

The  
**CarDAQ-Plus**  
Advantage



Presented by:



## **Overview**

Although ECU Flash programming has been around for over a decade, only recently has it become accessible, popular, and necessary for independent repair shops to use J2534 ECU Flash programming tools. After several years in development, the J2534 standard was published in 2002 and legislated by the EPA and CARB. The legislation required all automakers to offer software that would allow aftermarket users with J2534 tools to flash emissions-related ECUs. Since that legislation, several different companies have developed and marketed J2534 tools. This document will outline the key advantages of the Drew Tech CarDAQ-Plus over competing devices.

## **Product History**

The CarDAQ-Plus is a descendant of the original CarDAQ. The original CarDAQ was the first J2534 tool to ever be produced, and was offered to the public in 1999. Since that time the product has gone thru several improvements leading to the CarDAQ-Plus. The CarDAQ-Plus was designed for use by engineering and manufacturing groups at the automakers, with features and durability that are uncommon in other J2534 tools sold to the aftermarket.

Drew Technologies is also active with the SAE J2534 standards and has participated in development of the original and current specifications. That participation and commitment to J2534 has led to better products.

## **Unique Features to J2534**

All J2534 tools are designed to meet the minimum standards of the J2534-1 specification for reflashing ECUs. This specification states the requirements for reflashing emissions-only related ECUs. Because the CarDAQ-Plus was designed for use at the automakers, it required many protocols and features that are not required for J2534-1 tools. These additional protocols will benefit aftermarket customers in two ways

- 1) It will allow the user to reprogram more ECUs in the vehicle. Many non-emissions modules use special or proprietary protocols that are not specified in J2534-1, but are supported with the CarDAQ-Plus.
- 2) The extra features in the CarDAQ-Plus today may not be necessary for servicing current model vehicles, but could be required for future vehicles. The CarDAQ-Plus is used by automakers for new vehicle development, and those customers require features on the CarDAQ-Plus that the aftermarket will not see in production vehicles for years.

## **Connection Options**

ECU reprogramming requires the user to connect a PC or laptop to the J2534 tool and the car. In some cases, it is more convenient to have the PC a significant distance from the vehicle. USB is great for plug-and-play has a distance limitation of 16 feet. The automakers also have distance issues at the manufacturing plant, so the CarDAQ-Plus came equipped with Ethernet. Ethernet allows the user to span a distance of up to 300 feet from the PC to the vehicle. In addition to Ethernet, the CarDAQ-Plus also has USB and optional 802.11 Wireless. No other J2534 tool offers so many connection options.

## **Performance**

A common misconception is that all J2534 tools perform the same. A wide variety of factors ranging from the PC interface to the processor and memory on the J2534 tool can effect how fast a reprogramming procedure takes as well as the overall reliability of the process. The slower tools have a higher likelihood of failing to reprogram a newer vehicle that has high-speed ECUs.

CarDAQ was designed to accommodate vehicles that are still in development at the automakers, and has a very advanced architecture. It has more processing power and memory than any other J2534 tool available to the aftermarket. In independent tests conducted by trainers, the CarDAQ-Plus has proven that no other J2534 tool match it's performance.

## **Reliability and Validation**

Although J2534-1 is a published standard, not all tools and automaker programs work the same. Drew Technologies has been selling J2534 tools for over seven years, and has learned the best way to assure reliability is to work directly with the automakers and continually test. Testing is an important measure to prevent problems at the user level. The more testing that can be done, the less likely a user is to experience any problems with the tool.

Each automaker has at least one CarDAQ to test with and validate against. Every automaker that offers ECU reprogramming to the aftermarket either recommends or has tested a CarDAQ. No other tool can claim this. The user needs to know that they can reflash a car when it comes in for service, and we can say with confidence that the CarDAQ-Plus will work with all J2534 compliant automakers.

Most competitors also have a CarDAQ to test their own tool against. The CarDAQ has been called the "golden standard" by automakers, trainers, and competitors alike.

## **Support**

Drew Technologies offer free technical support with all of its products. If a customer has a pre-sales, installation, or product use question all they have to do is contact Drew Tech's support line. Support representatives have easy access to engineers within Drew Tech and the automakers. In many cases, incidents can be escalated back to the automaker and receive a response within minutes. Drew Tech's location in Ann Arbor Michigan allows locally connecting with engineering groups from many of the automakers.

## **Summary**

The CarDAQ-Plus from Drew Technologies is the most featured, accepted, and tested J2534 product on the market. It is competitively priced for its features, and the users highly value the usability and reliability of the product.