

# **AUTEL J2534 ECU Programmer Tool User Manual**

Home » AUTEL » AUTEL J2534 ECU Programmer Tool User Manual

AUTEL J2534 ECU Programmer Tool User Manual

```
Contents
1 1 Using This Manual
 1.1 1.1 Conventions
   1.1.1 1.1.1 Bold Text
   1.1.2 1.1.2 Notes and Important Messages
   1.1.3 1.1.3 Hyperlink
   1.1.4 1.1.4 Illustrations
   1.1.5 1.1.5 Procedures
2 2 General Introduction
 2.1 2.1. Maxi Flash VCI Vehicle Communication
 Interface
   2.1.1 2.1.1 Functional Description
   2.1.2 2.1.2 Power Sources
   2.1.3 2.1.3 Technical Specifications
 2.2 2.2 Accessories Kit
   2.2.1 2.2.1 Main Cable
   2.2.2 2.2.2 OBD I-Type Adapters
3 3 Getting Started
 3.1 3.1 Power Up
   3.1.1 3.1.1 Application Buttons
   3.1.2 3.1.2 Locator and Navigation Buttons
4 4 Service Procedures
 4.1 4.1 Technical Support
 4.2 4.2 Repair Service
 4.3 4.3 Other Services
5 5 Compliance Information
6 6 Warranty
 6.1 6.1 12-Month Limited Warranty
7 Documents / Resources
8 Related Posts
```

# 1 Using This Manual

This manual contains device usage instructions. Some illustrations shown in this manual may contain modules and optional equipment that are not included in your system.

## 1.1 Conventions

The following conventions are used.

## 1.1.1 Bold Text

Bold text is used to highlight selectable items such as buttons and menu options. Example: • Tap OK.

# 1.1.2 Notes and Important Messages

#### Notes

A NOTE provides helpful information such as additional explanations, tips, and comments. Example:

NOTE New batteries reach full capacity after approximately 3 to 5 charging and discharging cycles. Important

**IMPORTANT** indicates a situation that if not avoided may result in damage to the tablet or vehicle. Example:

**IMPORTANT** Keep the cable away from heat, oil, sharp edges and moving parts. Replace damaged cables immediately.

# 1.1.3 Hyperlink

Hyperlinks or links that take you to other related articles, procedures, and illustrations are available in electronic documents. Blue italic text indicates a selectable hyperlink and blue underlined text indicates a website link or an email address link.

#### 1.1.4 Illustrations

Illustrations used in this manual are samples, and the actual testing screen may vary for each vehicle being tested. Observe the menu titles and on-screen instructions to make correct option selection.

#### 1.1.5 Procedures

An arrow icon indicates a procedure. Example:

To use the camera:

- 1. Tap the Camera button. The camera screen opens.
- 2. Focus the image to be captured in the view finder.
- 3. Tap the camera icon on the right side of the screen. The view finder now shows the captured picture and autosaves the taken photo.
- 4. Tap the thumbnail image on the top right corner of the screen to view the stored image.
- 5. Tap the Back or Home button to exit the camera application.

## 2 General Introduction

## 2.1. Maxi Flash VCI Vehicle Communication Interface

## 2.1.1 Functional Description

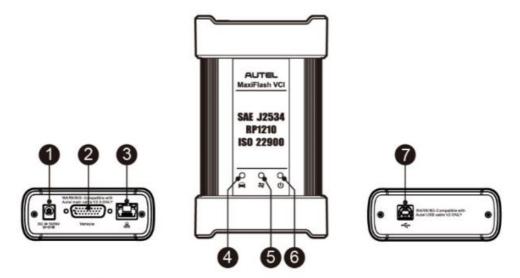


Figure 2-4 MaxiFlash VCI Programming Device

- 1. DC Power Supply Input Port
- 2. Vehicle Data Connector

- 3. Ethernet Port
- 4. Vehicle LED
  - Flashes green when the device is communicating with the vehicle system
- 5. Connection LED
  - Lights solid green when the device is properly connected with the display tablet via the USB cable
  - Lights solid cyan (blue/ green) when connected via Wi-Fi; lights solid blue when connected via wireless BT connection
- 6. Power LED
  - · Lights solid green when powered on
  - Flashes red when VCI is upgrading
  - · Lights solid red when system failure occurs
  - · Lights yellow automatically at power up when VCI is self-testing
- 7. USB Port

#### **IMPORTANT**

Do not disconnect the programming device while the vehicle LED status light is on! If the flash programming procedure is interrupted while the vehicle's ECU is blank or only partially programmed, the module may be unrecoverable.

# **Programming Capability**

The MaxiFlash VCI device is a D-PDU, SAE J2534 & RP1210 compliant Pass Thru programming interface device. Using the updated OEM software, it is capable of replacing the existing software/firmware in the Electronic Control Units (ECU), programming new ECUs and fixing software-controlled drivability issues and emission issues.

## **Communication Capability**

The MaxiFlash VCI device supports Bluetooth (BT), Wi-Fi, and USB communications. It can transmit vehicle data to the tablet with or without a cable connection. In open areas, the working range of the transmitter through BT communication is up to 328 feet (about 100 m). The working range of 5G Wi-Fi is up to 164 feet (50 m). If the signal is lost due to being taken out of range, communication will be restored once the tablet is within range.

#### 2.1.2 Power Sources

The VCI device can receive power from the following sources:

- Vehicle Power
- AC/DC Power Supply

## **Vehicle Power**

The VCI device operates on 12/24 Volt vehicle power, which receives power via the vehicle data connection port. The device powers on whenever it is connected to an OBD II/EOBD compliant data link connector (DLC). For non OBD II/EOBD compliant vehicles, the device can be powered from a cigarette lighter or other suitable power port on the test vehicle using the auxiliary power cable.

## AC/DC Power Supply

The VCI device can be powered from a wall socket using the AC/DC power adapter.

#### 2.1.3 Technical Specifications

Item	Description
Communications	• BT V2.1 + EDR
	• USB 2.0
	Wi-Fi 5G
	Ethernet
Wireless Frequency	5 GHz
Input Voltage Range	12 VDC to 24 VDC
Supply Current	• 170 mA @12 VDC
	• 100 mA @ 24 VDC
Operating Temp.	0°C to 50°C
Storage Temp.	-20°C to 60°C
Dimensions (L x W x H)	149 mm (5.87") x 86 mm (3.38") x 35 mm (1.28")
Weight	0.29 kg (0.64 lb.)

## Note

For additional information, please refer to the accompanied user manual for the VCI device.

## 2.2 Accessories Kit

# 2.2.1 Main Cable

The VCI device can be powered through the Nautel Main Cable V2.0 (the V2.0 icon can be seen on the cable) when connected to an OBD II/EOBD compliant vehicle. The Main Cable connects the VCI device to the vehicle's data link connector (DLC), through which the VCI device can transmit vehicle data to the tablet.



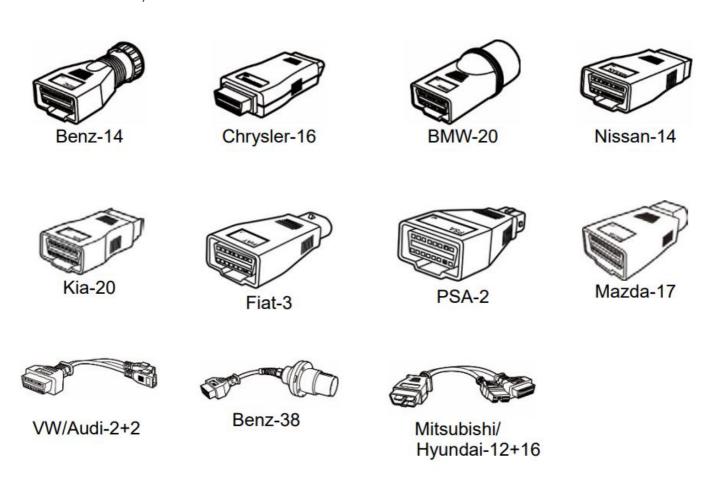
Figure 2-5 Main Cable - 1.5m in Length

## Note

MaxiFlash VCMI and MaxiFlash VCI can be connected by the Autel Main Cable V2.0 only. DO NOT use other Autel main cables to connect the MaxiFlash VCMI and MaxiFlash VCI.

## 2.2.2 OBD I-Type Adapters

The OBD I-type adapters are for Non-OBD II vehicles. The adapter used depends on the type of vehicle being tested. The most common adapters are shown below (Adapters may be sold separately, please contact your distributor for details).



# 3 Getting Started

Make sure the tablet has sufficient power or is connected to the external power supply (see Power Sources on page 5).

## 3.1 Power Up

Long press (press and hold) the Lock/Power button on the top right side of the tablet to switch the unit on. The system boots up and shows the lock screen with 3 entry options.

- 1. MaxiSys Home Swipes up the MaxiSys Home icon to enter the MaxiSys Job Menu shown as below.
- 2. Unlock Swipes up the Lock icon at the center to unlock the screen or enter the MaxiSys Job Menu when booting up.
- 3. Camera Swipes up the Camera icon to launch the camera.



Figure 3-1 Sample MaxiSys Job Menu

- 1. Application Buttons
- 2. Locator and Navigation Buttons
- 3. Status Icons

## **NOTE**

It is recommended to lock the screen when not in use to protect information in the system and conserve the power. Almost all operations on the tablet are controlled through the touchscreen. The touchscreen navigation is menu driven, which allows you to quickly locate the test procedure, or data that you need, through a series of questions and options. Detailed descriptions of the menu structures are found in the chapters for each application.

## 3.1.1 Application Buttons

The table below briefly describes each of the applications in the MaxiSys system.

Table 3-1 Applications

Name	Button	Description
Diagnostics		Accesses the unit's diagnostic functions. See Diagnostics on page 17.
Service	Fra	Accesses special functions menu. See <i>Service</i> on page 76.
Data Manager		Accesses the saved repair shop, customer and vehicle data including detailed vehicle diagnostics and test records. See <i>Data Manager</i> on page 81.
Settings	<b>©</b>	Accesses the system settings menu and general tablet menu. See <i>Settings</i> on page 89.
Update		Accesses system software update menu. See Update on page 94.
VCI Manager	VCI	Accesses VCI connection menu. See VCI Manager on page 96.
ADAS	ADAS	Accesses ADAS systems menu. See ADAS on page 100.

Support	Synchronizes Autel's online service database with the MaxiSys tablet. See <i>Support</i> on page 101.
Remote Desktop	Configures your unit to receive remote support using the TeamViewer application. See <i>Remote Desktop</i> on page 106.
Quick Link	Provides associated website bookmarks to allow quick access to product update, service, support and other information. See <i>Quick Link</i> on page 108.
MaxiViewer	Provides a quick search for supported functions and/or vehicles. See <i>MaxiViewer</i> on page 109.
MaxiVideo	Configures the unit to operate as a video scope device by connecting to an Imager head cable for close vehicle inspections. See <i>MaxiVideo</i> on page 111.

## 3.1.2 Locator and Navigation Buttons

Operations of the Navigation buttons at the bottom of the screen are described in the table below:

**Table 3-2 Locator and Navigation Buttons** 

Name	Butto	Description
Locator		Indicates the location of the screen. Swipe the screen left or right to view the previous or next screen.
Back	4	Returns to the previous screen.
Android Home		Returns to Android System's Home screen.
Recent Apps		Displays a list of applications that are currently running. Tap an app icon to launch. Remove an app by swiping it to the right.
Browser	6	Launches the Chrome Internet browser.
Camera	•	Tap icon to open camera viewfinder. Press and hold icon to capture a screenshot of the display screen. The saved files are auto-stored in the Data Manager application for later review. See <i>Data Manager</i> on page 81.
Display&Sound	<b>\</b>	Adjusts the brightness of the screen and the volume of the audio output.
MaxiSys Home	<b>♠</b>	Returns to MaxiSys Job Menu.
VCI	VC	Opens the VCI Manager application. A green icon at the bottom right corner indicates the VCI device is connected, while a red cross icon will display if connection fails. The battery status icon displays the remaining VCI power.
MaxiSys Shortcut	A	Returns to the Diagnostics screen.
Service	F	Returns to the Service screen.

# To use the camera

- 1. Tap the Camera button. The camera screen opens.
- 2. Focus the image to be captured in the view finder.

- 3. Tap the camera icon on the right side of the screen. The view finder now shows the captured picture and autosaves the taken photo.
- 4. Tap the thumbnail image on the top right corner of the screen to view the stored image.
- 5. Tap the Back or Home button to exit the camera application.

## **Note**

After swiping the camera screen from left to right, the camera mode and video mode can be switched by tapping the blue camera icon or video icon.

Refer to Android documentation for additional information.

#### 4 Service Procedures

This section provides information on technical support, repair service, and application for replacement or optional parts.

# 4.1 Technical Support

If you have any question or problem on product operations, please contact us.

## **AUTEL NORTH AMERICA**

Phone:1-855-AUTEL-US (855-288-3587) Monday-Friday 9am-6pm EST

• Website: www.autel.com

• Email: sales@autel.com; ussupport@autel.com

• Address: 175 Central Avenue, Suite 200, Farmingdale, New York, USA 11735

## **AUTEL EUROPE**

• **Phone**: 0049 (0) 6103-2000520

• Website: www.autel.eu

Email: <a href="mailto:sales.eu@autel.com">sales.eu@autel.com</a>; <a href="mailto:support.eu@autel.com">support.eu@autel.com</a>;

Address: Robert-Bosch-Strasse 25, 63225, Langen, Germany

# **AUTEL CHINA HQ**

• Phone: 0086-755-2267-2493

• Website: sales@auteltech.net; www.autel.com

Email: <u>support@autel.com</u>

• Address: 7-8th, 10th Floor, Building B1, Zhiyuan, Xueyuan Road, Xili, Nanshan, Shenzhen, 518055, China

## **AUTEL LATIN AMERICA**

• Website: www.autel.com

Email: <u>sales.latin@autel.com</u>; <u>latsupport@autel.com</u>

Address: Avenida Americas 1905, 6B, Colonia Aldrete, Guadalajara, Jalisco, Mexico

#### **AUTEL APAC**

• Phone: +045 5948465

• Email: <a href="mailto:sales.jp@autel.com">sales.jp@autel.com</a>; <a href="mailto:support.jp@autel.com">support.jp@autel.com</a>;

Address: 719, Nissou Building, 3-7-18, Shinyokohama, Kouhoku, Yokohama, Kanagawa, Japan 222-0033

Website: <u>www.autel.com/jp/</u>

#### **AUTEL IMEA DMCC**

Website: <u>www.autel.com</u>
 Phone: +971 43682500

• Email: sales.imea@autel.com; imea-support@autel.com

• Address: Office 1006-1010, Cluster C, Fortune Tower, Jumeirah Lakes Tower (JLT), Dubai, U.A.E

For technical assistance in other markets, please contact your local selling agent.

## 4.2 Repair Service

If it is necessary to send back your device for repair, please download and fill out the repair service form from <a href="https://www.autel.com">www.autel.com</a>. The following information must be included:

- · Contact name
- Return address
- Telephone number
- Product name
- · Complete description of the problem
- · Proof-of-purchase for warranty repairs
- · Preferred method of payment for non-warranty repairs

#### **NOTE**

For non-warranty repairs, payment can be made with Visa, Master Card, or with approved credit terms.

## Send the device to your local agent, or to the address below:

7-8th, 10th Floor, Building B1, Zhiyuan, Xueyuan Road, Xili, Nanshan, Shenzhen, 518055, China

## 4.3 Other Services

You can purchase the accessories directly from authorized tool suppliers of Autel, or your local distributor or agent.

Your purchase order should include the following information:

- Contact information
- · Product or part name
- · Item description
- Purchase quantity

# **5 Compliance Information**

## **FCC Compliance**

#### FCC ID: xxxx-xxxxx

This equipment has been tested and verified to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# SAR:

The radiated output power of this device is below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact is minimized during normal operation.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/Kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels to use only the power required to reach the network. To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to antenna should be minimized.

This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

# 6 Warranty

## 6.1 12-Month Limited Warranty

Autel Intelligent Technology Corp., Ltd. (the Company) warrants to the original retail purchaser of this MaxiSys Diagnostic Device that should this product or any part thereof during normal usage and under normal conditions be proven defective in material or workmanship that results in product failure within twelve (12) months period from the date of purchase, such defect(s) will be repaired, or replaced (with new or rebuilt parts) with Proof of Purchase, at the Company's option, without charge for parts or labor directly related to the defect(s).

The Company shall not be liable for any incidental or consequential damages arising from the use, misuse, or

mounting of the device. Some states do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty does not apply to:

- a) Products subjected to abnormal use or conditions, accident, mishandling, neglect, unauthorized alteration, misuse, improper installation or repair or improper storage;
- b) Products whose mechanical serial number or electronic serial number has been removed, altered or defaced:
- c) Damage from exposure to excessive temperatures or extreme environmental conditions;
- d) Damage resulting from connection to, or use of any accessory or other product not approved or authorized by the Company;
- e) Defects in appearance, cosmetic, decorative or structural items such as framing and non-operative parts.
- f) Products damaged from external causes such as fire, dirt, sand, battery leakage, blown fuse, theft or improper usage of any electrical source.

#### **IMPORTANT**

All contents of the product may be deleted during the process of repair. You should create a back-up copy of any contents of your product before delivering the product for warranty service.

#### **Trademarks**

Autel®, MaxiSys®, MaxiDAS®, MaxiScan®, MaxiTPMS®, MaxiRecorder®, and MaxiCheck® are trademarks of Autel Intelligent Technology Corp., Ltd., registered in China, the United States and other countries. All other marks are trademarks or registered trademarks of their respective holders.

## **Copyright Information**

No part of this manual may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of Autel.

## Disclaimer of Warranties and Limitation of Liabilities

All information, specifications and illustrations in this manual are based on the latest information available at the time of printing.

Autel reserves the right to make changes at any time without notice. While information of this manual has been carefully checked for accuracy, no guarantee is given for the completeness and correctness of the contents, including but not limited to the product specifications, functions, and illustrations.

Autel will not be liable for any direct, special, incidental, indirect damages or any economic consequential damages (including lost profits).

## **IMPORTANT**

Before operating or maintaining this unit, please read this manual carefully, paying extra attention to the safety warnings and precautions.

# For Services and Support:

pro.autel.com www.autel.com

1-855-288-3587/1-855-AUTELUS (North America) 0086-755-86147779 (China)

support@autel.com

For details, please refer to the Service Procedures in this manual.

# **Safety Information**

For your own safety and the safety of others, and to prevent damage to the device and vehicles upon which it is used, it is important that the safety instructions presented throughout this manual be read and understood by all persons operating or coming into contact with the device.

There are various procedures, techniques, tools, and parts for servicing vehicles, as well as in the skill of the person doing the work. Because of the vast number of test applications and variations in the products that can be tested with this equipment, we cannot possibly anticipate or provide advice or safety messages to cover every circumstance. It is the automotive technician's responsibility to be knowledgeable of the system being tested. It is crucial to use proper service methods and test procedures. It is essential to perform tests in an appropriate and acceptable manner that does not endanger your safety, the safety of others in the work area, the device being used, or the vehicle being tested.

Before using the device, always refer to and follow the safety messages and applicable test procedures provided by the manufacturer of the vehicle or equipment being tested. Use the device only as described in this manual. Read, understand, and follow all safety messages and instructions in this manual.

# Safety Messages

Safety messages are provided to help prevent personal injury and equipment damage. All safety messages are introduced by a signal word indicating the hazard level.



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

# **Safety Instructions**

The safety messages herein cover situations Autel is aware of. Autel cannot know, evaluate or advise you in regards of all possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.



When an engine is operating, keep the service area WELL VENTILATED or attach a building exhaust removal system to the engine exhaust system. Engines produce carbon monoxide, an odourless, poisonous gas that causes slower reaction time and can lead to serious personal injury or loss of life.

It is not advised to use headphones at a high volume Listening at high volumes for long periods of time may result in loss of hearing.

# A Safety Warnings

- · Always perform automotive testing in a safe environment.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Operate the vehicle in a well-ventilated work area, for exhaust gases are poisonous.
- Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make

sure the parking brake is engaged.

- Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
- Be extra cautious when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
- Keep a fire extinguisher suitable for gasoline, chemical, and electrical fires nearby.
- Do not connect or disconnect any test equipment while the ignition is on or the engine is running.
- Keep the test equipment dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clean the outside of the equipment as necessary.
- Do not drive the vehicle and operate the test equipment at the same time. Any distraction may cause an accident.
- Refer to the service manual for the vehicle being serviced and adhere to all diagnostic procedures and precautions. Failure to do so may result in personal injury or damage to the test equipment.
- To avoid damaging the test equipment or generating false data, make sure the vehicle battery is fully charged and the connection to the vehicle DLC is clean and secure.

Do not place the test equipment on the distributor of the vehicle. Strong electro-magnetic interference can damage the equipment.

# **Documents / Resources**

Tables 2002 A register freeling of malesters of particular freelings of particular

AUTEL J2534 ECU Programmer Tool [pdf] User Manual DC2122, WQ8-DC2122, WQ8DC2122, J2534 ECU Programmer Tool, ECU Programmer Tool

Manuals+