

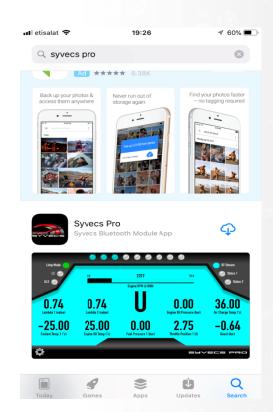
# **Telemetry Bluetooth Module**

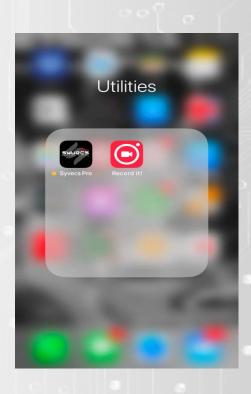


Syvecs Telemetry Bluetooth Module is designed for use with Apple and Android Devices. Enabling users to view custom configurable data on there portable devices. This data can then be viewed in a series of gauges which can be setup based on the customers personal preference all done via the mobile device.

Designed to work with any Syvecs package, the Syvecs App allows users full control of the RS232/Can Stream selection to suit any CAN or RS232 Layout used.

The Applications to work with the Device are free to download from the devices App stores and will only work with the Syvecs Bluetooth Module and a Syvecs Engine Management System.





## Installation

The Bluetooth Module will work with any Syvecs engine management unit, It important to check the pinout's of the Syvecs ECU which you are connecting to before installation which can be found in the below link.

Please Note: For the app to Function, only Pins 4, 5, 6 and 7 need to be connected. For Map switching Pins 2 and 3 need to be connected



### http://www.syvecs.co.uk/download-area/

#### **Wiring Information:**

PIN1 – Available On/Off Switch Output

PIN2 - PWM2 - Traction Sw - Connect to a Spare input on your Ecu

PIN3 - PWM1 - Calibration Sw - Connect to a Spare Input on your Ecu

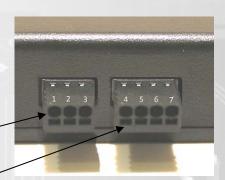
Pin4 – Ground (MUST connect to Ecu Power Ground)

Pin5 – RS232 TX (connect to ECU RX)

Pin6 - RS232 RX (connect to ECU TX)

Pin7 – 12v (connect to vehicle power or Ecu Power)

Strip 5mm of Insulation back from 20-24awg cable and push firmly into the appropriate circular slot. To release cable inset a small flat blade screw driver to lift the tab found in the rectangular slot shown here.



#### Status LED Information:

The status LED are located inside the unit and are for installation assistance.

LED1 Red - Application Loaded on IOS

LED2 Blue – Paired and Authenticated on IOS

LED3 Green - Power

LED4 Green - RS232 On / Off

Once wired in you will need to connect to you Syvecs ECU via the Ethernet cable part of your kit and to download the Syvecs Software suite from the Syvecs website.

Install the SSuite package onto your computer and 6 Programs will appear:

- SCal Used to adjust the maps in the ECU (Calibrate it)
- SCfg Used to setup the datalogging (Configure which channels and events to log, and how frequently)
- SData Used to read datalogs from the ECU
- **SView** Used to view and interpret datalogs
- **SMon** Used to monitor live ECU parameters
- SMsg Used to monitor ECU status and debug messages

Please note: New releases of software and firmware are often released to apply new features and upgrades, be sure to check the website to ensure you have the latest Ssuite installed

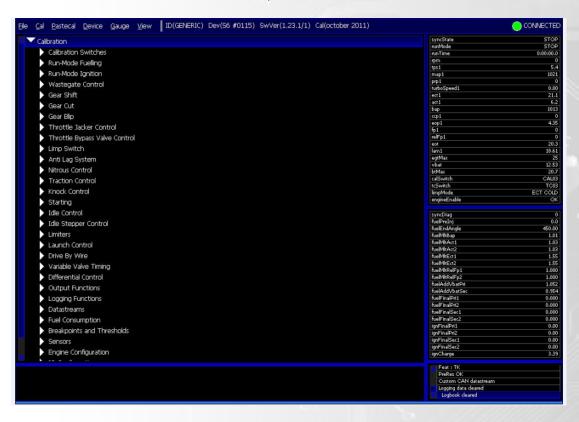
Now that the Syvecs software is installed double click on the program SCAL which will be placed in the Start Menu or via a shortcut which will be placed on your desktop if you selected this option in the installation of SSuite.



In the sub menu for **Device** you find the option **Connect**. Select this and Scal should find your Device. Once this device is found it will ask you how you want to access this File. Select **OK**.

The Offline Box shown in the Screenshot above should now change to Connected and a Green light will be present.

You are connected and the Calibration list should be presented as shown in the below screen shot



If you are having problems connecting to the Device speak to the Syvecs tech team on <a href="mailto:Support@Syvecs.co.uk">Support@Syvecs.co.uk</a> or <a href="mailto:Tech@syvecs.us">Tech@syvecs.us</a>

The Area which is required next, is the Datastream section found ¾ of the way down the calibration list



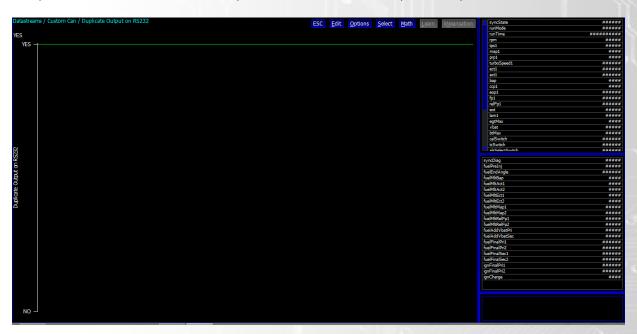
Now in the Datastream section go to the Datasteam Select



Select Custom Can, 95% of our customers will be using this already in our kits. So no change is required here if already on Custom Can... If Set to NONE change to Custom Can

An other stream set please contact <a href="mailto:support@syvecs.co.uk">support@syvecs.co.uk</a> for more help here.

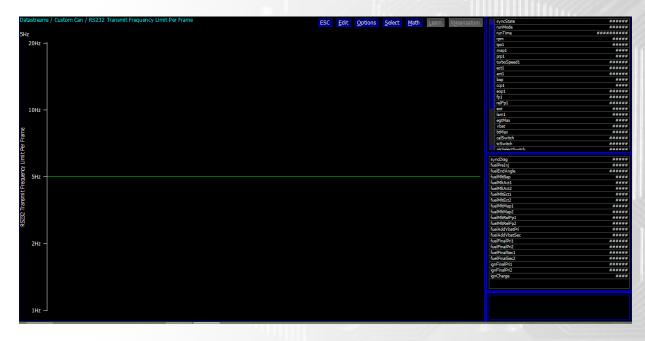
Now please ESC and Double click on the option under Datastreams - Duplicate Output on RS232



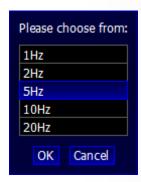
Press Enter then and select Yes



After this press Esc again and then Select the option – RS232 Transmit Frequency Limit Per Frame



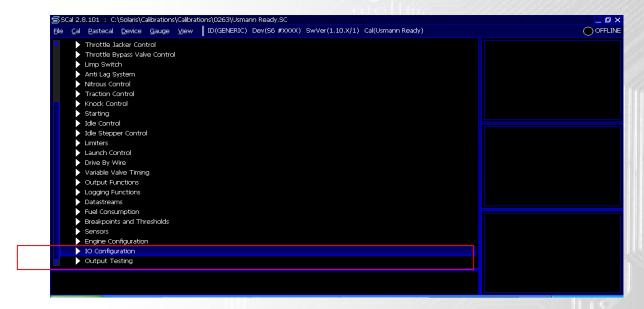
Press Enter and Select 5hz for the V1 Bt Module or 20hz for the V2 Module



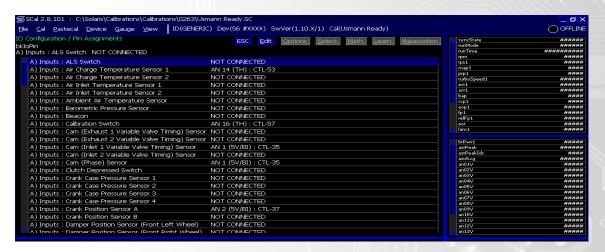
If you do not require the ability to do Map Switching then you need to save all the changed settings onto the Ecu...Click DEVICE at the top of the Screen and then PROGRAM

The ecu will then reset and say calibration flash passed OK

If you do Require Map Switching then you need to press Esc Twice and scroll down to the Pin Assignment Section found at the bottom of the list.



After selecting IO Configuration, Select Pin Assignments the Full Input and output table will be brought up.



#### **Assigning Calibration and Traction Switch**

When viewing the IO Configuration table you are presented firstly with all the input availabilities. You firstly need to select the appropriate item which you want to use, in this case it is the Calibration Switch and Traction Switch. Double Click on the Item and then Select the Analogue (AN) input you used when wiring in the Cal and Traction signals from the Bluetooth adaptor to the Syvecs Ecu Connector.



If the desired input pinout is currently allocated then it will be displayed in RED. The WHITE items show free spaces

You Must Program the ECU again at this point to save the changes made! If you encounter any problems in this stage please contact your calibrator or nearest Syvecs Branch

## Making a Connection on Mobile Device

Open the settings tab of you mobile device and select Bluetooth options

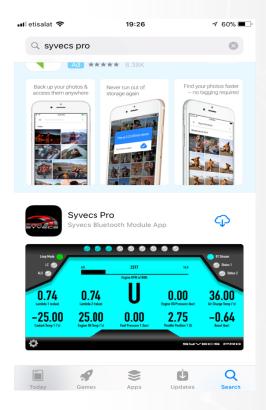


Airplane Mode DEVICES ( Samsung Home Audio Syvecs-BT-48FF cted (i) Control Center Oo Not Disturb General Sounds Wallpapers & Brightness Privacy Mail, Conta Messages TaceTime Maps

The mobile device will then find the Syvecs Bluetooth Module which will appear as "Syvecs-BT – XXXX" XXXX is the Serial number of the device.... Connect to the unit

Proceed then to the App store for your device

Search for SyvecsPro and install it once found.



## **Changing Calibration and Traction positions**

While in the display areas of the application you need to click on the setting button as shown below to access the Cal and TC Switching



Here select which Switch setting you wish to change

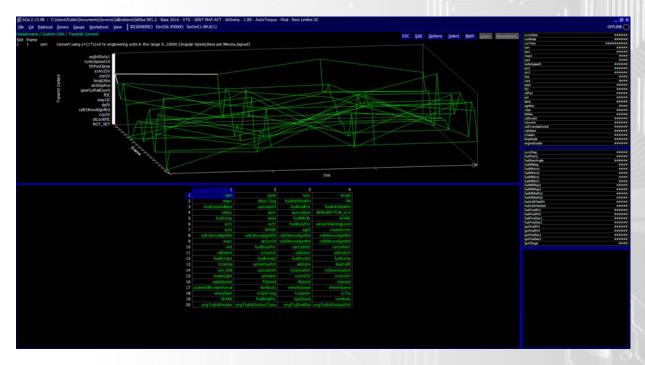


Then you can select the cal or tc number

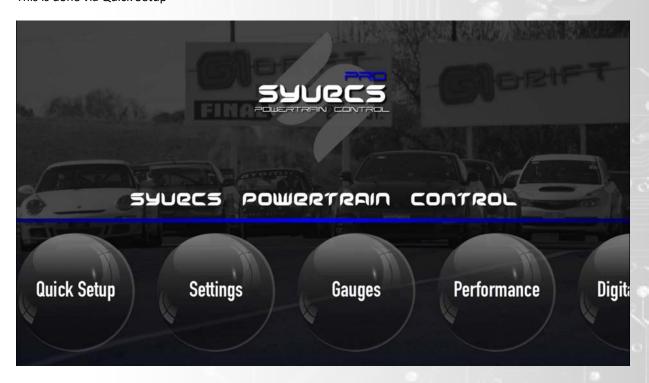


## DataStream Setup

In order to get as much data into the application, it's vital to ensure the datastream setup in the app matches what is set in the frame content for the custom can content in Scal. We suggest that users DO NOT adjust the items in the custom can content in scal but only in the Syvecs Pro Application.



This is done via Quick Setup



Here you can adjust the item in each frame and slot to match the Scal Setup

	1	2	3	4
1	RPM	N2OSWITCH	VBAT	SPARE
2	MAP1_BAR	SPARE	SPARE	REVLIMITACTIVE
3	SPARE	SPARE	SPARE	RUNMODE
4	RELFP1_PSI	AFR1	FII	FUELDUTYPRI1
5	IGNFINALPRI1	AFR2	FUELMLTCLL1	TPS1
6	ACT1	ECT1	EGT1	WGFINALDUTY1

	1	CANCEL	4
1	RPM	SPARE	SPARE
2	MAP1_BAR	Air Charge Temp – °c – (ACT1)	REVLIMITACTIVE
3	SPARE	Air Charge Temp – °c – (ACT2)	RUNMODE
4	RELFP1_PSI	AFR 1 - Fuel - (AFR1)	FUELDUTYFRI1
5	IGNFINALPRI1	AFR 2 - Fuel - (AFR2)	TPS1
6	ACT1	Air Intake Temp – °c – (AIT1_U09)	WGFINALDUTY1
- [		Air Intake Temp – °c – (AIT2_U10)	

For Further help or Support please contact  $\underline{Support@Syvecs.co.uk} \text{ or } \underline{Tech@Syvecs.us}$