



# User Guide

**MONGOOSEPRO** User Guide



# Contents

Please Note
Copyright & Trademarks 4
Limited Warranty 4
FCC Statement
Introduction
Getting to know the MongoosePro <sup>®</sup> 6
Driver Installation
J2534 Toolbox 3
Maximum Voltage Per MongoosePro® Product17
MongoosePro® Vehicle Connector Pin Assignments18
Bluetooth Setup
Technical Support 20
Environmentals



**MONGOOSEPRO** User Guide

## **Please Note**

**MongoosePro®** 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 **MongoosePro®** 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 **MongoosePro®**:

- \* Pull off the roadway immediately or as soon as it is safe to do so.
- \* Disconnect the MongoosePro® 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–Friday, 9:00am–5:30pm 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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## Copyright & Trademarks

Copyright 1999–2018 **Drew Technologies, Inc.**, All Rights Reserved. **MongoosePro®**, **CarDAQ®**, **ScanDAQ®**, **IMclean®**, **IMready®** and **J2534 ToolBox** are registered trademarks of **Drew Technologies, Inc.** All other trademarks and brand names are the property of their respective owners.

## **Limited Warranty**

**Drew Technologies, Inc.** guarantees that every **MongoosePro®** 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:

#### Drew Technologies, Inc.

3915 Research Park Dr Suite A10 Ann Arbor, MI 48108

**MONGOOSEPRO** User Gu

## **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 and, if not installed and used in accordance with the instructions, 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 received, including interference that may cause undesired operation. Modifications or changes to this equipment not expressly approved by the part 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.

**MONGOOSEPRO** User Guide



## Introduction

Thank you for choosing the **MongoosePro**<sup>®</sup>! The **MongoosePro**<sup>®</sup> will allow you to re-flash modern vehicle controllers to stock as well as perform dealer level diagnostics on select manufacturer's vehicles. The **MongoosePro**<sup>®</sup> 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 OBDII connector shell, making it a compact and rugged vehicle communications tool. The **MongoosePro**<sup>®</sup> is powered by the USB connector, so there's no need to re-start the **MongoosePro**<sup>®</sup> if it is unplugged from a vehicle.

## Getting to know the MongoosePro®



### **MONGOSEPRO** User Guid

## **Driver Installation**

- Go to or click this link to go to the **Drewtech** downloads page: http://drewtech.com/downloads/index.html
- Click the Set-up link for the respective MongoosePro<sup>®</sup> to be installed.
- **3.** Click **Run** to install the software once the software has downloaded to your PC.
- Upon receiving this screen, read, check the box next to I Accept then click Install.

Drew Technologies Dynamic Installer	
DREW TECHNOLOGIES	
Welcome to the Drew Technologies Drive	er Installer.
An Internet Connection Is Necessary Fo	or This Installer
END-USER LICENSE AGREEMENT	*
IMPORTANT-READ CAREFULLY: This End-User License agreement between you (either an individual or a sing Manufacturer ("MANUFACTURER") for the use of MAN hardware product(s) accompanying this EULA, which i computer software, programming hardware, License f electronic documentation, associated media, and prin PRODUCT"). By installing, copying, or otherwise using UPDATES (as defined below), you agree to be bound I	gle entity) and the J2534 Device NUFACTURER software and includes, but is not limited to, files and may include "online" or ited materials ("SOFTWARE the SOFTWARE PRODUCT or any
I accept the terms in the license agreement.	Version: 1.2.15.0
PRODUCT INSTALLER	Install



**MONGOOSEPRO** User Guid

#### 5. Installing...



6. Once the setup application has finished, connect the MongoosePro® to the PC. Once you have gotten a message in the lower, right-hand corner of your screen that the device has been installed, click on Activate My Device.

Ø Drew Technologies Dynamic Installer	X
Please plug in your device and wait for windows to inform you that your device is ready to be used This Drew Technologies product requires activation to function; Please press the button below to quickly activate your product (Internet Required).	I.
Activate My Device	
SPRODUCT INSTALLER	Exit



7. The Device Activator application will reopen after clicking Activate My Device. Click the Activate My Device! button.

Universal Activator Activation Window				
Welcome to the Universal Activator				
Your device requires activation to ensure continued award winning support, best in class quality, and no cost critical maintenance updates. Activating your device does not take long and can be done quickly over the internet.				
Press the button below to begin. Please ensure you have an active internet connection.				
Activate My Device!				
PRODUCT INSTALLER				

 Select the interface device you want to activate and click Continue.

Universal Activator Activation Window
Select The Device To Be Activated:
Select The Device To Be Activated:
CarDAQ-Plus 2
MongoosePro MFC2
PassThruPro 3
Continue
DRODUCT INSTALLER



**MONGOOSEPRO** User Gui

**9.** Enter the applicable information and click **Continue**.

Universal Activator Activation Windo	w	x			
To Activate Your Dev	vice, We Need To Know More About You				
We use this activation information	n to activate your product's warranty; Without it, your product is un	protected.			
First Name:	Last Name:				
Country:					
Company:					
Address:					
City:					
State:	Zip Code:				
Phone:	Email:				
	Continue				
SPRODUCT INSTALLER					

 Select your type of business and level of programming experience, then select the OEM's you are planning to support. Click Continue.

	INOLOGIE	s		
Tell us about your b	usiness			
Describe your Business:	Aftermarket Repair Sho	p		
Reprogramming Experience:	Beginner			
♥ Aud BMV ♥ Chry ■ Ford	ra \ Honda i \ VW W \ Mini vsler \ Fiat Group I Group Group	+ III +	Allison     Caterpillar     Cummins     Dana     Detroit Diesel     John Deere	*
	Contin	ue		



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11. Leave the MongoosePro® disconnected from the PC.



12. Plug your MongoosePro<sup>®</sup> to the PC, and click OK.

Last Che	ecks	
i	Before We Begin Plug in the device to the computer. Press OK when ready.	
	<u>k</u>	
Final Checks; Step 2		





**13.** This is the screen you will see once your device activation is successful.

Universal Activator Activation Window
Activation Status: Success.
Your Device Has Been Activated Successfully. Please press close, and proceed to use the device. Activation Was Successful.
Close Application

**NOTE:** Once product activation is performed successfully, you can also install the device on other PC's and not have to perform the activation procedure again.

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## **MONGOOSEPRO** User Guid

## J2534 Toolbox 3

The purpose of the **J2534 Toolbox** is to provide current, relative information and assistance to the user. The information is provided via various walk-through documents, OEM documentation, weblinks, quick-links, videos, basic diagnostic functions, connection verification and much more. The **J2534 Toolbox** should be referred to regularly as information is updated continually.

 Locate and double-click the J2534 Toolbox Icon on the desktop



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





# a. GENERAL TAB Contains important news, current OEM concerns, training broadcast invitations and current information you should review.

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**b.** SALES TAB Connects you to the **DrewTech** website.





**c. DIAGNOSTIC TAB** Contains relative links, some diagnostic functions, information and videos about flashing and OEM's that currently provide diagnostics via J2534.

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-	j2534 ToolBox	- = ×
File Tools Help Log Off	CHOAQ PLUS	
General Sales	Diagnostics / Rishing / Support / Training /	
Select o feature below Features		
Generic Diagnostics (0062)	Tech2Win Information	î
A-G A	Tech2Win Capabilities	
Acura	<ul> <li>Tech2Win provides a PC based emulation of the Tech2 handheld unit on your PC.</li> </ul>	
Audi	This application has most of the capabilities of the Tech2, for more information go to <a href="http://www.drewtech.com/technician/tech2win.htm">http://www.drewtech.com/technician/tech2win.htm</a>	
DMW	Current Issues/Limitations	
Cot Cot Cot Cot Cot Cot Cot Cot	Tech2Win does not currently support KW78 - 92, or UART protocols.     There is no capability for programming moduler through Tech2Win. Programming should be done through the SPS application. <u>Current Tech2Win Software Versions</u> Core Software: 2.102     North American Operations Diagnostic Package: 33.008 <u>Tech2Win's Subscription Details</u> 3 days for 555.     Old offers the unberliptions to the Tech2Win software bundled with other subscriptions as well. Please lock over all the options for the one that be your model.	est filts
HLA W	Tech2Win Technical Support	
LeN ¥	Technical support for Tech2Win using Drew Technologies produced devices is handled by Drew Technologies.	
9Z ¥	• Phone: 734-222-5228 opt 3	
Heavy Duty ¥	• E-mail: support@drewtech.com	
Europe *	PC Specifications:	~

**d. FLASHING TAB** Contains the information pertaining to OEM J2534 flashing including links, information, walk-throughs, and some helper functions.





e. SUPPORT TAB Contains functions to check driver installation, vehicle communication, updating the device, create debug logs, contact Technical Support and other resources.

		j2534 ToolBo	x	
le Tools Help Log Off				CarDAQ PLUS
General Sales	Diagnostics Flashing	Support Training		
elect a support option below:				
Support Options *	<u> </u>	Vehicle Check		Log Window
Support A				Copy VIN To Clipboard
		OBD2 Check Cor	nnection	
Device Support				Clear Log Window
Install Check	Current Status			
J Vehicle Check				
Device Check				
Hill Debug Check	32534 Device Information	Protocol Information		
😴 Support Website	a 32534	Vehicle Voltage:		Check St
TeamViewer	API Device Name		Status	VIN
1.000	Device Name DLL Version	Protocol	Status	VIN
	Firmware Version			
	IP Address			
	Serial Number			
	L			

f. TRAINING TAB Contains general information, installation and Using OEM J2534 Application Videos with Drew Technologies products.

-	j2534 ToolBox	X
File Tools Help Log Off		🗧 CarDAQ PLUS 🔹
General Sales	Diagnostics Flashing Support Training	
Select a support option below:		
Training Options *		
Webinars A	File Tools Help Log Off	
General Information	General Flashing Disgnostics Support	
General Information	Select a manufacturer below.	
	Manufactures «	
	A-G A	
	Acura	
	Click on the menu drop downs at	
	the left to see more options. The	
	"Flashing", "Diagnostics", and "Support" tabs at the top work this	
	way.	
	AUDI	
	BMW	
	H-La V	
	Left W	
	52 ¥	
1 - Installing and J2534 To 2 - Why Learn J2534?		
2 - Why Learn J2534? 3 - Chrysler Re-flashing		
4 - Ford Re-flashing		
5 - Toyota Install		
6 - GM Reflashing		
7 - Tech2Win Setup		
8 - Whats new 2013		
9 - GM: SPS or Tech2Win?		
10 - GM: Setting up GD S2		
11 - BMW Setup Overview		
12 - VW ODIS Overview		



# Maximum Voltage Per MongoosePro® Product

Product	Max VBatt	Min VBatt CAN	Min VBatt J1850	Min VBatt K-Line	Min VBatt SCI
Chrysler	25	N/A	9	N/A	6
Ford	30	N/A	N/A	6	N/A
GM II	18	N/A	9	6	N/A
Honda	30	N/A	N/A	6	N/A
ISO/CAN	30	N/A	N/A	6	N/A
JLR	16	N/A	N/A	6	N/A
Nissan	30	N/A	9	6	N/A
Toyota 2	30	N/A	9	6	N/A
VW	30	N/A	9	6	N/A



## MongoosePro® Vehicle Connector Pin Assignments

Pin	Chrysler	Ford	GM II	Honda	ISO/ CAN	JLR	Nissan	Toyota 2	vw
1			SW CAN	PS GND / Diag X			PS GND	PS GND	PS GND
2	J1850+	J1850+	J1850+			J1850+		J1850+	
З			CAN 2+ / K-Line	CAN 2+		CAN 2+ / K-Line			CAN 2+
4									
5	GND	GND	GND	GND	GND	GND	GND	GND	GND
6	CAN+	CAN+	CAN+	CAN+	CAN+	CAN+	CAN+	CAN+	CAN+
	SCI		K-Line						
7	SCI	K-Line	K-Line	K-Line	K-Line	K-Line	K-Line	K-Line	K-Line
8			K-Line			ROSCO			
9	SCI		UART	PS GND			PS GND	PS GND	PS GND
			K-Line	Diag H					
10		J1850-				J1850-			
11			CAN 2-	CAN 2-		CAN 2-			CAN 2-
12	SCI		CAN 3+	PS 5V		PS GND	PS 5V	PS 5V	PS 5V
			K-Line						
13		FEPS	CAN 3- / K-Line			FEPS			
14	CAN- / SCI	CAN-	CAN-	CAN-	CAN-	CAN-	CAN-	CAN-	CAN-
15	L-Line	L-Line / PS	L-Line	L-Line	L-Line	L-Line	L-Line	L-Line / PS GND	L-Line
	PS GND	GND			PS GND	PS GND	PS GND		
16	VBatt	VBatt	VBatt	VBatt	VBatt	VBatt	VBatt	VBatt	VBatt

\* PS GND = Pin Switched to Ground

- \* PS 5V Pin Switched to +5V
- \* Nissan supports API 04.04 and 05.00

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### **MONGOOSEPRO** User Guide

## **Bluetooth Setup**

Bluetooth is an option that can be purchased with some MongoosePro® versions. If you have purchased Bluetooth, your MongoosePro® will have a BT at the end of the model number. Please note that **DrewTech** does not recommend doing any reprogramming over **Bluetooth**.

- Make sure your **Bluetooth** dongle is installed by inserting your **Bluetooth** dongle manufacturer media into your PC and follow the installation directions.
- To pair your MongoosePro<sup>®</sup> BT, right click on the Bluetooth icon in the System Tray.



**3.** Click on Add Device

	Add a Device				
	Allow a Device to Connect				
	Show Bluetooth Devices				
	Join a Personal Area Network				
	Open Settings				
	Turn Adapter Off				
	Remove Icon				
	<b>V</b>				
Cus	stomize				
	□ 😼 🛱 🖿 🕪 11:54 AM 🖉				

**MONGOOSEPRO** User Guide



- 4. Select your device from the available options, then click Next.
- Enter the pairing code 2534 in the text box and click Next pair the MongoosePro® BT.
- Your MongoosePro<sup>®</sup> BT has been successfully paired with your PC.
  - **NOTE:** Only have one (1) **MongoosePro® BT** paired with your PC to avoid erroneous test results. The **MongoosePro®** driver will inform if you have multiple devices paired to your PC.

## **Technical Support**

Please contact **Drew Technologies** for technical support at support@drewtech.com or (734) 222–5228 option **3**.

If technical support finds it necessary for the unit to be returned for repair, you will be asked for your contact information and then provided with a **Return Merchandise Authorization number (RMA #)**. **Drew Technologies** will use the **RMA #** to track the unit through the repair process. 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.

## **Environmentals**

Environmental conditions, 5°C to 40°C and a Maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C

#### Indoor use only

Altitude: 2000m above mean sea level Relative humidity: 0 to 90% Over voltage category: II Pollution degree: 2

> 12V \_ \_ \_ , 150mA (battery power) 5V \_ \_ \_ , 150mA (USB power)







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