

LAUNCH L-ECTUP

LAUNCH X-431 ECU TCU Programming Tool Instruction Manual

Model: L-ECTUP

Brand: LAUNCH

1. INTRODUCTION

The LAUNCH X-431 ECU TCU Programming Tool is a sophisticated device designed for reading, writing, and cloning Engine Control Units (ECU) and Transmission Control Units (TCU). It supports operations through BENCH and BOOT modes, facilitating the replacement of both new and used components. This tool also offers essential functions such as chip ID reading, EEPROM and FLASH data backup, restoration, and Checksum Correction to ensure proper ECU functionality after data modification.



Figure 1.1: LAUNCH X-431 ECU TCU Programming Tool and accessories.

2. PRODUCT FEATURES

- Supports read, write, and clone operations for ECU and TCU via BENCH and BOOT modes.
- Facilitates easy replacement of new or used components, reducing costs and complexity.
- Includes functions for chip ID reading, EEPROM data backup, FLASH data backup, and data restoration.
- Features Checksum Check to ensure proper ECU functionality after data modification.
- Offers multi-language support: English, Japanese, German, Russian, Italian, Spanish, Portuguese, Arabic, French, Korean.
- Covers diverse vehicle models including cars, motorcycles, tractors, and trucks.
- Comes with 32pcs Matching Adapters for jumper preparation.
- Software features receive free upgrades.

3. PACKAGE CONTENTS

Verify that all items listed below are present in your package:

Packing List

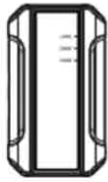
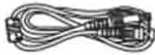







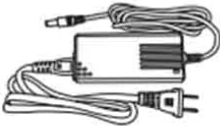





Main Unit		USB Cable (type B)		MCU Cable V1	
Bench Mode Cable		Matching Adapter A (5 Pcs)		Matching Adapter B (6 Pcs)	
Matching Adapter C (7 Pcs)		Matching Adapter D (8 Pcs)		Matching Adapter E (6 Pcs)	
Switching Power Supply		European power cord		User Manual	
Packing List		Password envelope		Carrying Case	

Figure 3.1: Detailed packing list diagram.

- Main Unit
- USB Cable (Type B)
- MCU Cable V1
- Bench Mode Cable
- Matching Adapter A (5 Pcs)
- Matching Adapter B (6 Pcs)
- Matching Adapter C (7 Pcs)
- Matching Adapter D (6 Pcs)
- Matching Adapter E (6 Pcs)
- Switching Power Supply
- European power cord
- User Manual (PDF link provided in Section 9)
- Packing List

- Password envelope
- Carrying Case

3.1. Unboxing Video

Watch this video for a visual guide to unboxing and identifying the components of your LAUNCH ECU TCU Programmer.

Your browser does not support the video tag.

Video 3.1: LAUNCH ECU TCU Programmer Unboxing Video. This video demonstrates the contents of the product package and how to identify each component.

4. SYSTEM REQUIREMENTS

- Operating System: Windows 10
- A personal computer is required to run the dedicated LAUNCH PC software. The download link for the software can be found in the user manual (PDF) or on the product page.

5. SETUP

Before operating the device, ensure proper connections are made between the LAUNCH X-431 ECU TCU Programming Tool, your computer, and the ECU/TCU. The tool utilizes BENCH and BOOT modes for direct connection to the control units.

LAUNCH ECU & TCU CLONING TOOL

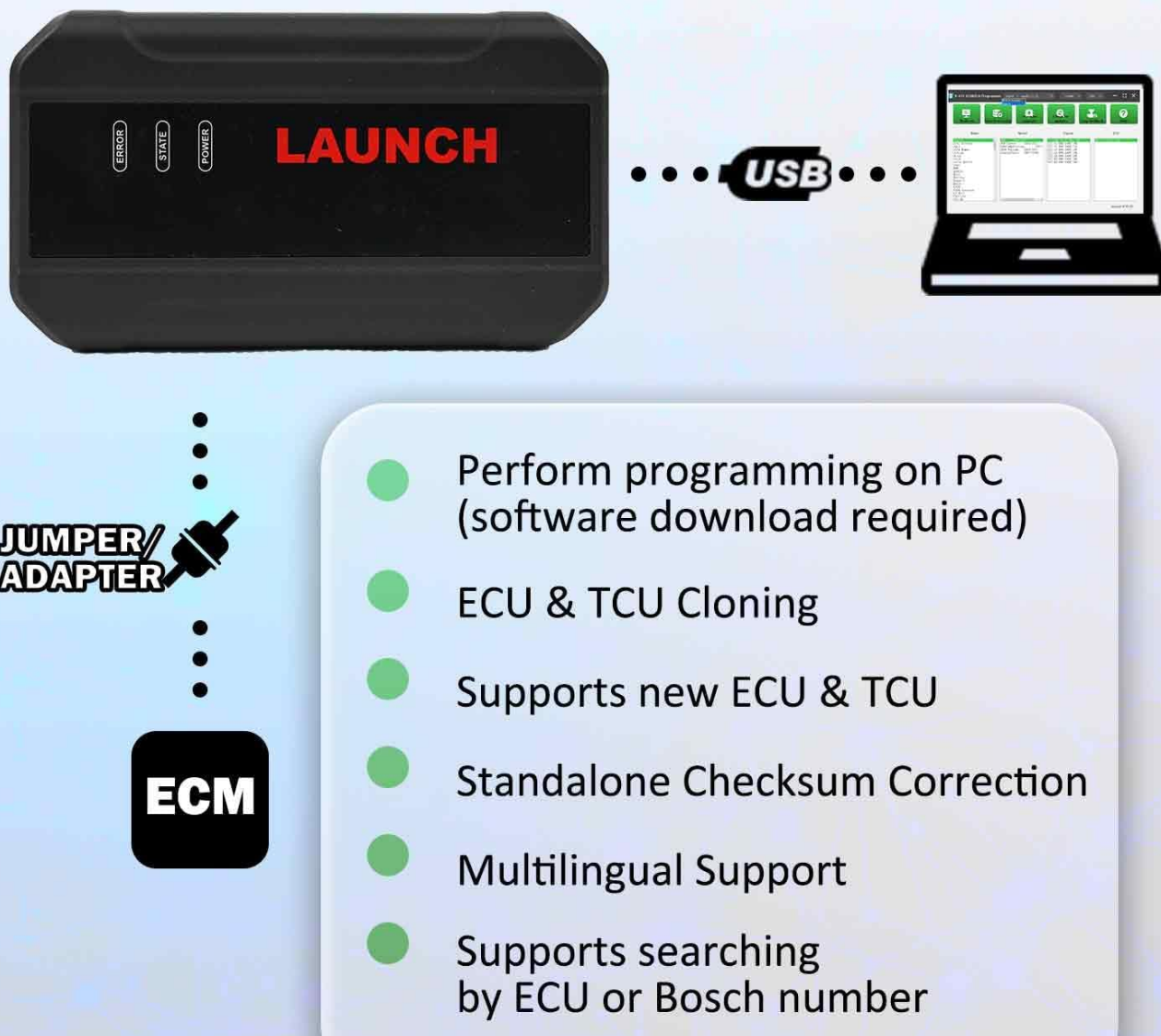


Figure 5.1: Connection diagram for the ECU TCU Programmer to a PC and ECM.

Use the provided 32pcs Matching Adapters for jumper preparation to establish a stable connection with various ECU/TCU types. Refer to the specific wiring diagrams within the software for your particular vehicle model and ECU/TCU.

6. OPERATING INSTRUCTIONS

6.1. ECU/TCU Cloning Procedure

The primary function of this tool is to clone ECU and TCU data, allowing for seamless replacement of control units. This process involves reading data from an existing ECU/TCU and writing it to a new or used one.

CLONING

Another ECU&TCU repair method



CLONE offers a programming-free solution for repairing ECU & TCU, boosting skills and profits.

Save Time

Easy Operation

Cut Costs

Figure 6.1: ECU/TCU cloning process overview.

For a detailed demonstration of the cloning process, specifically for a MED17.7.9 engine control unit, please refer to the video below. The steps generally involve:

1. Connect the X-431 ECU&TCU Programmer to your computer and the target ECU/TCU.
2. Launch the LAUNCH PC software.
3. Select the appropriate ECU model (e.g., MED17.7.9) within the software.
4. Follow the on-screen instructions for direct connection and diagram display.
5. Read the chip ID.
6. Read EEPROM data and save it.
7. Read FLASH data and save it.
8. Write the saved EEPROM data to the new/target ECU/TCU.
9. Write the saved FLASH data to the new/target ECU/TCU.
10. Disconnect the device safely.

Your browser does not support the video tag.

Video 6.1: Utilizing the ECU&TCU Programmer for MED17.7.9 engine cloning. This video provides a step-by-step guide on how to perform an engine computer cloning operation using the device and its software.

6.2. Checksum Correction

The tool supports Checksum Check functionality, which is crucial for validating data integrity after modifying or cloning ECU/TCU data. This ensures that the control unit operates correctly and reliably.

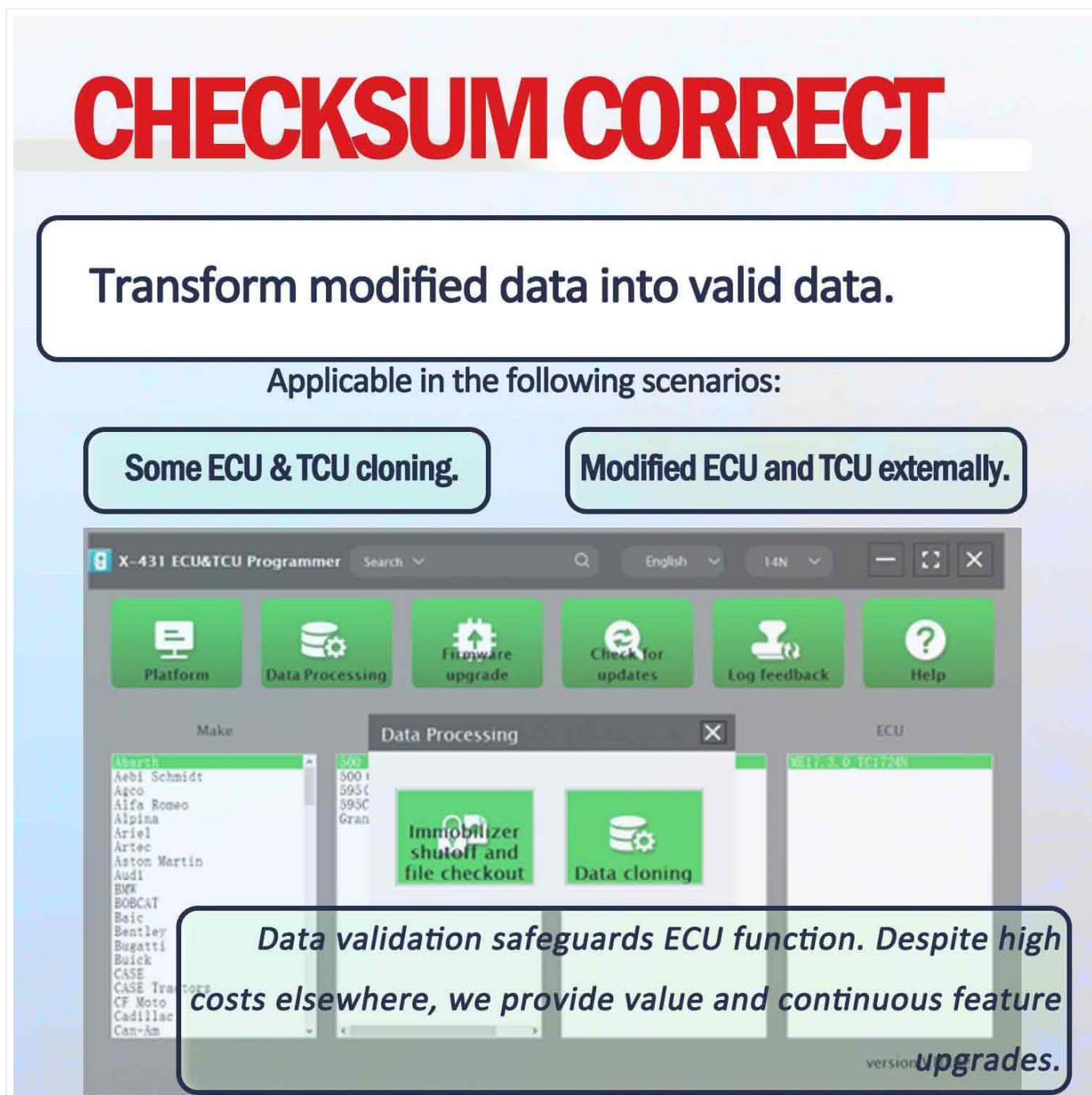


Figure 6.2: Software interface demonstrating the Checksum Correct feature.

7. IMPORTANT NOTES AND LIMITATIONS

Please be aware of the following important considerations:

OFFICIAL STATEMENT

We highly recommend checking the instruction manual, vehicle model, and ECU compatibility list on the page before placing an order.

This product **does not support** fault code blocking, power, mileage, VIN modifications, or any functionalities that would violate local regulations.

Currently, the anti-theft deactivation function is only supported for a subset of ECUs (MEDC17 ECUs). In the future, there is a possibility of expanding this support to more ECUs. For specifics, please refer to our statement or compatibility list.

Figure 7.1: Official statement from LAUNCH regarding product functionalities.

- This product **does not support** fault code blocking, power modifications, mileage adjustments, or VIN modifications.
- The tool is not designed for key programming; its sole purpose is to clone relevant data to the ECU or TCU.
- Anti-theft deactivation functionality is currently only supported for a subset of ECUs (MEDC17 ECUs). This feature is not the primary focus of the product.
- Always refer to the instruction manual and the ECU compatibility list before performing any operations.

8. MAINTENANCE

- Keep the device and its accessories clean and free from dust and moisture.
- Store the tool in its original carrying case when not in use to prevent damage.
- Avoid exposing the device to extreme temperatures or direct sunlight.
- Regularly check cables and connectors for any signs of wear or damage.

9. TROUBLESHOOTING

If you encounter any issues while using the LAUNCH X-431 ECU TCU Programming Tool, consider the following:

- Ensure all connections are secure and correctly made according to the software's wiring diagrams.
- Verify that the correct ECU/TCU model is selected in the software.
- Check your PC's operating system and ensure the LAUNCH software is up-to-date.
- For persistent issues, refer to the comprehensive user guide PDF or contact LAUNCH customer support.

10. SPECIFICATIONS

Attribute	Value
Manufacturer	LAUNCH
Brand	LAUNCH
Model Number	L-ECTUP
Item Weight	6.34 pounds
Package Dimensions	15.67 x 12.8 x 4.8 inches
Power Source	Corded Electric
Operating System	Windows 10
Date First Available	August 9, 2023







11. WARRANTY AND SUPPORT

LAUNCH provides free software upgrades for this product, ensuring continued functionality and compatibility with new vehicle models and features. For comprehensive support, detailed operational procedures, and the latest software download links, please refer to the official User Guide PDF:

Download Official User Guide
(PDF)

For further assistance, you may contact LAUNCH customer support through their official channels.



	<p>LAUNCH X-431 ECU&TCU Programmer User Manual</p> <p>Comprehensive user manual for the LAUNCH X-431 ECU&TCU Programmer, covering installation, operation, ECU data read/write, immobilizer functions, and data cloning for automotive applications.</p>
	<p>LAUNCH X-431 ECU&TCU Programmer User Manual - Automotive Diagnostics</p> <p>Comprehensive user manual for the LAUNCH X-431 ECU & TCU Programmer, detailing operation procedures, data read/write, immobilizer functions, and data cloning for automotive ECUs.</p>
	<p>Launch GIII X-Prog 3 Advanced Immobilizer & Key Programmer Guide</p> <p>Comprehensive guide to the Launch GIII X-Prog 3, an advanced immobilizer and key programmer for automotive diagnostics and key programming. Covers features, supported brands, systems, chip brands, connection methods, update procedures, specifications, and package contents.</p>
	<p>LAUNCH Vehicle Diagnostic Tools and Solutions</p> <p>Explore the comprehensive range of LAUNCH vehicle diagnostic tools, including the X-431 series for passenger cars and the X-431 EURO PRO HD+ for commercial vehicles. Discover features like remote diagnostics, extensive service functions, and specialized databases.</p>
	<p>LAUNCH X-431 Key Programmer User Manual: Features, Operations, and Specifications</p> <p>Comprehensive user manual for the LAUNCH X-431 Key Programmer. Learn about its features, components, operation modules, and technical parameters for generating car key chips and remote controls. Includes warranty and customer service information.</p>
	<p>LAUNCH X-431 PAD V Automotive Diagnostic Tool User Manual</p> <p>This document is the user manual for the LAUNCH X-431 PAD V, an advanced automotive diagnostic and maintenance tool. It details the product's features, technical specifications, setup procedures, diagnostic functions, maintenance resets, optional toolboxes, and troubleshooting guidance for professional automotive technicians.</p>