Wi-POD

Operator & User Manual

V3.1

22-01-2024

Contents

Safety Instructions

The Wi-POD has been designed with total safety a priority. However, it is your responsibility to read and adhere to the instructions in this manual carefully.

This Wi-POD Corner Weight Scale system is only intended for the use of weighing race cars, within the specification of the system, fitted with suitable 'set up wheel' jigs to each hub fitted with ball or roller bearing feet. It is not designed to take conventional road wheel and tyres.

It must not be used for any other application unless approved by the manufacturer.

Do not climb on or stand on any parts of the Wi-POD system.

The Wi-POD must be regularly inspected for any mechanical or electrical damage or failure.

EEC are not responsible for any loss of recorded data.

Only fully trained operators can use the Wi-POD.

Maintenance and repairs should only be carried out on the Wi-POD by persons trained and qualified for this type of equipment

General

Read this manual carefully before using the Wi-POD. This manual contains essential information and instructions for the correct and safe use of the Wi-POD. If problems arise that could have been avoided by referring to this manual, your warranty could be affected.

Please contact us if you have any problems or questions.

Environment

The Wi-POD, is designed to be used indoors in a dry environment. It may be used outside as long as it is protected from precipitation.

For correct and accurate operation, it must be placed on a flat and level floor and set up as described in this manual

Recommended ambient temperature for operation should be between 0 and 40 degrees C.

Do not use around other systems that emit RF in the range of 10^4Hz to 3x10^11Hz

Do not use near sources of ionizing radiation.

The old parts and the Wi-POD itself, should be returned to EEC Performance Systems for correct and safe disposal at the end of its serviceable life.

Maintenance and Cleaning

Cleaning of the Wi-POD should be with a damp cloth. Be careful that no cleaning agents containing solvents are used. Do not use high pressure cleaning hoses on any parts of the Wi-POD system.

Control panel switches condition and operation should be intact and working correctly.

There are no operator serviceable parts inside the control box of the Wi-POD.

Any malfunctions must be reported to EEC Performance Systems for advice.

Only original spare parts can be fitted, only available from EEC Performance Systems.

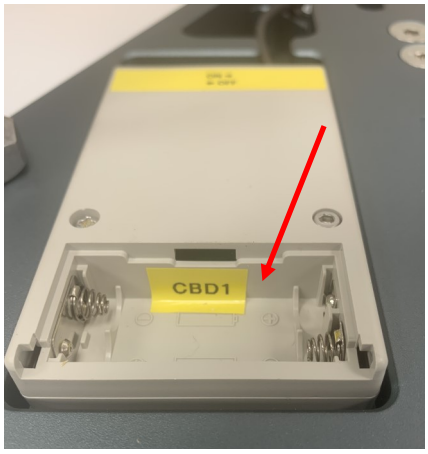
The f-POD must be serviced annually, by EEC Performance Systems or by their nominated service agent.

Maintenance and repairs may only be carried out by qualified persons with relevant training

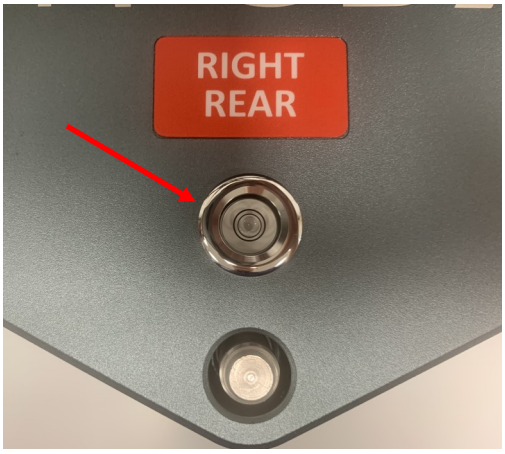
General Specification Wi-POD

Capacity:	Scales each:	800kg x 0.1kg (Max vehicle weight 3200kg)	
General Construction:	Scales: aluminium billet base and scale cross, stainless steel adjustable feet and locknuts		
	Seal Aluminium Loadcell, ABS battery box IP54		
	Indicator: ABS case IP54 when open, IP65 when closed and locked		
Dimensions:	1 Loadcell Scales (Each):	325w x 210d x 105-240h mm	Weight: 7.6kg
	3 Loadcell Scales (Each):	400w x 250d x 75-182h mm	Weight: 11.0kg
	Indicator:	275w x 250d x 120h mm	Weight: 2.4kg
Power Source:	Scale each:	2 x AAA 1.5v Drycell Battery	
	Indicator:	1 x 6vdc 4.5Ahr Sealed AGM Battery	
Max Current Draw:	Scale each:	20 micro amps	
	Indicator:	3A Max	
Ambient Temperature:	0 – 40 degree C		
Maximum Use Per Day:	Up to 4 Hours per Fully Charged Battery - 8 Hours overall		
IP Rating:	Scales IP54		
	Control Panel IP54 Open / IP65 Closed & Locked		
Noise:	Less than 70db(A)		
Vibration:	Does Not Exceed 2.5m/s²		

Setting Up Corner Scales



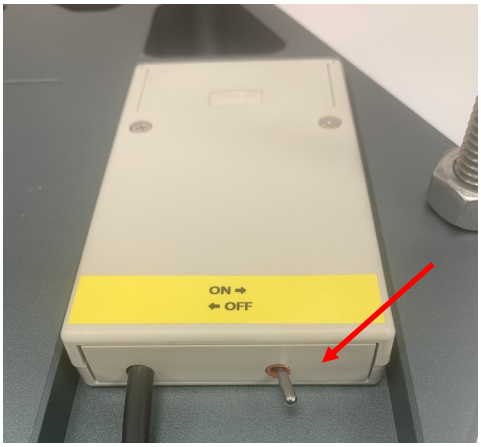
Insert 2 x AA Alkaline Batteries into each scales battery compartment



Level each scale to each other scale at the height to suit your application using the built in spirit level.

Once they are level, tighten the 3x M12 locknuts on each scale, check level again once tightened and re-adjust if necessary.

Fit the Wear Plates in position. Do not use without these fitted.



Switch each scale on using the toggle switch on the electrical box underneath. Always switch off when not in use to help battery life,

Setting Up Corner Scales—Load Pads & Guide Plates

Make sure the plate recess on the top of the scale is clean and free of any debris

Sit the appropriate Guide Plate into the recess

Insert a Load Pad into each hole in the Guide Plate. They are a close fit. If they get stuck, remove and refit very carefully.

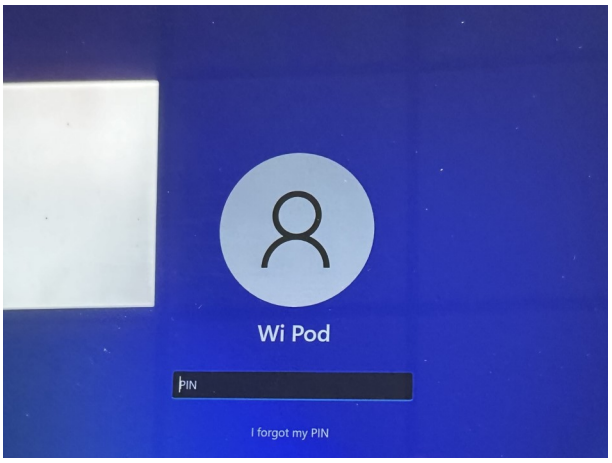
The Load Pads are made from Tungsten Carbide and whilst they are very hard to take the load of the car, they are also very brittle and can fracture if they are forced in, struck with a hammer or have the car drop on them!

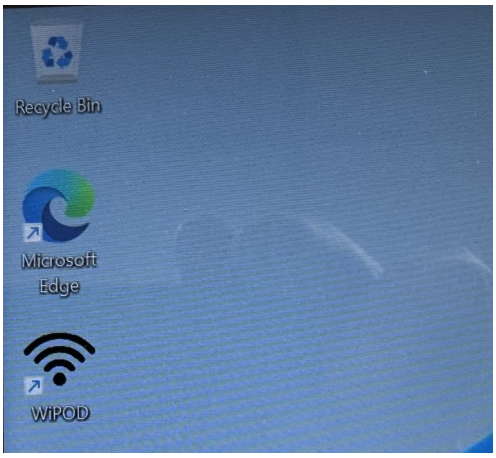
Preparing The Tablet PC for W-POD Indication

The Wi-POD is supplied with a Microsoft Tablet PC with the Wi-POD Indicator software installed. A Wireless Receiver and USB cable is supplied and must be connected to the tablet before use.

Follow the Tablet Manufacturers with respect to switching on and of and use of the supplied battery charger.

When you switch the PC on it will ask for a PIN number to unlock the device. The PIN is 2335





When the Desktop opens up just double click on the Wi-POD Icon to start the Wi-POD app then follow the user instructions.

When finished, to exit the app and return to windows. Enter the Wi-POD User Setting using the PIN ‘1111’ then press the Red Power button on the lower middle screen.

You are free to add other set up apps you may require to the Tablet, however we cannot guarantee any adverse effects this might have to the operation of the tablet or the Wi-POD software.

Home Screen

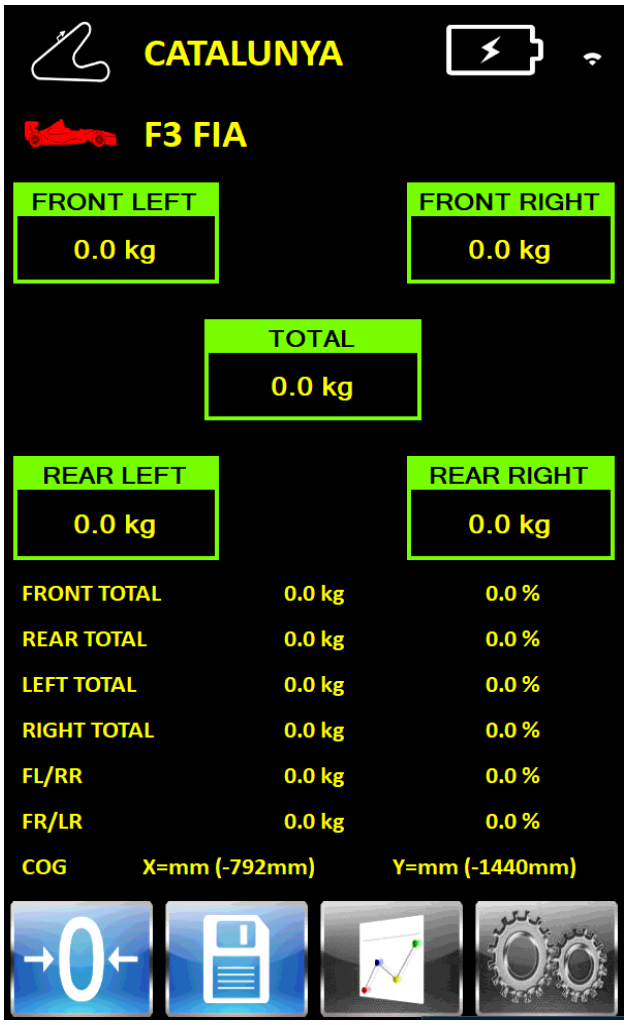
Automatic Track Compensation (ATC)

Touch to select current location to ensure correct calibration correction is made

Charger Connected

Wifi Signal Strength

Touch to select car being setup



Weight displays for each corner and total weight

Each corner can be set to ZERO individually by pressing its weight display

Low battery voltage in a corner scale will be indicated when its weight display changes colour from green to red and displays LOW BATTERY

Weight distribution data

ZERO Button

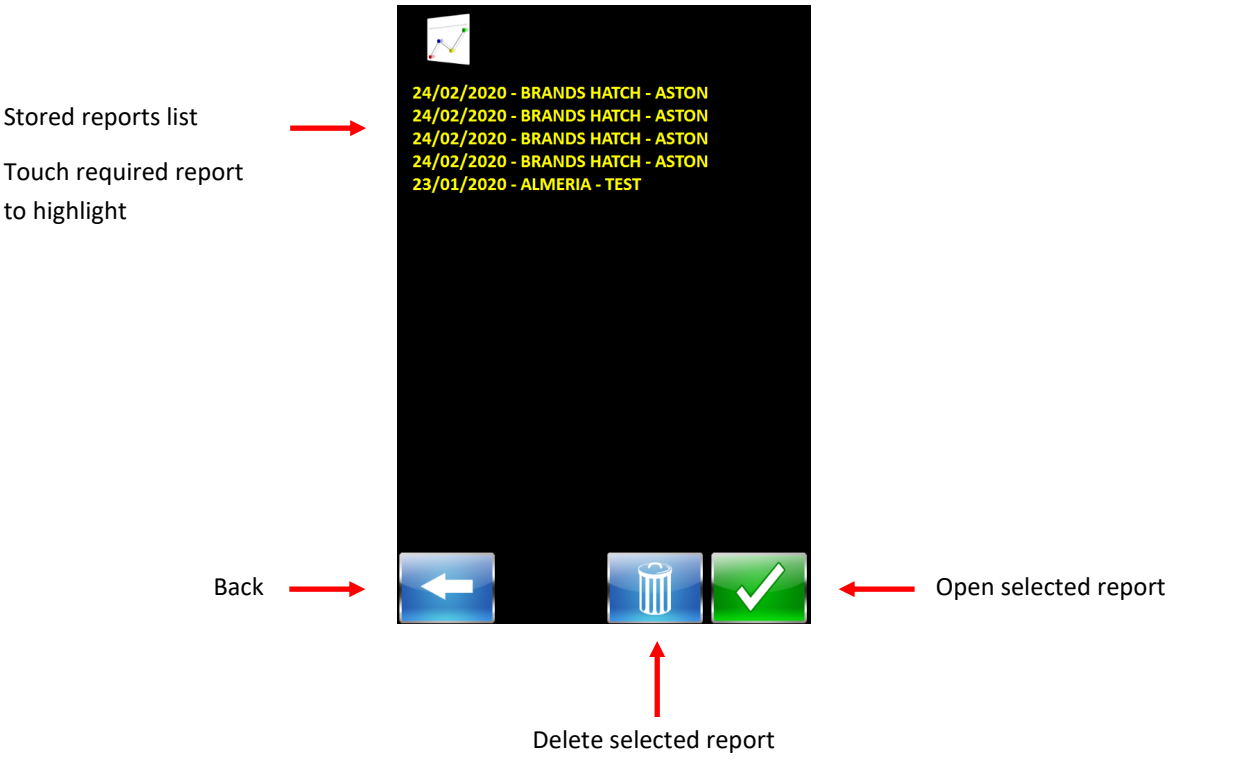
This will ZERO all four corners simultaneously

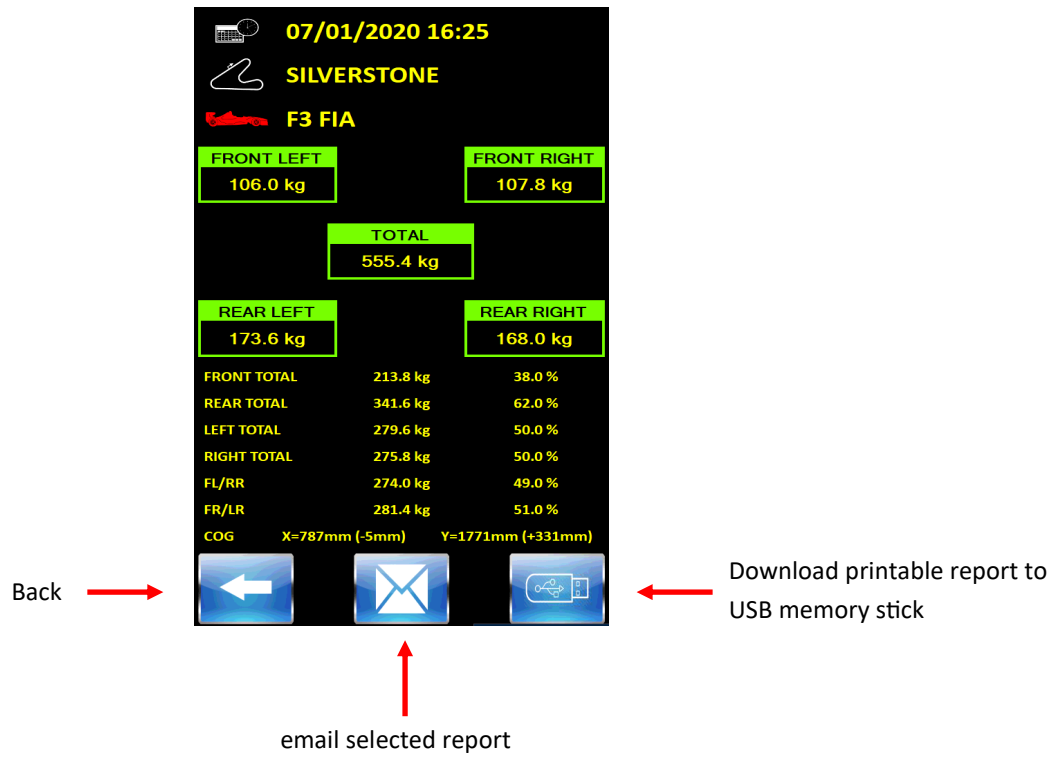
Press to save current setup data

Press to view previously saved data

Press to enter setup modes

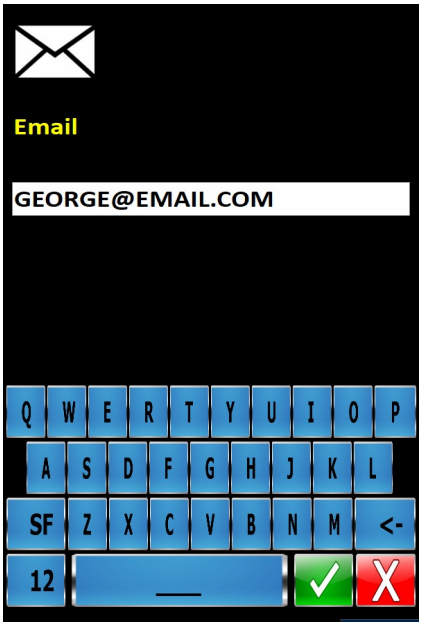
View reports





Email report

Type email address to receive report



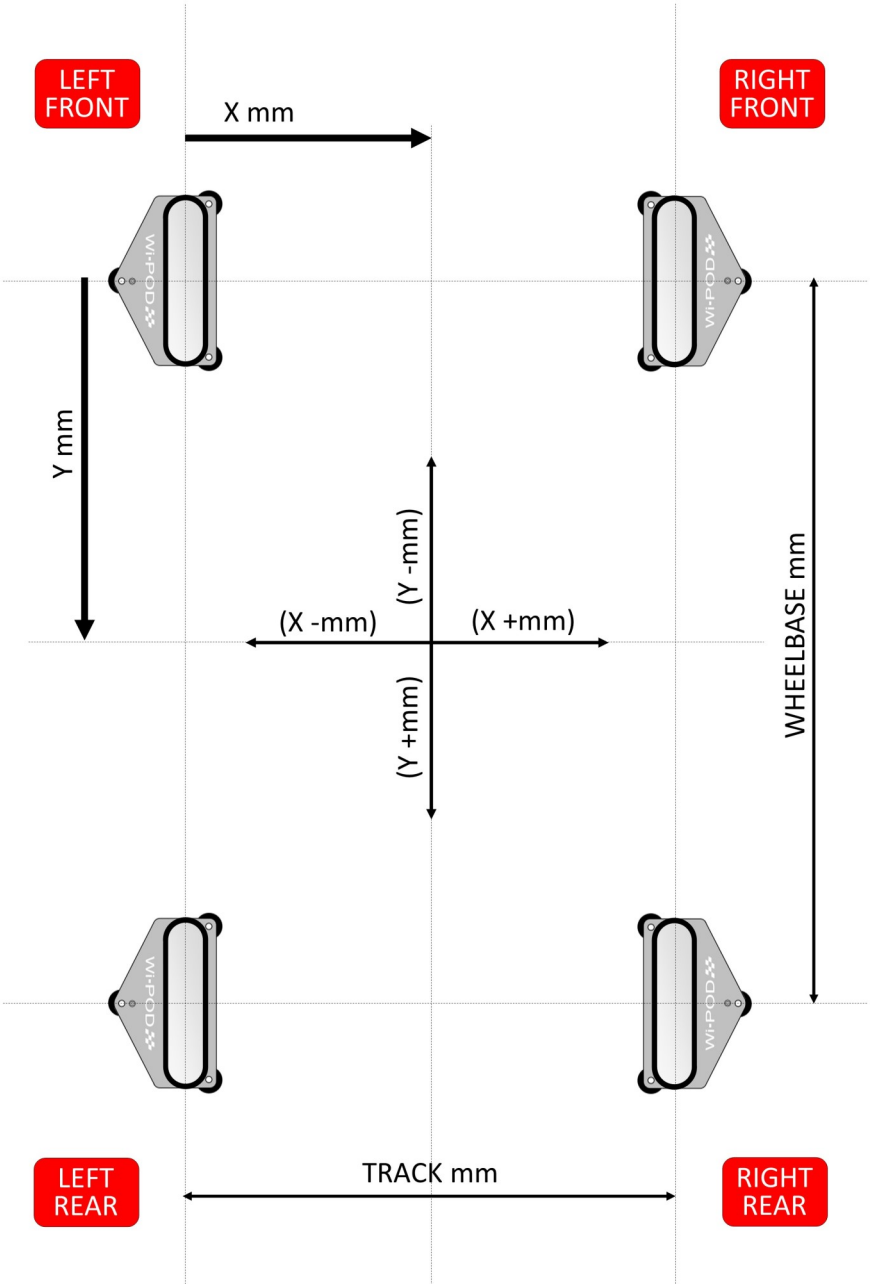
Select to send report

Centre of Gravity

The Wi-POD has a feature to display calculated dimensions for 2D Centre of Gravity of the vehicle on the scales. To enable this the vehicle Wheelbase and Track measurements need to be entered on the Create & Edit Cars section.

Assuming a vehicle with perfect weight distribution, the Wi-POD will display X and Y measurements from the Left Front corner to the COG.

Offsets in weight distribution will be shown as + and - mm figures to the optimum.

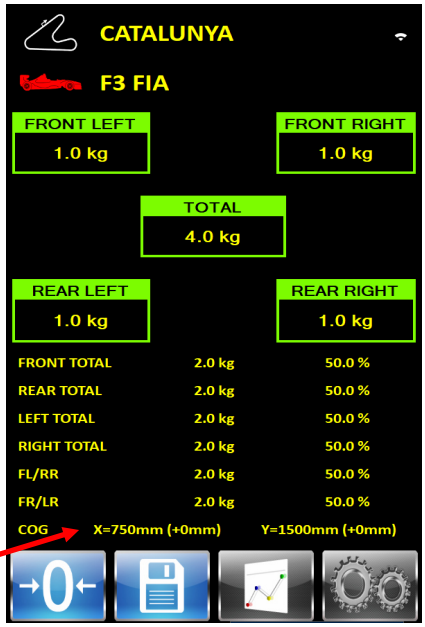


Centre of Gravity - Example

Example Vehicle

Track = 1500mm

Wheelbase = 3000mm



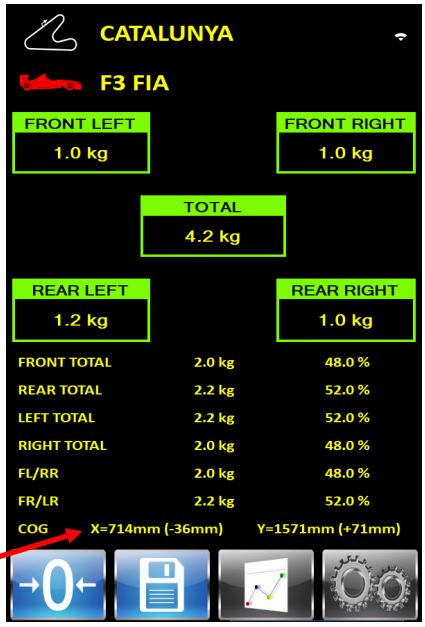
Optimum Setup

COG Coordinates

X = 750mm from LF corner

y = 1500mm from LF corner

No offsets



Vehicle has +0.2kg to RL

COG Coordinates

X = 714mm from LF corner

y = 1571mm from LF corner

X Offset –36mm from optimum

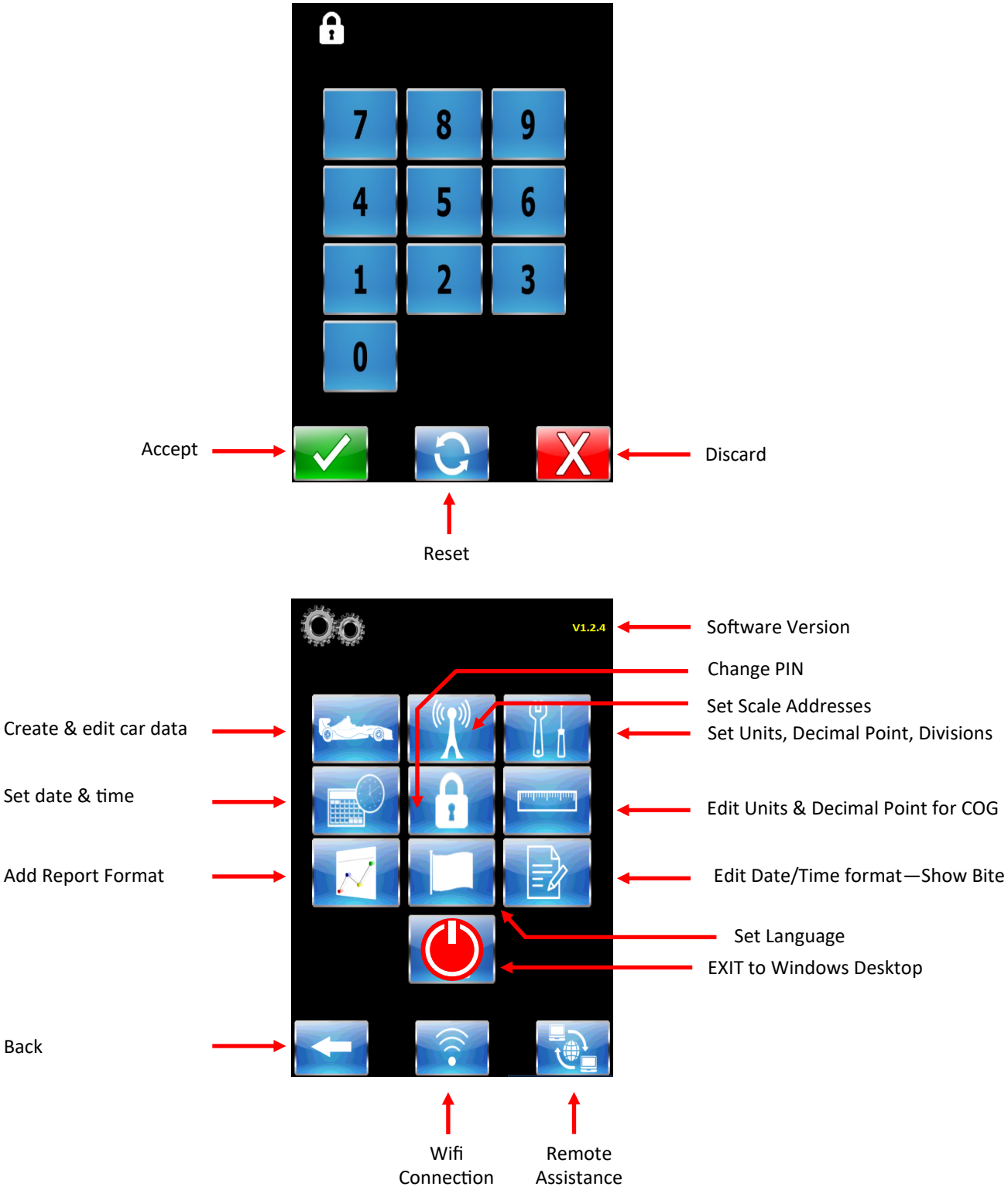
y Offset + 71mm from optimum

Enter Setup Mode

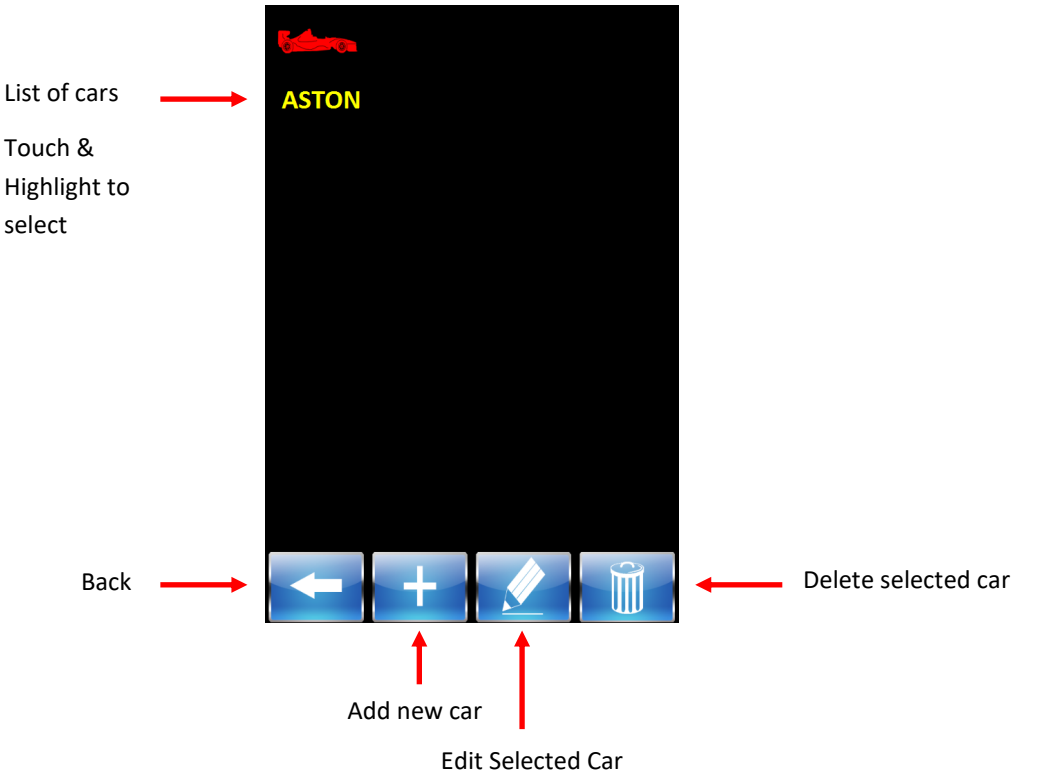
Press the setting button and enter the PIN number then pressing the green tick button

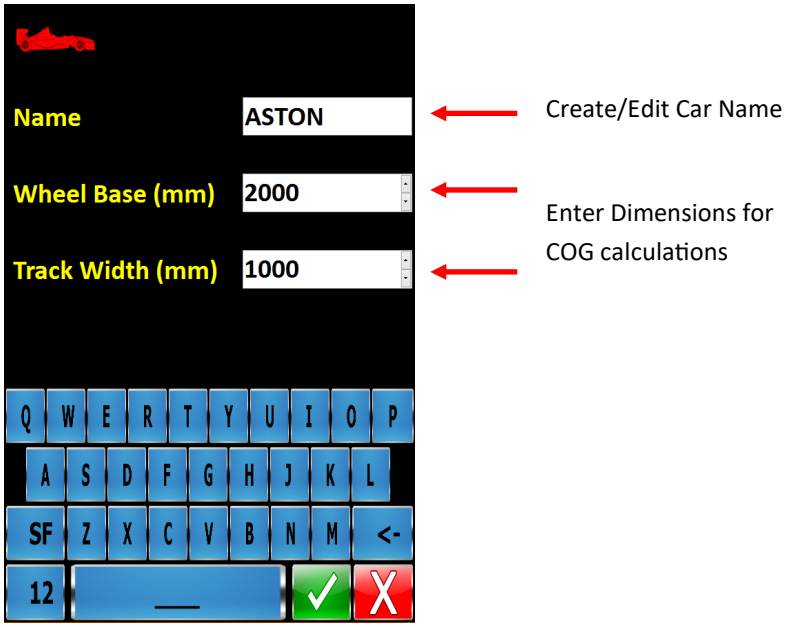
The default user pin number is 1111

(This can be edited by the user in setup mode)



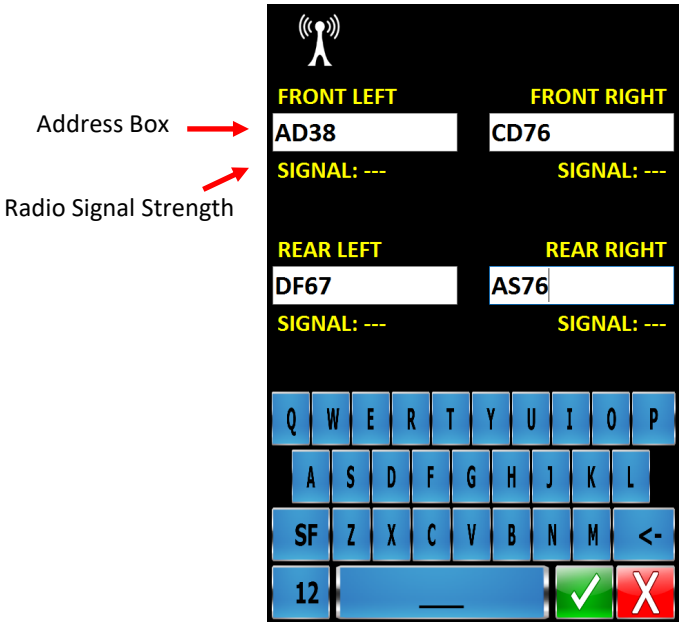
Create & Edit Cars



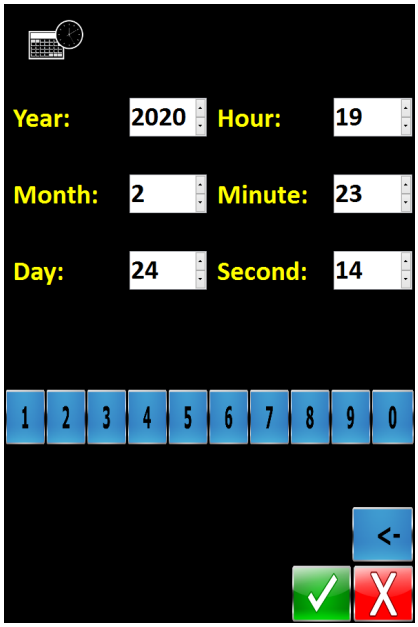


Enter / Edit Scale Addresses

Each Scale has its own unique address, which can be found on a label inside its battery compartment. This address must be entered into the box corresponding to the scales nominated corner



Set Date and time

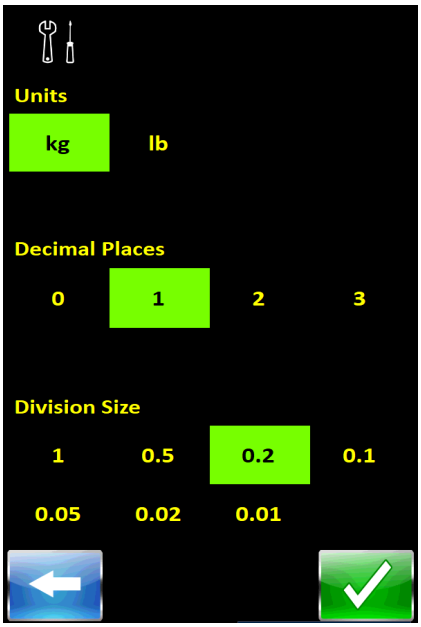


Set Units, Decimal Point, Divisions

Touch to highlight required Weighing Units Option

Decimal Places and Division Size has been carefully selected to compliment the capacity and sensitivity of the loadcells chosen for the Wi-POD Corner Scales.

We do not recommend altering these settings as it will affect the performance of this system

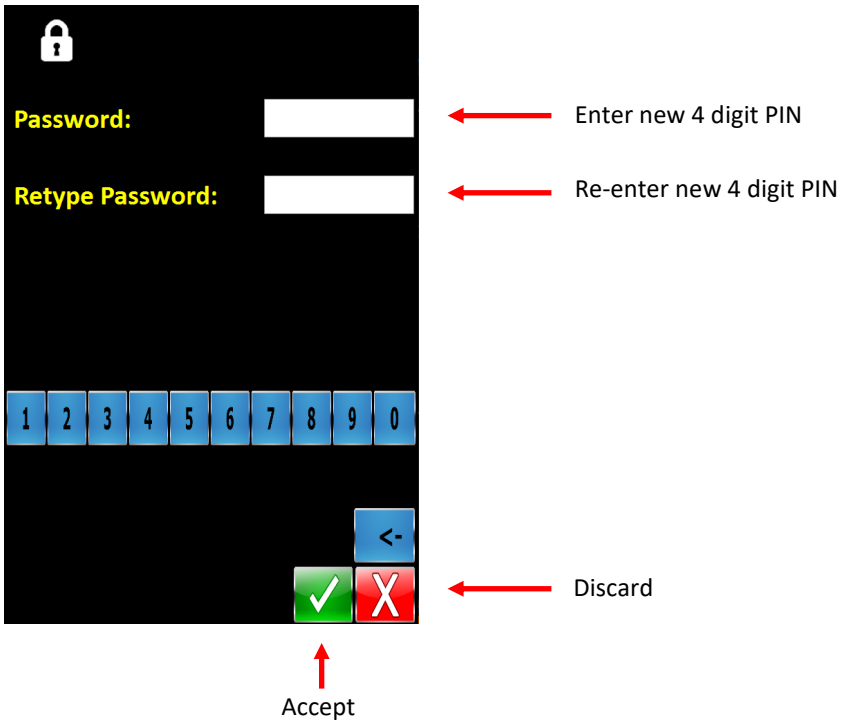


Accept

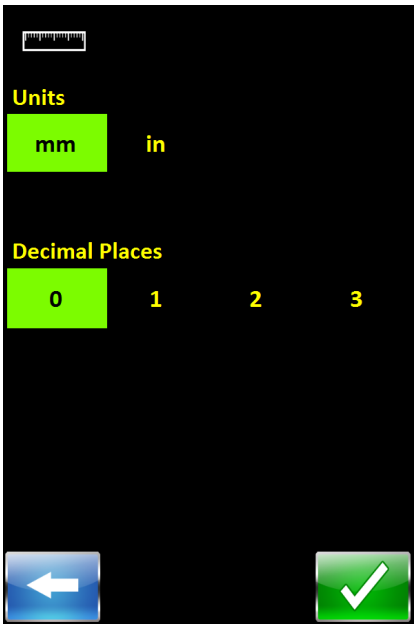
Edit User PIN

Default PIN number is 1111 - This can be changed to suit customer requirement.

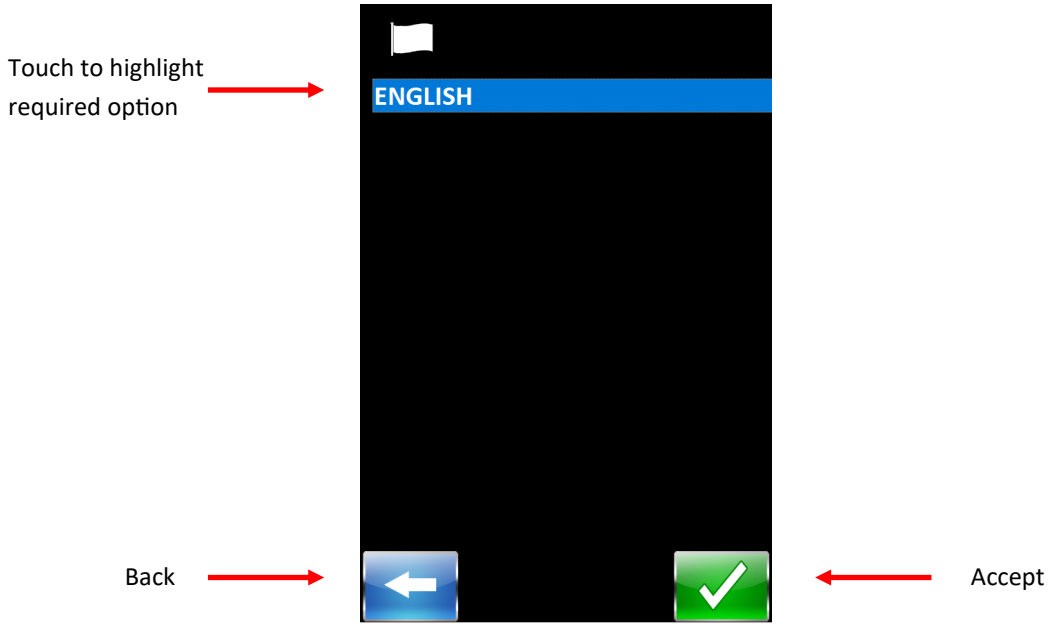
Please beware, if you choose to change from the default and then forget the new PIN, the indicator will have to be returned to EEC to be reset.



Select units and decimal places for COG



Select Language



Date format / Rear bite

Connect to Wifi

Available Internet Network

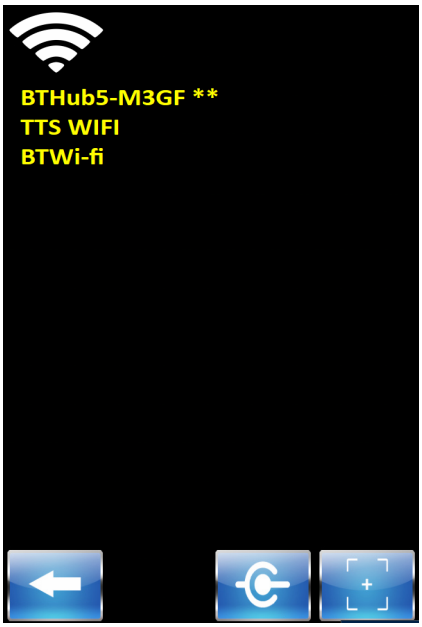
If no networks are listed then press SCAN button

Touch required network to highlight

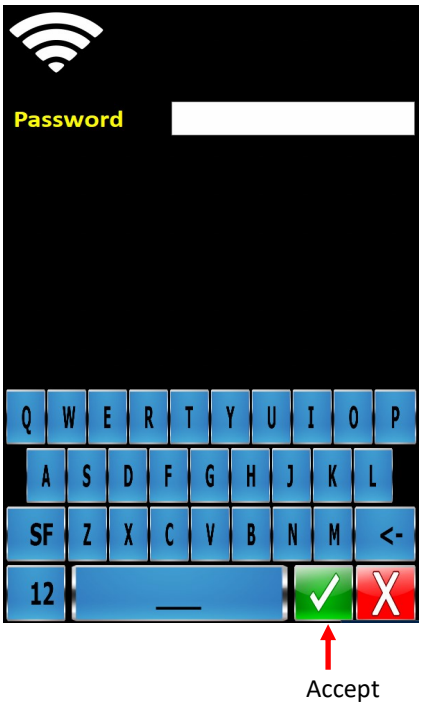
then press CONNECT button

Password Screen will open

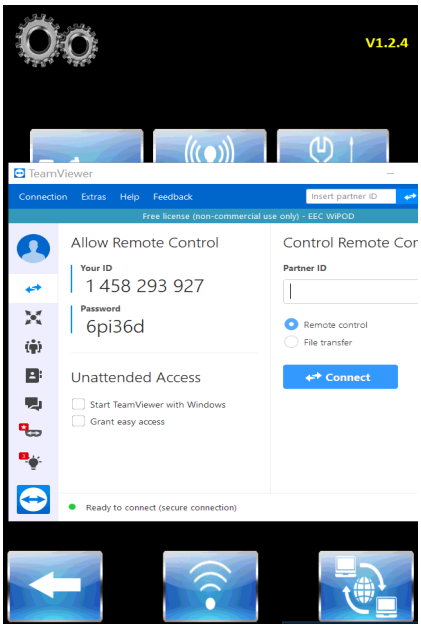
** denotes connected network



Type network password



Remote Assistance



if remote assistance is require our engineers can connect to your Wi-POD remotely. To update software can be an example.

1: Ensure Wi-POD is connected to the Internet

2: Press the REMOTE ASSISTANCE button and the Teamviewer screen will open.

3: Make note of the ‘Your ID’ number and ‘Password’ shown on the screen. The EEC Engineer will need these so they can connect to your Wi-POD.

4: When the Engineer is finished they will disconnect and restart your Wi-POD in normal operating mode.

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