



## **DSP<sup>4</sup> Phone / Tablet App for E98 GM Diesel Controllers**

Cindy Myers





# DSP<sup>4</sup> Phone / Tablet App for E98 GM Diesel Controllers

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## Contents

	.....	3
Prerequisites.....		3
Intended Audience .....		3
Computer Knowledge.....		3
Tuning Knowledge .....		3
	.....	4
Introduction.....		4
EFILive DSP <sup>4</sup> App.....		4
Hardware Requirements .....		4
Supported Android Devices .....		4
Supported OBD-II Adaptor Bluetooth Devices.....		4
Software Requirements.....		4
Pre-Work Requirements.....		4
	.....	6
EFILive DSP <sup>4</sup> App Operation.....		6
Launch the App.....		6
How to change tunes .....		8
	.....	9
Idle Speed Override.....		9
Idle Speed Override .....		9



.....	10
Settings / About .....	10
Settings .....	10
Change Settings .....	10
Info / Passenger Mode .....	11



## Prerequisites

### Intended Audience

Customers who have installed a DSP<sup>4</sup> custom operating system in their E98 ECM and wish to switch tunes using Android device.

- This app will not work on standard E98 operating systems.
- This app will not work on any other ECM or vehicle types, E98 only.

### Computer Knowledge

It is expected that readers have a basic understanding of:

- Android phone operating systems.
- Pairing to Bluetooth devices with their phone.
- Downloading and installing an app via Google Play.

### Tuning Knowledge

It is expected that readers have a basic understanding of:

- How to flash a DSP<sup>4</sup> operating system in to the ECM.



## Introduction

### EFILive DSP<sup>4</sup> App

EFILive's DSP<sup>4</sup> phone application is designed to allow those users who have installed EFILive's DSP<sup>4</sup> custom operating system in their vehicle to change tunes on the fly using their phone / tablet connected to an OBD-II Bluetooth adaptor as an alternative to switching tunes via hardwired switch or EFILive hardware.

The [EFILive DSP<sup>4</sup> App](#) is a free download from the Google Play store.

This application also incorporates an idle speed override function which is not available using other switching methods. Idle speed override allows temporarily control over engine idle speed; most likely to be used when using an electric winch.

### Hardware Requirements

To enable switchable tuning, the following hardware is needed:

1. A phone or tablet running Android V4.1 or higher.
2. A phone or tablet with Bluetooth connectivity.
3. An OBD-II to Bluetooth adaptor.

Note: iOS devices may be supported in the future however these unfortunately require specific Bluetooth adaptors.

### Supported Android Devices

EFILive development and testing was completed using the following devices:

- Samsung Galaxy.(A range of devices were tested.)
- Ulefone BeTouch 3.

In all cases, devices had a minimum screen size of 5".

Due to the enormous range of Android devices on the market it is impossible for EFILive to test this app on each one to ensure it runs on each device.

### Supported OBD-II Adaptor Bluetooth Devices

EFILive development and testing was completed using the following OBD-II Bluetooth adaptors:

- [PLX Kiwi 2+ for Android](#)
- [OBDLink® LX Bluetooth](#)

### Software Requirements

Download and install the free [EFILive DSP<sup>4</sup> App](#) from the Google Play store onto your Android device.

Note: iOS devices may be supported in the future.

## **Pre-Work Requirements**

Users are required to have flashed the DSP<sup>4</sup> custom operating system into their ECM. Refer to the [Duramax 2p8L E98 DSP4 User Guide.pdf](#) for instructions.

Users should connect their OBD-II Bluetooth adaptor to the vehicle and pair the adaptor to their Android device following the manufacturer's instructions before launching the EFILive DSP<sup>4</sup> app.



## EFILive DSP<sup>4</sup> App Operation

### Launch the App

Select the EFILive DSP<sup>4</sup> app on your device. The app will open on the tune selection screen.



Connect the paired Bluetooth device by pressing the Bluetooth logo at the top of the screen, and select the correct device.





When a successful connection is made, the connected device message will be updated to display the chosen device, and a pop up message will also be displayed at the bottom of the screen momentarily.



The app automatically checks the status of the ECM, highlighting the button of the selected tune, and displays the selected tune in the message dialog box.



## How to change tunes

Select an un-highlighted button to change tunes. The button highlight and the selected tune in the message dialog box will change to your new selection once the ECM has processed the tune change request.



The ECM will remember the tune position selected. The DSP<sup>4</sup> app will request the tune position selection each time the application is opened/closed.



## Idle Speed Override

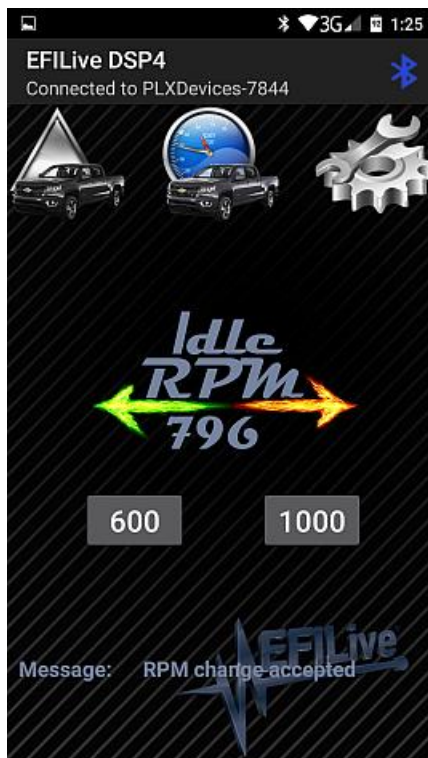
### Idle Speed Override

Idle speed override allows temporary control over the engine idle speed; most likely to be used when using an electric winch. This feature is only supported where the vehicle is in Park or Neutral and the vehicle is not moving, in line with ECM restrictions.

By selecting the idle speed override icon, users can use the left and right arrows to increment idle RPM by 32 RPM per selection in line with the ECM scaling limitations.

To stop the idle RPM override simply click away from this screen to the Tune Selection or Settings Screen and in a few seconds the engine will return to normal idle speed.

The message dialog box will detail if the RPM change is accepted or display an appropriate message where idle speed cannot be adjusted, such as when the vehicle is not in Park or Neutral, or when the vehicle moving.



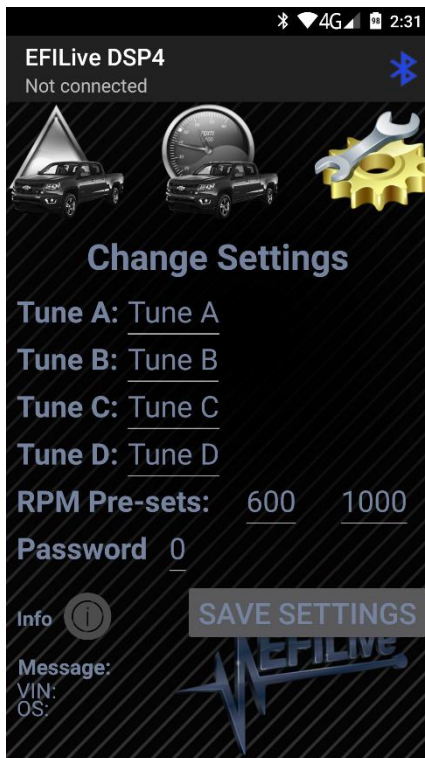


## Settings / About

### Settings

The settings menu allows users to:

1. Customize tune position names.
2. Enter pre-set idle RPM override speeds.
3. Enter a password to enable tune switching, where the password was enabled in the tune file prior to flashing the ECM.
4. Display the Info screen.
5. Display the vehicle VIN and OS in the Message dialog box.
6. Save changes made to settings.



### Change Settings

To change tune names or RPM pre-set values, use your finger to hold down the text until the keyboard appears. Edit the text/value and press the back button on your device.

Select the SAVE SETTINGS button to save changes.

The app does not prompt data to be saved prior to exiting the screen.

Do not accidentally click the phone's back button twice as the back button exits the app from all other screens.

## Info / Passenger Mode

The Information screen can be accessed by pressing the 'i' button on the settings screen.

Passenger mode by default is switched on, preventing the app from switching tunes while the vehicle is moving. Should a passenger be present in the vehicle, users can turn passenger mode off to allow for tune switching while the vehicle is moving.

Passenger mode should only be used where a person other than the driver is controlling the device.

