

R-Tune+Driver Installation, Connecting to ECU and Commands

Document Version	1.1	Release Date	14 october 2020
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Application information	Generic
Vehicle	Not Applicable
Model	Not Applicable
Year of manufacture	Not Applicable
PowerTRONIC application	All PowerTRONIC ECUs, From Version 2, Firmware version F.3.x onward

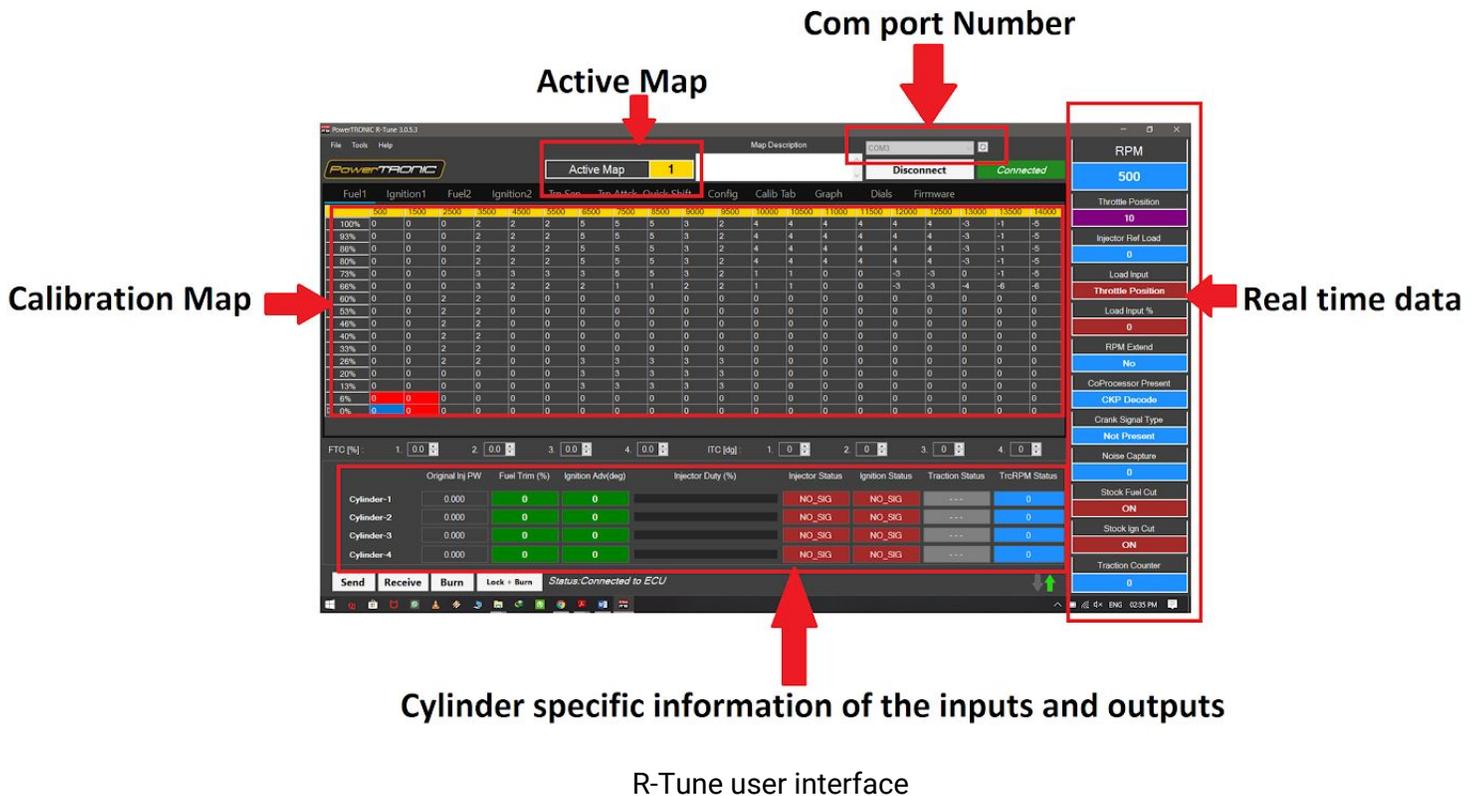
Note:

- Read through all instructions before installation and use.
- Ensure that the bike is switched off and the key is out of the ignition before proceeding with the installation.
- Some parts of the bikes might be hot/sharp and may cause burns/cuts. Proceed with extreme caution or wait until the bike has cooled down. Always wear safety gloves.
- When the installation is complete, make sure to secure the wiring loom away from the movable parts or components which tends to heat up during the normal operation of the vehicle at any chance.
- PowerTRONIC is intended for motorsport use on a closed course, please check with your local laws before using this product. Race Dynamics / PowerTRONIC is not liable for consequences arising out of using the product.

Support

Call/Whatsapp: +91 99162 29292 / +91 80409 29292
 E-Mail: support@powertronicECU.com
 Website: www.powertronicECU.com

The PowerTRONIC is an open user tuneable piggyback ECU. You can either use the provided maps, download maps from our website or create your own maps using the R-Tune tuning software.



Requirements

- 1) Minimum Recommended system configuration OPERATING SYSTEM: WINDOWS 7/8/10
- 2) Microsoft .NET framework latest version pre-installed
- 3) RAM 512 MB (minimum)
- 4) USB Type A port
- 5) Stable internet connection
- 6) Any file extracting software pre-installed (ex Winrar, Winzip, 7Zip)

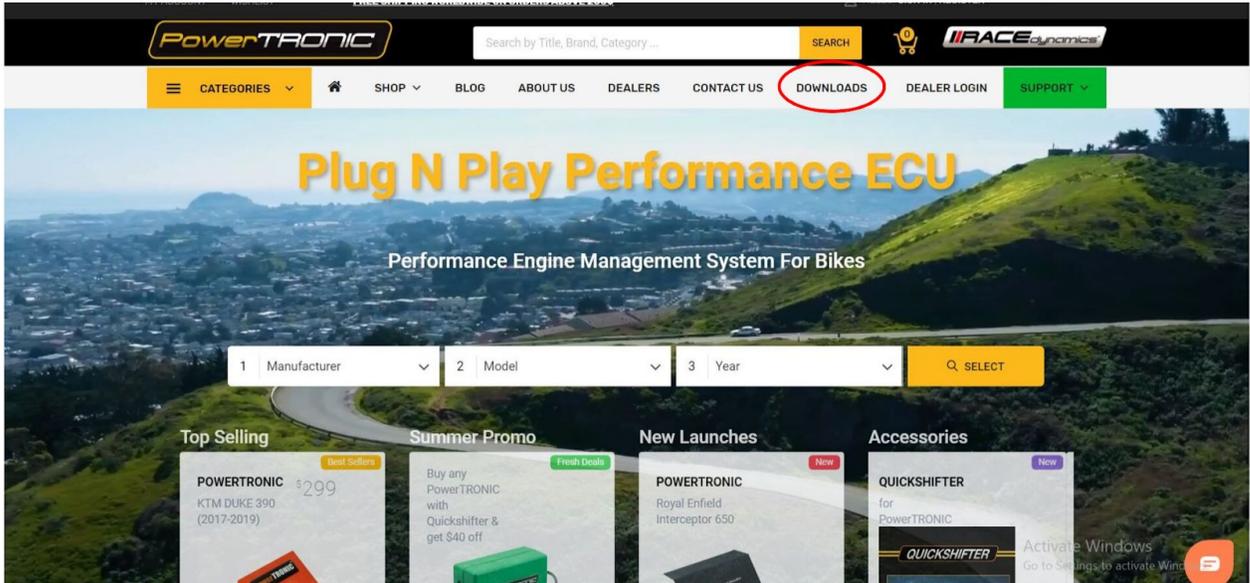
General information:

- 1) Uninstall any previous versions of R-Tune before proceeding.
- 2) Microsoft .NET framework must be installed on the PC without which R-Tune cannot be installed.
- 3) PowerTRONIC is a USB powered device, so it does not need to be connected to a vehicle or specifically turned on to establish communication with the computer.
- 4) The setup automatically places a shortcut to R-TUNE on your desktop.
- 5) Refer R-Tune 'Tuning Manual' for more details.
- 6) Sometimes the system antivirus does not allow to download the software setup or the installation process. Temporarily disable the antivirus till the installation process is over.

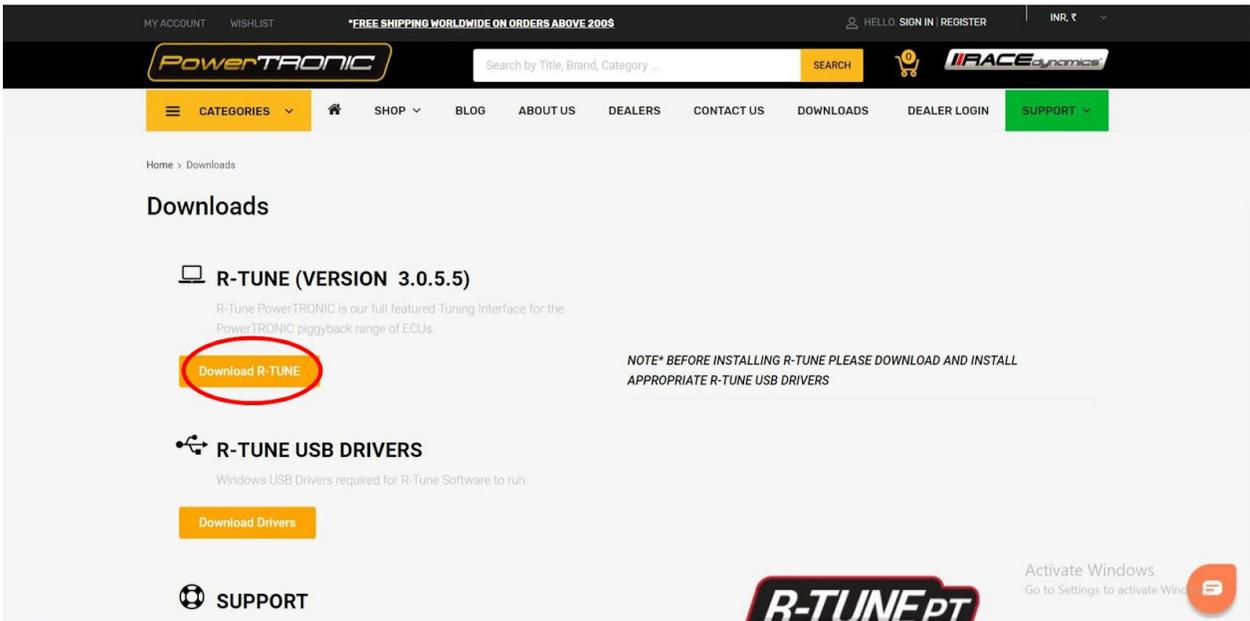
Downloading R-Tune

To download and install R-Tune software, follow the instructions

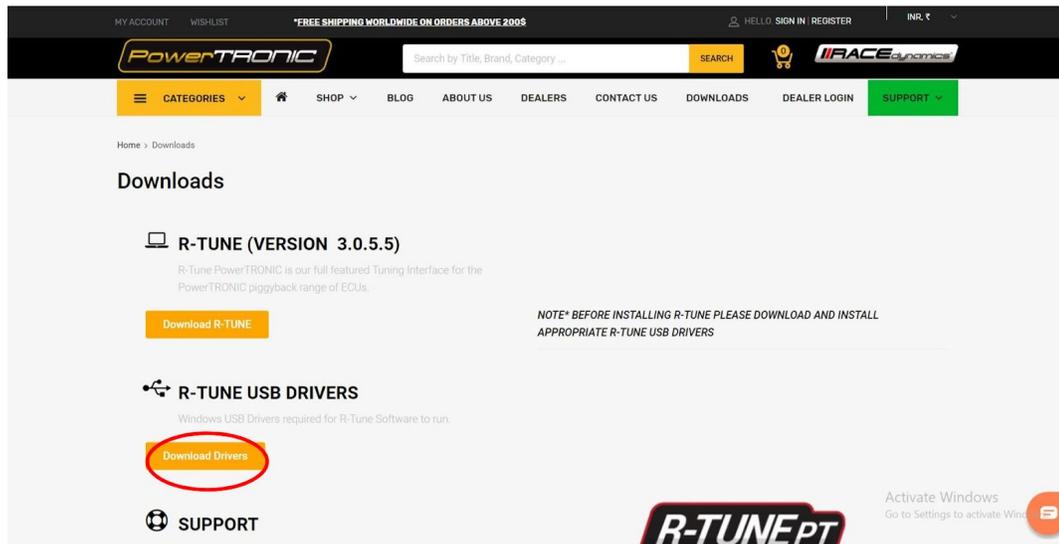
1. Go to <https://powertronicecu.com/> and select the **Downloads** option.



2. Click on the Download R-Tune menu to download the latest version of **R-Tune** setup file.

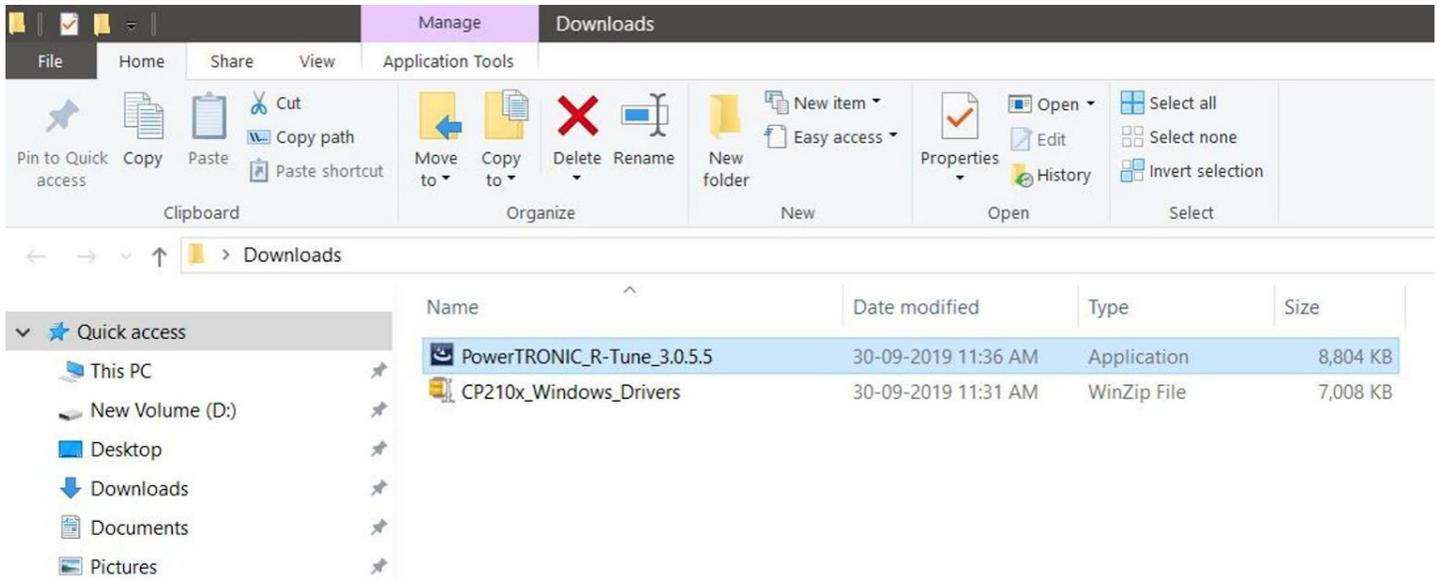


To Download the R-Tune **USB drivers**, click on Download drivers.



R-Tune Installation

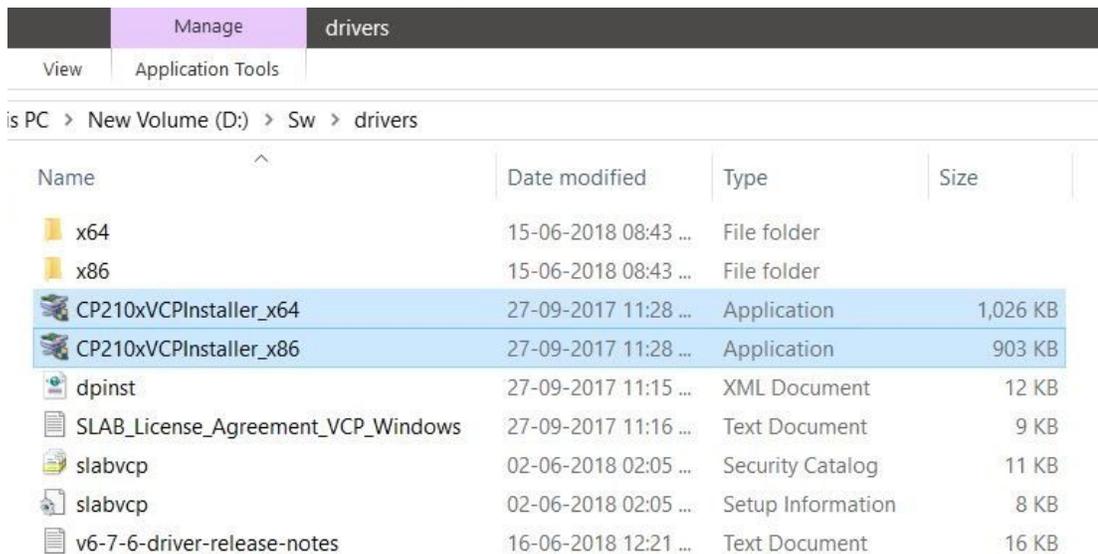
- To install the software, double click on the set up file downloaded and follow the installation wizard to complete the installation process.



- Open/Extract (using winzip/winrar/7zip etc) the CP210x_Windows_Drivers file to a new folder

To install drivers, double click *CP210xVCPInstaller_x64* (for 64bit system) or *CP210xVCPInstaller_x86* (32bit system) **depending on your system configuration**.

Refer figure below. Follow the instructions by Driver Installer Wizard



Note: To check whether your computer is 32 or 64 bit configuration, right click on **My Computer** and click on **Properties** and check **System type**.(Refer image below)

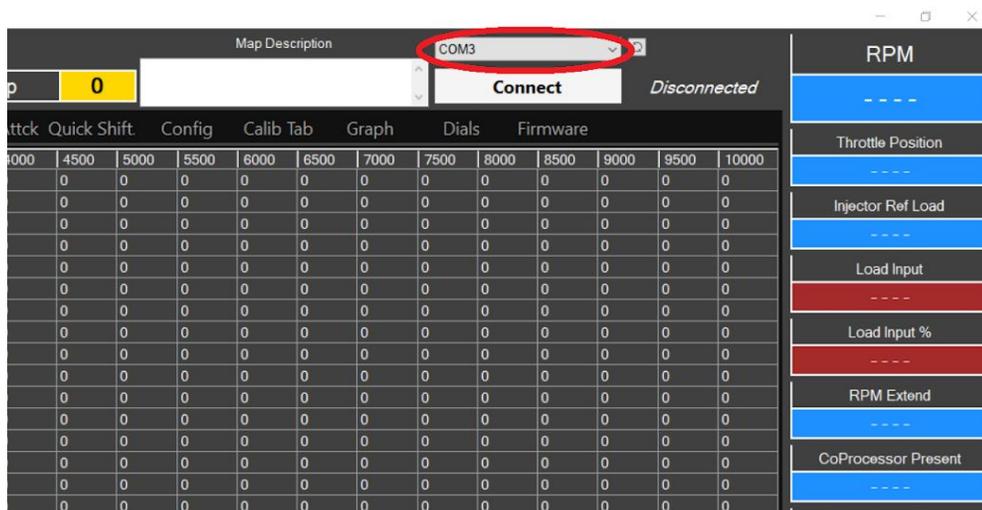
System

Processor:	Intel(R) Core(TM) i7-2820QM CPU @ 2.30GHz 2.30 GHz
Installed memory (RAM):	16.0 GB (15.9 GB usable)
System type:	64-bit Operating System, x64-based processor
Pen and Touch:	Touch Support with 2 Touch Points

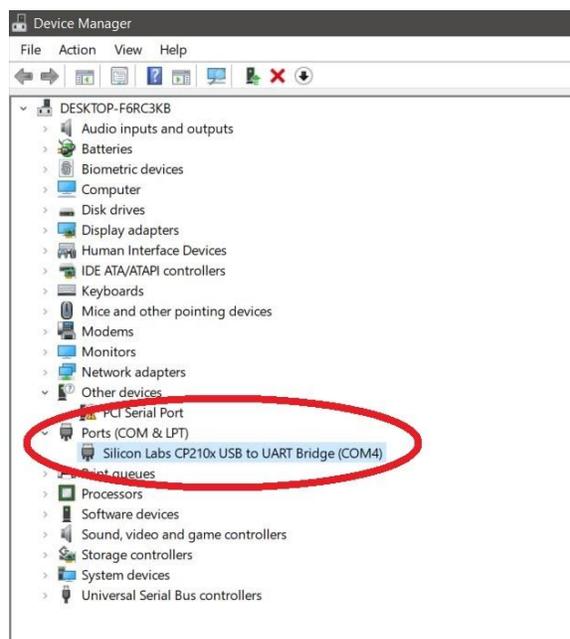
Computer name, domain, and workgroup settings

Connecting R-Tune to ECU

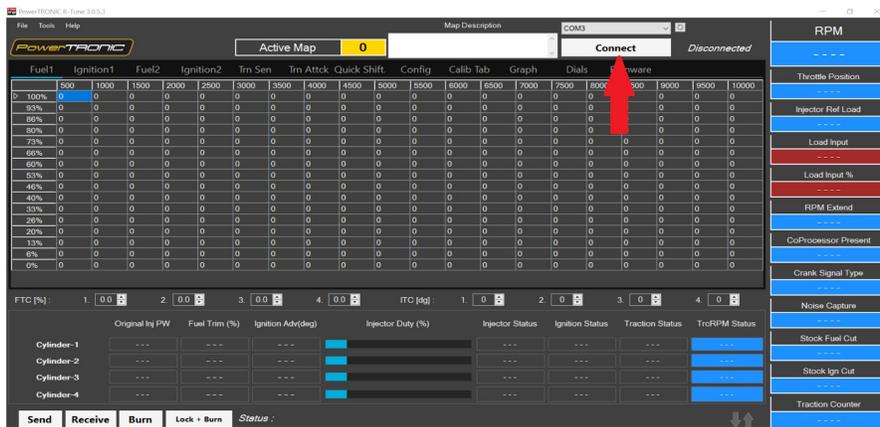
- Open the R-Tune software by double clicking the icon on the desktop of the PC.
- With the PowerTRONIC connected to your bike, use the USB cable and connect it to the PC
- Identify the correct **COM Port** in Device Manager and locate the same COM Port in the RTune software before clicking on Connect. Refresh the list if necessary by clicking the Refresh button []. Refer Figure below



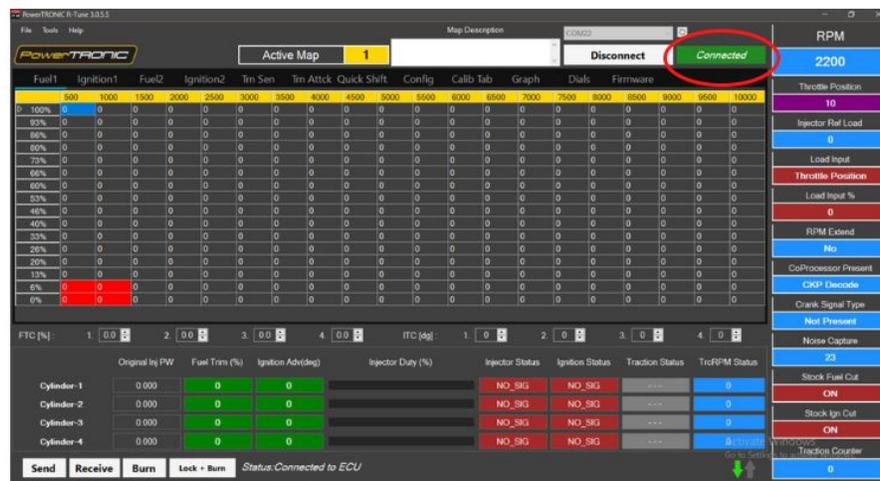
(To check your com port number, go to **Device Manager**, Select **Ports (COM & LPT)** and note the number on the **Silicon labs CP210x USB to UART Bridge**. Refer figure below)



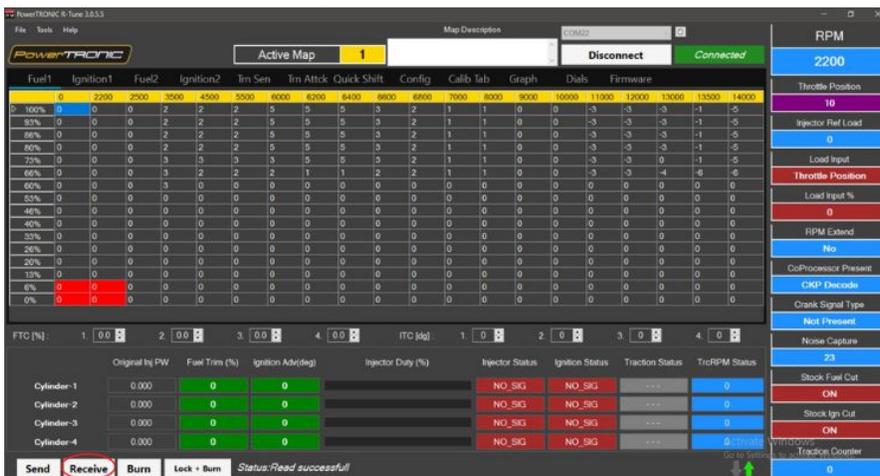
9. Once the appropriate COM Port number is selected, Click on **Connect**.



10. The connection between ECU and R-Tune is established.



11. Click on **Receive** to read the data. Now you can see the contents on the ECU



R-Tune commands

1) Send Command

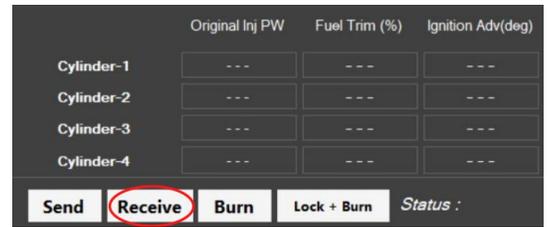
Sends the content of the maps on the PC to device

Note: All maps sent to device are temporary, they are erased and previously stored maps on the device are loaded on every power on sequence. "Burn" has to be clicked to make any map sent to the device permanent.



2) Receive Command

Reads the contents on the device and displays on the PC.



3) Burn Command

Used to store the map permanently on the device

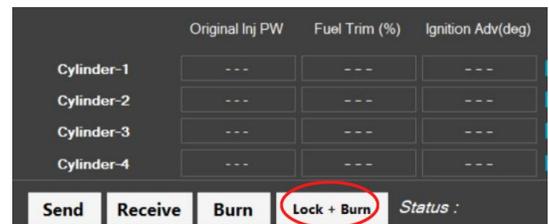
Important note: Please turn off the bike before clicking Burn command.



4) Lock + Burn Command

If you press Lock+Burn, the values and parameters are read-protected for confidentiality purposes. The values on the fuel and ignition table will automatically appear as 0 so that the values are not visible to any other.

Important Note: Before enabling the Lock+Burn feature, make sure you have saved the map in your computer file folder. If you want to see the values back on the ECU, you need to reload the same map (which you have saved in your file folder), but this time you need to SEND and BURN instead.



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