AUTEL

USER MANUAL

MaxiDiag MD600CV

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IMPORTANT

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

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For technical assistance in all other markets, please refer to *Technical Support* in this manual.

Safety Information

For your own safety and the safety of others, and to prevent damage to the tool 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 tool.

There are various procedures, techniques, tools, and parts required for servicing vehicles, as well as the skills 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 tool, 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 tool being used, or the vehicle being tested.

Before using the tool, 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 tool only as described in this manual. Be sure to 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.

⚠ DANGER

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

⚠ WARNING

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 at the time of publication. Autel cannot know, evaluate or advise you as to all of the possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.

⚠ DANGER

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 odorless, poisonous gas that causes slower reaction time and can lead to serious personal injury or loss of life.

⚠ 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.

CONTENTS

1 Using This Manual

This manual contains tool usage instructions.

Some illustrations shown in this manual may make reference to modules and optional equipment that are not included in your system. Contact your sales representative for availability of other modules and optional tools or accessories.

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

1.1.2.1 Notes

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

1.1.2.2 Important

IMPORTANT indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

1.1.3 Hyperlinks

Hyperlinks are available in electronic documents. Blue italic text indicates a selectable hyperlink; blue underlined text indicates a website link or an email address link.

1.1.4 Illustrations

Illustrations used in this manual are samples; 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 power down the MaxiDiag tool**

1. Long press the **Power/Lock** button.
2. Tap **Power Off**.
3. Tap **OK**. The tool will turn off in a few seconds.

2 General Introduction

There are two main components to the MaxiDiag system:

- MD600CV Diagnostics Tool — the central processor and monitor for the system.
- MaxiVCI V200 — a vehicle OBDII communication interface.

This manual describes the construction and operation of both the devices and how they work together to deliver diagnostic solutions.

2.1 MD600CV Diagnostics Tool

2.1.1 Function Description

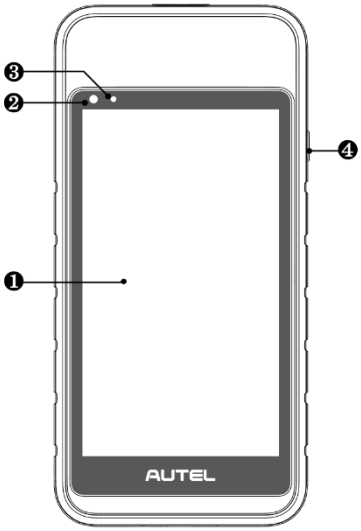


Figure 2-1 ***MD600CV Front View***

1. 5.5” LCD Touchscreen
2. Ambient Light Sensor — detects ambient brightness.
3. Power LED — refer to *Table 2-1 Power LED Description* for details.

4. Power/Lock Button — long press to turn on/off the MaxiDiag tool; short press to lock the screen.

Table 2-1 *Power LED Description*

LED	Color	Description
Power	Green	● **Flashing Green:** Flashes green when the MaxiDiag tool is charging. ● **Solid Green:** Lights solid green when the MaxiDiag tool is fully charged.
	Red	Lights red when a problem is detected.

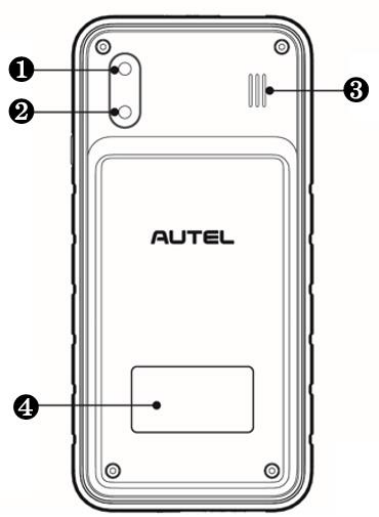


Figure 2-2 *MD600CV Back View*

1. Rear Camera
2. Camera Flash
3. Speaker
4. Sticker

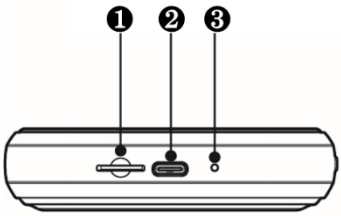


Figure 2-3 *MD600CV Bottom View*

1. Micro SD Card Slot
2. USB Type-C Port
3. Microphone

2.1.2 Power Sources

The MaxiDiag tool can receive power from any of the following sources:

- Internal Battery Pack
- AC/DC Power Supply
- Vehicle Power

IMPORTANT

Do not charge the battery when the temperature is lower than 0 °C (32 °F) or higher than 45 °C (113 °F).

2.1.2.1 Internal Battery Pack

The MaxiDiag tool can be powered with the internal rechargeable battery, which if fully charged can provide sufficient power for about 7 hours of continuous operation.

2.1.2.2 AC/DC Power Supply

The MaxiDiag tool can be powered from a wall socket using the AC/DC power adapter that connects to the USB Type-C cable. The AC/DC power supply also charges the internal battery pack.

2.1.2.3 Vehicle Power

The MaxiDiag tool can be powered by connecting it to the auxiliary power outlet adapter receptacle or other DC power port on the test vehicle using a cable connection. The charging port for the MaxiDiag tool is located at the bottom. An adapter is required to establish the connection.

2.1.3 Technical Specifications

Table 2-2 *Technical Specifications*

Item	Description
Operating System	Android 9.0
Processor	Quad-core processor (1.5 GHz)
Memory	2 GB RAM & 64 GB ROM
Display	5.5-inch LCD capacitive touchscreen with 1280 x 720 resolution
Rear Camera	8 MP
Connectivity	● Wi-Fi (802.11 a/b/g/n/ac) ● USB Type-C ● Bluetooth
Sensor	Ambient Light Sensor (ALS)
Audio Input/Output	● Input: Microphone ● Output: Speaker
Power and Battery	● 3.8 V/5000 mAh lithium-polymer battery ● Charges via 5 V DC power supply
Charging Input	5 V/2 A adapter
Power Consumption	700 mA (LCD on with default brightness, Wi-Fi on) @3.8 V
Operating Temp.	0 °C to 50 °C (32 °F to 122 °F)
Storage Temp.	-10 °C to 60 °C (14 °F to 140 °F)
Dimensions (W x H x D)	89.0 mm (3.5”) x 183.0 mm (7.2”) x 22.0 mm (0.87”)
Net Weight	368 g (0.8 lb.)
Protocols	ISO9141-2, ISO14230-2, ISO15765, K/L-Line, Flashing Code, SAE-J1850 VPW, SAE-J1850PWM, ISO11898 (Highspeed, Middlespeed, Lowspeed and Singlewire CAN, fault-tolerant CAN), SAE J2610, GM UART, UART Echo Byte Protocol, Honda Diag-H Protocol, TP2.0, TP1.6, ISO 13400, CAN FD

2.2 MaxiVCI V200 — Vehicle Communication Interface

MaxiVCI V200 is a small vehicle communication interface (VCI) used to connect to a vehicle's DLC and can wirelessly connect with the MaxiDiag tool for vehicle data transmission.

2.2.1 Function Description

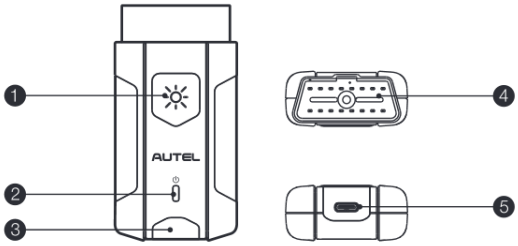


Figure 2-4 ***MaxiVCI V200 Views***

1. Flashlight Button — lights white when long pressed.
2. Power LED — refer to *Table 2-3 Power LED Description* for details.
3. Connection LED — refer to *Table 2-4 Connection LED Description* for details.
4. Vehicle Data Connector (16-Pin) — connects the MaxiVCI V200 to the vehicle's 16-pin DLC directly.
5. USB Type-C Port — provides the connection between the tool and the MaxiDiag tool via a USB-C to USB-C cable.

Table 2-3 ***Power LED Description***

LED	Color	Description
Power LED	Yellow	Lights yellow at power up when VCI is self-testing.
	Green	Lights solid green when powered on.
	Red	Flashes red when VCI is upgrading.

NOTE

The power LED briefly lights yellow each time the tool powers on and then lights green when the tool is ready.

Table 2-4 *Connection LED Description*

LED	Color	Description
Connection LED	Green	● **Solid Green:** The VCI is connected via USB cable. ● **Flashing Green:** The VCI is communicating via USB cable.
	Blue	● **Solid Blue:** The VCI is connected via Bluetooth. ● **Flashing Blue:** The VCI is communicating via Bluetooth.

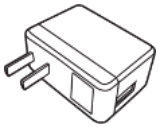
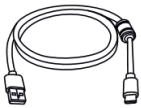
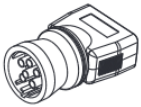
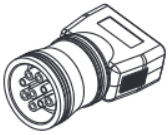
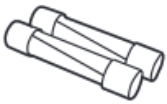
2.2.2 Technical Specifications

Table 2-5 *Technical Specifications*

Item	Description
Communications	● BLE + EDR ● USB Type-C
Wireless Frequency	2.4 GHz
Input Voltage Range	8 V to 30 V DC
Supply Current	150 mA @ 12 V DC
Operating Temp.	0 °C to 50 °C (32 °F to 122 °F)
Storage Temp.	-10 °C to 60 °C (14 °F to 140 °F)
Dimensions (W x H x D)	46.78 mm (1.84”) x 89.89 mm (3.53”) x 21 mm (0.82”)
Weight	70.7 g (0.156 lb.)
Built-in Battery	3.7 V Lithium Battery (for LED Lighting Only)

2.3 Other Accessories

Table 2-6 *Other Accessories*

	**Power Adapter** Together with the USB Type-C cable, connects the MaxiDiag tool to the external DC power port for power supply.
	**USB Type-C Cable (for Charging)**
	**Auxiliary Power Outlet Adapter** Provides power to the MaxiDiag tool or the VCI device through connection to the vehicle's auxiliary power outlet adapter receptacle, as some non-OBDII vehicles cannot provide power via the DLC connection. Another adapter is required to achieve the connection.
	**Clamp Cable** Provides power to the MaxiDiag tool or the VCI device through connection to the vehicle's battery. Another adapter is required to achieve the connection.
	**Deutsch-6** An OBDI-type adapter. Use it if needed.
	**Deutsch-9** An OBDI-type adapter. Use it if needed.
	**Spare Fuse x 2** A safety device for the auxiliary power outlet adapter.

3 Getting Started

Ensure the tool is sufficiently charged or is connected to an external power supply. (See *Power Sources*.)

3.1 Powering Up

Long press the **Power/Lock** button on the right side of the tool to power it on. The system boots up and displays the MaxiDiag Job Menu.

Figure 3-1 ***MaxiDiag Job Menu***

1. Status Information Bar
2. Application Buttons
3. Locator

3.1.1 Status Information Bar

The status information bar varies according to the stage of operations, and may display the items described in the table below.

Table 3-1 *Status Information Bar*

Icon	Name	Description
	**VCI Status**	Displays the VCI connection status. When the VCI device is properly connected to the vehicle and the tool, the VCI status icon will display a green "√" mark, otherwise, it will display a red "×" mark.
	**Voltage**	Displays the current voltage value of the connected device.
	**Wi-Fi**	Indicates that Wi-Fi is connected and displays the signal strength.
	**Battery Level**	Displays the remaining battery power.

3.1.2 Application Buttons

The touchscreen navigation is menu-driven, enabling quick access to functions and features by tapping the buttons on the screen. The table below briefly describes each of the applications in the MaxiDiag system.

Table 3-2 *Applications*

Button	Name	Description
	**CV Diagnostics**	Accesses CV diagnostics functions menu. See *CV Diagnostics*.
	**CV Service**	Accesses special functions menu for commercial vehicles. See *CV Service*.

Button	Name	Description
	**Data Manager**	Accesses the organization system for saved data and files. See *Data Manager*.
	**VCI Manager**	Pairs the MaxiDiag tool and MaxiVCI V200. Checks the communication status and updates the VCI firmware. See *VCI Manager*.
	**Settings**	Enables configuration of MaxiDiag system settings, general settings, and provides access to general information about the tool. See *Settings*.
	**Update**	Checks for the latest updates available for the MaxiDiag system and installs new software. See *Update*.
	**MaxiTools**	Accesses multiple useful tools such as quick link and log collection.
	**Remote Desktop**	Configures the tool to receive remote support using the TeamViewer application. See *Remote Desktop*.
	**Autel User Center**	Allows you to register an account, view and edit your personal profile and link your tool. See *Autel User Center*.

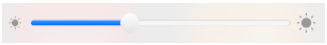
3.1.3 Locator

The locator icon displays at the bottom of the Job Menu. Swipe the screen left or right to view the previous or next screen.

3.1.4 System Status Icons

By swiping down from the top of the screen, a Shortcuts Panel will appear, allowing you to adjust various system settings of the tool. The operations of each button on the panel are described in the table below.

Table 3-3 *System Status Icons*

Icon	Name	Description
	Bluetooth	Enables/Disables Bluetooth connection.
	Wi-Fi	Enables/Disables Wi-Fi connection.
	Flashlight	Turns on/off the flashlight.
	Screenshot	Takes a screenshot of the current screen.
	Automatic Brightness	Automatically adjusts the brightness.
	Logger	Accesses the Log Collection screen.
	Restart	Restarts the tool.
	Camera	Opens the camera.
VCI	**VCI Manager**	Launches the VCI Manager screen.
 **Screen Brightness Slider** — Slide to manually adjust the screen brightness.		
 **Volume Slider** — Slide to manually adjust the volume.		

3.2 Powering Down

All vehicle communications must be terminated before shutting down the tool. A warning message appears if you attempt to shut down the tool while it is communicating with the vehicle. Forcing a shut-down while communicating may lead to ECU problems on some vehicles. Please exit the vehicle communication before powering down.

- **To power down the MaxiDiag tool**
  1. Long press the **Power/Lock** button.
  2. Tap **Power Off**.
  3. Tap **OK**. The tool will turn off in a few seconds.

3.2.1 Reboot System

In case of a system crash, long press the **Power/Lock** button and tap the **Restart** option to reboot the system.

4 CV Diagnostics

By establishing a data connection to the electronic control systems of the vehicle being serviced through the VCI (MaxiVCI V200) device, the CV Diagnostics application allows you to access the electronic control unit (ECU) for various vehicle control systems, including engine, electrical, and transmission. With this access, you can retrieve ECU information, read & erase DTCs, and view live data.

4.1 Establishing Vehicle Communication

Prior to performing the CV Diagnostics function, ensure the MaxiDiag tool is connected to the test vehicle through the MaxiVCI V200. (If needed, use the appropriate adapter such as Deutsch-6, Deutsch-9.) To establish a proper vehicle communication between the tool and the test vehicle, you can perform the following steps:

1. Connect the MaxiVCI V200 to the vehicle's DLC for both communication and power supply.
2. Connect the MaxiVCI V200 to the MaxiDiag tool via Bluetooth connection or using a USB-C to USB-C cable (not included).
3. A green "√" mark will be displayed on the VCI status icon, indicating the communication between the MaxiVCI V200 and the MaxiDiag tool has been established, and the tool is ready for vehicle diagnosis.

4.1.1 Vehicle Connection

To connect the MaxiVCI V200 device to the test vehicle, insert the vehicle data connector on the MaxiVCI V200 into the vehicle's DLC which is usually located under the vehicle dashboard, and the MaxiVCI V200 will be automatically powered on.

NOTE

The vehicle's DLC is not always located under the dashboard. Refer to the vehicle's user manual for DLC location.

4.1.2 VCI Connection

After the MaxiVCI V200 device is properly connected to the vehicle, the Power LED illuminates solid green, indicating that it is ready to establish a communication with the MaxiDiag tool.

The MaxiVCI V200 device supports two communication methods with the MaxiDiag tool: Bluetooth or USB-C to USB-C cable connection.

4.1.2.1 Bluetooth Connection

Bluetooth pairing is recommended as the first choice for the communication between the MaxiDiag tool and the MaxiVCI V200. This is because the Bluetooth connection does not need to repeat the plugging and unplugging procedure which is unavoidable when using traditional wired connection, saving more time and providing higher efficiency. The working range for Bluetooth communication is about 33 feet (about 10 m), enabling remote vehicle diagnostics.

Refer to *VCI Bluetooth Pairing* for detailed information.

4.1.2.2 USB-C to USB-C Cable Connection

The communication between the MaxiDiag tool and the MaxiVCI V200 device can also be established using a USB-C to USB-C cable. However, the USB-C to USB-C cable is not included in the package. If you choose this method to establish a communication between the devices, a USB-C to USB-C cable should be prepared by yourself.

4.1.3 No Communication Message

A. If the MaxiDiag tool is not connected to the MaxiVCI V200 correctly, an “Error” message may display. This indicates that the tool cannot access the vehicle control module. In this case, please do the following check-ups:

- Check if the MaxiVCI V200 is powered up.
- Check if the MaxiVCI V200 is properly positioned.
- Check if the Connection LED on the MaxiVCI V200 is illuminated for Bluetooth or USB-C to USB-C cable connection.
- In the case of Bluetooth connection, check if the network is configured correctly, or if the right MaxiVCI V200 has been paired up with the MaxiDiag tool.
  - ✧ During the diagnosis process, if the communication is suddenly interrupted due to the loss of signal, check if there is any object that causes signal interruption.
  - ✧ Try standing closer to the MaxiVCI V200 to obtain more stable signals and faster communication speed.
- In the case of USB-C to USB-C cable connection, check the cable connection between the MaxiDiag tool and the MaxiVCI V200.

B. If the MaxiVCI V200 is unable to establish a communication link, a prompt message displays with check instructions. The following conditions are the possible causes:

- The MaxiVCI V200 is unable to establish a communication link with the vehicle.
- The system selected for testing is not equipped on the vehicle.
- There is a loose connection.
- There is a blown vehicle fuse.
- There is a wiring fault of the vehicle or the adapter.
- There is a circuit fault in the adapter.
- Incorrect vehicle identification was entered.

4.2 Getting Started

Before beginning the diagnostics process, ensure that a communication connection has been established between the test vehicle and the MaxiDiag tool using the MaxiVCI V200.

4.2.1 Vehicle Menu Screen

When the MaxiDiag tool is properly connected to the vehicle, it is ready to start vehicle diagnosis. Tap the **CV Diagnostics** application on the Job Menu to access the vehicle menu.

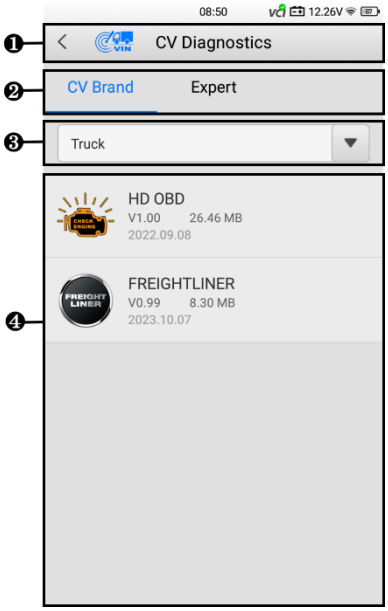


Figure 4-1 ***Vehicle Menu Screen***

1. Top Toolbar Buttons
   - Back Button — returns to the previous screen.
   - VIN Button — tap to select a vehicle identification method.
2. Mode Selection — switches the mode based on your preferences.
3. Vehicle Type Selection — tap the dropdown button to locate the vehicle more quickly.
4. Vehicle Manufacturer Buttons — select the vehicle manufacturer to start a diagnostics session.

4.3 Vehicle Identification

The MaxiDiag tool supports four methods of vehicle identification:

1. Auto VIN Scan
2. Manual VIN Input
3. Automatic Selection
4. Manual Selection

4.3.1 Auto VIN Scan

The MaxiDiag tool features the latest VIN-based Auto VIN Scan function to identify vehicles and scan all the diagnosable ECUs and run diagnostics on the selected system.

➢ **To perform Auto VIN Scan**

1. Tap the **CV Diagnostics** application on the Job Menu.
2. Tap the **VIN** button to open the dropdown list, and select **AutoVIN**.

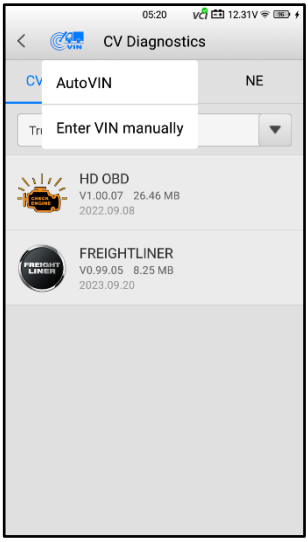


Figure 4-2 *VIN Screen*

3. The MaxiDiag tool will start VIN scanning on the vehicle's ECU. Once the test vehicle is successfully identified, the system will guide you to the Diagnostics Menu screen.

4.3.2 Manual VIN Input

For vehicles that do not support Auto VIN Scan function, you may manually enter the VIN.

➢ **To perform Manual VIN Input**

1. Tap the **CV Diagnostics** application on the Job Menu.
2. Tap the **VIN** button to open the dropdown list, and select **Enter VIN Manually**.
3. Enter the correct VIN into the input box.
4. Tap **OK**. Once the vehicle is identified, the Diagnostics Menu screen will display.

4.3.3 Automatic Selection

The vehicle VIN can also be automatically acquired after a vehicle manufacturer is selected.

➢ **To perform Automatic Selection**

1. Tap the **CV Diagnostics** application on the Job Menu.
2. Select a vehicle manufacturer from the Vehicle Menu screen.
3. Select the **Automatic Selection** option.

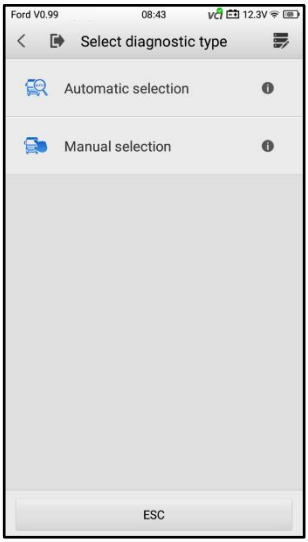


Figure 4-3 ***Selection Screen***

4. The MaxiDiag tool will acquire VIN information automatically and guide you to advance to the Diagnostics Menu screen.

4.3.4 Manual Selection

When the VIN is not automatically retrievable through the vehicle's ECU, or when the VIN is unknown, you can select the vehicle manually.

➢ **To perform Manual Selection**

1. Tap the **CV Diagnostics** application on the Job Menu.
2. Select a vehicle manufacturer from the Vehicle Menu screen.
3. Select the **Manual Selection** option.
4. Follow the on-screen instructions to complete step-by-step selection and finally enter the Diagnostics Menu screen.

4.4 Navigation

After the test vehicle is identified, the Diagnostic Menu screen will display. This section consists of various commonly used functions, including Auto Scan and Control Unit. The available functions displayed vary depending on the test vehicle.

4.4.1 Diagnostics Screen Layout

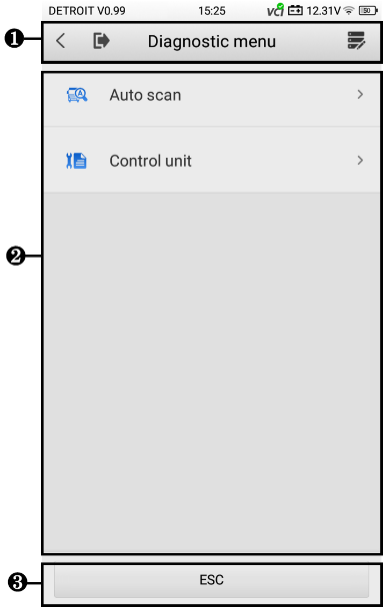


Figure 4-4 *Diagnostics Menu Screen*

The Diagnostics Menu screen typically includes three sections:

1. Top Toolbar Buttons
2. Main Section
3. Function Buttons

4.4.1.1 Top Toolbar Buttons

The top toolbar contains several buttons to navigate and control the screen. The table below describes the common-used buttons, which are available throughout the whole diagnostics procedure.

Table 4-1 *Top Toolbar Buttons*

Button	Name	Description
	**Back**	Returns to the previous screen.
	**Vehicle Swap**	Exits the service session of the currently identified test vehicle and returns to the Vehicle Menu screen.
	**Data Logging**	Records the communication data and ECU information of the test vehicle. When encountering an error during testing and diagnosing, use this function to contact Autel's technical support for solutions. The Data Logging function is available in the CV Diagnostics and the CV Service applications. See *Data Logging* for details.

➢ **To send message to the technical center**

1. After a testing or diagnostics session is done, tap the **Data Logging** button on the upper-right corner of the screen to make a selection of error type.
2. Tap **OK** to open the Details screen.
3. Describe problems in details in the **Reason for Sending** section.
4. Confirm vehicle information, then tap to upload data logs, or tap on the upper-right corner of the screen to correct the vehicle information.

4.4.1.2 Main Section

The main section of the screen varies according to the stage of operations, which may display diagnostics menu, test data, messages, instructions, and other diagnostics information.

4.4.1.3 Function Buttons

The displayed function buttons vary depending on the stage of operations. These buttons can be used to navigate menus, to save or clear diagnostics data, to exit scanning, and to perform a number of other control functions. The use of these buttons will be discussed in detail in the following sections of the corresponding test operations.

4.4.2 Screen Messages

Screen messages will appear when additional input is needed before proceeding. There are three main types of on-screen messages: Confirmation, Warning, and Error.

4.4.2.1 Confirmation Messages

Confirmation messages inform you when you are about to perform an action that cannot be reversed or when an action has been initiated and confirmation is needed to continue.

When a user-response is not required to continue, the message displays briefly.

4.4.2.2 Warning Messages

This type of messages displays a warning that a selected action may result in an irreversible change or loss of data. An example of this type of message is the “Erase Codes” message.

4.4.2.3 Error Messages

Error messages display when a system or procedural error has occurred. Examples of possible errors include cable disconnection or communication interruption.

4.4.3 Making Selections

The CV Diagnostics application is a menu-driven program that presents a series of choices. As a selection is made, the next menu in the series displays. Each selection narrows the focus and leads to the desired test. Tap the screen to make menu selections.

4.5 Diagnostics Function Entrance

There are two options available when accessing the diagnostics function:

1. Auto Scan — starts auto scanning for all the available systems on the vehicle.
2. Control Unit — displays a selection menu for all available control units of the test vehicle.

After a selection is made and the MaxiDiag tool establishes communication with the vehicle, the corresponding function menu or selection menu will display.

4.5.1 Auto Scan

The Auto Scan function performs a comprehensive scanning over all the ECUs in the vehicle to locate systems' faults and retrieve DTCs. An example of Auto Scan interface is shown as below.

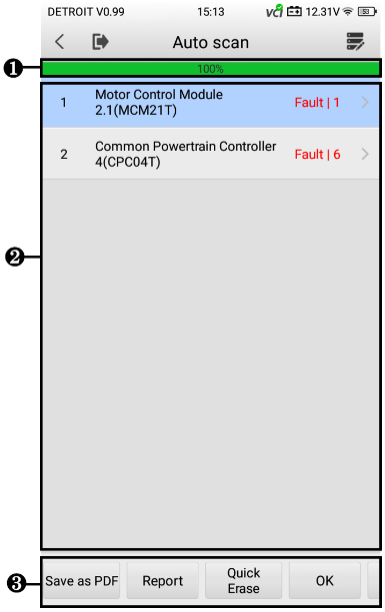


Figure 4-5 *Auto Scan Screen*

1. Progress Bar — indicates the test progress.
2. Main Section

   Column 1 — displays the sequence numbers.

   Column 2 — displays the scanned systems.

   Column 3 — displays the diagnostic indicators describing test results:

   These indicators are defined as follows:

   - ✧ **Fault(s) | #**: Fault(s) indicate(s) there is/are detected fault code(s) present; "#" indicates the number of the detected faults.
   - ✧ **Pass | No Fault**: Indicates the system has passed the scanning process and no fault has been detected.
   - ✧ **Not Scanned**: Indicates the system has not been scanned or the tool is unable to access this system.

Column 4 — tap to enter the related system to view the detailed information and perform further diagnosis or testing.

3. Function Buttons

The table below provides a brief description of the function buttons.

Table 4-2 *Function Buttons in Auto Scan Screen*

Name	Description
Save as PDF	Saves the diagnostics data in a PDF file.
Report	Saves the diagnostics data in a report form.
Quick Erase	Deletes fault codes. A warning message screen will display to inform you of possible data loss when this function is selected.
OK	Confirms the test result. Continues the system diagnosis after a required system is selected by tapping the item in the main section.
Pause	Suspends scanning during the scanning process and it will change to the **Continue** button after tapping. This button is available in scanning process, and will turn gray when the scanning is done.
ESC	Returns to the previous screen or exits the Auto Scan screen.

4.5.2 Control Unit

The Control Unit function allows you to manually locate a required control system for testing through a series of choices. Follow the menu-driven procedures and make proper selections; the tool will guide you to the proper diagnostics function menu based on selections.

4.6 Diagnostics Functions

Available functions may vary by vehicle. The function menu may include:

- ECU Information — provides the retrieved ECU information in detail.
- Trouble Codes — retrieves DTCs directly after tapping this button.
- Live Data — retrieves and displays live data and parameters from the vehicle's ECU.

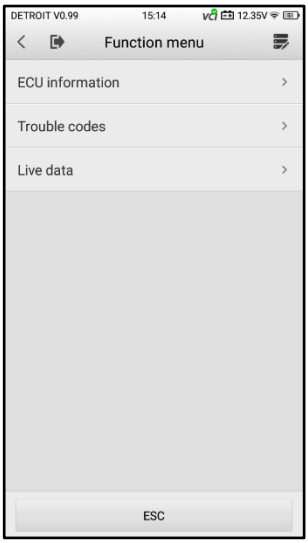


Figure 4-6 *Function Menu Screen*

➢ **To perform a diagnostics function**

1. Establish a communication with the test vehicle.
2. Identify the test vehicle by selecting from the menu options.
3. Locate the required system for testing by tapping **Auto Scan** or through menu-driven selections in **Control Unit**.
4. Select the desired diagnostics function from the Function Menu screen.

4.6.1 ECU Information

This function retrieves and displays all essential information for the test vehicle. Once tapped, a selection menu will open, allowing you to access the desired information screen.

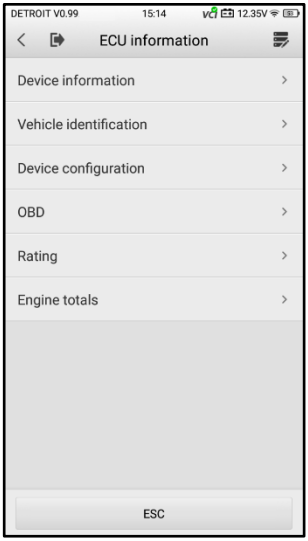


Figure 4-7 ***ECU Information Screen***

4.6.2 Trouble Codes

This function retrieves and displays the DTCs from the vehicle's control system. The Trouble Codes screen varies for each vehicle being tested. On some vehicles, freeze frame data can also be retrieved for viewing.

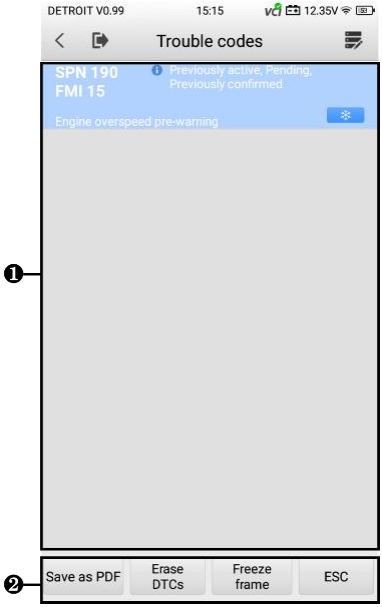


Figure 4-8 *Trouble Codes Screen*

1. Main Section
   - DTC Name — displays the retrieved DTCs from the vehicle.
   - Description — detailed description of the retrieved DTCs.
   - Status — indicates the status of the retrieved codes.
   - Information Icon — tap to view the detailed DTC information.
   - Snowflake Icon — displays when freeze frame data is available for viewing; selecting this icon will display a data screen.
2. Function Buttons — enables you to control the tool to perform certain functions or actions. The function buttons may vary depending on the vehicle being tested. The table below describes the function buttons that may include.

Table 4-3 ***Function Buttons in Trouble Codes Screen***

Name	Description
Save as PDF	Saves the diagnostics data in a PDF file.
Erase DTCs	Deletes DTCs. A warning message screen will display to inform you of possible data loss when this function is selected.
Freeze Frame	Tap to view the freeze frame if available.
ESC	Returns to the previous screen or exits the Trouble Codes screen.

- **To erase DTCs**
  1. After reading the retrieved DTCs and making appropriate vehicle repairs, tap **Erase DTCs** from the function buttons on the Trouble Codes screen.
  2. A warning message displays to inform you of data clearing when this function is applied.
     - ✧ Tap **Yes** to continue. A Confirmation screen displays when the operation is successfully done.
     - ✧ Tap **No** to exit.
  3. Tap **ESC** on the Confirmation screen to exit the Erase DTCs function.
  4. Tap **Trouble Codes** again to confirm whether the DTCs have been erased successfully.

NOTE

Before performing the Erase DTCs function, ensure that the vehicle's ignition key is in the ON (RUN) position while the engine is off.

4.6.3 Live Data

When this function is selected, the screen displays the data list for the selected module. The items available for any control module vary by vehicle. The parameters display in the order that they are transmitted by the ECU, so expect variation among vehicles.

Gesture scrolling allows you to quickly move through the data list. Touch the screen and drag your finger up or down to reposition the parameters being displayed if the data occupies more than one screen.

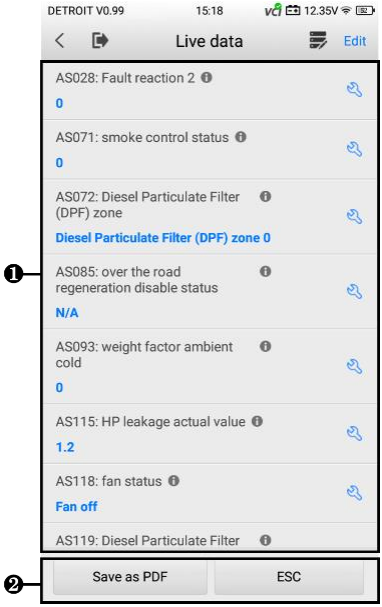


Figure 4-9 *Live Data Screen*

1. Main Section
   - Parameter Name — displays the retrieved parameters from the vehicle.
   - Status and Value — displays the status and current value of the parameters.
   - Information Icon — tap to view more information of the parameters.
   - Settings Icon — tap to select a data display mode and set the value range.
2. Function Buttons — enables you to control the tool to perform certain functions or actions. The function buttons may vary depending on the stage of the diagnostics.

Display Mode

There are three types of display modes available for data viewing, allowing you to view various types of parameters in the mode best suited to represent the data. Each parameter item displays the selected mode independently.

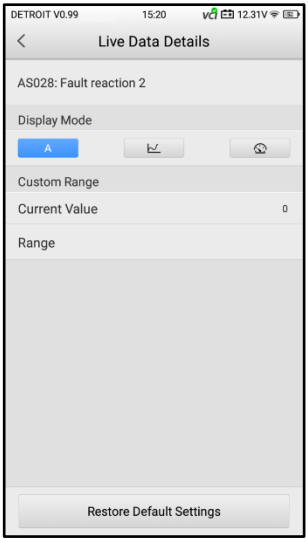


Figure 4-10 ***Live Data Details Screen***

The table below describes the three display modes in detail.

Table 4-4 ***Display Mode for Data Viewing***

Button	Name	Description
A	**Text Mode**	The default mode that displays the parameters as a text list.
	Waveform Graph Mode	Displays the parameters in waveform graphs.
	Analog Gauge Mode	Displays the parameters in gauge charts.

➢ **To select the display mode**

1. Tap the **Settings** icon on the right side of a parameter name to access the Live Data Details screen.
2. Select the display mode you need, and the parameters will display based on your selection.
3. Tap the **Restore Default Settings** button to return to the default settings if needed.

Trigger Settings

The Trigger Settings function is only available in Waveform Graph and Analog Gauge modes. You can set a standard range by specifying a minimum value and a maximum value to reach the trigger condition. When exceeding this range, the trigger function will be executed and the tool will automatically record and save the generated data.

➢ **To set a trigger**

1. Tap the **Settings** icon on the right side of a parameter name to access the Live Data Details screen.
2. Select **Waveform Graph Mode** or **Analog Gauge Mode**.
3. Make sure the button for trigger is ON.
4. Enter the required lower limit value and upper limit value.
5. Tap the **Back** button to return to the Live Data screen.

4.7 Generic HD (Heavy Duty) OBDII Operations

This option presents a quick way to check for DTCs, isolate the cause of an illuminated malfunction indicator lamp (MIL), check monitor status prior to emissions certification testing, and perform a number of other services that are emissions-related. The HD OBD direct access option is also used for testing HD OBDII/EOBD compliant vehicles that are not included in the database.

The top toolbar buttons are typically the same as those available for specific vehicle diagnostics. See *Table 4-1 Top Toolbar Buttons* for details.

4.7.1 General Procedure

➢ **To access the HD OBDII/EOBD diagnostics functions**

1. Tap the **CV Diagnostics** application on the Job Menu. The vehicle menu displays.
2. Tap the **HD OBD** button. There are three options to establish a communication with the vehicle.
   - Auto Scan General — select it to establish a communication using each protocol in order to determine which one the vehicle is using.
   - Auto Scan Enhance — if the protocol is incomplete or not scanned, tap **Auto Scan Enhance** to establish a communication using the supported protocol.
   - Protocols — select it to open a submenu of various protocols. A communication protocol is a standardized way of data communication

between an ECM and a diagnostics tool. Global HD OBD may use several different communication protocols.

3. Select a specific protocol if the **Protocols** option is selected. Wait for the HD OBDII/EOBD Diagnostics Menu to appear.

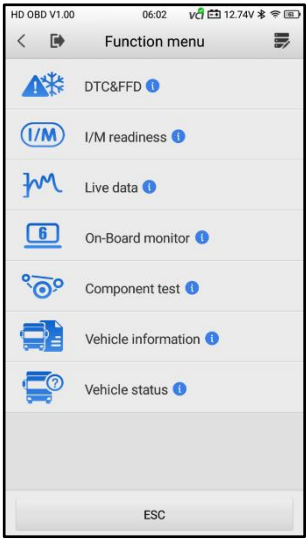


Figure 4-11 ***HD OBDII/EOBD Diagnostics Menu***

4. Select a function option to continue.
   - DTC & FFD
   - I/M Readiness
   - Live Data
   - On-Board Monitor
   - Component Test
   - Vehicle Information
   - Vehicle Status

NOTE

The supported functions may vary by vehicle.

4.7.2 Function Descriptions

This section describes the various functions of each diagnostics option:

4.7.2.1 DTC & FFD

When this function is selected, the screen displays a list of Current Codes and Pending Codes. When the freeze frame data of certain DTCs are available for viewing, a snowflake icon will display on the right side of the DTC item. The Erase Codes and Read codes functions can be applied by tapping the function buttons at the bottom of the screen.

- **Current Codes**

  Current codes are emission-related DTCs from the ECM of the vehicle. OBD II/EOBD Codes have a priority according to their emission severity, with higher-priority codes overwriting lower-priority ones. The priority of the code determines the illumination of the malfunction indicator lamp (MIL) and the codes erase procedure. Manufacturers rank codes differently, so DTCs may vary by vehicle.

- **Pending Codes**

  These are codes whose storing conditions have been met during the last drive cycle, but need to be met on two or more consecutive drive cycles before the DTC stored. The purpose of displaying pending codes is to assist the service technician after a vehicle repair when diagnostics information is cleared, by reporting test results after a single driving cycle.

  a) If a test fails during the driving cycle, the DTC associated is reported. If the pending fault does not occur again within 40 to 80 warm-up cycles, the fault is automatically cleared from memory.

  b) Test results reported do not necessarily indicate a faulty component or system. If test results indicate another failure after additional driving, a DTC is stored to indicate a faulty component or system.

- **Freeze Frame**

  In most cases the stored frame is the last DTC reported. Certain DTCs, those that have a greater impact on vehicle emission, have a higher priority. In these cases, DTC of the highest priority is the one for which the freeze frame records are retained. Freeze frame data includes a “snapshot” of critical parameter values at the time the DTC is stored.

- **Erase Codes**

  This option is used to clear all emission-related diagnostics data including DTCs, freeze frame data, and specific manufacturer-enhanced data from the vehicle ECM.

This option resets the I/M Readiness Monitor Status for all vehicle monitors to Not Ready or Not Complete status.

A confirmation screen displays when the clear codes option is selected to prevent accidental loss of data. Select **Yes** on the confirmation screen to continue, or select **No** to exit.

4.7.2.2 I/M Readiness

This function is used to check the readiness of the monitoring system. It is an excellent function to use prior to having a vehicle inspected for state emissions compliance. Selecting I/M Readiness opens a submenu with two choices:

- Since DTCs Cleared — displays the status of monitors since the last time the DTCs are erased.
- This Driving Cycle — displays the status of monitors since the beginning of the current drive cycle.

4.7.2.3 Live Data

This function enables the display of real-time PID data from the ECU. Displayed data includes analog and digital input and output, and system status information broadcast in the vehicle data stream.

Live data can be displayed in various modes. See *Live Data* for detailed information.

4.7.2.4 On-Board Monitor

This function allows you to view the results of On-Board Monitor tests. The tests are useful after the service when a vehicle's control module memory is already erased.

4.7.2.5 Component Test

This function enables dual-directional control of the ECM so that the diagnostics tool can transmit control commands to operate the vehicle systems. This function is useful in determining how well the ECM responds to a command.

4.7.2.6 Vehicle Information

This function enables the display of the vehicle identification number (VIN), calibration identification number, calibration verification number (CVN), and other information of the test vehicle.

4.7.2.7 Vehicle Status

This function checks the current condition of the vehicle, such as the communication

protocols of OBDII modules, number of fault codes, and status of the malfunction indicator light (MIL).

4.8 Exiting CV Diagnostics

The CV Diagnostics application remains open as long as there is an active communication with the vehicle. You must exit the diagnostics operation to stop all communications with the vehicle before closing the Diagnostics application.

NOTE

Damage to the vehicle electronic control module (ECM) may occur if the communication is disrupted. Ensure all forms of communication link such as data cable, USB cable, and wireless or wired network, are properly connected throughout the test. Exit all interfaces before disconnecting the test cable and power supply.

- **To exit the CV Diagnostics application**

  1. From an active diagnostics screen, tap the **Back** or **ESC** button to exit a diagnostics session; Or,
  2. From the Vehicle Menu screen, tap the **Back** button to exit the application directly.

Now, the CV Diagnostics application is no longer communicating with the vehicle and the tool is safe to open other applications.

5 CV Service

The Service application is specially designed to provide quick access to the vehicle systems for various scheduled service and maintenance tasks. The typical service operation screen is a series of menu-driven executive commands. Follow the on-screen instructions to select appropriate execution options, enter correct values or data, and perform necessary actions. The application will display detailed instructions to complete selected service operations.

The most commonly used services are described in this chapter.

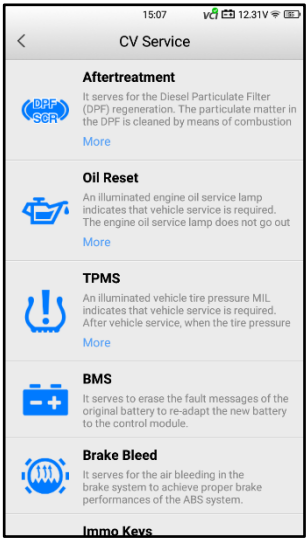


Figure 5-1 *CV Service Screen*

Upon accessing each special function, the screen will display the corresponding Vehicle Menu that supports that function. Choose a vehicle from the menu, and then select the diagnostics type to enter the Main Menu screen. In the Main Menu screen, you will find two options: **Diagnosis** and **Hot Functions**. The Diagnosis option includes Auto Scan and Control Unit, which are identical operations to those found in the CV Diagnostics application. The Hot Functions option consists of sub-functions that are relevant to the selected special function.

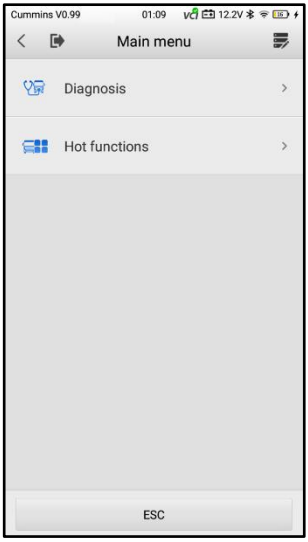


Figure 5-2 ***Main Menu Screen***

5.1 Diesel Particle Filter (DPF) Service

The Diesel Particle Filter (DPF) function manages DPF regeneration, DPF component replacement teach-in and DPF teach-in after replacing the engine control unit.

The ECM monitors driving style and selects a suitable time to employ regeneration. Vehicles driven a lot at idling speed and low load will attempt to regenerate earlier than Vehicles driven more with higher load and speed. In order for regeneration to take place, a prolonged high exhaust temperature must be obtained.

In the event of the vehicles being driven in such a way that regeneration is not possible, i.e., frequent short journeys, a diagnostic trouble code will eventually be registered in addition to the DPF light and “Check Engine” indicators displaying. A service regeneration can be requested in the workshop using the diagnostics tool.

Before initiating a forced DPF regeneration using the tool, check the following items:

- The fuel light is not on.
- No DPF-relevant faults are stored in system.
- The vehicle has the specified engine oil.
- The oil for diesel is not contaminated.

IMPORTANT

Before diagnosing a problematic vehicle and attempting to perform an emergency regeneration, it is important to obtain a full diagnostics log and read out relevant measured value blocks.

NOTE

1. The DPF will not regenerate if the engine management light is on, or there is a faulty EGR valve.
2. The ECU must be re-adapted when replacing the DPF and when topping up the fuel additive Eolys.
3. If the vehicle needs to be driven in order to perform a DPF service, a second person is needed for the function. One person should drive the vehicle while the other person observes the screen on the tool. Do not attempt to drive and observe the tool at the same time. This is dangerous and will pose a significant risk to your safety, as well as the safety of other motorists and pedestrians.

5.2 Oil Reset Service

This function performs reset of the Engine Oil Life system, which calculates the optimal oil life change interval depending on the vehicle driving condition and climate. The Oil Life Reminder must be reset each time the oil is changed, so the system can calculate when the next oil change is required.

NOTE

1. Always reset the engine oil life to 100% after every oil change.
2. All required work must be carried out before the service indicators are reset. Failure to do so may result in incorrect service values and cause DTCs to be stored by the relevant control module.
3. For some vehicles, the tool can reset additional service lights such as the maintenance cycle and service interval. On BMW vehicles for example, service resets include engine oil, spark plugs, front/rear brakes, coolant, particle filter, brake fluid, micro filter, vehicle inspection, exhaust emissions inspection and vehicle checks.

5.3 Tire Pressure Monitoring System (TPMS) Service

This function allows you to quickly look up the tire sensor IDs from the vehicle's ECU, as well as to perform TPMS replacement and reset procedures after tire sensors are replaced.

5.4 Battery Management System (BMS) Service

The Battery Management System (BMS) allows the tool to evaluate the battery charge state, monitor the close-circuit current, register the battery replacement, activate the rest state of the vehicle, and charge the battery via the diagnostic socket.

NOTE

1. This function is not supported by all vehicles.
2. The sub functions and actual test screens of the BMS may vary by vehicle, please follow the on-screen instructions to make correct selections.

The vehicle may use either a sealed lead-acid battery or an AGM (Absorbed Glass Mat) battery. Lead acid battery contains liquid sulphuric acid and can spill when overturned. AGM battery (known as VRLA battery, valve regulated lead acid) also contains sulphuric acid, but the acid is contained in glass mats between terminal plates.

It is recommended that the replacement aftermarket battery has the same specifications, such as capacity and type, as the exiting battery. If the original battery is replaced with a different type of battery (e.g. a lead-acid battery is replaced with an AGM battery) or a battery with a different capacity (mAh), the vehicle may require reprogramming of the new battery type, in addition to, performing the battery reset. Consult the vehicle manual for additional vehicle-specific information.

5.5 Steering Angle Sensor (SAS) Service

Steering Angle Sensor Calibration permanently stores the current steering wheel position as the straight-ahead position in the steering angle sensor EEPROM. Therefore, the front wheels and the steering wheel must be set exactly to the straight-ahead position before calibration. In addition, the vehicle identification number (VIN) is also read from the instrument cluster and stored permanently in the steering angle sensor EEPROM. On successful completion of calibration, the steering angle sensor fault memory is automatically cleared.

Calibration must always be carried out after the following operations:

- Steering wheel replacement.
- Steering angle sensor replacement.
- Any maintenance that involves opening the connector hub from the steering angle sensor to the column.
- Any maintenance or repair work on the steering linkage, steering gear or, other related mechanism.
- Wheel alignment or wheel track adjustment.

- Accident repairs where damage to the steering angle sensor, SAS assembly, or any part of the steering system may have occurred.

NOTE

1. Autel accepts no responsibility for any accident or injury arising from servicing the SAS system. When interpreting DTCs retrieved from the vehicle, always follow the manufacturer's recommendation for repair.
2. All software screens shown in this manual are examples, actual test screens may vary by test vehicle. Pay attention to the menu titles and the on-screen instructions to make correct selections.
3. Before starting any procedure, make sure vehicle has an ESC button. Look for the buttons on the dash.

5.6 Immobilizer (IMMO) Service

An immobilizer is an anti-theft mechanism that prevents an automobile's engine from starting unless the correct ignition key or other device is present. This device prevents thieves from starting the vehicle by a method known as hot wiring. Most new vehicles have an immobilizer as standard equipment. An important advantage of this system is that it doesn't require the vehicle owner to activate it; it operates automatically. An immobilizer is considered as providing much more effective anti-theft protection than an audible alarm alone; many auto insurance companies offer lower rates for vehicles that are equipped with an immobilizer.

As an anti-theft device, an immobilizer disables one of the systems needed to start a vehicle's engine, usually the fuel supply or the ignition. This is accomplished by radio frequency identification between a transponder in the ignition key and a radio frequency reader in the steering column. When the key is placed in the ignition, the transponder sends a signal with a unique identification code to the reader, which relays it to a receiver in the vehicle's computer control module. If the code is correct, the computer allows the fuel supply and ignition systems to operate and start the engine. If the code is incorrect or absent, the computer disables the system, and the engine will be unable to start until the correct key is placed in the ignition.

The IMMO service can disable a lost vehicle key and program the replacement key fob. One or more replacement key fobs can be programmed.

6 Data Manager

The Data Manager application allows you to store, print, and review the saved files, manage the workshop information, and keep test vehicle records.

Selecting the Data Manager application opens the file system menu. There are seven main functions available.

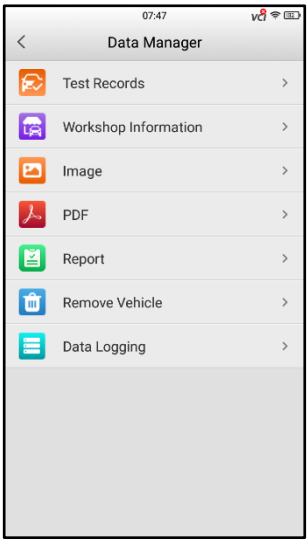


Figure 6-1 *Data Manager Screen*

Table 6-1 *Buttons in Data Manager*

Button	Name	Description
	Test Records	Tap to review the test vehicle history records.
	Workshop Information	Tap to edit the information of workshops.
	Image	Tap to review the screenshots.

Button	Name	Description
	**PDF**	Tap to review the reports stored as PDF format.
	**Report**	Tap to view the local reports on your tool. If the report is successfully uploaded to cloud, you can also share the report with others.
	**Remove Vehicle**	Tap to uninstall vehicles.
	**Data Logging**	Tap to review the communication data and ECU information of the test vehicle. The saved data can be reported and sent to the technical center via the Internet.

6.1 Test Records

This function stores the test vehicle records during CV diagnostics or CV service functions. All test information, including the vehicle information and the retrieved DTCs from the previous diagnostics sessions, is summarized and will be displayed in an easy-to-read table listing, from which you can tap one to access to the previously tested vehicle and directly restart a diagnostics session without the need for auto scan or manual vehicle selection.

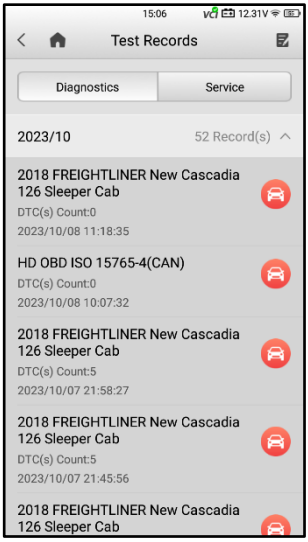


Figure 6-2 *Test Records Screen*

6.2 Workshop Information

The Workshop Information form allows you to edit, input, and save the detailed workshop information, such as shop name, address, phone number, and other remarks, which, when printing vehicle diagnostics reports and other associated test file, will display as the header of the printed documents.

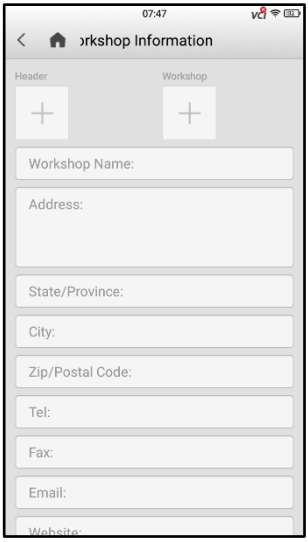


Figure 6-3 *Workshop Information Screen*

➢ **To edit the Workshop Information sheet**

1. Tap the **Data Manager** application on the Job Menu.
2. Select **Workshop Information**.
3. Tap the **Edit** button on the Top Toolbar.
4. Tap on each field to enter the appropriate information.
5. Tap **Done** to save the updated workshop information sheet, or tap **Cancel** to exit without saving.

6.3 Image

The Image section is a PNG database containing all captured screenshots.

Figure 6-4 *Image Screen*

➢ **To edit/delete image(s)**

1. Tap the **Data Manager** application on the Job Menu.
2. Select **Image** to access the PNG database.
3. Tap **Edit** on the top-right corner of the screen. The editing screen displays.
4. Select the image(s) you want to edit by tapping the check box at the bottom-right corner of the image.
5. Tap the **Delete** icon to delete the selected images or delete all images. Tap **Print** to print the selected image(s). Tap **Email** to send the selected image(s) to an email address.

6.4 PDF

The PDF files designated for local viewing are displayed in this section. After entering the PDF database, select a PDF file to view the stored information.

➢ **To view, share, and print the PDF files**

1. Tap the **Data Manager** application on the Job Menu.
2. Select **PDF** to enter the PDF database.
3. Select the PDF file you need from the list, then the detailed information will be displayed.

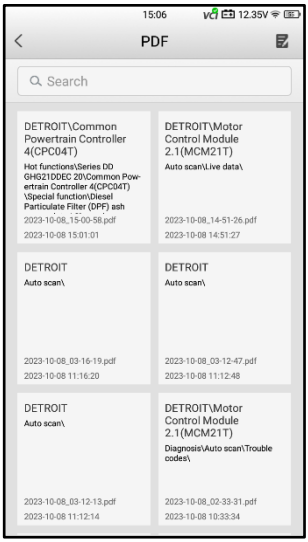


Figure 6-5 *PDF Screen 1*

4. In addition to viewing the PDF file, you have the option to share it with others or print it out.
   - To share the PDF file with others, tap the **Overflow** button ••• on the upper-right corner of the screen, then select **Share to** and enter the recipient's email address. Once everything is ready, tap **Send**.
   - To print it out, tap the **Overflow** button ••• on the upper-right corner of the screen, then select **PC Print**. You have two printing methods to choose from: **Print via PC-Link** and **Print via Wi-Fi**. Select the method that best suits your needs. See *Printer Manager* for detailed information.

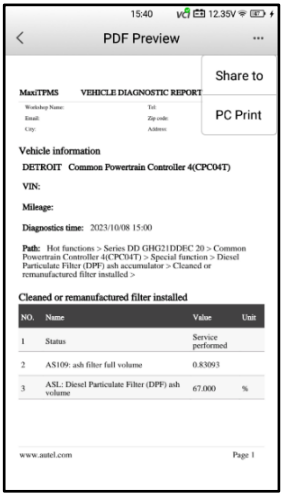


Figure 6-6 ***PDF Screen 2***

6.5 Report

This section stores and displays all reports. The reports stored in this area will be uploaded to cloud automatically when you set the Report Upload to Cloud in Report Settings to **ON**.

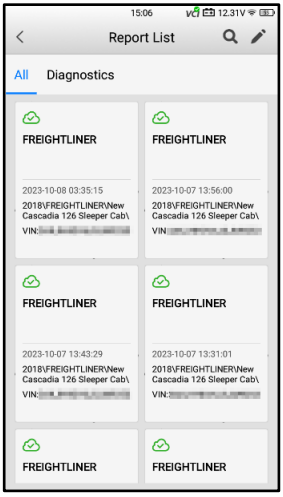


Figure 6-7 ***Report List Screen***

➢ **To view the local reports**

1. Tap the **Data Manager** application on the Job Menu.
2. Select **Report** to access the report list.
3. Select the report you need from the list.
4. A pop-up screen will appear. Select the **View Local Reports** option.

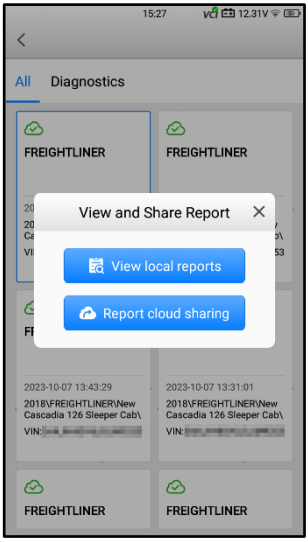


Figure 6-8 *View and Share Report Screen*

5. The report with detailed information will be displayed.

➢ **To share cloud report**

1. Tap the **Data Manager** application on the Job Menu.
2. Select **Report** to access the report list.
3. Select the report you need from the list.
4. A pop-up screen will appear. Select the **Report Cloud Sharing** option.

NOTE

Note that if the report displays, it means the report has been uploaded to the cloud successfully, and you can share the report with others; if the report displays , it means the report has failed to upload to the cloud, but will try to automatically upload to the cloud when entering the report again.

5. There are three ways for report cloud sharing: scan the QR code, send by email, or send by SMS (via phone number).

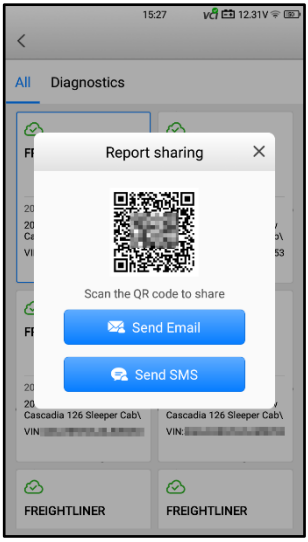


Figure 6-9 *Cloud Report Sharing Screen*

6.6 Remove Vehicle

This section allows you to manage the vehicles installed on the MaxiDiag diagnostics system. Selecting this section opens a managing screen, on which you can check all available vehicle applications.

Tap the **Edit** button on the upper-right corner of the screen. Select the vehicle software you want to delete by checking the box, and the selected item will display a blue mark. Tap the **Delete** button at the bottom of the screen to delete the software from the system database.

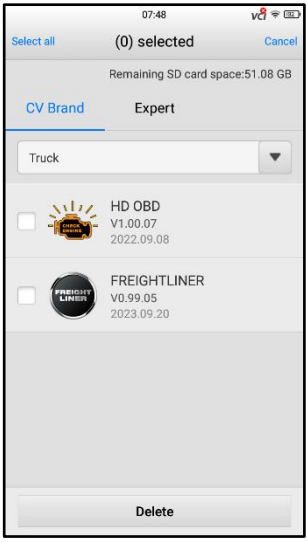


Figure 6-10 ***Remove Vehicle Screen***

6.7 Data Logging

The Data Logging screen keeps records of all **Feedback** (submitted), **No feedback** (saved) and **History** (up to the latest 20 test records) data on the diagnostics system. Autel support personnel will receive and process the submitted reports through the Support platform, and will send back solutions to the corresponding Data Logging session, on which you are also allowed to have a direct conversation with the support personnel.

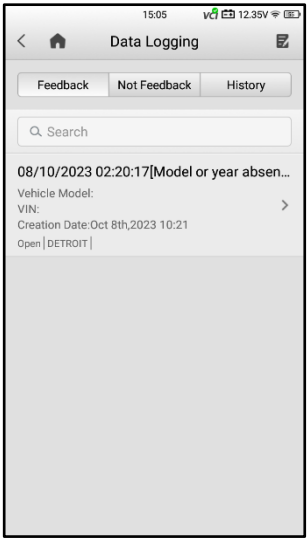


Figure 6-11 ***Data Logging Screen***

➢ **To make a reply in a Data Logging session**

1. Tap on the **Feedback** tag to view the list of submitted data loggings.
2. Select a specific item to view the latest update of the processing progress.
3. Tap on the input field at the bottom of the screen and enter your reply, or tap the **Audio** button to record a voice message or the **Camera** button to take a screenshot.
4. Tap **Send** to deliver your message to Autel support.

7 VCI Manager

The application enables the pairing of the MaxiDiag tool with the MaxiVCI V200 device, the communication status checking, and VCI firmware upgrades.

Figure 7-1 *VCI Manager Screen*

1. Function Buttons
   - Bluetooth — pairs the MaxiDiag tool with the MaxiVCI V200 via Bluetooth.
   - Firmware Upgrade — pairs the MaxiDiag tool with the MaxiVCI V200 via Bluetooth or a USB-C to USB-C cable for firmware updates.
2. Available Devices List

   After entering the VCI Manager screen, the MaxiDiag tool will search for available devices. The found devices will be displayed in this area. Select the needed one to initiate pairing.

7.1 VCI Bluetooth Pairing

The MaxiVCI V200 needs to be connected to a vehicle, so that it is powered during the synchronization procedure. Turn the vehicle's ignition to the **ON** position. Ensure the MaxiDiag tool has sufficient battery power or is connected to an external power supply.

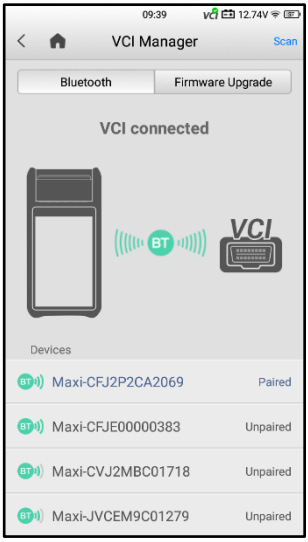


Figure 7-2 ***VCI Bluetooth Pairing Successful Screen***

➢ **To pair the MaxiVCI V200 with the MaxiDiag tool**

1. Power on the MaxiDiag tool.
2. Insert the 16-pin vehicle data connector of the MaxiVCI V200 to the vehicle data link connector (DLC). Make sure the vehicle's ignition is in the **ON** position.
3. Tap the **VCI Manager** application from the Job Menu.
4. Select the **Bluetooth** tab and tap the **Scan** button at the upper-right corner of the screen. The tool will automatically search for available pairing units.
5. The device name may display as "Maxi-" suffixed with a serial number. Select the appropriate device for pairing.
6. When the pairing is successfully done, the connection status displayed to the right of the device name is shown as "**Paired**," the VCI status icon displays a green "√" mark, and the Connection LED on the MaxiVCI V200 illuminates solid blue. The MaxiDiag tool is now ready for vehicle diagnosis. If you need to disconnect the connected device, tap it again.

7. Tap the **Home** button or **Back** button on the upper-left corner of the screen to return to the Job Menu.

NOTE

A VCI device can only be paired with one tool at a time, and once it is paired, the VCI will not be discoverable to other devices.

7.2 VCI Firmware Upgrade

Upgrading the VCI firmware enhances the overall performance of the MaxiDiag tool, bringing improved speed and functionality. Firmware upgrades can be performed either through a Bluetooth connection or by using a USB-C to USB-C cable.

➢ **To upgrade the MaxiVCI V200 firmware via the MaxiDiag tool**

1. Power on the MaxiDiag tool.
2. Insert the 16-pin vehicle data connector of the MaxiVCI V200 to the vehicle data link connector (DLC). Make sure the vehicle's ignition is in the **ON** position.
3. Connect the MaxiVCI V200 to the MaxiDiag tool via Bluetooth or using a USB-C to USB-C cable (not included).
4. Tap the **VCI Manager** application from the Job Menu.
5. Select **Firmware Upgrade**, and tap **Check for Firmware Updates** to check if an upgrade for MaxiVCI V200 is available.

Figure 7-3 *VCI Firmware Upgrade Screen*

6. Complete the upgrade if one is available to ensure that you have the latest version installed.

NOTE

Before upgrading the VCI firmware, make sure the MaxiDiag tool has a stable network.

8 Settings

Access the Settings menu to adjust default settings and view information about the MaxiDiag system. The following options are available for the MaxiDiag system settings:

- VCI Manager
- Laws and Regulations
- System Settings
- New User Guide Reset
- Printer Manager
- Upload Report to Cloud
- Unit
- About

8.1 VCI Manager

Tap this option to access the VCI Manager application screen, from which you are able to pair the tool with the VCI device and upgrade the VCI firmware. See *VCI Manager* for detailed information.

8.2 Laws and Regulations

To ensure the protection of the rights and interests of both software developers and users, we have provided a list of legal terms and statements. Please read them carefully before using Autel software.

8.3 System Settings

This function provides you with direct access to the System Settings screen, where you can adjust various system settings for the tool, including wireless and network settings, sound, display, and language settings.

8.4 New User Guide Reset

By selecting this option, you can restart the new user guide, providing you with concise step-by-step guidance when necessary.

8.5 Printer Manager

The Printer Manager function enables you to switch the way for report printing. There are two printing methods available:

- Print via PC-Link
- Print via Wi-Fi

8.5.1 Print via PC-Link

If you select the **Print via PC-Link** option, you need to install the PC Link driver program on your PC.

➢ **To install the PC Link driver program**

1. Download the **Maxi PC Suite** software from www.autel.com > ***Support*** > ***Downloads*** > ***Autel Update Tools***, and install it to your windows-based PC.
2. Double click on the **Setup.exe** item.
3. Select the installation language and the wizard will load momentarily.
4. Follow the instructions on the screen and click **Next** to continue.
5. Click on **Install** and the printer driver program will be installed onto the PC.
6. Click on **Finish** to complete the installation.

NOTE

The MaxiSys Printer tab is selected by default after the installation. The PC, printer, and the MaxiDiag tool must be connected to the same network.

➢ **To print via the PC Link driver program**

1. Make sure the printing method is changed to **Print via PC-Link**.
2. Run the **PC Link** program on the PC.
3. Select the **MaxiSys Printer** tab on the PC Link program.
4. Open the PDF file or the local report you wish to print. Tap the **Overflow** button ••• on the upper-right corner of the screen, then select **PC Print**. A test document will be sent to the PC.
   - ✧ If the **Auto Print** option in the MaxiSys Printer is selected, the MaxiSys Printer will print the received document automatically.
   - ✧ If the **Auto Print** option is not selected, click **Open PDF File** to view all the temporary files. Select the file(s) needed for printing, then tap **Print**.

NOTE

To confirm that the printer is functioning normally, click **Test Print** on the PC Link program to test.

8.5.2 Print via Wi-Fi

Before selecting **Print via Wi-Fi**, ensure that you have a wireless printer. Additionally, make sure that both the wireless printer and the MaxiDiag tool are using the same network.

➢ **To print using a wireless printer over Wi-Fi**

1. Make sure the printing method is changed to **Print via Wi-Fi**.
2. Open the PDF file or the local report you wish to print.
3. Tap the **Overflow** button ••• on the upper-right corner of the screen, then select **PC Print**.
4. The MaxiDiag tool will search for available printers.
5. Select the printer from the list, and the file will be automatically sent to the printer for printing.

NOTE

The printer and the MaxiDiag tool must be using the same network.

8.6 Upload Report to Cloud

This option automatically synchronizes the diagnostics information of the vehicle to the vehicle history and forms a diagnostic report for the user to upload. Toggle the **ON/OFF** button to enable/disable the Report Upload to Cloud function. The button appears blue if the function is enabled and displays gray if the function is disabled. See *Report* for detailed information.

NOTE

Make sure the tool is connected to the Internet while uploading reports.

8.7 Unit

This option allows you to adjust the measurement unit for the diagnostics system.

➢ **To adjust the unit setting**

1. Tap the **Settings** application on the Job Menu.
2. Tap the **Unit** option.

3. Select the appropriate measurement unit. A check icon will display to the right of the selected unit.
4. Tap the **Home** button on the top-left corner to return to the Job Menu, or tap **Back** button to select another option to adjust.

8.8 About

This option provides detailed information about the MaxiDiag tool, including the serial number, password, system version, hardware version, app version, and other relevant details.

9 Update

The Update application on the tool downloads the latest version of the software. The updates improve the MaxiDiag applications' capabilities, typically by adding new tests, new models, or by adding new or enhanced applications.

The tool automatically searches for available updates for all of the MaxiDiag software when it is connected to a network. Any updates that are found can be downloaded and installed on the tool.

NOTE

Ensure the tool is registered before utilizing the Update application. See *Autel User Center* for a comprehensive registration guide.

➢ **To update the software**

1. Power up the tool, and ensure that it is connected to a power source and has a steady Internet connection.
2. Tap the **Update** application button from the MaxiDiag Job Menu. The Update application screen displays.
3. On the Update screen, tap the **Get** button to update the specific item(s) or tap the **Update All** button to update all available items.
4. Tap **More** to view the details of all the available updates. You can also tap the **Get** or **Update All** button for update.
5. During the update, tap the icon to suspend the updating process. Tap the icon to resume the update and the process will continue from the pause point.
6. When the updating process is completed, the software will be installed automatically. The new version will replace the older version.

NOTE

For the account management, proceed to the Member Center tab.

10 Remote Desktop

The Remote Desktop application launches the TeamViewer QuickSupport program, which is a simple, fast, and secure remote-control interface. You can use the application to receive ad-hoc remote support from Autel's support center, colleagues, or friends, by allowing them to control your MaxiDiag tool on their PC via the TeamViewer software.

10.1 Operations

If you think of a TeamViewer connection as a phone call, the TeamViewer ID would be the phone number under which all TeamViewer Clients can be reached separately. Computers and mobile devices that run TeamViewer are identified by a unique global ID. The first time the Remote Desktop application is launched, this ID is generated automatically based on the hardware characteristics and will not change later on.

Make sure the MaxiDiag tool is connected to the Internet before launching the Remote Desktop application, so that the tool is able to receive remote support from the third party.

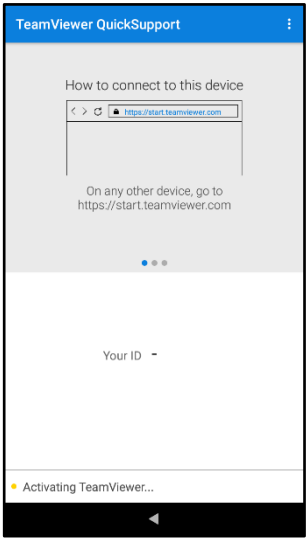


Figure 10-1 ***Remote Desktop Screen***

➢ **To receive remote support from a partner**

1. Power on the MaxiDiag tool.
2. Tap the **Remote Desktop** application on the Job Menu. The TeamViewer interface displays and the ID is generated and shown.
3. Your partner must install the Remote Control software to his/her PC by downloading the TeamViewer program (full version) online (see http://www.teamviewer.com), and then launch the software.
4. Provide your ID to your partner and wait for him/her to send you a remote-control request.
5. A prompt will appear asking you to allow remote control on your tool.
6. Tap **Allow** to accept, or tap **Deny** to reject.

Refer to the associated TeamViewer documents for additional information.

11 Autel User Center

Software updates are available for free for the first year from the date of purchase. The Autel User Center application allows you to register your tool to download the latest released software, thereby enhancing the functionality of the MaxiDiag application by adding new vehicle models or enhanced applications to the database.

There are two ways for product registration:

A. Register via the MaxiDiag tool

➢ **To log in with your account and register your tool**

1. Tap **Autel User Center** from the Job Menu. The following screen displays.

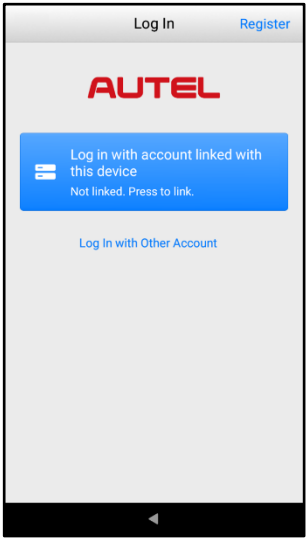


Figure 11-1 ***Autel User Center Screen***

2. If you already have an Autel account, tap the blue bar or tap **Log In with Other Account** to log in with your phone number (or email) and password. If you don't have an Autel account yet, tap **Register** to create one.

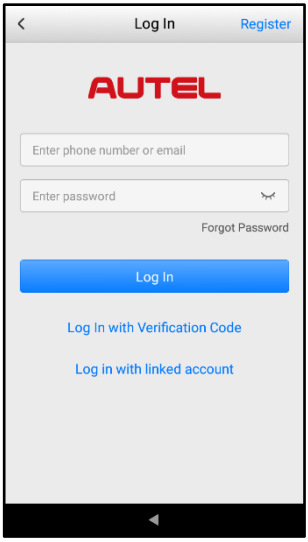


Figure 11-2 *Log In Screen*

3. After successfully logging in to your account, you will enter the main menu of the Autel User Center.
4. Select **Device Management** on the main menu.
5. Tap the **Link Device** button on the Device Management screen. The serial number and password of the tool will automatically appear on the Link Device screen.
6. Tap the **Link** button to complete the product registration.
7. Once your account is successfully linked with the tool, the Autel User Center application will automatically acquire and display your account information. By tapping the blue bar, you will be directly taken to the Device Management screen.

B. Register via the Autel website

➢ **To register the MaxiDiag tool**

1. Visit the website: pro.autel.com.
2. If you have an Autel account, sign in with your account ID and password and skip to step 7.
3. If you are a new member to Autel, click the **Register** button to create your Autel ID.
4. Enter the required personal information in the input fields.

5. Enter your email address, then click **Request**. You will receive an email from Autel with your verification code. Open the email and copy the code into the proper input box.
6. Set a password for your account, and enter the password again to confirm. Read the **Autel User Service Agreement** and **Autel Privacy Policy**, then check the box to accept the terms. After all the information is entered, click **Register**. A Product Registration screen will appear.
7. Your product serial number and password are required to complete your registration. To find your serial number and password on the tool: go to **Settings** > **About**.
8. Enter your tool's serial number and password on the Product Registration screen. Enter the CAPTCHA code and click **Submit** to complete your registration procedure.

12 Maintenance and Service

To ensure that the tool and the combined VCI device perform at their optimum level, we advise that the maintenance instructions in this section are strictly followed.

12.1 Maintenance Instructions

The following includes how to maintain your devices, together with precautions to take.

- Use a soft cloth dampened with alcohol or mild glass cleaner to clean the tool's touchscreen at the end of each work day.
- Do not use any abrasive cleansers, detergent, or automotive chemicals on the tool.
- Keep the devices in dry conditions and within specified operating temperatures.
- Dry your hands before using the tool. The touchscreen of the tool may not work when it is moist, or when you tap the touchscreen with wet hands.
- Do not store the devices in humid, dusty or dirty areas.
- Check the housing, wiring, and connectors for dirt and damage before and after each use.
- Do not attempt to disassemble your tool or the VCI device.
- Do not drop or cause severe impact to the devices.
- Use only authorized battery chargers and accessories. Any malfunction or damage caused by the use of unauthorized battery charger or accessories will void the limited product warranty.
- Ensure that the battery charger does not contact conductive objects.
- Do not use the tool beside microwave ovens, cordless phones and certain medical or scientific instruments to prevent signal interference.

12.2 Troubleshooting Checklist

A. When the tool does not work properly:
   - Make sure the tool has been registered online.
   - Make sure the system software and diagnostic application are properly updated.
   - Make sure the tool is connected to the Internet.
   - Check all cables, connections, and indicators to see if the signal is being received.

B. When battery life is shorter than usual:
   - This may happen when you are in an area with low signal strength. Turn off your device if it is not in use.

C. When you cannot turn on the tool:
   - Make sure the tool is connected to a power source or the battery is charged.

D. When you are unable to charge the tool:
   - Your charger maybe out of order. Contact your nearest dealer.
   - You may be attempting to use the device in an overly hot/cold temperature. Charge the device in a temperate area.
   - Your device may not be connected to the charger properly. Check the connector.

NOTE

If the problems persist, please contact Autel's technical support or your local selling agent.

12.3 About Battery Usage

Your tool is powered by a built-in lithium-ion polymer battery, which enables you to recharge your battery when there is electricity left.

DANGER

The built-in lithium-ion polymer battery is factory-replaceable only; incorrect replacement or tampering with the battery pack may cause an explosion.

- Do not use a damaged battery charger.
- Do not disassemble, open, crush, bend, deform, puncture, or shred the battery.
- Do not modify, remanufacture or attempt to insert foreign objects into the battery, or expose the battery to fire, explosion, or other hazards.
- Only use the specified charger and USB cables. Use of non-Autel-authorized charger or USB cables may lead to device malfunction or failure.
- Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazards.
- Avoid dropping the tool. If the tool is dropped, especially on a hard surface, and you suspect damage, take the tool to a service center for inspection.
- Try to keep closer to your wireless router to reduce battery usage.
- The time needed to recharge the battery varies depending on the remaining battery capacity.
- Battery life inevitably shortens over time.

- Unplug the charger once the tool is fully charged since overcharging may shorten battery life.
- Keep the battery in temperate environments. Do not place it inside a vehicle when it is too hot or too cold, which may reduce the capacity and life of the battery.

12.4 Service Procedures

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

12.4.1 Technical Support

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

Autel China Headquarters

- **Phone:** +86 (0755) 8614-7779 (Monday-Friday, 9AM-6PM Beijing Time)
- **Email:** support@autel.com
- **Address:** Floor 2, Caihong Keji Building, 36 Hi-tech North Six Road, Songpingshan Community, Xili Sub-district, Nanshan District, Shenzhen City, China
- **Web:** www.autel.com

Autel North America

- **Phone:** 1-855-288-3587 (Monday-Friday, 9AM-6PM Eastern Time)
- **Email:** ussupport@autel.com
- **Address:** 36 Harbor Park Drive, Port Washington, New York, USA 11050
- **Web:** www.autel.com/us

Autel Europe

- **Phone:** +49(0)89 540299608 (Monday-Friday, 9AM-6PM Berlin Time)
- **Email:** support.eu@autel.com
- **Address:** Landsberger Str. 408, 81241 München, Germany
- **Web:** www.autel.eu

Autel APAC

Japan:

- **Phone:** +81-045-548-6282
- **Email:** support.jp@autel.com

- **Address:** 6th Floor, Ari-nadoribiru 3-7-7, Shinyokohama, Kohoku-ku, Yokohama-shi, Kanagawa-ken, 222-0033 Japan
- **Web:** www.autel.com/jp

Australia:

- **Email:** ausupport@autel.com
- **Address:** Unit 5, 25 Veronica Street, Capalaba

Autel IMEA

- **Phone:** +971 585 002709 (in UAE)
- **Email:** imea-support@autel.com
- **Address:** 906-17, Preatoni Tower (Cluster L), Jumeirah Lakes Tower, DMCC, Dubai, UAE
- **Web:** www.autel.com

Autel Latin America

Mexico:

- **Phone:** +52 33 1001 7880 (Spanish in Mexico)
- **Email:** latsupport@autel.com
- **Address:** Avenida Americas 1905, 6B, Colonia Aldrete, Guadalajara, Jalisco, Mexico

Brazil:

- **Email:** brsupport@autel.com
- **Address:** Avenida José de Souza Campos n° 900, sala 32 Nova Campinas Campinas – SP, Brazil
- **Web:** www.autel.com/br

12.4.2 Repair Service

If it is necessary to send back your device for repair, please download and fill out the repair service form from www.autel.com. 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:

Floor 2, Caihong Keji Building, 36 Hi-tech North Six Road, Songpingshan Community, Xili Sub-district, Nanshan District, Shenzhen City, China

12.4.3 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

13 Compliance Information

FCC Compliance **FCC ID: WQ8-DV2311**

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

⚠**WARNING**

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

This equipment has been tested and found 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 try 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.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF Warning Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

IC Warning **IC: 10826A-DV2311**

This device complies with Industry Canada's licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) This device may not cause interference, and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil nedoit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

SAR Statement

This equipment complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. The device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA/Innovation, Science and Economic Development Canada (ISED)). These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 0.829 W/kg.

Cet équipement a été évalué et s'est avéré conforme aux exigences d'exposition aux RF (radiofréquences) du Code de sécurité 6 de Santé Canada pour les conditions d'exposition non contrôlée, qui est de 1.60 W/kg en moyenne sur 1g de tissu. Le DAS (débit d'absorption spécifique) le plus élevé rapporté pour cet appareil est de 0.829 W/kg.

CE Compliance

RED Directive 2014/53/EU.

RoHS Compliance

This device is declared to be in compliance with the European RoHS Directive 2011/65/EU.

14 Warranty

12-Month Limited Warranty

Autel Intelligent Technology Corp., Ltd. (the Company) warrants to the original retail purchaser of this MaxiDiag tool that should this product or any part thereof during normal usage and conditions, be proven defective in material or workmanship and results in product failure within 1 year 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).

NOTE

If the warranty period is inconsistent with local laws and regulations, please comply with the relevant local laws and regulations.

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.

AUTEL®