XTOOL IP900BT

XTOOL IP900BT Wireless OBD2 Diagnostic Scanner User Manual

Model: IP900BT

1. Introduction

This manual provides detailed instructions for the operation and maintenance of your XTOOL IP900BT Wireless OBD2 Diagnostic Scanner. The IP900BT is a professional automotive diagnostic tool designed for comprehensive vehicle system analysis, offering advanced functions such as full-system diagnostics, bi-directional control, ECU coding, and various reset services. Please read this manual thoroughly before using the device to ensure proper and safe operation.

Image 1.1: XTOOL IP900BT Diagnostic Scanner with its Wireless VCI module.

2. What's Included

Verify that all items are present in your package:

- IP900BT Diagnostic Scan Tool (Tablet)
- Wireless VCI Box (OBD II -16 Connector)
- Charger Adapter (US, UK, EU)
- Type-C to Type-C Charger Cable
- Type-C to Type-A Adapter
- Tool Case
- QuickStart Guide & Packing List
- Various OBD Adapters: for Honda-3, for Hyundai/for KIA-10, for KIA-20, for BMW-20, for Toyota -17, for Mazda-17, for Nissan-14, for GM/for Daewoo-12, for SUZUKI-3, for FIAT-3, for MITSUBISHI-12+16, for BENZ-38, for Audi-4, for UNIVERSAL-3, for BD15 M to VAG

Image 2.1: Visual representation of the items included in the XTOOL IP900BT package.

3. Initial Setup and Connection

3.1 Powering On and Charging

1. Connect the provided charger to the Type-C port on the IP900BT tablet.
2. Plug the charger into a power outlet. The device will begin charging.
3. Press and hold the power button to turn on the tablet.

3.2 VCI Module Connection

1. Locate the vehicle's OBD2 port, typically under the dashboard on the driver's side.
2. Plug the Wireless VCI Box (OBD II -16 Connector) firmly into the vehicle's OBD2 port. The VCI indicator lights will illuminate.
3. On the IP900BT tablet, ensure Wi-Fi is enabled and connected to a stable network for updates and certain online functions. The VCI module communicates wirelessly with the tablet.

3.3 Software Updates

It is recommended to update the software upon initial setup to ensure access to the latest vehicle models and diagnostic functions. The IP900BT includes 3 years of free software updates.

1. Connect the tablet to a stable Wi-Fi network.
2. Navigate to the 'Updates' section on the tablet's main menu.
3. Select and download available updates for your vehicle makes.

Image 3.1: The XTOOL IP900BT displaying the software update interface.

4. Operating the Device: Key Features and Functions

4.1 Full System Diagnostics

The IP900BT performs OE-level diagnostics across all available vehicle systems, including Engine, Transmission, ABS, SRS, EPB, BMS, TPMS, and more. It supports CAN fast scan for quick fault detection.

- **Read/Clear DTCs:** Retrieve and erase diagnostic trouble codes.
- **Auto Scan VIN:** Automatically identify vehicle information for faster diagnostics.
- **Live Data:** View real-time sensor data.

Image 4.1: The IP900BT interface showing full system diagnostic capabilities.

4.2 Bi-directional Control (Active Test)

This function allows you to send commands to vehicle subsystems and components to perform active tests, verifying their functionality without using the vehicle's controls. This is useful for quickly pinpointing issues.

- Test components such as fuel injectors, cooling fans, windshield wipers, power mirrors, and electronic throttle body.

Image 4.2: Illustration of bi-directional control functionality, sending commands to vehicle components.

4.3 41+ Special Functions (Resets)

The IP900BT provides over 41 essential maintenance and reset services, covering common repair jobs.

- Oil Reset
- Electronic Parking Brake (EPB) Reset
- Steering Angle Sensor (SAS) Calibration
- Battery Management System (BMS) Reset
- ABS Bleeding
- Throttle Relearn
- Injector Coding
- Transmission Adaptation
- Tire Size Reset
- Airbag Reset
- And many more.

Image 4.3: Screen showing a selection of the 41+ special functions available on the device.

4.4 ECU Coding

ECU Coding adapts the vehicle to different operating conditions after maintenance or component replacement. It provides component matching and adaptive data reset for various vehicle brands.

- **Online Coding:** For BMW.
- **Offline Coding:** For VW, Audi, Skoda, BENZ, Mitsubishi.

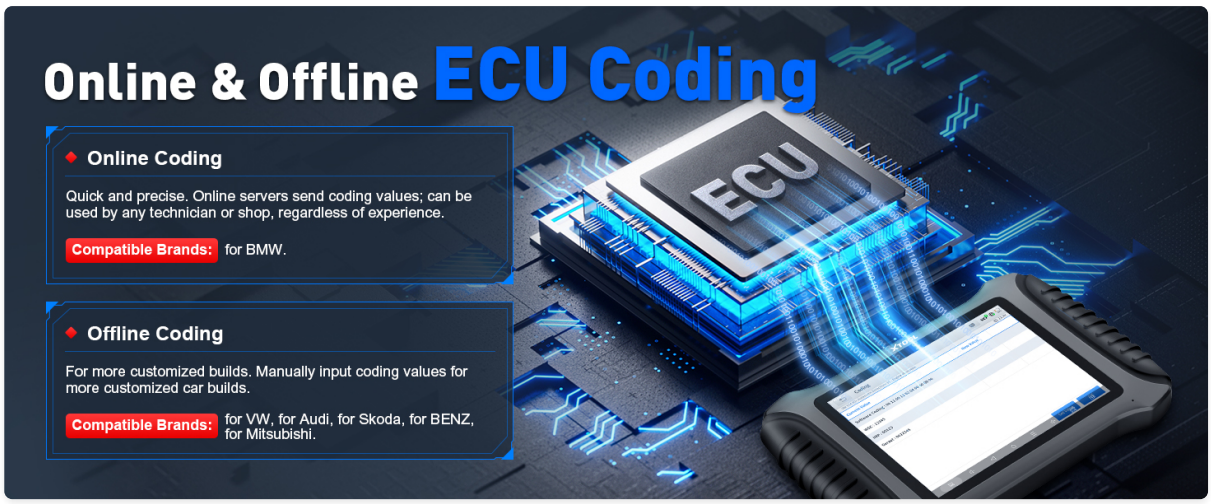


Image 4.4: Diagram explaining the online and offline ECU coding capabilities.

4.5 PMI Function (Programmable Module Installation)

The PMI function supports Ford, Mazda, and Lincoln vehicles. It allows for adjusting parameters like engine power output, fuel injection, and shift logic. It also enables coding new hardware components to ensure compatibility with the vehicle's existing systems.

Image 4.5: Visual representation of the PMI (Programmable Module Installation) function.

4.6 ECU Configuration

This feature allows users to customize vehicle functions by activating or deactivating certain features that may be hidden or redundant. Note that this function is only compatible with specific vehicle models.

- Unfold desired functions.
- Turn off unwanted functions.

Image 4.6: The ECU Configuration interface on the IP900BT tablet.

4.7 CANFD/DoIP/FCA Autoauth Support

The IP900BT supports advanced communication protocols for a wider range of modern vehicles.

- **CANFD:** Improves on the original CAN protocol with faster transmission speeds (up to 8x faster).
- **DoIP:** Enables high-speed data transmission via Ethernet/IP networks for diagnostic tools.
- **FCA AutoAuth:** Provides OE vehicle-approved Security Gateway access for FCA SGW-equipped vehicles (2018+ Chrysler, Dodge, Jeep, Fiat). Note: FCA account registration and subscription plan selection are required, administered by FCA. An XTOOL 12+8 cable can be used as an alternative.

Image 4.7: The FCA AutoAuth login screen on the IP900BT.

4.8 Live Data Visualization & Export

The device allows for detailed analysis of live sensor data.

- Graph up to 8 live data PIDs (Parameter IDs) into one chart.
- Display up to 8 individual graphs on one screen.
- Record and view data.
- Export data as a CSV file for further analysis.

Image 4.8: The IP900BT showing multiple live data streams graphically.

4.9 Pre/Post Scan

This feature allows you to document the vehicle's condition before and after repairs.

- Generate reports to track repair progress.
- Create comprehensive analysis reports for clients or colleagues.

Image 4.9: The Pre/Post Scan function displaying diagnostic reports.

4.10 ADAS Calibration

The IP900BT supports ADAS (Advanced Driver-Assistance Systems) calibration, which is crucial for maintaining the proper functionality of safety features after repairs or component replacements. This function may require additional calibration tools.

5. Vehicle Coverage

The XTOOL IP900BT is designed to work on most OBD2-compliant vehicles from 1996 onwards, covering over 10,000 OBDII/EOBD vehicle models. It supports diagnostics of CAN-FD and DoIP compliant models without requiring specialized adapters, facilitating faster diagnostic speeds.

Image 5.1: Illustration of the extensive vehicle coverage provided by the IP900BT.

6. Specifications

Feature	Specification
Model	XTOOL-IP900 BT
Operating System	Android 10.0
Processor	Quad-core 1.5GHz
Memory	4GB RAM + 64GB Storage
Display	8-inch Touch Screen (1024x768 resolution)
Battery	5000mAh 7.3V Lithium Ion (included)
Connectivity	Wireless (Wi-Fi), Type-C
Supported Protocols	CANFD, DoIP, FCA AutoAuth
Item Weight	1.65 pounds
Package Dimensions	15.5 x 12 x 5 inches

7. Maintenance

7.1 Device Care

- Keep the device clean and free from dust and moisture.
- Avoid dropping the device or exposing it to extreme temperatures.
- Use only the provided charger and cables.

7.2 Software Updates

Regularly check for and install software updates to ensure optimal performance and compatibility with the latest vehicle models. Updates are provided free for 3 years from the date of purchase.

8. Troubleshooting

If you encounter issues with your XTOOL IP900BT, consider the following general troubleshooting steps:

- **Device Not Powering On:** Ensure the battery is charged. Connect the charger and try again.
- **VCI Not Connecting:** Verify the VCI module is securely plugged into the vehicle's OBD2 port and that the vehicle's ignition is on. Check the tablet's wireless connection.
- **Communication Errors:** Ensure the vehicle's ignition is in the ON position (engine off). Check for loose connections. Try another vehicle to rule out a vehicle-specific issue.
- **Software Freezing/Lagging:** Close unnecessary applications. Restart the device. Ensure sufficient

storage space.

- **Update Issues:** Ensure a stable and strong Wi-Fi connection. Try updating at a different time.

For persistent issues, refer to the support section below.

9. Safety Information

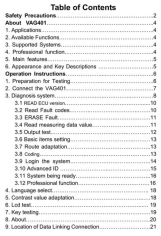
- Always operate the device in a well-ventilated area.
- Do not wear loose clothing or jewelry when working near moving engine parts.
- Keep the device away from water, oil, and other liquids.
- Ensure the vehicle is in Park (P) or Neutral (N) with the parking brake engaged before performing any diagnostic tests.
- Never attempt to disassemble or modify the device.

10. Warranty and Support

The XTOOL IP900BT comes with a 2-year warranty and lifetime after-sales support. For technical assistance, troubleshooting, or warranty claims, please contact XTOOL customer support.

- **Software Updates:** 3 years of free software updates are included.
- **Contact Support:** For quick support, you may reach out via email atxtoolinplusus@outlook.com.

Related Documents - IP900BT

	XTOOL D7 Diagnostic Tool User Manual Comprehensive user manual for the XTOOL D7 Diagnostic Tool, covering its features, operation, safety guidelines, and troubleshooting. Learn how to perform various diagnostic functions, special services, and system resets for a wide range of vehicles.
	Xtool VAG401 User Manual: Comprehensive Guide for VW, Audi, Seat, Skoda Diagnostics Comprehensive user manual for the Xtool VAG401 diagnostic tool, covering safety precautions, operation instructions, system diagnosis, and professional functions for VW, Audi, Seat, and Skoda vehicles. Get detailed instructions for this automotive diagnostic tool.

	[XTOOL HDGURU: Heavy Duty Vehicle Diagnostic Tool for Cummins & OBD2] Discover the XTOOL HDGURU, a compact and powerful entry-level heavy-duty vehicle diagnostic tool. Ideal for small fleets, it offers comprehensive Cummins ECU diagnostics, HD OBD2 generic functions, bi-directional tests, and advanced programming. Features a 5.45-inch display, Linux system, and extensive maintenance functions.
	[XTOOL Anyscan Wireless Scan Tool User Manual] Comprehensive user manual for the XTOOL Anyscan Wireless Scan Tool (models A30, A30D, A30M). Learn about setup, operation, diagnosis, special functions, and troubleshooting for this automotive diagnostic device.
	[XTOOL D7 Smart Diagnosis System User Manual: Comprehensive Guide to Automotive Diagnostics] User manual for the XTOOL D7 Smart Diagnosis System, an advanced Android-based OBD2 scanner. Covers setup, operation, system diagnostics, and special reset functions for professional and DIY automotive repair.
	[XTOOL D6S Smart Diagnostic System User Manual] Comprehensive user manual for the XTOOL D6S Smart Diagnostic System, detailing its features, operation, maintenance services, special functions, and safety guidelines for automotive professionals and DIY enthusiasts.