

# EFILive FlashScan



## FlashScan V2 Quick Start



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## Conventions used in this document



Potential danger



Important information



Helpful information

## FlashScan Shipping

EFILive is committed to quality and service and that commitment extends to our shipping and handling of your order.

If your FlashScan box was delivered with obvious, visible damage, please contact [sales@efilive.com](mailto:sales@efilive.com) and let us know. Please send us a picture of the damage if possible. You may be eligible for a refund of your shipping charges.

If you reside in the USA, and your package does not arrive within two business days, please contact [sales@efilive.com](mailto:sales@efilive.com) and let us know. You may be eligible for a refund of your shipping charges.

## FlashScan V2 Package Contents

- FlashScan V2 interface device
- EFILive software installation CD
- Blue *License Registration Card*
- Blue *Warranty Registration Card*
- White *EFILive FlashScan Limited Warranty* sheet
- Addressed warranty reply envelope
- FlashScan serial number sticker that matches the one on the box
- EFILive pen
- 2 x AD-2 external input connectors
- 4 x clear plastic stick on feet
- EFILive OBDII cable (J1962-A to RJ45)
- EFILive USB cable (USB-A to USB-B)
- EFILive serial cable (DB9 Female to RJ12)



## PC/Laptop Specification

Configuration	Recommended	Minimum <sup>1</sup>
CPU type	Pentium class CPU (Includes AMD and Cyrix)	Pentium class CPU (Includes AMD and Cyrix)
CPU speed	800MHz or faster	500MHz
Free <sup>2</sup> memory	64Mb or more	32Mb
Free <sup>3</sup> hard disk space	100Mb or more	100Mb
I/O port <sup>4</sup>	2 x USB 1.1 or 2.0	USB 1.1
Pointing device	Mouse, trackball, touch pad, etc.	
Keyboard	Standard PC keyboard	
Screen	Standard PC Screen at least 1024x768	
Operating System	Windows 7	Windows XP

<sup>1</sup> PC configurations that are **below** the recommended configuration may not support the full features of EFILive.

<sup>2</sup> Free memory means memory that is not already in use by other applications.

<sup>3</sup> Free hard disk space means space that is not already in use by other applications.

<sup>4</sup> Two USB ports are only required while upgrading from FlashScan V1 to FlashScan V2, otherwise only one USB port is required.

## FlashScan V2 Operating and Storage Conditions

Condition	Operating Range		Storage Range	
	Minimum	Maximum	Minimum	Maximum
Temperature	0°C 32°F	50°C 122°F	-10°C 14°F	60°C 140°F
Humidity	-	90%	-	90%
Shock	50G, 11ms		50G, 11ms	
Pressure	115kPa 16.68psi		115kPa 16.68psi	
5V A/D Input Voltage	0V	6V	-	-
12V Switch Input Voltage	0V	14V	-	-
USB Input Voltage	4.75V	5.25V	-	-
Vehicle Input Voltage	9V	24V	-	-
Thermocouple Input	 Only connect K-Type thermocouple sensors to the thermocouple inputs.			

## Unpacking FlashScan V2

Remove FlashScan V2 from its sealed bag and retrieve the serial number sticker. Keep the serial number in a safe place. You will need it for all customer service communications with EFILive.

In the same clear plastic bag as the two AD-2 connectors, are four clear plastic domes. If desired, fit the domes over the four screws on the back of the FlashScan V2 unit. Apply pressure by hand for about 5-10 seconds to aid the bonding process.

Please fill out the Warranty Registration Card and mail it back to EFILive using the envelope provided. Note that international postage rates may apply. Or use the online registration form here: <http://www.efilive.com/warranty-and-product-registration>. By registering your purchase of FlashScan V2, you ensure that any warranty claim will be dealt with swiftly. In addition, when EFILive publishes urgent and/or important information about your FlashScan V2, EFILive will know how to contact you if required.

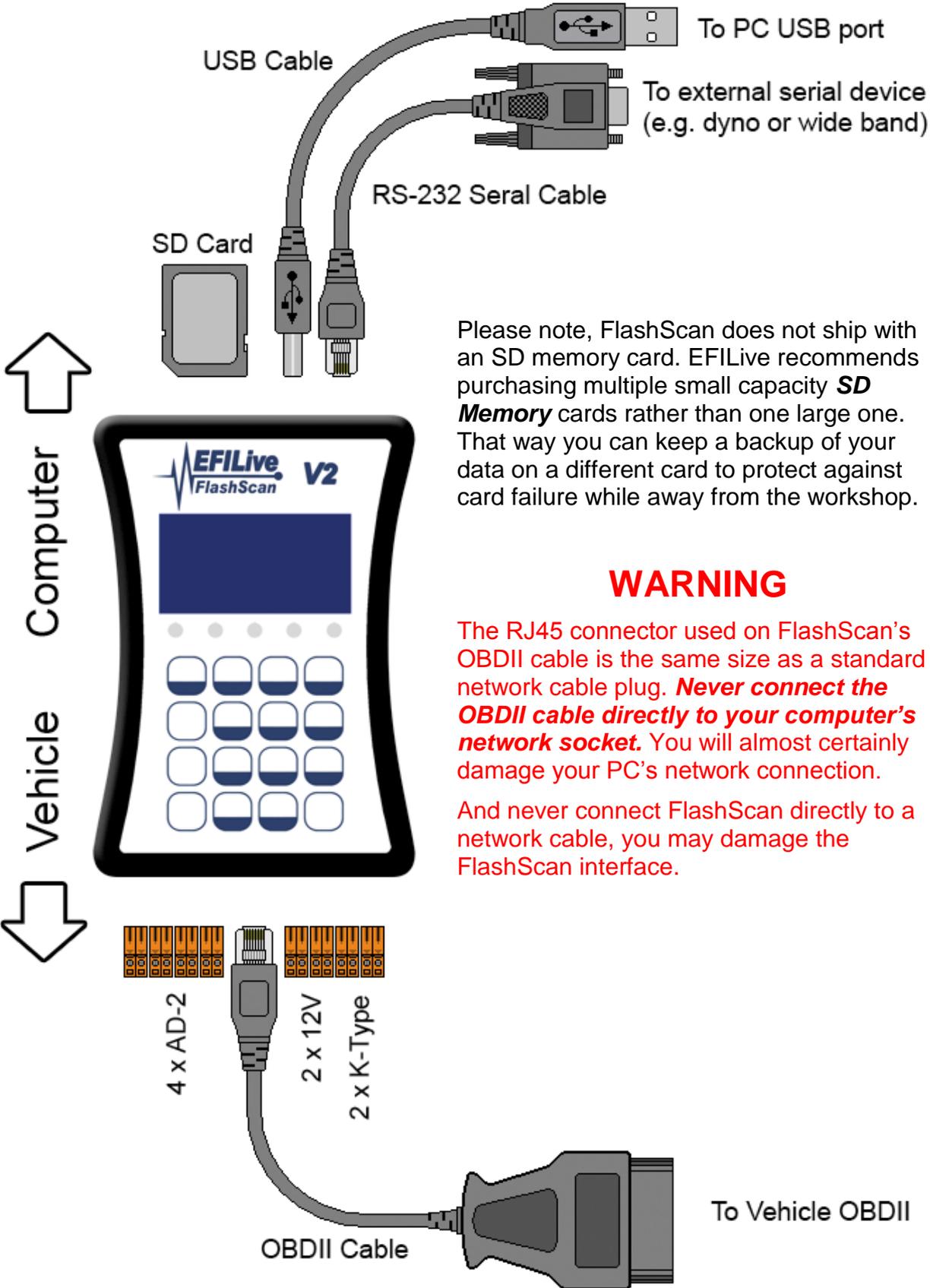
Dispose of any packaging that is no longer required, and do not leave any plastic bags or used twist ties within reach of young children.

## Taking Care of FlashScan V2

Your FlashScan V2 device is a sensitive electronic device. Care must be taken when using, transporting or storing FlashScan V2.

- Never leave FlashScan V2 in direct sunlight; it will damage the LCD screen and the polycarbonate keypad.
- Never expose FlashScan V2 to solvents or other corrosive or oxidizing agents.
- Do not immerse FlashScan V2 in any liquid.
- Do not expose FlashScan V2 to high temperatures or open flames.
- Remove ALL connectors from FlashScan V2 before transporting or storing FlashScan V2. Failure to do so may cause internal connections to break.
- Never wrap cables around FlashScan V2 that are still connected, even when not in use. Doing so can put excessive stress on the internal connectors and can cause them to break.
- Do not allow uninsulated wires to contact any part of the vehicle's chassis or electrical system. Take particular care to never allow FlashScan, or any wires connected to FlashScan, to contact the vehicle's battery terminals or other power source.
- Never use a DC to AC power inverter to operate your laptop while FlashScan is connected to either the vehicle or the laptop or both. To power a laptop from the vehicle, EFILive recommends using a purpose built laptop adapter. For example the *iGo Juice 70*, available from [www.igo.com](http://www.igo.com)

# Connecting FlashScan



Please note, FlashScan does not ship with an SD memory card. EFILive recommends purchasing multiple small capacity **SD Memory** cards rather than one large one. That way you can keep a backup of your data on a different card to protect against card failure while away from the workshop.

## WARNING

The RJ45 connector used on FlashScan's OBDII cable is the same size as a standard network cable plug. **Never connect the OBDII cable directly to your computer's network socket.** You will almost certainly damage your PC's network connection.

And never connect FlashScan directly to a network cable, you may damage the FlashScan interface.

## Installing the EFILive Software

Insert the EFILive CD into your PC CD-ROM drive.

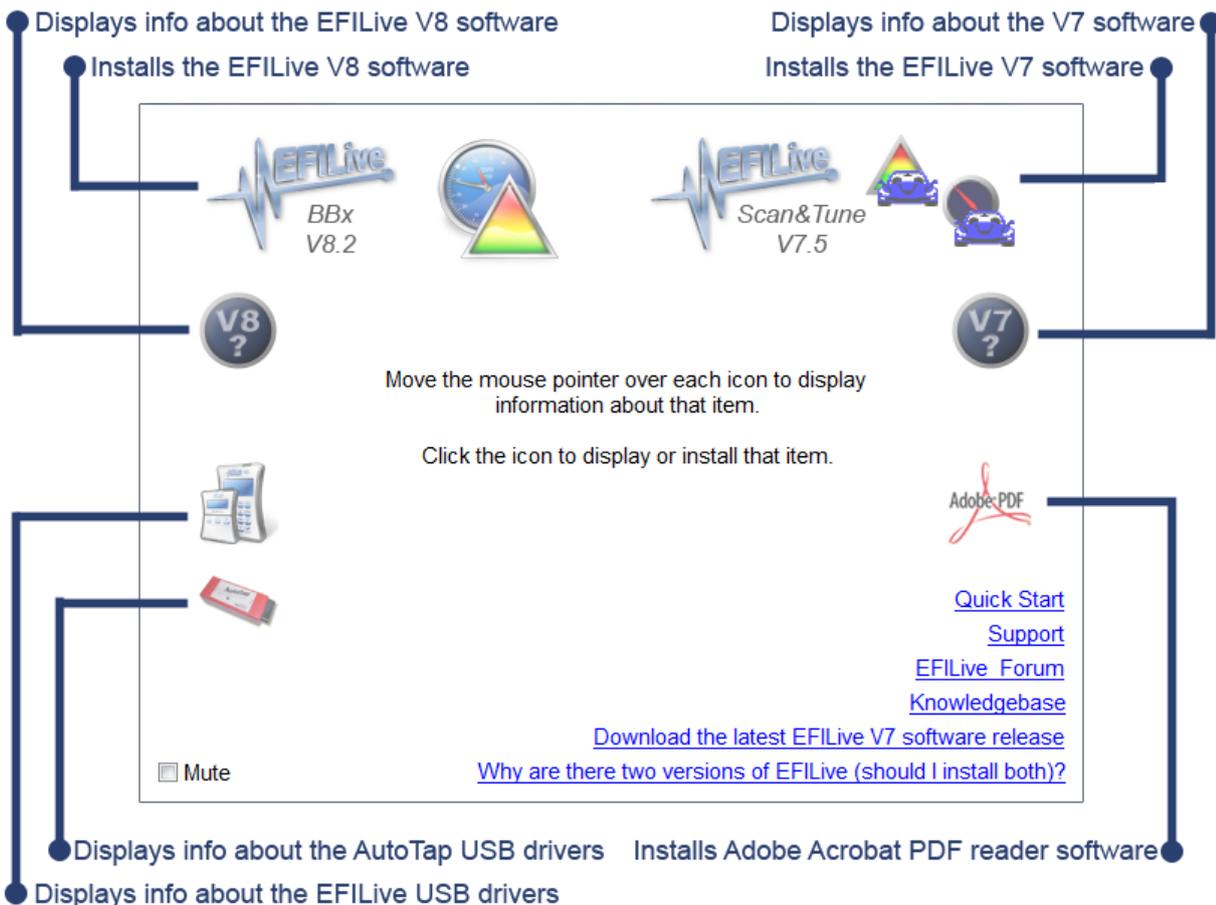
If your PC is configured to **AutoPlay** CDs, then please wait until the EFILive installer begins.

If the EFILive installer does not begin automatically, then your PC may not be configured to **AutoPlay** CDs. You can manually start the EFILive installer by right clicking on the CD drive icon in Windows Explorer and selecting **AutoPlay**.



Some computers have AutoPlay disabled for security reasons. If the AutoPlay option is not able to start the installer, you can start the installation manually by double clicking on the **EFILive\_Installer.exe** program.

The installer will display the following window. Please click on the *Installation Guide* icon to display the installation instructions.



To view the installation instructions, you will need the Adobe Reader installed on your PC. If Adobe Reader is not installed on your PC, you may install it by clicking on the *Adobe PDF* icon.

## Installing FlashScan USB Drivers

When you install the V7.5 or V8.2 software on Windows 2000, Windows XP or Windows Vista, the EFILive installer automatically installs the FlashScan and AutoCal USB drivers.

When you install the V7.5 software on Windows 98 or Windows ME, the FlashScan and AutoCal USB drivers are not automatically installed.

To manually install the USB drivers, please refer to the appropriate FlashScan USB installation document for your Windows operating system.

- Installing FlashScan V2 on Win98.pdf
- Installing FlashScan on Win2K-XP-Vista.pdf

If the EFILive software cannot connect to FlashScan V2, the most probable cause is incorrectly installed USB drivers. If you have trouble with Windows not recognising the FlashScan V2 device, EFILive recommends uninstalling the drivers and reinstalling them again.

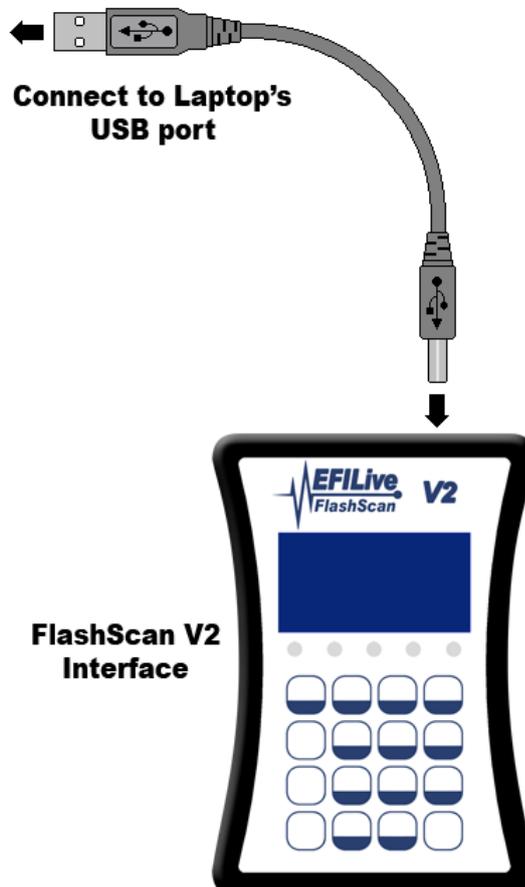
The uninstall document is called:

- Uninstalling FlashScan.pdf

These documents can be found on the EFILive CD, in the folder **InstDoc**

You can also download these documents from EFILive's web site:

<http://www.efilive.com/downloads.html>

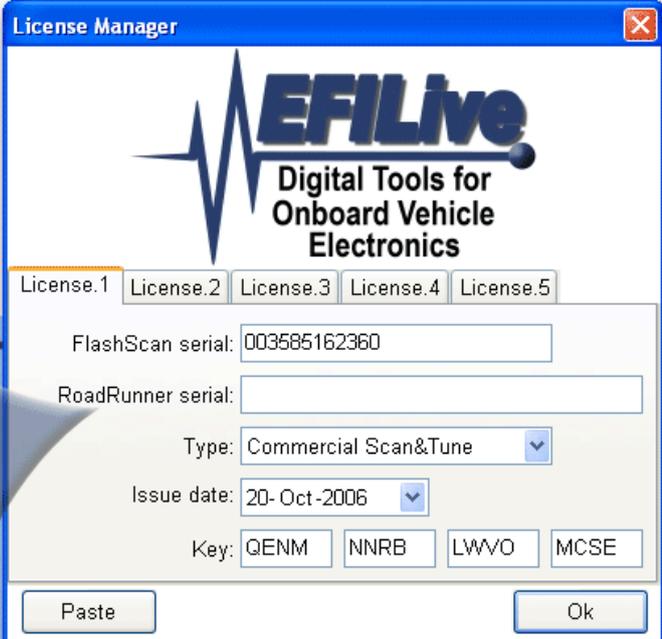


## Registering FlashScan V2 for use with the V7.5 Software

From within the Scan Tool or Tuning Tool software, select the menu option:  
Help->Register EFILive...

Copy the license registration details from the blue License Registration Card into the License Manager window.

If this is your first EFILive license, then enter the details in the [License.1] tab page. If there are existing license details, then enter the data in the first unused tab page.



### License Registration Card

FlashScan Interface:	<b>FlashScan V2</b>
FlashScan Serial Number:	<b>003585162360</b>
License Type:	<b>Commercial Scan&amp;Tune</b>
Issue Date:	<b>20-Oct-2006</b>
FlashScan Registration Key:	<b>QENM-NNRB-LWVO-MCSE</b>

Your EFILive FlashScan serial number and license key are important. Please keep these details in a safe place. You will need them whenever you install (or re-install) the EFILive software on your computer.

Enter these details using the menu option "Help->Register EFILive" in either the Scan or Tuning Tool. If you do not enter these license details, the Scan Tool will continue to operate correctly, but the Tuning Tool will revert to "Demo mode" if your FlashScan cable is not connected.



All details must be entered exactly as they appear on the License Registration Card. The majority of license registration problems are caused by incorrectly entered data.

Take particularly care to enter the correct date. The year is most often entered incorrectly.

Leave the RoadRunner field empty unless you have been issued a RoadRunner License. To obtain a RoadRunner Real-Time License, please contact MoatesWare LLC at <http://www.moates.net/>

## Is your software up to date?

The EFILive software is constantly evolving to keep pace with tuning technology. New updates and features are released regularly. Because of this, the CD in your FlashScan V2 package may not contain the latest and greatest software from EFILive.



After installing the software from the CD, which is described in the previous section, we highly recommend checking EFILive's web site for the most up-to-date software.



You may select the "Check for Updates" option in the Windows Start menu:

Start->All Programs->EFILive->V7.5->Tools->Check for Updates

Or

Start-> All Programs->EFILive->V8->Tools->Check for Updates

The web site address for updated software is: <http://www.efilive.com/downloads.html>

## Using FlashScan V2 to Display Trouble Codes

### Location of the OBD II Connector

The OBD II connector is located in the passenger compartment within reach of a technician seated in the driver's seat.

Access to the connector does not require any special tools for the removal of any instrument panel cover, connector cover or any barriers that may be obscuring the connector.



Left hand drive



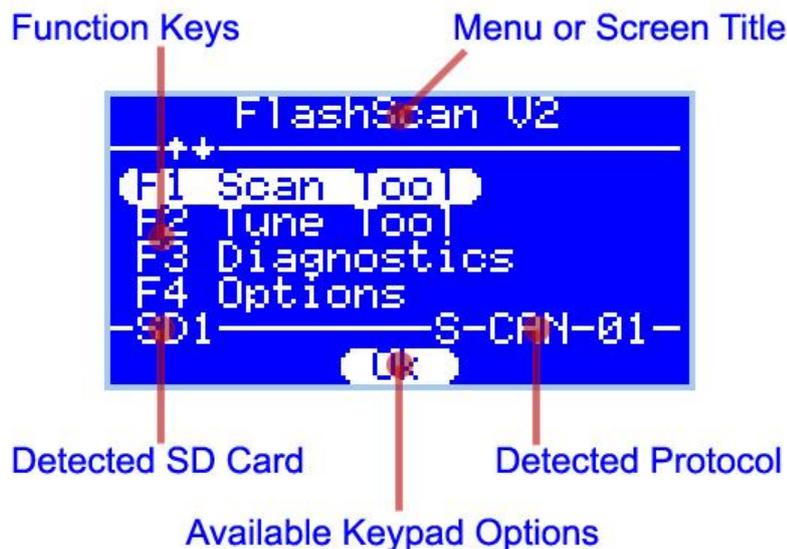
Right hand drive

Turn the vehicle's ignition to the on (or run) position, but do not start the engine.

Connect the OBDII cable from the vehicle to FlashScan.

FlashScan will start up and attempt to connect to the vehicle. You will see activity on one of the orange LEDs to indicate that FlashScan is communicating with the vehicle.

After approximately 2-3 seconds, the main menu will be displayed. It will look similar to this:



## Display System Readiness Test Results

Press the **F3** button to select the **Diagnostics** option.

Press the **F3** button to select the **Test Results** option.

Press the **F1** button to select the **System Readiness** tests option.



EFILive documentation often refers to sequences (similar to the steps above), by the appropriate function keys only. So the above example may also be written as: **Select: F2->F3->F1**

Such notation always assumes that the starting point is the first menu displayed by FlashScan.

Scroll up and down through the eleven test results using the **Up** and **Down** arrow buttons. The top right hand corner of FlashScan's display shows the line number of the last visible item and the total number of lines that can be displayed.

Press the **OK** (or **Cancel**) button to exit from the Readiness Test display screen.

## Display Diagnostic Trouble codes

**Select: F3->F2->F1->F1** to select the **EPA Current DTCs** option.

Scroll up and down through any DTCs that may have been displayed using the **Up** and **Down** arrow buttons.

Press the **OK** (or **Cancel**) button to exit from the Display DTCs screen.

## Clear Diagnostic Trouble codes

**Select: F3->F2->F2** to select the **Clear DTCs** option.

Confirm that you wish to clear the DTCs by pressing the **Yes** button.

Press the **OK** (or **Cancel**) button to exit from the Clear DTCs option.

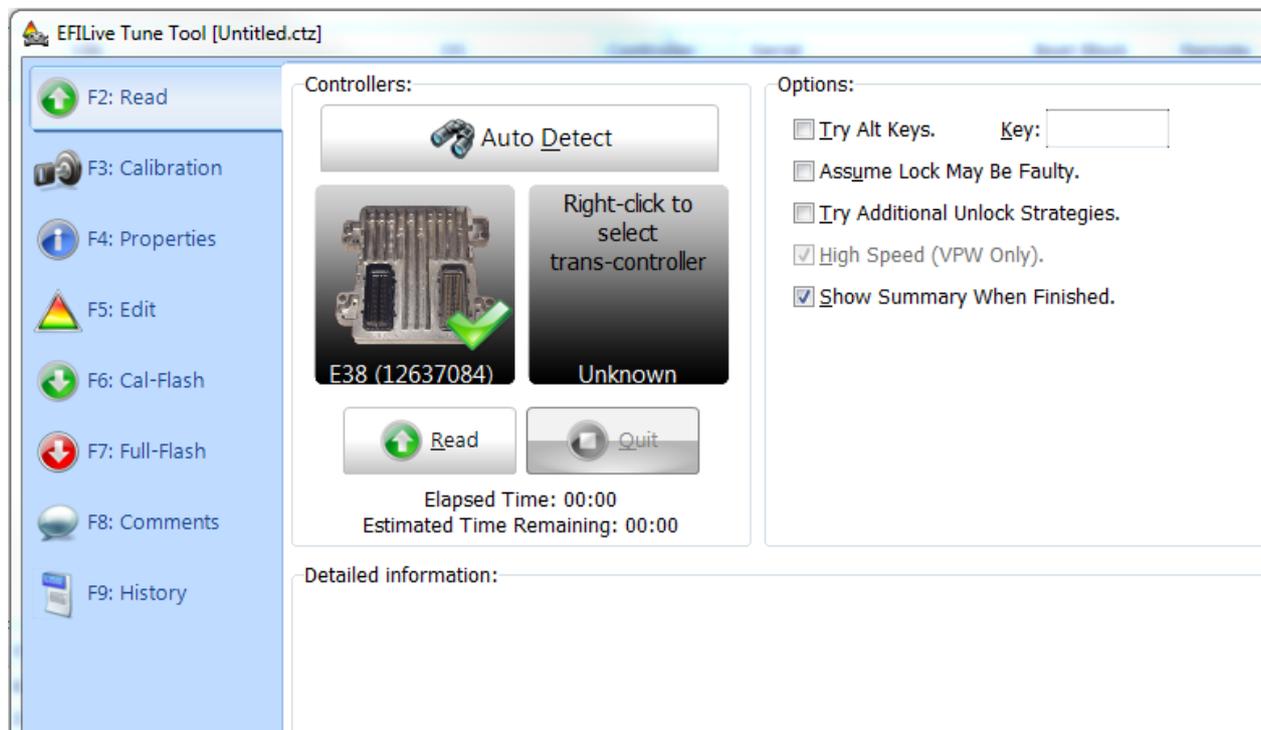


Clearing DTCs will also clear all Readiness Tests' Status.

## Making a Backup Copy of the Vehicle's Controller

1. Turn the vehicle's ignition to the on (or run) position, but do not start the engine.
2. Connect the OBDII cable from the vehicle to FlashScan.
3. Connect the USB cable from FlashScan to the PC or laptop.
4. Start the EFILive Scan and Tune software (version 8) by selecting the Windows Start Menu option: Start->All Programs->EFILive->V8->EFILive Scan and Tune
5. Select the [F3: Tune] option.
6. Select the [F2: Read] option
7. Click the [Auto Detect] button. If the controller is not auto detected, right-click in the engine (or transmission) controller's grey box and select the appropriate controller.

You will see a screen similar to this



Make sure your vehicle battery is capable of providing 12V for at least 5 minutes.

We recommend that you turn off the headlamps, daytime running lights, radio, air conditioning and as many other accessories as possible.

On some vehicles, applying the park brake 1 “click” may extinguish daytime running lights, if applied before ignition is switched on.

8. Click the [Read] button.
9. Once the read process has completed, follow the onscreen instructions and turn off the ignition for the indicated time. It is important that you turn the ignition off (and leave it off) to allow the PCM time to reset back to normal operation.
10. To save the data that has just been read from the vehicle, click the [Save] button
11. EFILive recommends saving \*.ctz tune files in the folder:  
  \My Documents\EFILive\V8\Tune



It is a good idea to create sub-folders in the Tune folder named after the vehicle's controller type, and save each vehicle's \*.ctz files in its matching folder.

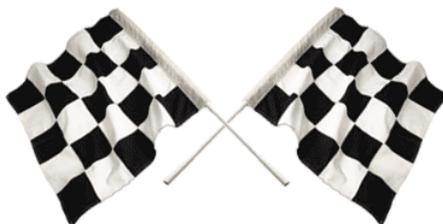
Use a naming convention like this: 2005\_corvette\_57L\_A4\_stock.ctz.

That way it is easy to keep track of your files. This is just a suggestion; you may name the files anything you like.

12. For peace of mind, backup the original \*.ctz files that have been read from each vehicle onto a CD for safekeeping.

Repeat steps 7 through 10 for any other controllers that you wish to backup, including other supported controllers on the same vehicle.

## Congratulations



You have successfully installed, configured, licensed and used your EFILive FlashScan tuning system. You are now ready to start scanning, logging and tuning your vehicle.

Unless you have done this type of tuning before, we recommend you proceed cautiously and make small, incremental adjustments and keep detailed notes of what you change and why.

Where possible, measure the effects of any changes to validate that the changes have a positive effect.

Research and read as much information as you can about tuning EFI engines.

## More Information

The Scan Tool User Manual can be accessed from the Scan Tool software menu: ***Help->Help contents.***

The Tuning Tool User Manual can be accessed from the Tuning Tool software menu: ***Help->Help contents.***

Tutorials can be accessed via the menu: ***Help->Tutorials,*** from either software package.

Additional documents and tutorials are available from EFILive's web site:  
<http://www.efilive.com/downloads.html>

Become a member of EFILive's online community, you may register free on our forum, where you can get instant help from tuners located all over the world:  
<http://forum.efilive.com/>

## Real Time Tuning



EFILive has partnered with MoatesWare LLC to bring you RoadRunner; the most comprehensive, affordable, real time tuning system for LS1 gas and LB7 diesel vehicles.

Other systems claim to be “real time” but they are just software emulators that attempt to simulate real time tuning. By combining the RoadRunner PCM with EFILive’s powerful tuning software, you can make changes to any supported vehicle’s PCM in real time and experience the feedback immediately.

To learn more about real time tuning or to purchase your own RoadRunner PCM, go to: <http://www.moates.net/>

## Training and Education



EFILive and EFI University have created an EFILive specific EFI tuning training course. The course is run regularly in the USA and in Australia. Please contact EFI University, (<http://www.efi101.com/efilive.html>) to obtain course locations, schedules and rates.

## Thank you

Thank you for purchasing EFILive FlashScan. We believe you will have many years of trouble free tuning and quality motoring in your FlashScan tuned vehicle(s).

If you should ever have trouble with any of EFILive’s products, please contact the place of purchase to discuss the problem. Most problems can usually be resolved quickly via telephone or email.





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Support forum: <http://forum.efilive.com/>