

LAUNCH U500

LAUNCH U500 Automotive OBD2 Scanner Instruction Manual

Your guide to operating and maintaining the LAUNCH U500 Diagnostic Scan Tool.



1. PRODUCT OVERVIEW

The LAUNCH U500 is a professional automotive diagnostic scan tool designed for enthusiasts, small garages, independent repair shops, and technicians. It provides comprehensive diagnostic functions for various vehicle systems.



Image 1.1: Front view of the LAUNCH U500 OBD2 Scanner, displaying its diagnostic menu on the screen.

2. PACKAGE CONTENTS

Upon opening the package, please verify that all the following items are included:

- 1 x LAUNCH Creader U500 Scanner
- 1 x OBDII Connector Cable
- 1 x USB Cable
- 1 x Quick Start Guide

3. SETUP

3.1 Connecting to Your Vehicle

1. Ensure the vehicle's ignition is OFF.
2. Locate the vehicle's 16-pin Data Link Connector (DLC). This is typically found under the dashboard on the

driver's side.

3. Firmly plug the OBDII Connector Cable into the vehicle's DLC.
4. Connect the other end of the OBDII Connector Cable to the LAUNCH U500 scanner.
5. Turn the vehicle's ignition to the ON position (engine off). The scanner should power on automatically.

4. OPERATING INSTRUCTIONS

4.1 Navigating the User Interface

The U500 features a 4.0" TFT 320*480 dpi screen and intuitive buttons for navigation.

User Friendly



Image 4.1: Diagram illustrating the LAUNCH U500's LCD screen and button functions, including DTC, ER, I/M, Help, OK, ESC, and selection buttons.

- **LCD Screen:** Displays test results and menu options.
- **DTC Button (F1):** Reads diagnostic trouble codes.
- **ER Button (F2):** Erases diagnostic trouble codes.

- **I/M Button (F3):** Provides quick access to the I/M Readiness function.
- **Help Button (F4):** Accesses help information.
- **OK Button:** Confirms the current operation or selection.
- **ESC Button:** Returns to the previous screen.
- **Selection Buttons (Up/Down/Left/Right):** Navigates through menus and options.

4.2 OBDII Full Functions

The U500 supports standard OBDII protocols (ISO9141-2, ISO14230-4, SAEJ1850, ISO15765-4) and offers the following functions:



Image 4.2: Visual representation of the various OBD-II modes supported by the LAUNCH U500, including Read Codes, Erase Codes, Check Engine, Evap System, I/M Readiness, Data Stream, Vehicle Information, On-Board Monitor, Freeze Frame, and O2 Sensor.

- **Read Dynamic Data Streams:** Displays real-time data from the vehicle's sensors.
- **MIL Indication and Ready Status Query:** Checks the Malfunction Indicator Lamp status and I/M readiness monitors.
- **Read Freeze Frame Data:** Captures a snapshot of vehicle conditions when a fault code is set.

- **Read Current DTCs:** Retrieves active diagnostic trouble codes.
- **Clear DTCs:** Erases diagnostic trouble codes and turns off the Check Engine Light.
- **O2 Sensor Test:** Monitors and tests the oxygen sensors.
- **Specific Monitoring System:** Accesses specific monitor test results.
- **On-board Monitoring:** Tests components and systems not continuously monitored.
- **Read Pending DTCs:** Retrieves codes that have not yet triggered the MIL.
- **On-board System or Component Control:** Allows bidirectional control for certain tests (if supported by vehicle).
- **Read Vehicle Information:** Displays VIN, Cal ID, CVN, etc.
- **Read Permanent DTCs:** Retrieves codes that remain after clearing until the system confirms the fault is fixed.

4.3 Four System Diagnosis

Beyond standard OBDII, the U500 can diagnose four key vehicle systems:

Four System Diagnosis

Read, clear error codes and view data stream for ABS/SRS/AT/Engine System, to turn off MIL quickly.



Image 4.3: Illustration showing the four main systems the LAUNCH U500 can diagnose: Engine Check, ABS, SRS, and Transmission.

- **Engine System:** Reads and clears DTCs, views data streams for engine-related issues.
- **ABS (Anti-lock Braking System):** Reads and clears DTCs, views data streams for ABS faults.
- **SRS (Supplemental Restraint System - Airbag):** Reads and clears DTCs, views data streams for airbag system issues.
- **Transmission System:** Reads and clears DTCs, views data streams for transmission problems.

4.4 Special Functions

The U500 supports two commonly required service features:

- **Oil Service Light Reset:** Resets the oil service light after an oil change.
- **Electronic Brake Pad Reset (EPB Reset):** Resets the electronic parking brake system after brake pad replacement.

4.5 DTC Code Lookup

The device includes a DTC code lookup function to provide detailed information and definitions for retrieved diagnostic trouble codes (generic P0, P2, P3, U0, and manufacturer-specific P1, P3, U1 codes, as well as pending codes).

4.6 Data Stream Storage and Playback

The U500 allows for graphical display of up to four data streams simultaneously. It also supports data stream storage and playback, enabling review of diagnostic data at a later time.

4.7 Vehicle Compatibility

The LAUNCH U500 is compatible with over 40 brands of 1996 and newer cars, light trucks, minivans, SUVs, or hybrid manufactured vehicles that support OBD II protocols.

Wide Car Coverage

Supports more than 40 global car brands vehicle.

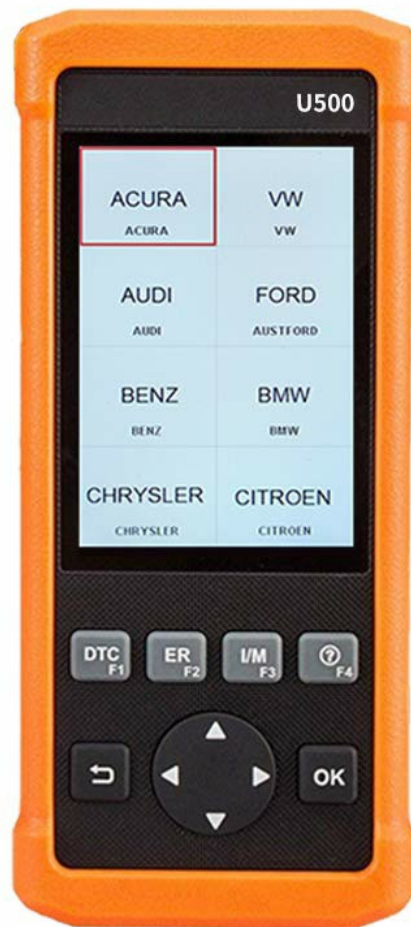


Image 4.4: Screen display of the LAUNCH U500 showing a list of supported car brands, indicating its wide vehicle coverage.

5. MAINTENANCE

5.1 Software Updates

The LAUNCH U500 offers lifetime free software updates. To update the device:

1. Connect the U500 scanner to a Windows PC terminal using the provided USB cable.
2. Visit the official LAUNCH website to download the update tool and latest software.
3. Follow the on-screen instructions of the update tool to complete the software upgrade.

Print and Upgrade

Upgrade by connecting your Window PC terminal with a USB cable at anytime and print out diagnostic report.



Image 5.1: Diagram showing the LAUNCH U500 connected via USB to a laptop for software updates and printing diagnostic reports.

5.2 Cleaning and Storage

- Clean the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Store the scanner in a dry, cool environment, away from direct sunlight and extreme temperatures.
- Keep the device and cables free from dust and moisture.

6. TROUBLESHOOTING

If you encounter issues with your LAUNCH U500 scanner, consider the following:

- **Device Not Powering On:** Ensure the OBDII cable is securely connected to both the vehicle's DLC and the scanner. Verify the vehicle's ignition is in the ON position.
- **Communication Error:** Check that the vehicle supports OBDII protocols. Ensure all connections are secure. Try the scanner on a different compatible vehicle if possible to rule out vehicle-specific issues.
- **Screen Freezes/Unresponsive:** Disconnect the scanner from the vehicle, wait a few seconds, and reconnect. If the issue persists, perform a software update.

- **Incorrect Readings:** Ensure the vehicle's VIN is correctly identified by the scanner. Verify that the software is up to date.

For persistent issues, refer to the official LAUNCH support resources or contact customer service.

7. SPECIFICATIONS

Feature	Specification
Screen	4.0" TFT 320*480 dpi
Voltage Range	9-18V
Operating Temperature	0°C to 50°C (32°F to 122°F)
Environment Temperature	-20°C to 70°C (-4°F to 158°F)
Dimensions (L*W*H)	195mm * 86mm * 32mm (7.6 * 3.4 * 1.2 inches)
Item Weight	880 g
Outer Material	ABS
Supported Protocols	ISO9141-2, ISO14230-4, SAEJ1850, ISO15765-4
Multilingual Support	English, Japanese, French, Spanish, German, Russian, Italian, Portuguese, Polish, Turkish, Korean, Czech

8. WARRANTY AND SUPPORT

The LAUNCH U500 comes with lifetime free software updates, ensuring your device remains current with the latest vehicle data and diagnostic capabilities.

For technical support, warranty claims, or further assistance, please contact LAUNCH customer service through their official website or the contact information provided in your product packaging. Please have your product model number (U500) and purchase details ready when contacting support.



