

CARDAQ-PLUS 2[®]

User Manual



www.DrewTech.com

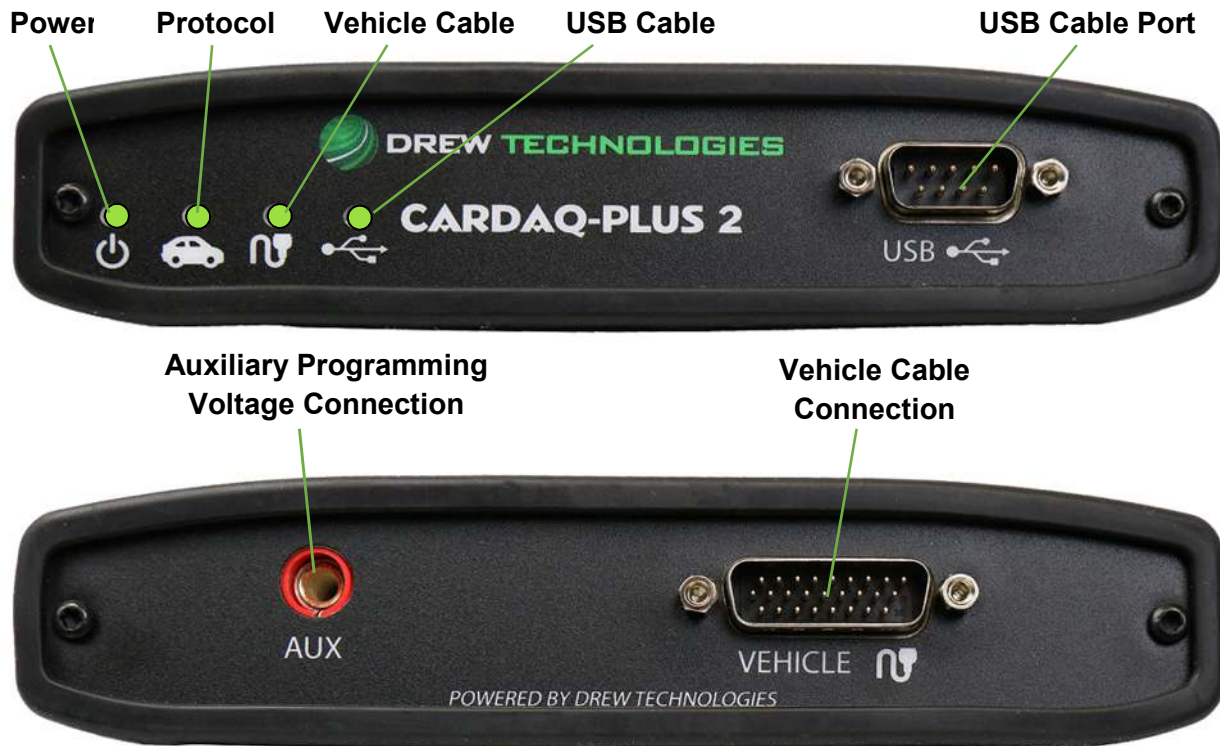
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INTRODUCTION

Thank you for choosing Drew Technologies! CarDAQ-Plus 2® will allow you to re-flash/program modern vehicle controllers specified by the OEM as well as perform dealer level diagnostics with select OEM applications. More information for each OEM can also be found in the J2534 Toolbox 3® application. This user manual covers the initial setup, features, and common questions regarding the CarDAQ-Plus 2® device and is available at DrewTech.com.

GETTING TO KNOW THE CarDAQ-Plus 2®



LED Status lights:

	Blinking Red	Solid Red	Blinking Green	Solid Green
Power	Firmware error-Call DrewTech Support	-	Device startup in progress	Device is functioning
Protocol Connection	-	-	Connected & communicating with vehicle	Connected to vehicle
Vehicle Cable	-	Cable not connected or cable error	-	Cable OK/vehicle power (communication)
USB Cable	-	Install issue - Call DrewTech Support	-	Connected to PC

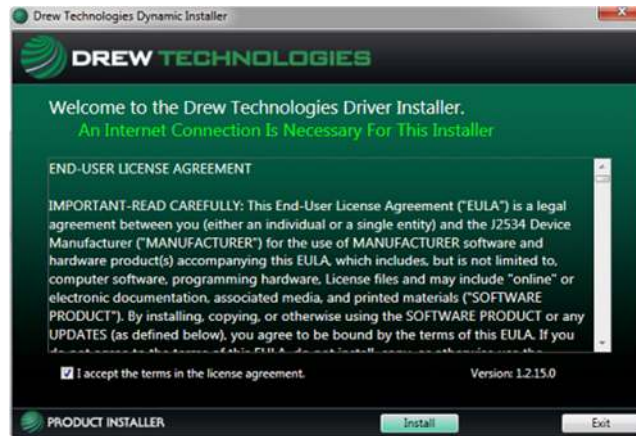
INSTALLATION & DEVICE ACTIVATION

1. Click this link to go to the DrewTech downloads page:

DrewTech.com/downloads

2. Locate and click on the "**CarDAQ-PLUS 2®Set-up**" link

3. Run the installation once the software has downloaded to your PC. Upon encountering this screen, read the end-user license agreement, and check the box next to "**I accept...**" then click "**Install**"



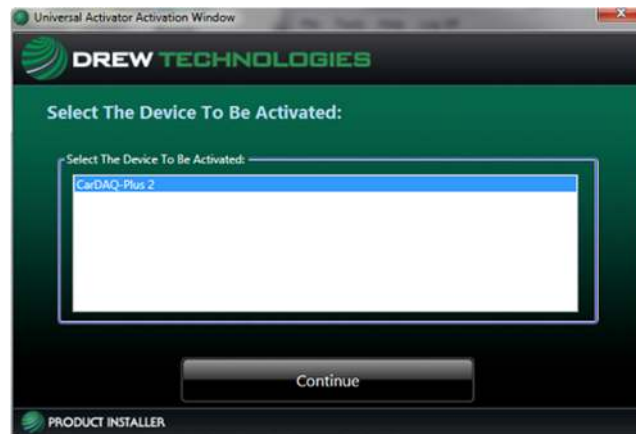
4. Once the setup application has finished, connect the USB cable to your CarDAQ-Plus 2®device and to the PC. Look for the message window in the lower, right-hand corner of the screen that indicates that the drivers are being installed and listen for the familiar Windows driver installation chime. Upon successful driver installation, click "**Activate My Device**"



5. The Device Activator application will refresh. Click **"Activate My Device!"**



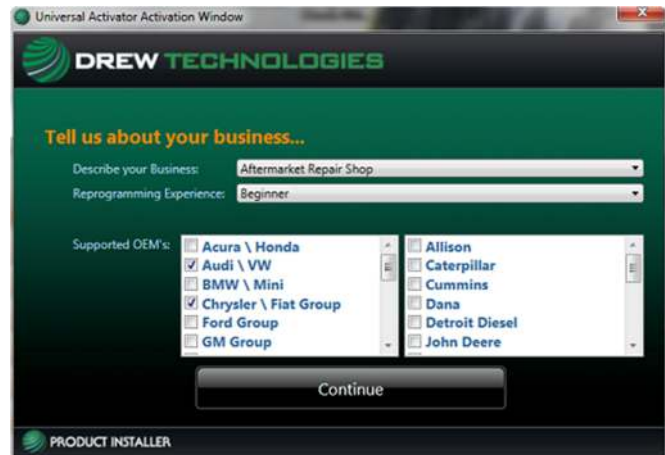
6. Select the device you want to activate and click **"Continue"**



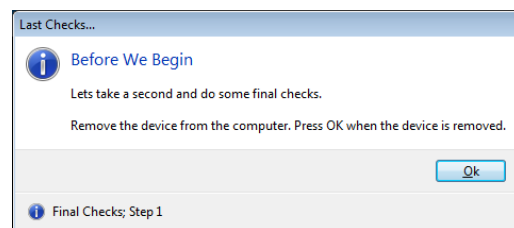
7. Fill in all applicable information and click **"Continue"**



8. Select your type of business and level of programming experience, then select the OEMs you are planning to support. Click **"Continue"**



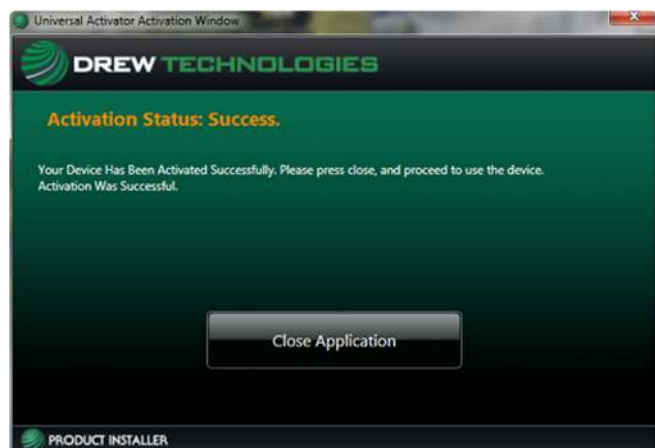
9. (a) For final check of the interface, unplug the USB cable for the CarDAQ-Plus 2[®] device from your PC, and click **"Ok"**



- (b) Then plug the USB cable for the CarDAQ-Plus 2[®] device back into your PC, and click **"Ok"**



10. Once product activation is performed successfully, you can also install the software on other PCs without having to perform the activation procedure again. Click **"Close Application"**



J2534 Toolbox 3

The J2534 Toolbox 3 application is automatically installed on the PC when the pass-thru driver is installed and will place an icon on the desktop. The purpose of J2534 Toolbox 3 is to provide current, relative information and assistance to the user. The information is provided via various walk-through documents, OEM documentation, web-links, quick-links, videos, basic diagnostic functions, connection verification, and more. J2534 Toolbox 3 should be referred to regularly as information is updated continually.

1. Locate and double-click the "**J2534 Toolbox**" icon on the Desktop



2. Select your interface from the dropdown menu and click "**Auto Login**"



3. **General** tab: contains important news, current OEM concerns, training broadcast invitations, and current information you should review



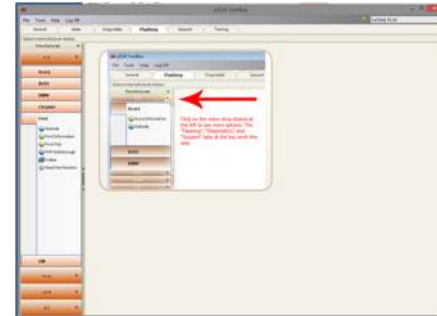
4. **Sales** tab: connects you to the DrewTech website



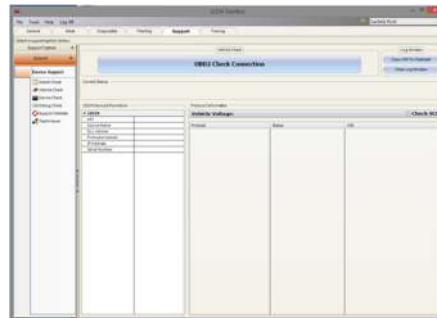
5. **Diagnostics** tab: contains relative links, some diagnostic functions, information and videos about flashing, and OEMs that currently provide diagnostics via J2534



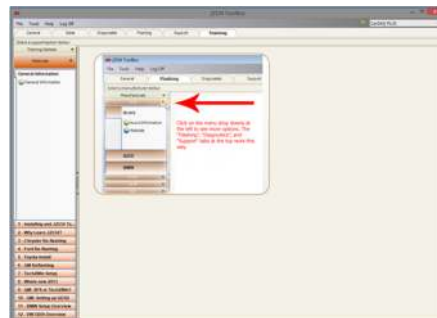
6. **Flashing** tab: contains the information pertaining to OEM J2534 flashing including links, information, walkthroughs, and some helper functions



7. **Support** tab: contains functions to check driver installation, vehicle communication, updating the device, create debug logs, contacting Support, and other resources



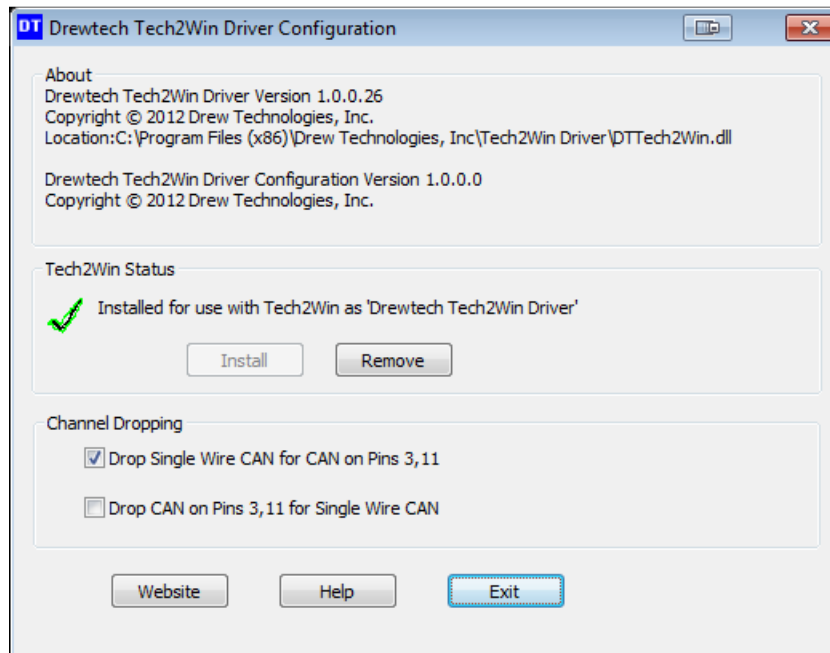
8. **Training** tab: contains general information, regarding installation and using OEM J2534 application videos with Drew Technologies products



DREWTECH - Tech2Win DRIVER

DrewTech's Tech2Win driver allows the use of the CarDAQ-Plus 2® device as the interface using the Tech2Win application. If communication concerns are encountered, first check the DrewTech Tech2Win driver status and configuration:

1. Go to: 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. Note: If there is a red X, click "Install"

Troubleshooting:

- If the "Install" does not work, click on "Exit", then right-click on the Start menu short cut and choose "Run as Administrator." Reopen the "DrewTech Tech2Win Driver Configuration" application and click "Install"
- Channel Dropping: Depending on which vehicle systems are being diagnosed, selecting "Drop Single..." or "Drop CAN..." options may need to be changed to communicate properly. CAN on 6 & 14 is not affected by this

Blue Tooth Setup

If you have ordered a Bluetooth equipped CarDAQ Plus 2[®], you will have an antenna and Bluetooth USB dongle included. Drew Technologies supports Bluetooth Diagnostics, but will not provide support for module programming done via Bluetooth. To setup your CarDAQ Plus 2[®] to communicate with your PC, you will need to perform several steps listed below:

1. Thread the antenna onto the gold stud labeled “Wireless” on the back faceplate of the CarDAQ Plus 2[®] between the “Aux” and “Vehicle Cable” ports.
2. Insert the USB Bluetooth Dongle into a known good USB port on your PC and allow Windows to install the drivers for it.
3. Plug the vehicle cable into your CarDAQ Plus 2 and a vehicle.
4. The Power LED and Car LED will be lit up Solid green. The Wireless LED is will be flashing a different shade of green.
5. For Windows 10, skip to step 10. Windows 7, Once the driver installation reports complete, Right click the BlueTooth icon  in your system tray in the lower right corner.
6. Click Add a device.
7. Click “CarDAQ-Plus2-#####” where the ##### corresponds to the serial number on the bottom of the case.
8. Click next.
9. Enter “2534” if prompted for the PIN code.
10. Windows 10. Once the driver installation reports complete, Right click the BlueTooth icon  in your system tray in the lower right corner.
11. Click Add a Bluetooth Device.
12. Wait until you see “CarDAQ-Plus2-#####” where ##### corresponds to the serial number on the bottom of the case.
13. Click Pair.
14. Enter “2534” if prompted for a PIN code.

PRODUCT SPECIFICATIONS

Protocols Supported:

- CAN Bus (capable of ISO 15765, GMLAN, J1939, and ISO14229)
- 2nd CAN (Dual or Single Wire)
- Ford SCP (J1850PWM)
- GM Class2 (J1850VPW)
- KWP2000 (ISO9141/14230)
- Chrysler SCI (J2610)
- Compliant to [SAE J2534](#) (Feb 2002) and [SAE J2534-1](#)(Dec 2004)
- Compliant to [ISO 22900-1](#) MVCI physical layer
- Programming voltage on J1962 pin 6, 9, 11, 12, 13, 14, or Aux
- Ground pin 9

Operating Systems Supported:

- Windows 7® 32-bit and 64-bit Versions
- Windows 8® 32-bit and 64-bit Versions
- Windows 8.1® 32-bit and 64-bit Versions
- Windows 10® 32-bit and 64-bit Versions

Physical Specifications/Tolerances:

Name	Value
Dimensions (approximate)	6.5" x 6" x 1.5"
InputVoltageRange	7VDC to 27VDC
Supply Current	220mA @ 7VDC 175mA @12VDC
Operating Temperature	0°C to +60°C ambient
Storage Temperature	-20°C to +85°C ambient
PC Communications Type	USB version 1.1 or higher

IMPORTANT NOTES

CarDAQ-Plus 2[®] has 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 DrewTech's testing and the experiences of thousands of CarDAQ-Plus 2[®] 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 CarDAQ-Plus 2[®]:

- Pull off the roadway immediately or as soon as it is safe to do so.
- Disconnect the CarDAQ-Plus 2[®] device from the OBDII port.
- Consult a licensed mechanic or automobile service center.

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LIMITED WARRANTY

Products are warranted to be free from defects in materials or workmanship for one year from the date of purchase*. Within this period, Drew Technologies will, at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not apply to: (i) cosmetic damage, such as scratches, nicks and dents; (ii) damage caused by accident, abuse, misuse, water, flood, fire, or other acts of nature or external causes; (iii) damage caused by service performed by anyone who is not an authorized service provider of Drew Technologies; or (iv) damage to a product that has been connected to power and/or data cables that are not supplied by Drew Technologies.

Drew Technologies retains the exclusive right to repair or replace (with a new or newly overhauled replacement product) the device or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

To obtain warranty service, contact Drew Technologies' Support for shipping instructions and a RMA number. Securely pack the device and the completed RMA form, which is required for warranty repairs. Write the RMA number clearly on the outside of the package. Send the device, with freight charges prepaid, to Drew Technologies.

** Detachable cables for all products have a 90-day warranty. IMclean and IMclean Bluetooth have a 3-year warranty. DrewLinQ has a 2-year warranty.*

FCC STATEMENT

The wireless module has been tested and found to comply with the FCC part 15 and ICRSS-210 rules. These limits are designed to provide reasonable protection against harmful interference in approved installations. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, this device may cause harmful interference to radio communications. However, there is no guarantee that interference may not occur in a particular installation. This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Modifications or changes to this equipment not expressly approved by the party responsible for compliance may render void the user's authority to operate this equipment.

- Modular Approval, FCC and IC
- FCC ID: X3ZBTMOD3
- IC: 8828A-MOD3

In accordance with FCC part 15, the SPT2632C1A.AT2 is listed above as a modular transmitter device.

COPYRIGHT INFORMATION

Copyright:

- All material herein is Copyrighted ©1996 - 2017 Drew Technologies, Inc.
- CarDAQ-Plus 2 software, hardware, and firmware are also copyrighted
- Users are given permission to copy any part of this manual provided that the copy is used with the DrewLinQ product and the "Copyright © 2017 Drew Technologies, Inc ." statement remain on all copies
- "DrewTech" is synonymous with "Drew Technologies, Inc." and is used in this manual
- The "Drew Technologies" logo is a registered trademark of Drew Technologies, Inc.

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- Warranties for DrewTech products and services are set forth in the express written warranty statements accompanying the product. Nothing herein should be construed as constituting any additional warranty
- DrewTech assumes no responsibility for any damage resulting from the use, misuse, or negligent use of the hardware or any software application used with CarDAQ-Plus 2

Acknowledgements:

- Microsoft™ and the various versions of Windows™ are U.S. registered trademarks of Microsoft Corporation
- Most OEM software applications are registered trademarks of their respective corporations and also carry copyright notices

DREWTECH SUPPORT

For any technical support, please contact Drew Technologies Support by email at support@drewtech.com or call toll-free:877.888.2534, option 3.

Support hours are 8:30am - 5:30pm EST Monday - Friday, excluding holidays.

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