

# PDM

Power Delivery Module



## Welcome to RacingLine PDM : Power Delivery Module.

Below is the user guide to get you ready to flash your vehicle's ECU and/or TCU using our new PDM tool to unlock a whole new level of performance!

It's a simple process, but **please take time to read this guide carefully** before starting - as any errors with your hardware, internet connection or usage of the PDM system could cause problems with your vehicle.

The RacingLine PDM Tuning Portal allows you to access your performance software suite, ranging from stock, to Stage 1, 1+, 2 and 3 (where available), TCU transmission tuning and different fuel options with our simple to use flashing process.

The PDM portal allows you to upload both ECU and TCU tuning to your vehicle yourself without the need to visiting one of our RacingLine approved Software dealers.

As RacingLine offers free upgrades for the registered vehicle, the portal will allow you to upgrade from Stages 1 through 3, subject to installation of the required supporting hardware or fuel types, and to return to stock at any time.



It is your responsibility to verify that the appropriate level of vehicle hardware modification, fuel type and other vehicle road legal requirements is suitable for the calibration you are installing, and accept a terms and conditions agreement each time a flash is made. RacingLine cannot be responsible for any calibration applied that doesn't support your vehicle upgrades/fuel type/ local laws.

Please contact your supplying RacingLine dealer if unsure about any aspect before proceeding!



**WARNING – Never flash software that does not meet the minimum hardware requirements.**

**DO NOT ever run a vehicle on lower octane fuel than is required for a selected calibration.**

# 1

## STEP ONE.

GETTING READY : WHAT YOU'RE GOING TO NEED.

### Requirements for End User Flashing:

- Windows 10/11 PC with Available USB / USB-C port
- Power supply for Laptop
- Secure wired or stable Wi-Fi High-speed Internet Connection
- Battery charger/tender capable of maintaining +12v while flashing
- Available electrical outlets (for laptop and battery charger)

### RacingLine PDM End User Flashing Kit Contents:

- RacingLine OBD-II PDM Cable with integrated Bluetooth & WIFI
- USB-C to USB-C Cable
- USB-C to USB-A Adaptor
- Carrying Case
- User Credentials (Provided Via Email)

Before going any further, please ensure you have all of this equipment in place prior to installation.





## 2

## STEP TWO.

### GETTING YOUR COMPUTER AND CABLE READY

#### TASK 1

#### RACINGLINE APP ACTIVATION

You will first need to download the latest PDM Client Software App onto the PC Laptop that you will be using to flash your vehicle, via the link included in your activation email from RacingLine, or via the link below. You do not need to be with your vehicle at this stage.



REMINDER: THIS DOWNLOAD REQUIRES YOUR PC COMPUTER TO BE OPERATING ON **WINDOWS 10** OR NEWER.

#### TASK 2

#### REGISTERING ON THE SYSTEM.

*(You still do not need to be with your vehicle at this stage)*

Once downloaded, Run/Double click the setup application (RacingLine OEM+ Setup) and run through the installer, and accept launch RacingLine OEM+.

This opens the app and presents you with the login screen.

Enter your Email or Username you received in your sign-up email, and click "Need to register or Forgot your password" Link. Please use an email you can access easily.

Check your email, you will now receive an email with further instructions on to complete account registration. Next, follow the link provided in this email to setup a password for your account and complete the final account information. Once completed you can login into the RacingLine Client using your email address and new password.



YOU'RE NOW READY TO GO TO YOUR VEHICLE.

#### TASK 3

#### PRE-FLASHING PREPARATION.

Important – Park vehicle in a location with a high-speed internet connection (preferably a covered garage).

Important – Vehicle must be in range of electrical outlets, in order to use a Battery Stabiliser on the vehicle (CTEK or Similar Battery Stabiliser, 15-20 Amps) and allow power for the laptop being used for flashing.

Connect battery stabiliser unit to the battery positive terminal and vehicle earth point. (Earth location will vary). Never connect directly to the vehicle battery! Please see your vehicle's owners manual for details.

**You are now all ready and setup to install RacingLine Software.**





### 3 STEP THREE. PRE-FLASH VEHICLE PREP:

*Important Reminder – Disable any third-party antivirus/firewall programs, prior to performing a flash using the PDM.*

Now it's time to get into the vehicle:

1. First, connect your PC laptop to its power supply and ensure stable internet connection.
2. Verify that your battery charger is connected to the vehicle.
3. Turn off any power draws from the battery. I.e. Climate control / Headlights / Media system / etc.
4. Start-up RacingLine Client App on your laptop & LOGIN (if not already open).

From this point, the RacingLine App will guide you through the flashing process.

The procedure is outlined below, but please follow the on-screen instructions and prompts.

### 4 STEP FOUR. VEHICLE FLASH:



#### TASK 1: BEGIN

On the home screen, click "CLICK HERE TO BEGIN"

#### TASK 2: CONNECTION

Now follow the three instruction steps on the "CONNECTION" screen, once completed click "CONTINUE" .



'Accessories' position means turning key/ignition to ON without starting the engine. (DO NOT press the brake pedal. DO NOT start the engine. So ignition is **ON** – Engine is **OFF**)

## TASK 3: ECU OR TCU?



At this stage the RacingLine Portal will search for compatible vehicle controllers (Engine 'ECU'/ Transmission 'TCU'). This process could take a minute or so. Once the search is complete, click on the controller you wish to flash to continue.



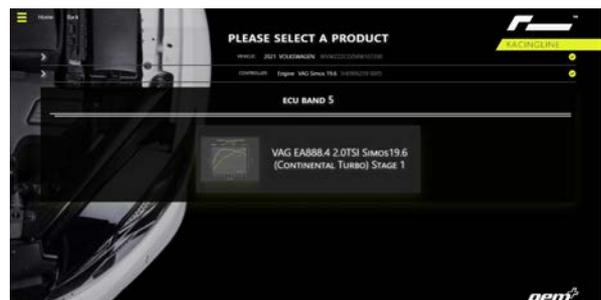
Best practice for DSG owners is to flash the TCU first (if TCU credits have been purchased).



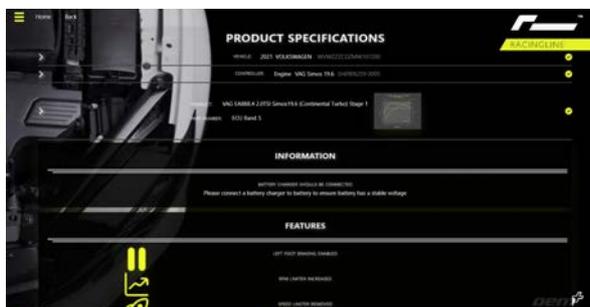
If your vehicle is manual transmission, or if no TCU is currently available, we advise to flash the *Low Torque* version ECU calibration where available for your vehicle. Once a suitable TCU calibration is made available, or an upgraded clutch is fitted, you can update to High Torque.

## TASK 4: SELECT PRODUCT

Having selected either ECU or TCU, on this screen you can choose the calibration stage you require, including the return to stock option. Please ensure to scroll down the entire display to view all available calibrations.



For calibrations that exceed your allocated flash credits, a lock icon will display on the calibration. Contact your supplying dealer if you want to add credits.



## TASK 5: SPECIFICATIONS

Once a calibration is selected, a feature list will be displayed, including the required hardware list. Ensure to scroll down the entire screen to read all the calibration's features and click 'CONTINUE' when ready.



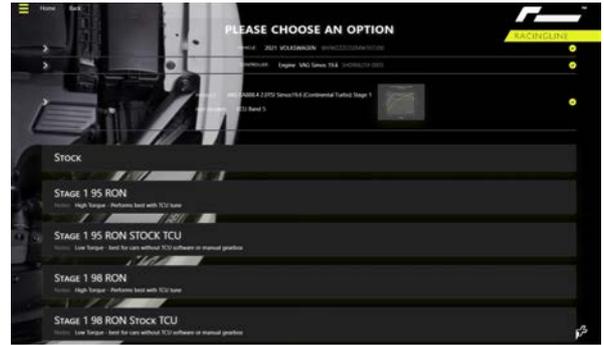
**WARNING: Never flash software that does not meet the minimum hardware requirements.**

**DO NOT run a vehicle on lower octane fuel than required for a selected calibration.**



## TASK 6: CHOOSE OPTIONS

Now select which calibration option of the Stage you want. Again, you may need to scroll down the entire display to view all available calibrations.



If the vehicle's current software calibration is unknown or has previously had other aftermarket software uploaded on either the ECU or TCU, ensure you **flash the vehicle to stock first** prior to selecting which calibration you require.



**WARNING: Never flash software that does not meet the minimum hardware requirements.**

**DO NOT run a vehicle on lower octane fuel than required for a selected calibration.**



## TASK 7: REVIEW SELECTION

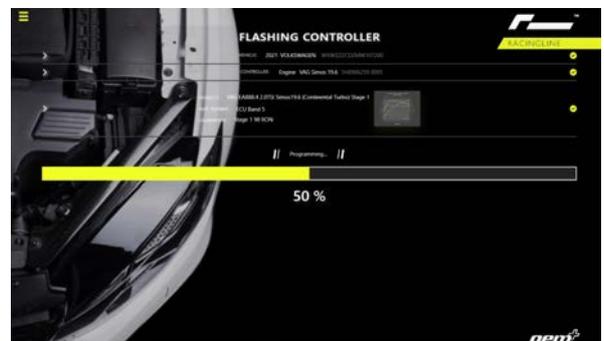
Please note the 'COMMIT AND FLASH' button at the bottom is not live if the 'TERMS & CONDITIONS' box hasn't been read and confirmed by clicking the box (not applicable to all markets).



Please enter your details fully here so our Tech Support can identify you if you require any assistance. In 'Session Notes' it's your choice to add any of your own notes, or leave blank.

## TASK 8: FLASHING

Now follow prompts on screen throughout this section, performing any necessary Key/Ignition cycles if prompted.



**DO NOT START ENGINE / DO NOT TURN KEY OFF / DO NOT DISCONNECT 'PDM' CABLE DURING THIS FLASHING PROCESS.**



Throughout the flashing process, your vehicle will display multiple warning lights on the dashboard from several vehicle systems. This is absolutely normal and will be resolved at the end of the flashing process.



## TASK 9: FLASH SUMMARY

Once flashing is complete, follow any further Key/Ignition cycle prompts.

If no errors occurred during the flashing process, you will see 'FLASHING COMPLETED SUCCESSFULLY'. At this point you may close the RacingLine Client and start the vehicle.



If you have purchased both **TCU and ECU** and have just flashed TCU, now select 'TAKE ME HOME' and start the process again for ECU flash.



**Note: Failure to complete a TCU flash will prompt an error message at this stage.**

Unfortunately this is normally due to your TCU being locked. If your attempt to flash the TCU fails, please select 'TAKE ME HOME', return to the start by clicking 'CLICK HERE TO BEGIN' and repeat the above process to and flash the TCU to 'STOCK'.

## TASK 10 FLASH COMPLETE!

The RacingLine Client App will now clear any faults stored after the flash process is completed. Should any codes or DTCs remain after the flashing process, these can be cleared with a VCDS cable or by driving the vehicle for a few minutes after the flash is completed.

- If you have any questions about your installation or usage, please contact your supplying dealer for advice.
- Disconnect the RacingLine PDM from the vehicle's OBD port.
- Disconnect the battery charger.
- If you encountered any technical issues during the flashing process, please contact us.



The vehicle will now require a period of adaptation for both ECU and TCU calibrations. You should use the vehicle normally during this period, but note that it's normal for process to result in slight changes to the vehicle and driving characteristics as the controllers adapt.

## THAT'S IT. YOU'VE FINISHED!

Now that you have understood the RacingLine Client App and Flashing Process, you can rapidly repeat this procedure any time to switch between calibration options, or return your vehicle to stock.



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## FINALLY, PLEASE REMEMBER:

- With the RacingLine Performance Software calibration now uploaded to your vehicle, you will experience a noticeable difference in the performance of the vehicle. Please drive carefully as you adapt, and do not carry out any performance testing on the public road.
  - Remember that it is your responsibility to notify your insurer of any modifications carried out.
  - Your manufacturer warranty may be invalidated by installation of aftermarket software to ECU and/or TCU.
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## JEALOUS FRIENDS?

Did you know that you can flash multiple cars using your RacingLine PDM? If you have another car in your household, or a friend who wants to get tuned, simply contact your supplying dealer who can help you to flash another car using your PDM. Credits and flash history are stored on our server under your username, so flashing multiple other vehicles won't affect your tuning or history in any way.

**Share some love today!**

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## ANY QUESTIONS OR ISSUES?

### **1** FIRST-LEVEL SUPPORT. YOUR RACINGLINE SUPPLYING DEALER

- Your first point of assistance should always be your supplying dealer. As local experts in your region, they can advise on your car's specifications, fuel types etc that may apply to your area. They will of course be in your timezone and language.
- Your supplying dealer can also provide first level Technical Support if you are having any difficulties installing the RacingLine App or connecting to your computer.
- Your RacingLine Dealer has direct access to the RacingLine Calibration Support Platform in the UK, so will be able to raise any issues that may arise directly with our team to ensure resolution.
- All billing enquiries must go through your supplying dealer.

### **2** SECOND-LEVEL SUPPORT. GETTING IN CONTACT WITH RACINGLINE

If your RacingLine Dealer has been unable to resolve your query or issue, you can escalate your question to the RacingLine Team who are of course committed to ensuring that you are delighted with your RacingLine Software so can step in to assist.



Please contact our tech team via email on [OEMPLUS@RACINGLINE.COM](mailto: OEMPLUS@RACINGLINE.COM)

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