

Autel AL549

Autel AL549 OBD2 Scanner Code Reader User Manual

Model: AL549

1. INTRODUCTION

This manual provides detailed instructions for the operation and maintenance of your Autel AL549 OBD2 Scanner. The AL549 is a versatile diagnostic tool designed to assist in identifying and resolving vehicle issues related to the engine, Anti-lock Braking System (ABS), and battery. Please read this manual thoroughly before using the device to ensure proper and safe operation.



The image displays the Autel AL549 OBD2 scanner, a red and black handheld device with a color screen, alongside its retail packaging. The packaging highlights key features such as 'Full OBD2 Modes', 'Battery Inspection', 'ABS Codes Read/Erase', and 'Update Free'.

2. SAFETY INFORMATION

Always observe safety precautions when working on a vehicle. Improper use of diagnostic equipment can lead to injury or damage to the vehicle.

- Ensure the vehicle is in a well-ventilated area.
- Wear appropriate eye protection.
- Keep clothing, hair, hands, tools, and test equipment away from moving or hot engine parts.
- Do not connect or disconnect the scanner while the ignition is on or the engine is running.
- Refer to the vehicle's service manual for specific safety procedures.

3. PRODUCT OVERVIEW

The Autel AL549 is a compact, handheld diagnostic tool designed for ease of use. It combines essential OBD2 diagnostic functions with ABS and battery testing capabilities.

3.1 Package Contents

- Autel AutoLink AL549 Unit
- OBDII Cable
- USB Cable
- User Manual

3.2 Device Layout

The AL549 features a color display, navigation buttons, and function keys for intuitive operation. The OBDII connector cable is permanently attached for direct connection to the vehicle's Data Link Connector (DLC).



This image illustrates the Autel AutoLink AL549 scanner with a modern car in the background. The screen of the device shows various diagnostic icons. Text overlays list its primary functions: OBDII Diagnosis, One-Click I/M Readiness, Starting/Charging System Test, ABS Diagnosis, Read/Erase Codes, DTC Lookup, Auto VIN function, 1996-Newest Vehicle Coverage, and Lifetime Update.

4. SETUP

To begin using your Autel AL549 scanner, follow these steps:

1. **Locate the Vehicle's DLC:** The Data Link Connector (DLC) is typically located under the dashboard on the driver's side. Refer to your vehicle's service manual for the exact location if needed.
2. **Connect the Scanner:** With the vehicle's ignition off, firmly plug the AL549's OBDII connector into the vehicle's DLC.
3. **Power On:** The scanner will automatically power on once connected to the vehicle's DLC. If not, turn the vehicle's ignition to the 'ON' position (engine off).
4. **Initial Scan:** The device may automatically attempt to establish communication with the vehicle and perform an Auto VIN scan.

5. OPERATING INSTRUCTIONS

The Autel AL549 offers a range of diagnostic functions accessible through its menu system.

5.1 OBD2 Diagnostics

The AL549 supports all 10 modes of OBDII testing, allowing for comprehensive engine system diagnostics.

FULL OBD2 FUNCTIONS

Ranging From Live Data Stream to Evap Test

Read code	Erase Code	I/M Readiness	Live Data
DTC Lookup	Freeze Frame	On-board Monitor Test	Vehicle Info
Component Test	Module Present	EVAP	More...

Read / Erase Code

Live Data

Freeze Frame Data

Note:
AL549 Can Read Enhanced Codes in Powertrain system for Ford, GM and Chrysler.

The image highlights the comprehensive OBD2 functions of the Autel AL549. It shows the scanner in use, with a menu of icons representing functions like Read Code, Erase Code, I/M Readiness, Live Data, DTC Lookup, Freeze Frame, On-board Monitor Test, Vehicle Info, Component Test, Module Present, and EVAP. A note indicates that the AL549 can read Enhanced

- **Read Codes:** Retrieves Diagnostic Trouble Codes (DTCs) from the vehicle's engine control unit (ECU).
- **Erase Codes:** Clears DTCs and turns off the Check Engine Light (CEL) or Malfunction Indicator Lamp (MIL). Ensure the underlying issue is resolved before clearing codes.
- **Live Data:** Displays real-time data stream from the vehicle's sensors and modules.
- **Freeze Frame:** Captures a snapshot of vehicle operating conditions at the moment an emission-related fault occurred.
- **I/M Readiness:** Checks the status of emission-related monitors to determine if the vehicle is ready for an emissions test.
- **O2 Sensor Test:** Retrieves O2 sensor monitor test results.
- **On-Board Monitor Test:** Retrieves test results for emission-related powertrain components and systems.
- **EVAP System Test:** Initiates a leak test for the vehicle's Evaporative Emission System.
- **Vehicle Information:** Retrieves the Vehicle Identification Number (VIN), Calibration ID (CALID), and Calibration Verification Number (CVN).
- **DTC Lookup:** Provides definitions for generic and manufacturer-specific diagnostic trouble codes.
- **Enhanced Codes:** The AL549 can read enhanced codes specifically within the Powertrain system for Ford, GM, and Chrysler vehicles.

ONE-CLICK I/M READINESS

Find out immediately if your vehicle will pass an emissions test



I/M Readiness

MIL	ON		
DTC	65	PD DTC	4
MIS	X	EVAP	✓
FUE	X	AIR	✓
CCM	✓	O2S	✓
CAT	✓	HRT	✓
HCAT	✓	EGR	✓

I/M Readiness

MIL	ON		
DTC	65	PD DTC	4
MIS	X	EVAP	✓
FUE	X	AIR	✓
CCM	✓	O2S	✓
CAT	✓	HRT	✓
HCAT	✓	EGR	✓

! Error DTCs ! Pending DTCs ✓ No DTCs

This image focuses on the One-Click I/M Readiness function, showing the Autel AL549 scanner displaying a grid of readiness monitor statuses (MIL, DTC, MIS, FUE, CCM, CAT, HCAT, O2S, HRT, EGR, EVAP, AIR). The statuses indicate whether each monitor is complete (green check), incomplete (red X), or has pending codes (orange PD DTC). This feature helps determine if a vehicle is ready for an emissions test.

DTC LOOKUP FUNCTION

Save Your Time to Understand What the Code Means



The image illustrates the DTC Lookup function of the Autel AL549. It shows the scanner displaying a diagnostic trouble code (P1001) along with its definition: 'Key on engine running self test not able to complete. Key on engine running aborted.' This feature helps users quickly understand the meaning of retrieved codes.

5.2 ABS Diagnostics

The AL549 can retrieve and clear codes from the vehicle's Anti-lock Braking System (ABS).

- **Read ABS Codes:** Identifies Diagnostic Trouble Codes related to the ABS system.
- **Erase ABS Codes:** Clears ABS DTCs and turns off the ABS warning light.

Note: The ABS diagnosis function is compatible with OBD2 standard vehicles manufactured in or before 2020. It does not support newer car models after 2020.

5.3 Battery Test Functions

The AL549 includes functions to assess the condition of the car battery and alternator.

- **Starting Test:** Evaluates the battery's ability to crank the engine.
- **Charging Test:** Checks the alternator's performance in charging the battery.

Note: It is advised to complete pretest procedures based on the instructions in this user manual before performing battery and alternator tests.

ABS Module Diagnosis

C13AD 1/2

.....

Battery (+) circuit open

Erase Codes

Codes erased

Press any key to continue





US Vehicles:
Ford, GM, Chrysler, Dodge, Lincoln, Scion, Lexus

Asia Vehicle:
Toyota, Honda, Mazda, Nissan, Kia, Acura, Hyundai, Infiniti

Europe Vehicles:
Benz, BMW, Volkswagen, Audi, Jaguar, Land Rover, Mini, Volvo

NOTE: ABS functions only support vehicles manufactured in or before 2020

BATTERY TEST



Starting Test



Charging Test



The image details the ABS Module Diagnosis and Battery Test capabilities of the Autel AL549. It shows a diagnostic screen displaying an ABS code (C13AD) and the option to erase codes. A diagram illustrates the ABS system in a car. Below, the Battery Test function is shown with options for Starting Test and Charging Test. A crucial note states that ABS functions only support vehicles manufactured in or before 2020.

5.4 Data Management and Updates

- **Data Playback:** Allows review of recorded live data or freeze frame data for later analysis.
- **Print Data:** Connect the AL549 to a Windows-based PC via the supplied USB cable to print recorded DTC data and diagnostic reports.
- **Lifetime Update:** The Autel AL549 supports lifetime free software updates via the Maxi PC Suite on a personal computer. Regularly updating the device ensures access to the latest vehicle coverage and diagnostic features.

6. MAINTENANCE

Proper maintenance ensures the longevity and reliability of your Autel AL549 scanner.

- **Cleaning:** Use a soft, damp cloth to clean the exterior of the device. Do not use abrasive cleaners or solvents.

- **Storage:** Store the device in a dry, clean environment, away from extreme temperatures and direct sunlight.
- **Cable Care:** Avoid bending or twisting the OBDII cable excessively. Inspect the cable and connectors regularly for damage.

7. TROUBLESHOOTING

If you encounter issues with your AL549, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Scanner fails to power on	Loose connection; Vehicle ignition off; Vehicle battery low.	Ensure secure connection to DLC; Turn ignition to 'ON'; Check vehicle battery.
Communication error with vehicle	Incorrect protocol; Faulty DLC; Ignition off.	Verify vehicle is OBDII compliant; Check DLC for damage; Ensure ignition is 'ON'.
Screen freezes or device is unresponsive	Software glitch; Power interruption.	Disconnect and reconnect the device; Perform a software update if available.
ABS function not working on newer vehicle	Vehicle manufactured after 2020.	The AL549's ABS function is limited to vehicles manufactured in or before 2020.

8. SPECIFICATIONS

Specification	Detail
Model	Autel AL549
Item Weight	13.7 ounces
Package Dimensions	10 x 7.17 x 1.42 inches
Screen Size	2.8 Inches
Power Source	Corded Electric (via OBDII port)
Operating System	Android 4.0 (Internal Firmware)
UPC	792499188474

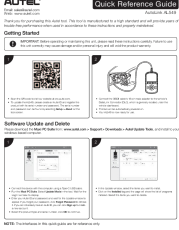
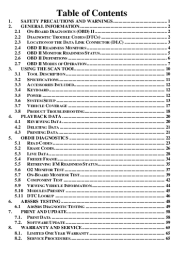
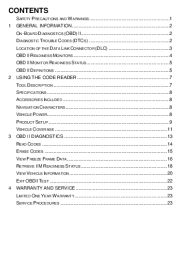

9. WARRANTY AND SUPPORT

For warranty information, technical support, or customer service inquiries, please refer to the official Autel website or contact Autel customer support directly. Keep your purchase receipt for warranty claims.

10. VIDEO RESOURCES

No official product videos were provided in the available data. For visual guides and demonstrations, please check the official Autel website or their authorized channels.

Related Documents - AL549

	<p>Autel AutoLink AL549 Quick Reference Guide: Setup & Software Updates</p> <p>Quickly set up and manage software for your Autel AutoLink AL549 diagnostic tool. This reference guide covers initial vehicle connection, Autel ID registration, and using the Maxi PC Suite for updates and deletions.</p>
	<p>Autel AutoLink AL619 OBD II Scanner User Manual & Guide</p> <p>Explore the Autel AutoLink AL619 OBD II scanner user manual. Learn about vehicle diagnostics, ABS/SRS testing, safety, troubleshooting, and software updates for efficient automotive repair and maintenance.</p>
	<p>Autel MaxiScan MS309 OBD II Code Reader User Manual</p> <p>Comprehensive user manual for the Autel MaxiScan MS309 OBD II Code Reader, covering safety precautions, general information on OBD II, tool description, specifications, product setup, diagnostics, and warranty information for vehicle emission system checks.</p>
	<p>Autel AutoLink AL309 OBD-II Code Reader User Manual</p> <p>User manual for the Autel AutoLink AL309 OBD-II/EOBD Code Reader, detailing its features, operation, and diagnostic capabilities for vehicle emissions systems.</p>

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