

## ANCEL AD310 Pro

# ANCEL AD310 Pro User Manual

2-in-1 OBD2 Scanner & 12V Battery Tester

## 1. INTRODUCTION

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The ANCEL AD310 Pro is an advanced diagnostic tool designed for both OBD2 system analysis and 12V vehicle battery testing. This compact device provides comprehensive insights into your vehicle's health, helping you identify and resolve issues efficiently. It combines the functionality of a professional OBD2 scanner with a reliable battery tester, making it an indispensable tool for vehicle owners and DIY mechanics.



Figure 1.1: ANCEL AD310 Pro OBD2 Scanner & Battery Tester

## 2. WHAT'S IN THE BOX

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

- 1x ANCEL AD310 Pro Unit
- 1x Battery Clamp Cable
- 1x USB - Type C Cable
- 1x User Manual

# ALL-IN-ONE KIT

All You Need in One Package



Figure 2.1: Package Contents

## 3. SETUP

### 3.1 Connecting the Device

1. Locate your vehicle's OBD2 port, typically found under the dashboard on the driver's side.
2. Plug the AD310 Pro's OBD2 connector firmly into the vehicle's OBD2 port. The device will power on

automatically.

3. For battery testing, connect the red battery clamp to the positive (+) terminal of the 12V battery and the black clamp to the negative (-) terminal.

## **3.2 App Installation and Bluetooth Connection**

The ANCEL AD310 Pro utilizes a Bluetooth connection for enhanced functionality via a smartphone app.

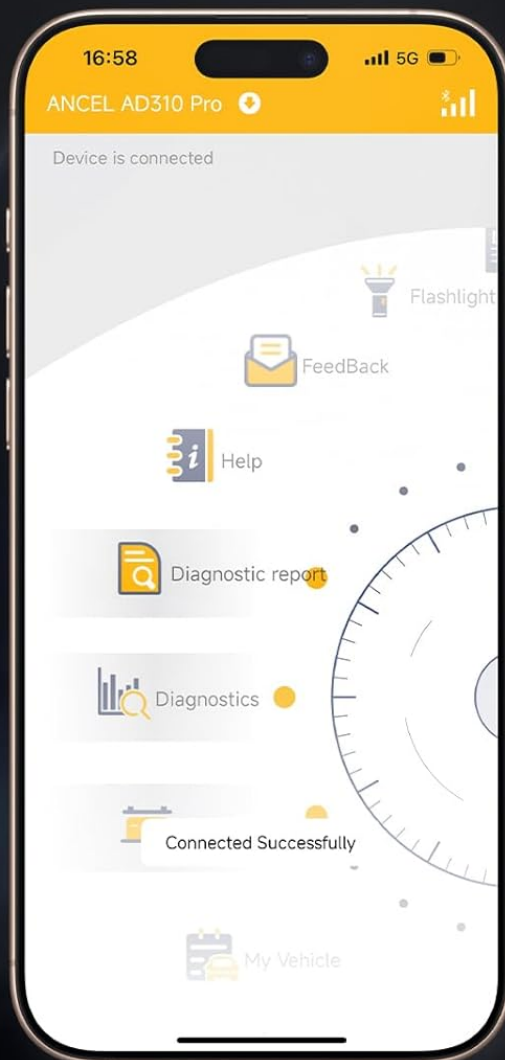
1. Scan the QR code in the user manual or search for the official ANCEL app in your device's app store (iOS or Android).
2. Install the app on your smartphone.
3. Ensure Bluetooth is enabled on your smartphone.
4. Open the ANCEL app and follow the on-screen instructions to pair with your AD310 Pro device. The device name will typically appear as "AD310 Pro" or similar.

# WIRELESS APP OPERATION

Check Codes & Battery on Your Phone



Bluetooth 5.0



iOS & Android Compatible

Figure 3.1: Wireless App Operation via Bluetooth

## 4. OPERATING THE DEVICE

### 4.1 Full OBD2 Diagnostic Functions

The AD310 Pro supports all essential OBD2 functions to help you diagnose engine-related issues.

- **Read & Erase Codes:** Retrieve Diagnostic Trouble Codes (DTCs) and clear them after repairs.



- **Data Stream:** View live sensor data in real-time, such as engine RPM, vehicle speed, oxygen sensor readings, etc.
- **I/M Readiness:** Check the status of emission-related monitors to ensure your vehicle is ready for an emissions test.
- **Freeze Frame:** Capture a snapshot of vehicle conditions at the moment a fault code was set.
- **Vehicle Information:** Display the vehicle identification number (VIN), calibration ID (CALID), and calibration verification number (CVN).
- **DTC Lookup:** Built-in library to explain the meaning of diagnostic trouble codes.



Figure 4.1: Full OBD2 Diagnostics Interface

## 4.2 Advanced 12V Battery Testing

The integrated battery testing feature allows for comprehensive analysis of your 12V battery's health, cranking performance, and charging system.

- **Battery Test:** Assesses the overall health and charge level of the battery.
- **Cranking Test:** Evaluates the battery's ability to start the engine, checking cranking voltage and time.
- **Charging Test:** Analyzes the vehicle's charging system, including alternator output and ripple voltage, to ensure proper battery charging.

## KNOW YOUR BATTERY'S HEALTH

Check Cranking, Charging & Avoid Costly Failures



**Cranking Test**  
Start-Up Performance

**Charging Test**  
Alternator Health



**Battery Test**  
Overall Battery Condition

Figure 4.2: Battery Health, Cranking, and Charging Tests

### 4.3 Bluetooth App Features

The dedicated smartphone app enhances the AD310 Pro's capabilities, offering additional diagnostic and monitoring features.

- **Performance Tests:** Analyze acceleration, braking, and distance for insights into driving performance.
- **Trip Analysis:** Monitor driving habits and fuel consumption over trips.
- **Data Stream:** View live data graphs directly on your phone for easier analysis.
- **Report Generation:** Create and share diagnostic reports with mechanics or for personal records.

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*Video 4.1: Overview of ANCEL AD310 Pro 2-in-1 Bluetooth OBD2 & 12V Battery Tester functions, including battery tests, full OBD2 functions, and performance tests via the app.*

## 5. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the device. Avoid using abrasive cleaners or solvents.
- **Storage:** Store the AD310 Pro in a cool, dry place away from direct sunlight and extreme temperatures.
- **Software Updates:** Periodically check the ANCEL website or app for available software updates to ensure optimal performance and compatibility with new vehicle models.

## 6. TROUBLESHOOTING

Issue	Possible Cause	Solution
Device does not power on.	Loose OBD2 connection; vehicle's OBD2 port not supplying power.	Ensure the OBD2 connector is fully seated. Check vehicle's fuse for the OBD2 port.
Cannot connect via Bluetooth.	Bluetooth not enabled; app not installed; device not discoverable.	Enable Bluetooth on your phone. Install the ANCEL app. Restart the AD310 Pro and try pairing again.
Error reading codes.	Ignition not on; vehicle not OBD2 compliant; faulty connection.	Turn ignition to ON position (engine off). Verify vehicle is 1996 or newer and OBD2 compliant. Re-check connection.
Inaccurate battery test results.	Loose battery clamp connection; dirty battery terminals; incorrect battery type selected.	Ensure clamps are securely attached to clean battery terminals. Select the correct battery type in the device settings.



## 7. SPECIFICATIONS

Feature	Detail
Model	AD310 Pro
Item Weight	1.21 pounds
Product Dimensions	7.87 x 7.48 x 2.36 inches
Operating System (App)	Android, iOS
Automotive Fit Type	Universal Fit
Battery Compatibility	12V (Regular Flooded, AGM Flat Plate, AGM Spiral, GEL)
CCA Range	100-2000 CCA
Connectivity	Bluetooth 5.0, Wired OBD2

### 7.1 Compatibility

The ANCEL AD310 Pro offers broad compatibility with a wide range of vehicles and battery types:

- **Vehicle Compatibility:** Compatible with 99% of global vehicles, including American (1996+), European (2001+), and Asian (2005+) cars and light trucks.
- **Battery Compatibility:** Supports various 12V battery types such as regular flooded, AGM flat plate, AGM spiral, and GEL batteries. Covers most cars, SUVs, light trucks, and small RVs.

# WIDE **VEHICLE** COMPATIBILITY

OBD Compatible with  
Cars & Light Trucks Since 1996



Sedan



SUV



Pickup



WAGON

**US** Since  
**1996**

**EU** Since  
**2000**

**ASIA** Since **2008**

OBD2 Works with 12V Vehicles Only.

*Figure 7.1: Wide Vehicle Compatibility*

## 8. WARRANTY AND SUPPORT

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

