen number. When the number reaches 50 it will go
back to 1.
 Hold down: Rapidly increments the screen number.

The screen will not change automatically. You may keep storing new temperatures at any tyre or position as many times as you wish. If you want to keep the screen and start a new one, press the screen button.

A car number is stored on each screen in case you need to assign screens to different cars. When any temperature is stored, the current car number from the menu is stored on that screen. When the memory is cleared the car number will be set to zero any unused screens.

When any button is pressed, the backlight will come on for a preset time and brightness. This is to reduce battery consumption as the backlight requires a lot of power. When the 'Low battery' message appears, the backlight will be turned down (or off) automatically.

The backlight is off by default (brightness= 0) Please switch the backlight on only while it is needed.

Menu System:-

Press and hold the Tyre- button to access the menu.

The menu shows a brief description of the function, and then underneath details about the setting.

Set car number to store Car (0-255) seconds temperature	Press and hold the Tyre- button and the display changes to the current setting. Press, or press and hold (changes quickly) to change. Leave for a few seconds and the display returns to the main menu. This number on the is stored with the current screen whenever a reading is stored.
Display direction	Press and hold the Tyre- button to set clockwise or anti clockwise
Select units Centigrade units	Press and hold the Tyre- button to change the units.
Clear memory numbers to progress. unused	Press and hold the Tyre- button to clear the temperature and car zero. This may take a few seconds, a percentage indicator shows the progress. There is no need to do this, but it maybe required for clarity to clear out readings.
Set the backlight brightness Brightness (0-15)	Press and hold the Tyre- button and the display changes to the current setting. Press, or press and hold (changes quickly) to change. Leave for a few seconds and the display returns to the main menu.
Set the display contrast setting. Contrast (10-40)	Press and hold the Tyre- button and the display changes to the current setting. Press, or press and hold (changes quickly) to change. Leave for a few seconds and the display returns to the main menu. This also adjusts the veiwing angle. May need increasing when cold etc.
Set the switch off time setting. Power on time (secs)	Press and hold the Tyre- button and the display changes to the current setting. Press, or press and hold (changes quickly) to change. Leave for a few seconds and the display returns to the main menu.
Set the backlight on time the current setting. Backlight time (secs)	Press and hold the Tyre- button and the display changes to the current setting. Press, or press and hold (changes quickly) to change. Leave for a few

seconds and the display returns to the main menu.

[Exit]

The next press exits the menu system and returns to the normal screen.

Specification:

Accuracy	1 deg C (0-100 deg C)
Power consumption	18mA (90mA typical with backlight)
Probe	K type fast response.
Memory	50 pages of 12 readings + car numbers