LAUNCH LAUNCH X-431 PRO5

LAUNCH X431 PRO 5 Scan Tool User Manual

Model: LAUNCH X-431 PRO5
Brand: LAUNCH

1. INTRODUCTION

This manual provides comprehensive instructions for the operation, maintenance, and troubleshooting of the LAUNCH X431 PRO 5 Scan Tool. The LAUNCH X431 PRO 5 is an advanced diagnostic scanner designed for professional automotive technicians and repair shops, offering extensive vehicle coverage and a wide range of diagnostic and service functions.

It is an upgraded version of the X431 V+ and PRO3, featuring J2534 ECU Programming, ECU Online Coding, Topology Mapping, bi-directional control, and over 50 reset functions. This tool is equipped with a SmartLink C VCI for enhanced communication capabilities, including CANFD and DOIP protocols.

2. PRODUCT OVERVIEW AND KEY FEATURES

The LAUNCH X431 PRO 5 Scan Tool is engineered to provide OE-level diagnostic capabilities. Its robust feature set includes:

- **J2534 ECU Programming:** Enables advanced OEM J2534 reprogramming for various vehicle brands, facilitating data transfer and module updates.

- **ECU Online Coding:** Allows direct connection to OEM servers for coding functions, enhancing vehicle performance and customizing settings.

- **Topology Mapping:** Provides a visual representation of the vehicle's data bus configurations, improving diagnostic efficiency.

- **Bi-directional Control (Active Test):** Permits sending commands to vehicle systems and components to test their functionality, aiding in rapid troubleshooting.

- **50+ Reset Functions:** Comprehensive suite of maintenance and service functions including Oil Reset, EPB Reset, TPMS Reset, BMS, Injector Coding, ABS Bleeding, SAS Reset, Throttle Matching, and more.

- **All System Diagnostics:** Full-function diagnostics for all on-board systems, including Engine, Transmission, ABS, Airbags, TPMS, BCM, and more. Supports reading/clearing codes, viewing live data, and VIN information.

- **SmartLink C VCI:** A wireless Vehicle Communication Interface supporting ISO9141, J1850, SAE J2610, CANFD,

and DOIP protocols for faster data transmission and remote diagnostics.

- **Advanced Functions:** Includes VAG Guided functions, personalization options, ADAS calibration support, and AutoAuth for FCA vehicles.

- **Wide Vehicle Coverage:** Supports 99% of vehicles manufactured from 1996-2024, covering American, Asian, and European models without IP limitations.

Figure 2.1: LAUNCH X431 PRO 5 Scan Tool and its comprehensive accessory kit.

Figure 2.2: Overview of the LAUNCH X431 PRO 5's primary advanced capabilities.

3. COMPONENTS AND PACKAGE CONTENTS

The LAUNCH X431 PRO 5 package includes the following main components:

- LAUNCH X-431 PRO5 Main Unit (Diagnostic Tablet)
- SmartLink C VCI Module
- Diagnostic Cables and Connectors (various vehicle-specific adapters)
- Power Adapter
- USB Cable
- User Manual (this document)
- Storage Case

The main unit is powered by a Lithium Ion battery (included).

4. SETUP GUIDE

4.1 Initial Power-Up and Configuration

1. **Charge the Device:** Before first use, connect the LAUNCH X431 PRO 5 main unit to the power adapter and charge it fully. The device uses a Lithium Ion battery.

2. **Power On:** Press and hold the power button on the main unit to turn it on.

3. **Initial Setup:** Follow the on-screen prompts to select your language, time zone, and connect to a Wi-Fi network. A stable internet connection is crucial for software updates and online functions.

4. **Software Update:** Navigate to the "Software Update" section within the diagnostic application. It is highly

recommended to update all available software packages to the latest version to ensure optimal performance and vehicle compatibility, including the Topology Mapping function (requires V 7.03.014 or higher).

4.2 Connecting the SmartLink C VCI Module

The SmartLink C VCI module acts as the communication bridge between the diagnostic tablet and the vehicle's OBD-II port.
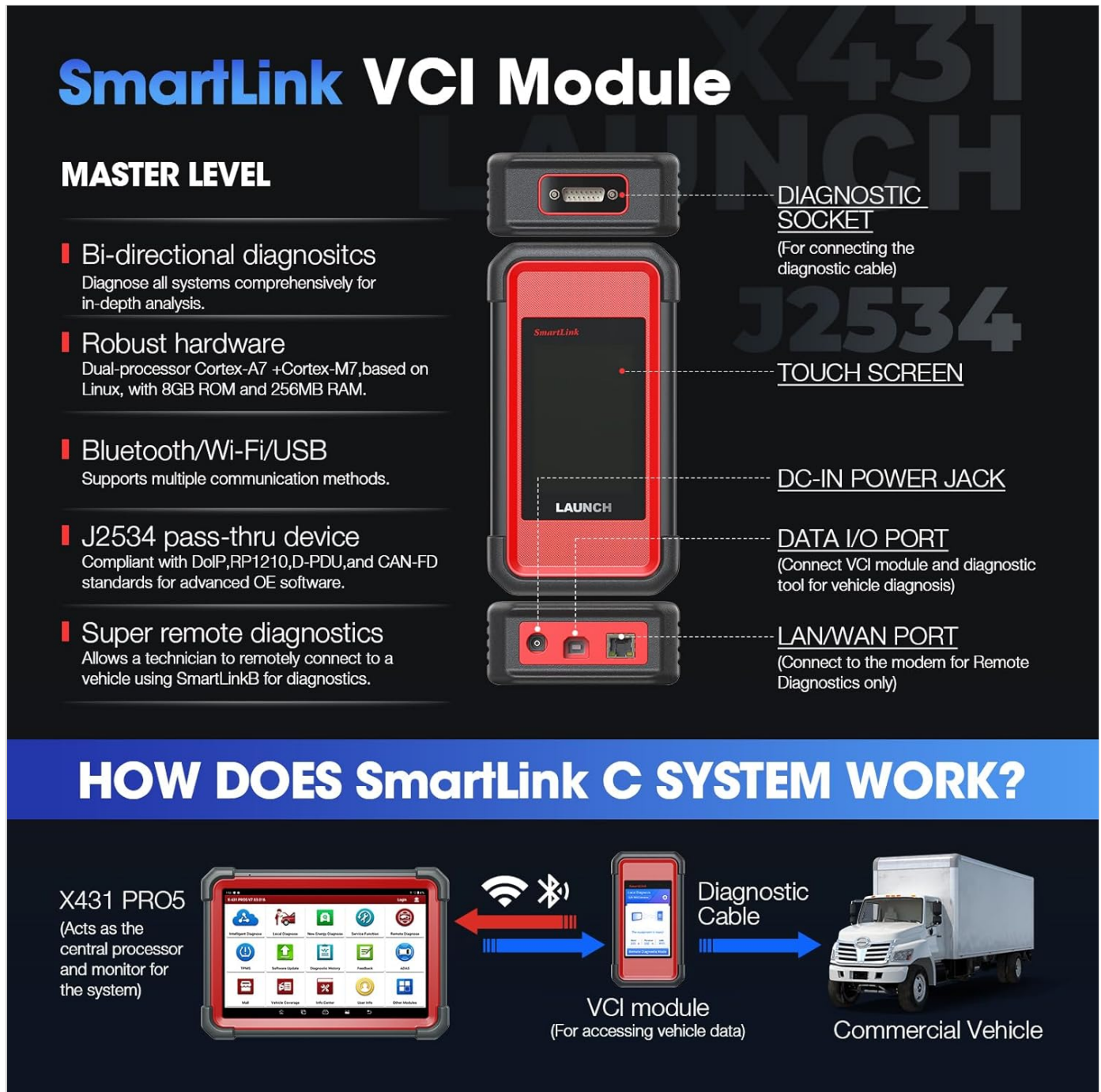

Figure 4.1: SmartLink C VCI Module with port descriptions.

1. **Connect VCI to Vehicle:** Locate the vehicle's OBD-II diagnostic port (usually under the dashboard) and securely plug in the SmartLink C VCI module.

2. **Pair VCI with Tablet:** The SmartLink C VCI connects wirelessly (Bluetooth/Wi-Fi) to the X431 PRO 5 tablet. Ensure Bluetooth is enabled on the tablet. The VCI should automatically pair or be discoverable within the diagnostic application.

3. **Power Status:** Verify the indicator lights on the SmartLink C VCI module to confirm it is powered on and communicating with the tablet.

5. Operating Instructions

5.1 Full System Diagnostics

The X431 PRO 5 can perform comprehensive diagnostics on all available vehicle systems.

Figure 5.1: Full System Diagnostics capability covering all on-board systems.

1. **Vehicle Connection:** Ensure the SmartLink C VCI is properly connected to the vehicle's OBD-II port and paired with the tablet.

2. **Select Diagnostic Mode:** From the main menu, select "Intelligent Diagnose" or "Local Diagnose" depending on your preference. Intelligent Diagnose can automatically identify the VIN.

3. **System Scan:** The tool will scan all accessible electronic control units (ECUs) in the vehicle.

4. **Review Data:**

   - **Read Codes:** Retrieve Diagnostic Trouble Codes (DTCs) from all systems.

- **Erase Codes:** Clear DTCs after repairs are completed.
- **View Live Data:** Monitor real-time sensor data and parameters.
- **VIN Information:** Access vehicle identification number details.

5.2 J2534 ECU Programming

The J2534 programming function allows for advanced module reprogramming, typically required for replacing ECUs, updating software versions, or repairing data loss issues.

Figure 5.2: J2534 ECU Programming and Coding capabilities.

This function requires the SmartLink C VCI and may necessitate access to OEM software subscriptions for specific vehicle brands (e.g., BMW, Mercedes-Benz, Ford, Jaguar, Land Rover, Volvo). Refer to the specific vehicle manufacturer's J2534 pass-thru programming instructions for detailed steps.
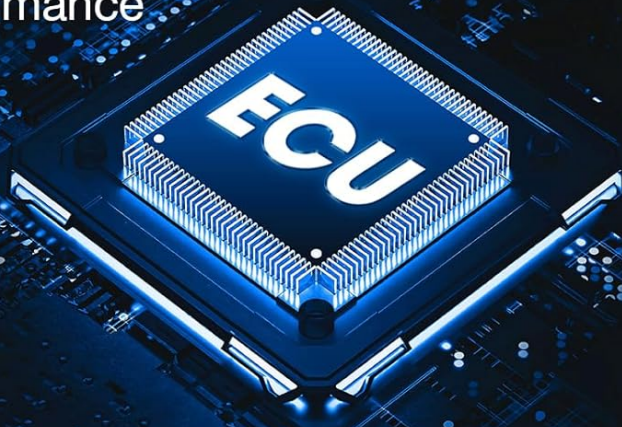
5.3 ECU Online Coding

Online coding allows for advanced vehicle customization and module matching by connecting directly to OEM servers.
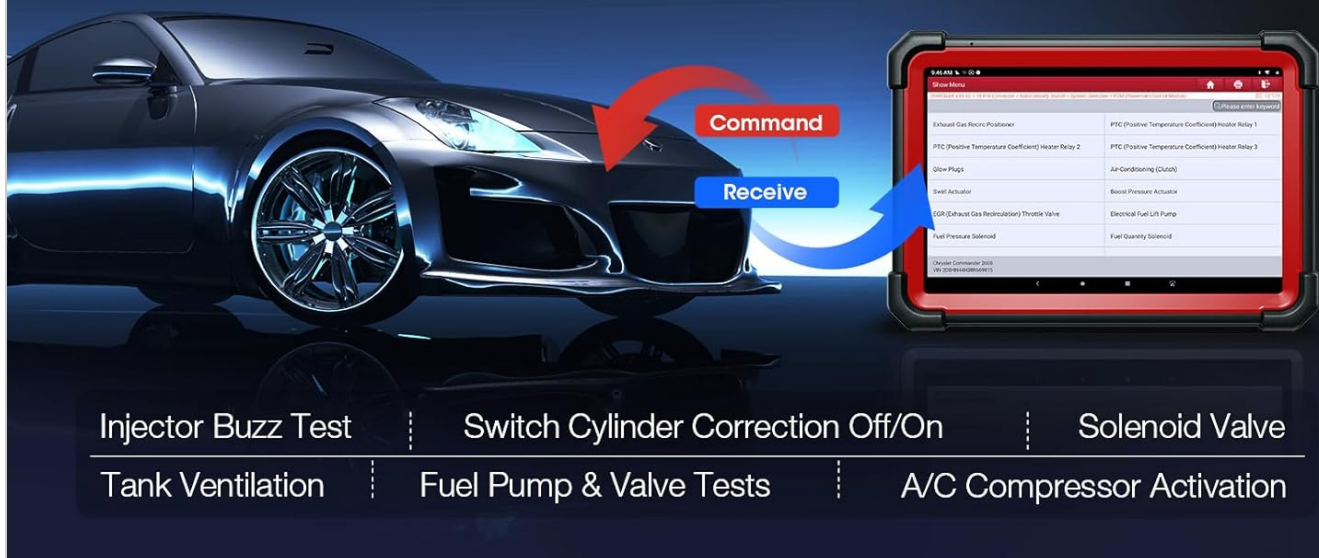
Figure 5.3: ECU Online Coding and Bi-directional Control in action.

- Match component control modules.

- Flash hidden features.

- Customize OE-settings.

- Disable or unlock specific functions.

This feature is particularly useful for brands like BMW, VW, Porsche, and Mercedes-Benz.

5.4 Topology Mapping

Topology Mapping provides an intuitive graphical display of the vehicle's communication network, showing the status and relationships of all ECUs.
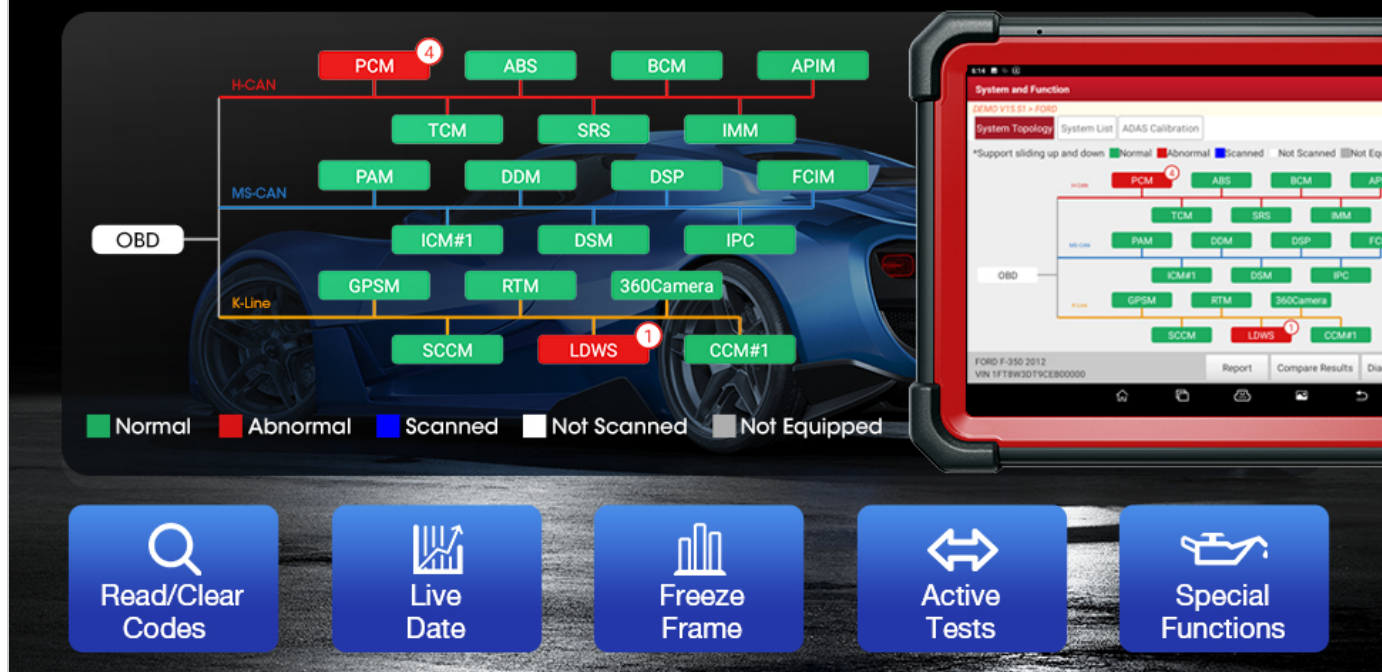
Figure 5.4: Topology Mapping interface for intuitive problem presentation.

To access this feature, ensure your X431 PRO 5 software is updated to V 7.03.014 or higher. This function allows for quick identification of problematic modules and streamlines the diagnostic process.

5.5 Bi-directional Control (Active Test)

Bi-directional control allows the technician to send commands from the scan tool to the vehicle's ECUs to activate specific components or perform system tests.

Examples include: Injector Buzz Test, Switch Cylinder Correction On/Off, Solenoid Valve activation, Tank Ventilation, Fuel Pump & Valve Tests, A/C Compressor Activation, turning windows on/off, EGR test, turning wipers on/off, and turning the radiator fan on/off.

5.6 50+ Reset Functions

The X431 PRO 5 offers a comprehensive suite of service and maintenance functions.

Figure 5.6: A selection of the 50+ available reset functions.

Common functions include:

- Oil Reset
- EPB Reset (Electronic Parking Brake)
- TPMS Reset (Tire Pressure Monitoring System)
- BMS Reset (Battery Management System)
- Injector Coding
- SAS Reset (Steering Angle Sensor)
- Throttle Matching
- ABS Bleeding
- Suspension Calibration
- Headlamp Adjustment
- WIN DR ROOF (Window/Door/Roof Initialization)
- TEC Learning (Transmission Electronic Control)
- Airbag Reset
- ODO Reset (Odometer)
- A/F Setting (Air/Fuel Ratio)
- Misfire Check

Access these functions via the "Service Function" menu on the main screen.

5.7 Advanced Functions

Beyond core diagnostics, the X431 PRO 5 offers several advanced features to boost repair efficiency:

Figure 5.7: Overview of advanced functions.

- **Online Functions:** Obtain data directly from OEM servers for various diagnostic and programming tasks.

- **Personalization:** Customize vehicle settings, such as enabling or disabling certain features (e.g., auto start/stop, daytime running lights).

- **Guided Functions:** Provides step-by-step instructions for complex procedures, particularly useful for VAG group vehicles (VW, Audi, Skoda, Seat).

- **AutoAuth for FCA Vehicles:** Allows access to protected FCA (Fiat Chrysler Automobiles) vehicle functions.

- **Component Matching:** Facilitates the matching and adaptation of new or replaced vehicle components.

- **ADAS Module Supported:** Supports calibration of Advanced Driver-Assistance Systems (ADAS). Note: This may require additional hardware and software.

Figure 5.8: HD Protocol and ADAS Calibration capabilities.

For heavy-duty trucks, an extra purchase of HD software subscription and non-16pin HD adapters may be required.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your LAUNCH X431 PRO 5 Scan Tool.

- **Software Updates:** Regularly check for and install software updates. LAUNCH offers 2 years of free updates for this model. Updates often include new vehicle models, bug fixes, and enhanced functionalities.

- **Cleaning:** Use a soft, dry cloth to clean the tablet screen and body. Avoid abrasive cleaners or solvents.

- **Storage:** Store the device and its accessories in the provided protective case when not in use. Keep it in a cool, dry place away from direct sunlight and extreme temperatures.

- **Battery Care:** To prolong battery life, avoid fully discharging the battery frequently. If storing for extended periods, ensure the battery is charged to about 50-70%.

- **Cable Inspection:** Periodically inspect all diagnostic cables and connectors for signs of wear, damage, or corrosion. Replace damaged cables immediately.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with the LAUNCH X431 PRO 5 Scan Tool.

Problem	Possible Cause	Solution
Device does not power on.	Low battery; Power button not held long enough; Hardware malfunction.	Charge the device fully. Press and hold the power button for 3-5 seconds. If issue persists, contact technical support.

Problem	Possible Cause	Solution
Unable to connect to vehicle.	VCI not properly connected; VCI not paired with tablet; Vehicle ignition off; Damaged OBD-II cable/VCI.	Ensure VCI is securely plugged into OBD-II port. Verify VCI is paired via Bluetooth/Wi-Fi. Turn vehicle ignition to ON position. Check cables for damage.
Diagnostic app crashes or freezes.	Outdated software; Insufficient memory; Software conflict.	Update all software to the latest version. Close other running applications. Restart the device. If persistent, perform a factory reset (backup data first) or contact support.
Certain functions not available for a specific vehicle.	Vehicle not supported for that function; Software not updated; Specific module not present in vehicle.	Verify vehicle compatibility for the specific function. Ensure software is up-to-date. Some advanced functions require specific vehicle configurations.
J2534 programming issues.	Incorrect OEM software setup; Unstable power supply during programming; Network issues.	Ensure correct OEM software and drivers are installed. Maintain stable vehicle battery voltage (use a battery maintainer). Ensure stable internet connection. Follow OEM programming procedures precisely.

For issues not covered here, please refer to the official LAUNCH support resources or contact their customer service.

8. SPECIFICATIONS

Feature	Detail
Model	LAUNCH X-431 PRO5
Operating System	Android 10.0
Processor	2.0GHz 4-core Processor
Display	10.1" (1280x800 resolution)
Memory	4GB RAM / 64GB Internal Storage
Camera	8MP Rear Camera
Connectivity	Dual-WiFi (2.4GHz/5GHz), Bluetooth
Battery	6300mAh Lithium Ion (included)
Item Weight	21.4 pounds
Product Dimensions	23.62 x 6.3 x 15.75 inches
Automotive Fit Type	Universal Fit
Manufacturer Part Number	X431 PRO5

Feature	Detail
UPC	850052860332

Figure 8.1: Key hardware specifications of the LAUNCH X431 PRO 5.

9. WARRANTY AND SUPPORT

The LAUNCH X431 PRO 5 Scan Tool typically comes with a manufacturer's warranty. Please refer to the warranty card included in your package or visit the official LAUNCH website for detailed warranty terms and conditions.
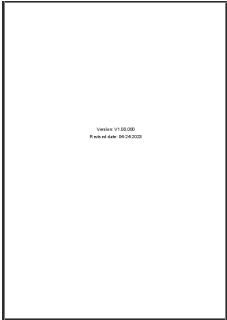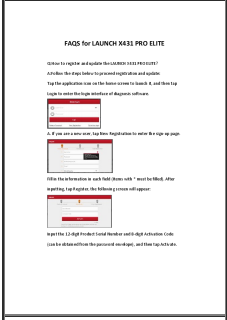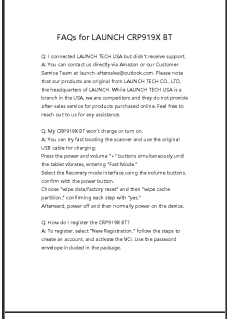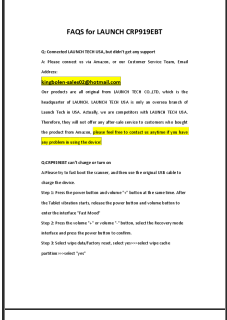
- **Free Updates:** This product includes 2 years of free software updates from the date of activation.

- **Technical Support:** For technical assistance, troubleshooting, or inquiries regarding product functionality, please contact LAUNCH customer support. Contact information can usually be found on the official LAUNCH website or within the device's "Info Center" application.

- **Online Resources:** Utilize online forums, FAQs, and video tutorials provided by LAUNCH for additional support and operational guidance.

Related Documents - LAUNCH X-431 PRO5

Version: v1.00.000 *Revised date: 06/24/2020*	[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.
FAQS for LAUNCH X431 PRO ELITE	[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.
FAQs for LAUNCH CRP919X BT	[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.
FAQS for LAUNCH CRP919EBT	[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.
V1.00.000 *02-22-2022*	[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.

FAQS for LAUNCH X431 IMMO ELITE

Q:Is easy to use LAUNCH X431 IMMO ELITE?

A:Yes! Before normally use,you just need to do right connection with cable under cable VDI!.And we have a manual guide for you to use.Please be reassured.You don't have to be a technician to use it.

Q:Is X 2 years Update?How to update?

A:Yes!! Connect our LAUNCH X431 IMMO ELITE to the VDI! and then one key update, no need to connect computer, no need to know system to update.

Q:Is LAUNCH X431 IMMO ELITE scan tool an American model and I can I use it outside America?

A:Yes, LAUNCH X431 IMMO ELITE is an American model and not and no it limited.

Q:How to Register & Update with X431 IMMO ELITE?

A:Follow the steps below to proceed registration and update.Tap the application icon on the home screen to launch it, and then tap Login to enter the login interface of diagnostic software.

[LAUNCH X431 IMMO ELITE FAQs and User Guide](#)

Frequently Asked Questions and operational guidance for the LAUNCH X431 IMMO ELITE diagnostic tool, covering registration, updates, features, and troubleshooting.