



CARDAQ3

User Guide





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Introduction

Thank you for choosing **Drew Technologies! CarDAQ-Plus 3**° will allow you to re-flash/program modern vehicle controllers specified by the OEM as well as perform dealer level diagnostics with 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 3**° device and is available at **DrewTech.com**.

Getting to Know the CarDAQ-Plus 3®



LED Status Lights

	RED		GREEN	
	BLINKING	SOLID	BLINKING	SOLID
POWER	Firmware error: Call DrewTech Support	-	Device startup in progress	Device is functioning
PROTOCOL CONNECTION	-	-	Connected and communicating with vehicle	Connected to vehicle
VEHICLE CABLE	-	Cable not connected or cable error	-	Cable OK / Vehicle power (Communication)
USB CABLE	-	Installation Issue: Call DrewTech Support	-	Connected to PC





INSTALLATION & DEVICE ACTIVATION

Windows 10 users:

- 1. It is important that you connect the device to your PC first.
 - a. Initial low-level drivers will be automatically downloaded and installed as Windows Update recognizes your device.
- Leave your device connected to your PC and proceed to Step 1 of the Installation & Device Activation process.
- Click this link to go to the **DrewTech Downloads** page:

DrewTech.com/downloads

- 2. Locate and click on the CarDAQ-Plus 3[®] 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. Check the box to accept the license agreement terms and then click Install.







4. Once the setup application has finished, connect the USB cable to your CarDAQ-Plus 3® 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! to continue.



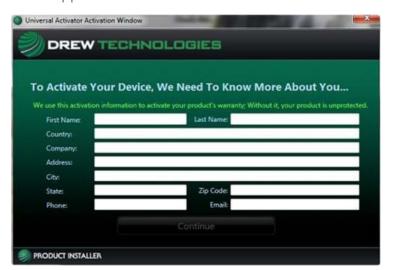




6. Select the device you want to activate and click **Continue**.



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





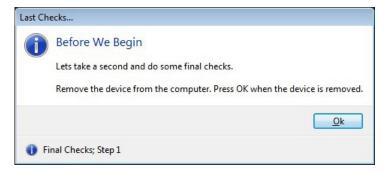


8. Select your type of business and level of programming experience, then select the OEMs you are planning to support.

Click Continue.



9a. For final check of the interface, unplug the USB cable for the CarDAQ-Plus 3® device from your PC, and click Ok.



9b. Then plug the USB cable for the **CarDAQ-Plus 3**® device back into your PC, and click **Ok**.

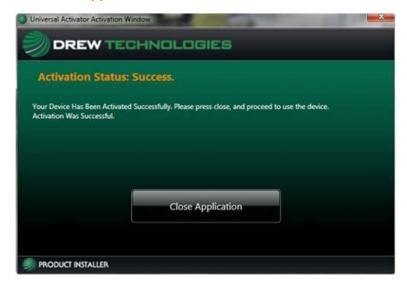






10. Once product activation is performed successfully, you can also install the software on other PC's without having to perform the activation procedure again.

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. Double-click the J2534 Toolbox icon located on your desktop.







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



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



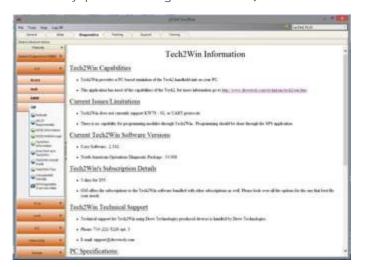




4. The Sales tab connects you to the DrewTech website.



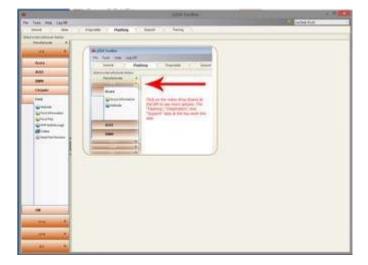
5. The **Diagnostics** tab contains relative links, some diagnostic functions, information and videos about flashing, and OEMs that currently provide diagnostics via J2534.







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



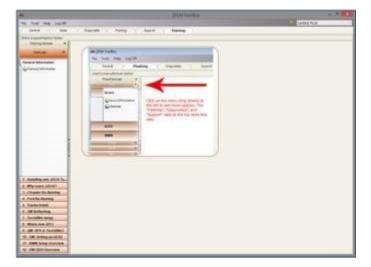
7. The Support tab contains functions to check driver installation, vehicle communication, updating the device, create debug logs, contacting DrewTech Support, and other resources.







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



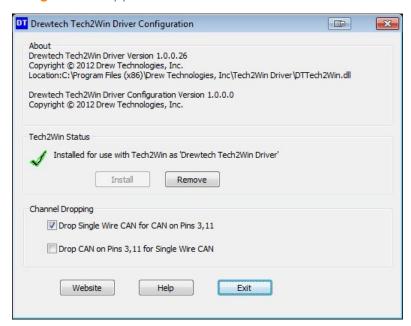




DREWTECH - Tech2Win DRIVER

DrewTech's Tech2Win driver allows the use of the **CarDAQ-Plus 3®** device as the interface when using the **Tech2Win** application. If communication concerns are encountered, first check the **DrewTech Tech2Win** driver status and configuration:

 Navigate to the Tech2Win Driver Configuration application by clicking: 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 \checkmark .

If there is a red *, click Install.





Troubleshooting

Installation Issues:

If the **Install** does not work, click **Exit**. Then right-click on the **Start Menu** shortcut and choose **Run as Administrator**. Re-open 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.

BLUETOOTH SETUP

If you have ordered a Bluetooth-equipped **CarDAQ-Plus 3**°, 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 set up your **CarDAQ-Plus 3**° to communicate with your PC, you will need to perform several steps listed below:

- Thread the antenna onto the gold stud labeled Wireless on the back faceplate of the CarDAQ-Plus 3® 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 3**® and the vehicle you wish to diagnose.
- 4. The **Power** LED and **Car** LED will be lit up solid **green**.

The Wireless LED will flash a different shade of green.

5. If you are a Windows 10 user, skip to Step 10.

For Windows 7 users, when the driver installation has completed, right-click the **Bluetooth** icon **3** in your **System Tray** located in the lower right corner.

6. Click Add a Device.





- 7. Click CarDAQ-Plus 3°-#####, 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.
- For Windows 10 users, when the driver installation has completed, right-click the Bluetooth icon in your System Tray located in the lower right corner.
- 11. Click Add a Bluetooth Device.
- 12. Wait until you see CarDAQ-Plus 3°-#####, where the ##### corresponds to the serial number on the bottom of the case.
- 13. Click Pair.
- **14.** Enter **2534** if prompted for the PIN code.

PRODUCT SPECIFICATIONS

Protocols Supported:

- * CAN Bus (can fd, ISO 15765, GMLAN, J1939, & ISO14229)
- 4 CAN channels (FD CAN, DUAL WIRE)
- Single-wire CAN support
- Ford SCP (11850PWM)
- GM Class2 (J1850VPW)
- KWP2000 (IS09141/14230)
- 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/64-BIT)
- * Windows 8[®] (32-BIT/64-BIT)
- * Windows 8.1® (32-BIT/64-BIT)
- * Windows 10[®] (32-BIT/64-BIT)

Physical Specifications/Tolerances:

NAME	VALUE		
Dimensions (approximate)	6.5" × 6" × 1.5"		
Input Voltage Range	7VDC to 36VDC		
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 3® 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.

Based on our rigorous testing and thousands of end-user experiences, we deem the **CarDAQ-Plus 3**° to be safe and reliable; but there is an inherent risk 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 3**°:

- Immediately pull over to the side of the road as soon as it is safe to do so.
- Disconnect the CarDAQ-Plus 3® device from the OBDII port.
- Consult a licensed mechanic or an automobile service center.





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.





FCC STATEMENT

The wireless module has been tested and found to comply with the FCC part 15 and ICRSS210 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: X3ZBTM0D3
- IC: 8828A-MOD3

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





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Copyright

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 © 1996–2018 Drew Technologies, Inc.
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- "DrewTech" is synonymous with "Drew Technologies, Inc." and is used in this manual.



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- Warranties for CarDAQ-Plus 3® 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 3[®].

Acknowledgments

- * Microsoft[™] and all 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

Our knowledgeable support representatives are eager to provide solutions to your support needs. Email us at support@drewtech.com or call us toll-free at (877) 888-2534, option 3.

> **Support Hours** 8:30am-5:30pm ET | Monday-Friday (EXCLUDES HOLIDAYS)



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