

THUNDER TMAX

Resetting Firmware Guide for SmartLink and TMax Tuner Software

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If you have observed a new or unusual performance anomaly with your ThunderMax equipped motorcycle, there is a possibility that the module firmware or map has become corrupt. Module firmware or map corruption can occur during ThunderMax installation or operation of the motorcycle, when there is a surge or spike in power voltage.

The following procedure should be performed to determine if additional troubleshooting is required. This process will fully re-program the ThunderMax ECM and clear any learned changes the system has stored. Our experience has shown that this “clean sheet” approach will resolve many performance anomalies related to the ThunderMax system on a motorcycle.

To perform this process, you must have the most current software version installed on your computer, and the latest firmware file downloaded into the software. You will need an internet connection to update the software and download the firmware.

Please Note: Use of a computer with *strained resources* or *insufficient free memory* will increase the possibility of data corruption when communicating with the ThunderMax ECM. It is the responsibility of the user to ensure that the computer used for map loading, map adjustment or firmware installation meets the minimum system requirements.

First, confirm that you have the latest software version. From the toolbar, click **Configure > SmartLink Update** or **TMaxI Software Update > Check**. The system will inform you if a later version is available. If so, download and install the software update by following the on-screen prompts.

Second, verify that you have the latest firmware stored within your ThunderMax software for transfer to your module. Follow these steps: Click **Configure** on the toolbar, then **Firmware > Check for Firmware Upgrade**. Highlight the firmware file with most recent date and click **OK**. The firmware file will be downloaded.

Third, Update your base maps library by clicking from the main toolbar **EFI Maps > EFI Map Listings / Definitions**. Close the Base Map Definitions window and select **Check Internet for Updates** from the next window. If new base maps are found, follow the prompts to download.

You are now ready to refresh the firmware and module map in your ThunderMax module. An Internet connection is not required for this task. **You must be linked to the module** to perform these steps. **Close any open programs** on your computer except for your ThunderMax software. If any of these processes are interrupted for any reason, start over at **Step 1**.

Step 1. Make a note of any Diagnostic Trouble Codes & then **Clear** the codes. From the Tuning Maps Tree, click **Module Configuration > Diagnostic Codes > Clear Diagnostic Codes**.

NOTE: For motorcycles with cable operated throttle, it is normal to see a code counting for **EGO Front & EGO Rear** when the engine is **NOT** running.

Step 2. Load the latest version of firmware to your module. From the main toolbar, click **Configure > Firmware > Upgrade Module Firmware Now** (follow the prompts *exactly*).

Step 3. Install the correct Base Map from the software (see tuning manual for further instructions to choose the correct map).

- 1. Go to “EFI Maps” in the Main Tool Bar, then click “EFI Map Listings and Definitions”.**
- 2. To locate the closest matching Base Map,** sort by Map element specifics using the right click function of your mouse (see installation instructions located in “Help” menu).
- 3. Select the desired map** by double clicking anywhere on the base map definition line.
- 4. Select “Load Base Map”** from the Base Map Name Encoding window.
- 5. On your motorcycle, turn the Run switch and the Ignition switch to the “On” position.**
- 6. In the Main Tool Bar, go to “Map Editing” and then “Write Module Maps and Settings”.**
- 7. Go to “Map Editing”, then “Clear Learned Idle Control Adjustments”.**
This step does not apply to Throttle-By-Wire systems.
- 8. In the “Tuning Maps” tree, go to “Module Configuration” and then “Basic Settings”** to confirm the correct Speedo-Cal value for your year and model motorcycle.

Initializing the Module

For ThunderMax Systems on Motorcycles with Cable-Throttle Control

1. With the Run switch in “On” position, cycle the Ignition switch 30 seconds on and 30 seconds off - 3 times.
2. Start the engine. Allow the engine to warm up to operating temperature, without touching throttle (around 250 degrees).



<http://bit.ly/HBZOyB>

Click above to watch the video on-line!

For ThunderMax Systems on Motorcycles with Throttle-By-Wire Control

1. Turn the main power and run switch “On” for 20 seconds, uninterrupted.
2. Cycle the main switch “Off” and “On”, and then start the engine.
3. Let the motorcycle idle on its own for 15 seconds and shut off. Restart and allow engine idle to operating temperature (around 250 degrees).



<http://bit.ly/HwittJ>

Click above to watch the video on-line!

During engine warm-up, remain linked to the ThunderMax module to monitor the engine temp. When finished, (1) un-link the software, (2) turn the engine off, and then (3) disconnect the cable. The motorcycle is now ready for a test ride and review.

If you have questions or require additional assistance, start by reviewing the condition of your new tune in the **TMax Control Center** (on the software’s Main Tool Bar) or you may transmit the module data through the **TMax Auto Support** function (on the software’s Main Tool Bar).