LAUNCH LAUNCH X431 CRP919 EV

LAUNCH X431 CRP919 EV Scanner User Manual

Model: LAUNCH X431 CRP919 EV

Brand: LAUNCH

1. INTRODUCTION

The LAUNCH X431 CRP919 EV is a state-of-the-art diagnostic scan tool designed for both traditional internal combustion engine (ICE) vehicles and the rapidly growing new energy vehicle (NEV) market, including hybrid and electric vehicles (EVs). This intelligent scanner provides comprehensive system diagnostics, advanced service functions, and bidirectional control capabilities, making it an essential tool for professional technicians and advanced DIY enthusiasts.

Equipped with an Android 10.0 operating system, a 7.0-inch touch screen, and robust hardware, the CRP919 EV offers fast, efficient, and accurate vehicle diagnostics. It supports modern communication protocols like CANFD and DOIP, ensuring broad compatibility with vehicles up to the latest models.

Figure 1.1: LAUNCH X431 CRP919 EV Scanner and its protective carrying case.

2. SAFETY INFORMATION

Always observe the following safety precautions when operating the LAUNCH X431 CRP919 EV scanner to prevent personal injury or damage to the device or vehicle:

- Ensure the vehicle's ignition is off before connecting or disconnecting the diagnostic cable.
- Do not operate the scanner in wet conditions or with wet hands.
- Keep the device away from strong magnetic fields and high temperatures.
- Always refer to the vehicle manufacturer's service manual for specific diagnostic procedures and safety warnings, especially when working with high-voltage EV systems.
- Use appropriate personal protective equipment (PPE) when performing vehicle diagnostics.
- Do not attempt to disassemble or modify the scanner. Refer all servicing to authorized personnel.

3. WHAT'S IN THE BOX

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

- LAUNCH X431 CRP919 EV Main Unit

- Main Diagnostic Cables

- Type-C Charger

- Power Adaptors (various regional types)

- User Manual

- Quick Start Guide

- Protective Carrying Case

Figure 3.1: Included components with the LAUNCH X431 CRP919 EV scanner.

4. SETUP

4.1 Initial Charging

Before first use, fully charge the CRP919 EV scanner. Connect the Type-C charger to the device's charging port

and plug it into a power outlet. The charging indicator will show the charging status. A full charge can provide up to 15 hours or more of battery life.

4.2 Powering On/Off

- **To Power On:** Press and hold the Power button located on the side of the device until the screen illuminates.
- **To Power Off:** Press and hold the Power button until a power-off menu appears. Select "Power Off" and confirm.

4.3 Network Connection

For software updates, online feedback, and cloud services, connect the device to a Wi-Fi network:

1. From the main menu, tap "Settings".
2. Select "Wi-Fi" and turn it on.
3. Choose your desired Wi-Fi network from the list and enter the password if prompted.
4. Confirm connection. The device supports 2.4GHz and 5GHz dual-band Wi-Fi for faster transmission.

4.4 Software Updates

Regular software updates are crucial for optimal performance, new vehicle coverage, and bug fixes. The CRP919 EV offers 2 years of free updates.

1. Ensure the device is connected to Wi-Fi.
2. From the main menu, tap "Software Update".
3. The system will check for available updates. Follow the on-screen prompts to download and install them.

Figure 4.1: Software update interface and hardware optimization.

5. OPERATING INSTRUCTIONS

The LAUNCH X431 CRP919 EV provides a wide range of diagnostic and service functions. Below are key operational aspects:

5.1 Connecting to Vehicle

1. Locate the vehicle's OBD-II diagnostic port (usually under the dashboard).
2. Connect the main diagnostic cable to the CRP919 EV and then to the vehicle's OBD-II port.
3. Turn the vehicle's ignition to the "ON" position (engine off).
4. On the scanner, select "Local Diagnose" to begin communication.

5.2 Full System Diagnostics (EV & ICE)

This function allows you to scan all available electronic control units (ECUs) in the vehicle, including engine, transmission, ABS, SRS, and specific EV high-voltage systems.

- **Auto Scan 2.0:** The device features an intelligent Auto VIN function that automatically identifies the vehicle's VIN for quick system access.
- **Read/Clear Codes:** Retrieve diagnostic trouble codes (DTCs) and clear them after repairs.
- **Live Data Stream:** View real-time data parameters from various sensors and components in text, graph, or multi-in-one formats.
- **EV System Diagnostics:** Specifically for EVs, perform battery pack analysis and high-voltage system diagnostics. This includes reading/clearing codes, performing HV parts replacement, and generating HV system diagnostic reports.

Figure 5.1: Overview of All System Diagnose capabilities.

5.3 Bidirectional Control (Active Test)

Bidirectional control allows the scanner to send commands to vehicle ECUs to perform specific tests and functions, such as activating solenoids, relays, or motors, to verify system integrity without using the vehicle's controls.

- Access this function from the "Active Test" menu.
- Common tests include activating fuel pumps, cycling ABS solenoids, testing window motors, or operating cooling fans.

- This feature helps in quickly locating faulty components.

Figure 5.2: Bidirectional control functionality for component testing.

5.4 43+ Service Functions

The CRP919 EV supports over 43 common maintenance and reset functions, accelerating repair processes.

- **Oil Reset:** Reset the oil life system after an oil change.

- **EPB Reset:** Reset the electronic parking brake after brake pad replacement.

- **SAS Reset:** Calibrate the steering angle sensor.

- **BMS Reset:** Register new battery and clear fault codes.

- **Throttle Reset:** Relearn throttle body position.

- **ABS Bleeding:** Perform ABS brake bleeding procedures.

- **TPMS Reset:** Reset tire pressure monitoring system.

- And many more, including Injector Coding, Gear Reset, DPF Regeneration, etc.

Figure 5.3: Examples of 43+ service functions available.

5.5 ECU Coding

ECU Coding allows for customization of vehicle settings, module matching, unlocking hidden functions, and module retrofitting. This advanced function requires careful operation and knowledge of vehicle systems.

5.6 CANFD & DOIP Protocols

The CRP919 EV supports the latest CANFD and DOIP communication protocols, ensuring compatibility with newer vehicle models (up to 2024/2025) that utilize these advanced network architectures.

5.7 FCA AutoAuth

For FCA (Fiat Chrysler Automobiles) vehicles, the scanner supports FCA AutoAuth, allowing secure access to protected diagnostic functions on these vehicles.
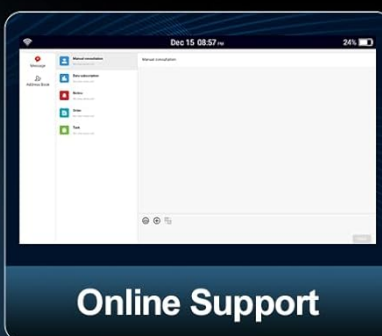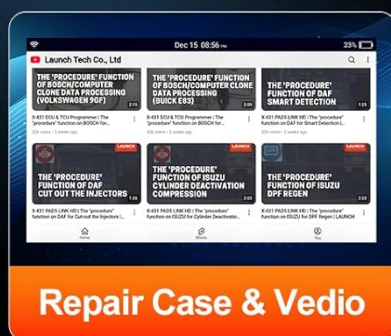
Figure 5.4: Global compatibility and protocol support.

5.8 Additional Features

- **WiFi Print:** Directly print diagnostic reports via Wi-Fi.

- **Cloud Health Report:** Generate and store vehicle health reports in the cloud for easy access and sharing.

- **Online Feedback:** Submit feedback or issues directly to LAUNCH for support.

- **DTCs Library:** Built-in database for looking up diagnostic trouble code definitions.

- **Remote Diagnose:** Potential for remote assistance (requires additional setup/software).
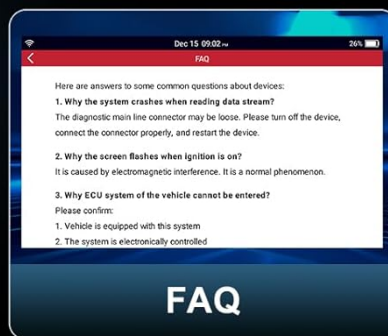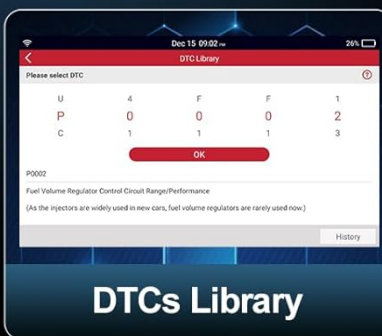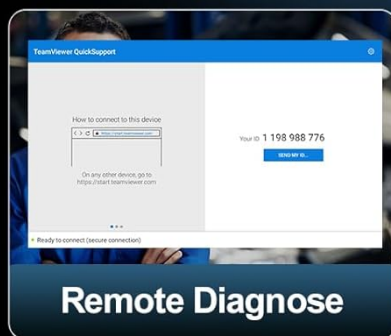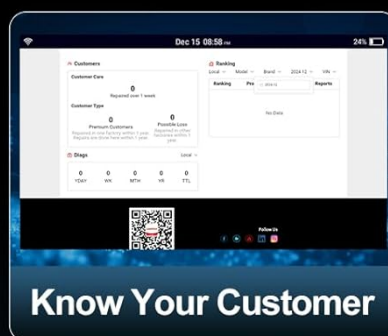
Figure 5.5: User interface and support features.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your LAUNCH X431 CRP919 EV scanner:

- **Cleaning:** Use a soft, dry cloth to clean the device. Avoid abrasive cleaners or solvents.
- **Storage:** Store the scanner in its protective carrying case in a cool, dry place when not in use. Avoid extreme temperatures.
- **Battery Care:** For long-term storage, ensure the battery is charged to approximately 50-70% to preserve its lifespan. Recharge periodically if stored for extended periods.
- **Software Updates:** Regularly update the software to ensure compatibility with new vehicles and access to the latest features and bug fixes.
- **Cable Inspection:** Periodically inspect diagnostic cables for any signs of wear, damage, or corrosion. Replace damaged cables immediately.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with the CRP919 EV scanner.

Problem	Possible Cause	Solution
Device does not power on.	Low battery; Power button not pressed long enough; Device malfunction.	Charge the device; Press and hold the Power button for 3-5 seconds; Contact technical support.
Unable to connect to vehicle.	Loose cable connection; Vehicle ignition off; Damaged OBD-II port; Vehicle not supported.	Ensure cable is securely connected; Turn ignition ON; Check vehicle's OBD-II port; Verify vehicle compatibility.
Software is slow or freezes.	Too many applications running; Low storage; Software bug.	Close unnecessary applications; Clear cache/data; Perform software update; Restart device.
Wi-Fi connection issues.	Incorrect password; Out of range; Router issue.	Re-enter password; Move closer to router; Restart router; Try another Wi-Fi network.
"Mall" features require additional payment.	Certain advanced features or brand-specific software are add-ons.	This is by design. Purchase desired add-ons through the "Mall" section if needed.

8. SPECIFICATIONS

Feature	Detail
Model	LAUNCH X431 CRP919 EV
Operating System	Android 10.0
Display	7.0-inch Touch Screen, 1024x600 resolution
Processor	1.8GHz Octa-core Qualcomm Snapdragon CPU
Memory/Storage	64GB (internal)
Battery	6000mAh rechargeable battery (up to 15+ hours)
Connectivity	2.4GHz & 5GHz Dual-band Wi-Fi, USB Type-C
Dimensions (L x W x H)	12.8" x 5.38" x 11.4"
Item Weight	6.82 pounds
Supported Protocols	CANFD, DOIP, OBD-II/EOBD, etc.
Vehicle Coverage	150+ car brands, 1996-2025 models (including EV/HEV)

9. WARRANTY AND SUPPORT

LAUNCH provides comprehensive support for the CRP919 EV scanner:

- **Software Updates:** Enjoy 2 years of free software updates from the date of activation.

- **Technical Support:** Access 7/24/365 online support for any operational or technical queries.

- **Online Resources:** Utilize the built-in "Online Library," "FAQ," and "Online Feedback" features for self-help and direct communication with LAUNCH support.

- **Warranty:** Refer to your purchase documentation for specific warranty terms and conditions. Typically, LAUNCH products come with a standard manufacturer's warranty covering defects in materials and workmanship.

For further assistance, please visit the official LAUNCH website or contact their customer service directly.

Related Documents - **LAUNCH X431 CRP919 EV**

	[LAUNCH X431 PRO ELITE FAQs and User Guide](#) Frequently asked questions and guidance for the LAUNCH X431 PRO ELITE automotive diagnostic tool, covering registration, updates, subscriptions, troubleshooting, and features.
	[LAUNCH CRP919EBT FAQs and Troubleshooting Guide](#) Frequently Asked Questions and troubleshooting steps for the LAUNCH CRP919EBT diagnostic scan tool, covering software updates, registration, password reset, and common issues.
	[LAUNCH CRP919X BT: FAQs, Troubleshooting, and Support](#) Comprehensive FAQs for the LAUNCH CRP919X BT automotive diagnostic tool. Find answers on setup, software updates, language settings, troubleshooting charging issues, and more.
	[LAUNCH X431 PRO DYNO User Manual](#) Comprehensive user manual for the LAUNCH X431 PRO DYNO OBD2 diagnostic scan tool, covering features like intelligent diagnosis, local diagnosis, remote diagnosis, service functions, software updates, and toolbox modules. Includes safety precautions and FCC statements.

[LAUNCH CRP919E FAQs: Your Guide to Advanced Automotive Diagnostics](#)
Frequently Asked Questions about the LAUNCH CRP919E OBD2 scanner, covering usage, updates, features like bidirectional control, ECU coding, special services, and troubleshooting.

[LAUNCH Creader Professional 919X User Manual: Comprehensive Guide to Vehicle Diagnostics](#)
Explore the features and functionalities of the LAUNCH Creader Professional 919X diagnostic tool. This user manual provides detailed instructions on vehicle coverage, OBD II diagnostics, system resets, data analysis, and add-on modules for automotive professionals and enthusiasts.