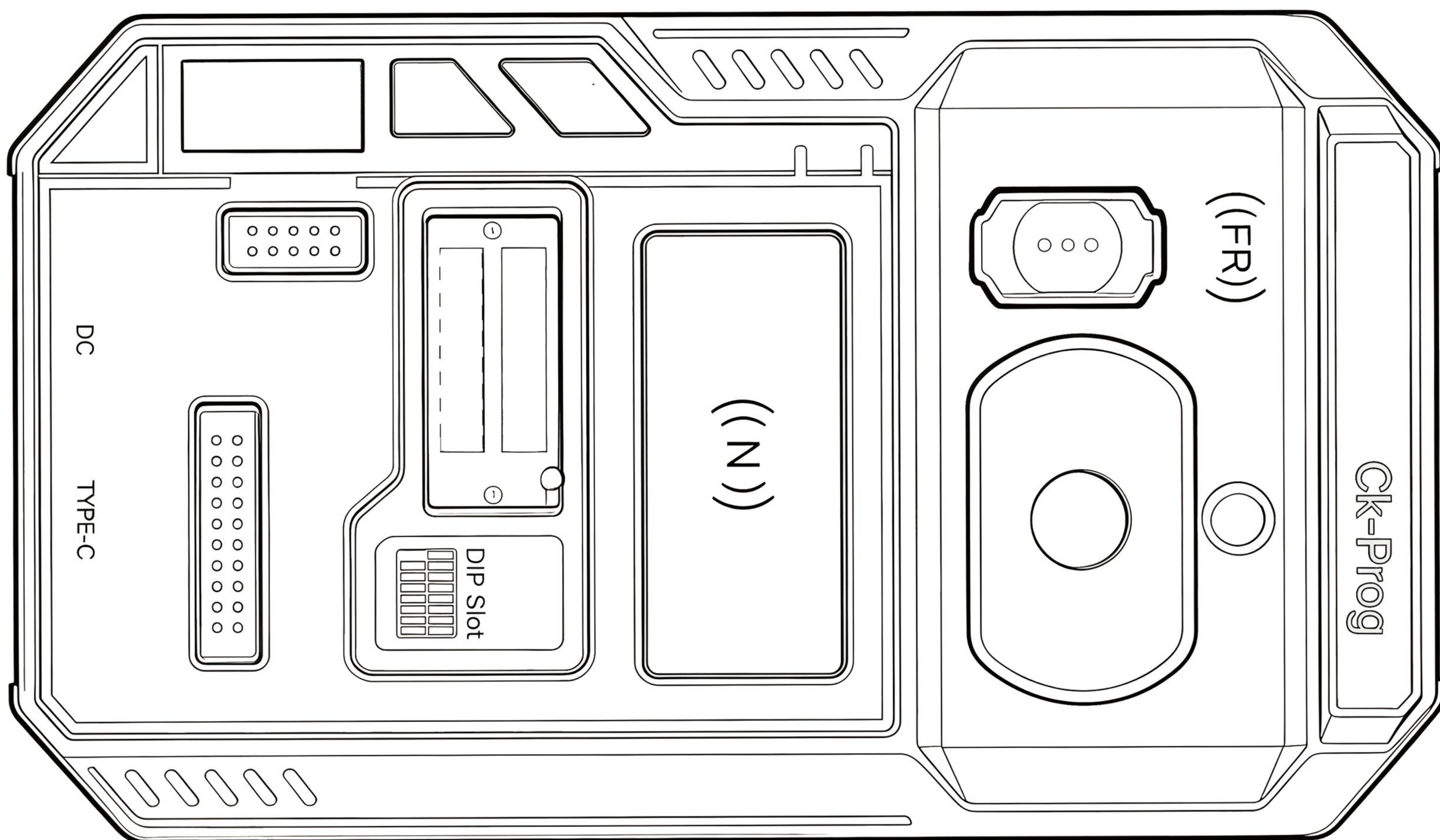




CK-PROG

Automotive Intelligent ProgrammerV1.0



Contents

Table of Contents	02
Introduction	03
Document Notice	04
Safety Notes	05
Product Exterior View	06
Packing List	07
Main Unit Details	08
CK-PROG Main Unit	
Casing Material Description	
Control Areas Overview	
Accessory Details	10
ATMEGA Adapter	
8-pin Socket	
MCU-Cable V1 Programming Cable	
Software Overview & User Instructions	12
Memory Introduction	
MCU Introduction	
Immobilizer ECU	
Instrument ECU	
Engine ECU	
Key Transponder	
NFC	
BDC2 Programming	
Instrument Cluster	
Key module	
Airbag repair	
Wear-prone module	
After-sales	20

Brief introduction

CK-PROG device supports reading and writing data for a wide range of chips, including SPC56xx, MPC56xx, SPC564xx, MAC7, MPC57xx, MC68HC(9)12 series, TC2xx series, XC2xx series, FS32K1xx series, 9S12, 9S08, M68Hxx series, H8S, R5F61725 series, ATMEGA series, PIC16/PIC18 series, S6J series, RH850 (R7F7) series, RL78 (R7F1/R5F5) series, STM10, STM8 series, MB96FXX series, V850 (D70F) dual-wire series, V850 (DF70) single-wire series, MB91 series and EEPROM chips.

It is equipped with decryption functions, currently supporting chips from Freescale, Renesas, NXP and other manufacturers, with more models under continuous development. The device enables chip programming operations such as reading, writing, erasing, unlocking, locking and data verification. It also allows users to customize programming data via the menu and complete one-click flashing. Wiring diagrams are provided by vehicle model for easy connection.

Document Statement

Dear users, thank you for choosing CK-PROG. Please read this manual carefully and follow the below regulations before use:

- 1 .Use the equipment in a stable electromagnetic environment.
- 2 .Ensure reliable grounding of the anti-static constant-temperature soldering station during soldering.
- 3 .Cut off all power beforehand to prevent short-circuit damage to equipment and components.
- 4 .Keep the area well ventilated against harmful soldering fumes.
- 5 .Do not use non-rated power supply to avoid equipment damage.
- 6 .Keep the unit away from moisture, grease, dust and corrosives. Avoid heavy load, dropping and direct sunlight.
- 7 .Clean with clean cotton cloth and mild detergent.
- 8 .Store out of children's reach.
- 9 .Contact technical support for any other issues.

Safety Precautions

To prevent personal injury, damage to vehicles, equipment and other property, please strictly follow the safety precautions below:

1. Use in a stable electromagnetic environment.
2. Use properly grounded anti-static constant-temperature soldering stations only.
3. Cut off all power before soldering to prevent short-circuit damage.
4. Ensure good ventilation against harmful soldering fumes.
5. Do not use non-rated power supplies to avoid device damage.
6. Keep away from moisture, oil, dust and corrosives. Avoid heavy pressure, drops and direct sunlight.
7. Clean with soft cloth and mild detergent.
8. Store out of children's reach.

Product Overview



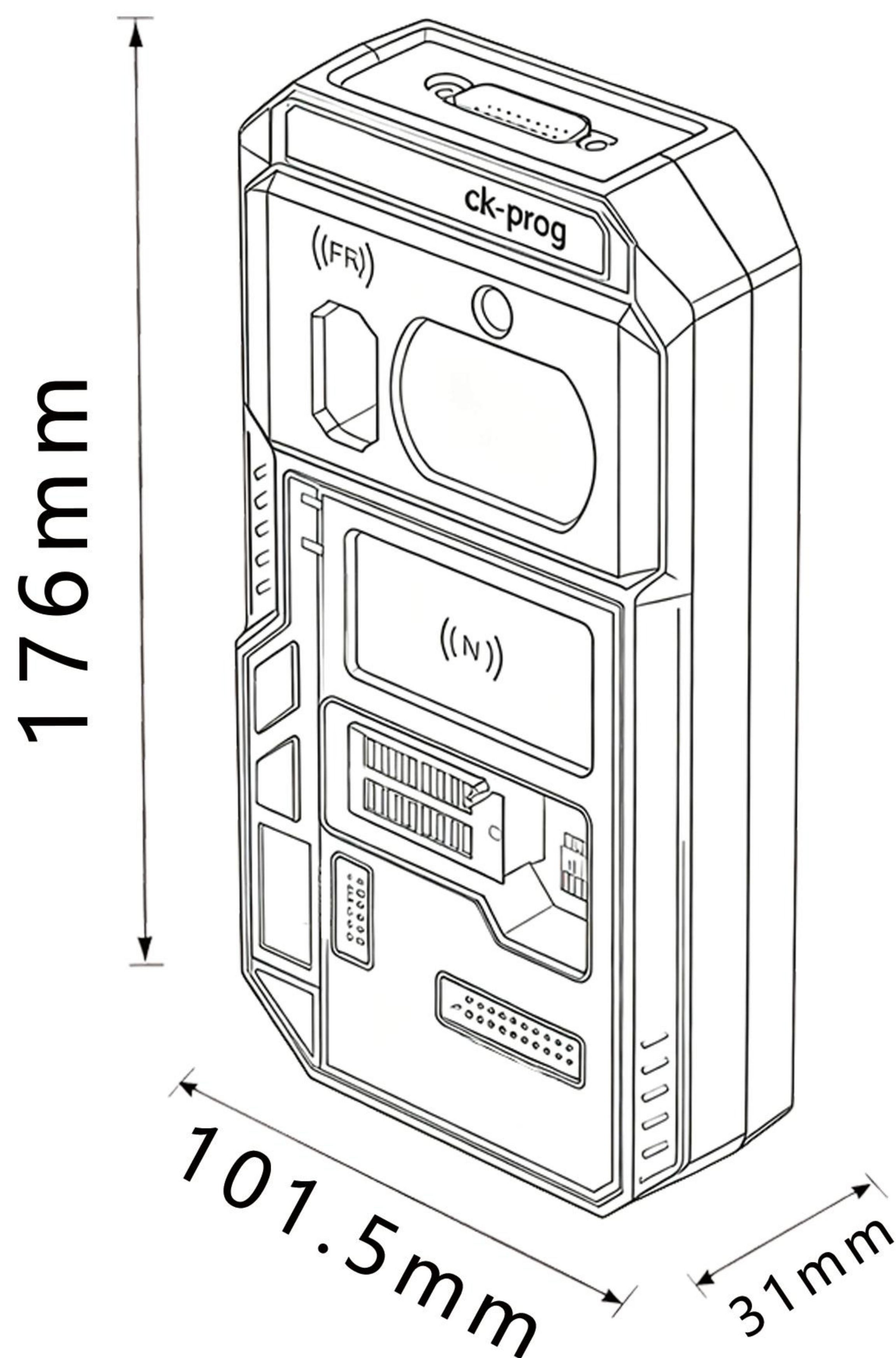
Package List

Below are the product and accessories.
Please contact your dealer if any
standard parts are missing. See the next
page for accessory details.

	Name	Quantity
1	CK-PROG Main Unit	1
2	Power Cord	1
3	USB Data Cable	1
4	ATMEGA Adapter (Standard)	1
5	8-pin Socket (Optional)	1
6	8-pin Adapter Board (Standard)	1
7	MCU-Cable V1 Programming Cable	1
8	8-pin Solderless Harness	1

Main Unit Details

1. CK-PROG Main Unit



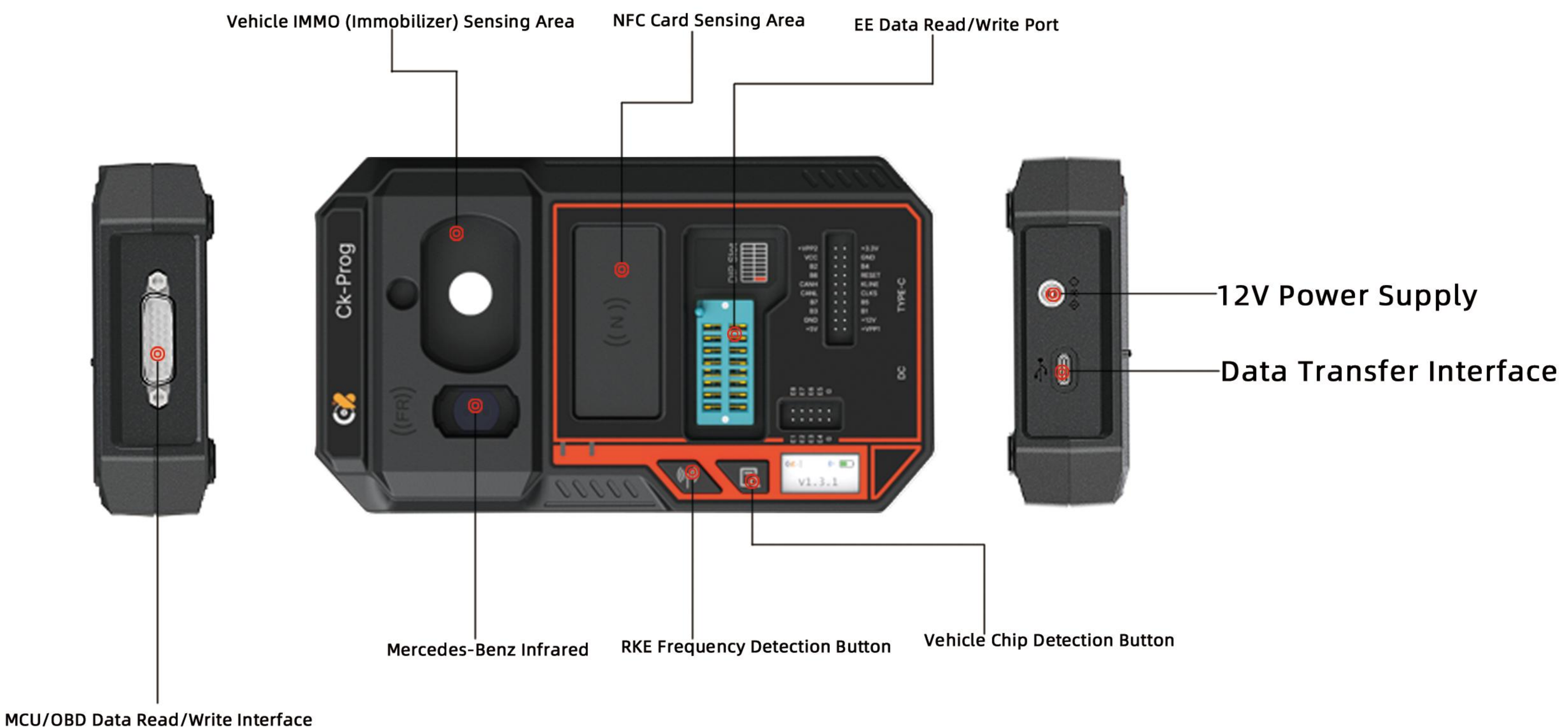
USB Interface		USB 2.0	
External Power Supply		12V/2A	
Power		1W	
Product Dimensions	Length	Width	Height
	176mm	101.5mm	31mm

Main Unit Details

Housing Material Introduction

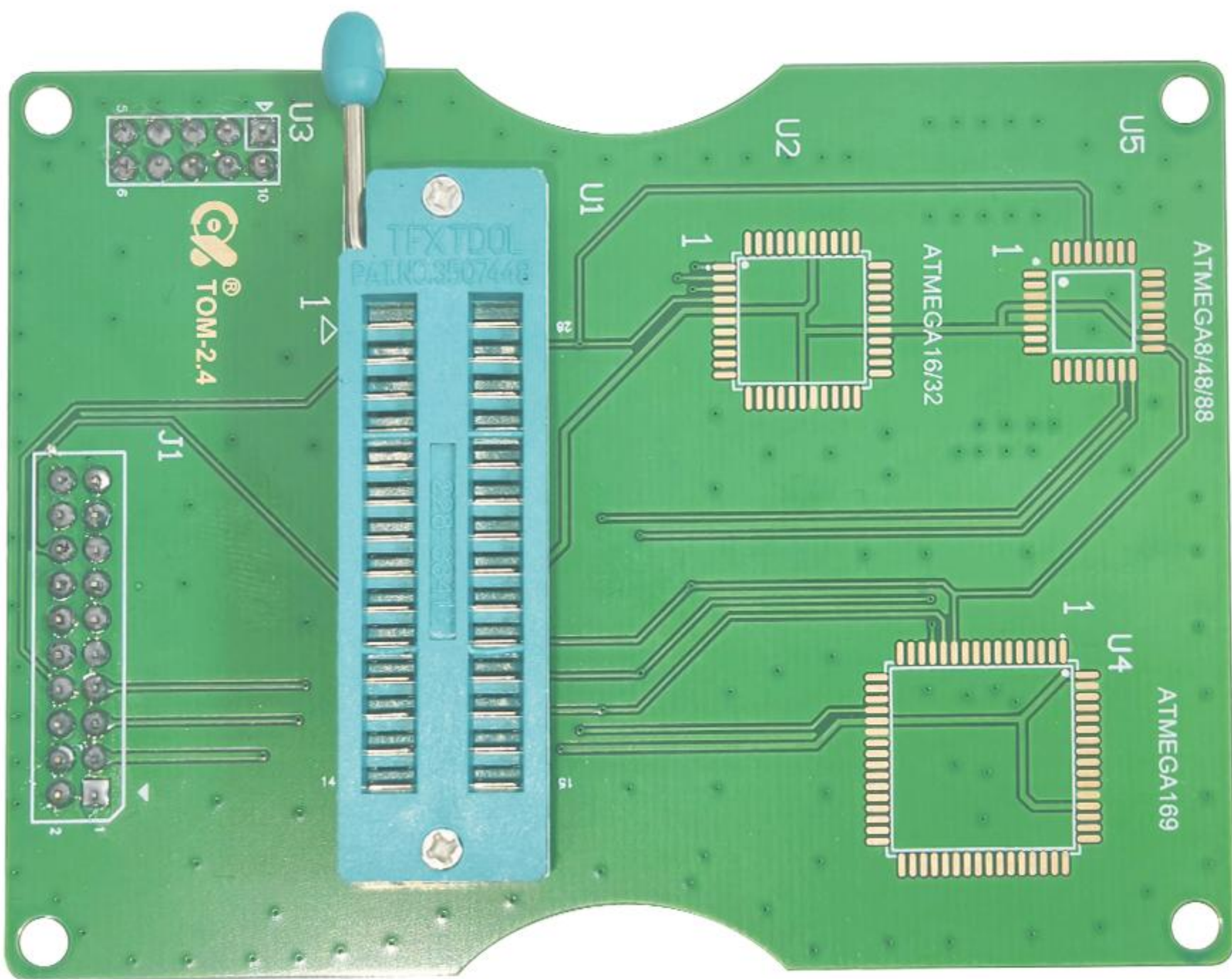


Function Area Introduction



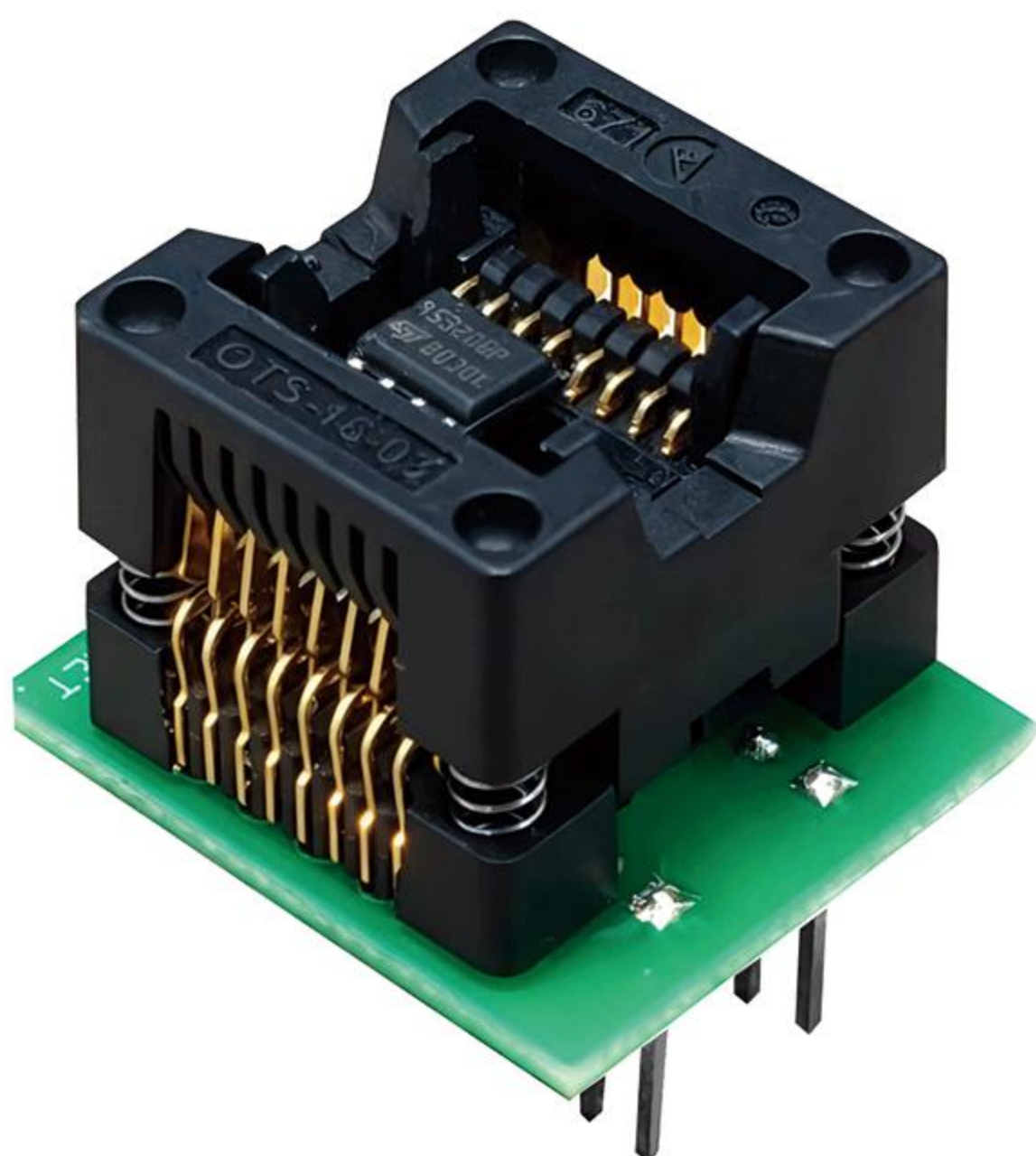
Accessories Details

4. ATMEGA Adapter (Standard Configuration)



Supports 8/16/32-pin chips. Comes with through-hole solderless lock socket and 3 solder positions; enables meter calibration and chip erasure.

5. 8-pin Socket (Optional)



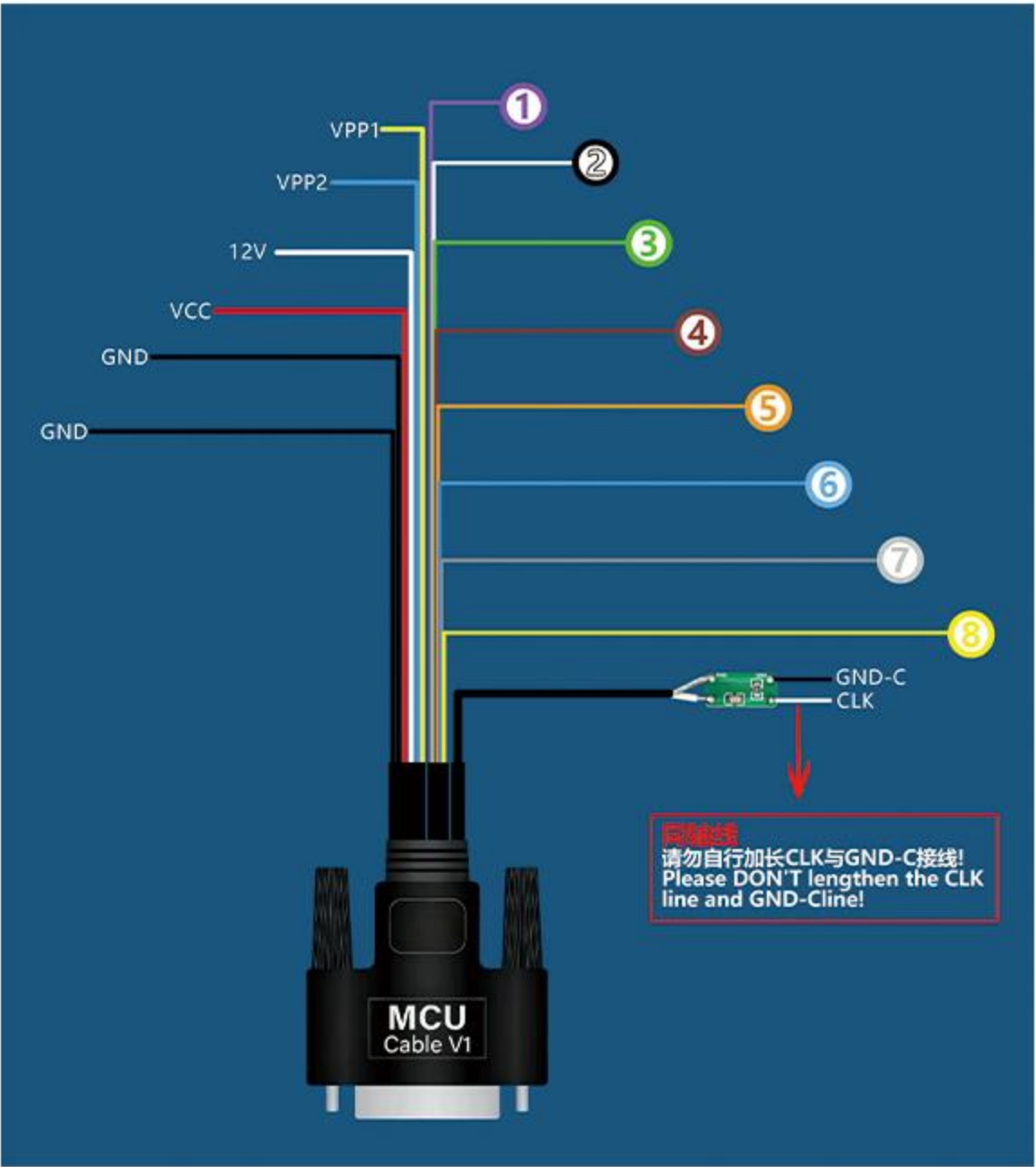
For programming 8-pin chips, solderless pin contact. Compatible with 6/8-pin soldering positions.

Accessory Details

7.MCU-CableV1 Programming Cable



MCU线束				
DB26 pinout	Wire color	Network / Function	Sleeve silkscreen	Remarks
1	White	ECU_B2	2	Signal harness
2	Brown	ECU_B4(TX)	4	
3	Blue	ECU_B6	6	
4	Yellow	ECU_RESET	8	
5				
6				
7				
8	Red	ECU_SI_VDD/VCC	VCC	Power harness
9	Yellow	VPP1/VPP	VPP1	
10	Purple	ECU_B1	1	Signal harness
11	Green	ECU_B3	3	
12	Orange	ECU_B5	5	
13	Gray	ECU_B7	7	
14				
15				
16				
17				
18	Blue	VPP2/VPPR	VPP2	Power harness
19	White	ECU_W/R_FREQ/CLK		CLK harness
20				
21				
22				
23				
24	Two black wires	GND	GND	Ground wire
25	Black	GND-C		CLK harness ground wire (this wire is a shielded wire)
26	White	12V	12V	Power harness

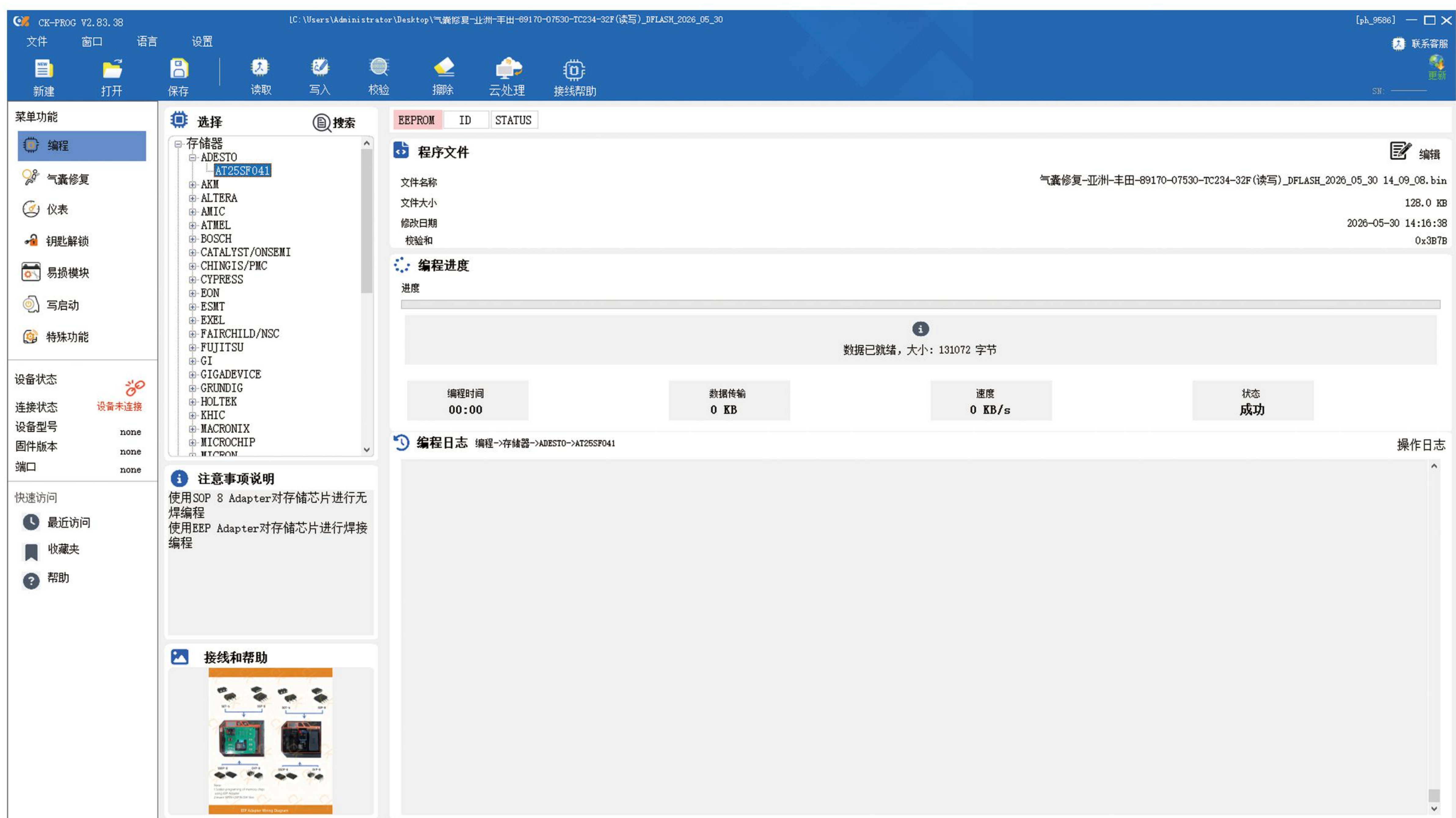


Supports programming for various chips.
Clearly marked wire numbers for stable and safe soldering.

Software Introduction & Operation Guide

Memory Introduction

This software's memory functions support data reading, writing, backup and repair of onboard storage chips for automotive electronic boards. It serves as a basic repair function for airbag computers, instrument panels, body control modules, engine ECUs and other devices, and is compatible with mainstream Flash and EEPROM storage chips on the market.



Software Application

Select Program on the left → choose Memory, then search for the corresponding chip model.

Double-click the highlighted item or click Wiring Help to view the wiring diagram.

Connect the device to the chip, read original data and save a backup.

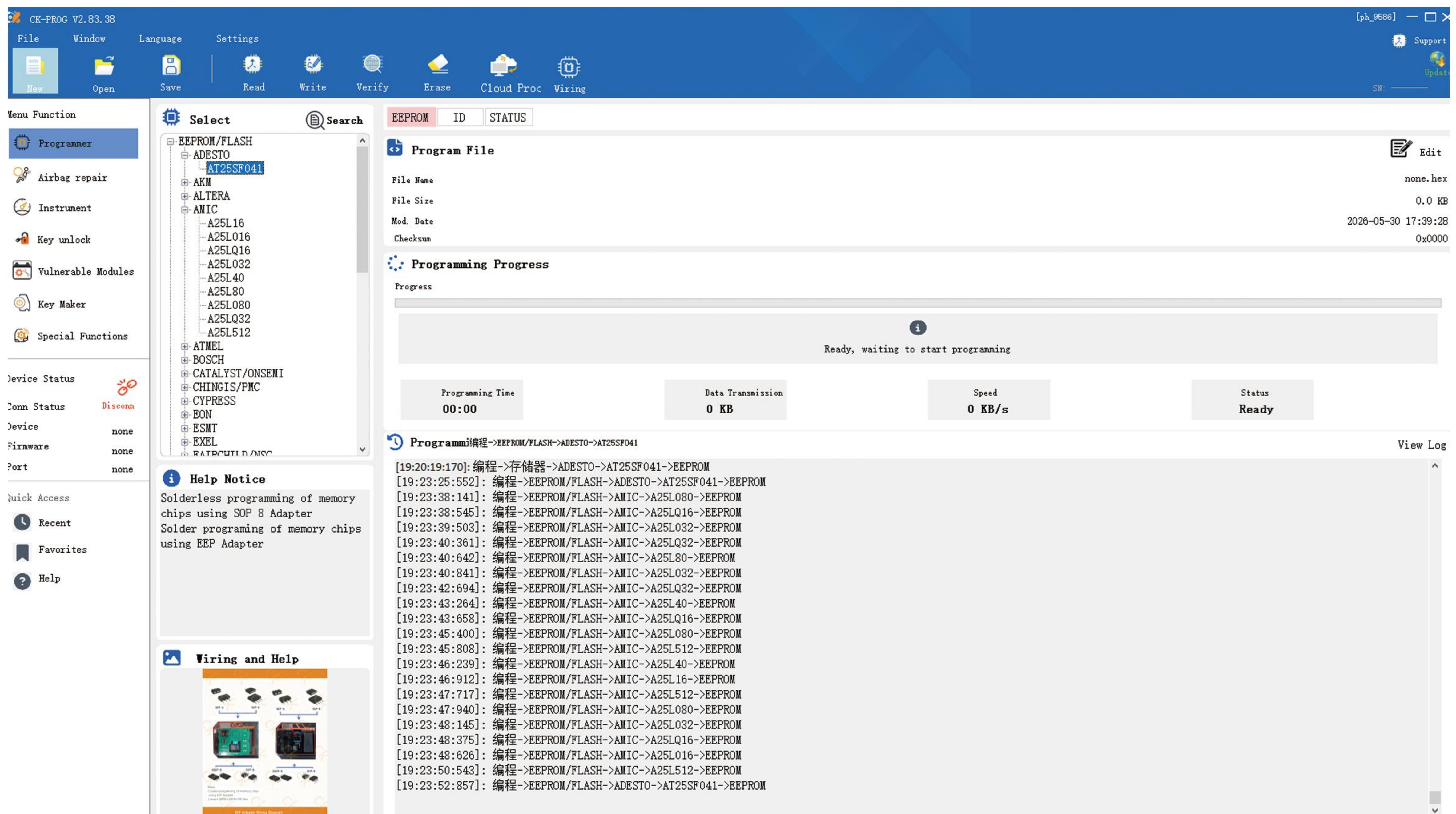
Import repaired data and start writing.

Built-in data verification ensures complete and lossless writing.

Software Introduction & Operations

Introduction to Single-Chip Microcomputer

This MCU tool reads, flashes and repairs mainstream vehicle MCUs for automotive repair. It supports data backup, fault fix and module cloning for key ECUs



Software Usage

Select Programming on the left, pick MCU and search for the chip model.

Double-click the highlighted entry or click Wiring Help to view the wiring diagram.

After device connection, use the functions below:

Read: One-click to read and locally back up MCU data & programs, for module cloning and repair.

Write: Flash repaired/cloned data or matching programs to the MCU for module reuse and ECU programming.

Verify: Check data integrity to avoid errors and module damage.

Erase: Clear MCU storage for new programming or unlock encrypted chips.

Introduction & Operation

Anti-theft computer

This module handles data read/write, repair and matching for vehicle anti-theft control units. It features D-FLASH, P-FLASH, CONFIG and other functions to ensure safe data operations. It supports key matching, data cloning, fault fixing and anti-theft lock removal.

Instrument computer

This tool reads, writes, calibrates and repairs vehicle instrument control units for odometer adjustment and fault fixing. It has DFLASH, FLASH, ID, lock and unlock functions, with read, write, verify, erase, cloud processing and wiring guides to ensure stable data operation. It repairs faulty data, recovers blank screens and writes matching data for replaced instruments.

Engine Control Unit

Provides read/write, repair and cloning for vehicle ECUs. Features DFLASH, EEPROM, FLASH, ID, lock and unlock. Supports data operations, cloud processing and wiring guides. For ECU cloning, used module matching and anti-theft data writing.

Software Introduction & Operation

Key chip

This module reads and writes data for vehicle key chips. It has EEPROM, CONFIG and other sections, supporting read, write and verification.

NFC

This tool reads and writes vehicle NFC data for NFC key cloning and duplication.

NFC 14443A (ISO 14443A)

Also known as Type A card, mainly Mifare cards.

Reading range: ≤ 10 cm (close contact required)

Max speed: 424 kbps

Mature encryption, high security

Widely used for digital NFC keys and phone car keys in new energy vehicles.

NFC 15693 (ISO 15693, ICODE)

Long-range loosely coupled RFID standard.

Reading range: over 1 meter

Strong penetration through metal, glass and plastic

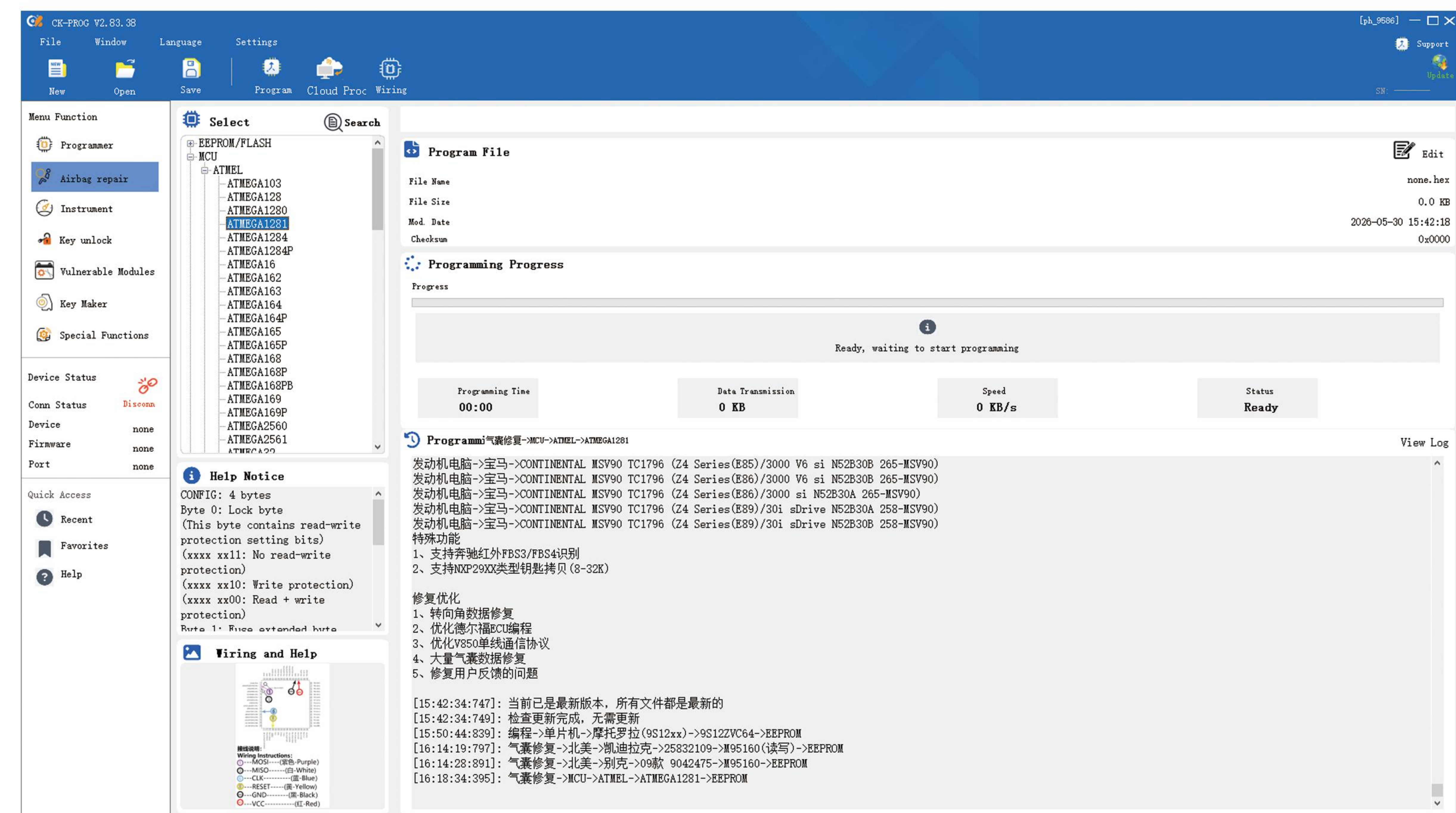
Max speed: 53 kbps, strong anti-interference

Applied to old models' keyless entry and vehicle component identification.

Software Introduction and Operation

Airbag repair

This module is dedicated to reading and writing data for vehicle key chips. The operation interface is divided into functional sections such as EEPROM and CONFIG, enabling separate access to the data area and configuration area of key chips. It supports reading, writing, verification and other functions.



Airbag Software Operation

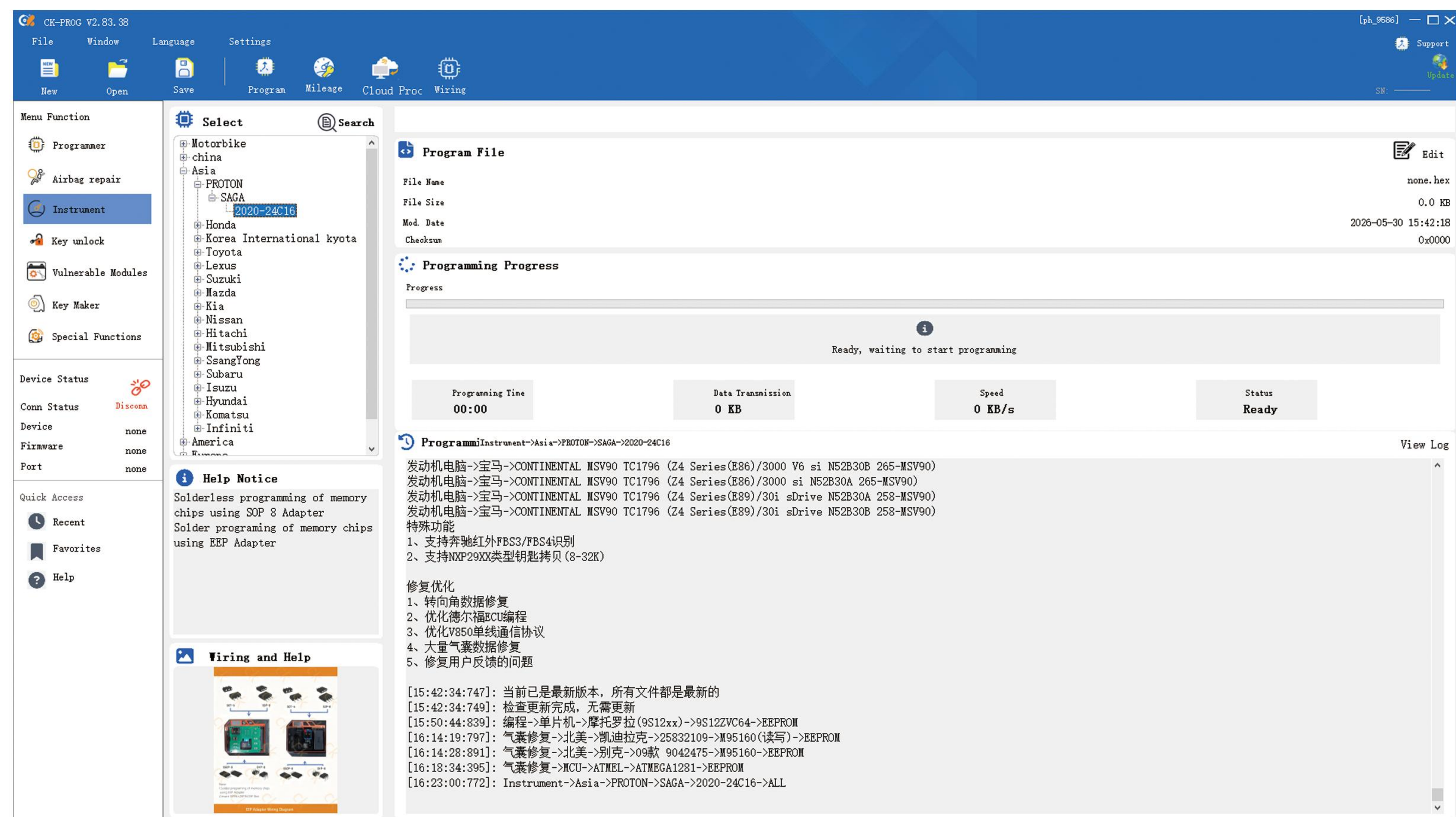
Select Airbag Repair on the left → Search for the corresponding part number.

Double-click the highlighted item or click Wiring Help to open the wiring diagram or octagonal chip layout diagram. Click the Repair button. Remember to back up the original data during repair. When the status shows success, install the part on the vehicle for verification.

Software Introduction & Operation

Dashboard

It supports data reading, writing, repair and calibration for dashboards, and is a tool for mileage adjustment.



Dashboard Operation

Select Dashboard on the left → Search for the corresponding vehicle model and year, then confirm the dashboard chip.

Double-click the highlighted entry or click Wiring Help to open the wiring diagram or octagonal chip position diagram.

Click Mileage. After the mileage value pops up, carefully check the original reading. Adjustment is acceptable even with a difference of dozens of kilometers before installation.

Dashboard Operation

Key Unlocking

It is specially designed to unlock vehicle key chips.

Wear-prone Module

It repairs data for vehicle vulnerable electronic control units and clears fault codes.

Software Introduction & Operation

Chip Identification

Quickly read the protocol types of anti-theft key chips (such as Hitag, TIRIS, MEGAMOS), ID data and encryption status, and determine whether the chip is locked, damaged or copyable. This is the basic initial inspection for key repair.

Frequency Detection

Detect the RF signal frequency of remote keys (e.g. 315MHz /433MHz/868MHz), check if the signal transmits normally and if the buttons malfunction. Troubleshoot issues such as unresponsive remotes and short operating range.

Add BMW Key

Provide key adding and matching services for BMW models equipped with BDC2/BDC3 anti-theft systems, supporting programming and additional configuration of new keys.

29Ax Copy

Support one-click cloning for dedicated NCF29Ax series key chips to enable quick key reuse.

Mercedes Infrared (IR) Key

Infrared Key Identification for Mercedes-Benz Vehicles

After-sales Service

Warranty Coverage and Duration

Within the valid warranty period, if the device malfunctions due to inherent quality defects or normal use, free repair or replacement service will be provided.

The warranty period commences on the date the device is received. The specific warranty term shall be subject to the product manual or the agreement at the time of purchase.

II. Liability Division and Expense Allocation

1. Expenses borne by our side

If inspection confirms the fault is caused by product quality issues:

Free repair, replacement of parts or complete unit will be provided.

All round-trip shipping fees shall be covered by us.

2. Expenses borne by the user

The user shall pay for all repair fees and round-trip shipping fees under any of the following circumstances:

Expired warranty: The device is out of the specified warranty period.

Man-made damage: Damage caused by improper use, including but not limited to:

Water ingress, dampness, dropping and collision;

Man-made damage to internal circuits and component breakdown.

Unauthorized disassembly or modification: Damage resulting from disassembly, repair or modification performed without authorization from official service centers.

III. Additional Notes

To apply for warranty service, the user shall present proof of purchase (such as order number, invoice, etc.) and deliver the device to an officially authorized service center.

For repairs outside the warranty scope, we will provide a quotation, and the user may decide whether to accept it.