

bootmod3 user manual

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Welcome to the **bootmod3** user manual. **Bootmod3** is the World's first and most advanced BMW F-series flash tuning platform. Here at PTF we have worked tirelessly since 2015 to create a truly unique cloud-based service solution for flash tuning that benefits both end users and tuners in ways prior unimaginable.

The **bootmod3** team is here to support you from the time you purchase your license, during set up, and to answer any questions or concerns you may have using our platform. Please do not hesitate to reach us at sales@protuningfreaks.com or support@protuningfreaks.com. We are committed to making sure you have the best ride possible. Get ready to unleash the BEAST!

Revision History

Date	Version	Description
October 16, 2018	1.0	Initial draft
October 24, 2018	1.1	Appendix Added
November 28, 2018	1.2	Further Burble Features Explained
January 29, 2019	1.3	Dashboard changes updated
January 30, 2019	1.4	Diagnostics screen updated
June 6, 2019	1.5	Dashboard changed; map configuration updated
October 31, 2019	1.6	Data logs screen adjustment, Map configuration layout, Transmission
Nov 4	1.7	Data log config screen added, Start up roar edited.
January 28, 2020	1.8	Sign in screen edited, Help Menu added, Tuners sing up edited
February 14, 2020	1.9	Map Configuration screen Layout
April 27 2020	2.0	Complete New Layout
June 1 2020	2.1	EWG and DTC Deactivation added to map configuration screen
June 18 2020	2.2	Copy button added to maps, Respond with bin file added to tuner requests

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bmm3

OBD CONNECTION OPTIONS

OPTION ONE

Connect laptop to OBD port inside vehicle via OBD2 Ethernet cable.



OBD2
ETHERNET
CABLE



OBD PORT

OPTION TWO

Connect iOS or Android to OBD Agent via USB charge cable.



MOBILE USB



OBD AGENT



OBD2
ETHERNET
CABLE



OBD PORT

OPTION THREE

Connect iOS or Android to OBD Agent via WiFi.



WiFi



OBD AGENT



OBD2
ETHERNET
CABLE

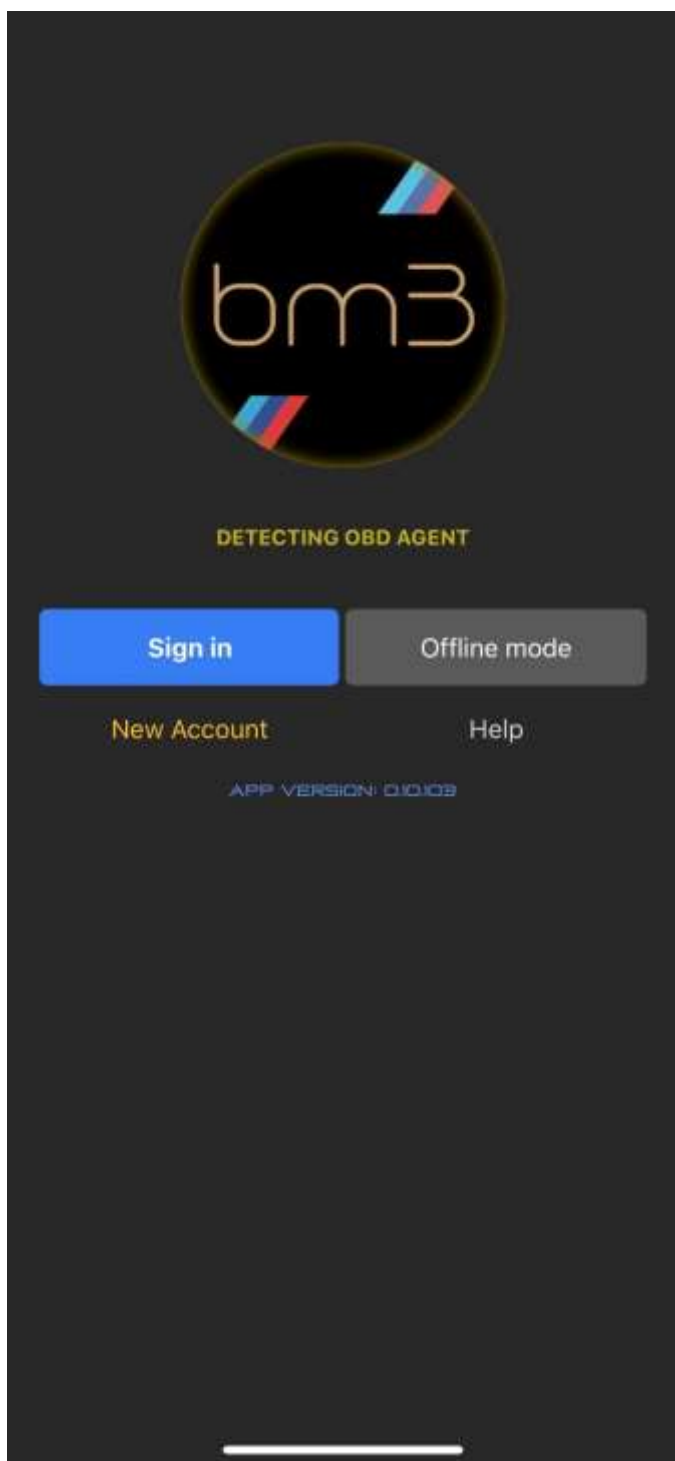


OBD PORT

* In case the laptop does not have an Ethernet port, use a USB adaptor to connect the Ethernet cable.



1 Sign in Screen

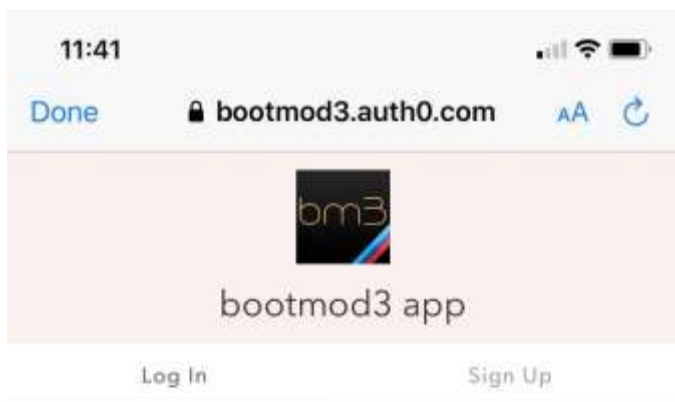


The screen on the left is the first screen that will appear when logged on to www.bootmod3.net or the phone application is opened. This screen can be used to sign in, or to create a new account. By clicking '[Sign in](#)' or '[New Account](#)', a new screen will appear (see page 8).

If the OBD Agent is not running in the background '[Detecting OBD Agent](#)' is what will appear as shown. Once the agent is running, the screen will show a connection including the VIN of the vehicle. The OBD Agent Version and the application version will be visible once the agent establishes a connection. Always make sure both are up to date.

'[Help](#)' button will be explained in further details in section 14.

Bootmod3 can also work in offline mode. To enable offline mode, the account must be activated with internet access. '[Offline mode](#)' button is ONLY active when agent connects to the car (grey until OBD agent connects, then orange for active). Offline mode will be explained in further details, in section 15.



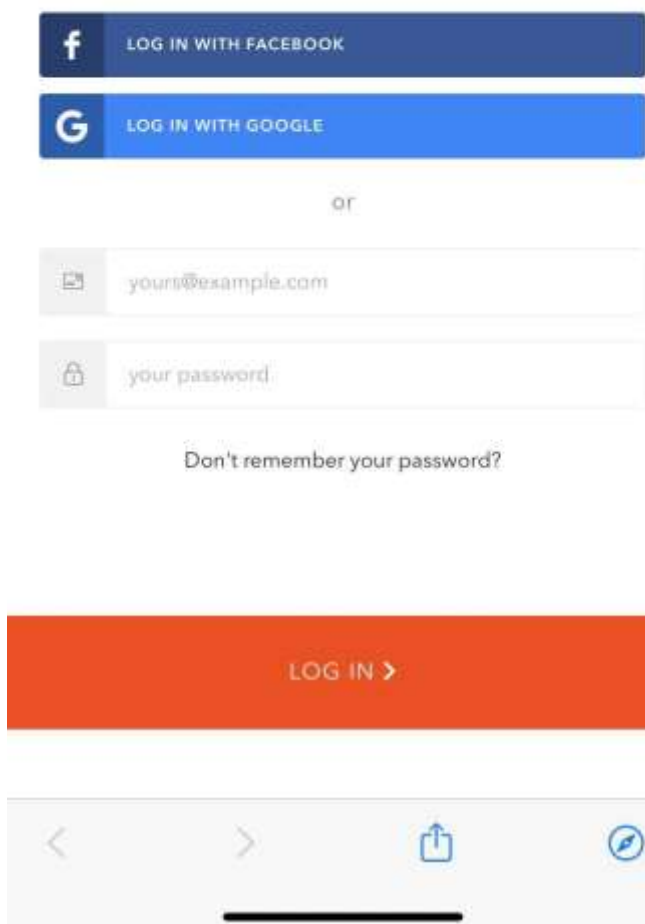
An account can be logged into via Facebook, Google, or an email address.

Please note that same log in method will have to be used to access the account.

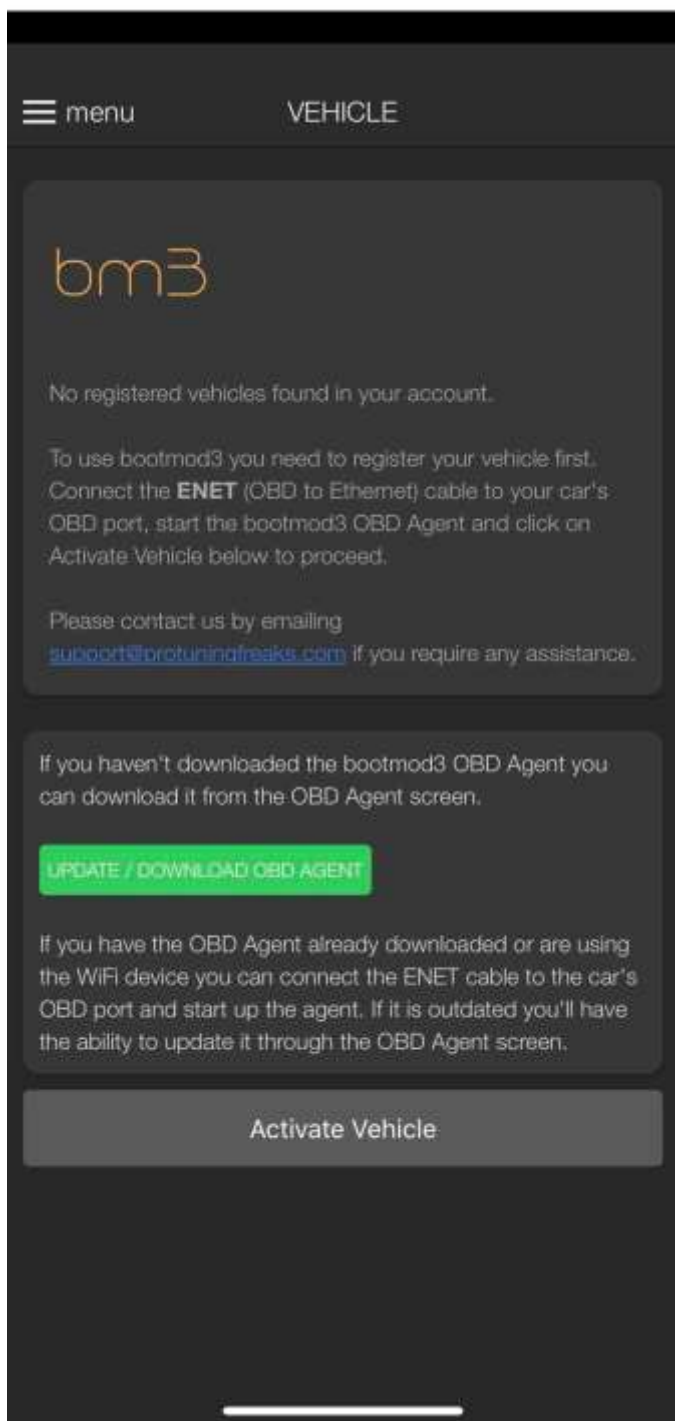
To Sign up with a new account, click on the 'Sign Up' tab, next to the log in, and proceed to create the new account.

Once the email address and the password have been entered, click on '**LOG IN**' to access the account.

In case a password has been forgotten, click on the '**Don't remember your password?**'. User will need to enter their email address, and we will send an email to reset the password.



2 Adding a Vehicle



Once successfully logged into the account, the screen on the left will appear. This screenshot indicates that the account has been created and/or logged in successfully, however, there is no vehicle registered to the account.

To use bootmod3, user will need to register a vehicle first. Connect the OBDII ENET cable, to the car's OBD port and start the OBD Agent.

To download the agent, click on the **green** box shown on the screen. The OBD Agent can also be downloaded manually by visiting the website below. www.bootmod3.net/downloads.

By clicking '**Activate Vehicle**' at the bottom, screen on the next page (pg.10) will appear.



This screen indicates that the **OBD Agent** has not been detected.

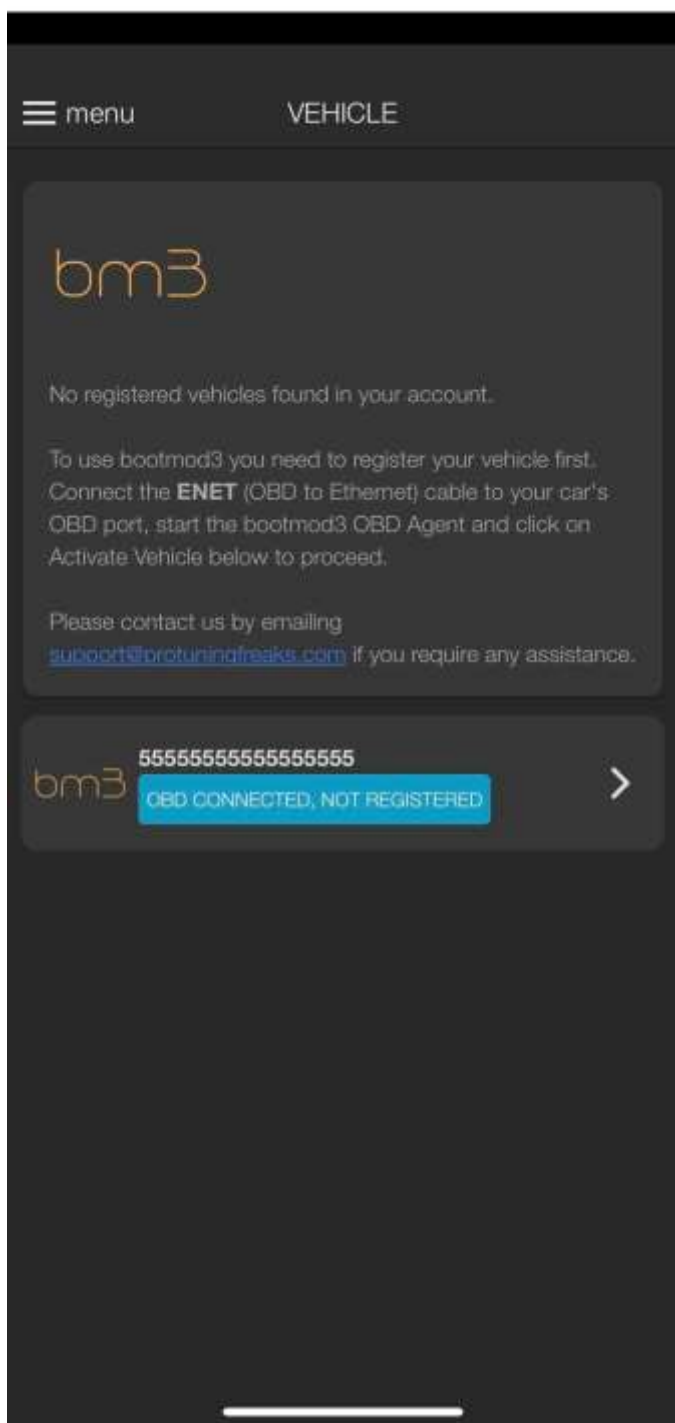
If using a laptop instead of the Wi-Fi Agent Device, the user will be able to download the agent by clicking on the **green** box.

OBD II ENET cable must be connected to the laptop or bootmod3 Wi-Fi Agent that runs the OBD Agent. If using the Wi-Fi device, ensure it is powered from a 5V USB connection.

Below are a few helpful links to get the user started with the installation process.

1. [How to Install bootmod3](#)
2. [OBD Agent Instructions](#)
3. [Bootmod3 FAQ Page](#)

2.1 Activating a Vehicle



This screen on the left will appear after the vehicle has been successfully connected and the OBD Agent has detected the VIN.

Once an order is successfully processed, a randomly generated activation key is sent to the email provided on checkout.

If for any reason the user does not receive the 'License Activation' email, support@protuningfreaks.com should be contacted for further assistance.

Activation key format is as following:
20XXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXB7

By pressing '**OBD Connected, Not Registered**', the screen on the next page (pg. 12) will appear.

< Vehicle VEHICLE ACTIVATION

OBD AGENT DETECTED

Confirm vehicle's VIN number below and if you've done a bench DME unlock choose your stock DME file readout and activate. If you haven't pulled your DME to unlock and would like to activate using the new OBD-only option click activate without selecting the file.

If any issues at all activating please contact us through our Tech Support portal and we'll provide any support required.

VIN DETECTED 5555555555555555

Activation Key ACTIVATION KEY..

Vehicle Software Details

00003080-000.001.032
00003081-070.005.004
00003E39-070.005.010
00002742-000.105.003

Activate

Once the vehicle's VIN has been confirmed, the activation key provided in the email is to be entered in the "**Activation Key**" field, below the VIN detected.

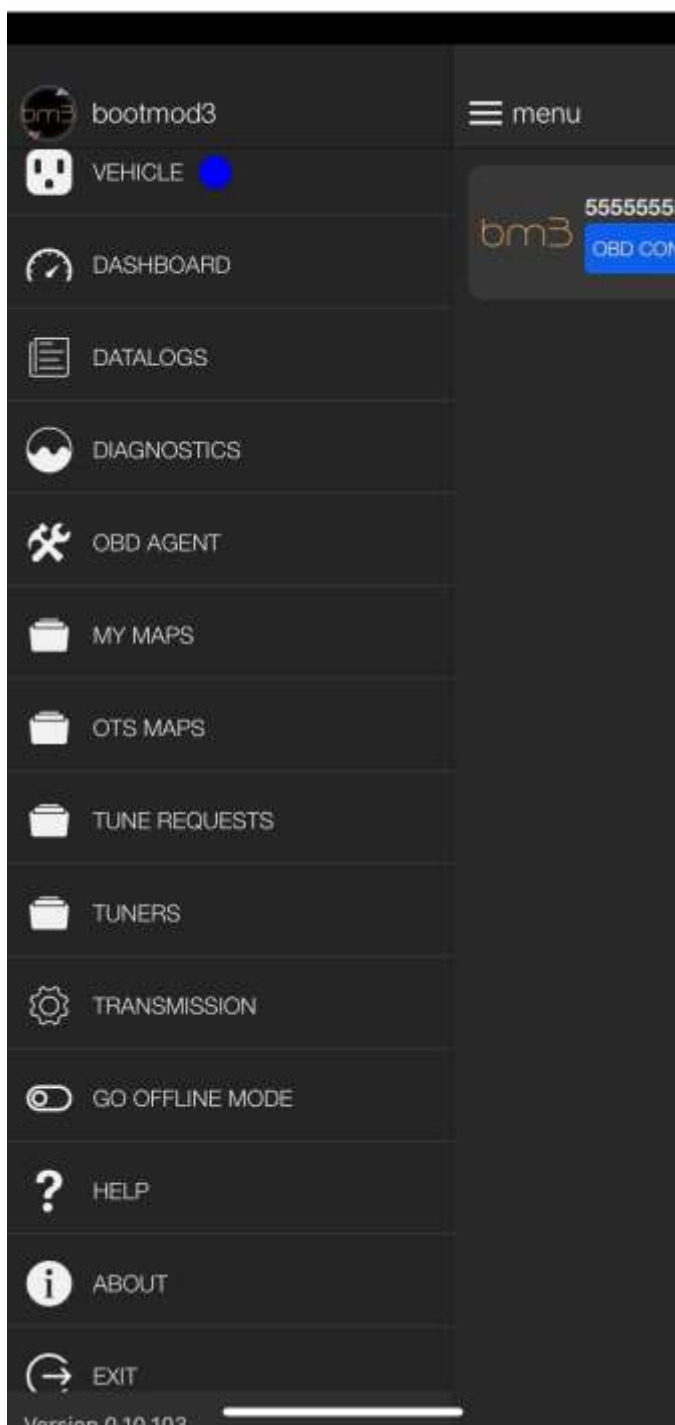
'**Vehicle Software Detail**' must be shown for a successful activation. Ensure the ignition is turned on.

In the case where vehicle software details cannot be identified, please check and ensure the OBDII ENET cable is securely plugged in on both the OBD port and the ENET side.

Once the key has been entered, the user can click on "**Activate**" at the bottom of the screen. After a successful activation, a pop-up "**Success**" screen will appear.

In case of any technical difficulties during the activation process, such as **VIN NOT RECOGNIZED**, or **DATA NOT SUPPORTED**, we strongly recommend reaching out to our support team at support@protuningfreaks.com. For efficiency purposes, please include the order number, full VIN and the screenshot of the vehicle software details in the email.

3 Main Menu



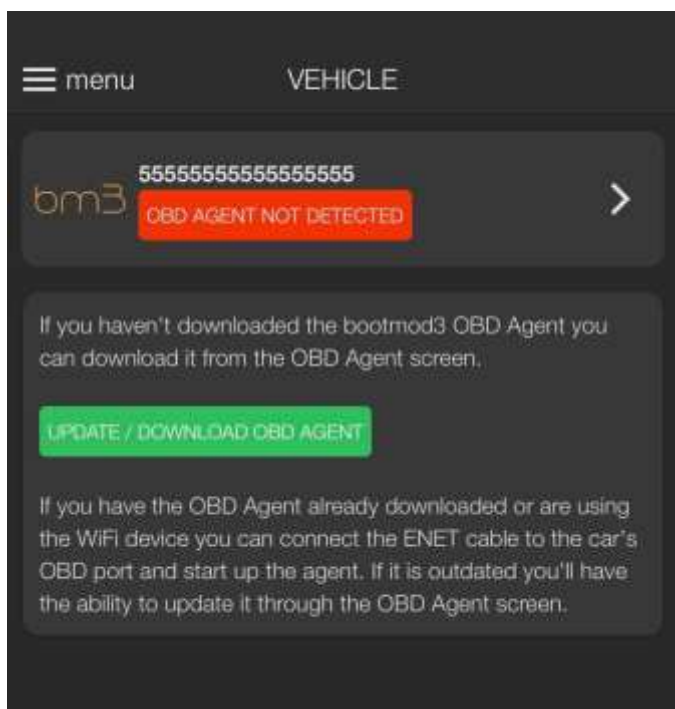
By clicking on the three horizontal lines in the top left of the screen, the **'menu'** will appear, as seen on screenshot.

Here is where the fun begins!

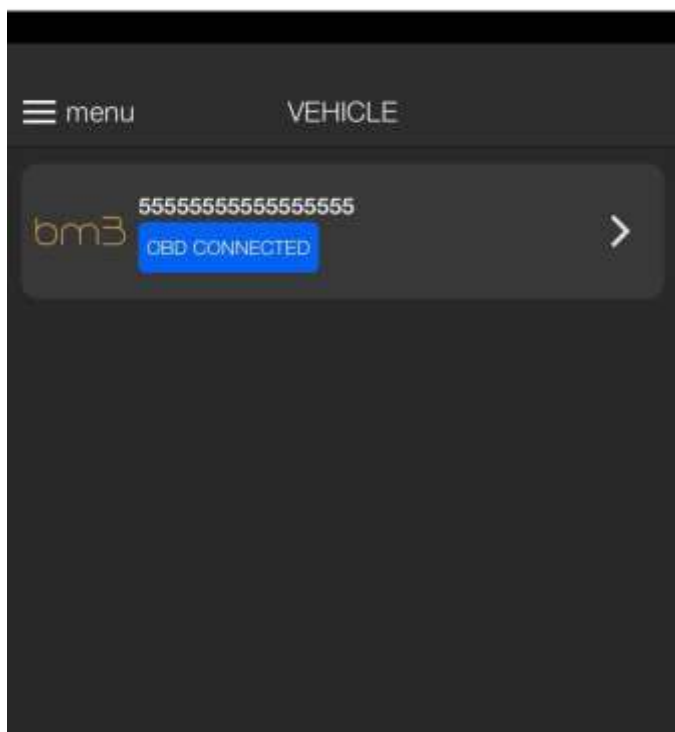
We will explain each sub-menu in detail, demonstrating all functions and purposes.

1. [Vehicle](#)
2. [Dashboard](#)
3. [Datalogs](#)
4. [Diagnostics](#)
5. [OBD Agent](#)
6. [My Maps](#)
7. [OTS Maps](#)
8. [Tune Requests](#)
9. [Tuners](#)
10. [Transmission](#)
11. [Go Offline Mode](#)
12. [Help](#)
13. [About](#)
14. Exit

4 Vehicle

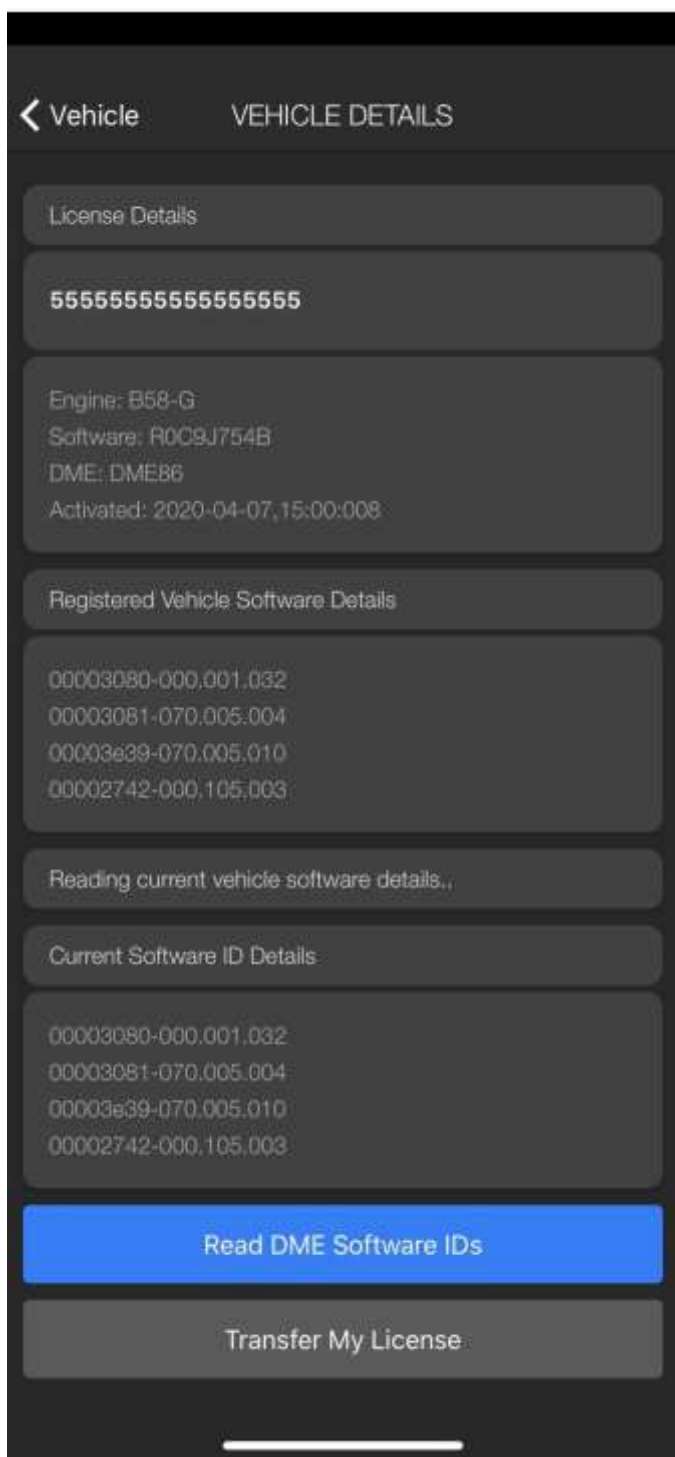


If the OBD agent is not turned on, the red box will appear as shown on the top screenshot. If the OBD agent is outdated or needs to be downloaded, pressing the **green** button will download or update the agent. This only applies for Wi-Fi Agent Device. If using a laptop, the updates of the agent are automatically handled.



Once the connection with the car has been established, the red box will turn blue and it will say **"OBD CONNECTED"**.

By clicking on the arrow to the right of the VIN, the screen on the following page will appear.



The vehicle details page shows all the information about the registered vehicle.

As shown on the image to the left, underneath the registered VIN, this vehicle is a G-series, B58 engine with the R0C9J754B software.

The DME type is DME86 and the activation date states when the license was activated.

‘Registered Vehicle Software Details’ indicate the versions of software found on the DME.

Bootmod3 always uses the original software versions that are on the car, unlike some other tools that force all users to use a single version of the software, which causes a mismatch without a way to go back to true stock map, making it more obvious the vehicle had prior tuning applied to it.

‘Current Software ID Details’ represent the current software on the DME and may differ than the **‘Registered Vehicle Software Details’**, due to software update (iStep), or if the vehicle has been flashed with another tune using bootmod3 or another flash tool.

Clicking on the **‘Read DME Software IDs’** will show both the registered and the current software details.

‘Transfer My License’ is explained on the next page.

4.1 License Transfer

LICENSE TRANSFER ✕

***** WARNING *****

This License Transfer will delete your account data and transfer your license to the user entered below. This action is not reversible. Once transfer is confirmed, the other user will receive an email with an software activation key and be able to go ahead to activate their vehicle.

Email to Transfer To:
Enter the other user's email address proceed..

Other car's VIN:
Enter the other user's VIN..

☐ I accept the terms of account transfer and understand this action is not reversible. All the current account data will be removed and this account will no longer be usable for flashing.

CANCEL YES, TRANSFER MY LICENSE

Bootmod3 is the only flash solution where the license can be resold and/or transferred by the original owner. Having re-sale value is a great advantage to choosing bootmod3 for tuning which is not available with any other flash tune platform.

License transfer is only available to the original buyer of the software license. It can be only transferred once.

Software **must be uninstalled** from the original vehicle by following the steps below to be eligible for the license transfer.

***** If uninstall is not completed by the original buyer, the license cannot be transferred.**

Steps to follow for a successful license transfer:

1. Go to www.bootmod3.net
2. Go to **'My Maps'**, select the stock tune, click flash and choose the **FLASH AND RELOCK DME** option.

Once the 2 steps have been completed, the user can go to the **'Vehicle'** screen and click on the **'Transfer My License'** button. (page 15)

LICENSE TRANSFER

×

*** WARNING ***

This License Transfer will delete your account data and transfer your license to the user entered below. This action is not reversible. Once transfer is confirmed, the other user will receive an email with an software activation key and be able to go ahead to activate their vehicle.

Email to Transfer To:

Serge@bootmod3.com

Other car's VIN:

22334455667788990

☒ I accept the terms of account transfer and understand this action is not reversible. All the current account data will be removed and this account will no longer be usable for flashing.

CANCEL YES, TRANSFER MY LICENSE

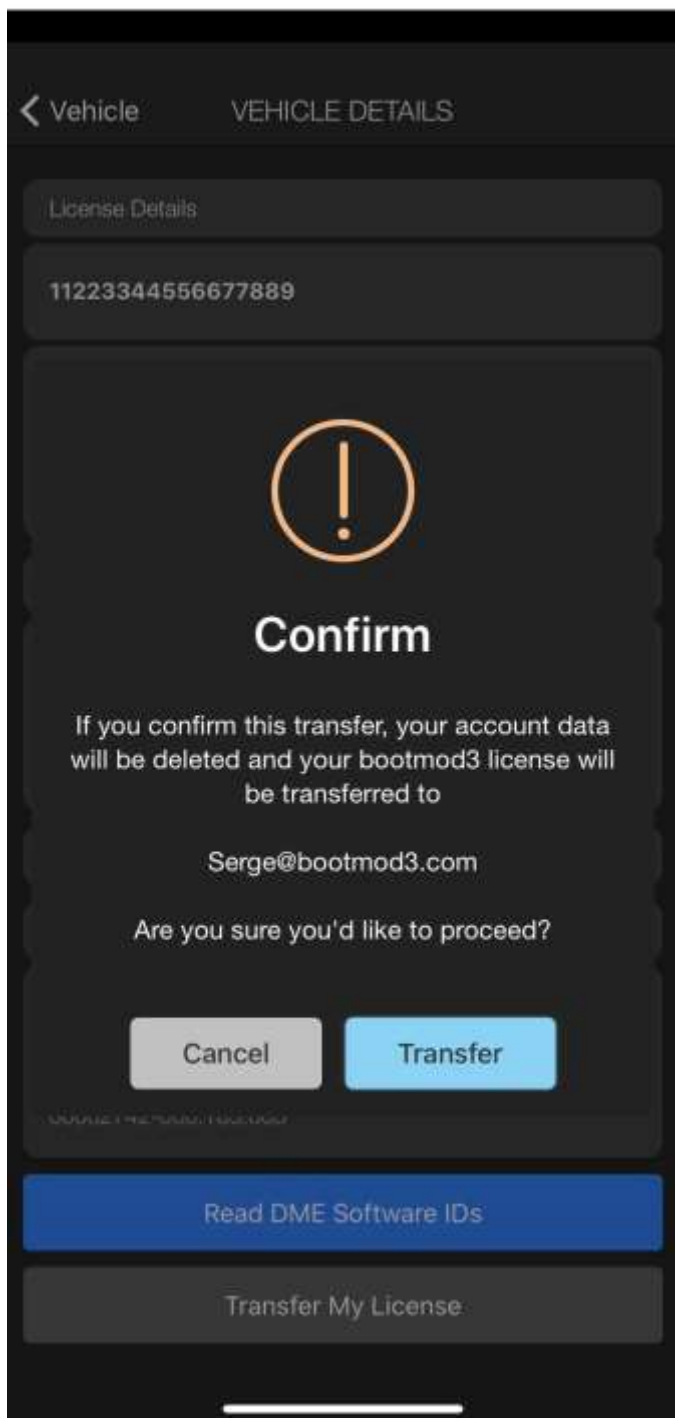
Once the license transfer is initiated, the original license owner will have to fill out the requested information in the fields provided.

- Email address of the transferee
- Full VIN of the transferee

Original license owner will have to check the box ☒ to accept the terms of the account transfer in order to proceed.

To proceed, click on 'Yes, Transfer My License'.

'Cancel' button cancels the license transfer.



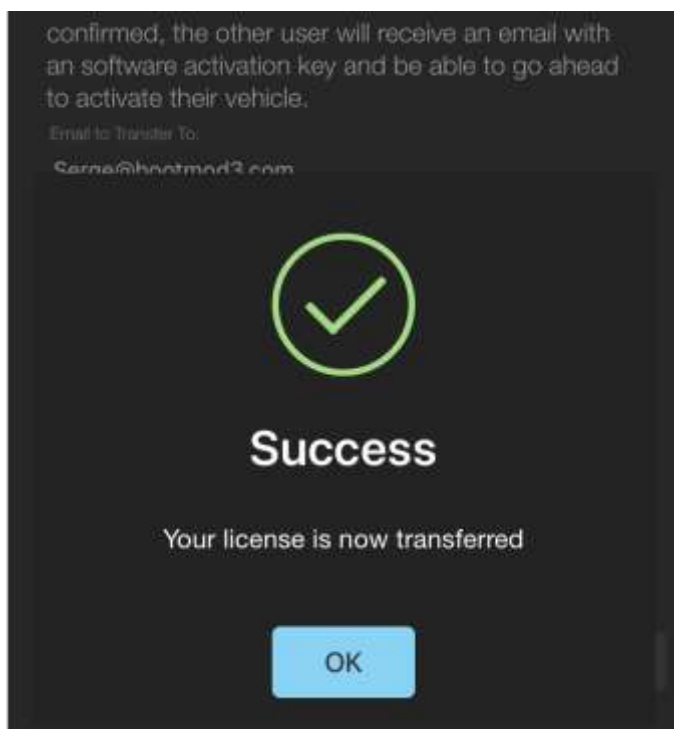
After clicking on **'Yes, Transfer My License'** from the previous page, the confirmation screen will pop up as shown on the screenshot to the left.

It is particularly important for the users to read over the content before proceeding.

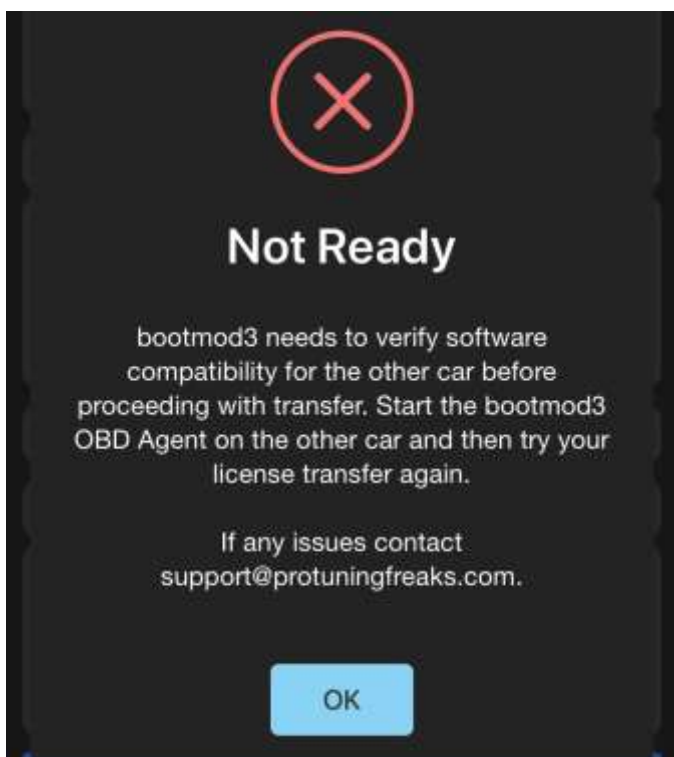
A license transfer will delete your account data and transfer your license to the new user. All the current account data will be removed, and this account will no longer be usable for flashing purposes. This action is not reversable. Once the transfer is confirmed, the new user will receive an email with the software activation key which will allow them to activate their license.

By clicking on the **'Transfer'** button, the original license owner will then complete the license transfer.

'Cancel' button cancels the license transfer and takes the user back to the previous screen.

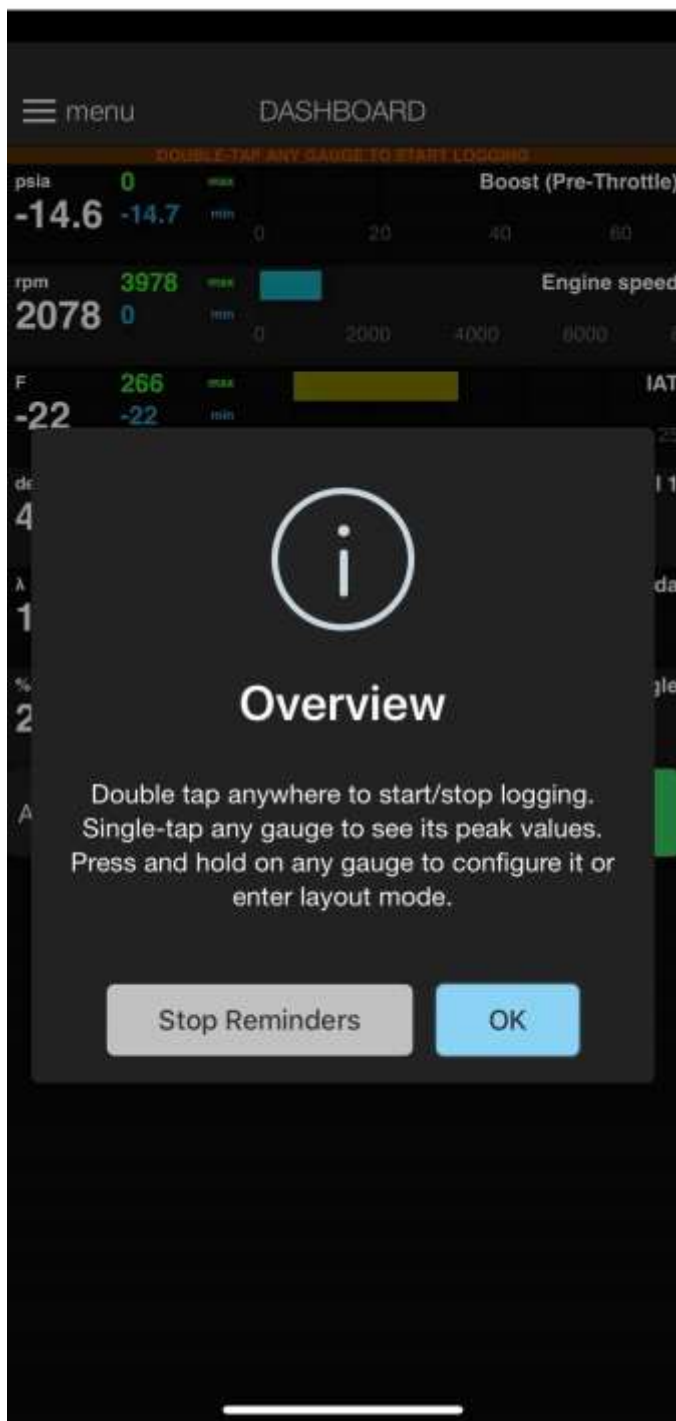


After a successful license transfer, the **'Success'** message as shown on the top image will appear, confirming the license has been transferred.



In case the **'Not Ready'** message as shown on the bottom image, the new user will need to verify their software compatibility before proceeding with the transfer. They will need to connect the car to the laptop and start the OBD Agent. Our servers will detect the vehicle's software, in which case the license transfer can be attempted again.

5 Dashboard



As shown on the screenshot, the first pop-up message when entering the dashboard sub-menu will inform the user how to start data logging. To start the log, simply double tap on any gauge. To stop the log the user will perform the same action and double tap on any gauge. To view all the logs that have been recorded, user will have to go into **'Datalogs'** submenu.

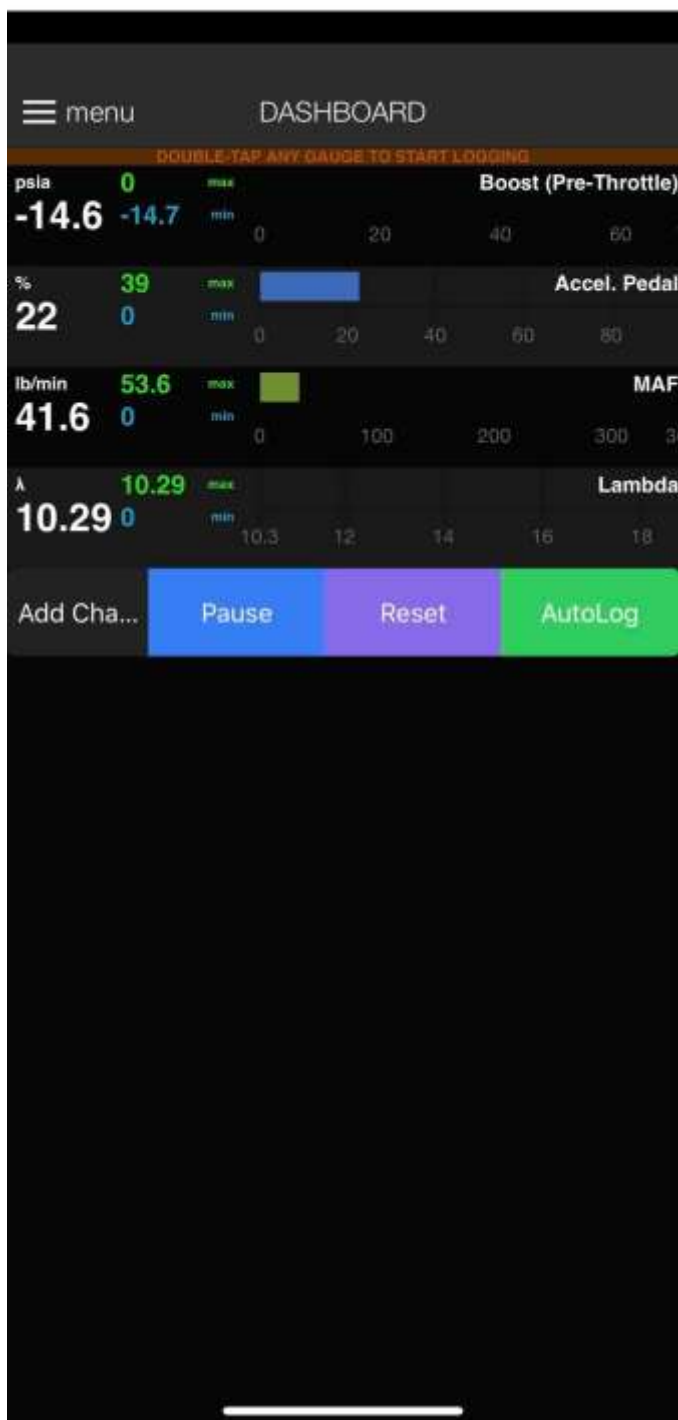
By clicking on **'Stop Reminders'**, the pop-up message will not appear again.

Bootmod3 currently offers 3 different dashboard layouts which users can choose from. The most suitable option can be selected in the **'Datalogs'** menu.

1. Bar Graphs
2. Dials
3. Live Charts

Each Dashboard Layout will be explained separately in detail.

5.1 Bar Graph



'Bar Graph', as shown on the image to the left is one of the available options for the dashboard layout. The dashboard displays the live gauges once user is connected to the car.

Values shown here are just for illustration purposes and not actual values from any car.

The name of the channel is written in white letters on the right-hand side, and the value with units is shown on the left-hand side. Beside the current value of the channel, minimum and maximum values are shown. The green number represents the **maximum** value, and the blue number represents the **minimum** value.

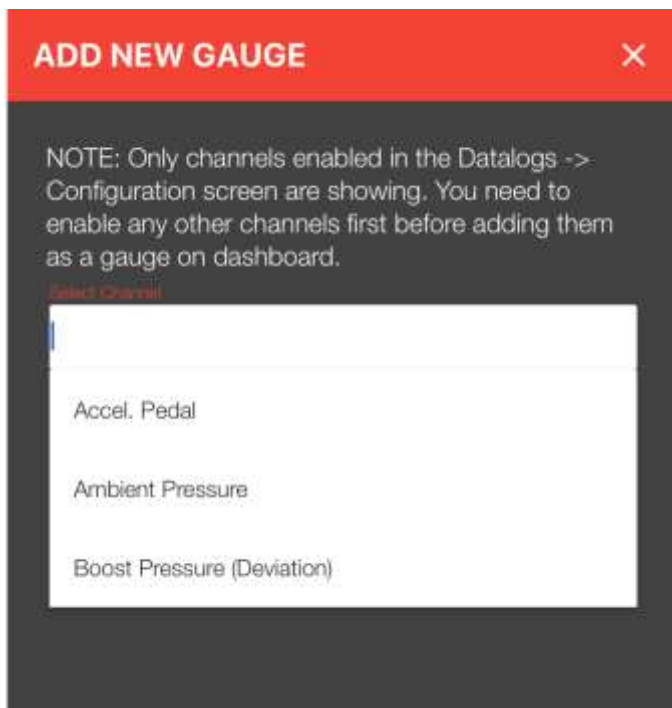
To start/stop the log, double tap/click on any gauge.

By clicking on the **'Pause'** button, the user will pause the live dashboard.

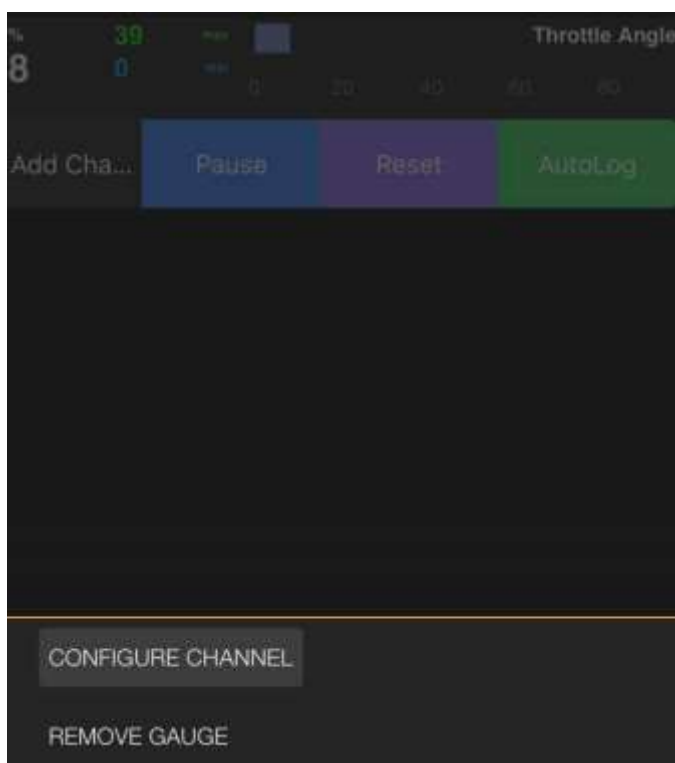
'Reset' button will reset all the values briefly to 0.

Clicking on the **'AutoLog'** enables the logs to be captured automatically. The user will not have to double tap to start/stop the log. **'AutoLog'** thresholds are further explained in the **'Datalogs'** menu.

'Add Channel' is explained on the next page.



By clicking on the **'Add Channel'** button from the previous screen, a new screen will pop up, as shown on the top image. A list of channels will be available for the user to add to their dashboard. Please note, only the channels that are enabled in the **'Datalogs'** configuration screen are showing. The user will need to enable any other channels first before adding them as a gauge on dashboard.



By clicking/tapping any gauge once and holding, options to remove the gauge and to configure the channel will appear, as shown on the bottom image.

Clicking/tapping on the **'Remove Gauge'** will remove the gauge from the dashboard.

'Configure Channel' allows the user to configure the channel. Channel configuration is explained on the next page in greater detail.

☒ Show in Datalogs

Precision (Decimals)
1

Update Refresh Rate (Hz)
Realtime Updates (No Delay)

Override units preference

Min Value
-60

Max Value
60

WARNING/Alarm Min Value
-1000000

WARNING/Alarm Max Value
1000000

Gauge Dial Color
#e6001b

Background Sweep Color
#292929

Show Pointer
No

Gauge Pointer Color
#F6532D

CANCEL SAVE, APPLY TO ALL SAVE

The following changes can be made in the

‘Configure Channel’ option.

1. Precision (Decimals) - If defaults are not satisfactory for any reason, user will be able to adjust the decimal point.
2. Realtime Update (No Delays) - Default is real time (fastest updating no delay) but the user can now also slow down update to each gauge as needed 1, 5, 10 Hz (1,5 or 10 updates per second)
3. Override Units Preference - User can set each gauge to imperial or metric units and in case of pressure channels to absolute or relative, overriding the global defaults.
4. Configuration of minimum and maximum value for each gauge.
5. Ability to set alarms - Minimum and maximum threshold values. If breached, a given channel will place a red border around that channel for a period of 5 seconds.
6. Change gauge dial color to any color user wishes.
7. Change Background Sweep Color.
8. Show a pointer on the gauge or turn it off.
9. Change color for pointer.

Once the changes have been made, clicking **‘Save’** will only apply the changes to the selected gauge. Selecting **‘Save, Apply to All’** will apply changes to all the gauges.

5.2 Dial Gauges



The dial gauge is the original dashboard layout bootmod3 released that displays the gauges as shown in the image to the left. The functionality of the dashboard is the same, however, the option to **'Pause'**, **'Reset'** and **'AutoLog'** is not available in this layout mode.

To start the log, simply double tap/click on any gauge. To stop the log the user will perform the same action and double tap/click on any gauge. To view all the logs that have been recorded, go into **'Datalogs'** submenu.

To add a new gauge, click on the big '+' button on the right side of the screen. This action will result in a new screen popping up, as already mentioned on page 22.

Feel free to customize your dashboard!

Please note, values shown here are just for illustration/demo purposes and not actual channel values from any given car.



The user can press and hold any one of the gauges, and the 4 options shown on the screenshot on the left will appear.

- 1) Configure Channel
- 2) Change Layout
- 3) Show Peak Values
- 4) Remove Gauge

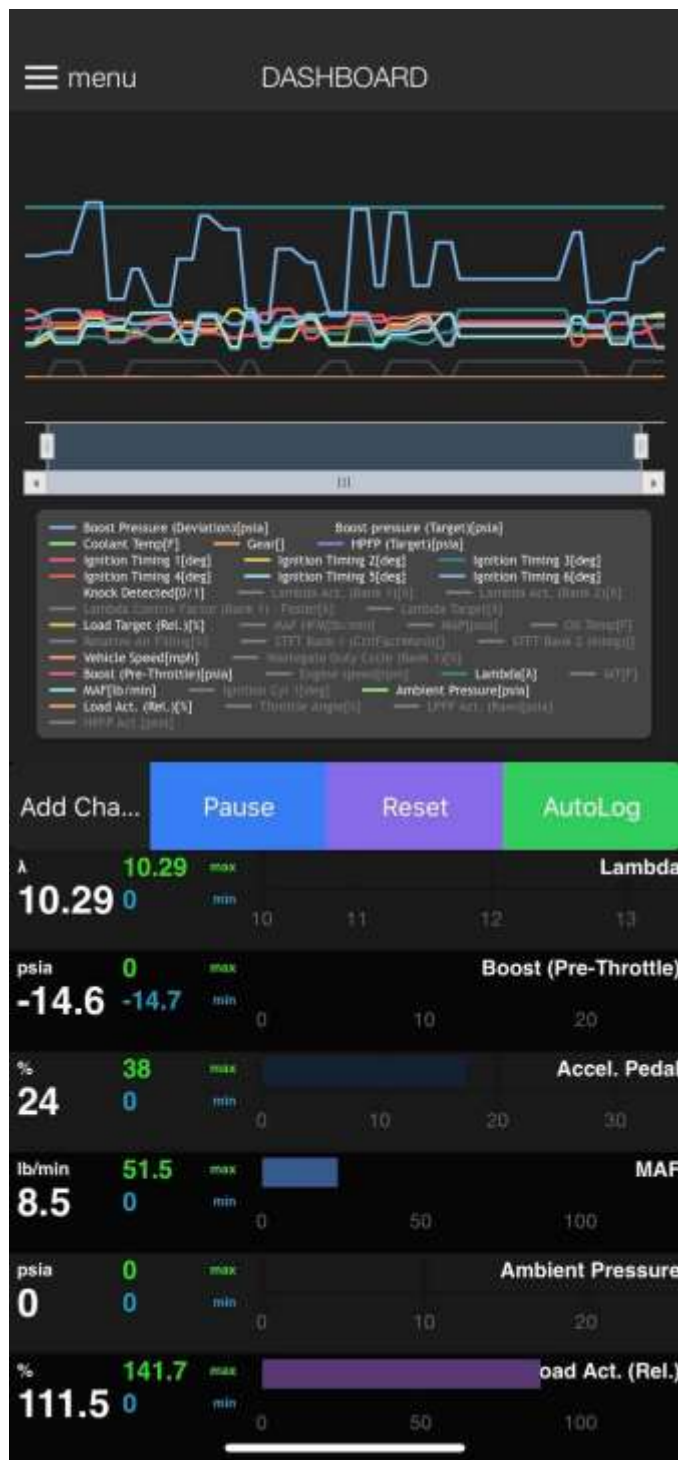
1. **Configure Channel** – see page 23.

2. **Change Layout** – By clicking on the '**Change Layout**' option, this will enable the user to customize the gauges in whichever order they would like it. To do so, simply press and hold the desired gauge and move it to the wanted position. To exit layout mode, simply double tap any gauge.

3. **Show Peak Values** - By clicking on the '**Show Peak Values**', the user will be able to see the minimum and maximum value given for a specific gauge. User will be able to reset the values to default settings at any point.

4. **Remove Gauge** - Clicking on '**Remove Gauge**' simply removes the gauge from the screen.

5.3 Live Charts



'Live Charts' dashboard layout is a mix of the 'Bar Graph' layout with the addition of the live chart updating in real time.

To start the log, simply double tap/click on any gauge. To stop the log the user will perform the same action and double tap/click on any gauge. To view all the logs that have been recorded, go into 'Datalogs' submenu.

Live chart shows 20 seconds of data at a time, and it can replace logging.

The user can select which parameter they want to view on the live chart by clicking/tapping the desired channel from the list below the live chart.

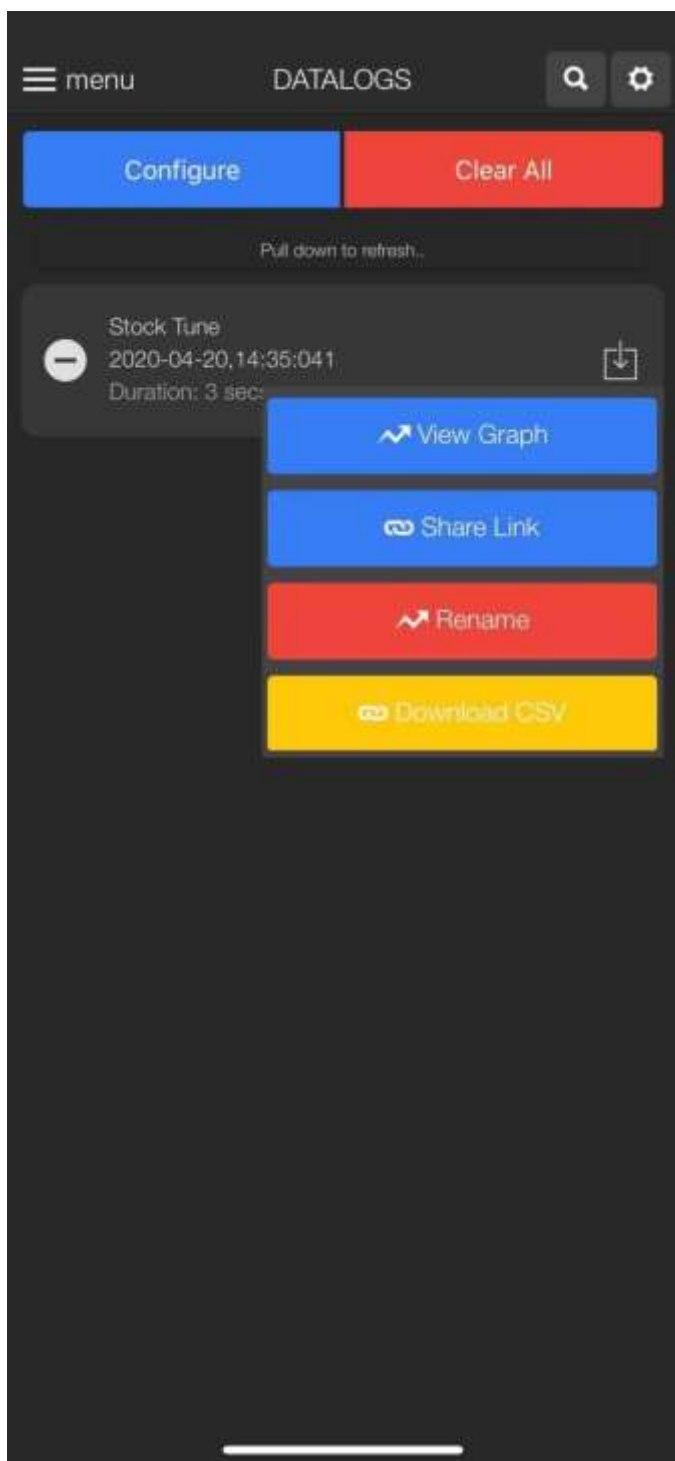
By clicking on the 'Pause' button, the user will pause the live dashboard and the live chart, allowing the user to view the chart.

'Reset' button will reset all the values on the 'Bar Graphs' and the 'Live Chart'.

Clicking on the 'AutoLog' enables the logs to be captured automatically. The user will not have to double tap to start/stop the log. 'AutoLog' thresholds is further explained in the 'Datalogs' menu.


'Add Channel' – Please see page 22.


6 Datalogs




This is the first screen in the Datalogs sub-menu. Previously recorded logs from the dashboard menu will be available to view in the datalogs menu.


All the data logs recorded will be labelled with the date, time, and duration.

Clicking on the , the user will be able to search for specific graphs from the entire list.

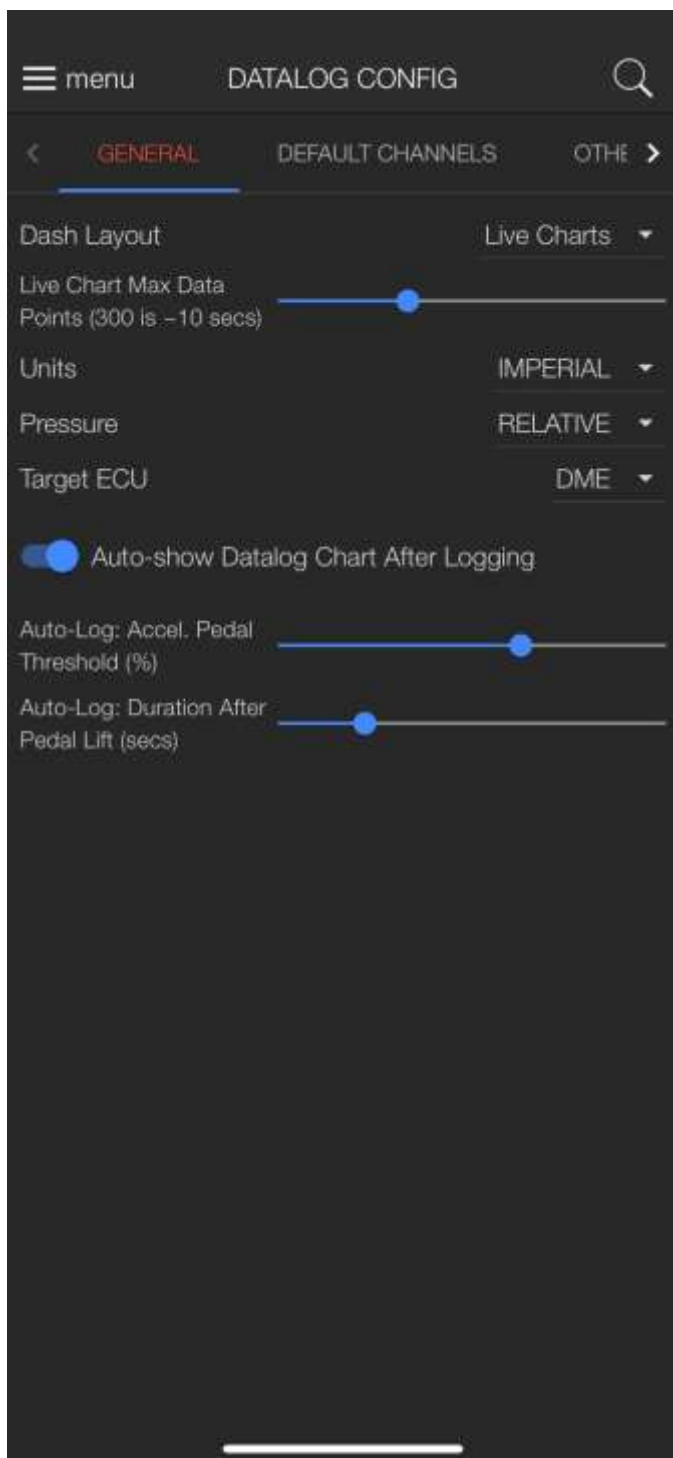
By clicking on the small down arrow  on the right of the data log, 4 options as shown on the image will pop up. The user will be able to view the graph, share the link for the given log, rename the log and download the .csv file.

The '**Clear All**' button will clear all the logs that have been recorded.

By pressing on , on the left side of the graph, user will be able to remove the datalog.

'**Configure**' button and the  (settings) button in the top right corner have the same functionality and will be explain in depth on the next page.

6.1 Datalog Settings



Once inside the datalog settings, the screen on the left is what will appear. This would be the general configuration screen, as highlighted in red in the top left part of the image.

'Dash Layout' gives the user the option to choose what they want their dashboard layout to look like. Clicking on the dropdown arrow will give the user the options of choosing either Bar Graphs, Live Charts or Gauge Dials.

'Live Chart Max Data' slider sets the number of points available in the live chart before the chart starts to scroll.

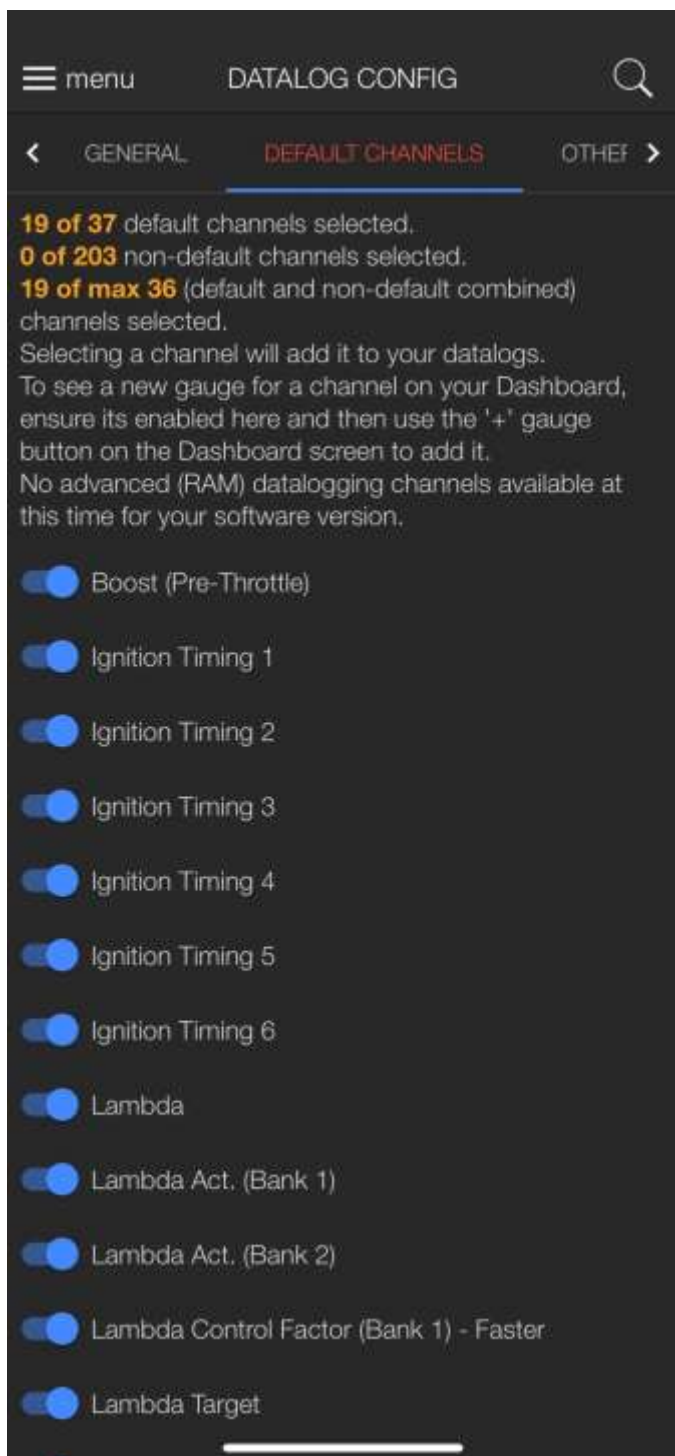
'Units' can be changed to either Imperial or Metric, and **'Pressure'** can be set to either Absolute or Relative. The target ECU will always be the DME.

Toggling the Auto-show Datalog Chart enables/disables the log showing automatically after it has been recorded.

'Auto-Logger' captures the logs automatically in the car.

Acceleration Pedal Threshold % - this slider allows the user to set the percentage of the acceleration pedal at which the auto logging will begin.


Duration After Pedal Lift - this slider allows the user to configure the number of seconds after the pedal lift, under the % threshold the auto-log will end.



'Default Channels' screen, as shown on the image shows the entire list of all the default channels available.

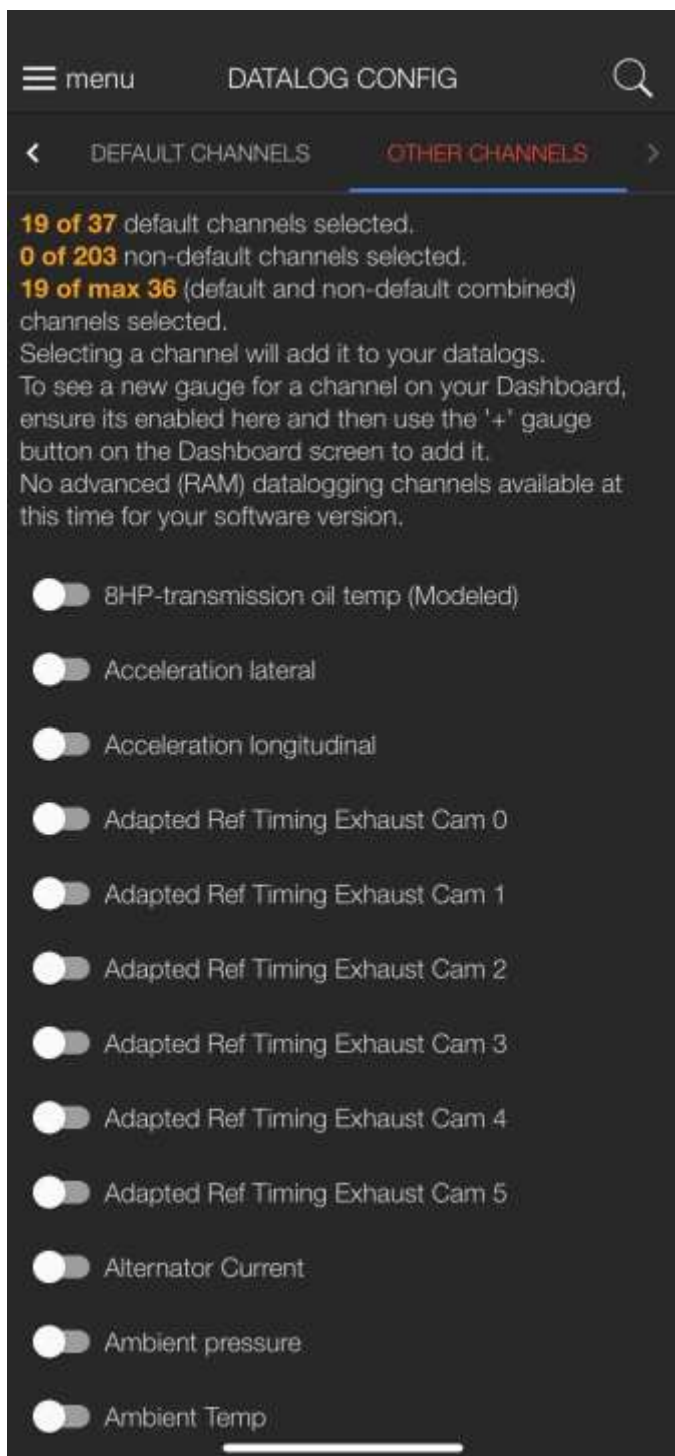
As demonstrated in the screenshot provided, there are 37 default channels, 19 of them which have been selected.

The maximum number of default and non-default channels combined, allowed for logging purposes is 36. Once the max. number has been reached, a pop-up message will appear notifying the user it is at the max. limit.

To search for a specific channel, use the  button instead of scrolling down the list.


Selecting a channel by toggling it on, will add it to the datalogs.

To see a new gauge for a channel on the dashboard, ensure the channel is enabled here, and then use the '+' gauge button, or 'Add Channel' (depending on the layout) on the dashboard screen to add it.



‘**Other Channels**’ screen, as shown on the image shows the entire list of all the default channels available.

The maximum number of default and non-default channels combined, allowed for logging purposes is 36. Once the max. number has been reached, a pop-up message will appear notifying the user it is at the max. limit.

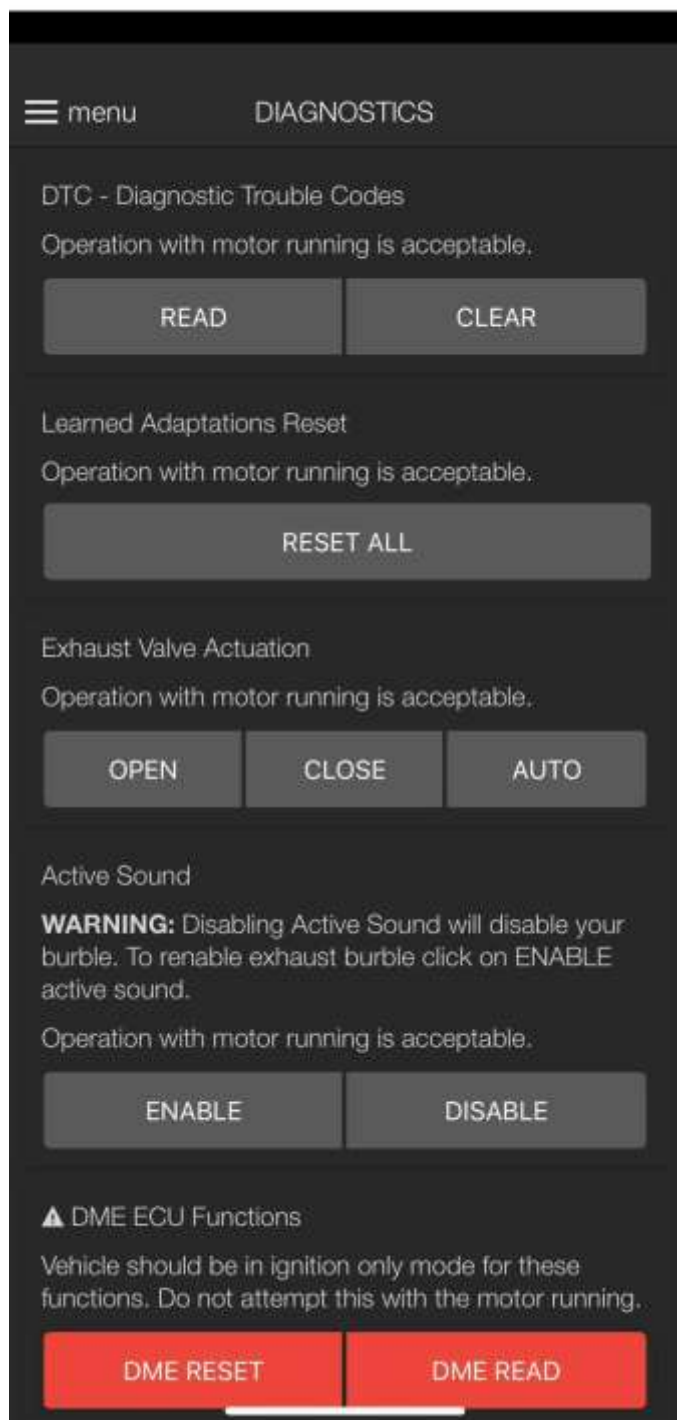
To search for a specific channel, use the  button instead of scrolling down the list.

Selecting a channel by toggling it on will add it to the datalogs.

To see a new gauge for a channel on the dashboard, ensure the channel is enabled here, and then use the ‘+’ gauge button, or ‘**Add Channel**’ (depending on the layout) on the dashboard screen to add it.

PLEASE NOTE: This tab shows non-default channels, some of which may not be compatible with the connected vehicle. Adding a non-default channel may cause the Dashboard and logging to stop working (e.g. all zeros). If this happens, go to the ‘About**’ screen and click on ‘**Reset Settings**’ button.**

7 Diagnostics



The Diagnostics screen is mainly used to read codes from the DME.

Pressing the '**READ**' button will read all the DTC from the DME. Users may be asked by the **bootmod3** team to do the readout, to help identify any potential issues.

The '**Clear**' button clears all the codes.

The Learned Adaptation Reset ('**Reset All**' button) is used to reset all previous adaptations. This is used when flashing from stock to a tune, or if a new version of the tune is available.

Exhaust Valve Actuation can either be set to '**Open**', '**Close**' or '**Auto**'. This is an on-demand option, not permanent. To permanently set valves position, use the map configuration screen.

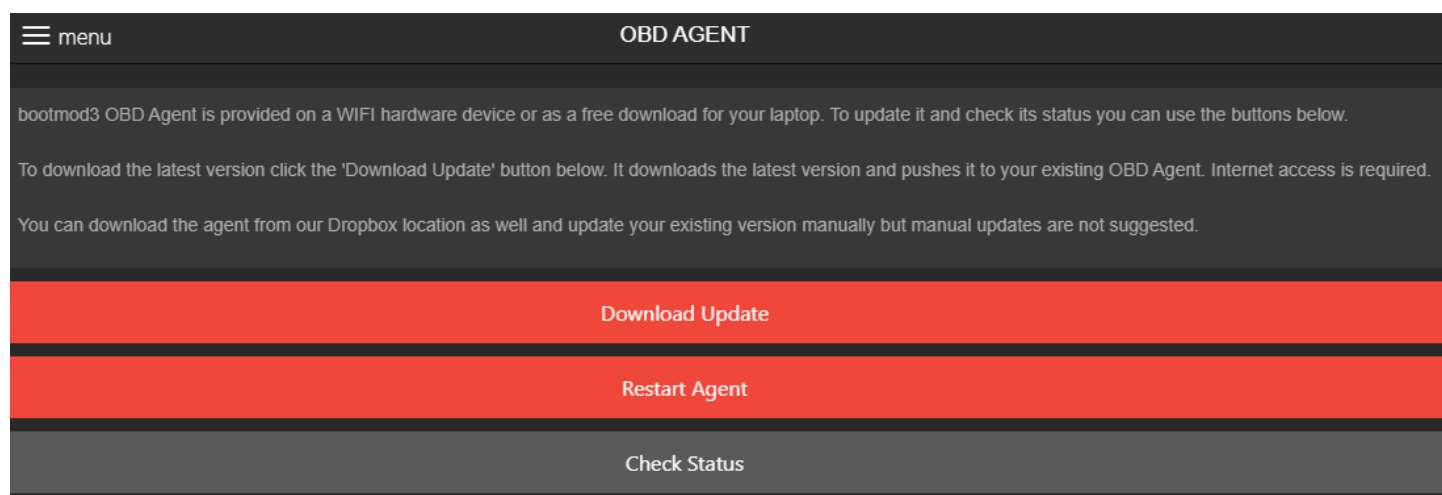
Active sound can always be either enabled or disabled. Note that disabling the '**Active Sound**' may disable current burble setting.

DME RESET will power reset the entire DME. Only to be used when/if troubleshooting with technical support staff.

By clicking the '**DME READ**', the platform will then perform a DME readout and save any previously flashed maps. This function is to be used only when instructed by bootmod3 tech. support team.

Please note that the vehicle should be in ignition mode only when performing these two actions – **DME RESET** and **DME READ**.

8 OBD Agent



OBD agent is the software program that is running in the background as **bootmod3** is being used. To avoid failed flashes, or any other technical difficulties, always make sure that the agent is up to date. Team **bootmod3** is constantly coming up with new features and new updates, therefore the agent does get updated frequently. By clicking '**Check Status**' the system will tell whether the latest version is active or if the agent needs to be updated. **It's very important that users are running the latest version of the OBD AGENT.**

When using a laptop as a means of flashing the vehicle, picture above is what will appear when inside the OBD Agent submenu.

Using a phone and the OBD Agent Device, identical picture as the above will be shown. Hotspot connection on iPhones will have a blue line across the top of the phone screen, indicating a successful connection.

Below are links provided to assist user on how to successfully install and run the OBD Agent, whether it is on a laptop or through the OBD Agent Device.

OBD Set-up instructions for laptop, [click here](#).

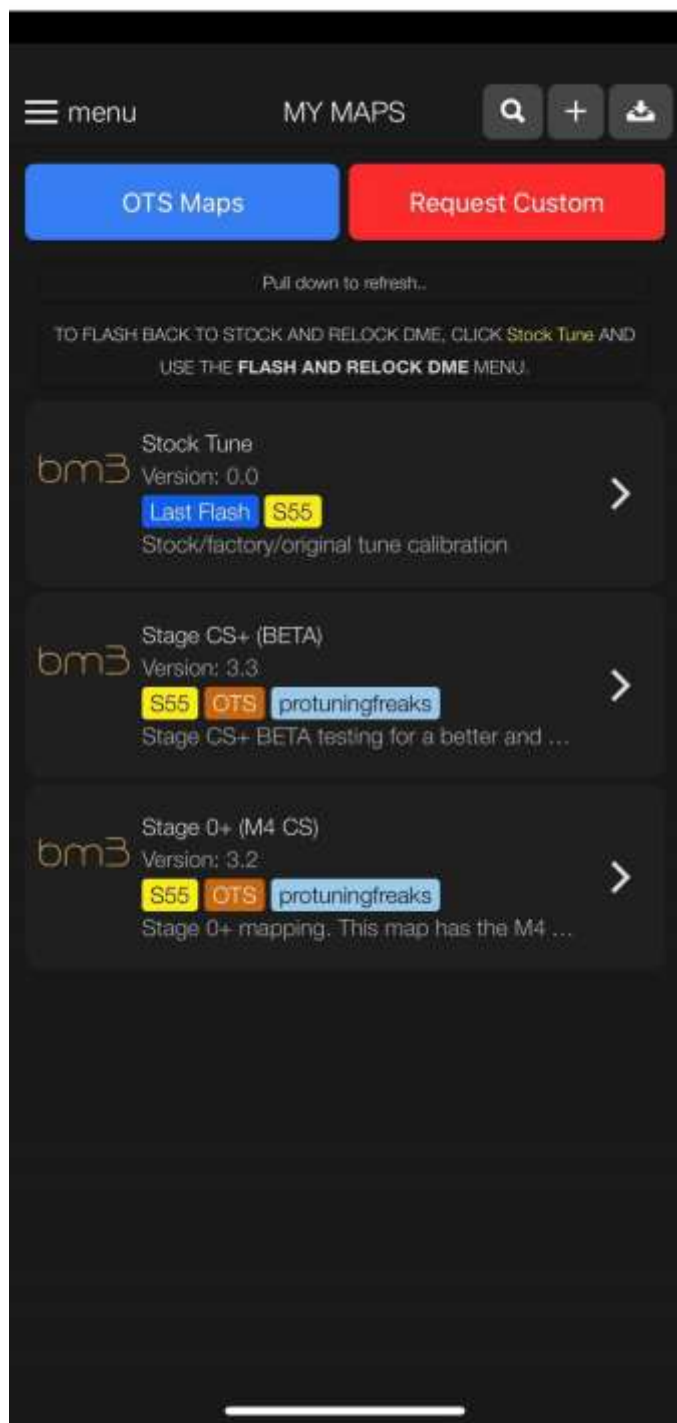
OBD Set-up instructions for Wi-Fi Agent Device, [click here](#).

OBD Agent Hardware Firmware Update, [click here](#).

OBD Agent Device Connectivity Issues (iPhone), [click here](#).


In case your OBD Agent is not connected or your VIN is not being detected, [click here](#) for troubleshooting instructions.

9 My Maps



This is the first screen that will appear when inside 'My Maps' menu. All acquired maps from the OTS Menu will be stored in 'My Maps', including the stock tune which will always be at the top of the list. Each flash will begin when the user enters this menu.


Clicking on the 'OTS Maps' will show the entire collection of all maps available for the specific engine, which will be explained in the next chapter in full detail.

Clicking on the  button, the user will be able to search a specific map, without having to scroll down in case there is quite a few maps.

Each map will state the name of the map, with the version of the map below, and labels such as the engine type and the tuners name.

As shown on the stock tune, 'Last Flash' label will appear on the map that was flashed last.

9.1 Add Map File

By clicking on the  button from the previous page, the user will be taken to this screen, as shown on the image.

Files exported in the bootmod3 map editor can be uploaded back to the account using this feature.

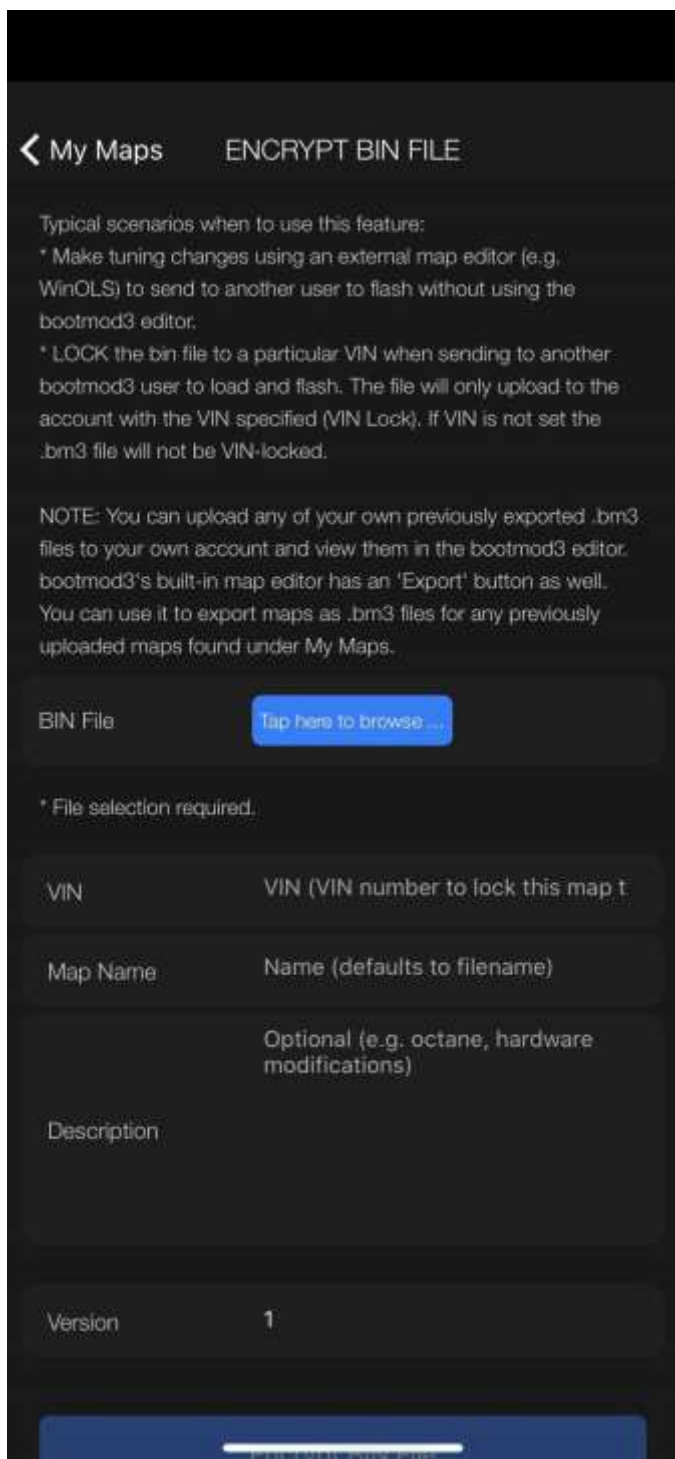
Clicking on the **'Tap here to browse'** will open a screen allowing the user to search for the specific file on their computer.

File selection is required; entering the map name, the description of the map, and the version is recommended.

Once the appropriate file has been selected, and all the fields have been filled out, the **'Upload Map'** button will become available for clicking.

The uploaded file can be then found in **'My Maps'** screen.

9.2 Encrypt .bin File



My Maps ENCRYPT BIN FILE

Typical scenarios when to use this feature:

- * Make tuning changes using an external map editor (e.g. WinOLS) to send to another user to flash without using the bootmod3 editor.
- * LOCK the bin file to a particular VIN when sending to another bootmod3 user to load and flash. The file will only upload to the account with the VIN specified (VIN Lock). If VIN is not set the .bm3 file will not be VIN-locked.

NOTE: You can upload any of your own previously exported .bm3 files to your own account and view them in the bootmod3 editor. bootmod3's built-in map editor has an 'Export' button as well. You can use it to export maps as .bm3 files for any previously uploaded maps found under My Maps.

BIN File [Tap here to browse ...](#)

* File selection required.


VIN VIN (VIN number to lock this map t

Map Name Name (defaults to filename)

Description Optional (e.g. octane, hardware modifications)

Version 1

ENCRYPT BIN FILE

By clicking on the  from page 33, only an authorized tuner will be taken to the page, as shows on the screen here.

Some tuners use editors outside of bootmod3 to make custom maps, like WinOLS for example. This feature allows any tuner that is also a bootmod3 authorized tuner to export their tunes originally from .bin format to any bootmod3 customer in .bm3 format instantly.

Clicking on '[Tap here to browse...](#)' button will allow the tuner to import the desired map.

Once all the information has been filled out, such as the VIN, Map Name, Description, and the Version, at the bottom of the page is the '[ENCRYPT BIN FILE](#)' button.

An Authorized Tuner can send that file to the customer over email, put it on dropbox or any other method. Once the customer receives the map, they can then upload it into their account (page 34), and then flash as usual.

9.3 Requesting Custom Tune

REQUEST TUNE X

You're choosing a tuner to build you a **CUSTOM** map. You'll see a new map created and a request will be sent to the tuner of your choice to build it for you.

protuningfreaks does not offer custom tuning. bootmod3 OTS Maps which can be found in the OTS Maps screen.

Map Name
e.g. Stage 2 93 octane

Tuner name
X bootmod3 office TEST

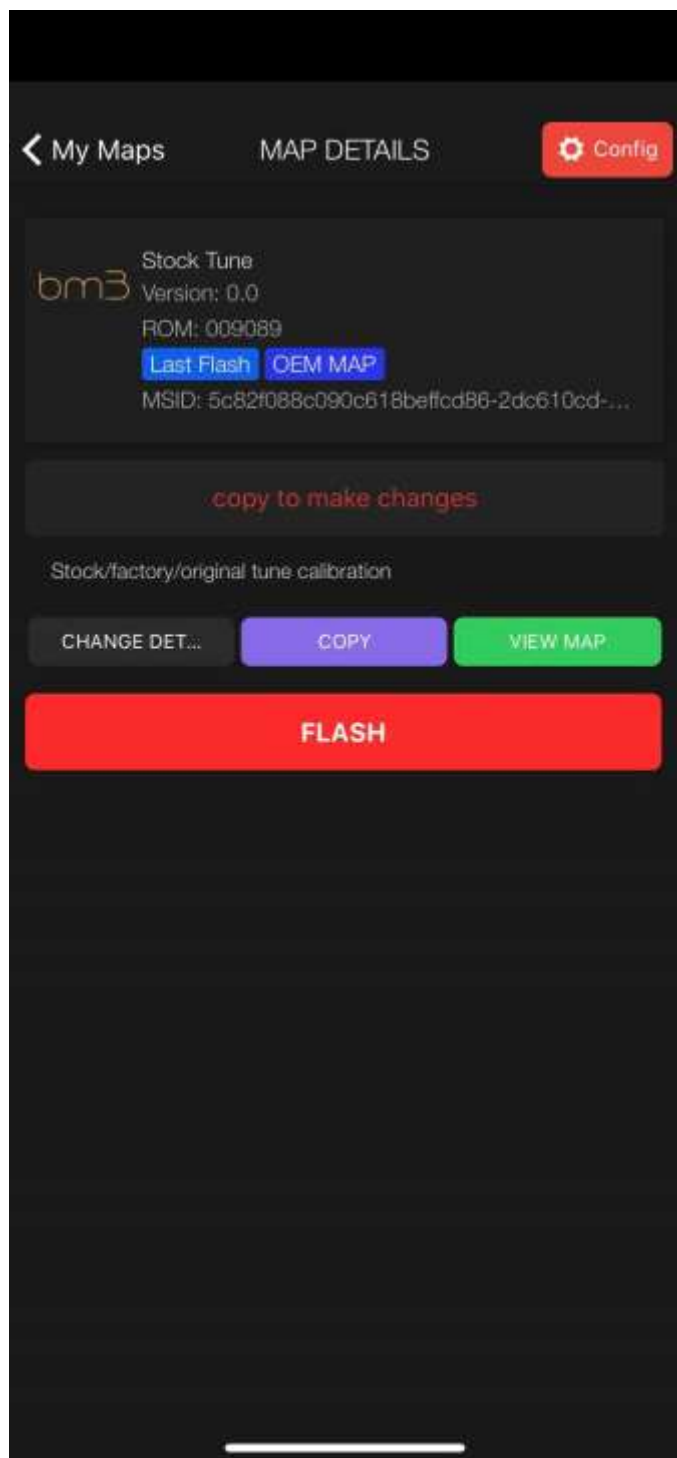
Map Request Details
Map details...

CANCEL SEND REQUEST

Since ProTuning Freaks does not offer custom tuning, the user has an option of requesting a custom tune by clicking on the red button **“Request Custom”** in the top right corner of the **“My Maps”** screen, see page 33. A list of all authorized tuners will appear as shown in the screenshot on the left, allowing the user to select a tuner of their own choice.

Once a Tuner has been selected, the user will have to write a map description of the desired custom map in **‘map details’**, as well as the map name above the tuners name. This gives the tuner details of the map. Once all the information has been filled out, by clicking **‘Send Request’**, the tuner will receive a custom map request on their end. (See section 11).

9.3 Stock Tune



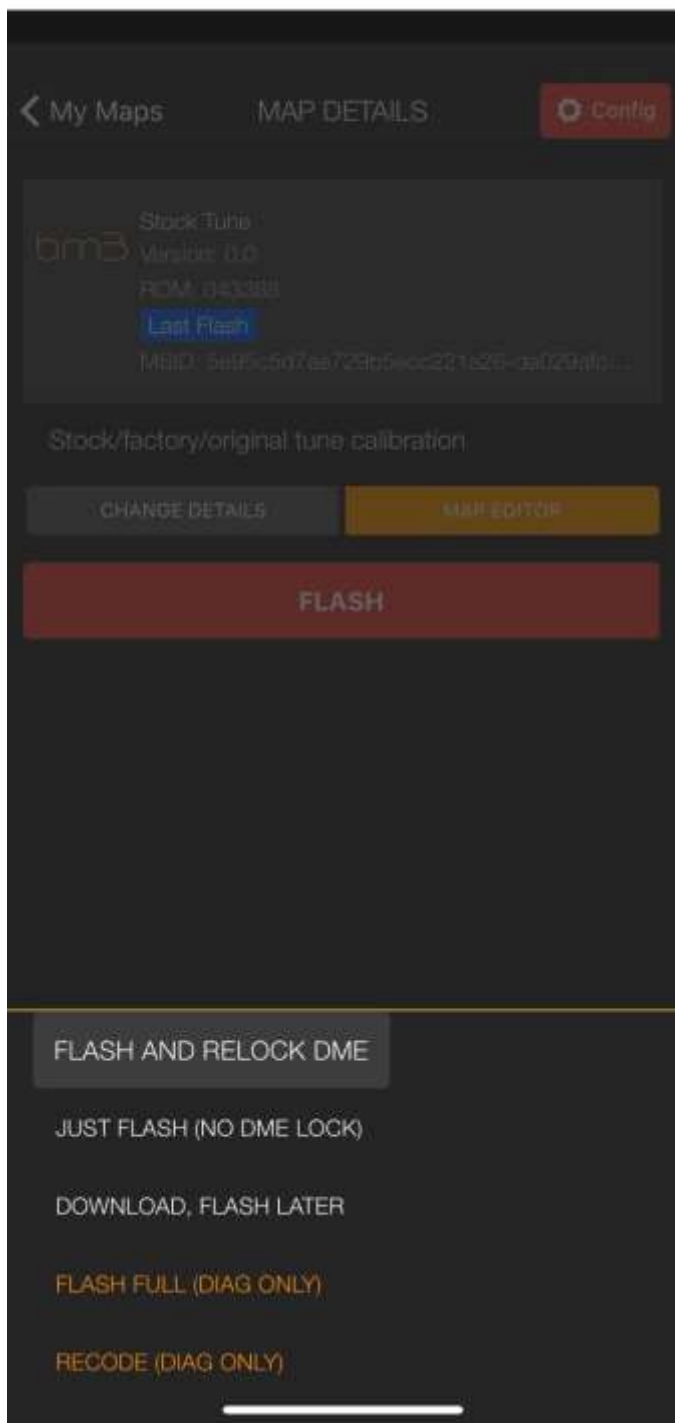
Stock Factory Tune is automatically created for the vehicle upon activating the license. Factory tune is based on the software details on the vehicle's DME. Flashing to stock tune is always an option. This is typically done when a license transfer needs to be completed. Other times include; if the vehicle needs to be taken to the dealership or simply if there is no more desire to drive with the OTS map.

Changing the details of the stock tune, such as the name of the map, description and the version is available by click on **'Change Details'**.

'Config' button and the **'View Map'**(previously Map Editor), will be explained in detail in their separate sections.

Clicking on the **'Copy'** button allows the user to make a copy of the map. Once a copy is made, it is placed in **'My Maps'**.

Clicking on the **'FLASH'** button will prompt the user to 5 possible flashing options, explained on the next page.



Five choices of flashing back to stock:

- 1) **Flash and Relock DME:** This option is used to flash back to stock tune and to lock the DME. This is mainly used when transferring a license to a new owner, or if taking the vehicle back to dealer. Please note that DME must be locked for a successful license transfer.
- 2) **Just Flash (No DME Lock):** This flash option is used to only flash back to the stock tune, but not to lock the DME.
- 3) **Download, Flash Later:** To download the stock tune now, and to flash it later in offline mode.
- 4) **Flash Full (Diag. Only):** This option is used for all 4mb of data to be programmed. It is not a necessary function, unless doing a recovery.
- 5) **Recode (Diag Only):** This option is used by boomod3 tech support only, when the flash is successful, but the coding is not properly applied.

9.4 Map Editor

Map Editor is a feature **bootmod3** offers. It can be found in ‘**Stock Tune**’ screen (page 37). **Map Editor is not to be used, unless one has prior experience in tuning and are comfortable using the map editor.**

Importing and editing **bootmod3**’s OTS maps is not an option. Tuning begins with opening the Stock Tune, clicking ‘**Save As**’ and saving it as another map first. The next step would be to open the new map and start making the changes. Choice of importing any Stage 0 FREE map, as a learning guide is available, to see how factory has approached some of the tuning details, but that is not required to make a tune.

Exhaust Flaps (Sport) 1 is being used in the example above to demonstrate how the values can be changed. The table on the example is showing stock tune calibration. To make changes to the current table, the user will have to highlight all cells and make appropriate adjustments. Once the adjustments have been made, changes will need to be saved before flashing.



After importing a map, or changing data in a map, the user can hover on or off the 'Original' button on any table to see the original data in it and see current changes. If the 'Original' button is pressed, the original values of that table are reverted.

'Commit' button is used to indicate to the editor that the user is happy with the changes to a given table, and that it's changes should be included when clicking save. If the user doesn't click on 'Commit'; on a table that has had its data changed and the save button is clicked, the user will notice that the save dialog box shows the uncommitted table in a separate list from committed tables. In which, this indicates its changes will not be saved. This way some changes can be ignored, and others saved while working inside the editor.

Attached below are two links explaining the map editor in full detail.

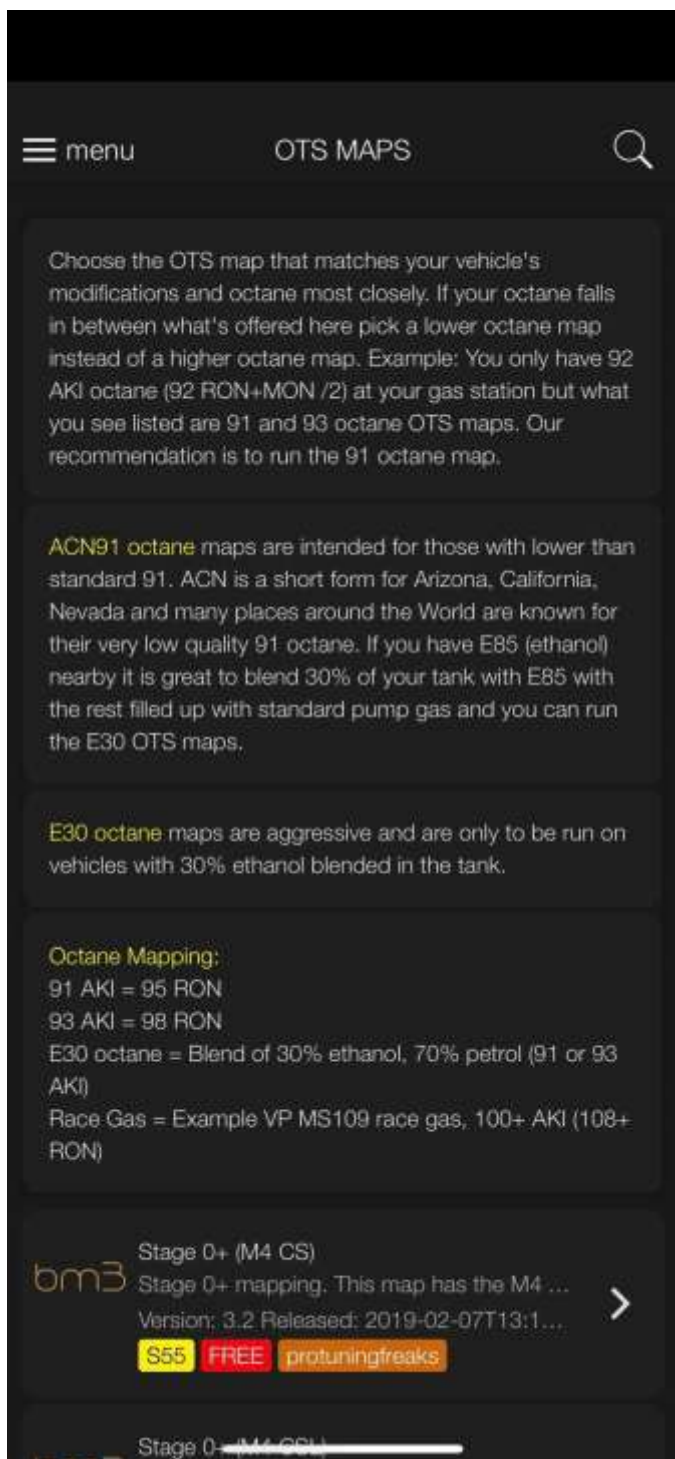
https://www.youtube.com/watch?v=d_1hsXjL1Jw&t=626s

<https://www.youtube.com/watch?v=UAINJnBi1E0>

Inside the map editor, logs will be available to view, as well as request a custom tune button from one of our authorized tuners. Flashing the customized map is also part of the map editor menu.

There are about 200 tables in the map editor that can be changed. Again, it is very important that one has prior tuning experience before entering this screen. We highly recommend reaching out to one of our authorized tuners from the directory.

10 OTS Maps



OTS Maps menu is where the user will be able to find all the maps available for the vehicle connected.

ACN91 octane maps are intended for those with lower than standard 91. ACN is short for Arizona, California, Nevada, and other places in the World known for their low quality 91 octane.

E30 octane maps are aggressive and are only to run on vehicles with 30% ethanol blended in the tank.


Octane Mapping:

91AKI = 95 RON

93AKI = 98 RON

Race Gas = 100+ AKI (108+ RON)

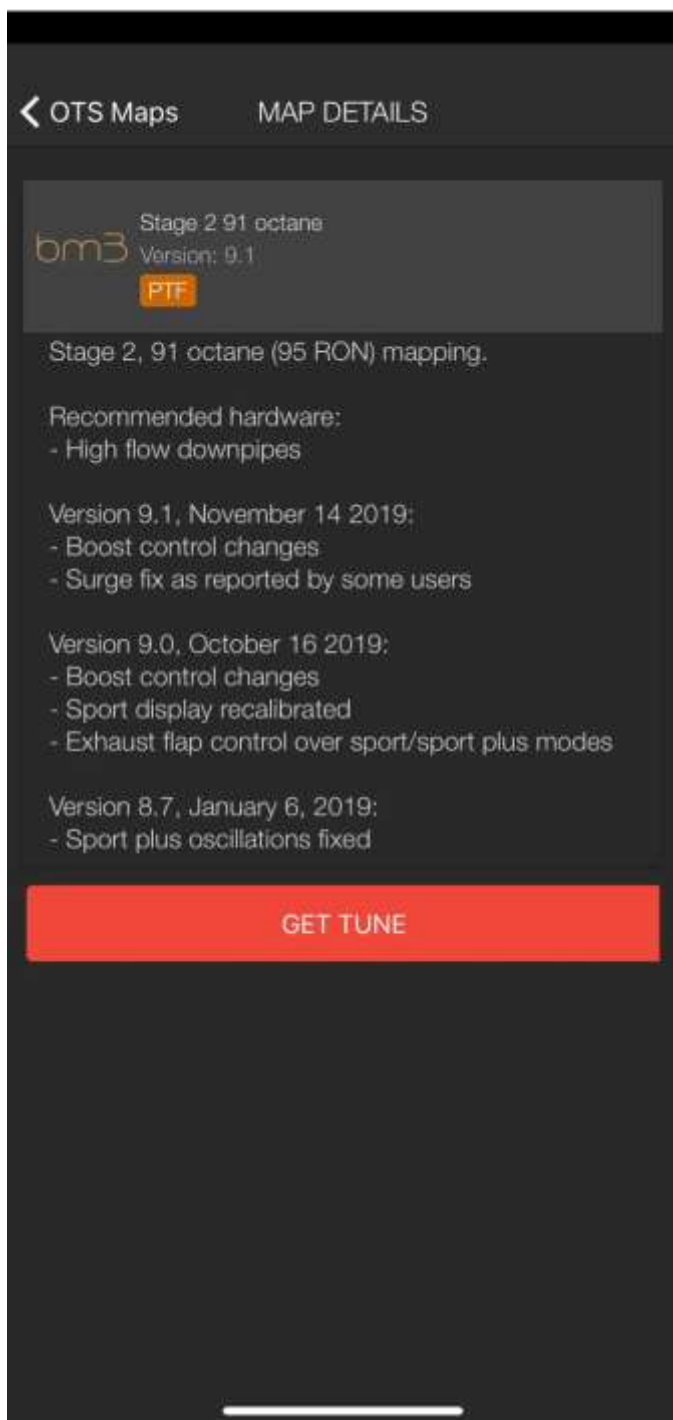
E30 = Blend of 30% Ethanol

User can use the  button to search for a specific map.

Each bootmod3 license includes one free OTS map of the user's choice. This can be either Stage 1 maps or Stage 2 maps, depending on the vehicle's hardware set up. When selecting the OTS maps, please note the version of the map, as well as required hardware upgrades.

Clicking on any map will prompt the user to the **'Map Details'** screen, explained on the next page.

10.1 Map Details

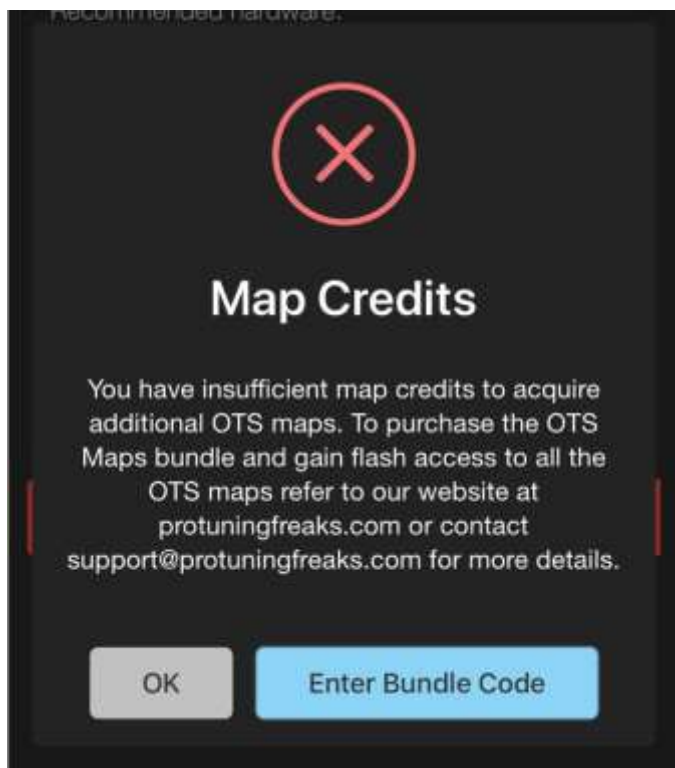


Once a desired map has been selected, the user will be directed to the 'Map Details' page, as shown on the screen on the left.

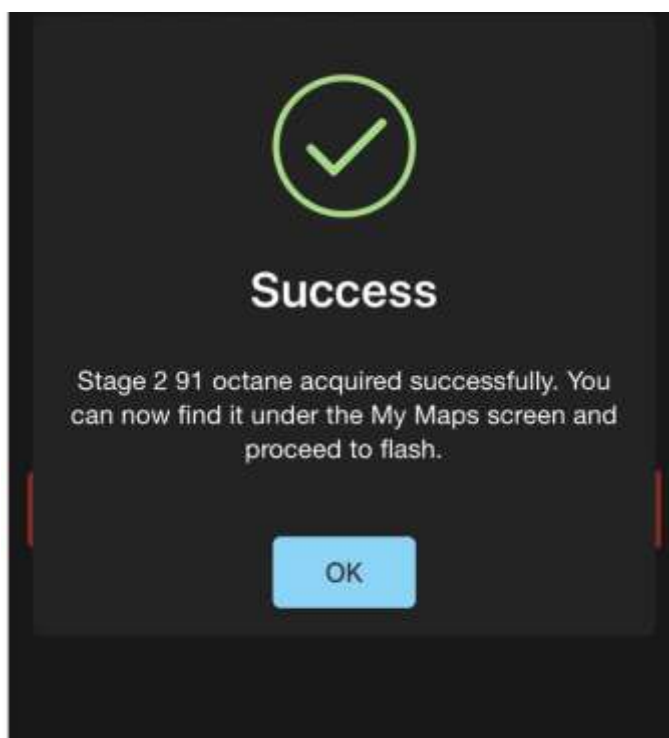
Map details include the following details:

- 1) Map Name – Stage 2 91 Octane
- 2) Map Version – 9.1
- 3) **PTF** will always be the tuner when acquiring maps from the OTS Menu.
- 4) Recommended Hardware – Each engine type will have different hardware requirements. Be sure to have the proper parts installed to avoid any issues.
- 5) Current Version – Current version of the map shows what changes were made from the previous map version. Current map version will display the date the version was released by our calibrators.
- 6) Previous Versions – Previous map version will show the version number, the date released, and the changes provided for those versions.

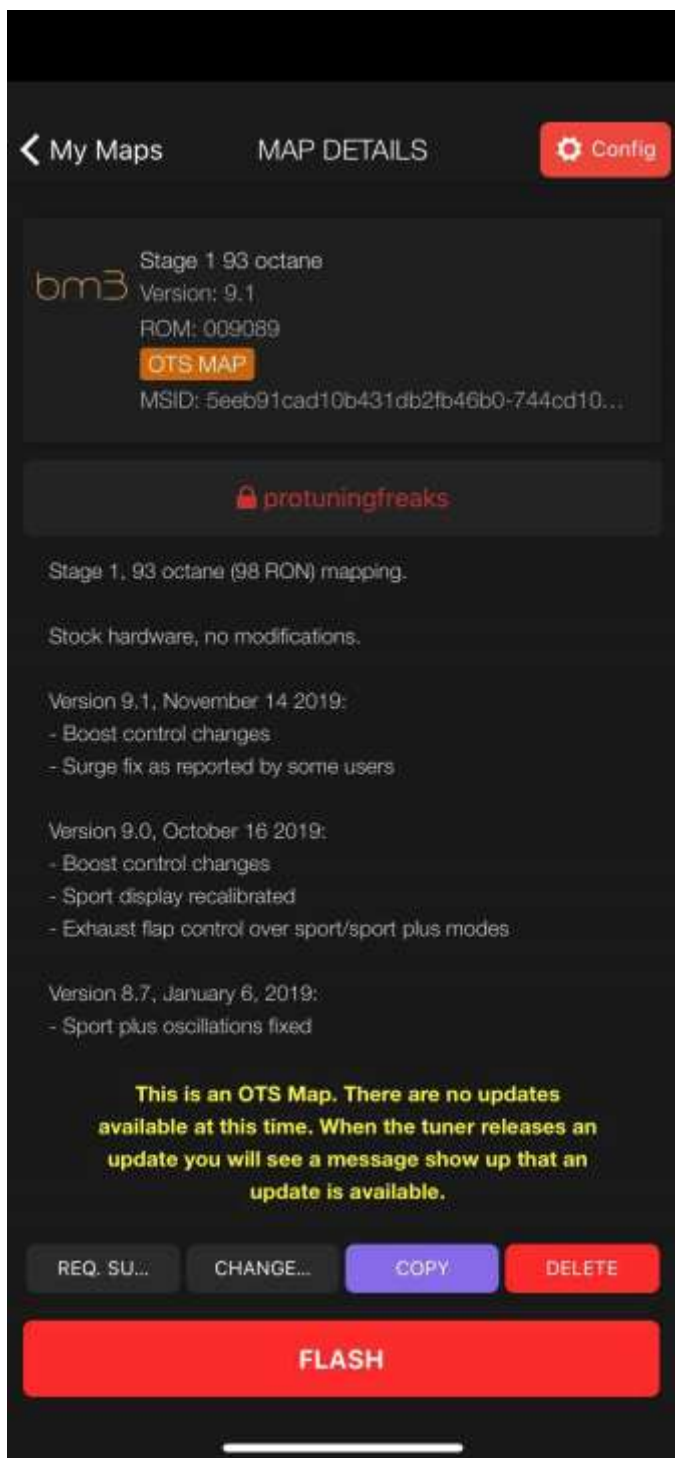
Once ready to acquire the map, click on '**GET TUNE**'.



Once the user clicks on **'Get Tune'** From the previous screen, one of the 2 messages will appear. If this is the second OTS map that is being acquired, the insufficient map credits message will appear, as shown on the top image. As mentioned earlier, a software license purchase includes one free OTS map. To have access to more maps, the [OTS Map Bundle](#) will need to be purchased. Be sure to enter the full VIN at checkout. This will ensure the credits are automatically applied to the account. For further assistance, please contact support@protuningfreaks.com



Once the map has been successfully acquired, the pop-up message, as shown on the bottom image will appear. The freshly acquired map can now be found in **'My Maps'**.



To find the map that has been selected from the OTS maps, the user will have to go back to the **'My Maps'** screen. Simply select desired map to be flashed, and the screen on the left will appear.

At any point, the user will be able to delete this map if no longer needed. This is done by clicking on the **'Delete'** button.

The **'REQ. SUPPORT'** button is used in case there is something wrong with the map, and the user would like to report it to us.

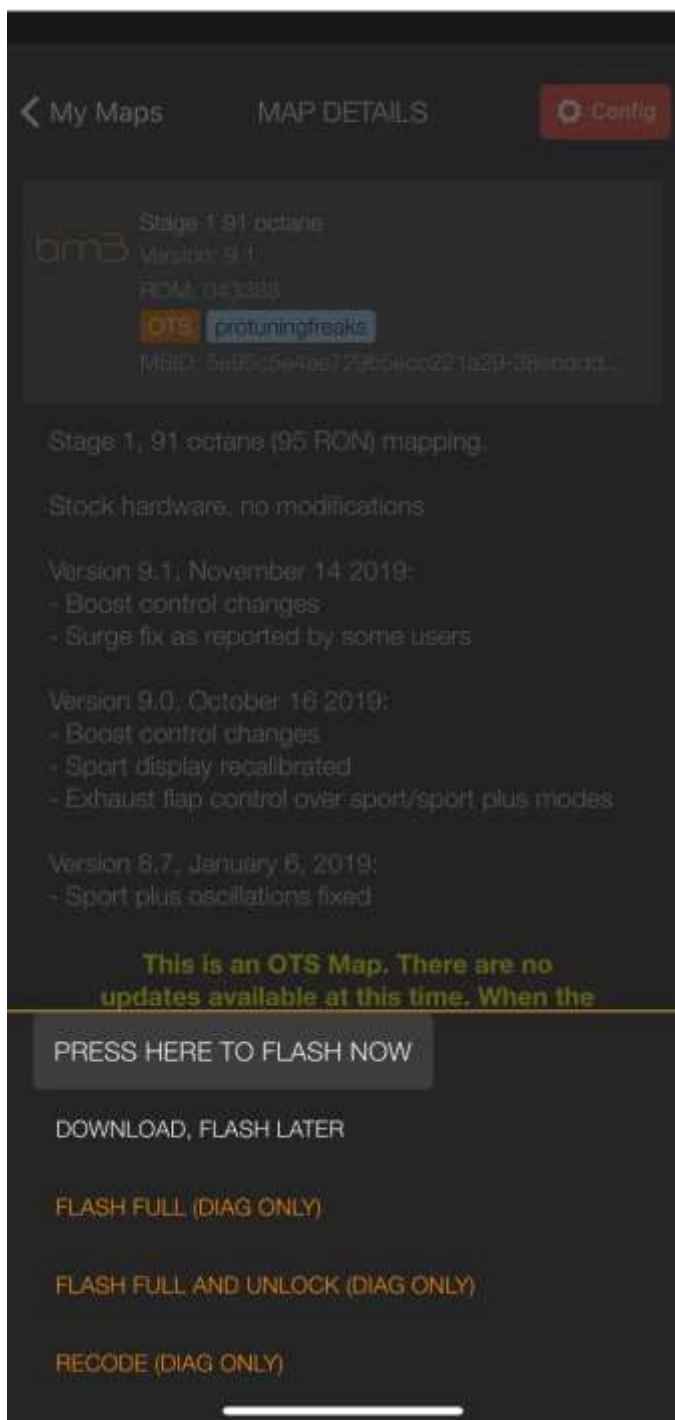
The user will be able to re-acquire the OTS map at any time and get an extra copy. For instance, the account can have two of the same OTS maps. One can be custom configured using the map configuration screen (e.g. aggressive burble settings for fun) and the other map can be configured in a different way (e.g. mild burble for daily driving).

Clicking on the **'Copy'** button allows the user to make a copy of the map. Once a copy is made, it is placed in **'My Maps'**.

The user will be able to change the map details such as the map name, map description and map version, by clicking on **'Change Details'** button.

Clicking on the **'FLASH'** will prompt the user to 5 possible flashing options explained on the next page.

10.2 OTS Map Flashing



Once the user has decided which specific map to flash, clicking on the red '**FLASH**' button will prompt four different options of flashing.

Press Here to Flash Now: This option is used most frequently by users. Simply click and wait for the flash to be completed.

Download, Flash Later: This option for flashing is used to download the map now, and to flash it later in "**Offline Mode**".

Full Flash (Diag Only): This option is used when instructed to do so by a bootmod3 team member.

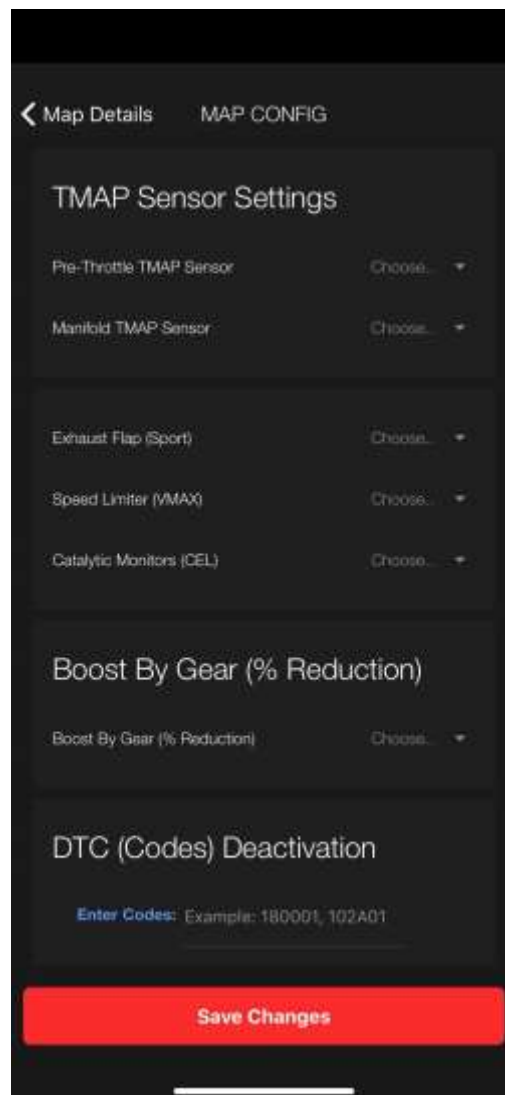
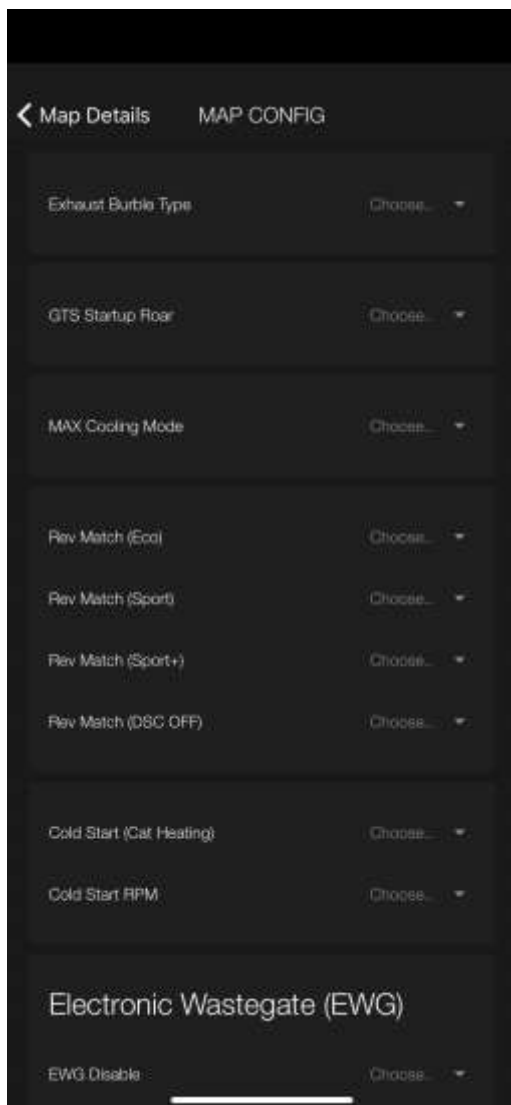
Full Flash and Unlock (Diag. Only): This option is used to program the 4mb data and calibration part to your vehicle. This also includes the boot loader as well. Unnecessary function, unless doing a recovery.

Recode (Diag Only): This option is used when the flash is successful, but the coding is not properly applied.

Flash Times: **30 seconds** for a normal flash, and **3.5 minutes** for a full flash on single DME vehicles.

Please note all 'flashing' downloads the full map data to the laptop or Wi-Fi device first and that internet is NOT being used during programming of the DME.

10.3 Map Configuration



Map Configuration screen offers the following features on OTS Maps:

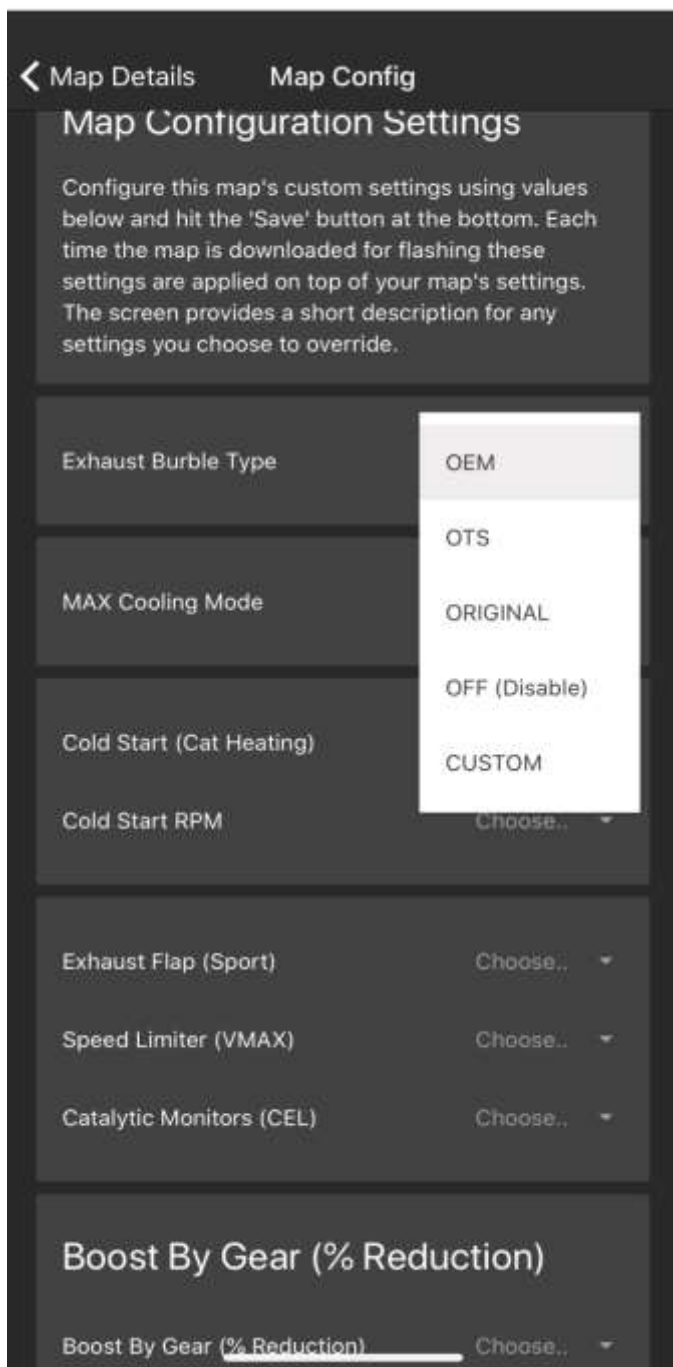
- Exhaust Burble
- Cold Start Idle RPM
- GTS Start-up Roar
- MAX Cooling Mode
- Electronic Wastegate (EWG)
- Rev Match/Rev Match (DSC off)
- TMAP Sensors switch for N20 TMAP Sensor where applicable

- Exhaust Flaps
- Ignition Coils
- High Pressure Fuel Pumps
- Speed Limiter defeat (VMAX off)
- Cat Monitors CEL off for off-road/race car configuration
- Boost by Gear (% Reduction)
- DTC (Codes) Deactivation
- Exhaust OPF

Please note some of the features are not applicable for all supported vehicles.

	A90	B48	B58	N13	N20	N55	N63TU	S55	S58	S63TU	S63TU4
Exhaust Burble	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
GTS Start up Road	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Max Cooling Mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cold Start (Cat Heating)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cold Start RPM				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exhaust Flap	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Speed Limiter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exhaust OPF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Catalytic Monitors (CEL)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ignition Coils						<input checked="" type="checkbox"/>					
HPFP			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					
Pre Throttle TMAP Sensor						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Manifold TMAP Sensor						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rev Match (Eco, Sport, Sport+)						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Rev Match (DSC OFF)						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Boost By Gear Reduction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Electronic Wastegate (EWG)								<input checked="" type="checkbox"/>			
DTC Deactivation						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			

10.3.1 Exhaust Burble



Exhaust Burble is one of **bootmod3's** most desired features. It enables the user to customize the exhaust burble to personal liking. There are five choices to select from.

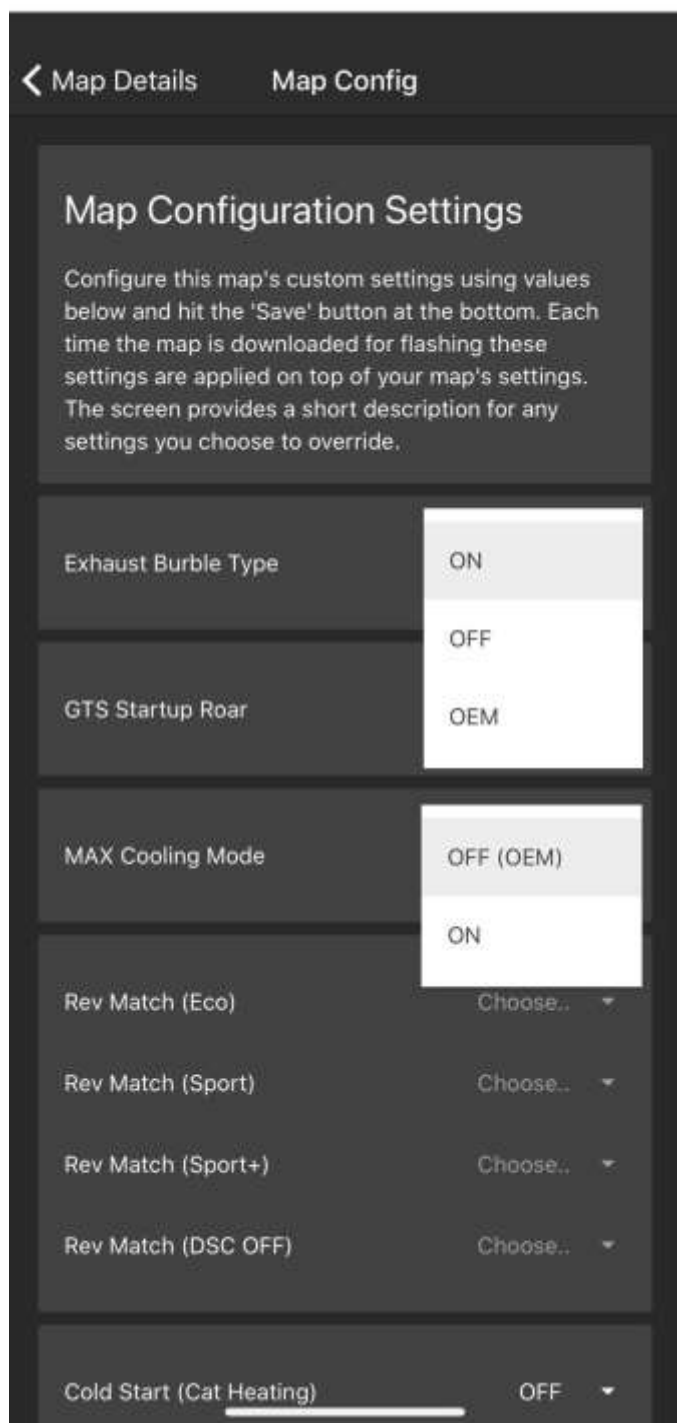
- 1) **OEM** – will set the map to the vehicle's OEM burble settings.
- 2) **OTS** – will set this map up with the latest released OTS Exhaust Burble setting.
- 3) **Original** – uses this map's original values. If it's a custom map, it will use the settings from inside the map which the custom tuner configured. If it's an OTS map, it will use the maps original OTS values. If the map is Stock tune, it will use the stock tune values, equivalent to using OEM setting.
- 4) **OFF** (Disable)
- 5) **Custom** – allows the user to customize this map's exhaust burble settings.

Default Settings:

Duration	1 seconds
Duration (sport)	1.5 seconds
Aggression	5
Min. RPM	1200
Max. RPM	5600
Min. Speed	0km/h
Max. Speed	100km/h

Please note Exhaust Burble custom option is not available for S63TU and N63TU engines.

10.3.2 GTS Roar, Max Cooling Mode



GTS Start-up Roar

GTS Startup Roar increases the RPMs to about 2000 for .5 seconds at start up. It can be set to ON, OFF or OEM.

1. **On** – Choosing this option enables the GTS Startup Roar, or race start. On engine startup the RPM will briefly go higher than factory settings to produce a more aggressive sounding engine start. On vehicles with electronic exhaust valves, the valves will also open for a brief moment to assist the overall sound effect.
2. **OFF** – Disable
3. **OEM** – This option will use the vehicle's factory startup RPM setting.

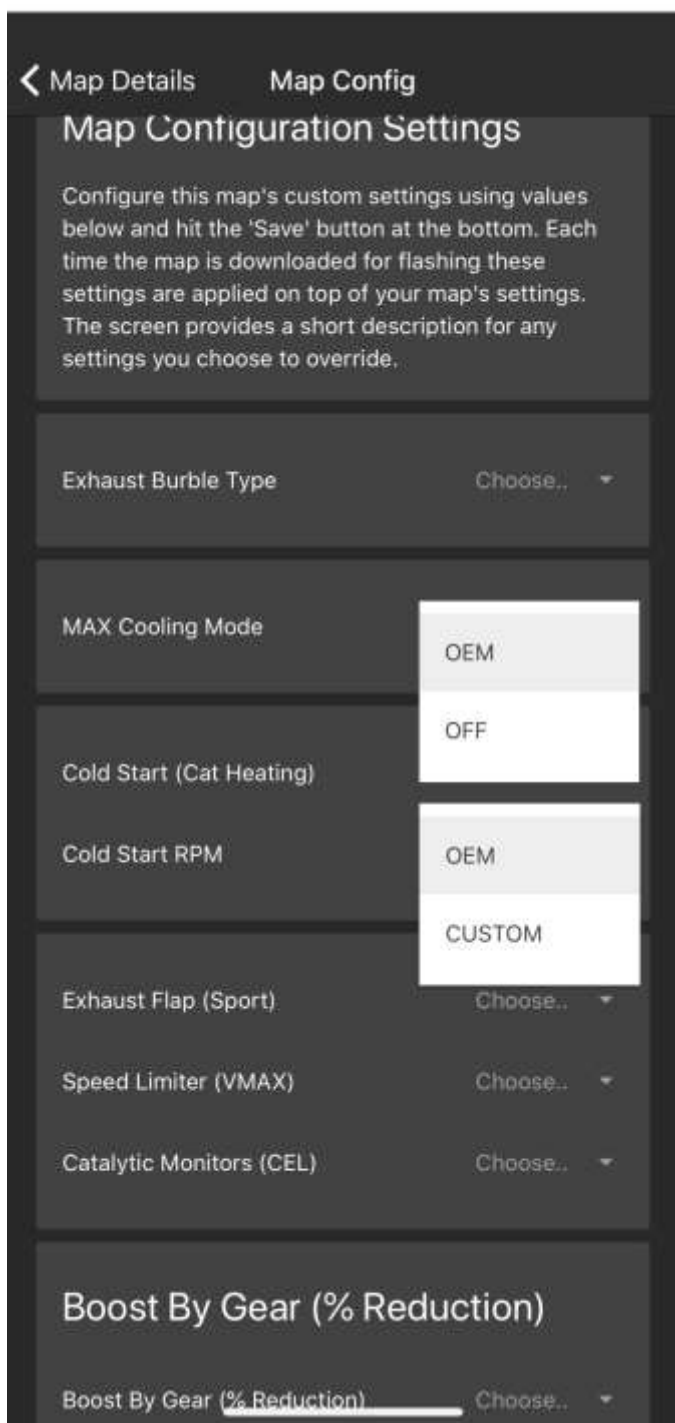
(Available for all N55, S55, B58, B48 and A90 engines)

Max Cooling Mode

1. **ON** - Turning on this feature will reduce the targeted coolant temperature by 10 degrees Celsius, thereby causing the water pump thermostat to open earlier, as well as the fan to come on. This feature does not add additional load to the cooling system in the car when coolant temperatures are below target.
2. **OFF (OEM)** – uses the vehicle's factory cooling settings.

(Available for all supported engines)

10.3.3 Cold Start, Cold Start RPM



Cold Start

Cold Start (Cat Heating) can either be left to OEM settings or be turned OFF. The intended purpose of a cold start is to heat up the catalytic convertors.

1. **OEM** – This option will use the stock tune settings for cat heating. This brings back the factory long running high RPM cold start to heat up the catalytic converters.
2. **OFF** – This option will turn off the cat heating process and upon engine start, the engine will immediately run at the standard lower RPM (e.g. 600rpm)

(Available for all supported engines)

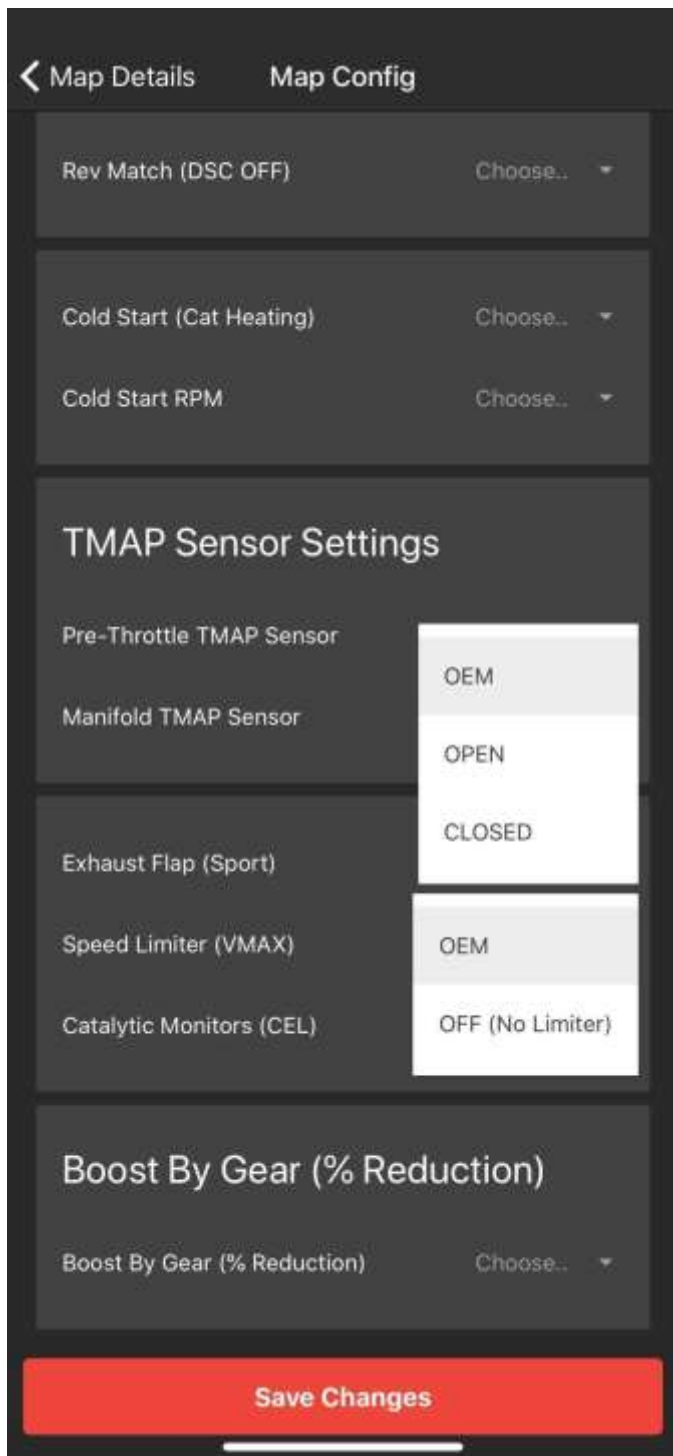
Cold Start RPM

Cold Start RPM can either be left to OEM or Custom. Custom RPMs will range from 660-1200 RPMs.

1. **OEM** – Choosing this option will use the stock tune settings for the cold start RPM.
(Recommended setting)
2. **Custom** – This option allows the user to set a higher cold start RPM than OEM. This is commonly never used, only in the case of a manual transmission vehicle and if running a lightweight flywheel. Raising idle RPM may remove some associate transmission chatter.

(NOT AVAILABLE FOR B48, B58 AND A90)

10.3.4 Exhaust Flap, Speed Limiter



Exhaust Flap

Exhaust Flaps can be opened, closed or left at factory setting in sport and sport+ mode. These are permanent, unlike in the diagnostics screen, where it is on demand. Purpose of the exhaust flaps is to reduce the exhaust noise.

1. **OEM** – This option sets up the DME to run exhaust flap controllers with OEM settings, varying 'open/close' operation based on RPM and gear.
2. **OPEN** – Choosing this option sets up the DME to fully open exhaust valves when in Sport and Sport+ mode, not to vary open/closing by RPM and gear.
3. **CLOSED** – Sets up the DME to fully close the Exhaust valves in Sport and Sport+ mode.

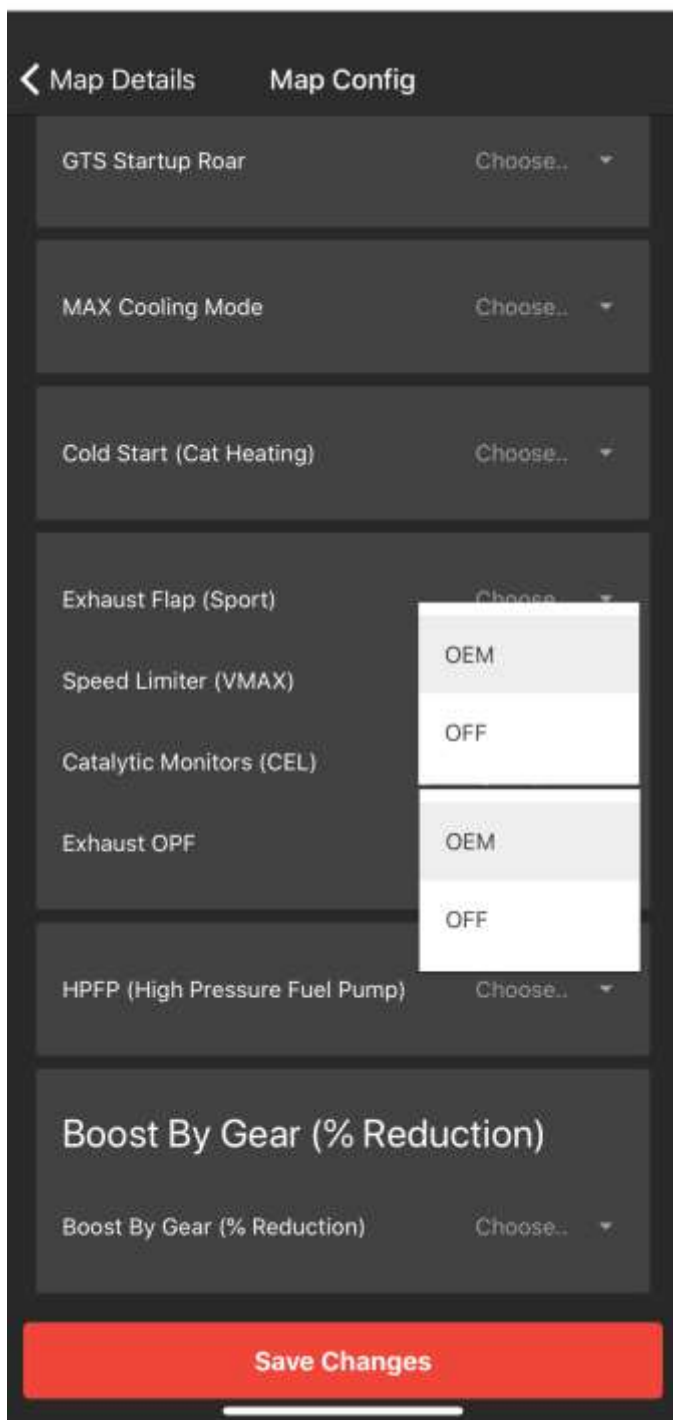
(Available for all supported engines)

Speed Limiter

1. **OEM** – Choosing the OEM option sets this map up with the factory vehicle top speed limiter.
2. **OFF (No Limiter)** – Choosing this option removes the vehicle top speed limiter.

(Available for all supported engines)

10.3.5 CEL, Exhaust OPF



Catalytic Monitors (CEL)

In case a CEL comes up, in most cases due to cat inefficiency, it can be turned off in the map configuration screen. Stage 2 maps are set for CEL to be turned off automatically.

1. **OEM** – Choosing OEM enables the catalytic efficiency monitor as per factory settings.
2. **OFF** – Choosing OFF disables the catalytic efficiency to remove the CEL (check engine light) associated with (catless) high flow down pipes for off road use.

(Available for all supported engines)

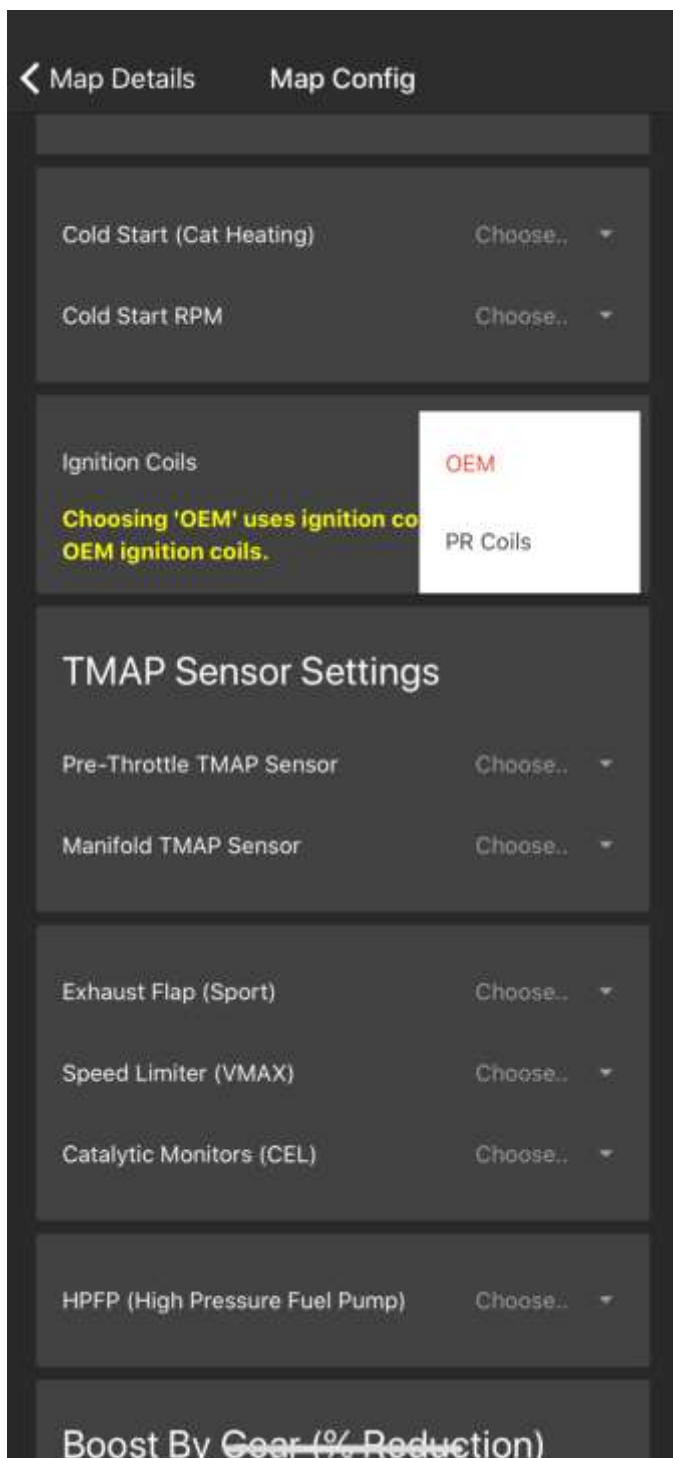
Exhaust OPF

Cars of Europe in late 2018 are required to have the OPF/PPF due to emissions regulations. OPF (Otto Partikelfilter) / PPF (Petrol Particulate Filter). Function can be turned off when removing the particulate filter from the car.

1. **OEM** – Choosing this option restores OPF operation to factory settings.
2. **OFF** – Choosing OFF disables the OPF operation and monitoring preventing drivetrain malfunction associate with high flow down pipes that don't have OPF in them.

(Support Available only for A90, B48, B58, S55 and S58 engines)

10.3.6 Ignition Coils



Ignition Coils

Upgraded ignition coils support from Precision Racewerks (PR). Take the ignition to the next level, far better than OEM.

1. **OEM** – Choosing OEM uses ignition coil settings for OEM ignition coils.
2. **PR Coils** – Choosing this option uses ignition coil setting for the aftermarket Racewerks PR ignition coils. If the car does not have the aftermarket Racewerks PR coils installed, the vehicle will not start or may start rough. DO NOT choose this option unless the OEM ignition coils have been replaced with PR.

(Available only for N55 engines)

10.3.7 High Pressure Fuel Pump

The screenshot shows the 'Map Config' screen with the following settings:

- Exhaust Burble Type: Choose..
- GTS Startup Roar: Choose..
- MAX Cooling Mode: Choose..
- Cold Start (Cat Heating): Choose..
- Exhaust Flap (Sport): OEM
- Speed Limiter (VMAX): DORCH
- Catalytic Monitors (CEL): XDI-HPFP-35
- HPFP (High Pressure Fuel Pump): ORIGINAL
- Boost By Gear (% Reduction): Choose..

A red 'Save Changes' button is located at the bottom of the screen.

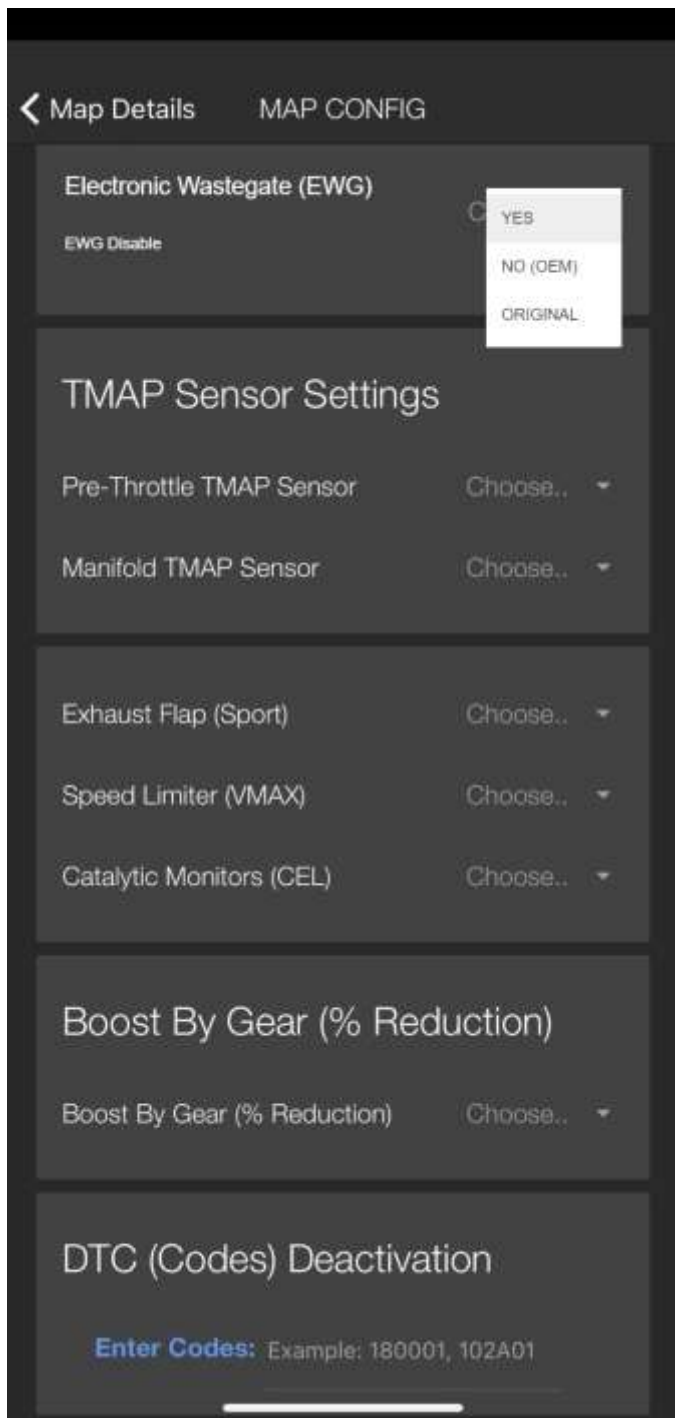
H.P.F.P.

High Pressure Fuel pump is an upgraded fuel pump from XDI. Both XDI-HPFP-35 and 60 outflow the OEM HPFP pump on the N55.

Installing one of these pumps without making the changes will force the car into limp mode, as well as throw various codes for fuel pressure.

1. **OEM** – Choosing OEM uses factory high pressure fuel pump settings.
2. **DORCH** – Choosing DORCH uses high-pressure fuel pump settings for this particular aftermarket HPFP.
(Available for B58 & N55 engines)
3. **XDI-HPFP-35** – Choosing this option uses high-pressure fuel pump settings for this particular aftermarket HPFP.
(Available only for N55 engines)
4. **XDI-HPFP-60** - Choosing this option uses high-pressure fuel pump settings for this particular aftermarket HPFP.
(Available only for N55 engines)
5. **Original** – Choosing ORIGINAL uses the HPFP settings from this map. This can be used on custom maps where a custom tuner is applying their HPFP settings for this map. If this isn't a custom map, then it is equivalent to OEM

10.3.8 Electronic Wastegate



Electronic Wastegate (EWG) is one of our new features. Customers going with aftermarket big turbo kits there the factory EWG controller is being removed in favor of the conventional wastegate (e.g. Tial, Tubrosmart, etc.) for boost control. EWG OEM set up is great but this option makes it much easier for custom tuners to dial in the big turbo set up and focus on what matters the most, making gains.

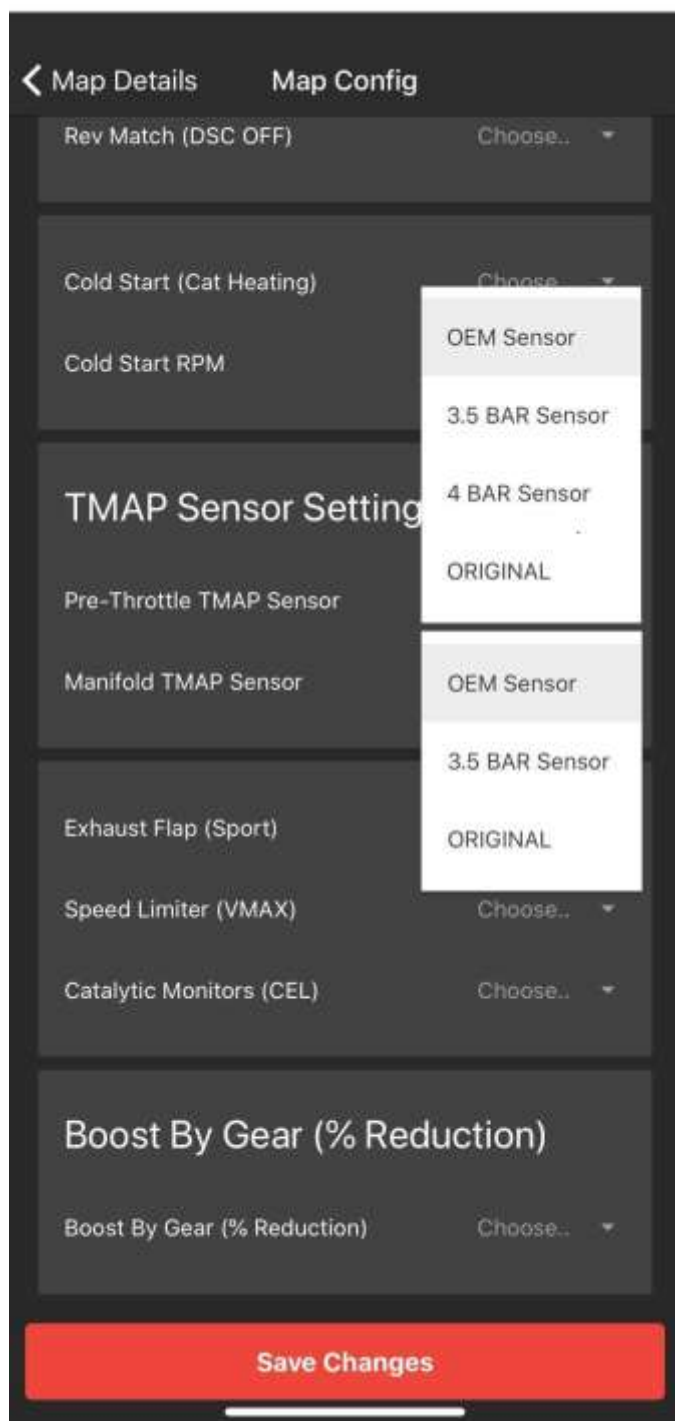
1. **YES** – Choosing 'YES' disables the Electronic Wastegate controller functionality. This should only be used in after market turbo kit applications where the EWG is being removed from the car and replaced for the more conventional after market wastegate setup. Contact an authorized bootmod3 tuner for required custom tuning details.

WARNING: If EWG has not been removed on this vehicle, do not use this setting

2. **NO** – Choosing NO leaves the EWG Enabled.
3. **ORIGINAL** – Choosing original, uses the EWG original set up from this map. This can be used on custom maps where a custom tuner is applying their EWG set up to this map. If this is not a custom map, then this is equivalent to setting it to OEM.

Available only for S55 Vehicles

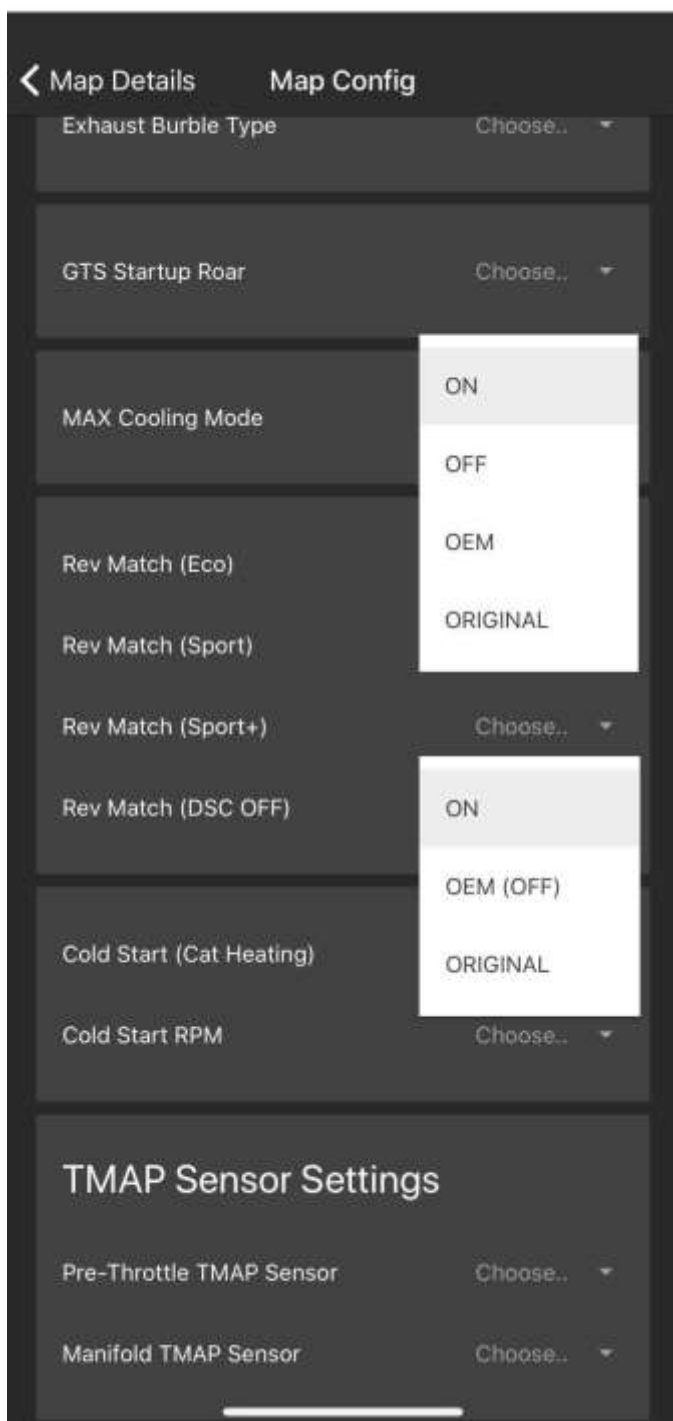
10.3.9 Pre-Throttle & Manifold TMAP Sensor



Users may wish to change the Pre-throttle and Manifold TMAP sensors on certain vehicles where the boost will exceed factory TMAP sensors, typically with custom tunes. Only change these settings if certain of the changes. If the changes don't match the sensor after flashing the map the vehicle will stumble, get a drivetrain malfunction and won't idle.

1. **OEM** – Choosing OEM uses the vehicles stock settings for Pre-Throttle/Manifold TMAP Sensor. Unless the sensor has been changed, this setting should not be changed.
2. **3.5 BAR Sensor** – If the car isn't running the 3.5bar Pre-Throttle/Manifold TMAP sensor, the vehicle will not start or may start rough. Do not choose this option unless the OEM Pre-Throttle/Manifold TMAP Sensor has been changed.
3. **4 BAR Sensor** – If the car isn't running the 4bar Pre-Throttle TMAP sensor, the vehicle will not start or may start rough. Do not choose this option unless the OEM Pre-Throttle TMAP Sensor has been changed.
4. **ORIGINAL** – Choosing this option uses the original TMAP settings from this map. This can be used on a custom map where a custom tuner is applying their TMAP settings for this map. If this isn't a custom map then this is equivalent to OEM
(Available only for N55, S55, S63TU and N63TU engines)

10.3.10 Rev Match / Rev Match DSC OFF



Rev Match Eco/Sport/Sport+

This feature is used to match the revolutions when downshifting.

1. **ON** – Choosing ON will enable rev matching in Eco/Sport/Sport+ mode.
2. **OFF** – Choosing OFF will disable rev matching in Eco/Sport/Sport+ mode.
3. **OEM** – Choosing OEM will revert rev matching in Eco/Sport/Sport+ mode to stock tune settings.
4. **ORIGINAL** – Choosing Original will use this map's preset setting in Eco/Sport/Sport+ mode. If this map is custom tune, it will use the settings the tuner configured.

(Only available on S55 MT engines, as well as the N55-M2)

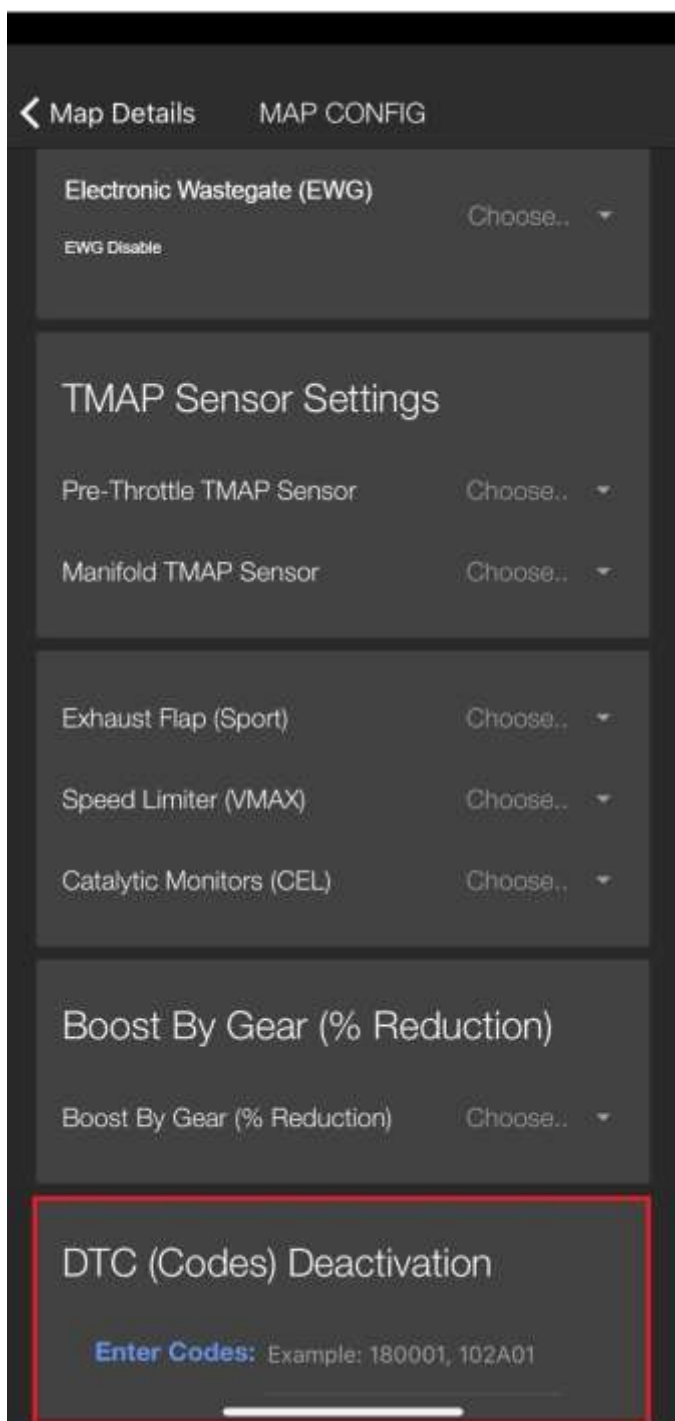
Rev Match (DSC OFF)

S55 6MT (Manual) transmission cars now have the ability to turn Rev Match ON when DSC is turned OFF. By default, factory tuning turns off the rev matching feature when DSC is OFF. It is now configurable for all maps including Stock, OTS and Custom maps.

1. **ON** – Choosing this option will enable rev matching in DSC OFF mode.
2. **OEM (OFF)** – Choosing this option will revert rev matching in DSC OFF mode to stock tune settings.
3. **ORIGINAL** – Choosing Original will use this map's preset setting in DSC OFF mode. If this map is custom tune, it will use the settings the tuner configured.

(Only available on S55 MT engines, as well as the N55-M2)

10.3.11 DTC Deactivation



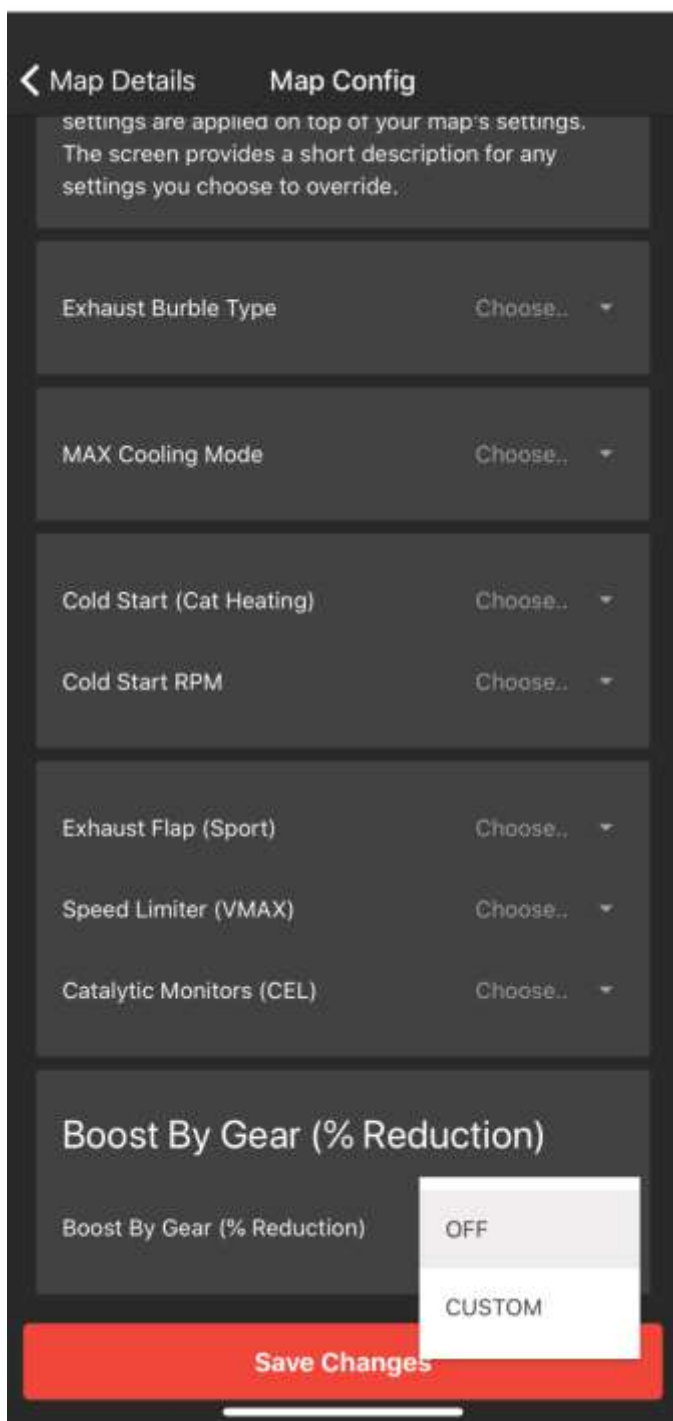
We have added a new feature to enable users to selectively remove DTCs (Diagnostic Trouble Codes) on maps. In the cases of extensive hardware modifications, relating to the engine or its accessories, there are times when its nice to turn off certain codes from coming up.

This DOES NOT in any way help resolve any mechanical issues the user may be having. In some other cases, turning off a code will also not resolve an issue where the additional custom tuning is necessary to fully address the problem.

In situations where the source/cause of a given code is understood and the user is comfortable turning it off to 'clean things up', this is a neat feature to get that accomplished.

Available today for all S55 cars, N55-M2 and N55-EWG.

10.3.12 Boost by Gear Reduction (%)



Many people on the racetracks can attest to having traction issues, especially in lower gears. These issues are about cutting better 60' at the ¼ mile or in a 2nd gear roll, given how torque ramps in quickly on these cars. This is a great feature we have added where user can reduce the boost by gear to their personal liking. Quality tires and proper suspension set up go a long way.

1. **OFF** – Choosing this option will not apply any boost reduction to this map's request torque output settings.
2. **CUSTOM** – Choosing this option allows the user to configure this map's requested torque output based on gear. This is typically used to adjust for loss of traction issues in lower gear preventing quick off the line launches.

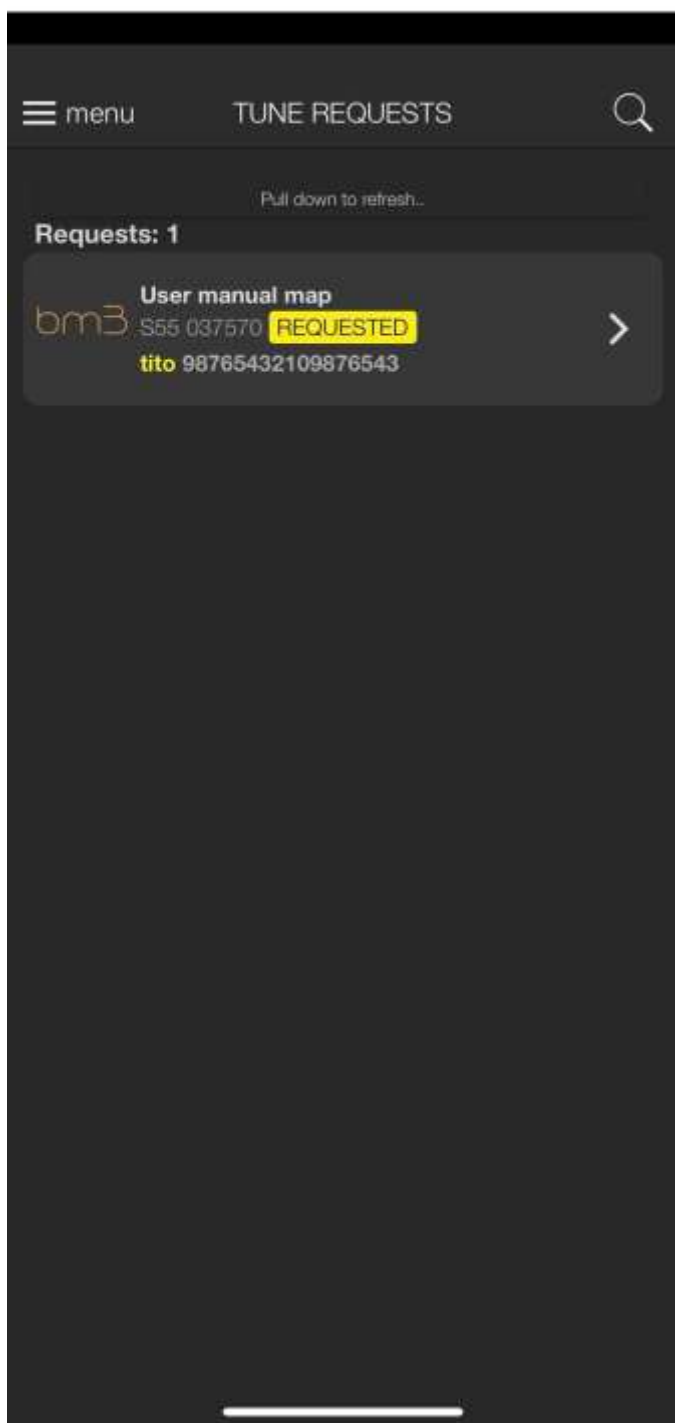
Typical starting values if traction is limited:

20-30% - 1st Gear

10-20% in 2nd Gear

Please note that after every change in the map configuration screen, saving changes (button on the bottom), as well as re-flashing the map will be required for the changes to be applied to the map.

11 Tune Requests



'[Tune requests](#)' is part of the **bootmod3** menu where authorized tuners can check their incoming custom tune requests from other users.

As explained earlier (page 35), the option of requesting a custom tune is available for everyone.

Once a custom map is successfully requested and submitted, the tuner will be able to view the request, as shown on screenshot on the left.

The Name of the map will be visible to the tuner, as well as the VIN of the vehicle, including the engine type and the DME ROM type.

A copy of the requested map will also appear in the users '[My Maps](#)' screen, confirming the request has been successfully submitted.

By clicking on the requested map, the tuner will be taken to the '[Tune Request Details](#)' page, explained starting on the next page.

11.1 Tune Request Details

< Tune Requests TUNE REQUEST DETAILS

bm3 User manual map
Version: 1.0

Name: titi
Email: titi@titi.com
VIN: 98765432109876543
Engine: S55
ROM: 037570
RequestID: 5ea707eac090c64c3c029890
MSID: 5ea707eac090c64c3c029890-1fda8a2e-7c25-4e66-a43e-2362c88add8a

Stock/factory/original tune calibration

RENAME COPY DETAILS

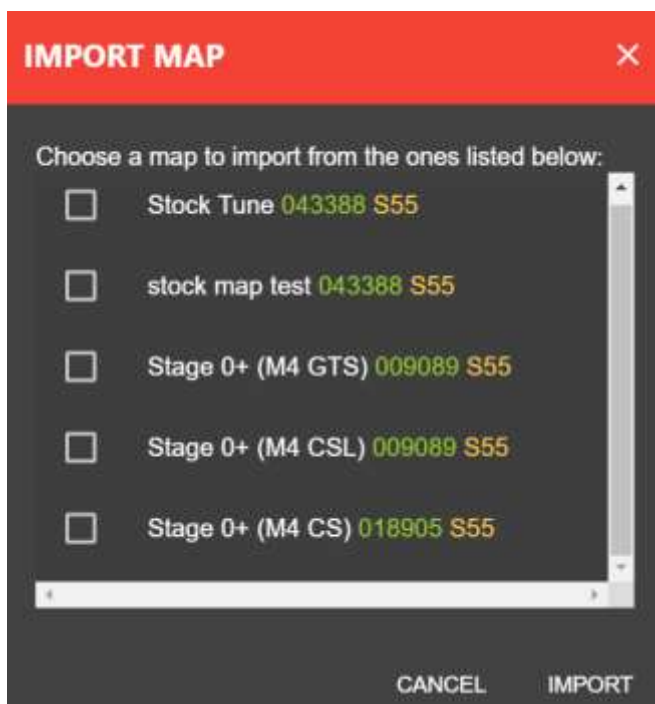
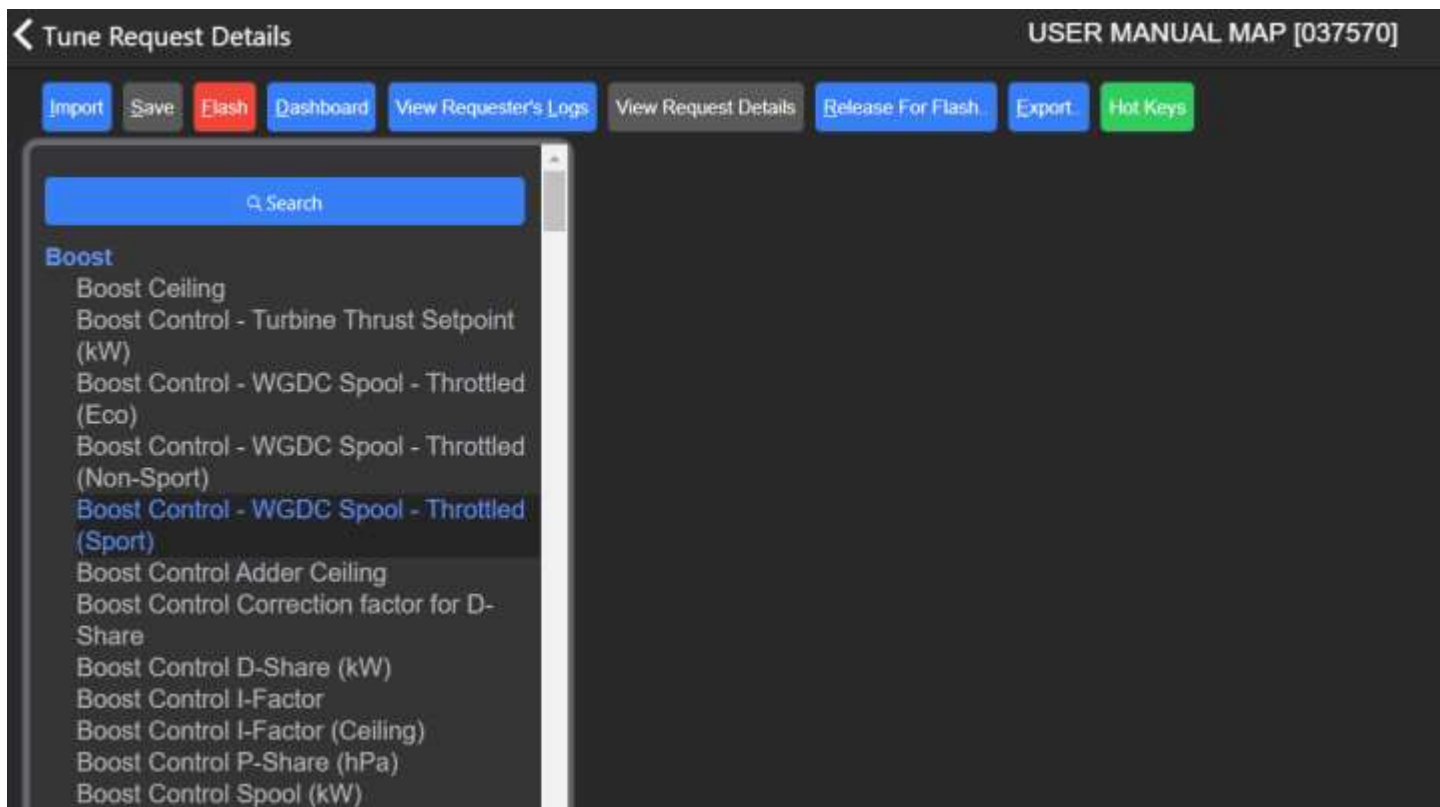
Reject Comment and Release Respond With BIN file EDIT MAP

Change History

Add Comment

Once the requested tune is selected, the tuner will be able to see further details of the custom tune request. The name of the map will be at the top right corner, and right below it will be the rest of the information about the customer, including a comment regarding the map. The tuner will have the option of renaming the map name by clicking on the **'Rename'** button. **'Copy Details'** button is used to copy the details to a clipboard, allowing the tuner to paste them elsewhere. **'Map Editor'** is where the tuners will begin their work. **'Respond with BIN File'** allows the tuners who use map editors outside of bootmod3 (WinOLS) to respond to tune requests with their raw BIN file and skip using the tables/editor in bootmod3. If the tuner does not wish to, or cannot proceed with the request, they will also have the option of rejecting the custom tune request by clicking on the red **'Reject'** button. Comment and Release button will be explained further below.

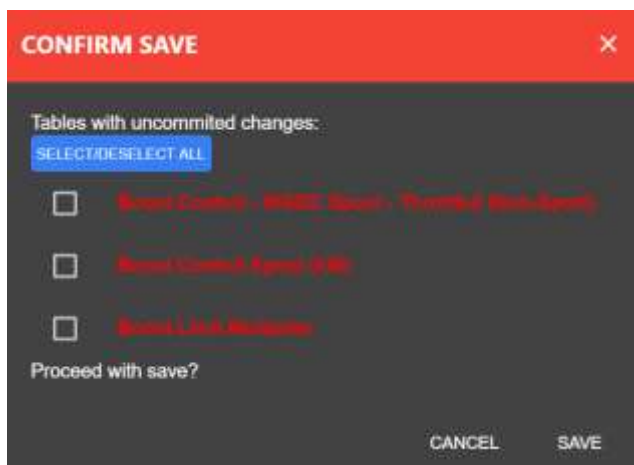
Bootmod3 enables a seamless collaboration between the tuner and the end user. Everything is in one place and integrated, logs are automatically uploaded and available to both users and tuners. No emailing required, no attachments and no third-party software to deal with. It saves both end users and tuners significant amount of time.



By clicking on the **'Import'** button, the tuner can import any Stage 0+ free maps, or any other custom map from that tuner.

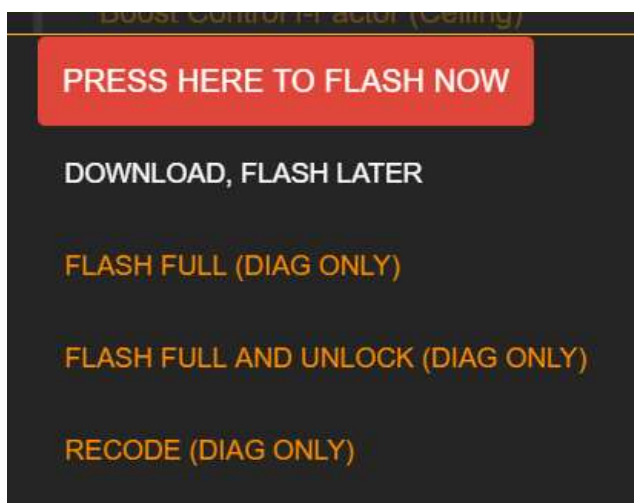
Importing a map allows the tuner to compare the tables between the current map that is being worked on and the imported map.

Previous custom-made maps by the tuner can be imported as well. Bootmod3 has a cross-ROM import which allows the tuner to import changes from any given ROM that has the same engine type as the requested tune.



After the map editing has been done, clicking on the **'Save'** button allows the tuner to save all the work they have done before flashing.

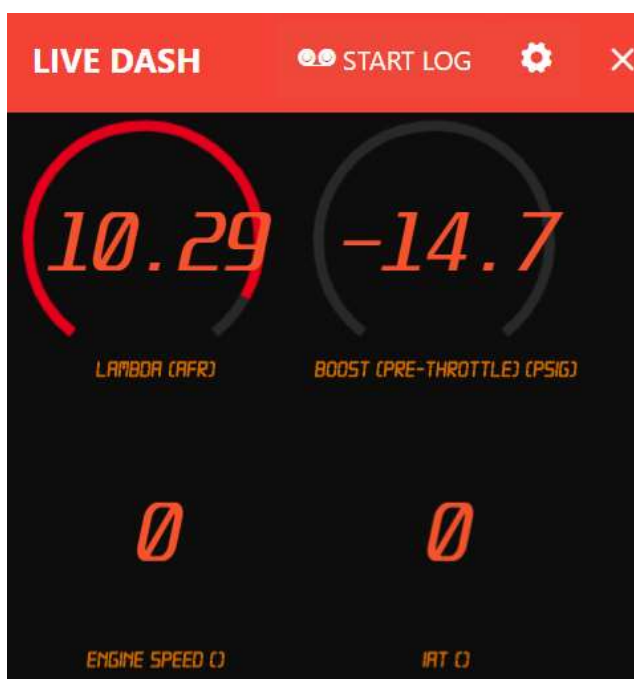
The tuner will have the option of saving each individual table separately, or all the tables together at once.



'FLASH' button allows the tuner to flash the vehicle from a tuner request editor when the car is on a dyno.

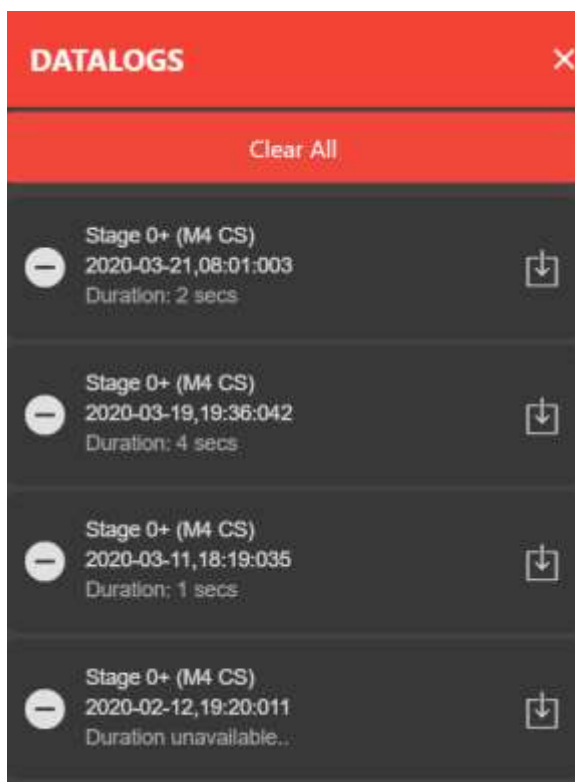
The tuner would not be flashing the car that is registered to the account, but rather the vehicle they are creating a custom map for.

Flashing the vehicle from within the tune request editor makes things more convenient for the tuner, allowing them to flash maps after every needed change, without going back and forth with the user via emails and tune requests.




By clicking on the **'Dashboard'** button in the tune request details, the tuner will be able to have a live dash of the vehicle they are working on. The tuner will be able to record the requester's logs.

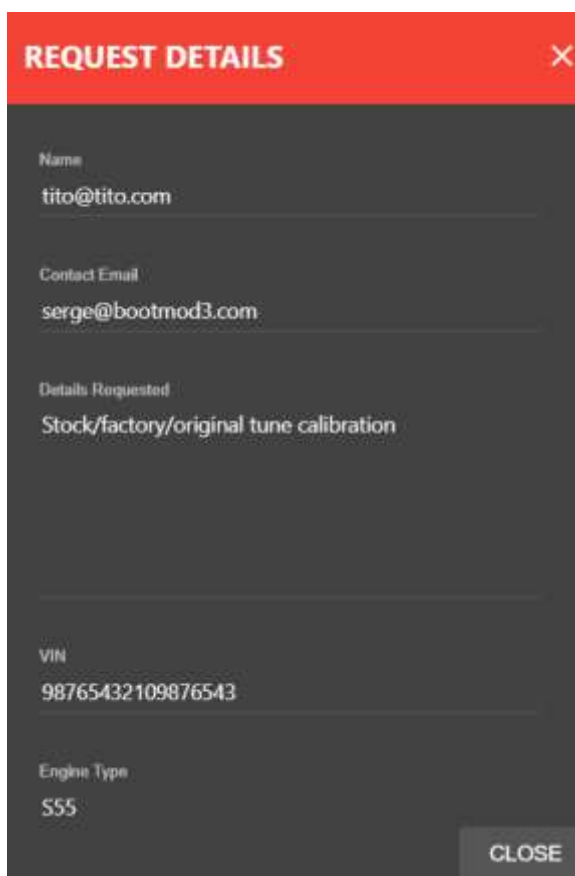
Logs captured in tune request dashboard will end up only in the tuner request datalogs, not the data log screen of the tuner's account.



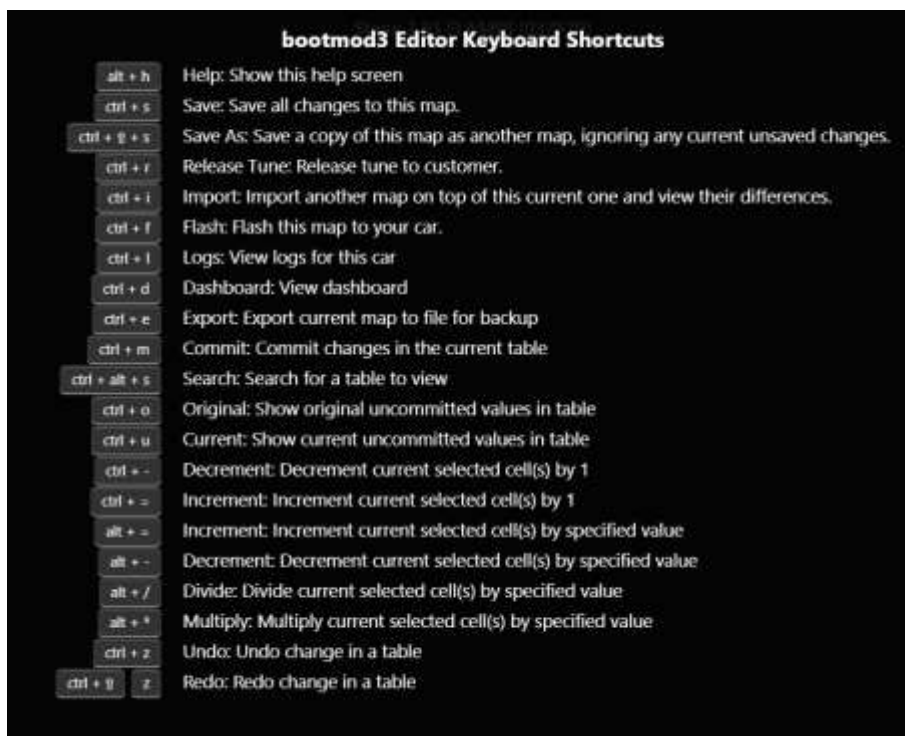
Clicking on the '[View Requester's Logs](#)' button, the tuner will be able to see all logs recorded from the requested tune.

The name of the map, the time, the date and the duration will be presented, as shown on the top image.

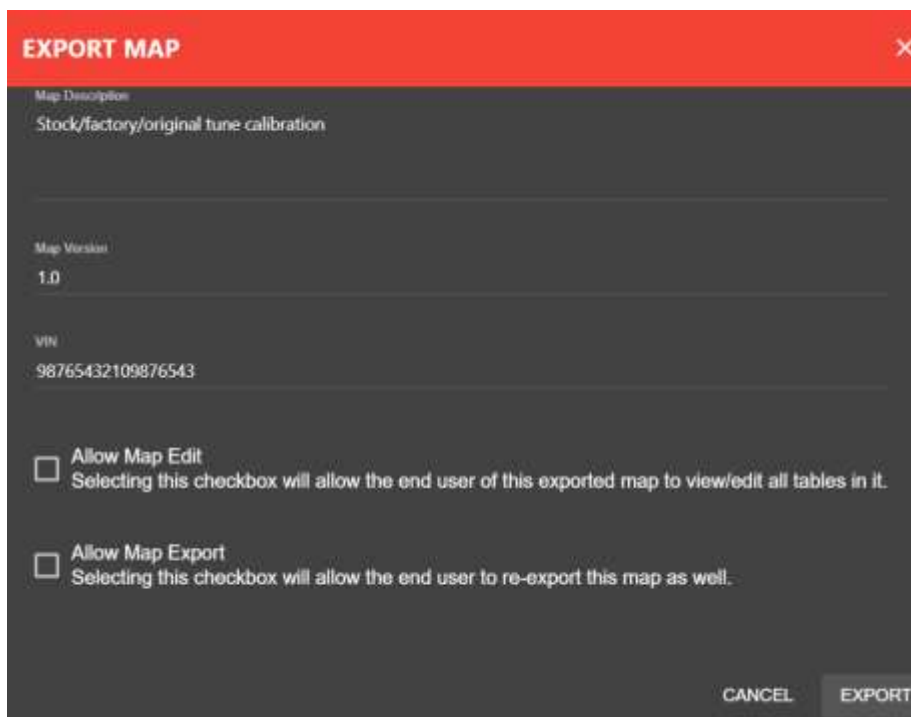
Clicking on the drop-down arrow  will allow the user to view and graph and share the graph.



By clicking on the '[View Request Detail](#)' button, the tuner will be able to see all the details of the user, including the ending type, full VIN, contact email, and the details of the tune requested.



By clicking on the green button **"Hot Keys"**, a list of all the bootmod3 Editor Keyboard Shortcuts will appear as shown on the screenshot above.



Exporting a map will create a .bm3 file that can be saved anywhere on the user's computer. The tuner can export the map allowing the end user to view/edit all the tables in the exported map, as well as allowing the end user to re-export the map as well.

RELEASE TUNE

NOTE
You are releasing the map for flashing and will not have access to edit it until the other side makes a new request. The notes you enter below will end up in the map description for them.

Are you sure you would like to release the map to them and make it available for flashing?

Comments to user
Anything you'd like the end user to know when it comes to changes in this map enter it here.

Updated map description
Stock/factory/original tune calibration

☒ Block Map Editing
Un-checking this checkbox will allow the end user to view your map table changes.

☒ Block Map Export
Un-checking this checkbox will allow the end user to export this map.

☐ Skip Notification To Customer
Checking this checkbox will NOT send an email notification to the end user.

☐ Yes, I'm done making changes.

CANCEL RELEASE FOR FLASH RELEASE AND COMPLETE

'**Release for Flash**' button is used when the tuner is done making all the changes and they would like to send the tune back to the customer, so they can flash. The tuner will be able to add comments to the user when sending the tune back and those comments are shown on the tune request as the tune is built out.

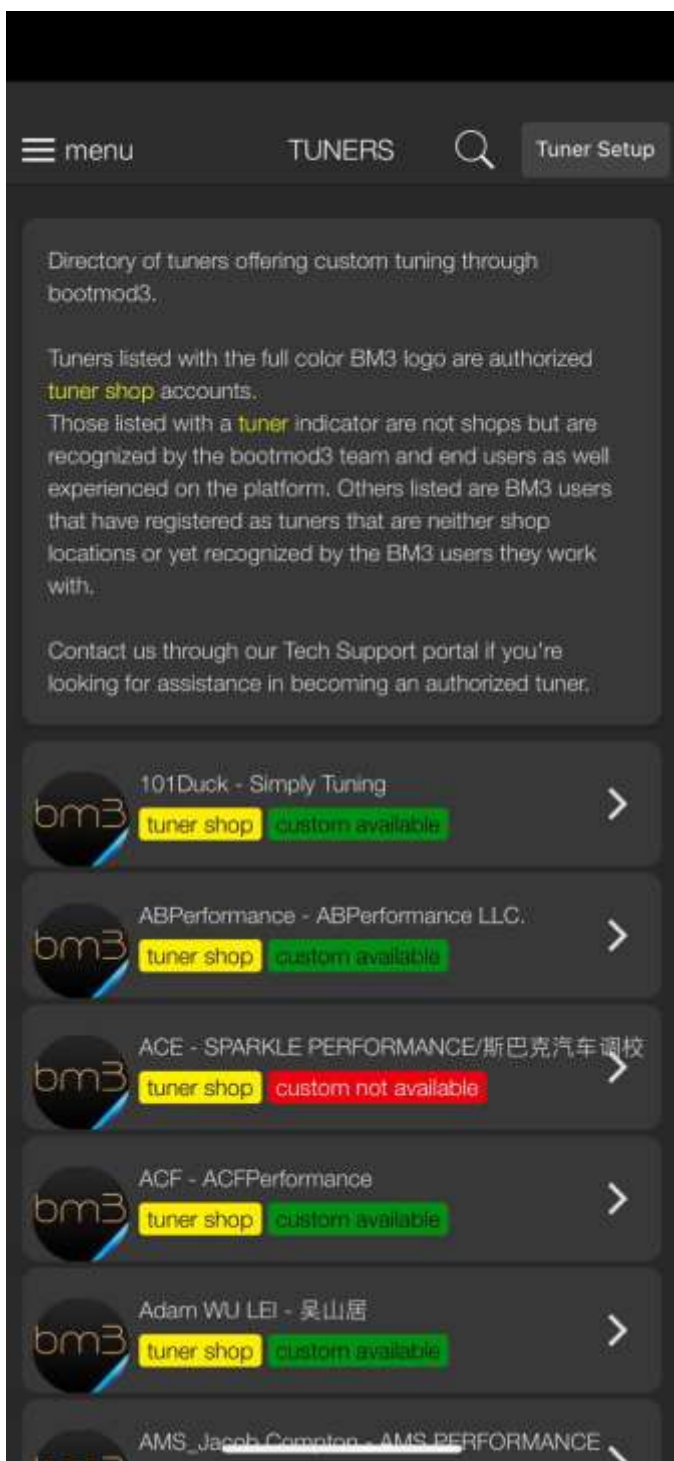
'**Block Map Editing**' and '**Block Map Import**' are checked off by default so that the customer isn't allowed to open the map in the editor to see changes or import them into another map. This way the map is protected and only available for editing and viewing by the tuner.

'**Skip Notification to Customer**' does not send a notification email to customer confirming the map is ready. To release the tune for the customer, the tuner needs to confirm by checking off '**Yes, I'm done making changes**'.

There are two ways the tuner can release the map back to the customer.

- 1) **Release for Flash** - This keeps the tune request in the list of tune requests but sends the map to the customer and lets them know they can flash it. Customer will see in '**My Maps**' the map is '**Flash Ready**'.
- 2) **Release and Complete** - This removes the tune request from the list of tune requests and sends the map to the customer for flashing. Customer will see the map in '**My Maps**', marked as '**Map Done**'.

12 Tuners




In the '**Tuners Menu**', a complete list of all available tuners will be shown.

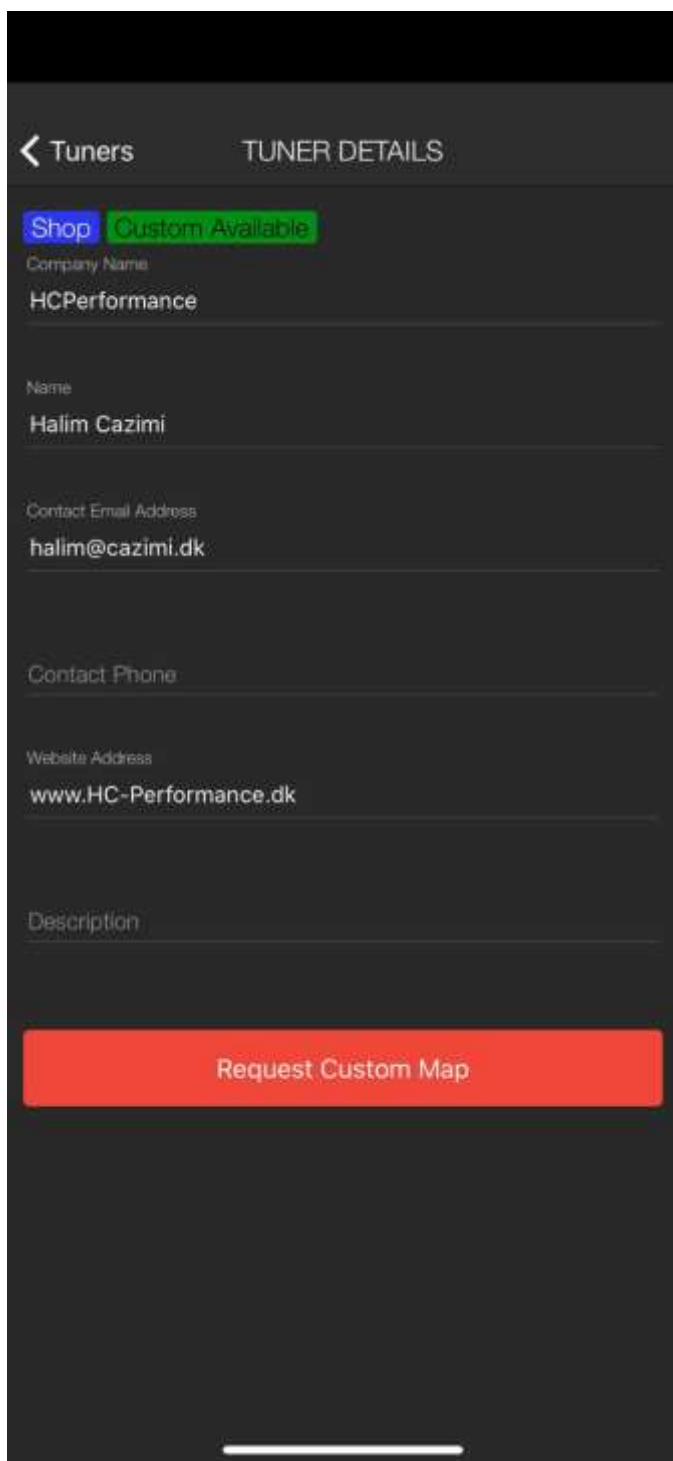
Tuners with a bootmod3 (BM3) logo beside their name are authorized tuner shops.

Tuners that provide custom tunes will have a green label beside their name (as shown in the image) and tuners that do not provide custom tunes, will have a red label beside their name.

Tuner shops will have a yellow label underneath their name, indicating that this tuner has its own shop.

By pressing on the small arrow, on the right of the tuner's name, a new screen will appear where all the details of the tuner will be provided (see page 63).

Clicking on the  will allow the user to search for a specific tuner and not scrolling through the entire list.



By clicking on the specific tuner, the '**Tuner Details**' page will appear as shown on the screen to the left, showing all the details about the particular tuner.

As demonstrated on this screen; the '**shop**' and '**custom available**' labels will indicate that this tuner has a shop, and that he does provide custom tuning.

Details of the tuner will include the following:

- Company Name
- Tuner's Name
- Contact Email address
- Contact Telephone
- Website
- Description

The user will also be able to request a custom map via tuner details page by clicking on the '**Request Custom Map**' button.

12.1 Tuner Setup

< Tuners TUNER SETUP

Name (*)
Bootmod3

Contact Email Address
support@protuningfreaks.com

Company Name
Bootmod3

Contact Phone
Not Available

Website Address
Www.bootmod3.

Description
Custom map tuning

☐ Tuners Directory (Opt-in)
Selecting this checkbox show your details in the Tuners Directory.

☐ Accept Custom Tune Requests
Select this checkbox to allow BM3 users to send you their maps for custom tuning.

CANCEL UPDATE INFO

To be able to use the map editor in '[Stock Tune](#)', a tuner account will need to be set up. Clicking on '[Tuner Setup](#)' from page 64 will prompt the user to the screen shown on the left.

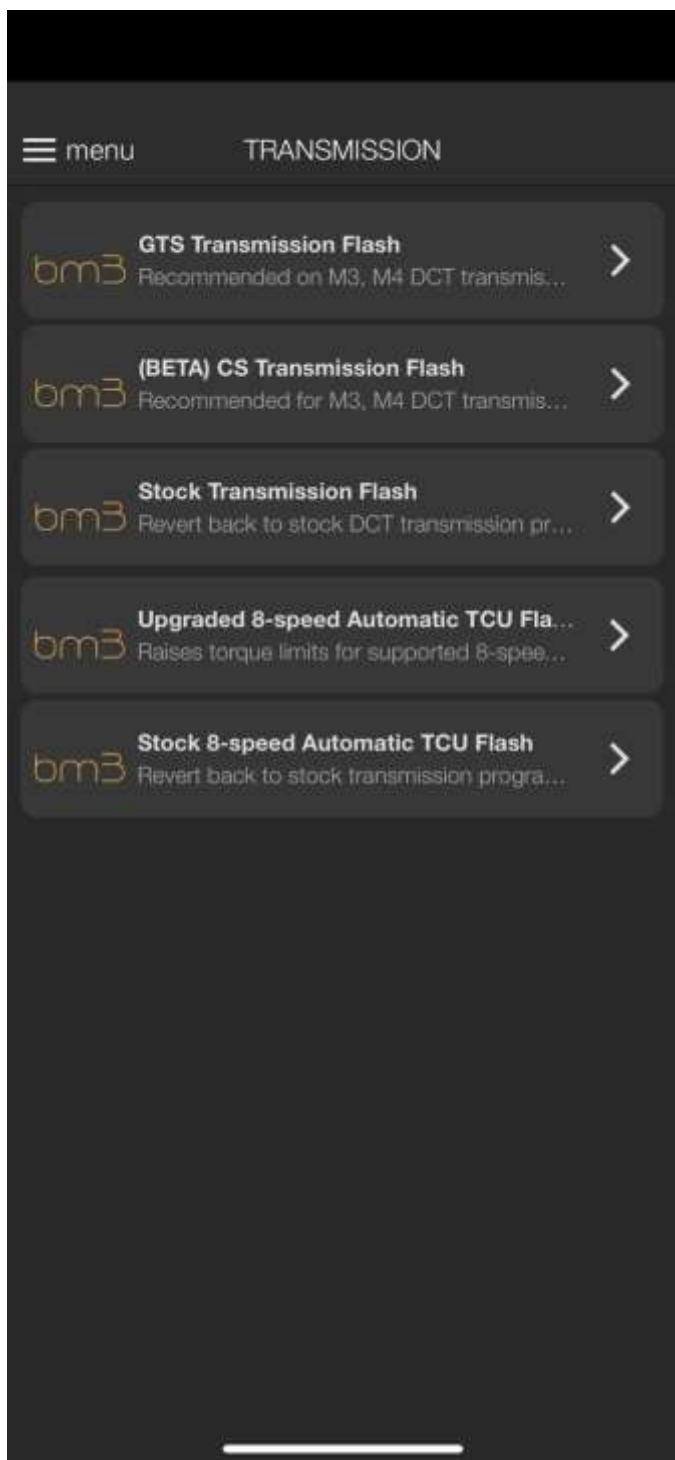
Completing all the necessary information and clicking on the '[UPDATE INFO](#)' button, will grant the user the ability to go into the map editor.

Checking off the '[Accept Custom Tune Request](#)', the tuner will be able to accept custom tune requests from other users.

Checking off '[Tuners Directory](#)' box will show the details of the tuner in the Tuners Directory.

Tuners that wish to be recognized as bootmod3's authorized tuners will need to submit custom made maps to our support team for review.

13 Transmission



Bootmod3 also offers support for GTS and CS transmission flash for certain vehicles: **M4, M3 and M2 DCT equipped vehicles.**

The purpose of the transmission flash is to enable more precise and faster shifts. It maximizes the clamping force applied by the clutches, which is highly recommended on tuned M2, M3 and M4 vehicles.

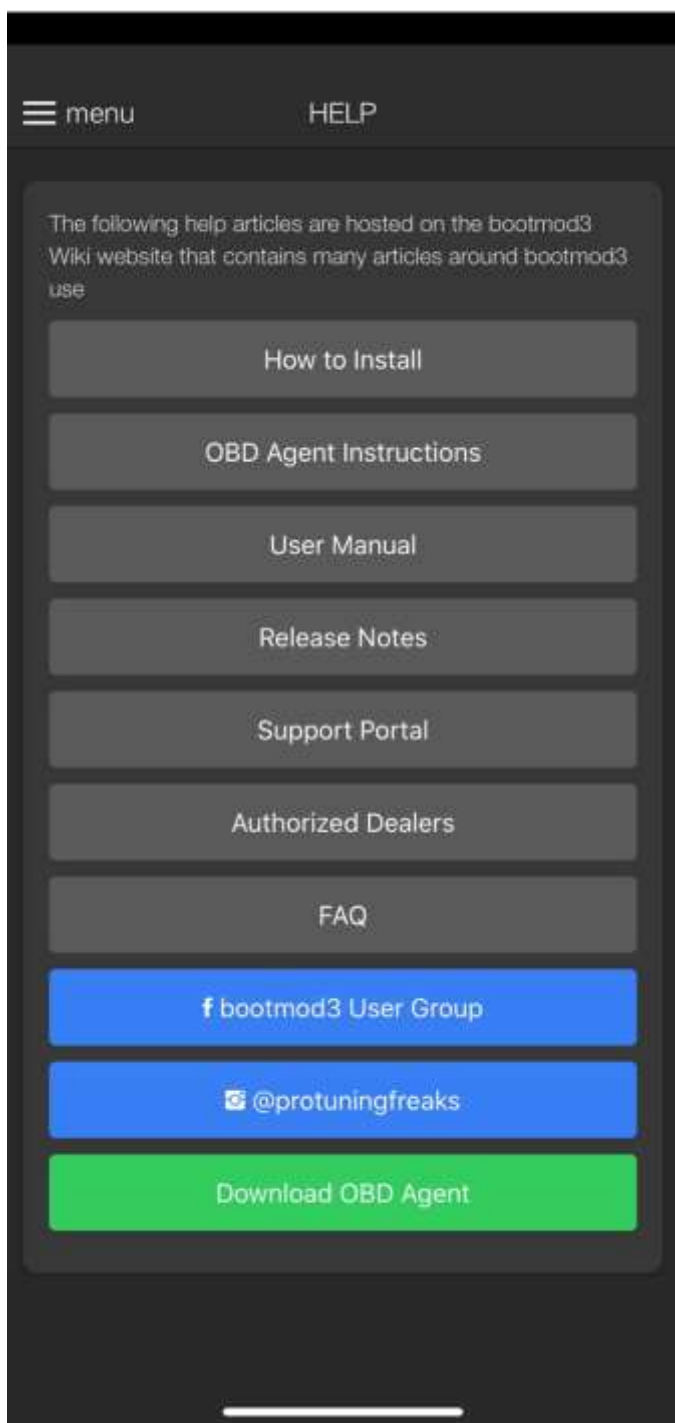
CS DCT transmission flash option added for late production S55 DCT cars where the GTS TCU flash was causing certain compatibility issues with the dash cluster (e.g. gear display).

Stock Transmission Flash is also there to revert to stock transmission with stock programming.

This applies to the **ZF 8HP45** transmission cars only. The purpose of this addition to bootmod3 is to lift the torque limits on the 3rd and the 6th gear that mostly impact N55 equipped cars. As the same transmission is in the N20/N26 automatics, those are also supported. Without this flash the 3rd and 6th gear load/torque targets (boost) end up far lower than the tune targets (at around 11-12psi) and a DME flash cannot lift them on its own.

ZF 8HP45 Transmission flash available only for N55/N20/N26 8 speed AT vehicles

14 Help

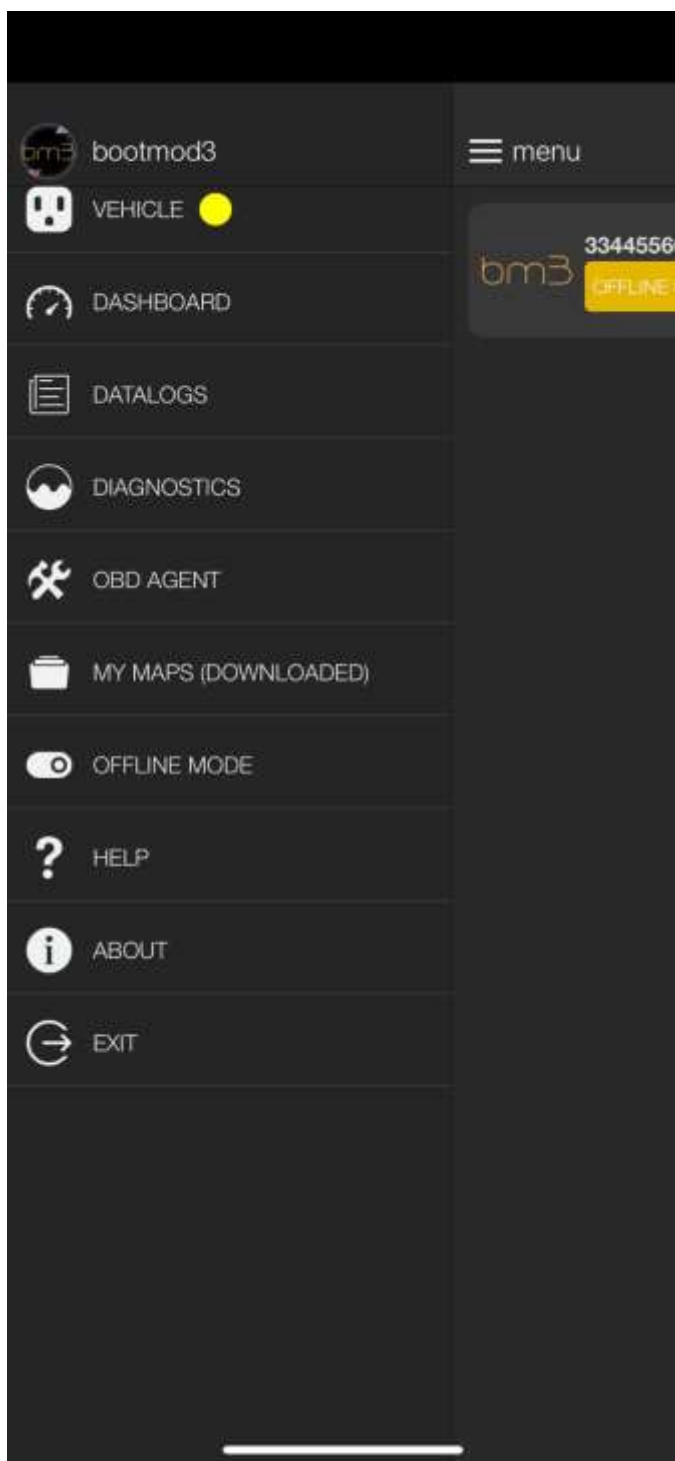


A new Help button on the log in screen and inside the app in the main menu has been added, allowing the user to be able to find all the help articles that are hosted on **bootmod3** Wiki website.

Users can also directly visit our Facebook user group and our Instagram page as well.

Option to download the OBD Agent is also added to this screen.

15 Offline Mode



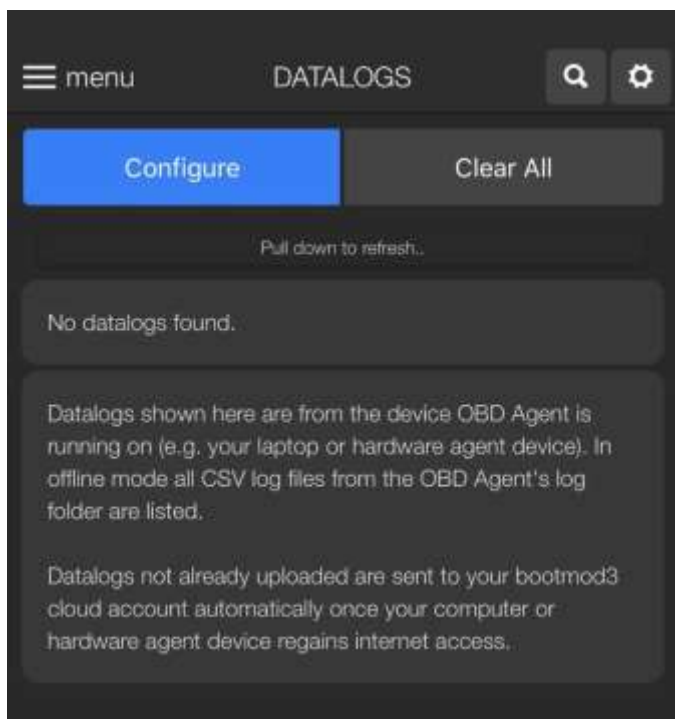
As mentioned earlier, to enable '**Offline Mode**', the user must log in once first on the app or using the browser with an internet connection.

'**Offline Mode**' was created so the users can use bootmod3 without the use of internet.

Previously downloaded OTS maps will be available to flash in '**Offline Mode**'.

Data logging in '**Offline Mode**' while driving is highly recommended.

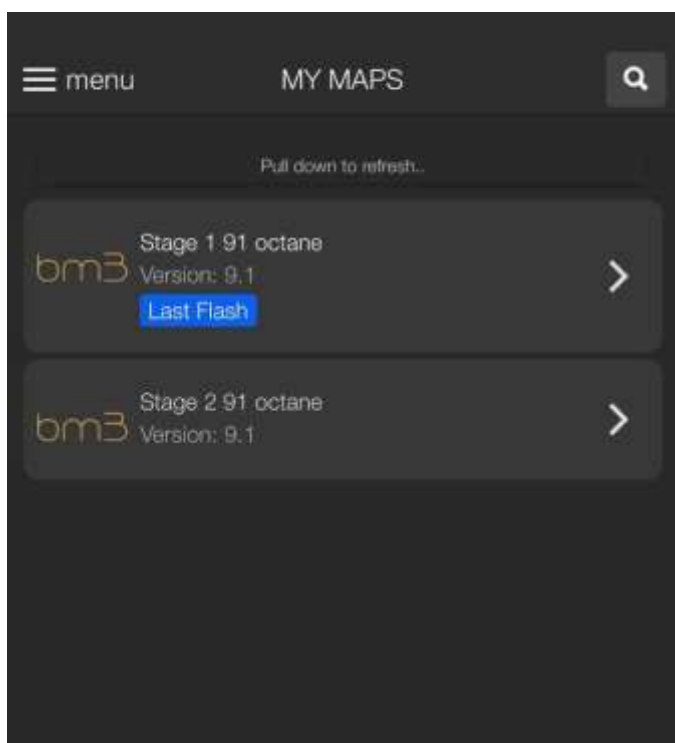
As shown on the screenshot attached, when in '**Offline Mode**', OTS Maps, Transmission and Tuners sections are not available.



When data logging in '**Offline Mode**' and there is an internet connection, the logs will get uploaded right away as usual.

'**Configure**' button will have the same function as when in online mode.

Datalogs not already uploaded, are sent to the bootmod3 cloud account once the computer or the hardware agent device regains internet access.

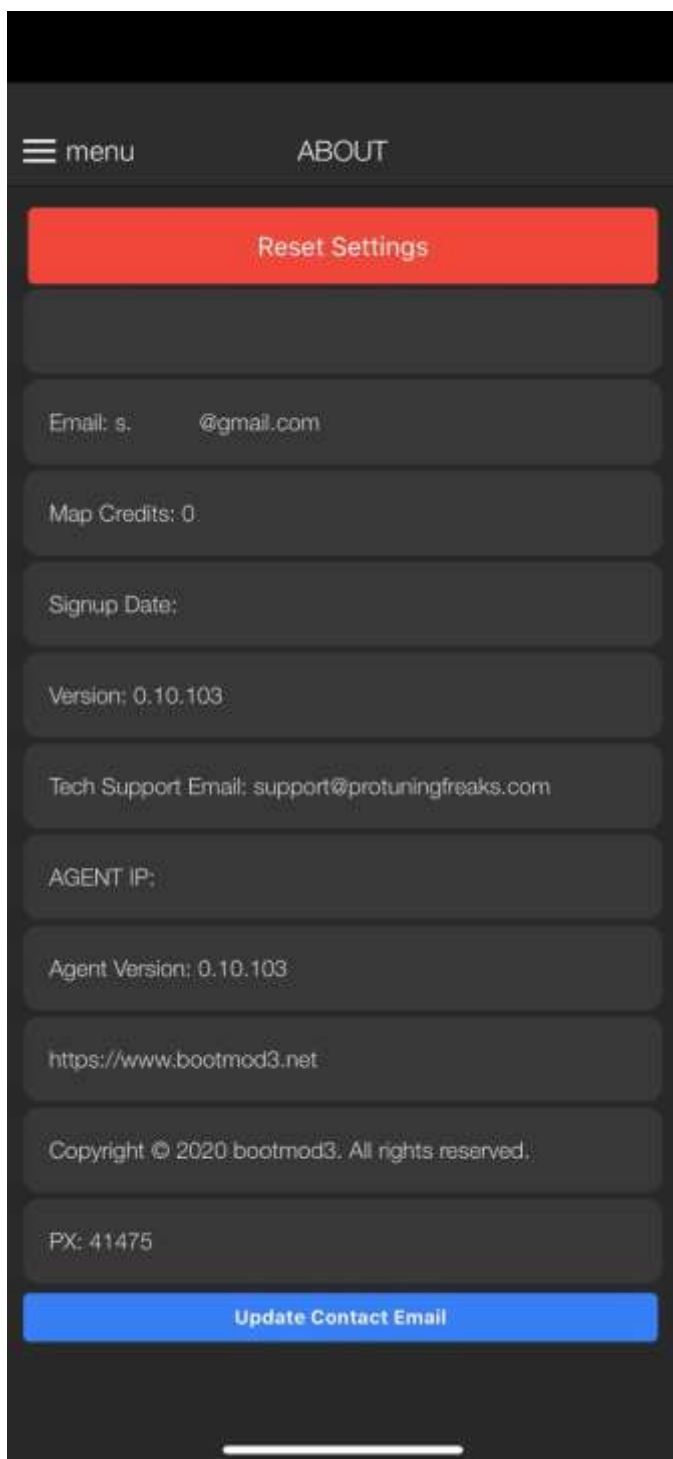


Once inside '**My Maps (Downloaded)**' sub-menu in '**Offline Mode**', the only maps that will be available for flashing will be the previously downloaded maps.

Clicking on any one of the maps will prompt the user to a screen that will allow flashing **ONLY**.

Map configuration screen, request support and delete options will not be available.

16 About



The '**About**' screen shows username, email address and all the account information.

Clicking on '**Reset Settings**' will reset pre-saved (cached) settings in the app/browser and server to the defaults for dash and logging. This is done in case data logging does not work.

If you have any difficulties with either the activation, flashing, or have any other inquiries regarding your account, please do not hesitate to reach us at support@protuningfreaks.com.

The last part of the menu, which is the '**EXIT**' button, allows the user to log out of the account.

We hope this manual is helpful in your setup and we are here to support every step of your ride. Get ready to UNLEASH THE BEAST! 😊

Please refer to our general [FAQ](#) page for any further related boomod3 information.

17 Appendix

Throughout the entire user manual, we have added a few links for easy access to our useful material we have posted on the web. Below is a list of all links our team has created over a period of time, with intention of assisting our users with any inquiries or technical issues.

- 1) [Frequently Asked Questions](#)
- 2) [How to Install Bootmod3 On Your Vehicle](#)
- 3) [How to Activate Bootmod3 License](#)
- 4) [How to Flash Your BMW With Bootmod3](#)
- 5) [How to Datalog With Bootmod3](#)
- 6) [OBD Agent Instructions – Laptop](#)
- 7) [OBD Agent Instructions – Wi-Fi Hardware Device](#)
- 8) [OBD Agent Hardware Device – Firmware Update](#)
- 9) [OBD Wi-Fi Hardware Agent Connectivity Issues – iPhone Hotspot Troubleshooting](#)
- 10) [Need More Help? How to Open a Support Ticket](#)
- 11) [How to Properly Fill Out a Support Ticket](#)
- 12) [Bootmod3 Release Notes](#)
- 13) [Bootmod3 License Transfer](#)
- 14) [BMW F-series Spark Plugs – Which Brand and Which Gap?](#)
- 15) [How to Prepare Your Vehicle for Dyno Mode?](#)
- 16) [OBD Agent Not Detected / VIN Not Detected](#)
- 17) [Bootmod3 Flash Failure \(DME, TCU, Online Recode\)](#)