



# **Port Fuel Injection**

## **Microsquirt**

### **TPS Calibration**

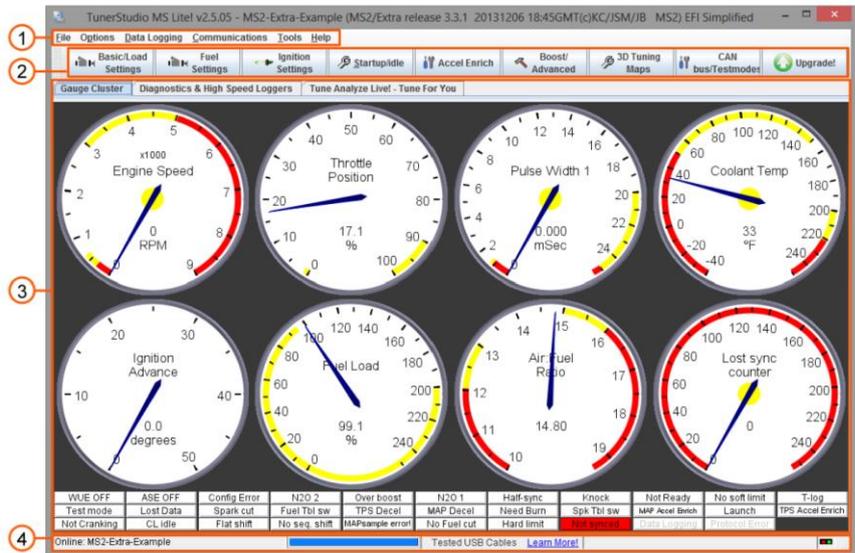
## Tools required

- Kavinci Motors Programming lead (see with your local dealer)
- Computer
- TunerStudio Software ( <https://www.tunerstudio.com/index.php/downloads> )

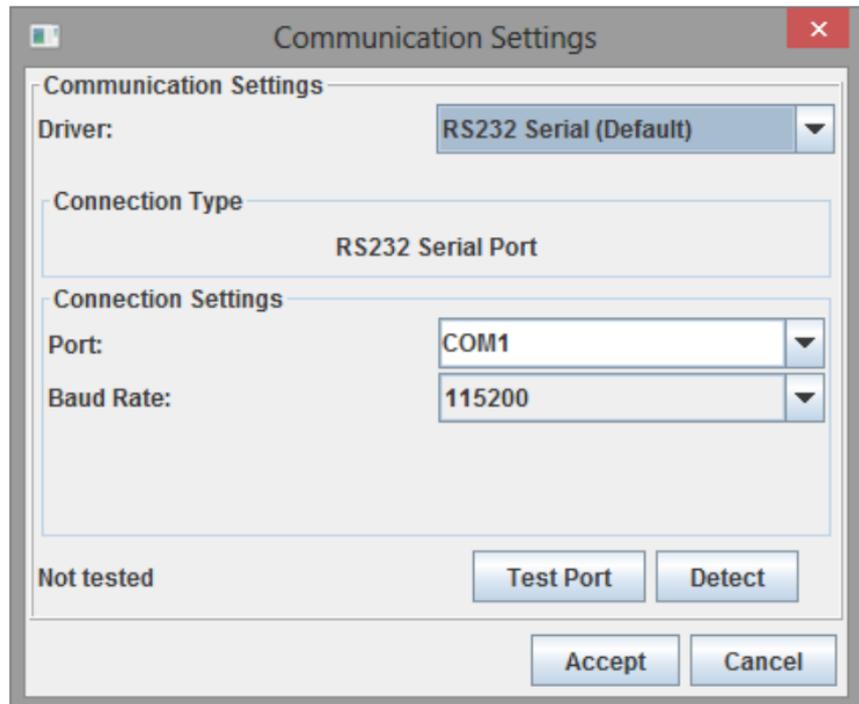


## 1. Connect Microsquirt to TunerStudio

- a. Connect the Microsquirt ECU with the Kavinci Motors Programming lead to the computer.
- b. Open Tuner studio software
  - i. If a TunerStudio project has been previously created, open the project
  - ii. If a Tuner Studio project never been created, open the “.msq” file
    1. Connect communication of TunerStudio to Microsquirt by pressing on the Communications on the Top Menu (section 1 of TunerStudio)



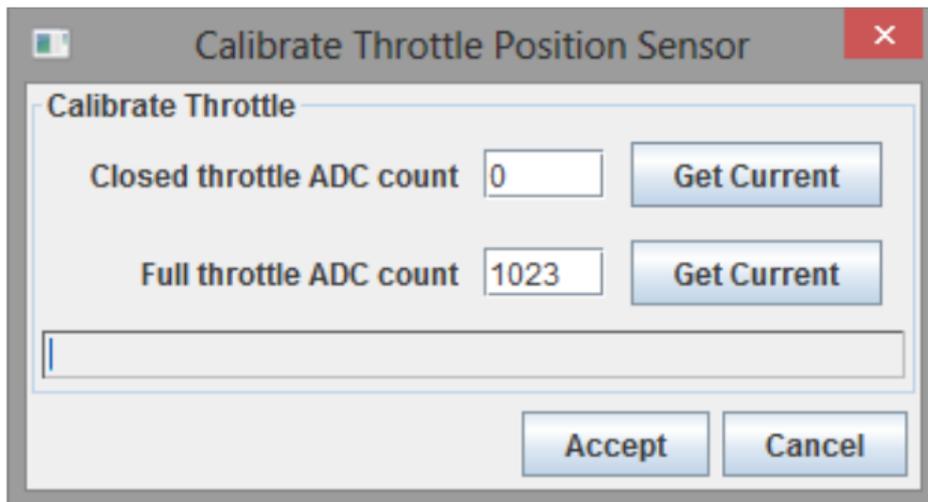
2. The communications Settings window opens, Set the Correct Port in Connection Settings.  
Once the port selected, Press “Detect” then “Test Port”



3. To finish with the communications Settings, click on “Accept” button to close the window.

## 2. Calibration of the TPS

- a. In the “Tools” Menu (section 1 of TunerStudio)
- b. Press the “Calibrate TPS” Section
- c. “Calibrate Throttle Position Sensor” window will open



- i. Fully close the Throttle (unscrew the screw holder on the opposite side of the throttle body sensor to make sure the Throttle is fully closed)
  1. Press the Button “Get Current” on the first line “Closed throttle ADC count”
- ii. Fully open the Throttle (turn by hand the Throttle wheel, to make sure the Throttle is fully open)
  1. Press the Button “Get Current” on the second line “Full throttle ADC count”
- iii. Once the values Get, Close the windows by clicking on “Accept”

## 3. Check the TPS Value

- a. To check the TPS value, on the main screen with the gauge (section 3 of TunerStudio)
  - i. Fully Open the throttle, the Value should be 100% (+/- 0.2%)
  - ii. Release the throttle, the value should be 0% (+/- 0.2%)
- b. If the values are not correct go back to “2. Calibration of the TPS”