

R-Tune V4 installation and connecting to ECU For Windows and Android devices

Document Version	1.0	Release Date	12 Jan 2023
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Application information	Generic
Vehicle	Not Applicable
Model	Not Applicable
Year of manufacture	All PowerTRONIC V4 ECUs

Note:

- Read through all instructions before installation and use.
- For any assistance, please contact the support team.
- The files may be downloaded to the Downloads section of your devices generally unless the user previously selected a file directory.
- In some cases, the connection may face an error or the comport number may not be visible. To see the comport number, refer to page 9. Contact support for any assistance.

Support:

North & South America : +1 267 214 9292 (Call) +91 9606 044 178 (WhatsApp)

India, Bangladesh, Bhutan, Sri Lanka & Nepal : +91 9916 229 292 (Call & WhatsApp)

Rest of the world : +91 9606 044 177 (Call & WhatsApp)

Email : support@powertronicecu.com

Website : www.powertronicECU.com

Requirements

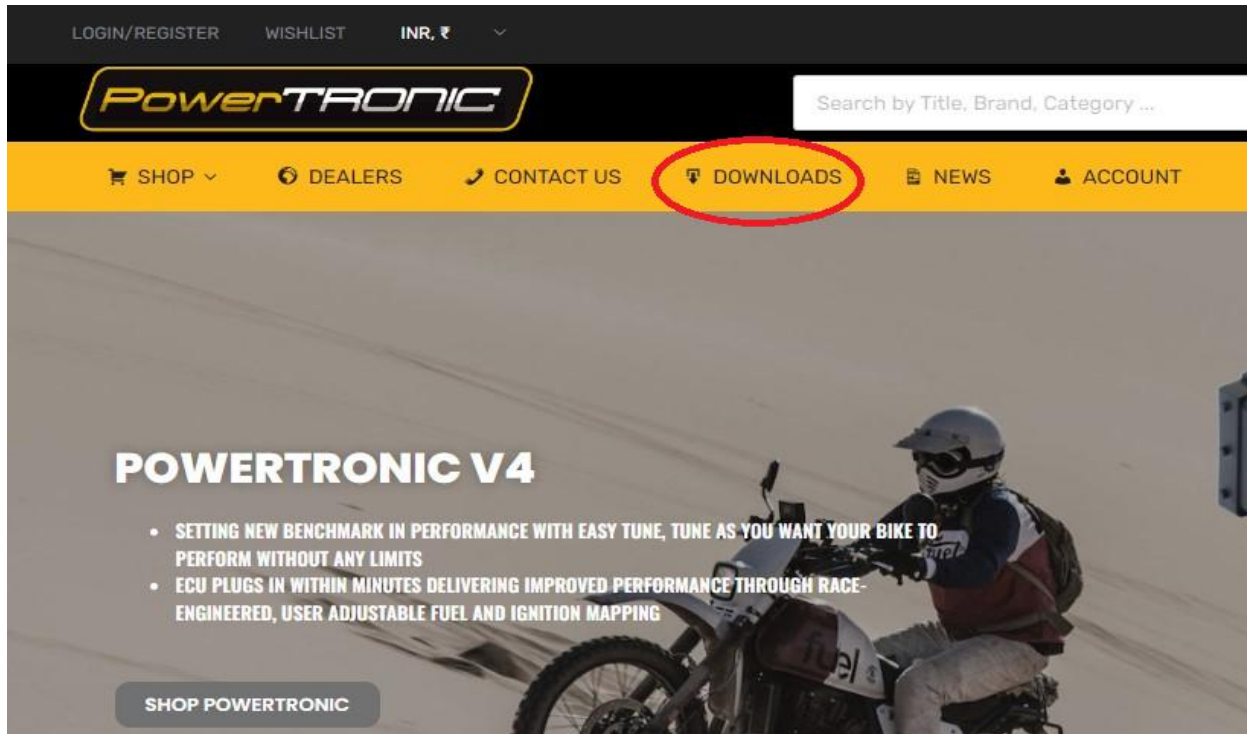
- 1) Minimum Recommended operating system, WINDOWS 10/11
- 2) Minimum Recommended Android version, 11 and onwards
- 2) RAM 4 GB
- 4) USB Type-A port on the laptop, Type-A female to Type-C male or Type-A female to Micro USB male depends on the phone model/variant
- 5) Stable internet connection
- 6) A fully charged computer/Phone or a stable power supply

General information:

- 1) Uninstall any previous versions of R-Tune before proceeding.
- 2) 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/phone.
- 3) To create a shortcut to R-TUNE V4 on your desktop, please tick "Create a desktop icon" during the installation process.

R-Tune V4 installation for Windows

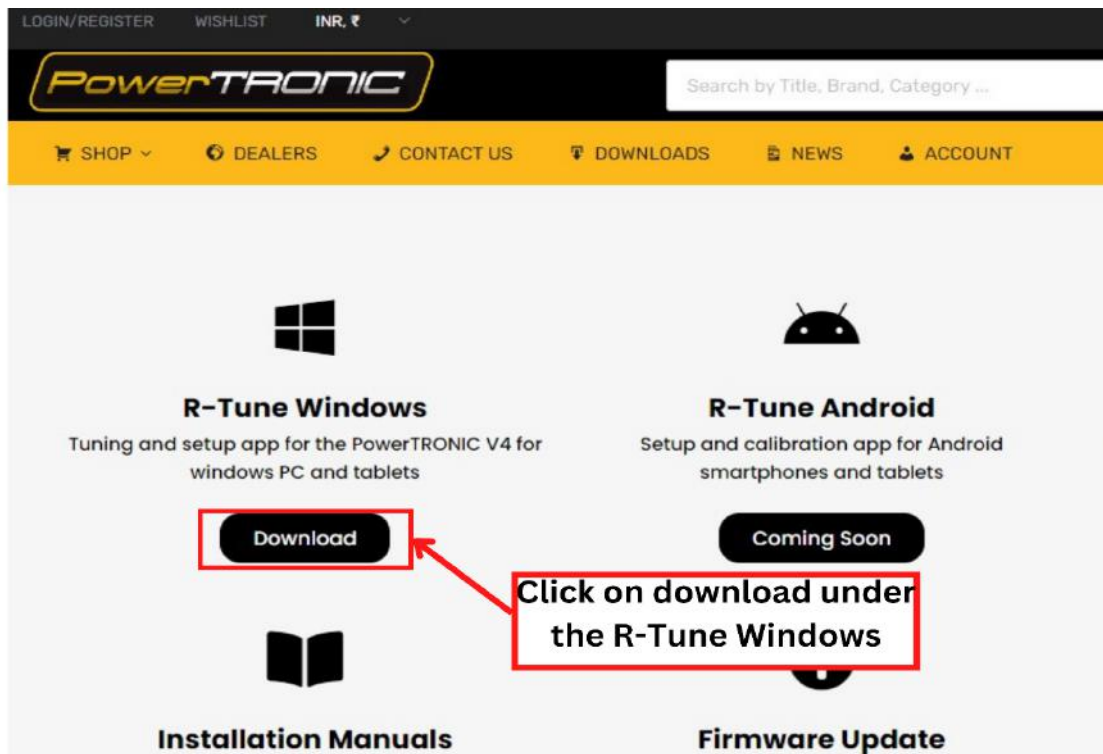
1. Go to www.powertronicecu.com and select the [Downloads](#) option.



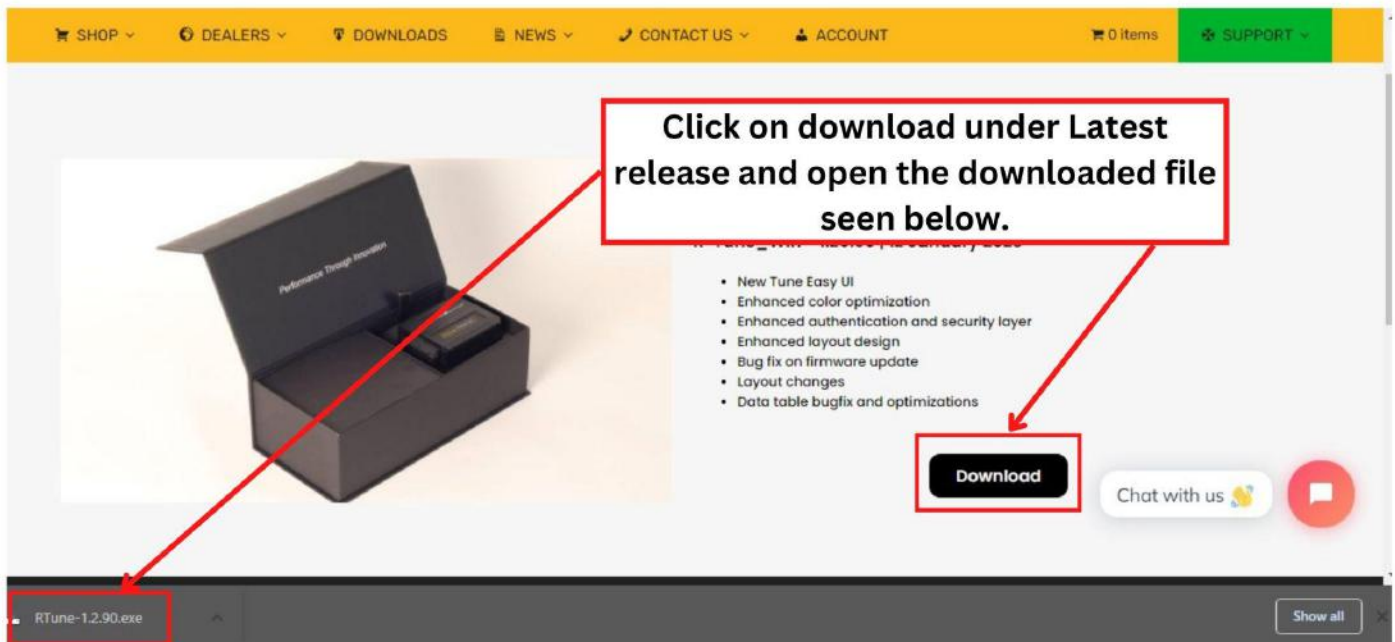
2. Scroll down to the **Downloads PowerTRONIC V4** section and click on **View Downloads**



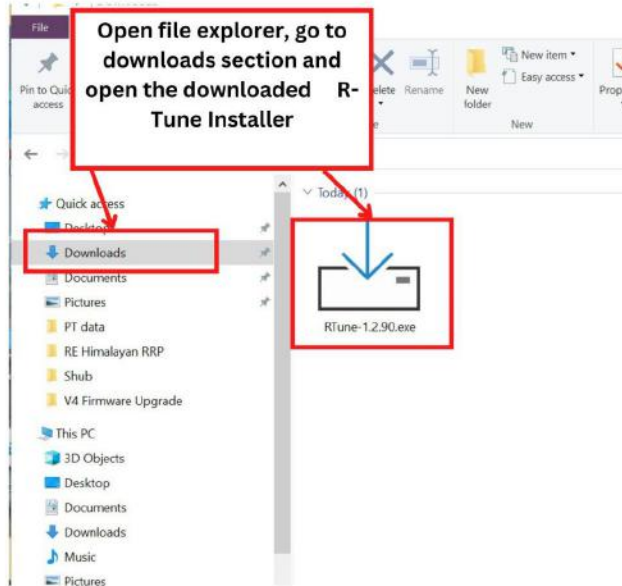
3. Click on [Download](#) under the R-Tune Windows



4. Click on Download under latest release and navigate to the downloaded file location.



5. Navigate to the Download location of the file and double-click on the R-Tune setup file.



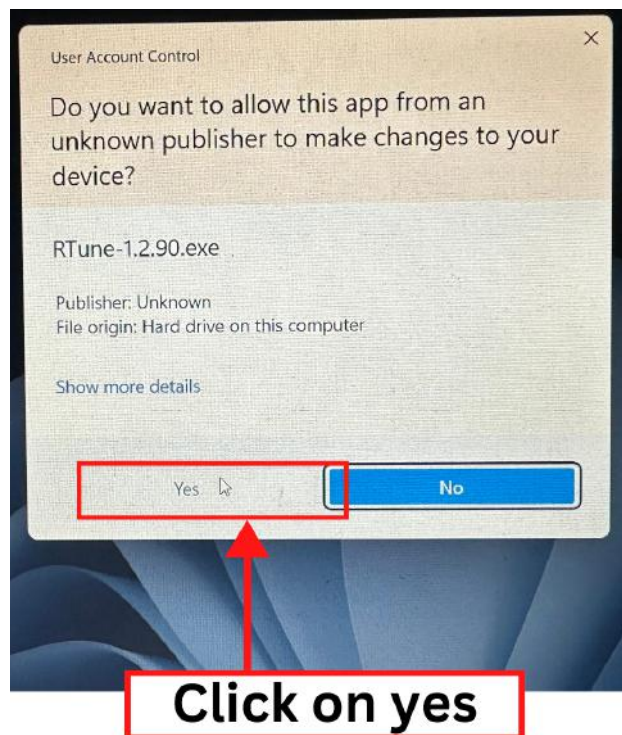
6. Once the installer is opened a pop-up window appears. Click on **More info** in the pop-up.



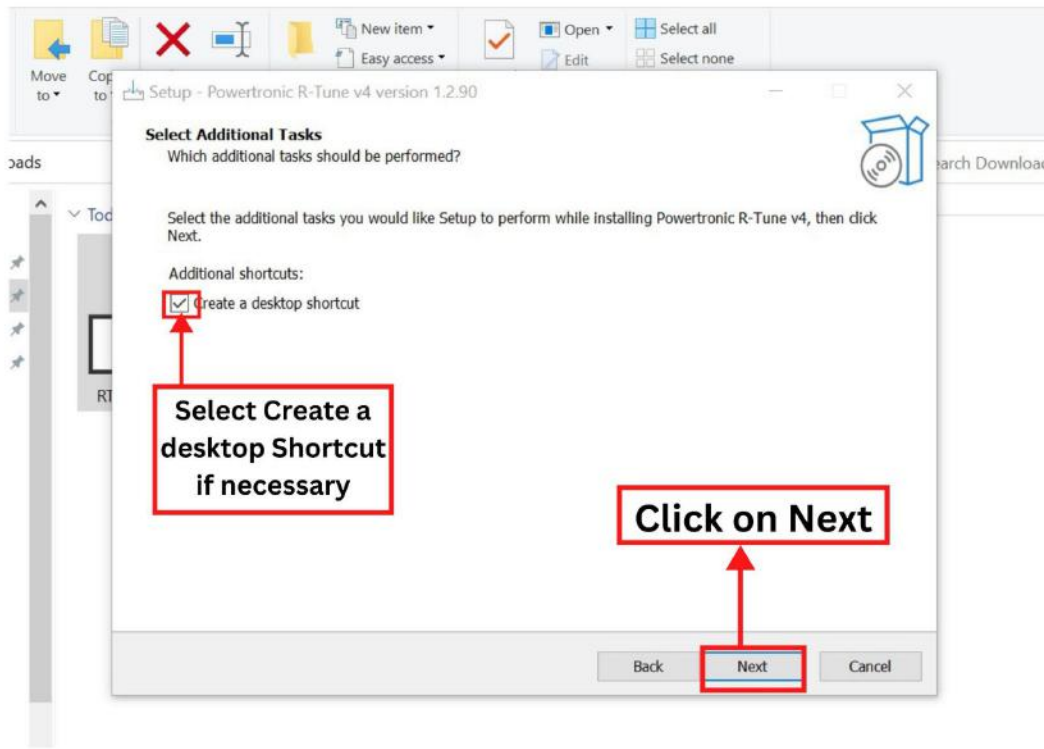
7. After clicking on **More info** in the pop-up, click on **Run Anyway**.



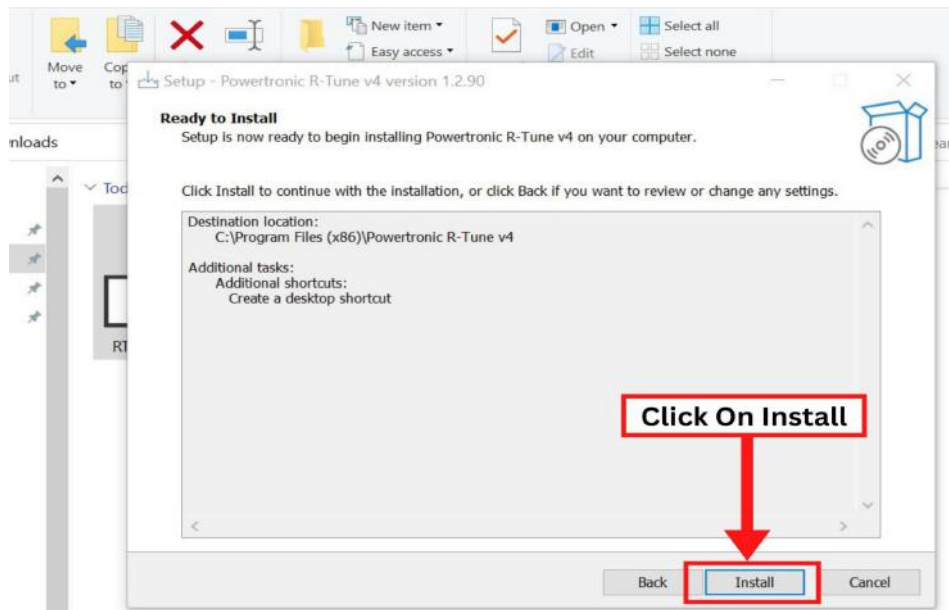
8. After clicking on **Run Anyway**, the **User Account Control** pop-up appears. Click on **Yes**.



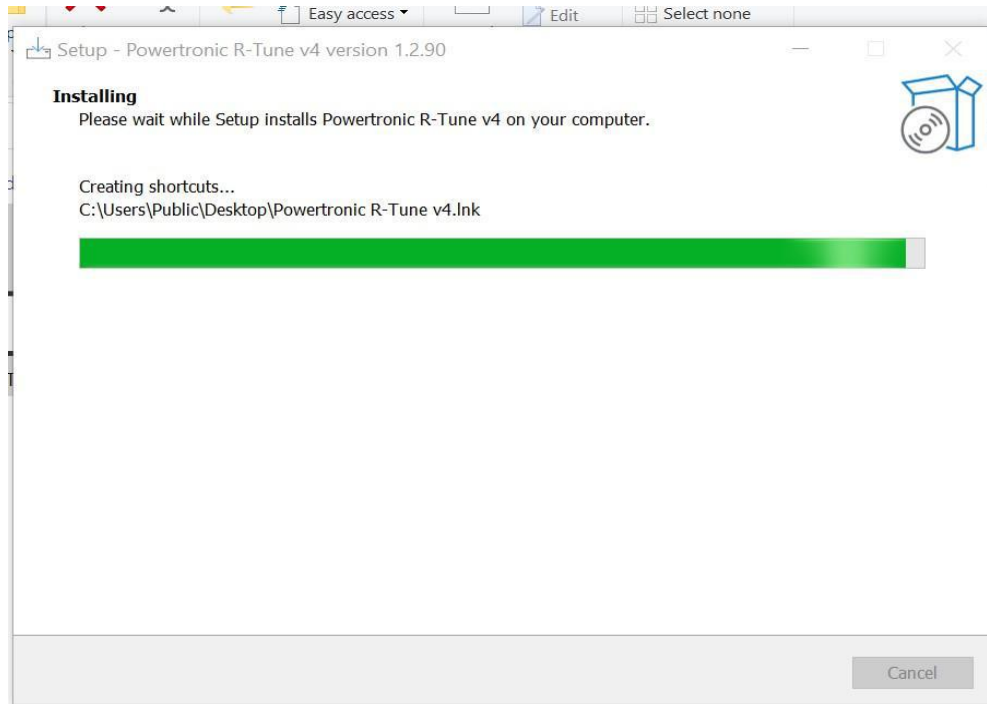
9. The installation wizard will appear now. Select **Create a desktop shortcut** if necessary and then click on **Next**.



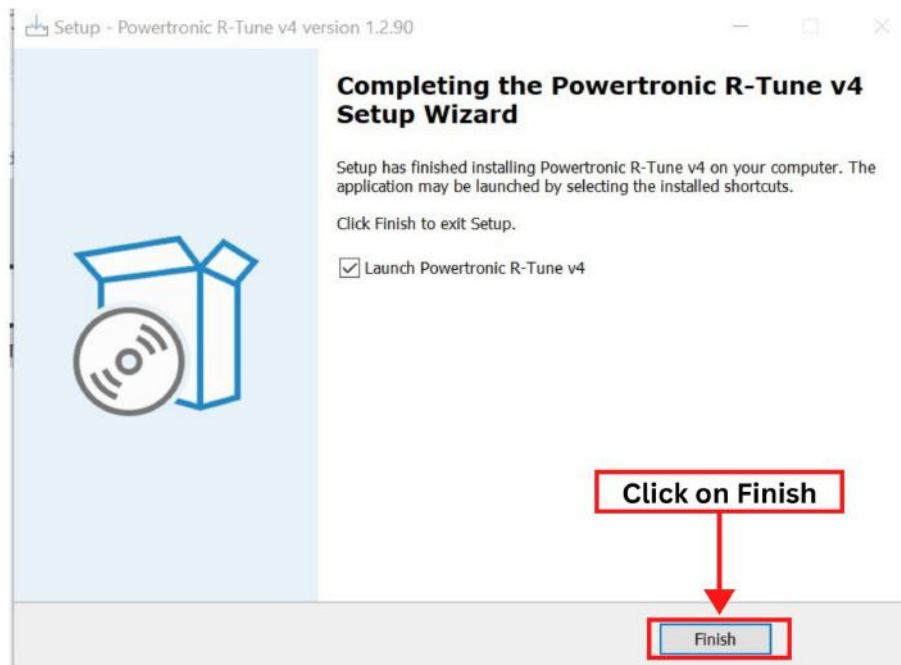
10. Click on **Install**



11. The process of installation will automatically get started.



12. After the setup is completed, click on **Finish**.

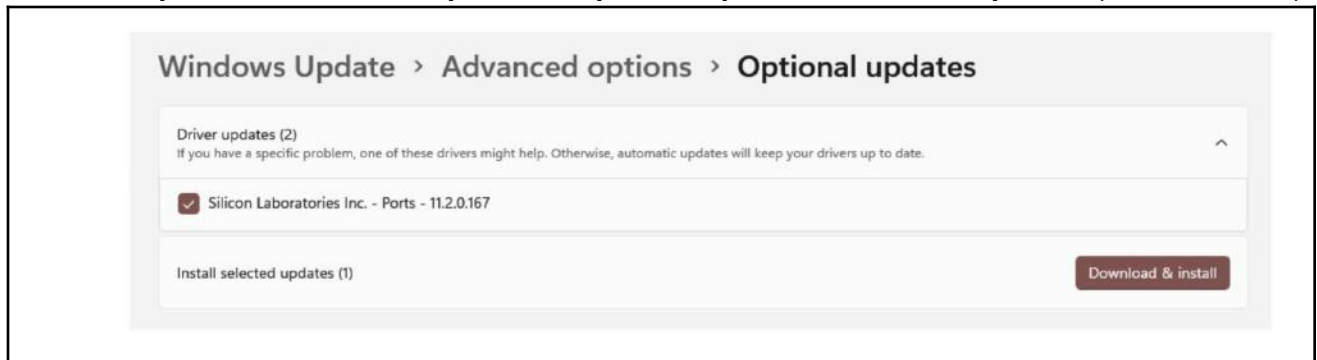


13. R-Tune V4 does not require USB drivers separately. They will be installed with the R-Tune V4 setup.

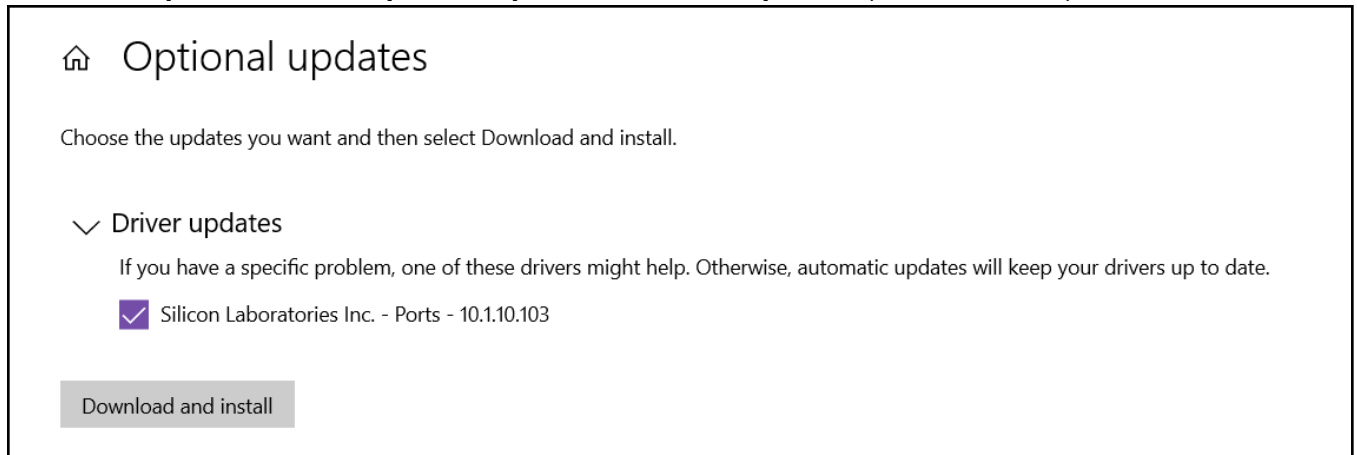
However, if you face some connection issues, please make sure you update your system's drivers, especially "**Silicon Laboratories Inc**"

To see this driver **Download** option, Click on **Check for Update** in the Windows update section and go to

- **Windows update** → **Advanced options** → **Optional Updates** → **Drivers Updates** (in Windows 11)



- **Windows Update** → **View Optional Updates** → **Driver updates** (in Windows 10)



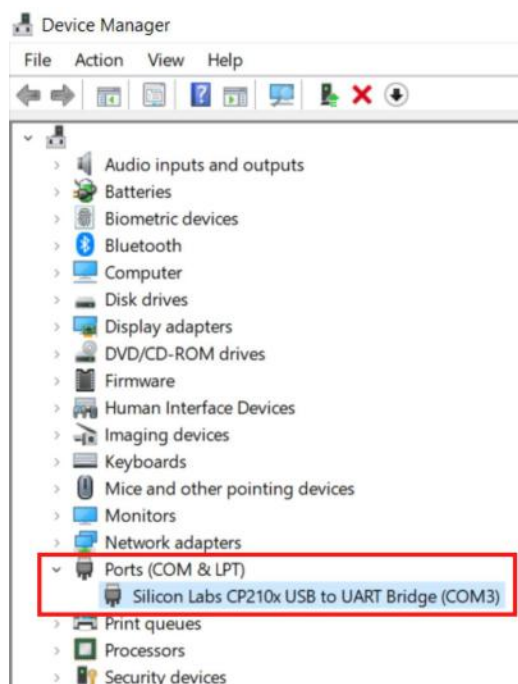
Check on the *Silicon Laboratories Inc* Driver and click on the Download and install button.

Connecting R-Tune to ECU

14. Open the R-Tune software by double-clicking the icon on the desktop of the PC.
15. With the PowerTRONIC connected to your bike, use the USB cable and connect it to the PC.
16. Identify the correct COM Port in **Device Manager** and locate the same COM Port in the R-Tune software. (Refer to the 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 to the figure below)



17. Once connected, the status bar of the R-Tune will denote as shown below.

The screenshot shows the Powertronic R-Tune v4-1.2.90 software interface. At the top, two yellow status bars indicate "Device configured successfully" and "Device configured successfully Connected". A red box highlights a central area with a red arrow pointing to a text box that says "Once connected, the status bar will be shown here". The main interface features a large data table for "Map-1 : Fuel % adjust (Rpm v Load%)".

	500	1000	2000	3000	4000	5000	6000	7000	8000	8500	9000	9500	10000	10500	11000	11500	12000	12500	13000	13500
Map-1 : Fuel	3	3	4	5	6	7	8	7	6	5	2	0	-1	-3	-4	-5	-5	-5	-5	-5
Map-1 : Spark	3	3	4	5	6	7	8	7	6	5	2	0	-1	-3	-4	-5	-5	-5	-5	-5
Map-2 : Fuel	3	3	4	5	6	7	8	7	6	5	2	0	-1	-3	-4	-5	-5	-5	-5	-5
Map-2 : Spark	3	3	4	5	6	7	8	7	6	5	2	0	-1	-3	-4	-5	-5	-5	-5	-5
Quickshifter Settings	3	3	3	4	5	6	7	8	7	6	2	0	-1	-3	-4	-5	-5	-5	-5	-5
Control Settings	2	2	2	2	2	2	2	2	2	2	1	0	0	-2	-3	-4	-4	-4	-4	-4
Factory Settings	2	2	2	2	2	2	2	2	2	2	0	0	0	0	-1	-2	-2	-2	-2	-2
Index Maps	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Dials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Realtime Graphs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Device Information	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Below the table are sections for "Spark Input Status", "Fuel Duty", and "Injector Input Status". The "Live data" panel on the right shows "Engine RPM" at 0, "Tps Volt (v)" at 0.454, and "Load %" at 0. The "Map Number" is set to "Map-1". At the bottom, there are buttons for "BURN" and "Update Firmware".

R-Tune V4 installation for Android

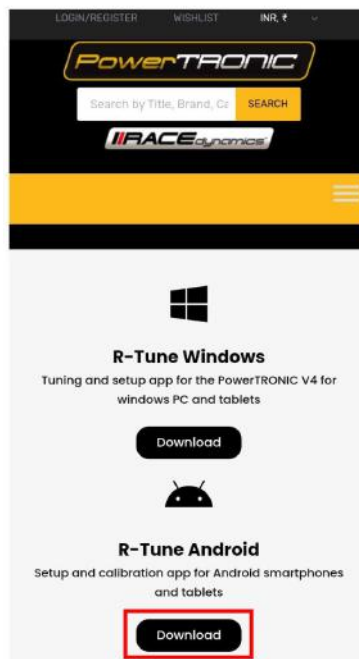
Step 1: Go to the internet browser on your Android phone and go to the website www.powertroniccu.com and click on the Downloads section.



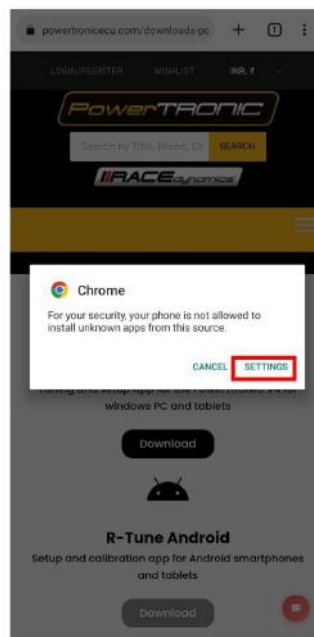
Step 2: Scroll down and go to the PowerTRONIC V4 Downloads section and click on the View Downloads button.



Step 3: Click on the Download button below the R-Tune Android section.



Step 4: In some cases, the phone may not let you download the file and gives a pop-up. Click on Settings

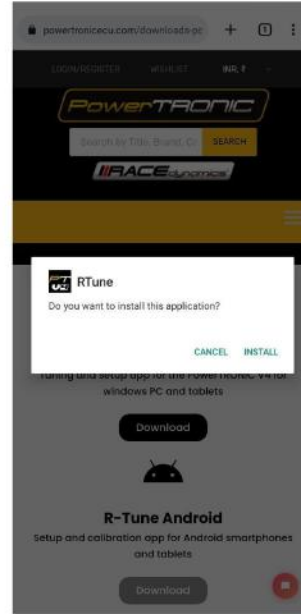


Step 5: Check the Allow apps from this source in the in coming screen.

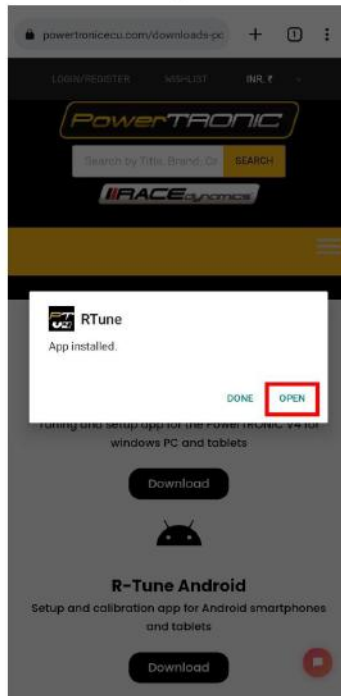
Step 5.1: Then click on the back menu.



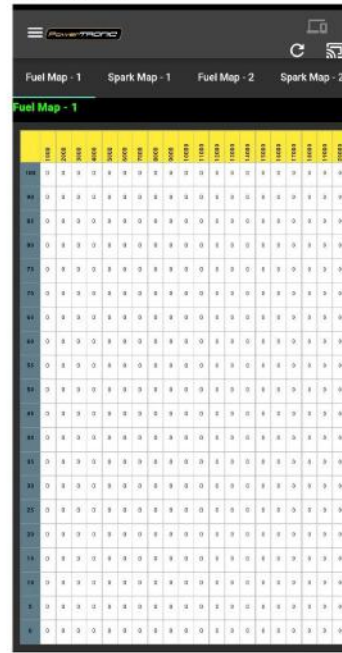
Step 6: Click on the Install button in the coming screen.



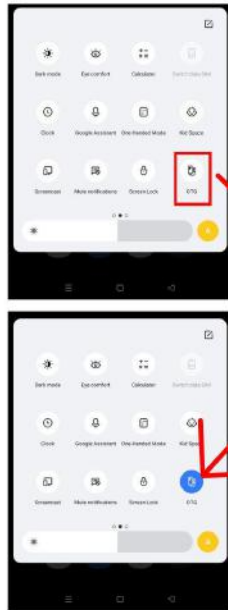
Step 7: R-Tune V4 app will be installed now and Click on Open.



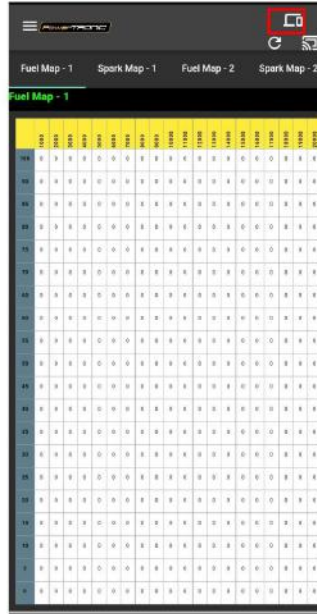
Step 8: R-Tune will be opened on the screen. Now connect the ECU to the phone using the cables provided within the kit.



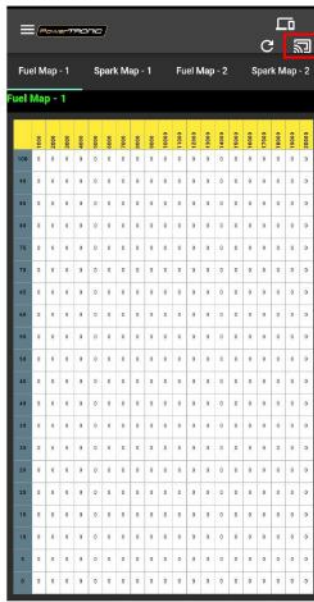
Step 9: Open the notification bar and select the OTG button. In some cases, the user has to search in the settings to see this function.



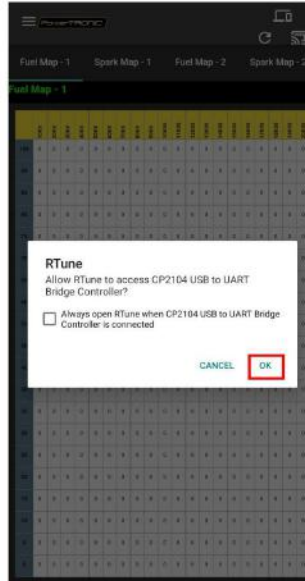
Step 10: Once you enable the OTG then you can see the device icon will be enabled.



Step 11: Click on the Connect button on the screen



Step 12: A pop-up message will appear, asking for the connection, click on OK



Step 13: R-Tune will be connected to the ECU now.

Device configured successfully
 Wait... configuring device
 Device connected.

Map-1 : Fuel Map-1 : Spark Map-2 : Fuel Map-2 : Spark

Map-1 : Fuel % adjust (Rpm v Load%) Live Value: 0.0

	900	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000			
100	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
95	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
90	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
85	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
80	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
75	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
70	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
65	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
60	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
55	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
50	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
45	3	1	3	5	7	6	7	9	7	7	6	5	4	3	2	1	0	0	0	0
40	3	0	2	3	4	5	5	5	5	5	4	3	2	1	0	0	0	0	0	0
35	3	0	1	2	3	4	4	4	4	4	3	2	2	0	0	0	0	0	0	0
25	3	0	0	1	2	3	3	3	3	3	2	1	1	0	0	0	0	0	0	0
20	3	0	0	0	1	1	2	2	2	2	1	0	0	0	0	0	0	0	0	0
15	3	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Spark Input Status	Fuel Duty	Injector Input Status	Live data
Spk-1 Status	Inj-1 Duty Cycle	Inj-1 Status	Engine RPM
Inactive		Inactive	0
Spk-2 Status	Inj-2 Duty Cycle	Inj-2 Status	Load % bar
Inactive		Inactive	