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BASIC MENU LAYOUT

Some of the menu options or features displayed in this manual are vehicle specific, and may not be available for your specific make and model.





Misapplication or misuse of this product could lead to a serious or fatal accident. Comply with all safety information in this manual, and your vehicle owner's manual. Follow safety, installation and operating instructions in this User Manual to assure proper use.

BEFORE YOU BEGIN

LIST OF COMPONENTS

DISPLAY DEVICE



USB CABLE



POWEIR HARNESS



POWEIR MODULE



BUTTON FUNCTIONALITY



NAVIGATING TIPS:

- To move forward to the next menu, you can press either **OK** or ▶ button to enter the highlighted option.
- The ▲ & ▼ buttons are used to select menu options and adjust values for certain features.

This part is legal under the provisions of EPA's Tampering Policy dated November 23rd, 2020. The company has reasonable basis (test results) to verify that this product allows the vehicle to operate within legal emissions standards and is therefore legal to be sold for onstreet use in all states that accept the legal provisions of the Clean Air Act and the EPA Tampering Policy. This product is NOT LEGAL FOR SALE OR USE IN THE STATE OF CALIFORNIA. Testing with the California Air Resources Board, in order to achieve 50-state compliance, is pending with CARB. Once testing is complete with California, and an E.O. number is issued, this product will be updated to 50-state legal status.

TUNING LEVELS EXPLAINED

The DINANFLASH Handheld comes with pre-tuned levels, or maps, based on the fuel quality/octane(RON) used. It is imperative for the safety of the engine that you do not use lower grade fuel than what the map being run requires. The different tuning levels are listed below, but availability may vary based on your vehicle's year, make, and model:

Update Coding: This option should only be used when prompted to by a technician or by the DINANFLASH device, OR if after programming your vehicle is displaying "drivetrain malfunction". It is part of the tuning procedure and restores previously written ECU characteristics that get erased when programming.

91 Octane

93 Octane

100 Octane

Stock - Returns vehicle to factory stock. Removes all Dinan tuning from your vehicle. It is recommended that you calibrate your vehicle back to stock prior to taking it in for service or maintenance. See page 12 for details on how to return your vehicle to stock.

SAFETY WARNING & CAUTION

Throughout this User Manual you will see important messages regarding your safety or the protection of your vehicle. These messages are designated by the words WARNING, CAUTION, or NOTICE.



A WARNING indicates a hazardous situation which, if not avoided, will result in death or serious injury.



A CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

A NOTICE indicates a condition that could cause damage to the product or your vehicle.

The Dinan Product you have purchased is a high-performance product. As such, it does present some risks of which you should be fully aware. Do not use this product until you have carefully read the following safety information and the Owner Agreement.

GETTING STARTED

Change the power level of your vehicle using custom options and settings.

NOTE: Not all features are available on every make, model, and engine.

NOTICE: Do not remove or bump the OBD-II connector during any programming sequence. If you do, the vehicle may not start.

Do not program your vehicle while parked in unsafe locations, including in heavy traffic or places without cell phone service.

STEP 1 - Plug the STEP 2 - Enter the STEP 3 - Follow Tuning Menu by the on-screen device into the OBDII pressing OK. instructions. port. DINAN**FLASH** DINANFLASH DINANFLASH STAR STOP <NGIN^E TURN IGNITION ON Tune Levels & Octanes Do Not Start Engine Press OK to Continue Press OK to Select Press OK When Completed STEP 4a - Select a STEP 4b - Press OK to STEP 5 (If ECU is locked) - Follow the tuning level. customize options. on-screen instructions. DINANFLAS DINANFLASH Select Tune Level ATTENTION Do you want to customize Update Coding Π Π ootions? 91 Octane 93 Octane 100 Octane Stock Press Left Arrow to Cancel Press OK to Select Press OK to Confirm Press OK to Continue If ECU is already unlocked, proceed to page 12.

ECU UNLOCK

All stock ECUs will need to go through the unlock process. This process also includes installing the Tune selected on page 9 (while connected to the OBDII port).

STEP 1 - Go to ECU location shown on device prompt.

STEP 2 - Remove ECU cover and shroud.

* May require a flathead screwdriver to aid in unclipping shroud



STEP 3 - Disconnect all harness connectors from ECU.

* Each connector is keyed to only fit in one location





ECU UNLOCK CONT'D

STEP 4 - Connect Poweir[™] harness to ECU.

Correct plugs can be identified by locating the QR code on the ECU connector bezel at one end of the DME. One connector will connect to the plug closest to the QR code and the other will plug into the secondfarthest plug on the opposite end of the QR code as shown by the images below.



View 2

QR Code

View 1



QR Code

g

ECU UNLOCK CONT'D

STEP 5 - Connect Poweir[™] harness to battery/battery jumper post.



STEP 6 - Connect Poweir[™] harness to Poweir[™].



STEP 7 - Connect device to Poweir[™] and wait for all files to finish installing. Follow onscreen prompts as this process may need to be repeated for dual ECU platforms. **STEP 8** - Once Unlock and Tune files have been installed, follow Poweir[™] install steps in reverse order to reconnect ECU to factory harness. **STEP 9** - Vehicle is now tuned and ready to be driven. If any DTCs persist, connect device to OBDII port and use the Clear DTC function found in the SCAN menu to aid in clearing them.



ADVANCED TUNING OPTIONS

Change the power level of your vehicle using custom options and settings.

NOTE: Not all features are available on every make, model, and engine.

NOTICE: Do not remove or bump the OBD-II connector during any programming sequence. If you do, the vehicle may not start.

Do not program your vehicle while parked in unsafe locations, including in heavy traffic or places without cell phone service.



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ADVANCED TUNING OPTIONS EXPLAINED

Availability of specific options may vary based on your vehicle's make and model:

Speed Limiter

Adjustment:

- Stock
- Raised

* Adjusting the Speed Limiter does not mean the tires or vehicle are rated to operate at the set speed. Obey local traffic laws and do not exceed the appropriate operating conditions.

Throttle Sensitivity - Adjusts the pedal feel for different drive modes.

Drive Modes:

- Eco Mode
- Comfort Mode
- Sport Mode

Adjustment:

- STOCK
- 5% to 25%, with 5% increments

COMMON TUNING QUESTIONS

Questions and Answers

Q: Can my DINANFLASH program more than one vehicle at a time? A: No, only one vehicle can be programmed per DINANFLASH device. However, once the original value is flashed back to stock, the DINANFLASH can be used to program a different vehicle.

Q: Does Dinan support custom tuning?

A: Not at this time. Please check us out online for updates.

Q: What aftermarket accessories will my DINANFLASH work with? **A:** The DINANFLASH is engineered to work with otherwise stock cars or those with bolt-on hardware such as intakes, exhausts, intercoolers, etc.

Q: How do I change my vehicle's calibration?

A: Refer to the TUNING sections of this guide for detailed instructions.

RETURNING YOUR VEHICLE TO STOCK

NOTICE:

Before taking your vehicle into a service center, return your vehicle to Stock with relock. The service center might reprogram your vehicle with an updated program without your knowledge. If you do not use this device to return your vehicle to factory stock and your vehicle is reprogrammed by the service center, the programmer will no longer be able to program your vehicle.

"Stock" is a factory performance tune with Dinan enhancements. This option is useful for a temporary power reduction, or vehicle performance diagnostics. This mode will still allow for a quick reflash, as the DME remains unlocked.

"Stock with relock" is for customers wishing to completely remove Dinan performance software and return the car to an OEM stock configuration.



READ DTCs

This feature allows you to troubleshoot issues that your vehicle may be experiencing. Most vehicles will illuminate the in-dash check engine light. A Diagnostic Trouble Code (DTC) arises when a vehicle's computer detects a sensor failure or a parameter outside of specific range.



CLEAR DTCs

This feature allows you to clear the DTC and turns off the check engine light. NOTE: If a DTC persists, this could indicate a vehicle malfunction. We recommend seeking a qualified professional in resolving the issue. Program the vehicle back to stock prior to service.



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VIEWING GAUGES

If you would like to view Parameter IDs (PIDs) specific to your vehicle, follow these instructions to learn how to view them using your DINANFLASH device.

A WARNING **Do not exceed legal speed limits on public roadways**.



DATA LOGGING

Data logging allows you to record specific vehicle information while driving. Follow these instructions to find out how to datalog, and how it may be helpful to your particular needs.



The information will be stored on the device and may be retrieved using a computer. For more information continue to the next section.



TA LOGGING RETRIEVAL

To learn more about how Data Logging results can be extracted from the device, please follow these instructions:

STEP 1 - Remove the device from the vehicle Load ECT EngRPM ABS Thrt ME (ms) OBDII port. STEP 2 - Using the USB cable provided, connect the device to your computer. STEP 3 - The device will enter USB Mode, and allow your computer to open its STEP 4 - Open the folder to view files. POWERTEQ (G:)



Name

DB

UI



STEP 6 - Copy the Excel file to your computer desktop, then open it. A file will open that looks similar to the following:

TIME (ms)	Load	ECT	EngRPM	ABS Thrt
0	15	147	622	14
126	15	149	603	14
241	14	149	613	14
359	15	149	615	14
478	14	149	604	14
600	15	149	618	14
715	14	149	604	14
834	15	149	607	14
953	17	149	634	16
1075	22	149	672	17
1201	23	149	701	17



files.

BATTERY VOLTAGE

STEP 1 - Plug the device into the OBDII port.





VEHICLE INFO

STEP 1 - Plug the device into the OBDII port.





DEVICE INFO

STEP 1 - Plug the device into the OBDII port.



STEP 2 - Enter the Info Menu.



STEP 3 - Select the Device Info option.



STEP 4 - Press OK to return to the previous screen.



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DOWNLOAD UPDATE AGENT 1.0 TOOL

① Go to: https://www.dinancars.com/update-agent to download Update Agent directly, or select the appropriate download link on the product page.

(2) Click the Download button to download Update Agent 1.0.

③Click the **Run** button on the pop-up menu.

④ Read and click the box to accept the license agreement terms.

(5) Click the Install Button, then the Close button once the download is complete.

6 Double-click the Update Agent 1.0 desktop icon.

7 Fill out the registration form.

(8) Refer to the next section for performing product update.

TIP: Use a wired internet connection vs. wireless, air card, or satellite connections. This will minimize potential connection issues that may affect the update process.

DOWNLOAD UPDATE AGENT 1.0 TOOL CONT'D



PRODUCT UPDATES USING UPDATE AGENT 1.0

① Double-click the **Update Agent 1.0 Icon** located on your computer's desk-top.

(2) Connect your device to the computer using the supplied USB cable.

(Update Agent 1.0 will automatically search for updates related to your device.)

③ Click the **Update** button.

(The update process will start and finish automatically. Once the update is complete, you may be directed to the **Online Store**. To further update your device using the online store, refer to the following steps.)

④ Click on any or all of the available options.

(A check mark will appear in the upper right corner.)

- (5) Click the Purchase button.
- (6) If required, read and Accept the disclaimer.
- 7 Fill in the required information and click **Go to Review**.

(Here you can check the information you filled in before submitting the order.)

8 Click the Place Order button to complete your order.

(9) If a purchase was made, follow steps 1-3 above to complete the update.

PRODUCT UPDATES CONT'D



NOTICE: Do not unplug the USB while the device is being updated. Once the update is complete, you will be informed that it is safe to disconnect.



TROUBLESHOOTING

My DINANFLASH does not power up when plugged into the OBDII port?

Your vehicle's OBDII port is powered through a fuse and the fuse may be blown. (In most vehicles, this is the same fuse shared by the cigarette lighter)

Try the DINANFLASH on another vehicle to make sure it powers up. If it does, then the wiring on the vehicle you are trying to program may be the issue (See your dealer for service).

My DINANFLASH Says: "Non-Stock File Detected..."

Your vehicle may have been programmed by another device. Use that device to set your vehicle back to stock before using the DINANFLASH.

When reading the vehicle's trouble codes (DTCs), I received a P1000 error code?

P1000 is a DTC that sometimes appears after a vehicle is programmed or the battery cables are unplugged from the battery. It will automatically clear after several drive cycles. It cannot be removed using the 'DTC Clear' function.

My vehicle has several aftermarket part modifications and after I program it with the DINANFLASH, the vehicle does not run well?

A DINANFLASH is designed for stock vehicles (factory stock calibrations and stock engine & transmissions). In some cases, upgrades like air intakes, upgraded turbos, injectors, alcohol or water injection, and high flow downpipes may not be supported.

I left DINANFLASH tuning in my vehicle and went to my dealer for service, now my DINANFLASH will not work?

The dealership likely updated your vehicle's calibrations, and saved over the tuning. The DINANFLASH does not recognize the new files in your vehicle. Contact Dinan Technical Support at 800-341-5480 to correct the situation.

My programmer did not complete programming and went into recovery mode?

DINANFLASH programmers are designed with 'Recovery Mode' which means if, for any reason, the programming process does not finish, the programmer will automatically program your vehicle back to the factory stock settings. It is necessary to follow the screen prompts, possibly requiring several 'Ignition On' and 'Ignition Off' sequences. When recovery is complete your vehicle is at factory stock. You are now able to start your vehicle normally. You may now attempt to program your vehicle again. In the event that recovery is unsuccessful or fails to complete the programming cycle, a status message will display on the programmer. Please make note of the message displayed and contact Dinan Technical Support at 800-341-5480.

My programmer shows a 'vehicle calibration not on file' status.

The DINANFLASH is loaded with the latest databases meant to provide extremely broad vehicle coverage. 'Vehicle calibration not on file' status occurs when programmer does not have the necessary calibration files to program a vehicle. Update your programmer using the Update Agent software. If your calibration is available it will be downloaded to your programmer for immediate use. If your calibration is not available, your calibration will be uploaded to Dinan's R&D for tuning. You will receive an e-mail as soon as your calibration is available. Calibrations are usually available in 5 business days.

STORAGE AND MAINTENANCE

NOTICE: It is recommended to NOT store your programmer in your vehicle in extreme heat, direct sunlight or extreme cold (temperatures near or below freezing). These conditions can cause malfunction or damage to the programmer.

TIP: Prior to using your device after a long period of non-use, use Update Agent 1.0 to update. This will ensure that your device is up-to-date and contains all of the latest files and functionality. See pages 22-25 for instructions on how to update your device.

SAFETY GUIDELINES



Before using device, read and understand the user manual, including these additional safety instructions. Failure to do so could result in DEATH or SERIOUS INJURY.

- Do not exceed legal speed limits on public roadways. Violating traffic laws is dangerous and could result in injury or vehicle damage or both.
- Use any enhanced speed capabilities of this product only in closed circuit, legally sanctioned racing environments expressly for this purpose. Violating traffic laws is dangerous and could result in injury or vehicle damage or both.
- Do not operate the device while driving. Distracted driving could result in traffic accidents, death or serious injury, and/or damage to your vehicle.
- Always perform all adjustments or changes while stopped. Changing a setting while driving can
 interfere with your attention to roadway conditions and could result in injury or vehicle damage
 or both.
- Do not stack products. "Stacking" performance-enhancing devices or other improper installation can cause power train failure on the road. Other products may have features incompatible with your Dinan device. Follow all installation and operating instructions.
- Some modifications may affect other parts of your vehicle. For example, if you remove/adjust the speed limiter in your vehicle, be sure your tires and other components are rated for the increased speeds they will have to withstand. Not doing so can lead to loss of vehicle control. Modify the speed limiter only for use in closed circuit, legally sanctioned racing environments, not for use on public roadways.
- Water/Methanol: Water/Methanol may have adverse effects, and potentially disastrous effects when used on higher octane maps with lower octane fuel. Usage is up to the end user's discretion.
- Octane Booster: Do not use octane booster. It may do nothing at all, or it may cause other problems.
- Accidental low quality fuel: If you accidentally use lower quality fuel than prescribed by the tune, draining the tank is recommended. In the case where you're running a higher pump fuel program, such as 93 Octane (R+M)/2 and only 91 Octane(R+M)/2 is available, you can continue driving so long as you take extra precaution. Do not drive the car hard. If the engine is boosted, stay out of boost. Keep IAT low. Don't lug out the engine, and only use light throttle input. Essentially, be careful. If you detect knock, don't continue driving.
- Ethanol blending: Increasing the ethanol content of your fuel to increase octane will place additional strain on the fuel system. Your tune is calibrated specifically for the octane stated and we do not recommend trying to blend pump gas with high ethanol content fuel. These mixes must be precise, provide limited benefits in these applications, and can cause severe engine damage if done incorrectly.

LIMITED 1 YEAR WARRANTY

Dinan Corp., (hereafter "SELLER"), subject to the conditions and limitations set forth herein, warrants to the original consumer purchaser only that each DINANFLASH product sold by SELLER (the "Product") through an authorized dealer will be free from defects in material and workmanship under normal operating conditions for one (1) year after the date of purchase. SELLER will repair or replace, at SELLER's option, any Product that is found to be defective in material or workmanship under normal operating conditions during the one-year period after the date of purchase by the original consumer purchaser.

What Is Not Covered by This Warranty?

This warranty does not apply to any of the following:

1. Loss, damage, repairs, or maintenance required as a result of accident, abuse, negligence, or misuse.

2. Loss, damage, repairs, or maintenance required as a result of any third-party tuning software.

3. Loss, damage, repairs, or maintenance required as a result of fire, water, hail, theft, earthquake, wind, ice, lightening, acts of god, accident, animals, corrosive atmosphere, or other external causes beyond the control of SELLER.

4. Any special, indirect, incidental, consequential, or punitive damages, including property damage, arising out of or related to the use or loss of use of the Product under this Limited Warranty.

5. Any Products purchased through auction websites.

Limitation of Liability

The terms of this Limited Warranty constitute the entire agreement between the parties with respect to the Product. The original consumer purchaser's exclusive remedy shall be limited to the repair or replacement of the defective product. EXCLUDING THE LIMITED WARRANTY PROVIDED ABOVE, SELLER, TO THE MAXIMUM EXTENT PERMITTED BY LAW, MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, AND DISCLAIMS ALL WARRANTIES, DUEITES AND CONDITIONS, WHETHER EXPRESS, IMPLIED, OR STATUTORY, WITH RESPECT TO THE WORK, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY REMEDY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT.

How to Make a Warranty Claim

Contact Dinan Technical Support. BUYER will be required to submit proof of purchase from an authorized dealer within 5 days of the warranty claim.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS. IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT, THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.



VEHICLE WARRANTY INFO

Many of our customers ask, "Will your product void my vehicle's manufacturer's warranty?" Dinan is committed to providing quality products that are safe to use. Our products do not cause damage to a vehicle when used as intended in accordance with the User Manual and should not void your vehicle's manufacturer's warranty.

However, the reality is that many dealerships have been known to improperly void warranties on vehicles that use aftermarket products as a matter of policy. This applies in particular to those aftermarket products that produce horsepower, such as performance enhancement "chips," modified intake manifolds, or aftermarket exhaust systems, regardless of product brand.

Consumers of aftermarket products are protected by the Federal Magnusson-Moss Warranty Act. The Act provides that if something breaks on your vehicle and you take it in for warranty repair, the dealer must honor your warranty unless whatever modifications you have added to your vehicle actually caused the problem in question.

In order to understand your rights under the Federal Magnuson-Moss Warranty Act, Powerteq recommends that you contact qualified legal counsel.

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