DREW TECHNOLOGIES

Mongoose Pro GMII
Quick Start Guide



PLEASE NOTE

Mongoose Pro interfaces have been carefully designed and tested to comply with OBDII protocols. However, some vehicle models are not in full compliance with these protocols for various reasons. In addition, the computer control systems or sensors on any given vehicle may be malfunctioning or out of specification.

While Drew Tech's testing and the experiences of thousands of Mongoose Pro users have shown the unit to be safe and reliable, there is an inherent risk in using any product that may potentially affect the operation or drive-ability of your vehicle.

If you are concerned about the operation of your vehicle at any time while using Mongoose Pro:

* Pull off the roadway immediately or as soon as it is safe to do so.

* Disconnect the Mongoose Pro from the OBDII port.

* Consult a licensed mechanic or automobile service center.

Please report any issues or concerns to our Technical Support Department at support@drewtech.com or (734)222-5228 option 3. We are open Monday through Friday, 9:00 a.m. to 5:30 p.m. Eastern Time. We maintain an active database of the feedback we receive, and your comments can help us continuously improve the product.

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LIMITED WARRANTY

Drew Technologies, Inc. guarantees that every Mongoose Pro is free from physical defects in material and workmanship under normal use for one year from the date of purchase.

IN NO EVENT SHALL DREW TECHNOLOGIES, INC.'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT. DREW TECHNOLOGIES SHALL BE EXEMPT FROM ALL OTHER CLAIMS WHETHER BASED UPON DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, ITS ACCOMPANYING SOFTWARE, OR ITS DOCUMENTATION. Drew Technologies, Inc. makes no warranty or representation, expressed, implied, or statutory, with respect to its products or the contents or use of this documentation and all accompanying software, and specifically disclaims its quality, performance, merchantability, or fitness for any particular purpose. Drew Technologies, Inc. reserves the right to revise or update its products, software, or documentation without obligation to notify any individual or entity. Please direct all inquiries to:

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Introduction

Thank you for choosing Mongoose Pro GMII! This “PassThru” vehicle interface lets you use your PC to communicate and perform ECU diagnostics and reprogramming on many modern vehicles. The Mongoose Pro is an SAE J2534-compliant device at a low cost. It provides a direct connection to a laptop or desktop computer via a USB connection. All of the electronics are contained in the OBD-II connector shell, making it a compact and rugged vehicle communications tool. The Mongoose Pro is powered by the USB connector, so there’s no need to re-start the Mongoose Pro if it is unplugged from a vehicle.

Getting to Know Mongoose Pro

Your package includes a Mongoose Pro, and a CD that includes drivers, this guide, and the Drew Technologies J2534 ToolBox 3.



Installation of the MongoosePro on your PC

DO NOT PLUG IN THE MONGOOSEPRO UNTIL PROMPTED BY THE DRIVER INSTALLER.

1. Insert the driver CD into your CD-Rom drive. Click "MongoosePro GMII Setup.exe" when the Auto-run window populates.

2. Check the box next to "I accept the terms…" and click Install.



3. When User account control asks if you want to allow this program to make changes, Click Yes.

4. Wait while the application installs the device drivers.



5. Plug in your Mongoose Cable and wait for Windows to finish the driver installation, a text bubble will populate in the lower right corner by the clock. Once that is done, click "Exit."

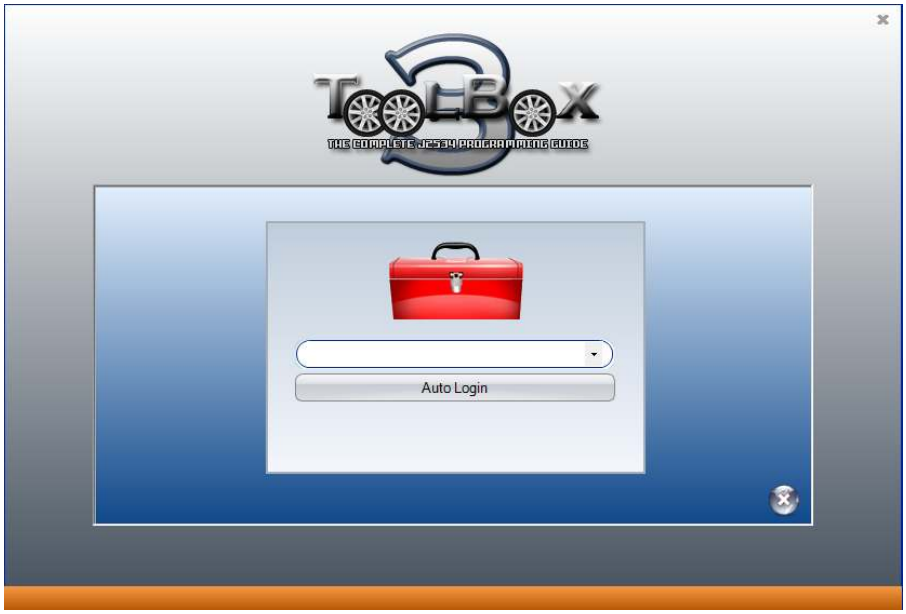


J2534 Toolbox 3

1. Double Click the J2534 Toolbox 3 Icon on the Desktop.



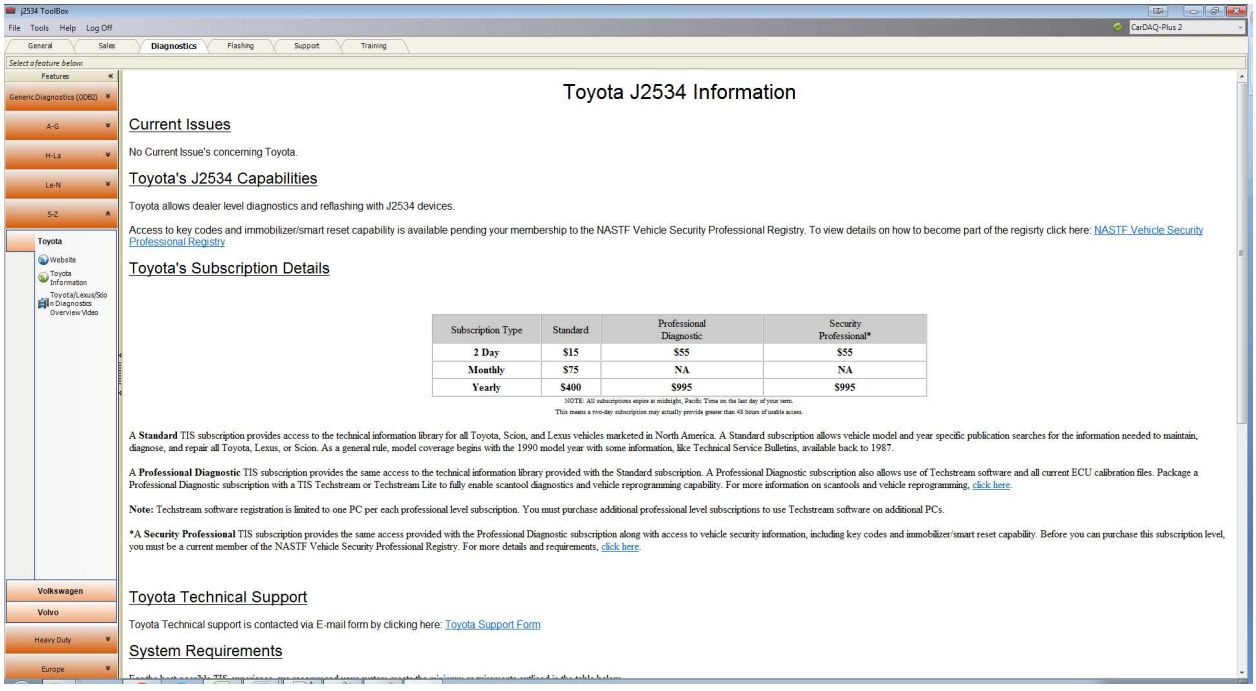
2. Select your interface from the drop down and click Auto Login.



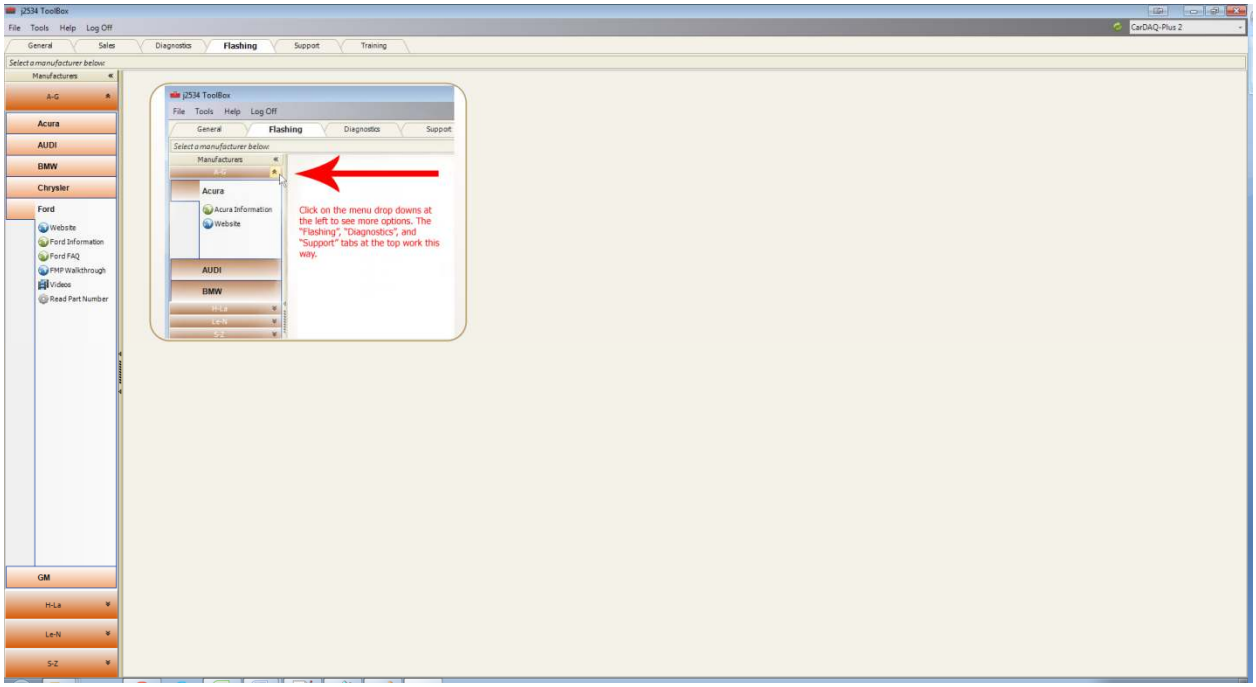
3. The Toolbox will open with 6 tabs available. The first is General, it has news, current OEM concerns, and training broadcast invitations. The sales tab is connected to the Drew Tech website.



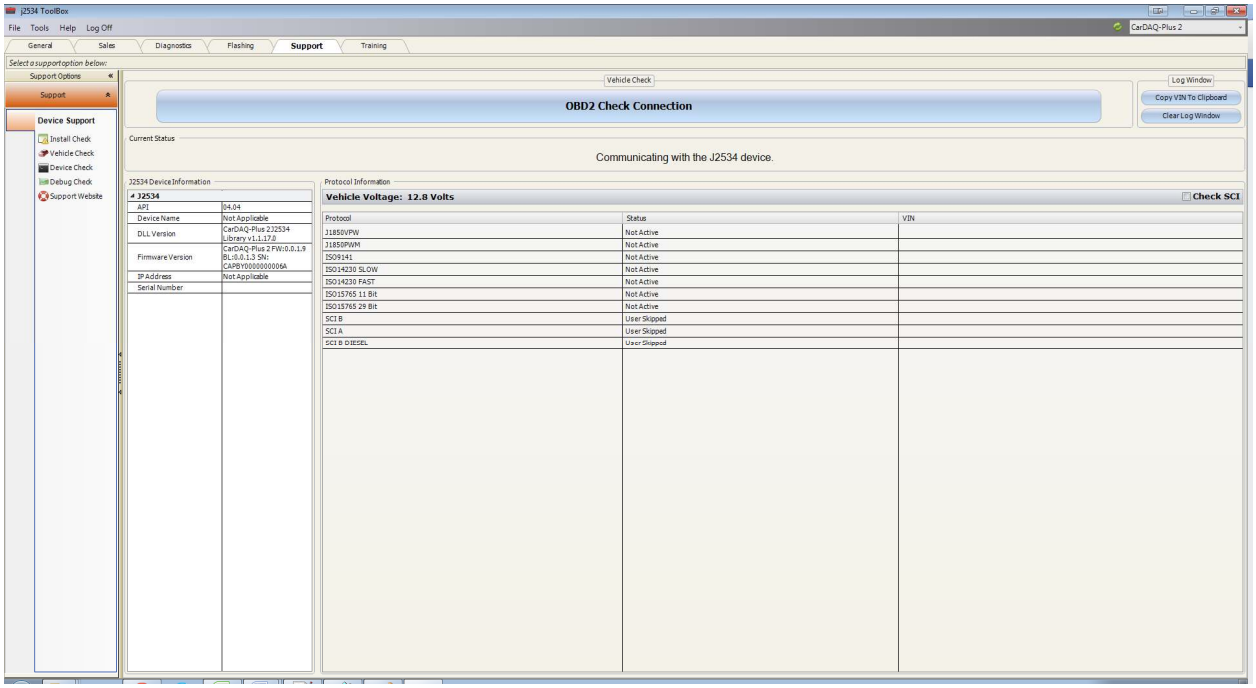
4. The Diagnostics tab has basic Diagnostic functions, as well as links, information and videos about all OEMs that currently provide Diagnostics via J2534.



5. The flashing Tab has contains the information pertaining to OEM J2534 reflashing including links, information, walkthroughs, and some helper functions.



6. The Support tab has functions to check driver installation, vehicle communication, update your device, create debug logs, and contact Technical Support.

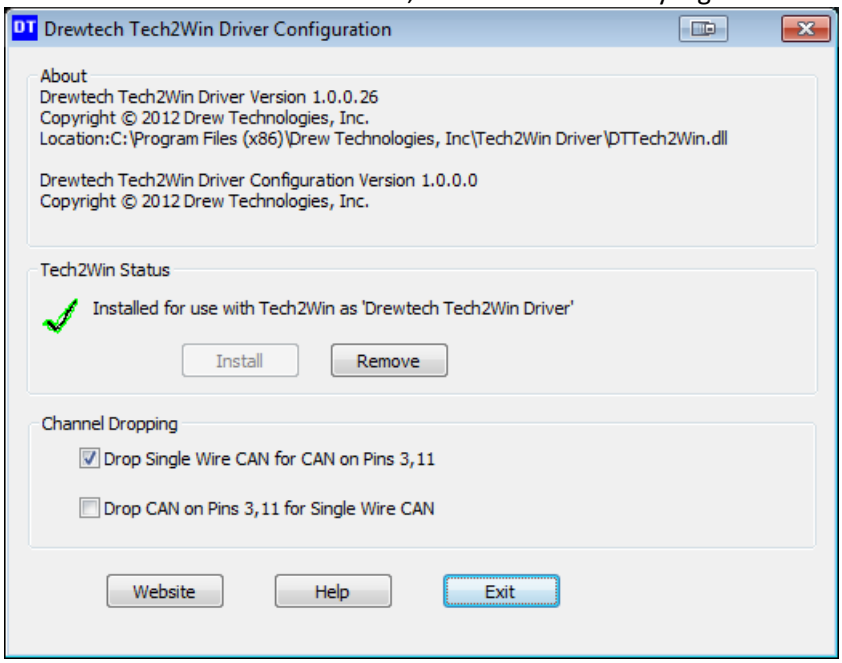


7. The Training tab includes videos of installing and using OEM J2534 applications with Drew Technologies products.

DrewTech Tech2Win Driver(MongoosePro GM II Only)

The DrewTech Tech2Win driver allows technicians to use the Mongoose Pro GM II as an interface for the Tech2Win application. If you experience concerns, the first place you can check the status and configuration by following the instructions below:

1. Go Start>All Programs>Drew Technologies, Inc.>Tech2WinDriver and open the Drewtech Tech2Win Driver Configuration application.
2. Confirm that the driver is installed, which is indicated by a green check mark.



3. If there is a red X, click Install. If Install does not work. Close the Configuration tool and right click on the start menu short cut and choose “Run as Administrator.” Then click Install once the configuration application is running.
4. Depending on which systems you are diagnosing, you will want to check the top or bottom check box under Channel dropping to communicate on either proprietary CAN channel. CAN on 6 & 14 is not affected by this.

Mongoose Driver and Firmware Updating

Drew Technologies periodically releases updates to Mongoose Pro drivers and firmware. Updates are necessary to solve specific problems and to make sure Mongoose Pro is working properly with OEM software.

If you are experiencing problems during use, always make sure you have the latest firmware and driver. The Mongoose Pro driver and firmware are located on the download portion of the Drew Technologies website here:

http://www.drewtech.com/downloads/index.html

The J2534 ToolBox 3 also can be used to update your MongoosePro as well using the Device Check function in the Support Tab.

Module Programming & Updating

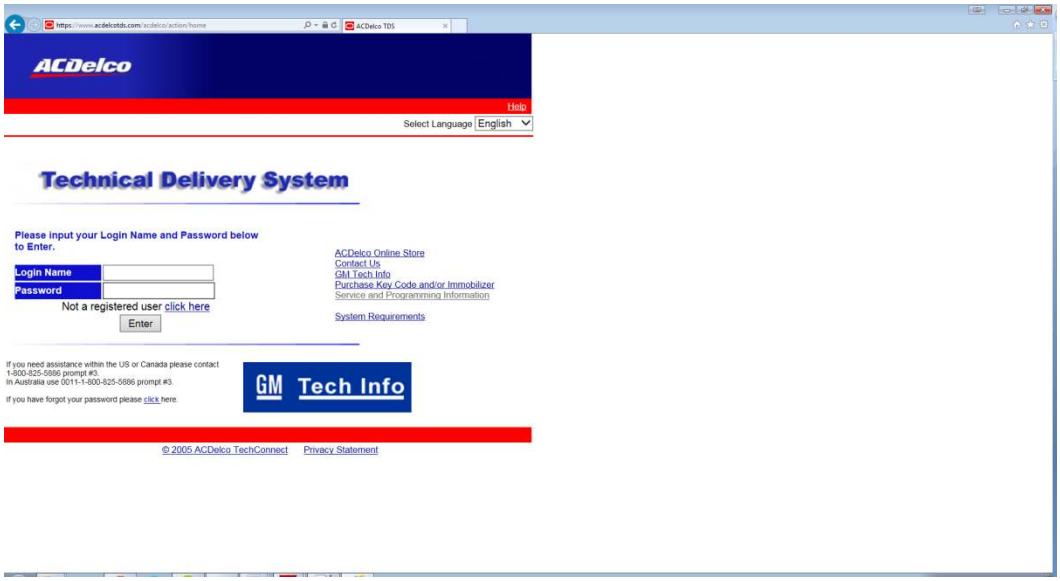
The J2534 Toolbox 3 has links to the OEM service information website as well as information pertaining to what is supported by each OEM in the Flashing Tab..

Since SAE J2534 allows multiple devices to be connected at once, you must tell the OEM software application that you are using Mongoose Pro. Each OEM software application has a different way to select the device. Please consult each software application's instructions.

Drew Technologies neither supports nor recommends doing any kind of module flashing or updating via Bluetooth connection. All programming events should be done via cabled connection from the PC to the Vehicle.

General Motors TIS website

Please go to http://www.acdelcotds.com to begin using the MongoosePro GM II with General Motors OEM applications. Programming is done using the Service programming System, or SPS, application which is a web based application. Diagnostics on Pre Global Chassis is done using Tech2Win. Diagnostics on Global Chassis and All 2014 and newer vehicles is done using GDS2.





Mongoose Pro Capabilities

Below is a table of the capabilities that the manufacturer's service subscriptions provide with your Mongoose Pro:

	Chrysler	FORD	GM II	JLR	TOYOTA (MFC)	VW
Factory Diagnostics			•	•	•	•
Re-flashing	•	•	•	•	•	•
Key re-programming		•	•	•	•	•

GM, Toyota, VW and Jaguar/Land Rover provide dealer level capability through J2534.

Maximum Vehicle Voltage per Mongoose Product

Product	Max VBatt	Min VBatt CAN	Min VBatt J1850	Min VBatt K-Line	Min VBatt SCI
MFC	30	N/A	9	6	N/A
GM II	18	N/A	9	6	N/A
Ford	30	N/A	N/A	6	N/A
JLR	16	N/A	N/A	6	N/A
Chrysler	25	N/A	9	N/A	6
VW	30	N/A	9	6	N/A
ISO/CAN	30	N/A	N/A	6	N/A

Mongoose Variants:

Currently there are several variations of the Mongoose Pro J2534 device:

- **Mongoose Pro-Chrysler**
- **Mongoose Pro FORD**
- **Mongoose Pro GM II**
- **Mongoose Pro ISO/CAN**
- **Mongoose Pro-JLR**
- **Mongoose Pro Toyota**
- **Mongoose Pro Toyota BT**
- **Mongoose Pro VW**

Mongoose Pro vehicle connector pin assignments:

Pin	Chrysler	FORD	GM II	ISO-CAN	JLR	MFC	VW
1			SW CAN			PS GND	PS GND
2	J1850+	J1850+	J1850+		J1850+	J1850+	
3			CAN 2+/K-Line		CAN 2+/K-LINE		CAN 2+
4							
5	GND	GND	GND	GND	GND	GND	GND
6	CAN+ SCI	CAN+	CAN+ K-Line	CAN+	CAN 1+	CAN+	CAN+
7	SCI	K-Line	K-Line	K-Line	K-LINE	K-Line	K-Line
8			K -Line		ROSCO		
9	SCI		UART/ K-Line			PS GND	PS GND
10		J1850-			J1850-		
11			CAN 2-		CAN 2-		CAN 2-
12	SCI		CAN3+ K-Line		PS GND	PS 5V	PS 5V
13		FEPS	CAN 3-/K-Line		FEPS		
14	CAN-/SCI	CAN-	CAN-	CAN-	CAN 1-	CAN-	CAN-
15	L-Line/ PS GND	L-Line / PS GND	L-Line	L-Line / PS Gnd	L-LINE PS GND	L-Line / PS Gnd	L-Line
16	VBatt	VBatt	VBatt	VBatt	VBatt	VBatt	VBatt

- PS GND = Pin Switched to Ground
- PS 5V = Pin switched to +5V

Troubleshooting and Support

The Mongoose Pro gets power from your computer's USB port. LEDs inside the OBDII shell indicate the status of the Mongoose Pro.

Flashing green LED, typically means that Windows has found the device and the drivers are installed correctly. If the green light is flashing, but you cannot connect to Mongoose Pro, contact technical support.

Continous red LED, usually means that the drivers have not been installed, or have not been installed correctly. Try reinstalling the drivers.

No LED lights when connected to a PC, may indicate a failure of the Mongoose Pro device. Try connecting your Mongoose Pro to another computer. If no LEDs light up on Mongoose Pro during this second test, then contact technical support.

If these issues have been addressed and verified, and you are still having trouble, email support@drewtech.com

If all else fails...

Drew Tech is available Monday through Friday during eastern-time business hours, to answer technical support questions. Please email support@drewtech.com if you need assistance.

If technical support finds it necessary to return the Mongoose Pro for repair, you will be asked for your contact information and provided with a Return Merchandise Authorization number (RMA#) that Drew Technologies will use to track the unit through the repair department back to you. Please write this number on the outside of your shipping box so it can be routed to the correct department. If the necessary repair is not covered by Drew Technologies' warranty, you will be contacted for payment arrangements.

If your Mongoose Pro was purchased from an OEM equipment supplier, you may want contact your supplier first for warranty and support claims.

Other Drew Tech Products

Drew Technologies has several products available for data acquisition, diagnostics, development, testing, and reprogramming for modern vehicles. Visit www.drewtech.com for more information



CarDAQ-Plus™ - Fully SAE J2534 compliant. Ethernet and USB connectivity to a computer, a built-in operating system for running internal programs, protocol support for all modern vehicles, and six analog inputs.



Mongoose Pro™ - DrewTech's family of low-cost, high-performance PassThru (SAE J2534) vehicle interfaces. Connect any laptop with USB 2.0 directly to the OBD-II (SAE J1962) connector with full-speed performance.



CarDAQ-M™ - The CarDAQ-M is Drew Technologies modular J2534 interface that can be field upgradeable for future OBD protocols requirements.



IMclean™ - OBD2 emissions test tool. Certified for use in California and other states.



IMready™ - Low cost emissions tester. Plug into a vehicle and get a simple green, yellow, red indication for pass/wait/fail. Runs the whole emission test