FOXWELL FOXWELL NT510 Elite fit for GM

FOXWELL NT510 Elite OBD2 Scanner User Manual

Model: FOXWELL NT510 Elite fit for GM
Brand: FOXWELL

1. PRODUCT OVERVIEW

The FOXWELL NT510 Elite is a professional diagnostic scanner designed specifically for GM vehicles, including Alpheon, Cadillac, Chevrolet, GMC, and Buick models. This advanced OBD2 scan tool offers comprehensive system diagnosis, bi-directional control, and a wide range of maintenance service resets, providing dealership-level diagnostic capabilities for car owners and mechanics.

Figure 1.1: FOXWELL NT510 Elite Multi-System Scanner and its included carrying case.

The NT510 Elite features upgraded hardware and software for improved performance, addressing previous issues and supporting a wider range of car models. It is designed for ease of use with features like AutoVIN scan, real-time data streaming, and lifetime free software updates via Wi-Fi.

2. WHAT'S IN THE BOX

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

- 1 * FOXWELL NT510 Elite Diagnostic Tool
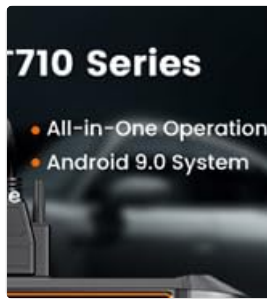- 1 * USB Cable
- 1 * Quick Guide
- 1 * Carrying Case

Figure 2.1: Included components: the NT510 Elite scanner, USB cable, quick guide, and carrying case.

3. SETUP AND INITIAL USE

To begin using your FOXWELL NT510 Elite scanner, follow these steps:

1. **Power On:** Connect the NT510 Elite to your vehicle's OBDII port. The device will power on automatically.

2. **Language and Unit Settings:** Navigate to the 'Settings' menu to select your preferred language and measurement units (e.g., Metric or Imperial).

3. **Software Update:** It is highly recommended to update the software to the latest version before first use. Connect the device to a Wi-Fi network and select 'Update' from the main menu. Follow the on-screen prompts to download and install updates. This ensures compatibility with the widest range of vehicles and access to the latest features.

4. **Vehicle Connection:** Once powered on, the scanner is ready to connect to your vehicle. For GM vehicles, the device supports automatic VIN reading to quickly identify your vehicle.

Figure 3.1: The scanner's Auto VIN feature automatically retrieves vehicle information for quick diagnostics.

4. OPERATING THE SCANNER

The FOXWELL NT510 Elite provides a wide array of diagnostic and service functions. Below are key operational aspects:

4.1 Full System Diagnosis

The scanner can access and diagnose all available electronic control modules in your GM vehicle. This includes systems such as Engine, ABS, Airbag (SRS), Transmission, 4WD, HVAC, Headlights, and more. You can read and clear fault codes, turn off warning lights, view live data, and retrieve freeze frame data.
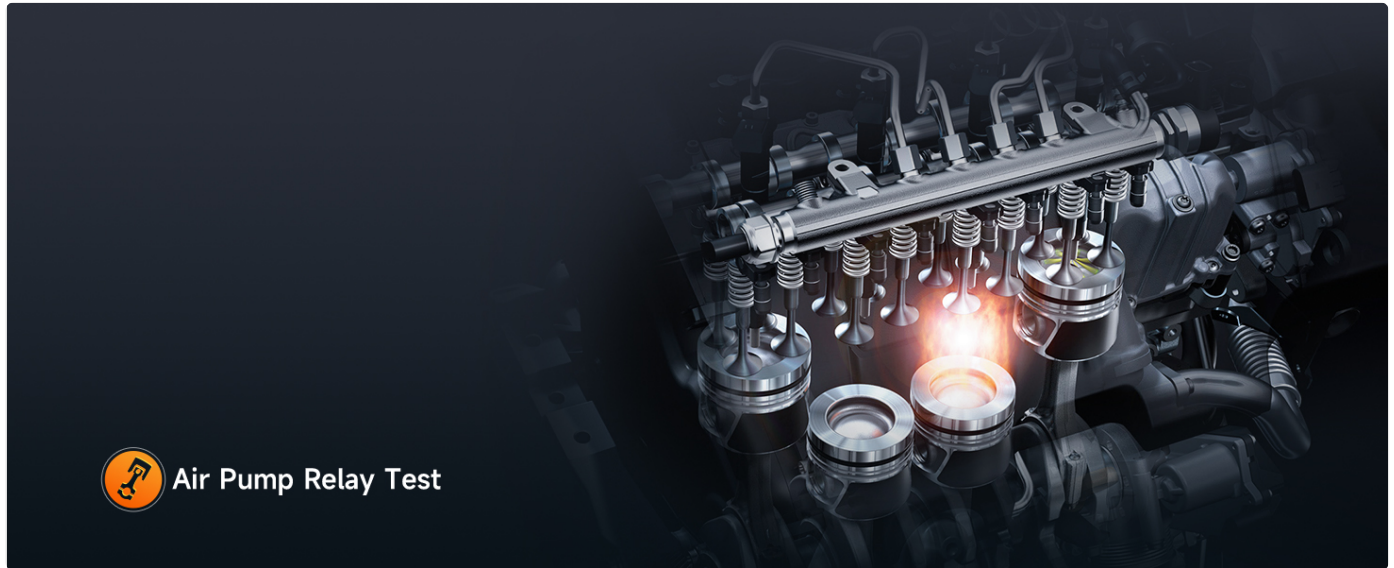

Figure 4.1: The NT510 Elite provides comprehensive OE-level diagnosis across all vehicle systems.
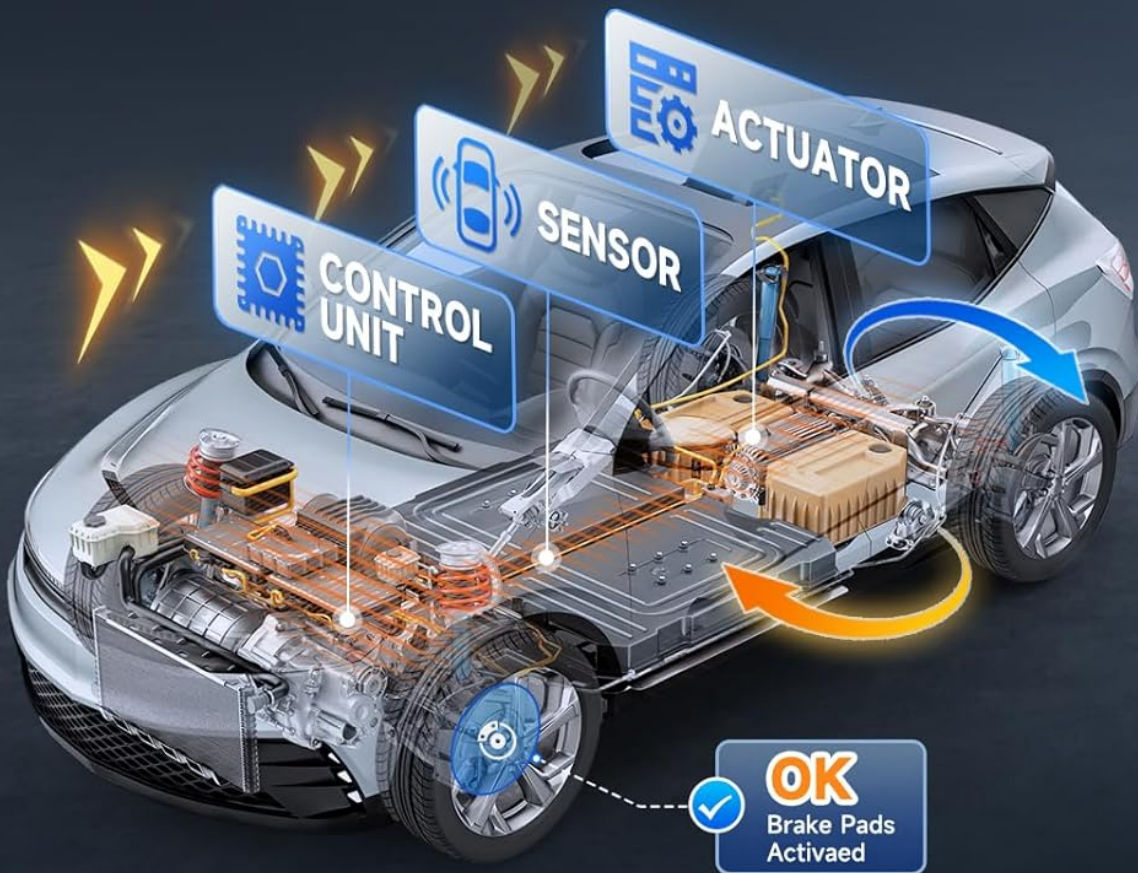
- **Engine System:** Diagnose engine-related issues, read and clear engine fault codes.
- **ABS System:** Perform diagnostics on the Anti-lock Braking System.
- **Airbag System (SRS):** Check and clear airbag system faults.
- **Transmission System:** Diagnose automatic transmission issues.

4.2 Bi-Directional Control / Active Test

This function allows the scanner to send commands to the vehicle's ECU to perform specific active tests on components and parts. This helps in verifying normal operation and identifying potential problems. Examples include testing doors, windows, mirrors, locks, lights, headlamps, wipers, sunroofs, A/C on/off, and cooling fan tests.

Figure 4.2: Bi-directional control enables direct communication with vehicle actuators for active testing.

4.3 All Maintenance Service Reset Functions

The NT510 Elite offers comprehensive service options including Reset, Relearn, Match, Adaptation, Calibration, and Initialization. Some common services include:

- **Oil Light Reset:** Reset the oil service light after an oil change.
- **EPB (Electronic Parking Brake) Reset:** Deactivate and activate the brake control system, assist with brake fluid control, open and close brake pads, and set brakes after disc or pad replacement.
- **SAS (Steering Angle Sensor) Calibration:** Perform calibration for the Steering Angle Sensor.
- **TPMS (Tire Pressure Monitoring System) Reset:** Reset tire pressure values.
- **TPS (Throttle Position Sensor) / Throttle Body Relearn:** Relearn throttle body positions.
- **ABS Bleeding:** Perform ABS brake bleeding to restore ABS brake sensitivity.
- **Crankshaft Sensor Relearn:** Perform crankshaft position sensor relearn.
- **Injector Coding:** Program new injector codes to the ECU.
- **Airbag Reset:** Reset airbag crash data.
- **Battery Registration:** Register new battery replacement.

Figure 4.3: The NT510 Elite supports a wide range of maintenance services to keep your vehicle in optimal condition.

4.4 OBDII Functions

The NT510 Elite supports all 10 modes of OBDII test functions, including:

- Live PCM data streaming in graphical format.

- DTC reading and clearing.

- I/M readiness monitor status check.

- O2 sensor tests.

- Freeze frame data retrieval.

- EVAP system testing.

- Vehicle information lookup (VIN, CIN, CVN).

- Malfunction Indicator Lamp (MIL) status.

- Real-time battery voltage monitoring.

4.5 Data Management

The device allows for real-time data streaming with multiple PID graphs, data preservation, and data printing. This enables detailed analysis and record-keeping of diagnostic sessions.

Figure 4.4: Live data display, preservation, and printing capabilities of the NT510 Elite.

5. MAINTENANCE AND UPDATES

To ensure optimal performance and access to the latest vehicle data and functions, regular maintenance and software

updates are crucial for your FOXWELL NT510 Elite.

5.1 Software Updates

The NT510 Elite offers lifetime free software updates. Updates are performed via Wi-Fi directly on the device. This ensures your scanner is always up-to-date with the latest vehicle models and diagnostic protocols.

1. **Step 1:** From the main menu, select "Update".

2. **Step 2:** Connect the device to a stable Wi-Fi network.

3. **Step 3:** Select the specific vehicle software or general updates you wish to install. Follow the on-screen instructions to complete the update process.

Figure 5.1: One-click software updates via Wi-Fi ensure your device is always current.

Figure 5.2: Visual guide for updating the NT510 Elite software.

5.2 General Care

- Keep the device clean and free from dust and moisture.
- Store the scanner in its provided carrying case when not in use to protect it from damage.
- Avoid extreme temperatures.

6. TROUBLESHOOTING

If you encounter issues with your FOXWELL NT510 Elite, consider the following common troubleshooting steps:

- **Device Not Powering On:** Ensure the OBDII cable is securely connected to both the scanner and the vehicle's OBDII port. Verify the vehicle's ignition is on (or in accessory mode, depending on the vehicle). Check the vehicle's battery voltage.

- **Screen Freezes or Black/White Display:** Ensure the device has the latest software updates. If the issue persists, try restarting the device by disconnecting and reconnecting it from the vehicle.

- **Update Issues (Cannot Register/Update):** Verify your Wi-Fi connection is stable. Ensure the device's internal clock is set correctly. If registration issues persist, contact FOXWELL customer support for assistance, as some units might have been previously registered.

- **Communication Errors with Vehicle:** Ensure the vehicle's ignition is on. Verify the OBDII connector is clean and free of debris. Confirm the vehicle is compatible with the NT510 Elite for the specific function you are attempting.

- **Function Not Supported:** Not all functions are available for all vehicle models or years. Refer to the official FOXWELL website or contact support with your vehicle's VIN for specific compatibility details.

7. SPECIFICATIONS

FOXWELL NT510 Elite Key Specifications

Feature	Detail
Brand	FOXWELL
Model	FOXWELL NT510 Elite fit for GM
Product Dimensions	1.26"L x 5.71"W x 3.7"H
Operating System	All System Diagnosis
Display Resolution	480 x 640
Automotive Fit Type	Vehicle Specific Fit (GM)
Item Weight	1.3 pounds
Voltage	12 Volts
UPC	712321437082

Figure 7.1: Product label on the back of the NT510 Elite, detailing input voltage, operating temperature, and storage temperature.
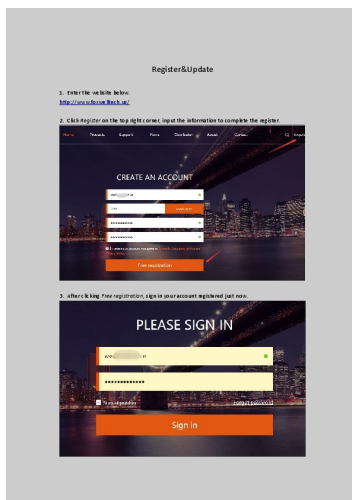
8. WARRANTY AND SUPPORT

FOXWELL is committed to providing high-quality products and customer satisfaction. For any inquiries or support needs, please refer to the following resources:

- **Official User Manual:** A detailed PDF user manual is available for download:Download User Manual (PDF)
- **Software Updates:** As mentioned, the device includes lifetime free software updates via Wi-Fi.
- **Customer Support:** For technical assistance, warranty claims, or specific compatibility questions, please contact FOXWELL customer support. Refer to the official FOXWELL website or your purchase documentation for contact details.
- **Legal Disclaimer:** The logo and brand name of GM appearing on product pages are used to describe compatibility with GM vehicles. FOXWELL is an independent brand and does not sell products manufactured or sold by GM.

Documents - FOXWELL – FOXWELL NT510 Elite fit for GM

[pdf] Guide

FOXWELL NT510 Elite fit for GM OBD2 Scanner Bi Directional All System Engine ABS SRS Diagnostic Scan Tool Code Reader Chevrolet Cadillac GMC Reset Oil EPB TPS Bleeding Crankshaft RelearnFoxwell nt510elite gm User Guide FOXWELL Relearn B014CT4M3K81u5y gQocLm media amazon images I 81u5y gQocL |||

Register Update 1. Enter the website below. http://www.foxwelltech.us/ 2. Click Register on the top right corner, input the information to complete the register. 3. After clicking Free registration, sign in your account registered just now. 4. Choose NT510ELITE in the drop-down list of Products. 5...

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