TTM113

Tire Tread Depth Examiner



P13

EV Detection Tool



SHENZHEN SMARTSAFE TECH CO., LTD.

2 3310, Building 11, Tianan Cloud Park, Longgang District, Shenzhen



■ sales@newsmartsafe.com







cebook

SmartSafe

2024 ISSUE 1

WA913

Wireless Touchless Wheel Aligner



PRODUCT SERIES

01CM1 Wheel Equipment

11 CM2 ADAS Calibration

20CM3 Maintenance Equipment

30 CM4 Detection Tool

40 EV1 EV Detection Tool

54

EV2 EV Maintenance Equipment

WA913

Wireless Touchless Wheel Aligner

WA913 is a touchless wheel aligner which adopts technology of laser image recognition processing and three-dimensional measurement to perform wheel alignment on vehicles.



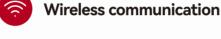






Magnetic suction design, installation-free

*Lift is shown only, lift is not included



Features

- 1. Touchless, not install wheel clamps and targets. Zero damage to wheel hub.
- 2. The industry's first magnetic design, ready to use out of the box, no assembly or wiring required; Factory calibration-free.
- 3. Simple, efficient and no vehicle-push required. Generate wheel alignment test result within 30 seconds.
- 4. Compatible with multiple platforms and can be adapted to big scissor lifts and four post lifts.
- 5. Work with ST13 intelligent terminal to display testing process and result. Convenient to adjust vehicle as well.
- 6. Equipped with large-capacity removable battery. It is safer not to connect power during whole wheel alignment process.

Functions

- **1. Four-wheel alignment measurement:** It supports standard measurement and quick measurement and can measure key parameters such as toe, camber, caster, kingpin inclination, and thrust angle. Supports additional measurements such as whee base, wheel track, axle offset, wheel offset, diagonal, center offset, etc.
- **2. Vehicle model database:** Covers four-wheel alignment data for 50,000+ models around the world and supports user customization.
- **3. Terminal wireless connection:** The measurement data is transmitted wirelessly and paired with the ST13 intelligent link terminal to display the four-wheel alignment process.
- **4. Test report:** Generate professional testing reports, support data comparison before and after training, and support report sharing.
- **5. Multi-platform compatible:** Can be adapted to big scissor lift and four post lift.
- **6. Charging base:** Equipped with two charging bases, which combine charging and storage.

Parameters

Supported Vehicle Specifications

Wheel Base 2150~370	00mm Wheel T	rack 1430~1900mm
Measurement Accuracy & Range	Measurement Range	Measurement Error
Total Toe	±20°	±0.08°
Toe	±10°	±0.04°
Camber	±10°	±0.04°
Caster	±20°	±0.1°
Kingpin Inclination	±20°	±0.1°
Thrust Angle	±5°	±0.04°

wheel Diameter 590~8	80mm	Tire wiath	165~325mm
Measurement Accuracy & Range Flinch Angle	Measurer Rang ±5°	e	Measurement Error ±0.04°
Axis offset	/		±2mm
Wheel offset	/		±2mm
Wheel Track	1900m	m	±2mm
Wheel Base	3700m	m	±2mm
·			·

CM4 Detection Tool

EV1 EV Detection Tool

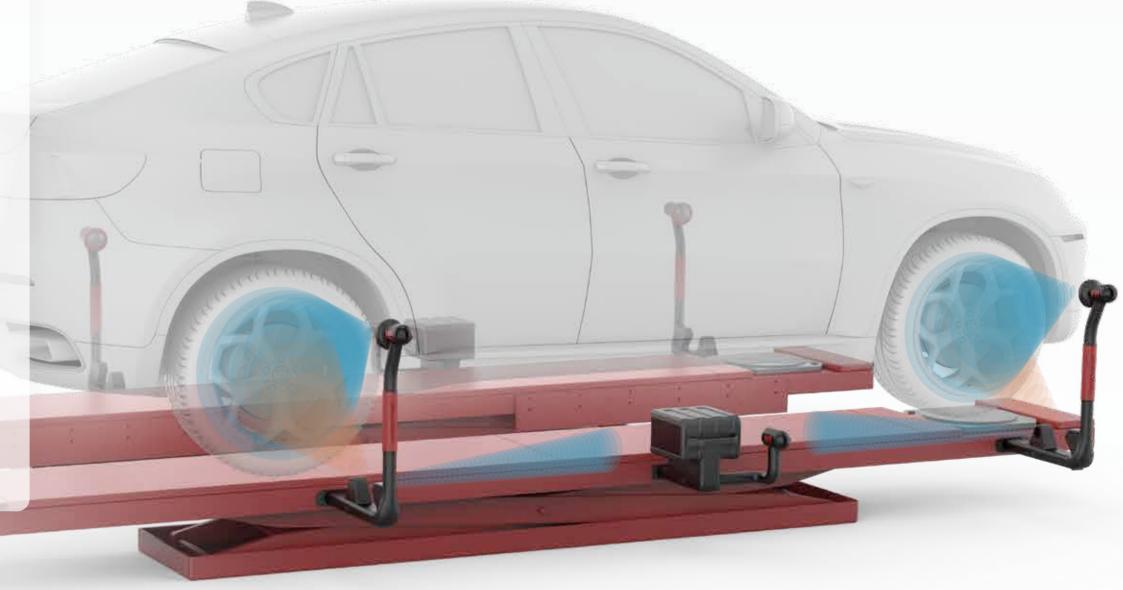
CM1 Wheel Equipment

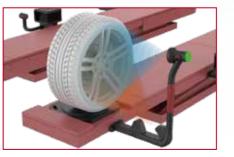
CM2 ADAS Calibration

Measurement Unit



- Complete wheel alignment measurement in 30 seconds, display results
- Industry-first magnetic suction design, convenient and user-friendly
- No need to install wheel clamps and targets, zero wear to wheel hub
- The charging base has functions of both charging and storage
- Suitable for big scissor lift and four post lift
- The first to use metalloid material in the industry, lightweight and durable





Using three-dimensional laser image processing technology



High-precision 5 million pixels industrial camera



Industry's first magnetic design solution



The charging base has both charging and storage functions



Suitable for scissor lift and 4 post lift



Wireless networking, connect to ST13 to display the measurement process and results

02

EV Detection Tool

ADAS Calibration

TTM113

Tire Tread Depth Examiner



TTM113 is a handheld tire tread depth examiner with a measurement accuracy of up to 0.1mm. The innovative structural design allows the measurement to be independent of the chassis height. The full tread can be measured in one go by using a line laser scan.









Features

- 1. The innovative structural design makes the measurement not limited by the height of the chassis, which is more convenient to use;
- 2. Scan the entire tread with a line laser to obtain the number of grooves and the depth of each groove at one time;
- 3. 0.1mm measurement accuracy, real-time display of measurement data;
- 4. 180mm laser measuring width, supporting tires of more specifications;
- 5. Supports the generation of professional inspection reports and maintenance suggestions, and can scan codes and share after connecting to WIFI.

Functions

- **1. Tread depth measurement:** support one-time measurement of the entire tread of a single tire;
- **2. Inspection report:** quickly generate tread depth inspection report, display tread depth data, wear analysis, braking distance estimation, maintenance suggestions, etc., and can scan the code to share after connected to WIFI;
- 3. Detection parameter setting: support setting the number of tires (up to 6) and tread depth unit setting;
- **4. Equipment calibration:** with the calibration block, the user can calibrate the measurement accuracy of the equipment as needed;
- **5.** It can be used with a variety of Smartsafe connection terminals: such as ST13, ST10, P01, P03, etc., to display the measurement results;
- **6. System Settings:** Supports Wi-Fi connection, language switching, screen brightness adjustment, automatic sleep, software updates, and more.

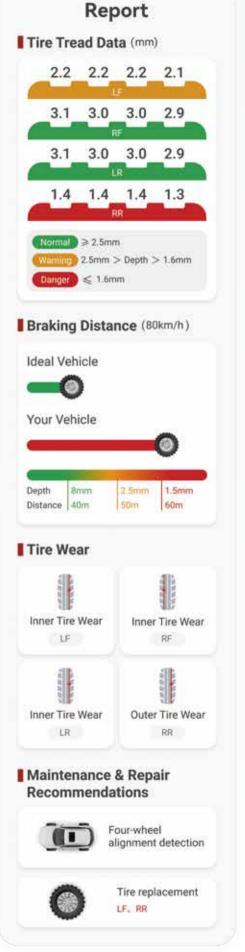
Parameters

Accuracy	0.1mm
Laser Width	180mm
CPU	ARM Cortax A53
RAM/ROM	2GB / 8GB
Display	1.7inch 240×280 Pixel
Wi-Fi	2.4GHz
Camera	2M Pixel 30fps

Battery	3000mAh
Charging Port	Type C
Input	5V / 1A
Working Temperature	0~45°C
Storage Temperature	-20~60°C
Size	224×97×70mm
·	







CM4 Detection Tool

EV1 EV Detection Tool

EV2 EV Maintenance Equipment

Wheel Equipr

TTM619

Tire Tread Depth Detection Equipment

TTM619 is an intelligent tire tread depth detection equipment with an accuracy of 0.1mm, which can complete the tread depth data acquisition at the moment the car passes, and generate inspection reports and maintenance suggestions on the computer or mobile terminal.

0.1mm Detection Accuracy







Features

- 1. Fully automatic detection without manual operation, greatly improving the detection efficiency;
- 2. Applicable to all kinds of four-wheel passenger car tire tread depth detection, the accuracy can reach 0.1mm, and the detection report can be output in 4 seconds;
- 3. Provide tire maintenance, replacement and four-wheel alignment suggestions according to the tread wear;

Functions

- 1. Tread depth measurement: after the vehicle passes by, it will automatically identify the number of tire grooves and measure the
- 2. Inspection report: quickly generate tread depth inspection report, display tread depth data, wear analysis, braking distance estimation, maintenance suggestions, etc., and support report sharing;
- 3. Multiple communication methods: the PC side supports wired and bluetooth communication, and the Android side supports bluetooth communication;
- 4. It can be used with a variety of Smartsafe intelligent terminals: such as ST13, ST10, P01, P03, etc., to display the measurement results.

Parameters

100~240V,50/60HZ
DC 24V
4t
0.1mm
450mm
15km/h

Range of Vehicle Wheelbase	1360~1720mm
Communication	BT、USB
Waterproof Grade	IPX5
Product Size	2165×1660×100mm
Product Size Working Temperature	2165×1660×100mm -10~45°C



Supports Multi-Terminal Display

Connects to tablet devices or computer terminals via Bluetooth, allowing viewing of historical inspection records and detailed reports.

Professional Inspection Report

Generate tire tread inspection reports in 4 seconds, determine tire wear, braking distance, and other conditions based on inspection data, and provide tire maintenance, replacement, and four-wheel alignment recommendations.



Cases



Auto Dealership



Vehicle Inspection Station



Auto Repair Shop



Auto Fleet

CM4 Detection Tool

EV Detection Tool

EV2 EV Maintenance Equipment

ADAS Calibration

WA861 PRO

3D Wheel Aligner



for more information

WA861 PRO is a mobile device that uses 3D imaging technology and intelligent adaptive tracking system to accurately collect four-wheel positioning data of vehicles.



Beam Automatic Tracking System



5 Million Pixel Industrial Camera



50,000+ Vehicle Model Database



8-12cm Rolling Compensation

Features

1. 50000+ global vehicle model database, lifetime free upgrade;

2. 5 million pixel industrial camera, easily adapt to a variety of lighting environment;

- 3. 8-12cm rolling compensation, saving time and effort;
- 4. Adaptive tracking system, freely adjust the operating space under the chassis, can be expanded to adapt to small scissors and two post lift;
- 5. The whole machine is movable and can be shared by multiple stations, which improves the space utilization rate of the repair shop; 6. When the beam is raised or lowered, it will automatically stop when encountering obstacles to protect the safety of personnel and equipment.

Functions

- 1. Four-wheel alignment measurement: It supports standard measurement and quick measurement and can measure key parameters such as toe, camber, caster, kingpin inclination, and thrust angle. Supports additional measurements such as whee base, wheel track, axle offset, wheel offset, diagonal, center offset, etc.
- **2. Intelligent self-adaptive tracking system:** automatically track the target, and adjust the height of the beam adaptively according to the height of the target;
- 3. Database: supports positioning data of 50,000+ global vehicle models, and supports user-defined database;
- **4. Test report:** support measurement report saving and printing;
- 5. Compatible with multiple platforms: suitable for four-post lifts, large scissors lifts, small scissors lifts, two-post lifts and trenches;
- 6. Multi-station sharing: the whole machine is moveable, which is convenient for multi-station sharing;
- 7. Dual-screen display: Support dual-screen display at the same time, an optional secondary screen is required.

Parameters

Display Accuracy	1'/0.01/0.1mm	Kingpin Inclination	±6'
Toe	±2'	Trust Angle	±2'
Camber	±2'	Wheel Track	±2mm
Caster	±4'	Wheel Base	±2mm

WA861

3D Wheel Aligner



Scan for more information

WA861 is a classic mobile device that uses 3D imaging technology to accurately collect four-wheel positioning data of vehicles.

- Multi-Station Sharing
- High-Definition Industrial Camera
- 50,000+ Vehicle Model Database
- = 10-15cm Rolling Compensation



Features

- 1. 50000+ global vehicle model database, lifetime free upgrade;
- 2. 10-15cm rolling compensation, saving time and effort;
- 3. The height of the beam can be adjusted manually, adapting to various maintenance environments, and does not need to be re-calibrated;
- 4. The whole machine is movable and can be shared by multiple stations, which improves the space utilization rate of the repair shop;

Functions

- **1. Four-wheel alignment measurement:** It supports standard measurement and quick measurement and can measure key parameters such as toe, camber, caster, kingpin inclination, and thrust angle. Supports additional measurements such as whee base, wheel track, axle offset, wheel offset, diagonal, center offset, etc.
- 2. Database: supports positioning data of 50,000+ global vehicle models, and supports user-defined database;
- **3. Test report:** support measurement report saving and printing;
- 4. Compatible with multiple platforms: suitable for four-post lifts, large scissors lifts and trenches;
- 5. Multi-station sharing: the whole machine is moveable, which is convenient for multi-station sharing;
- **6. Dual-screen display:** Support dual-screen display at the same time, an optional secondary screen is required.

Display Accuracy	1'/0.01/0.1mm	Kingpin Inclination	±6'
Toe	±2'	Trust Angle	±2'
Camber	±2'	Wheel Track	±2mm
Caster	±4'	Wheel Base	±2mm

WA861 LITE

3D Wheel Aligner



WA861 LITE is a classic stationary device that uses 3D imaging technology to accurately collect four-wheel positioning data of vehicles.

Beam Manual Height Adjustment







Features

- 1. 50000+ global vehicle model database, lifetime free upgrade;
- 2. 10-15cm rolling compensation, saving time and effort;
- 3. The height of the beam can be adjusted manually, adapting to various maintenance environments, and does not need to be re-calibrated;
- 4. Classic stationary design, cost-effective choice.

Functions

- 1. Four-wheel alignment measurement: It supports standard measurement and quick measurement and can measure key parameters such as toe, camber, caster, kingpin inclination, and thrust angle. Supports additional measurements such as whee base, wheel track, axle offset, wheel offset, diagonal, center offset, etc.
- **2. Database:** supports positioning data of 50,000+ global vehicle models, and supports user-defined database;
- 3. **Test report:** support measurement report saving and printing;
- 4. Compatible with multiple platforms: suitable for four-post lifts, large scissors lifts and trenches;
- 5. Dual-screen display: Support dual-screen display at the same time, an optional secondary screen is required.

Parameters

±2'
±2'
<u>±</u> 4'

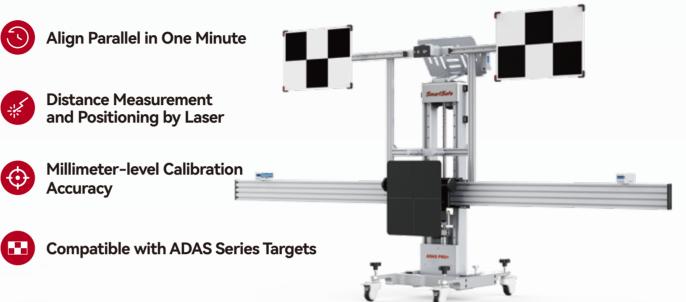
Kingpin Inclination	±6'
Trust Angle	±2'
Wheel Track	±2mm
Wheel Base	±2mm

ADAS PRO+

Wheel Equipment

Passenger Vehicle ADAS Calibration Equipment

ADAS PRO+ is an industry-leading professional ADAS system calibration equipment for passenger vehicles, which can provide professional ADAS calibration solutions for auto manufacturers, large auto repair shops and auto glass shops.



Features

- 1. Support horizontal angle, front and rear, left and right fine-tuning, electric lifting and lowering of the beam, the beam can also be manually raised and lowered, and the centering and paralleling can be completed in 1 minute;
- 2. Equipped with a millimeter-level laser rangefinder to ensure accurate calibration;
- 3. It can support the calibration of more than 95% of the models equipped with ADAS systems in the world, and keep updating;
- 4. Support LDW/ACC/AVM/NVS/BSD/RCW ADAS system calibration;
- 5. The software provides graphic tutorials and step-by-step guidance;
- 6. Support the output of comparison reports before and after calibration.

Functions

- 1. Multi-System Calibration: Supports calibration for six major systems including LDW/ACC/AVM/NVS/BSD/RCW;
- **2. Multi-Vehicle Model Calibration:** Supports ADAS system calibration for over 90 vehicle brands in Europe, Americas, Asia, and China, with over 90 target models;
- **3. Device Fine-Tuning:** Supports fine-tuning in terms of front-back, left-right, and angles;
- **4. Device Elevation:** Supports both manual and electric elevation methods, using a laser rangefinder for height positioning;
- **5. Parallel Alignment:** Achieves parallel positioning between the device and the vehicle using a laser rangefinder, and center alignment using a line laser;
- **6. Level Adjustment:** Observe the bubble level, adjust the base knob, and achieve device leveling.

Accessories



Wheel Clamp Assembly

Distance Center-mounted Measurement Laser Target

Wheel Equipment

ADAS MOBILE



Passenger Vehicle ADAS Calibration Equipment

ADAS MOBILE is a portable ADAS system calibration equipment for passenger vehicles, which can provide professional ADAS calibration solutions for auto glass shops, auto repair shops, mobile dealers and on-site auto repair service providers.











Features

- 1. Innovative full folding design, which can be placed in the trunk of a vehicle to meet mobile calibration scenarios;
- 2. It can support the calibration of more than 95% of the models equipped with ADAS systems in the world, and keep updating;
- 3. Support LDW/ACC/AVM/NVS/BSD/RCW ADAS system calibration;
- 4. The software provides graphic tutorials and step-by-step guidance;
- 5. Support the output of comparison reports before and after calibration.

Functions

- 1. Multi-System Calibration: Supports calibration for six major systems including LDW/ACC/AVM/NVS/BSD/RCW;
- 2. Multi-Vehicle Model Calibration: Supports ADAS system calibration for over 90 vehicle brands in Europe, Americas, Asia, and China, with over 90 target models;
- 3. Device Folding: Supports full folding of the beam and base;
- 4. Device Fine-Tuning: Supports angle fine-tuning;
- 5. Device Elevation: Supports manual elevation adjustment, using a laser rangefinder for height positioning;
- 6. Parallel Alignment: Achieves device parallel alignment using auxiliary accessories like a five-line laser;
- 7. Level Adjustment: Observe the bubble level, adjust the base knob, and achieve device leveling.

Auxiliary

Accessories



Laser Level



Cross-line

Laser Level





Laser Reflective





Positioning

Bracket



Plumb Bob



Placement

Stand



Tape Measure Alignment

ADAS LITE



Passenger Vehicle ADAS Calibration Equipment

ADAS LITE is an economical ADAS system calibration equipment for passenger vehicles, which can provide professional ADAS calibration solutions for auto glass shops, auto repair shops, mobile dealers and on-site auto repair service providers.



Features

- 1. Minimalist and detachable design, the whole equipment is light and can be operated by a single person, cost-effective choice;
- 2. It can support the calibration of more than 95% of the models equipped with ADAS systems in the world, and keep updating;
- 3. Support LDW/ACC/AVM/NVS/BSD/RCW ADAS system calibration;
- 4. The software provides graphic tutorials and step-by-step guidance;
- 5. Support the output of comparison reports before and after calibration.

Functions

- 1. Multi-System Calibration: Supports calibration for six major systems including LDW/ACC/AVM/NVS/BSD/RCW;
- 2. Multi-Vehicle Model Calibration: Supports ADAS system calibration for over 90 vehicle brands in Europe, Americas, Asia, and China, with over 90 target models;
- 3. Device Folding: Supports beam folding;
- 4. Device Elevation: Supports manual elevation adjustment, using a laser rangefinder for height positioning;
- 5. Parallel Alignment: Achieves device parallel alignment using auxiliary accessories like alignment assist lines;
- 6. Level Adjustment: Observe the bubble level, adjust the base knob, and achieve device leveling.

Accessories















Cross-line Laser Level

Positioning **Bracket**

Rangefinder Tape Measure Centring Parallel

Auxiliary Line Kit

Alignment

EV Detection Tool

EV1

EV Maintenance Equipment

EV2

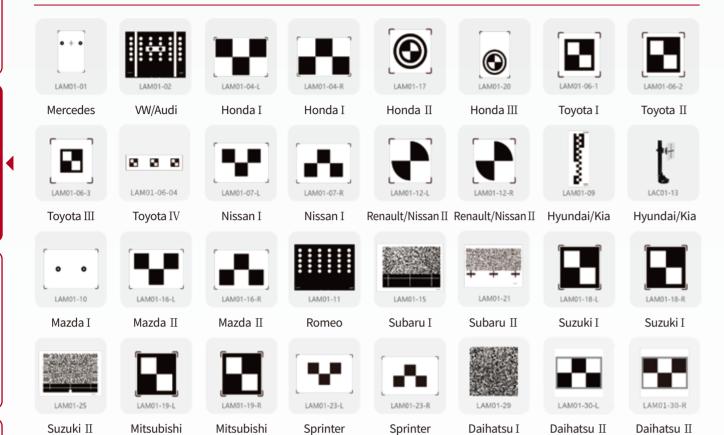
CM1 Wheel Equipment

CM2 ADAS Calibration

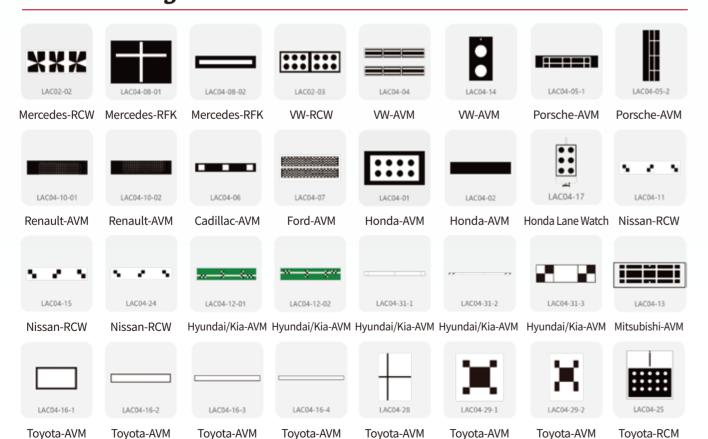
Passenger Vehicle ADAS Calibration Targets & Accessories

(Compatible with PRO+/MOBILE/LITE)

LDW Targets



RCW&AVM Targets



Radar Targets



Radar Level Alignment Tool



NV Targets





Vehicle Coverage

uropean

Mercedes-Benz, BMW, Audi, Volkswagen, Land Rover, Jaguar, Volvo, Fiat, Opel, Seat, Skoda, Renault, Citrone, Smart, MINI, Peugeot, Porsche, Romeo, etc.

sian

Kia, Hyundai, Toyota, Lexus, Honda, Acura, Nissan, Infiniti, Mitsubishi, Subaru, Suzuki, Daihatsu, Mazda, etc.

American

GM, Ford, Chrysler, Buick, Cadilac, Chevrolet, Dodge, Jeep, Lincoln, etc.

Note: This list is continually updatiing.

CM4 Detection Tool

EV1 EV Detection Tool

EV2 EV Maintenance Equipment

ADAS RADAR 3IN1



Passenger Vehicle ADAS Radar Calibration Toolkit scanford

ADAS RADAR 3IN1 is a ADAS radar system calibration kit for passenger vehicles, which can meet the calibration requirements of adaptive cruise system, blind spot monitoring system, lane change assist system and front corner radar system.











Provides Detailed Visual Tutorials

LAM05-02 ACC Radar Target Corner Reflector Doppler Simulator

LAC05-03 LAC05-04



Functions



ACC







Main Unit

BSM Adaptive Cruise Control **Blind Spot Monitoring**

LCA Lane Change Assist

FCR Front Corner Radar

ACC Radar Target, Corner Reflector, and Doppler Simulator share the main frame, supporting ACC and BSD system calibration.

Calibration System Vehicle Coverage **Target** LAM05-02



ACC Radar Target

ACC(Adaptive Cruise Control)

Mercedes-Benz, BMW, Audi, Volkswagen, Porsche, SKODA, Seat, Romeo, MINI, Bentley, Rolls-Royce, Maserati, FIAT, Jeep, Nissan, Mitsubishi, Suzuki, Infiniti, Hyundai, Kia, BYD, GEELY, CHERY, etc.



LAC05-03 **Corner Reflector** ACC(Adaptive Cruise Control) BSM (Blind Spot Monitoring)

Toyota, Lexus, Honda, Acura Mazda, Subaru, Mitsubishi, Hyundai, etc.



LAC05-04 **Doppler Simulator** LCA(Lane Change Assist) ECR(Eront Corner Radar)

Volkswagen.Audi.SKODA, Seat, Mazda, etc.

Cases













Accessories















Mounting adaptor

Five-line Laser Device

Laser Reflector

Auxiliary Mirror

Plumb Line

Positioning Bracket

Tape-10m

ADAS HD

Commercial Vehicle ADAS Calibration Equipment Scanfor

ADAS HD is an industry-leading professional ADAS system calibration equipment for commercial vehicles, which can provide professional ADAS calibration solutions for commercial vehicle service stations.









Features

- 1. Innovative one-piece full folding design, fully folded for easy transportation, and half folded for easy movement;
- 2. Support horizontal angle, front and rear, left and right fine-tuning, the beam can be manually raised and lowered, and the centering and paralleling can be completed in 1 minute;
- 3. Equipped with a millimeter-level laser rangefinder to ensure calibration accuracy;
- 4. Support LDW and ACC system calibration of domestic and foreign most commercial vehicles;
- 5. The software provides graphic tutorials and step-by-step guidance;
- 6. Support the output of comparison reports before and after calibration.

Functions

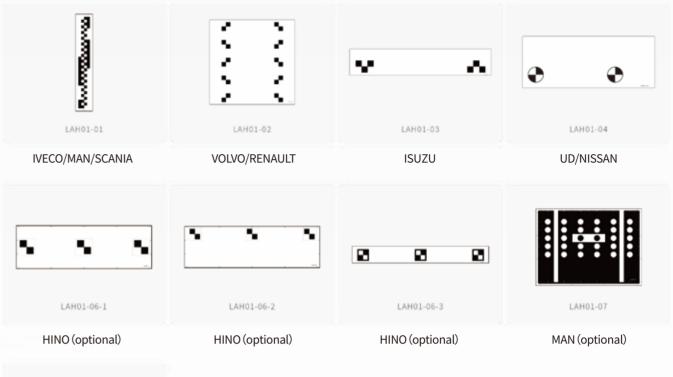
- $\textbf{1.} \, \mathsf{Supports} \, \mathsf{LDW} \, \mathsf{and} \, \mathsf{ACC} \, \mathsf{System} \, \mathsf{Calibration} \, \mathsf{for} \, \mathsf{Commercial} \, \mathsf{Vehicles};$
- 2. **Device Folding:** Supports folding of the beam and bracket, accommodating three modes: full folding, half folding, and fully extended;
- 3. Device Fine-Tuning: Supports front-back, left-right, and angle fine-tuning;
- 4. Device Elevation: Supports manual elevation adjustment, using a laser rangefinder for height positioning;
- **5. Parallel Alignment:** Achieves parallel positioning between the device and the vehicle using a laser rangefinder, and center alignment using a line laser;
- **6. Level Adjustment:** Observe the bubble level, adjust the base's leveling cups, and achieve device leveling.



Full folding Semi folding Full deployment

ADAS HD Targets & Accessories

LDW Targets





VOLVO-North America (optional)

Radar Targets







Vehicle Coverage

Dynamic Calibration

Mercedes, RENAULT, DAF, Erf, SISU, MAN, UD, FUSO, IVECO, ISUZU, VOLVO, Freightliner, Setra, SCANIA...

Static Calibration

Mercedes, RENAULT, Mack, International, MAN, UD, IVECO, ISUZU, VOLVO, Freightliner, Kenworth, Peterbilt...

Note: This list is continually updatiing.

CM4 Detection Tool

EV Detection Tool

Wheel Equipment

ADAS Calibration

CNC605

GDI Injector Cleaner & Tester



Injector Cleaner & Tester

CNC603 is a fully automatic automotive fuel injector cleaning and testing equipment that can simulate engine operating conditions to simultaneously clean and test up to 6 fuel injectors.



Compatible with Various Fuel Injectors (GDI, EFI, SFI...)



Deep Ultrasonic Cleaning

simultaneously clean and test up to 6 fuel injectors.



Automatic Oil Drain Control



Simulated Operating Condition Testing

Features

- 1. Supports cleaning and testing of GDI, EFI, and SFI fuel injectors;
- 2. Utilizes ultrasonic intensive cleaning technology to thoroughly remove carbon deposits and filter screen residues from the fuel injectors;

CNC605 is a fuel injector cleaning and testing equipment suitable for GDI, EFI, and SFI systems. It can simulate engine operating conditions to

- 3. Utilizes microcomputer automatic control technology for automatic control of the cleaning and testing process, and real-time monitoring of the key performance of the fuel injectors;
- 4. Equipped with various non-dismantle cleaning connectors, capable of non-dismantle cleaning and maintenance for multiple vehicle
- 5. Through simulating engine operating conditions, comprehensively tests various aspects of the fuel injector's performance.

Functions

- 1. Working Mode Selection: Can select GDI or EFI working mode based on the injector type.
- 2. Ultrasonic Cleaning: Capable of simultaneously ultrasonic cleaning multiple injectors, effectively removing carbon buildup.
- 3. Uniformity/Spray Testing Function: Detects the uniformity of fuel injection quantity for each injector and allows comprehensive observation of the injector spray pattern using background lighting.
- 4. Sealing Test Function: Tests the sealing and leakage of injectors under system pressure.
- 5. Fuel Injection Quantity Detection Function: Measures the fuel injection quantity of injectors under a constant 15-second injection
- 6. Automatic Cleaning and Testing Function: Under specific working parameters, realistically simulates injector testing under various conditions.
- 7. Reverse Flush Function: For the uniformity/spray testing item, performs a reverse flush using a reverse flush adapter to remove internal injector contaminants and residues attached to the filter screen.
- 8. Non-Dismantle Cleaning Function: Equipped with various non-dismantle cleaning adapters, allowing non-dismantle cleaning and maintenance for multiple vehicle models.

Parameters

Power Supply	AC110	V/AC220V 50Hz/60Hz	Revolutions Per Minute	100~9900rpm Step length 100rpm
Main Engine Pov	ver	350W	Pulse Width	0.5~25ms Step length 0.1ms
Ultrasonic Clean	ing Power	100W	Timer Range	1~30min
Fuel Pressure		0.1~10 bar	Tank Capacity	3L
Air Inlet Pressure	9	5~8 bar	Size	442×490×533mm

Automatic Oil Drain Control



CNC603







Features

- 1. Utilizing ultrasonic intensive cleaning technology, it can thoroughly eliminate carbon buildup and filter screen deposits from the
- 2. Utilizing microcomputer automatic control technology, it can enable automatic control of the cleaning and testing process, and real-time monitoring of the key performance of the fuel injectors;
- 3. Equipped with various non-dismantle cleaning connectors, it can perform non-dismantle cleaning and maintenance for multiple
- 4. By simulating engine operating conditions, it comprehensively assesses various aspects of the fuel injector's performance.

Functions

- 1. Ultrasonic Cleaning: Capable of simultaneously ultrasonic cleaning multiple injectors, effectively removing carbon buildup.
- 2. Uniformity/Spray Testing Function: Detects the uniformity of fuel injection quantity for each injector and allows comprehensive observation of the injector spray pattern using background lighting.
- 3. Sealing Test Function: Tests the sealing and leakage of injectors under system pressure.
- 4. Fuel Injection Quantity Detection Function: Measures the fuel injection quantity of injectors under a constant 15-second injection
- 5. Automatic Cleaning and Testing Function: Under specific working parameters, realistically simulates injector testing under various conditions.
- 6. Reverse Flush Function: For the uniformity/spray testing item, performs a reverse flush using a reverse flush adapter to remove internal injector contaminants and residues attached to the filter screen.
- 7. Non-Dismantle Cleaning Function: Equipped with various non-dismantle cleaning adapters, allowing non-dismantle cleaning and maintenance for multiple vehicle models.

Parameters

Power Supply AC110V/AC220V 50Hz/60Hz		Pulse Width	0.5~25ms Step length 0.1ms	
Main Engine Power	300W	Timer Range	1~10min	
Ultrasonic Cleaning Powe	r 50W	Tank Capacity	3L	
Revolutions Per Minute	10~9990rpm Step length 10rpm	Size	396×380×446mm	

CM4

EV Detection Tool

EV Maintenance Equipment

Wheel Equipment

ADAS Calibration

CNC603 LITE



Injector Cleaner & Tester

CNC603LITE is a semi-automatic automotive fuel injector cleaning and testing equipment that can simulate engine operating conditions to simultaneously clean and test up to 6 fuel injectors.



One-key Manual Oil Discharge



Suitable for Multiple Injectors



Deep Ultrasonic Cleaning



Simulated Operating Condition Testing



0.5~25ms Step length 0.1ms

352×305×345mm

1~10min

Features

- 1. Utilizing ultrasonic intensive cleaning technology, it thoroughly removes carbon deposits and filter screen residues from the fuel
- 2. Employing microcomputer automatic control technology, it allows for automated control of the cleaning and testing process, and real-time monitoring of the key performance of the fuel injectors;
- 3. Equipped with various non-dismantle cleaning adapters, it can perform non-dismantle cleaning maintenance for multiple vehicle
- 4. Through simulating engine operating conditions, it comprehensively assesses various aspects of the fuel injector's performance.

Functions

- 1. Ultrasonic Cleaning: Capable of simultaneously ultrasonic cleaning multiple injectors, effectively removing carbon buildup.
- 2. Uniformity/Spray Testing Function: Detects the uniformity of fuel injection quantity for each injector and allows comprehensive observation of the injector spray pattern using background lighting.
- 3. Sealing Test Function: Tests the sealing and leakage of injectors under system pressure.
- 4. Fuel Injection Quantity Detection Function: Measures the fuel injection quantity of injectors under a constant 15-second injection condition.
- 5. Automatic Cleaning and Testing Function: Under specific working parameters, realistically simulates injector testing under
- 6. Reverse Flush Function: For the uniformity/spray testing item, performs a reverse flush using a reverse flush adapter to remove internal injector contaminants and residues attached to the filter screen.
- 7. Non-Dismantle Cleaning Function: Equipped with various non-dismantle cleaning adapters, allowing non-dismantle cleaning and maintenance for multiple vehicle models.

Parameters

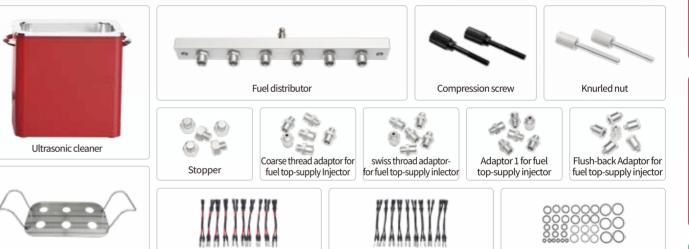
Power Supply	AC110V/AC220V 50Hz/60Hz	Pulse Width
Main Engine Power 240W		Timer Range
Ultrasonic Cleaning Power	50W	Tank Capacity
Revolutions Per Minute	10~9990rpm Step length 10rpm	Size

CNC605 Accessories



CNC603 Accessories

stud 3

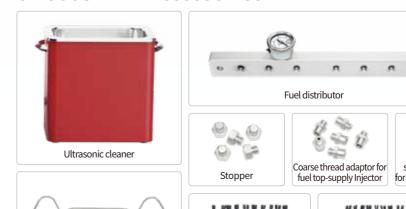


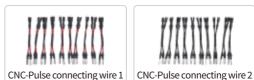
connecting wire 1

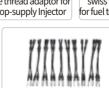
CNC-Pulse connecting wire 2

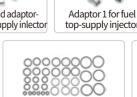
connecting wire 2

CNC603 LITE Accessories









Compression screw



Funnel

Knurled nut

EV Detection Tool

ATF601

86~106kpa

5µm ≥2.2L/60s 20L×2 ±100mL

Smart Safe **ATF601**

Auto Transmission Cleaner and Fluid Exchanger

ATF601 is an intelligent equipment that utilizes the pressure difference between the internal pressure of an automatic transmission gearbox and the pressure of the equipment pump during the operation of a car engine to perform cleaning and oil changing for the automatic transmission.

Automatic Circulation Cleaning







Features

- 1. Equipped with a convenient used oil sampling function;
- 2. Can be paired with a smart terminal for remote control;
- 3. Automatically identifies the transmission's inlet and outlet oil directions;
- 4. Equipped with various specialized adapters suitable for vehicles from different countries;
- 5. Supports the addition of cleaning agents for performing circulation cleaning of the automatic transmission;
- 6. Intelligent electronic control ensures automatic equal-volume replacement of new and used oil;
- 7. Provides an extensive vehicle model database, eliminating the need for manual oil quantity setting;
- 8. Features oil temperature display and oil filter replacement reminder function.

Functions

- 1. Used Oil Sampling Function: Automatically collects used oil from the transmission.
- 2. Transmission Oil Level Adjustment: Customizes oil level adjustments, refilling or draining the set transmission oil amount.
- 3. Transmission Oil Replacement: Automatically identifies transmission inlet and outlet ports, enabling equal-volume replacement of transmission oil.
- 4. Transmission Oil Circulation Cleaning: Allows the addition of cleaning agents for circulating cleaning of the automatic transmission.
- 5. New and Used Oil Drain: Automatically drains transmission oil from new and used oil barrels in the equipment.
- 6. Custom Vehicle Data: Supports the custom addition of maintenance data for commonly used automatic transmission models.
- 7. Printing: Supports printing of equipment execution results, with customizable repair shop information.
- 8. Remote Control: Supports connection to an Android tablet for remote control of equipment operation.

Parameters

Power Supply	AC110V/AC220V 50Hz/60Hz	Working Air Pressure
Pump Power	150W	Filter Accuracy
Working Temperature	-10~50°C	Rate of Flow
Relative Humidity	<90%	Oil Tank
Working Noise	<70db	Equal Exchange Accuracy

ATF501

Wheel Equipment

ADAS Calibration

Auto Transmission Cleaner and Fluid Exchanger ATF501 is an equipment that utilizes the pressure difference between the internal pressure of an automatic transmission gearbox during the

operation of a car engine and the pressure of the equipment pump to perform cleaning and oil changing for the automatic transmission.











Features

- 1. Automatic identification of transmission inlet and outlet oil directions;
- 2. Equipped with a variety of specialized adapters suitable for vehicles from various countries;
- 3. Supports the addition of cleaning agents for performing circulation cleaning of the automatic transmission;
- 4. Intelligent electronic control ensures automatic equal-volume replacement of new and used oil;
- 5. Provides an extensive vehicle model database, eliminating the need for manual oil quantity setting;
- 6. Features oil temperature display and oil filter replacement reminder function.

Functions

- 1. Transmission Oil Level Adjustment: Customizes oil level adjustments, refilling or draining the set amount of transmission oil.
- 2. Transmission Oil Replacement: Automatically identifies transmission inlet and outlet ports, enabling equal-volume replacement of automatic transmission oil.
- 3. Transmission Oil Circulation Cleaning: Allows the addition of cleaning agents for circulating cleaning of the automatic transmission.
- 4. New and Used Oil Drain: Automatically drains automatic transmission oil from new and used oil barrels in the equipment.
- 5. Custom Vehicle Data: Supports the custom addition of maintenance data for commonly used automatic transmission models.
- 6. Printing: Supports printing of equipment execution results, with customizable repair shop information.

Parameters

Power Supply	AC110V/AC220V 50Hz/60Hz	Working Air Pressure	86~106kpa
Pump Power	150W	Filter Accuracy	5μm
Working Temperature	-10~50°C	Rate of Flow	≥2.2L/60s
Relative Humidity	<90%	Oil Tank	20L×2
Working Noise	<70db	Equal Exchange Accuracy	±100mL

EV1 EV Detection Tool

EV Maintenance Equipment

EV2

Wheel Equipment

ADAS Calibration

ATF Series Standard Adapter (Compatible with ATF601/501)

Images	Part Numbe	r Compatible Vehicle Models	Images	Part Number	Compatible Vehicl Models
	A01	General type (TOYOTA, MITSUBISHI SPACE WAGON GLXI) LEXUS ES300, HONDA and NISSAN car type		A11B	FORD LINCOLN, VOLVO
P	Ф8			A12A	FORD
	Ф10	General type (TOYOTA, MITSUBISHI SPACE WAGON HONDA and NISSAN GLXI) LEXUS ES300		A12B	FORD CADILLAC
	Ф12			A13A	GENERAL MOTORS
	A03A	One group CADILLAC, BMW 750 AT type 4HP-22 4HP-24 A421,MITSUBISHI V6,3000	=3 <u>(</u> p)	A13B	CHRYSLER
	A03B	One group CADILLAC, BMW 750 AT type 4HP-22 4HP-24 A42	~	A14A	FORD, VOLVO
9	A05A	EUROPEAN		A14B	
=	A05B	Eg: New VECTRA, PASSAT		A15A	CHRYSLER Benxc200,s325i
	A06A	CHRYSLER		A15B	GENERAL MOTORS
	A06B	GRAND VOYAGER, CHRYSLER 300	0	A16A	
	A07A	EUROPEAN		A16B	EUROPEAN
	A07B	New VECTRA		A17A	
	A08A	CENTEN MOTORS		A17B	EUROPEAN
	A08B	— GENERAL MOTORS LINCOLN, CADILLAC		A20A	
	A10A	FORD, eg: VOLVO, FORD		A20B	FORD
	A10B	CHRYSLER: DAIMLER-BENZ		A43	
To Table	A11A	FORD LINCOLN, VOLVO		A44	

AC500

A/C Service Station



AC500 is an environmentally friendly and energy-saving automotive air conditioning maintenance equipment that integrates multiple functions such as cleaning, recycling, recharging, regeneration, vacuuming, air conditioning leak detection, and refrigeration oil replenishment. It significantly improves situations where air conditioning cooling performance is poor, compressor load is high, noise is excessive, and fuel consumption is elevated.



Recovery and Reuse of Refrigerants



Air Conditioning System Cleaning



Automatic Precision Refilling



Printing of Work Hours and Material Usage

Features

- 1. Equipped with an automotive refrigerant model database, eliminating the need for manual setting;
- 2. Supports both R134A and R1234YF refrigerants;
- 3. Comes with forward cleaning, reverse cleaning, and pulse cleaning functions, delivering noticeable cleaning effects;
- 4. The automatic mode can accomplish cleaning, recovery, vacuuming, refrigeration oil injection, refrigerant injection, and other operations with a single button. Each function can also be executed separately;
- 5. Built-in printer supports printing material usage, labor hours, and other information.

Functions

- 1. Air Conditioning System Cleaning: Cleans the air conditioning pipelines, eliminating sludge, powder, and other impurities from the pipelines. It thoroughly replaces the refrigeration oil, improves compressor lubrication, and enhances the cooling performance of the air conditioning system.
- 2. Refrigerant Recovery: Purifies and recycles refrigerant from the car's air conditioning system back into the working container, meeting reuse standards.
- 3. Vacuuming: Achieves vacuuming of the air conditioning pipelines and equipment pipelines.
- 4. Refrigeration Oil Refilling: Supports manual/automatic refilling, with intelligent precision refilling achieved through a built-in
- 5. Refrigerant Refilling: Adds refrigerant to the vehicle according to the set quantity.
- 6. Automatic Mode: Automatically performs cleaning, recovery, vacuuming, refrigeration oil refilling, refrigerant refilling, and other operations based on the set parameters.
- 7. Database: Equipped with an automotive refrigerant model database, supports database retrieval, eliminating the need for manual setting. 8. Printing: Supports printing of equipment execution results.

Parameters

Power Supply	AC110V/AC220V 50Hz/60Hz	
Compressor	12.12cm ³	
Vacuum Pump	42L/Min, 5Pa (for 220V); 50L/Min, 5Pa (for 110V)	
Tank	12L	

Main Engine Power	700W
HP/TP Gauge	-1bar~35bar
LP Gauge	-1bar~20bar
Work Temperature	0~50°C

5mart5afe

CM4 Detection Tool

EV Detection Tool

AC519

A/C Service Station



AC519 is a fully automatic intelligent automobile air conditioning maintenance equipment that integrates functions such as disassembly-free cleaning, refrigerant recovery, filling, and vacuuming. It can effectively improve the problems of poor air conditioning cooling effect, large compressor load, high noise, and high fuel consumption.











Features

- 1. Equipped with automobile refrigerant model database, no manual setting is required.
- 2. Supports two refrigerants: R134A or R1234YF.
- 3. It has forward, reverse, and pulse cleaning functions, and the cleaning effect is obvious good.
- 4. The automatic mode can complete operations such as cleaning, recycling, vacuuming, filling refrigeration oil, and refrigerant with one click. Each function can also be executed independently.
- 5. Built-in printer supports printing materials, working hours, and other information.

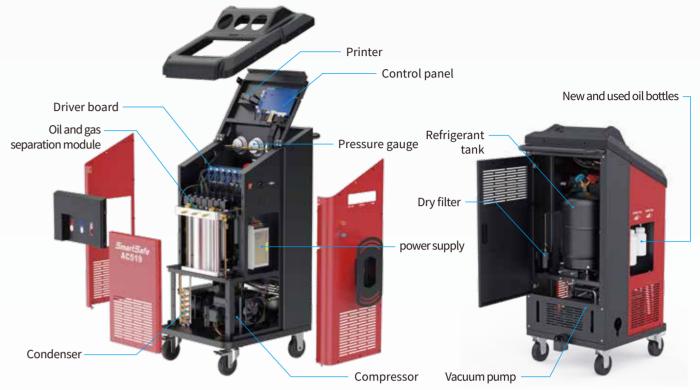
Functions

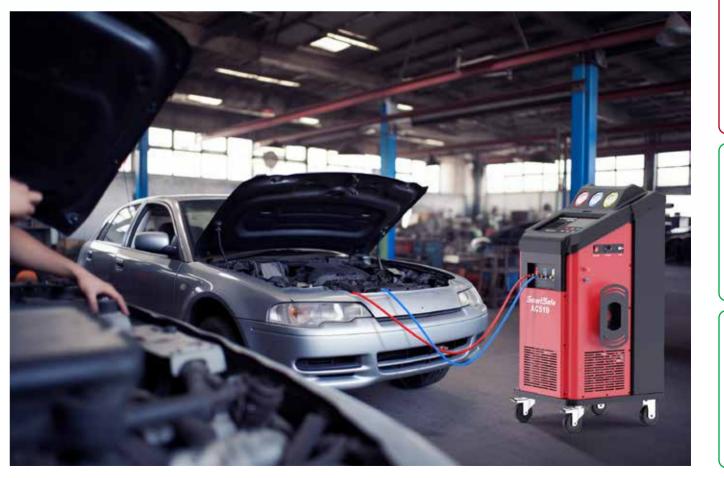
- 1. Air-conditioning pipeline cleaning: Clean the air-conditioning pipelines, remove sludge, powder and other impurities inside the pipelines, replace the refrigeration oil more thoroughly, improve compressor lubrication, and improve the refrigeration performance of the air-conditioning system.
- 2. Refrigerant recovery: The refrigerant in the automobile air conditioning system is purified and regenerated and then recycled into the working tank to meet the standards for reuse.
- 3. Vacuuming: Achieve vacuuming of air conditioning pipelines and equipment pipelines.
- 4. Refrigeration oil filling: supports manual/automatic filling, and realizes intelligent and precise filling through the built-in electronic scale.
- 5. Refrigerant filling: Add refrigerant to the vehicle according to the set filling amount.
- 6. Automatic mode: According to the set parameters, automatically perform cleaning, recovery, vacuuming, filling of refrigeration oil, and Inject refrigerant and other operations.
- 7. Database: Equipped with automobile refrigerant model database, supports database calling, no manual setting is required.
- 8. Print: Supports printing of device execution results.

Parameters

power supply	AC110V/AC220V 50Hz/60Hz	Recycling capacity Gaseous state:40	00g/min Liquid state:700g/min
Main Engine Power	700W	Vacuum pump capacity	2pa
Working temperature	10~50°C	Tank	12L
Electronic scale accuracy	±10g	Filling rate	800g/min

The new patented pipeline logic design and scientifically integrated oil and gas separation module bring more efficient and stable working conditions.





EV Detection Tool

EV Maintenance Equipment

EV2

Wheel Equipment

ADAS Calibration

ST13

Intelligent Link Terminal

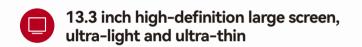


ST13 is a super-intelligent connection terminal equipped with a customized Android system (AAOS) that supports four-wheel alignment, tire pattern detection, ADAS calibration, anti-theft programming, EV detection and maintenance equipment connection. It integrates a 13.3-inch high-definition large screen, high-performance Chip, large-capacity battery, and ultra-large storage integrated into one.











Features

- 1. The world's first AAOS system that is deeply customized for automotive aftermarket scenarios. Each application is displayed by type. Applications are divided into equipment applications, basic applications and system applications;
- 2. Supports split-screen display of applications. During vehicle inspection, can query information via split-screen browser;
- 3.Intelligent connection with multiple devices, supporting four-wheel alignment, tire tread detection, ADAS calibration, anti-theft programming, EV detection and maintenance equipment;
- 4. A new reporting system that can combine multiple reports to generate a comprehensive report;
- 5. 13.3-inch large high-definition display screen, good display effect, a high-performance processor with large storage capacity, smooth
- 6. Brand-new industrial design, using new material technology, the body is ultra-light and ultra-thin.

Functions

- 1. User Center: Supports registering an account, viewing connected devices, and activating diagnostic connectors.
- 2. Upgrade Center: Supports online upgrade of application software, vehicle model software, and firmware software, and can manage APP and vehicle model software.
- 3. Report Center: Supports viewing reports generated by all applications, and can filter and merge reports to generate comprehen-
- 4. Tire equipment application: Supports four-wheel alignment, and tire tread detection functions, and can be connected to WA913
- 5. Automotive testing applications: Supports ADAS calibration, anti-theft matching, maintenance functions, vehicle detection, remote collaboration, super remote, and usage feedback.
- 6. Application of EV equipment and tools: Supports equalization testing, wireless equalization, charge and discharge, equalized charge and discharge, air tightness testing, oscilloscopes, multimeters, voltmeters, digital power supplies, insulation tests, current clamps, and Videoscopes.
- 7. System application: Supports camera, gallery, calculator, calendar, email, file management, browser, and system settings.

Parameters

CPU	2.0GHz
Memory	8GB
Storage	256GB
System	AAOS (Android 10)
Display	13.3inches (1920×1080)
Camera	Front 8MP, Rear 13MP

Wi-Fi	2.4GHz/5GHz dual-band dual Wi-Fi
Battery	13600mAH/3.8V
Interface	Type A、Type C、DC-IN、Mini HDMI
Communication	Wi-Fi, Bluetooth, USB
Dimensions	355.4×227×34.45mm

Pre-installed SmartSafe customized the world's first AAOS system specifically for the automotive aftermarket industry scenario, pre-installed with all SmartSafe applications, and supports connection control





Multi-device smart connectivity



EV Detection Tool

EV1

EV Maintenance Equipment

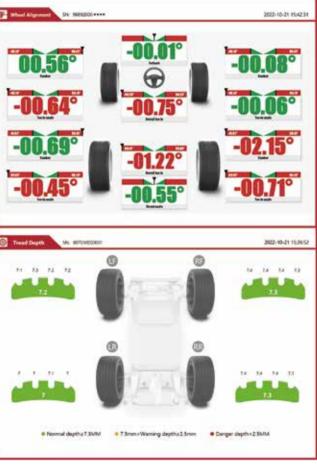
Wheel Equipment

Supports application split screen and can open two applications at the same time



A new reporting system that can generate comprehensive reports from multiple reports





ST10

Intelligent Automotive Detection Tool



ST10 is an automotive intelligent detection tool that supports ADAS calibration, anti-theft matching and programming, all system detection, and over 30 common maintenance functions. It also supports tire tread detection, oscilloscope, multimeter, current clamp, videoscope, and other expansion modules.

- **ADAS Calibration**
- Car Anti-Theft
- 30+ Common Maintenance **Functions**





Features

- 1. Whole system detection, supporting detection functions such as DTC reading, DTC clearing, data stream reading, action test;
- 2. Provide the topological graph of the whole vehicle, clearly display the vehicle communication network and quickly locate the fault
- 3. Wi-Fi/Bluetooth dual-mode wireless VCI, supports DoIP/CAN FD communication protocol;
- 4. It can be used with SmartSafe's full series of ADAS calibration main racks, covering ADAS calibration of European, American, Asian and domestic passenger and commercial vehicles;
- 5. Used with G3 module, it supports the anti-theft matching function of many European, American, Asian and domestic models, and more brands are being updated continuously;
- 6. Support 34 common maintenance functions.

Functions

- 1. ADAS calibration: supports ADAS system calibration of many models in Europe, America, Asia and China, compatible with ADAS PRO+, ADAS MOBILE, ADAS LITE, ADAS RADAR 3IN1 and other equipment;
- 2. Car anti-theft: support the anti-theft matching function of many models in Europe, America, Asia, China, and support the anti-theft programmer function (optional IMMO G3);
- 3. Vehicle detection: support for code reading, code clearing, data stream reading, action testing, special functions and other full-system and full-function detections;
- 4. Maintenance function: support 30 common maintenance functions, such as maintenance light reset, throttle matching, brake pad replacement, steering angle reset, anti-theft matching, ABS bleeding injector coding, DPF regeneration, sunroof initialization, Gearbox matching, etc;
- 5. Test report: support the display of ADAS calibration, fault detection, data flow and other reports;
- 6. Software upgrade: Support online upgrades, including model software, firmware software, and APP software;
- 7. Module expansion: support tread detection, oscilloscope, multimeter, current clamp, insulation test, endoscope, and other functional

CPU	2.0GHz Octa-core
System	Android
Memory	4GB
Storage	128GB
Display Size	10.1inches(1920x1200)
Wi-Fi	2.4GHz/5GHz

Camera	Front 8MP、Post 13MP
Interface	Type A、Type C
Battery	3.8V/9360mAH
Working Temperature	0~45°C
Storage Temperature	-20~70°C

EV Detection Tool

Wheel Equipment

ST06

Intelligent Automotive Detection Tool



ST06 is a handheld Intelligent Automotive Detection Tool that integrates battery testing, tire pressure system activation, learning, programming, matching, whole system detection, common maintenance functions, printing, and videoscope.



Battery Inspection



Tire Pressure Monitoring System



System Detection



26 Common Maintenance Functions

Features

- 1. Support the full-system and full-function testing of more than 100 car brands in Europe, America, Asia and China;
- 2. It can test the health of all passenger car lead-acid batteries;
- 3. Support all 315MHz/433MHz tire pressure sensor activation, matching and learning, and read tire pressure data;
- 4. Support 26 common maintenance functions, support CAN FD\DoIP and other detection protocols;
- 5. The test report can be printed instantly through the built-in printer or shared by email.

Functions

- **1. Battery detection:** Supports two methods of in-vehicle detection and out-of-vehicle detection, supports battery health test, start-up test, charging test, battery barcode scanning, and battery matching;
- **2. Tire pressure detection:** Support 315MHz/433MHz tire pressure sensor activation and learning, support reading tire pressure, tire temperature, battery status and other information, and can read, copy, and write sensor ID values;
- **3. Vehicle detection:** support for code reading, code clearing, data stream reading, action testing, special functions and other full-system and full-function detections;
- **4. Maintenance function:** support 26 common maintenance functions, such as maintenance light reset, throttle matching, brake pad replacement, steering angle reset, anti-theft matching, ABS bleeding injector coding, DPF regeneration, sunroof initialization, Gearbox matching, etc.
- 5. Test report: support the display of battery tests, tire pressure monitoring, fault detection, data flow and other reports;
- 6. Software upgrade: support online upgrades, including model software, firmware software, and APP software.
- **7. Module expansion:** support the expansion of videoscope functions;
- **8. Report printing:** support printing reports through the built-in thermal printer.

Parameters

СРО	4 Core 2.0GHz
System	Android
Memory	4GB
Storage	64GB
Display Size	5.99 inch
Resolution	720×1440
Battery Capacity	4500mAh/7.6V

Camera		8MP
Wi-Fi		2.4GHz/5GHz
		DB15 diagnostic connection
Interface		Battery clip connector
		USB Type A , USB Type C
Working Temperature		0~45°C
Storage Temperature		-10~60°C

IMMO 801

Automotive Key & IMMO Programming Tool

IMMO 801 is a professional automotive key & IMMO programming tool that integrates vehicle detection, common maintenance functions, remote control matching, key matching, anti-theft ECU matching, ECU reset, chip reading and writing, and car computer reading and writing. It is suitable for the automotive electronics industry, locksmiths, repair shops and other professional users.









Art That Programmer Art That Programmer Art That Programmer

Features

- 1. The perfect combination of detection equipment and anti-theft programmer, one machine with multiple functions, high cost performance;
- 2. Support the anti-theft matching function of many models in Asia, Europe, America and China, and more brands will continue to be
- 3. Support 26 common maintenance functions;
- 4. Pop-up VCI connector compartment design, the connector is not easy to lose.

Functions

- **1. Anti-theft matching:** support learning, reset, matching, replacement and programming of IMMO, PEPS, EMS, ESCL and other control units;
- **2. Anti-theft programmer:** support anti-theft chip reading and writing, anti-theft ECU reading and writing, key matching and remote control matching and other functions;
- **3. Vehicle detection:** support for code reading, code clearing, data stream reading, action testing, special functions and other full-system and full-function detections;
- **4. Maintenance function:** support 26 common maintenance functions, such as maintenance light reset, throttle matching, brake pad replacement, steering angle reset, anti-theft matching, ABS bleeding injector coding, DPF regeneration, sunroof initialization, Gearbox matching, etc;
- **5. Test report:** Support the display of fault detection, data flow and other reports;
- **6. Software upgrade:** Support online upgrades, including model software, firmware software, and APP software.

Parameters

CPU	4 Core 1.8GHz
System	Android
Memory	4GB
Storage	64GB
Display	8 inch

Resolution	1280×800
Camera	8MP
Wi-Fi	2.4GHz/5GHz
Working Temperature	0~45°C
Storage Temperature	-10~60°C

34

CM4 Detection Tool

EV1 EV Detection Tool

EV2 EV Maintenance Equipment

CM1 Wheel Equipment

IMMO G3

Immobilizer Programmer



2. Remote

IMMO G3 is a special device for auto anti-theft programming used to read and write car key chip data, including EEPROM reading and writing, car MCU reading and writing, Mercedes-Benz infrared keys, generating special keys, BMW engine INS code reading, BMW CAS4+/FEM chip reading and writing, etc.



















Features

- 1. Powerful function, integrated key matching/copy, car anti-theft chip read-write, car computer read-write and other functions;
- 2. It can be used with a variety of SmartSafe detection tools, no binding, flexible use and wide adaptation range;
- 3. It can be used with IMMO PCBOX to operate on the computer terminal.

Functions

- **1. Car anti-theft:** Add Mercedes-Benz, BMW, Volkswagen Audi and other car series, Porsche anti-theft function and engine computer and gearbox cloning function of other car series;
- 2. Key matching: add functions such as Mercedes-Benz infrared key, key imitation duplicator, key reading and writing, etc.

Parameters

Working Temperature	0∼50°C	working current	500 mA
Interface	DB26, DB15, DCIN, DIY slot	Size	228x110x45.5mm
input voltage	12V DC		

Key Matching

- 1. Key Matching
- 2. Remote control matching
- 3. Anti-theft component replacement
- 4. Anti-theft component Identification
- 5. Continuous updates

- 1. EEPROM reading and writing
- 1. EEFROM Teauling and Writing
- 2. MCU reading and writing3. CAS4+/FEMreading and writing
- 3. CA34+/FEMILEAUTING ATTU WITHING
- 4. Anti-theft component replacement
- 5. Continuous updates

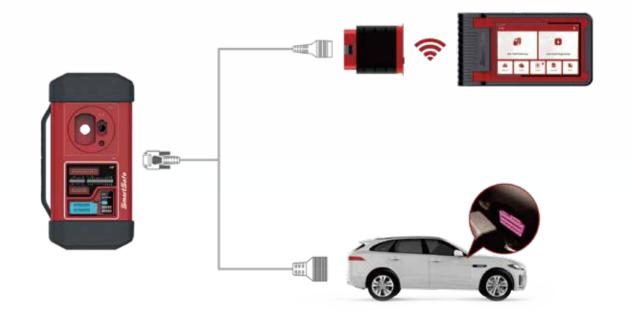
- 1. Audi comfort computer replacement
- 2. Audi fifth-generation gearbox ECU replacement
- 3. VW/Audi fourth-generation UDS engine Change
- 4. VW/Audi fourth-generation MQB platform engine replacement
- 5. Continuous updates

Chip Reading & Writing ECU Reading & Writing

Product Function Zone



Anti-Theft Matching Wiring Diagram



EV1 EV Detection Tool

IMMO G3BOX

IMMO PC Adaptor for G3



IMMO G3BOX is an anti-theft PC adapter designed to be used in conjunction with IMMO G3. It is used for backing up, storing, and cloning flash data and EEPROM data of the original vehicle's ECU and external ECUs.







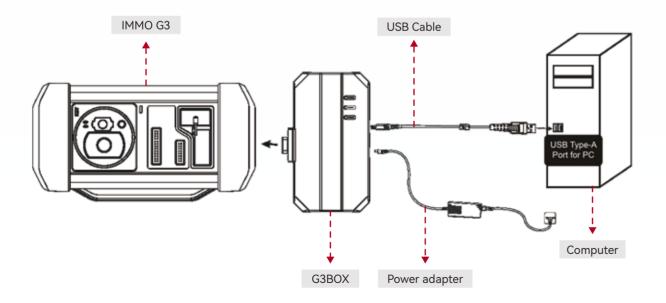




Functions

Used with IMMO G3 immobilizer programmer, use PC software to realize ECU cloning.

- 1. Reading and writing ECU data: support reading and writing ECU data through PC software;
- 2. Anti-theft data processing: Support the operation of anti-theft off and file verification in the software.



IMMO F3

IMMO PC Based ECU&TCU Programmer



Wheel Equipment

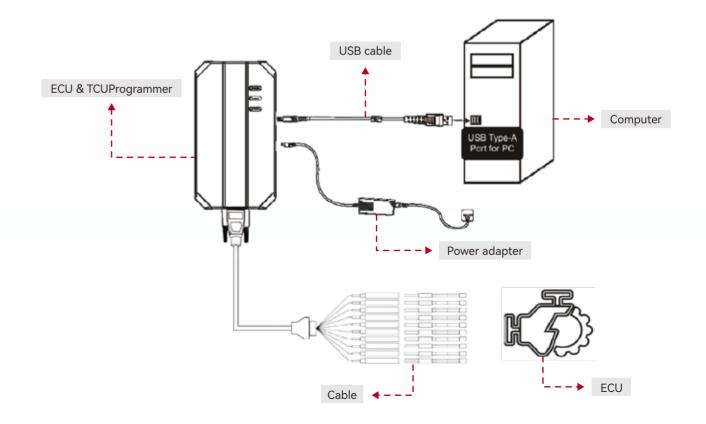
IMMO F3 is an anti-theft ECU module cloning device used for backing up, saving and cloning the flash data and EEPROM data of the original ECU and external ECU. IMMO F3 integrates the functions of IMMO G3 and PC BOX. It does not need to rely on Android-side detection equipment. It can be used independently to operate the engine and gearbox cloning functions. It is easy to connect, quick to respond, and easy to operate.

- Integrated IMMO G3 and G3BOX Functions
- Read and Write EEPROM and Flash Data
- **Support Anti-Theft Deactivation and File Verification**
- Volkswagen, Audi, Porsche Engine ECU Data Cloning

Functions

Use PC software to realize ECU cloning.

- 1. ECU module cloning: support ECU cloning of engine and gearbox;
- 2. Anti-theft data processing: operate anti-theft off and file verification.



P13

EV Detection Tool

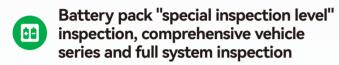


Scan for more informati

P13 is a "special inspection level" electric vehicle detector that integrates battery pack testing, whole vehicle system testing, anti-theft, ADAS, and common maintenance functions.

Deeply customized AAOS system, supports application split screen, and can open two applications at the same time











New SLC detection connector, support LAUNCH remote detection ecology

Features

- 1. Wide model coverage, covering the full system diagnosis of more than 95% of electric vehicle models, and is continuously updating.
- 2. Supports offline testing functions of multiple components and multiple maintenance functions.
- 3. Supports 4 battery pack connection methods, special connector for patented battery pack, high detection efficiency.
- 4. Topology map display, and provides vehicle topology map, clearly displays vehicle communication, and quickly locates fault points.
- 5. Standard remote diagnostic box, support super remote, independent WIFI communication.
- 6. The AAOS system is deeply customized and supports split-screen display of applications. During vehicle detection, the browser can be used to query data in split-screen mode.
- 7. Intelligent connection of multiple devices, supporting four-wheel alignment, tire tread detection, ADAS, anti-theft, and EV detection and maintenance equipment.
- 8. Supports the merging of multiple device reports, and different detection reports of the same vehicle can be merged into a comprehensive report; 9. 13.3-inch high-definition display screen, featuring a brand-new industrial design, utilizes state-of-the-art materials and processes, with an ultra-light and ultra-thin body.

Parameters

позі	
Display	13.3inches(1920×1080)
CPU	2.0GHz Octa-core
Memory	8GB
Storage	256GB
System	AAOS(Android 10)
Wi-Fi	2.4GHz/5GHz dual-band dual Wi-Fi
Camera	Front 8MP, Rear 13MP
Battery	13600mAh/3.8V
Interface	USB、Type C、DC-IN、Mini HDMI
Communication	Wi-Fi, Bluetooth, USB
Dimensions	355.4×227×34.45mm

VCI	
CPU	Cortex-A7 + Cortex-M7
Memory	256MB
Storage	8GB
System	Linux
Display	3.97 inches, resolution 320×480
Operating Voltage	DC 9~36V
Wi-Fi	2.4GHz/5GHz dual frequency
Interface	Type B、RJ45、OBD-II 16、DC-IN
Communication	Local diagnostic modes: Wi-Fi, Bluetooth, USB
Remote Diagnosti	c Mode Ethernet, Wi-Fi
Dimensions	192×107.2×42.5mm

Functions

- **1. Vehicle inspection:** Supports full-system and full-function detection of electric vehicle models such as DTC reading, DTC clearing, data stream reading, action test, and special functions, and supports remote collaboration, super remote, and trial feedback functions.
- **2. Battery pack detection:** Supports battery pack detection for passenger vehicles, commercial vehicles, and battery brands. It can read SOC/SOH, cell/module voltage, temperature, battery pack status and fault information, and automatically calculate total voltage, voltage difference, maximum/minimum Voltage and other key indicator data are automatically labeled with abnormal data.
- **3. Maintenance function:** Supports offline testing of DC-DC converters, OBC car chargers, air conditioning compressors, 48V light hybrid components, etc. Supports maintenance light reset, throttle matching, brake pad replacement, steering angle reset, anti-theft matching, ABS exhaust, injector coding, DPF regeneration, sunroof initialization, gearbox matching.
- **4. Anti-theft matching:** Supports vehicle anti-theft matching, anti-theft chip reading and writing, anti-theft ECU reading and writing, key matching and other functions.
- **5. ADAS calibration:** Supports ADAS system calibration for many models in Europe, America, Asia, and China, and is compatible with ADAS PRO+, ADAS MOBILE, ADAS LITE, ADAS RADAR 3IN1 and other devices.
- 6. User Center: Supports registering an account, viewing connected devices, and activating diagnostic connectors.
- **7. Upgrade Center:** Supports online upgrade of application software, vehicle model software, and firmware software, and can manage APP and vehicle model software.
- **8. Report Center:** Supports viewing reports generated by all applications, and can filter and merge reports to generate comprehensive reports.
- **9. Tire equipment application:** Supports four-wheel alignment, and tire tread detection functions, and can be connected to WA913 and TTM113.
- **10. Application of EV equipment and tools:** Supports equalization testing, wireless equalization, charge and discharge, equalized charge and discharge, air tightness testing, oscilloscopes, multimeters, voltmeters, digital power supplies, insulation tests, current clamps, and Videoscopes.
- 11. System application: Supports camera, gallery, calculator, calendar, email, file management, browser, and system settings.

Battery Pack Detection Special Adapter List

TL-101R	BYD TANG DM
TL-102R	BYD HAN EV
TL-127R	BYD D1
TL-124B	Tesla Model 3
TL-152B	Tesla Model 3
TL-153B	Tesla Model S & X

40

Detection Tool

EV Maintenance Equipr

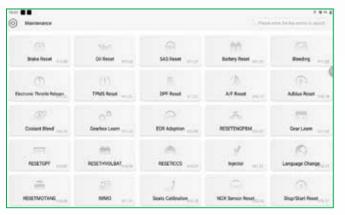
Wheel Equipment

Four Battery Pack Detection Methods



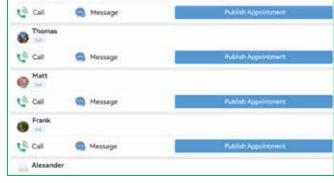
Supporting specialized adapter connection, quick charging port connection (Only for Chinese models), jumper connection, and OBD connection, these four methods offer users a broader range of choices.

Supports offline testing capability



Supports offline testing for components like air conditioning compressors, onboard chargers (OBC), DC-DC converters, and 48V mild hybrid components

Support LAUNCH remote detection ecology



The device initiates a remote diagnosis application, and technical support personnel remotely control the equipment to solve complicated problems. It also supports the release of requirements through super remote diagnosis and pays to find online

Topological graph for quick fault localization



Provide the whole vehicle topological graph, clearly display the vehicle communication network, and quickly locate the fault

Coverage for Over 95% of EV Models



Currently, it covers battery pack testing and full-system testing for over 95% of EV brands, with ongoing updates.

P01 EV Detection Tool



P01 is a professional detection level EV detection tool that integrates battery pack detection, whole vehicle system detection, and common maintenance functions.

Battery Pack "Professional Grade" Testing







Features

- 1. Cover more than 95% of the whole system of EVs, and keep updating;
- 2. Supports testing of DC/DC converter, onboard charger, high-voltage distribution box, and other common maintenance functions
- 3. Provide four battery pack connection methods, including OBD, special connector, jumper connection and fast charging port
- 4. Equipped with battery pack professional connector as standard and integrated aviation plug connector to improve detection
- 5. Support ADAS calibration, tread detection, insulation tester, oscilloscope, digital power supply, multimeter, current clamp, videoscope and other expansion modules;
- 6. Dual WIFI design, the host is connected to the VCI with independent WIFI, and the VCI does not affect the host to access the Internet when it is working;
- 7. Provide the whole vehicle topological graph, clearly display the vehicle communication network, and quickly locate the fault point.

VCI

Parameters

Host	
Display Size	10.1inches(1920x1200)
CPU	2.0GHz Octa-core
Memory	4GB
Storage	128GB
System	Android11
Wi-Fi	2.4GHz/5GHz
Camera	Front 8MP、Post 13MP
Battery	3.8V/9360mAH
Interface	Type A√Type C
Communication	Wi-Fi、BT、USB
Product size	318×40.5×246.5mm

Voltage	DC9~36V
CPU	Cortex-A7 + Cortex-M7
Memory	256MB
Storage	8GB
System	Linux
Wi-Fi	2.4GHz/5GHz
Communication	Wi-Fi、BT、USB
Interface	USB Type B、OBD II -16、DC-IN
Product size	197×40×83mm
	·

technicians to quickly solve the problem.

Functions

- 1. Battery pack detection: support battery pack detection of passenger car and commercial vehicle battery brands, read SOC/SOH, monomer/module voltage, temperature, battery pack status and fault information, and automatically calculate total voltage and differential pressure, key index data such as the highest/lowest voltage, and automatically mark abnormal data;
- **2. Vehicle detection:** support the whole system and full-function detection of EVs, such as code reading, code clearing, data flow reading, action testing, and special functions;
- **3. Fast charging port detection:** connect the fast charging detection gun with Bluetooth, and read the battery pack data through the fast charging port of the vehicle to realize fast detection of the battery pack;
- **4. Maintenance function:** support offline testing of DC-DC converters, OBC car chargers, air conditioner compressors, 48V light hybrid components, etc., and support 30+ common special functions;
- **5. ADAS calibration:** supports ADAS system calibration of many models in Europe, America, Asia, and China, compatible with ADAS PRO+, ADAS MOBILE, ADAS LITE, ADAS RADAR 3IN1 and other equipment;
- **6. Test report:** support the display of battery pack test report, vehicle test report, ADAS calibration report, etc;
- 7. Software upgrade: support online upgrades, including model software, firmware software, and APP software;
- **8. Module expansion:** support tread detection, digital power supply, oscilloscope, multimeter, current clamp, insulation test, endoscope and other functional expansions.

Battery Pack Detection Special Adapter List

TL-101R	BYD TANG DM
TL-102R	BYD HAN EV
TL-127R	BYD D1
TL-124B	Tesla Model 3
TL-152B	Tesla Model 3
TL-153B	Tesla Model S & X

Four Battery Pack Detection Methods



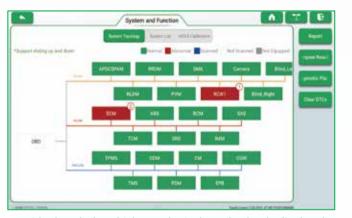
Supporting specialized adapter connection, quick charging port connection (Only for Chinese models), jumper connection, and OBD connection, these four methods offer users a broader range of choices.

Supports offline testing capability



Supports offline testing for components like air conditioning compressors, onboard chargers (OBC), DC-DC converters, and 48V mild hybrid components

Topological graph for quick fault localization



Provide the whole vehicle topological graph, clearly display the vehicle communication network, and quickly locate the fault point

Dedicated Battery Pack Testing Software



Built-in dedicated battery pack testing software, supports battery pack testing based on car brand or battery manufacturer, allowing users to access battery pack testing functions more quickly

Coverage for Over 95% of EV Models



Currently, it covers battery pack testing and full-system testing for over 95% of EV brands, with ongoing updates.

44

EV1 EV Detection Tool

EV2 EV Maintenance Equipment

ADAS Calibration

P03

EV Integrated Detection Tool



Scan for more information

P03 is a professional detection level EV integrated detection tool that integrates battery pack detection, whole vehicle system detection and common maintenance functions. And built-in 4 common detection tools, including oscilloscope, multimeter, insulation tester and current clamp.



Battery Pack "Professional Grade" Testing



Dedicated Connector for Battery Pack Testing



Integration of Four Types of Testing Tools



Comprehensive Vehicle Series and Full System Inspection



Features

- 1. Built-in 4 common detection tools, including oscilloscope, multimeter, insulation tester and current clamp. Covering common measurement requirements in maintenance scenarios of EV battery pack;
- 2. Cover more than 95% of the whole system of EVs, and keep updating;
- 3. Supports testing of DC/DC converter, onboard charger, high-voltage distribution box, and other common maintenance functions;
- 4. Provide four battery pack connection methods, including OBD, special connector, jumper connection and fast charging port connection;
- 5. Equipped with battery pack professional connector as standard and integrated aviation plug connector to improve detection efficiency;
- 6. Support ADAS calibration, tread detection, insulation tester, oscilloscope, digital power supply, multimeter, current clamp, video-scope, and other expansion modules;
- 7. Dual WIFI design, the host is connected to the VCI with independent WIFI, and the VCI does not affect the host to access the Internet when it is working;
- 8. Provide the whole vehicle topological graph, clearly display the vehicle communication network, and quickly locate the fault point.

Parameters

Host

Display Size	10.1inches(1920x1200)
CPU	2.0GHz
Memory	8GB
Storage	256GB
System	Android10
Wi-Fi	2.4GHz/5GHz
Camera	13.0 MP
Battery	3.7V/18720mAH
Interface	Type A、Type C
Communication	Wi-Fi 、BT、USB
Size	440×120×298mm

VCI

Voltage	DC9~36V
CPU	Cortex-A7 + Cortex-M7
Memory	256MB
Storage	8GB
System	Linux
Wi-Fi	2.4GHz/5GHz
Communication	Wi-Fi、BT、USB
Interface	USB Type B、OBD II -16、DC-IN
Size	197×40×83mm

Functions

- 1. Battery pack detection: support battery pack detection of passenger car and commercial vehicle battery brands, read SOC/SOH, monomer/module voltage, temperature, battery pack status and fault information, and automatically calculate total voltage and differential pressure, key index data such as the highest/lowest voltage, and automatically mark abnormal data;
- **2. Vehicle detection:** support the whole system and full-function detection of EVs, such as code reading, code clearing, data flow reading, action testing, and special functions;
- **3. Fast charging port detection:** connect the fast charging detection gun with Bluetooth, and read the battery pack data through the fast charging port of the vehicle to realize fast detection of the battery pack;
- **4. Maintenance function:** support offline testing of DC-DC converters, OBC car chargers, air conditioner compressors, 48V light hybrid components, etc., and support 30+ common special functions;
- **5. ADAS calibration:** supports ADAS system calibration of many models in Europe, America, Asia and China, and is compatible with all calibration main frames of ADAS calibration series;
- 6. Test report: support the display of battery pack test report, vehicle test report, ADAS calibration report, etc;
- 7. Software upgrade: support online upgrades, including model software, firmware software, and APP software;
- **8. Module expansion:** support tread detection, digital power supply, oscilloscope, multimeter, current clamp, insulation test, endoscope and other functional expansions.

Battery Pack Detection Special Adapter List

TL-101R	BYD TANG DM
TL-102R	BYD HAN EV
TL-127R	BYD D1
TL-124B	Tesla Model 3
 TL-152B	Tesla Model 3
TL-153B	Tesla Model S & X

46

CM4 Detection Tool

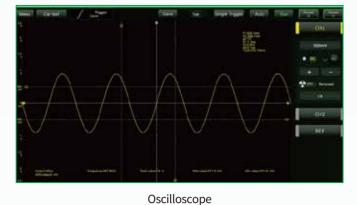
EV1 EV Detection Tool

EV Maintenance Equipment

EV2

Wheel Equipment

Integration of four detection tools



Multimeter



VM13 is a high-precision, wide-range intelligent DC voltage measuring instrument that supports multi-channel wireless network connections.

Multi-point Voltage Wireless Collection, **Integrated Display**



Support Voltage Change Curve, **High Sampling Rate**

Wireless Voltage Monitor

VM13



Supports Up to 48 Channels Simultaneous Wireless Network Connections



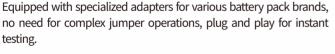
DC 0~1000V Measurement, **Accuracy Reaches 0.5%FS**





Battery Pack Detection Specialized Adapters Innovatively supports quick charging port testing





Current Clamp

By connecting to the quick charging port and reading battery pack data, rapid battery pack testing is achieved (Only for Chinese

Features

- 1. Wide range measurement, automatic switching range selection.
- 2. High-precision measurement, digital real-time display of voltage value.
- 3. Supports multi-channel wireless networking and can display the voltage values of multiple devices/circuits under test at the same time (up to 48 supported).
- 4. Supports voltage curve graph, allowing real-time viewing of multi-channel voltage change curves.
- 5. Standard probe and alligator clips, can be selected according to usage scenarios.
- 6. The body is compact and lightweight, with a built-in magnetic device that can be adsorbed on the surface of iron objects.
- 7. Built-in rechargeable lithium battery with long battery life.

Dedicated Battery Pack Testing Software Coverage for Over 95% of EV Models



Built-in dedicated battery pack testing software, supports battery pack testing based on car brand or battery manufacturer, allowing users to access battery pack testing functions more quickly



Currently, it covers battery pack testing and full-system testing for over 95% of EV brands, with ongoing updates

Functions

- 1. Voltage measurement: Supports 0~1000V DC voltage measurement with a measurement accuracy of 0.5% FS.
- 2. Multi-channel networking: Supports networking with terminals such as ST13, displays voltage change curves, and can connect up to 48 channels at the same time.
- 3. Quick connection terminal: It supports scanning the QR code on the fuselage or manually selecting and adding connection terminals. nals in batches.
- 4. Abnormal alarm: Communication status indicator, battery power indicator, low battery alarm.
- 5. reminder and find: Supports reverse search of voltmeter, buzzer reminder and indicator light flashing.

Measurement Range	DC 0~1000V
Measurement Accuracy	0.5%FS
Resolution	10mV
Display Method	6-digit digital tube
Communication Method	BT, Wi-Fi

Battery	3000mAh/3.7V
Charging Interface	Type C
Working Temperature	0~45°C
Storage Temperature	-10~60°C
Dimensions	78×100×31mm

CM4 Detection Tool

EV1 EV Detection Tool

Wheel Equipment

Voltage display, can be used independently



Wireless networking, supports up to 48 channels



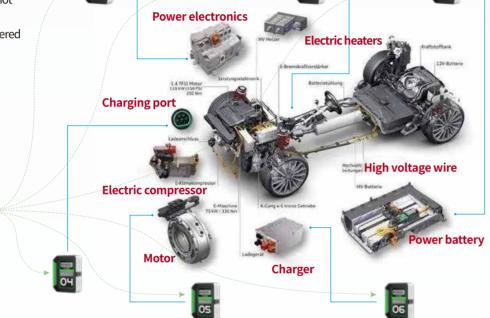
Comprehensive data, increase troubleshooting speed

Vehicle troubleshooting

- Precharging failed and high voltage cannot be supplied
- Quickly locate faults that cannot be powered on due to high voltage
- · cannot charge by fast and slow charge.
- Motor temperature failure
- PDU control box failure



Summary of multi-channel voltage data



Application cases

Prima cannot start



Multiple startups are normal

- There are total positive and total negative relay pull -in actions at startup
- No trouble code

Many possible failures

- There is a problem with the key wake-up line or the wake-up relay
- · There is a problem with the brake switch or connec-
- There is a problem with the VCU acquisition connec-

PDU+MCU is difficult to judge

- There is a problem with the total positive and total
- negative relays, there is no bus voltage • There is bus voltage and pre-charging failed
- · There is a problem with the motor control bus collection
- Motor control board is defective

Quick detection of multiple points in the same test



Simultaneous detection of multiple nodes

- For the total positive and negative output terminals of the battery, use a wireless voltmeter
- · For the total positive and negative input terminals of the motor, use a wireless voltmeter
- DCDC positive and negative input terminals, use a
- · Start the positive and negative terminals of the battery and use a wireless voltmeter
- · The key wake-up line, use a wireless voltage meter

ECC01

Current Clamp



ECC01 is an EV circuit system testing tool that supports DC voltage, DC current, and AC current testing. It can complete circuit testing in a non -contact manner under power-on conditions.











Features

- 1. Non-contact DC test, which can be detected when power is on, simple and safe;
- 2. Anti-electromagnetic interference, providing stable and reliable measurement data;
- 3. Automatically select the range, combined with the noise reduction algorithm, fast and accurate measurement;
- 4. Ergonomic design, small and portable.



Usage Scenarios of ECC01

- **Functions** (Need to be used with P01/P03/ST13/ST10 and other equipment)
- 2. Support AC current test;
- 3. Support range selection;
- 4. Support real-time display of measured value, maximum value, minimum value, peak-to-peak value;
- 5. Support measurement waveform saving and playback.

1. Support DC voltage/current test, dual-mode display;

Parameters

Test functions	DC test, DC voltage test, and AC test
Battery	9V dry cell
Current test methods	Clamp CT, non-contact measurement
Jaw dimension	φ16 mm×18 mm
Input measuring range	0~200A AC/DC
Resolution	1mA AC/DC
Output gear	10mV/A (0~20 A), 100 mV/A(0~200 A)

Accuracy	±3%FS (23°C±5°C, below 75%rh)
Phase error	≤3°(AC50Hz / 60Hz, 23°C±2°C)
Zero-setting	Adjust the ZERO key for zero setting
Frequency response	DC~ 50kHz
Working current	500mA
Working temperature	0~50°C
Size	278×71×37 mm

Detection Tool

CM4

EV2 EV Maintenance Equipment

Wheel Equipment

ADAS Calibration

IRT01

Insulation Resistance Tester



IRT01 is a special insulation resistance tester for EVs. It is equipped with powerful measurement and data processing software, which can efficiently complete the measurement of parameters such as insulation resistance and voltage.



Flexible Application



Wide Measurement Range



Smart Alarm



Auto Shutdown



Features

- 1. Flexible application, can measure insulation resistance and AC/DC voltage, support comparison measurement, continuous measurement, timing measurement 3 modes;
- 2. Wide range measurement, for different output voltages, the resistance measurement range can reach 10MΩ-1000GΩ;
- 3. Intelligent alarm, low resistance, timely alarm to protect personnel and equipment safety when the range is exceeded;
- 4. 5-inch LCD backlit display, convenient for measurement in poor light
- 5. Automatically shut down without any operation in 15 minutes, saving energy and electricity.



Usage Scenarios of IRT01

Functions

- 1. Insulation resistance test: support the selection of 500V/1000V/2500V/5000V output voltage range, support comparison measurement, continuous measurement, timing measurement three modes;
- 2. Voltage measurement: support DC and AC voltage measurement;
- 3. Other functions: support LCD backlight, automatic shutdown after 15 minutes without operation, over-range alarm, high-voltage warning indication.

Parameters

Output voltage	500 V/1000 V/2500 V/5000 V
	500V:10MΩ~20GΩ
Insulation	1000V:10ΜΩ~40GΩ
resistance	2500V:10ΜΩ~100GΩ
	5000V:10MΩ~1000GΩ
Short-circuit current	<3.0mA

DC measurement	±30 V~±600 V DC,resolution: 1 V, accuracy: ±2%
AC measurement	±30 V~±600 V AC,resolution: 1 V, accuracy: ±2%
Display mode	5-inch display
Battery	3150mAh/11.4V
temperature	0~50°C
Size	190×207×72mm

OM201

Two-channel Oscilloscope & Multimeter



OM201 is a professional measurement tool for EVs that integrates multimeter and two-channel oscilloscope.



Multi-purpose Device



Automatic Measurement



Waveform Playback



Multiple Communication Methods

Features

- 1. Integrating the functions of multimeter and dual-channel oscilloscope, one machine with multiple functions;
- 2. Provide 3 measurement functions, including manual, tracking, automatic
- 3. Waveform diagrams can be saved locally and viewed at any time;

ters, automotive testing, waveform recording and playback;

4. Support both wired and wireless communication methods (can be used



1. Dual-channel oscilloscope: supports automatic measurement of 6 parame-



Usage Scenarios of OM201

2. Multimeter: support DC/AC voltage, current measurement, resistance measurement, diode measurement, on-off measurement.

Parameters

Battery		160×195×42 mm		
		Oscillo	scope	
No. of channels		2	Input coupling	DC, AC, and grounding
Bandwidth		10 MHz	Input impedance	1M Ω \pm 2%, parallel with 15pF \pm 5pF
Maximum real-time s	sampling rate	100 Mbps	Input capacitance	20 pF Max
Time base range	1us/div~10s/div, st	tep by 1~2~5 times	Automatic measuren	nent Peak-peak,value, average
Sampling methods	Common, peak value	detection, average		/

Multimeter

DC voltage	±600 V	Resistance	0~6ΜΩ
AC voltage	±600 V	Diode	0~2.0 V
DC current	±10 A	Continuity	Buzz when less than 50Ω
AC current	±10 A		/

EV Detection Tool

WEB1224

Modularized Wireless Equalizer



WEB1224 is a split-type balancing maintenance equipment designed based on the characteristics of lithium battery charging and discharging points. It can effectively repair the problem of battery performance degradation caused by excessive cell pressure differences in battery pack modules.

40A charging current, 10A discharging current, fast balancing efficiency



Supports SOH battery health assessment and SOC battery capacity assessment



Separate charging and discharging design, balanced wiring is convenient and orderly



Each set contains 3 discharge units, supports 12 channels of equalization, and supports a maximum of 24 channels (additional purchase required)

Features

- 1. Separate charging and discharging design, equalization channels can be freely combined, and a maximum of 24 cells can be balanced simultaneously.
- 2. Wireless networking communication, conveniently expand the number of equalization channels.
- 3. Supports all common lithium batteries in the market.
- 4. Supports two modes: charge-discharge balance and discharge balance.
- 5. Isolated high-precision voltage acquisition module for safe, precise and balanced control.
- 6. Support SOC/SOH and can evaluate battery health status.
- 7. Each battery core is wired separately and independently, effectively avoiding the problem of misconnection/misconnection.
- 8. Own patented clamp design, wiring is more convenient and reliable.

Functions

- **1. Balanced maintenance:** Supports two working modes: discharge balance and charge-discharge balance, which can be used for ternary lithium and iron phosphate Lithium, lithium titanate, lithium manganate and other batteries are maintained.
- 2. Health assessment: Supports battery health status assessment, and unique software algorithm calculates SOC/SOH values.
- 3. Data analysis: Automatically save historical equilibrium records and support two display methods: curve chart and column chart.
- 4. Data transfer: Supports exporting historical data to U disk as Excel file.
- **5. Data visualization:** The balancing process monitors the voltage, current, charging and discharging status, capacity and other information of each single cell in real time.
- **6. Multiple protection:** Supports safety protections such as overvoltage, undervoltage, overcurrent, output short circuit, reverse connection, and overtemperature.

Parameters

Charge Unit

Charge Offic	
Power Input	AC90~264V 40~60Hz
Output Voltage Range	DC 0~112V
Output Voltage Accuracy ≤±1%@4	8~112VDC, ≤±0.5V @10~48VDC
Output Current Range	1~40A
Output Current Accuracy	≤±1% @output≥4A
Display 7 inches LCD touch scr	een, resolution 1024×600
Dimensions	306.5×255×261.5mm

Discharge Unit

Number of Channels	4 channels
Discharge Voltage Range	DC 2.8~4.2V
Discharge Current Range	0~10A
Voltage Measurement Accuracy ≤±1%@	48~112VDC;≤±0.5V@10~48VDC
Current measurement Accuracy	≤±1%@output≥4A
Communication Method	Wi-Fi, BT
Dimensions	202.5×89.5×105mm

WEB1224 supports two modes: discharge balancing and charge-discharge balancing for all common types of lithium batteries available in the market. It features intelligent operation, ensuring safety and ease of use.



Voto	otage Deschold 3.900v Maximu					type: temar in Voltage 3 priours: 014	.628v		Number of Cells: 7 Minimum Voltage: 3,619v		
60		1# - Cons	ected	Henn	announin .	69		20 - Com	ected	1010	100000
Channel	Na	Voltage	Current	Mode	Samely County	Otannel	No.	Voltage	Current	Mode	Batter Dayson
CHT	1#	3.625	1.900	Distarging	-1.035	CHT	5#	3.625	1,900	Discharging	
CH2	28	3.625	1.900	Disharging	-1.035	CH2	6#	3.625	1.900	Discharging	-1.03
СНЗ	3#	3.625	1.900	Discharging	-1.035	СНЗ	7#	3.625	1.900	Dellering	-1.03
CH4	4.0	3.625	1.900	Disharping	-1.035	CH4					
69		38-10	haanne te	et.		00		Mr. o	NEW CO	ett	
Channel	No.	Voltage	Current	Mode	Marry .	Channel	No	Voltage	Current	Mode	Settle Copie

WEB1224 supports battery health status assessment, featuring a unique software algorithm to calculate SOC/SOH values. It automatically saves historical balancing records and supports two display modes: curve chart and bar chart.





WEB1224's own patented clamp design makes wiring more convenient and reliable; Each battery cell is wired separately and independently, effectively avoiding the problem of misconnection/misconnection.



CM4 Detection Tool

EV Detection Tool

ADAS Calibration

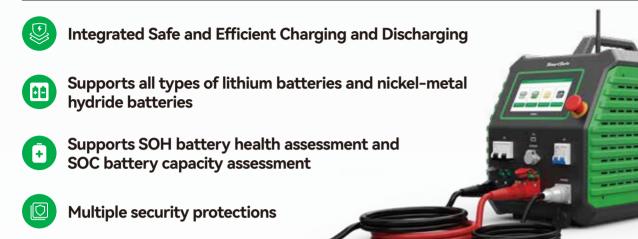
Wheel Equipment

EP401



EV Battery Charge & Discharge Equipment

The EP401 is a battery pack module integrated charge-discharge machine designed based on the characteristics of lithium-ion batteries used in electrical vehicles. It can efficiently perform the charging, discharging, and balancing of battery pack modules, thereby enhancing the efficiency of battery pack maintenance.



Features

- 1. Support charging and discharging maintenance of various lithium batteries and nickel-metal hydride batteries.
- 2. Support SOC/SOH, which can evaluate battery health status.
- 3. Utilizes cutting-edge charge-discharge testing technology to prevent interference with the BMS system;
- 4. Designed with a wide voltage range and equipped with various built-in charge-discharge modes, meeting the voltage and current requirements of diverse battery pack modules during charge-discharge operations, ensuring safety and enhancing efficiency;
- 5. Allows flexible configuration of charge-discharge rules and activation cycles, effectively enhancing battery capacity;
- 6. Equipped with safety features including reverse polarity protection, high-temperature alert, over-current protection, fan failure detection, over-voltage warning, and excessive current alert, ensuring hardware safety.

Functions

- 1. Charge/discharge test: Adopting a wide voltage design, it is suitable for charging and discharging tests of battery modules of different voltage levels. Supports various lithium batteries and nickel metal hydride batteries.
- 2. Health assessment: Support battery health status assessment, unique software algorithm to obtain SOC/SOH value.
- 3. Single unit and terminal voltage collection: Supports real-time acquisition of pack terminal voltage and individual cell voltage
- 4. Single battery core protection: Cell current and voltage protection thresholds can be set to prevent overcharge and over-discharge.
- 5. Terminal charging and discharging protection: Supports overvoltage, undervoltage, overcurrent, output short circuit, reverse connection protection and overtemperature protection.
- 6. Data visualization: During the charging and discharging process, the voltage of each single cell, terminal voltage, terminal current, the charging and discharging status, the charging and discharging capacity, etc. are monitored in real time.

Parameters

Powerinput	AC	290~264V/40~60Hz	Discharge Current range	e Max current:100A / max power:7.2kW
Display 7-inch	TFT LCD screen,res	olution 1024×600	Charge Control Consta	nt current charging + constant voltage charging
Data Communication		CAN,RS485	Discharge Mode	Constant current discharge
Group Terminal Voltag	ge Accuracy	≤±0.5%FS+0.3V, resolution:0.1V	Charge Discharge Protection	Overcharge and over-discharge protection, over-high temperature protection
Single Voltage Accurac	y ≤±0.1%FS+5m	V, resolution:0.001V		er-temperature, over-current and out-of control rrent trigger shutdown protection
Test Current Accuracy	≤±1%FS+0	2A, resolution:0.1A	Reverse Polarity Prot	ection Supported
Charge and Discharge	Voltage Range	DC 2~420V	Abnormal Protection P	ower cord power failure, main cable power failure
Charge Currentrange	Maximum curre power 4.4kW	nt 100A, maximum		The resistance box over-temperature is 85°C; Radiator over temperature is 100°C

EB240

EV Battery Cell Equalizer



EB240 is a high-precision equalization maintenance equipment designed based on the charging and discharging of EV lithium batteries, which can effectively repair battery module performance problems caused by inconsistent battery cell voltages.









Features

- 1. Capable of simultaneously balancing up to 24 battery cells;
- 2. Compatible with all common types of lithium-ion batteries available in the market;
- 3. Intelligent balancing function allows individual balancing of battery cells within a battery module, preventing overcharging or over-discharging of individual cells.

Functions

- 1. Balancing Maintenance: Supports charging, discharging, and balancing modes for lithium-ion batteries like ternary lithium, lithium iron phosphate, lithium titanate, and lithium manganese;
- 2. Parameter Configuration: Pre-settable work modes, battery types, voltage thresholds, operating currents, cell series numbers, and other parameters;
- 3. Multiple Protections: Supports overvoltage, undervoltage, overcurrent, output short circuit, reverse polarity protection, and overheat protection;
- 4. Data Visualization: Real-time monitoring of voltage, current, charge-discharge status, and capacity of individual cells during the balancing process;
- 5. Data Analysis: Automatically stores historical balancing records, supports data presentation in both graph and bar chart formats;
- **6. Data Export:** Historical data can be exported to a USB drive as Excel files:

Parameters

Power input	AC90~264V/40~60Hz	Wireless communication WiFi ar	nd BT(external WiFi antenna)
Power	600W Max	Equalize number of channels	2×12Pin
Charge and discharge voltage range	1.8~4.2V	Equalize interface	16Pin
Voltage detection accuracy $\pm 0.1\%$ FS \pm	2mV (maximum range 5V)	Battery interface	24Pin
Charge and discharge current range	0.1~5A Max	Display 7-inch TFT LCD s	screen,resolution 1024×600
Current detection accuracy ±1% FS±	0.05A (maximum range 5A)	Communication Interface	SMA,USB-Device
Battery temperature detection accuracy $\pm 2^{\circ}\text{C} (-25^{\circ}\text{C} \sim 85^{\circ}\text{C})$		Charge control Constant current charge	arging+constant voltage charging
Discharge mode Constant cu	rrent discharging + constant	voltage discharging	
Protection function Input over-co	urrent protection, over-voltage	protection, output over-current protection	on, over-temperature protection

Wheel Equipment

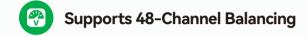
ADAS Calibration

EB480

EV Battery Cell Equalizer



EB480 is a high-precision lithium battery equalization maintenance equipment designed based on the charging and discharging of EV lithium batteries, which can effectively repair the problem of reduced cruising range caused by inconsistent battery voltage.









Features

- 1. Supports simultaneous balancing of up to 48 battery cells at maximum capacity;
- 2. Compatible with all common types of lithium-ion batteries available in the market;
- 3. Independent channel design ensures that each individual cell within the module avoids overcharging or over-discharging.

Functions

- 1. Balancing Maintenance: Supports charging, discharging, and balancing modes for lithium-ion batteries like ternary lithium, lithium iron phosphate, lithium titanate, and lithium manganese;
- 2. Parameter Configuration: Pre-settable work modes, battery types, voltage thresholds, operating currents, cell series numbers, and other parameters;
- 3. Multiple Protections: Supports overvoltage, undervoltage, overcurrent, output short circuit, reverse polarity protection, and
- 4. Data Visualization: Real-time monitoring of voltage, current, charge-discharge status, and capacity of individual cells during the balancing process;
- 5. Data Analysis: Automatically stores historical balancing records, supports data presentation in both graph and bar chart formats;
- 6. Data Export: Historical data can be exported to a USB drive as Excel files;

Parameters

Power input	AC90~264V/40~60Hz	Wireless communication	WiFi and BT(external WiFi antenna)
Power	1200W Max	Equalize number of chan	nels 4×12Pin
Charge and discharge voltage	ge range 1.8~4.5V	Equalize interface	26Pins×2
Voltage detection accuracy	±0.1% FS±2mV (maximum range 5V)	Battery interface	24Pin
Charge and discharge current	range 0.1~5A Max	Display 7-inch	n TFT LCD screen,resolution 1024×600
Current detection accuracy	±1% FS±0.05A (maximum range 5A)	Communication Interface	sMA,USB-Device
Battery temperature detection a	accuracy ±2°C (-25°C~85°C)	Charge control Constant of	current charging+constant voltage charging
Discharge mode C	Constant current discharging		
Protection function	nput over-current protection, over-voltage	protection, output over-current	t protection, over-temperature protection

ET30

EV Battery Airtightness Detector (Low pressure)



ET30 is a professional air-tightness detection equipment designed for EV battery packs.











Features

- 1. High sensitivity pressure sensing for precise and stable testing accuracy;
- 2. Real-time display of pressure curve during the testing process for clear monitoring;
- 3. Alert notifications for testing anomalies or failures;
- 4. Real-time display of working status during stages like inflation, pressure stabilization, leakage, and exhaust, providing visual process tracking.

Functions

- 1. Low-pressure airtightness testing: Using compressed air as the medium, a certain pressure is applied to the battery pack cavity, and a highly sensitive sensor detects pressure changes to determine its sealing integrity;
- 2. Parameter configuration: Pre-settable parameters include workpiece number, volume, pressure, duration for each stage, leakage limit, and other settings;
- 3. Dual pressure display: Real-time display of current pressure and leakage fluctuation;
- 4. Testing history: Automatically saves testing history records, supports detailed data presentation in the form of graphs;
- 5. Multi-language support: Supports various languages including Simplified Chinese, Traditional Chinese, English, German, French, Japanese, Spanish, Portuguese, Italian, and more.

Parameters

Power Input	AC90V~264V/40~60Hz
Test Pressure Range	0~30Kpa
Sensor Resolution	1pa
Test Accuracy	±5pa
Communication Interface	RS232 / USB

Power		20W Max
Air Source Requirements	0.1~1.0	Mpa Dry Compressed Air
AirInlet Interface / Test Interface		ф6 mm air pipe
Working Temperature		-10~ 55°C
Working Humidity		10%~ 90%

EV1 EV Detection Tool

EV Detection Tool

Wheel Equipment

ADAS Calibration

ET500



EV Battery Airtightness Detector (High pressure)

ET500 is a high and low voltage compatible air tightness testing equipment that supports the sealing test of electric vehicle battery pack boxes and liquid cooling systems.











Features

- 1. The battery pack and liquid cooling system share high and low voltages.
- 2. High-sensitivity pressure sensing, high testing accuracy and stability.
- 3. Automatically detect the pressure inside the battery pack. When the pressure is reached, it will automatically enter the next stage. Segmented inflation is more accurate.
- 4. The pressure gauge panel displays the process pressure curve in real time, making the test process clear at a glance.
- 5. High voltage automatic protection, alarm prompt when test fails or is abnormal.

Functions

- 1. Air tightness testing: Compressed air is used as the medium to apply a certain pressure to the battery pack cavity, and a highly sensitive sensor is used to detect changes in pressure to determine its sealing.
- 2. Parameter settings: Parameters such as workpiece number, volume, pressure, time of each stage, leakage limit and other parameters. ters can be preset.
- 3. Process visualization: Real-time display of the working status of inflation, pressure stabilization, leakage, exhaust and other stages.
- 4. Dual display of pressure value: Display current pressure and leakage amount in real time.
- 5. Detection history: Automatically save detection history records and support curve charts to display detailed data.

Parameters

Power Input	AC90~264V/40~60Hz
Test Pressure Range	0~500Kpa
Sensor Resolution	1pa
Test accuracy	±5pa
Interface	RS232 / USB

Air Requirements	0.4~1.0MPa Dry Compressed Air
Air Intake Interface/Test Interface	Ф8mm Ttrachea/Ф6mm Trachea
Working Temperature	-10~ 55°C
Working Humidity	10%~ 90%
Working Humidity	10%~ 90%

DP750

Adjustable Power Supply



DP750 is a dedicated intelligent digital power supply suitable for both EVs and fuel vehicle maintenance. The voltage range of the high-voltage output is 250V-750V, which can be used for offline driving and maintenance testing of high-voltage electrical appliances.

Suitable for Electrical and Fuel Vehicles









Features

- 1. High-voltage and low-voltage modules are independently isolated, allowing each module to protect itself during power output without mutual interference;
- 2. Independent protection mechanisms are present in the input circuit, high-voltage output circuit, and low-voltage output circuit. They can detect faults such as undervoltage, overvoltage, overcurrent, and short circuits, and initiate corresponding protective
- 3. Compatible with various models of Smartsafe intelligent terminals for remote control capabilities.

Functions

- 1. Low Voltage Output: Supports 12V/24V DC output, switchable through buttons;
- 2. High Voltage Output: Supports 250V-750V, 0A-5A DC output, adjustable voltage/current through knobs;
- 3. Multiple Protections: Supports high voltage input overvoltage, undervoltage protection, high voltage output overtemperature, short circuit, reverse polarity protection, low voltage output current limiting, short circuit protection;
- 4. Remote Control: Can be used with ST13/P01/P03 devices, remote operation via Bluetooth connection.

Power Supply		AC100-240V@16A	Communication	ВТ
Maximum Pow	ver .	3200W Max	Display	LED Digital Tube
High Voltage C)utnut —	Voltage: 250~750V	Protection	Short-Circuit, Current-Limiting, OverVoltage, UnderVoltage, Over Temp
Then voltage output		Current: 0~5A	Working Temp	-10~65°C
Low Voltage O	utnut	Voltage: 12/24V	Size	315x192x186mm
Low voltage o	игрис	Current: 1A	Weight	4.85kg
Front Panel —	High Voltage	Current knob, Voltage knob, High	n voltage switch button	
rionic raffet —	Low Voltage:	w Voltage: 12V knob, 24V knob, Low voltage switch		

EV Detection Tool

CM1 Wheel Equipment

CM2 ADAS Calibration

DP901

Scan for more informat

Adjustable High Voltage Power Supply

DP901 is a dedicated intelligent digital power supply suitable for both EVs and fuel vehicle maintenance. The voltage range of the high-voltage output is 50V-900V, which can be used for offline driving and maintenance test scenarios of more high-voltage electrical appliances.

Suitable for Electrical and Fuel Vehicles



Dual-Mode Output for High and Low Voltage



High Voltage Self-Check Protection



Bluetooth Wireless Control



Features

- 1. The high-voltage and low-voltage modules are isolated from each other, allowing individual protection for each module during power output without mutual interference;
- 2. Independent protection mechanisms are implemented in the input circuit, high-voltage output circuit, and low-voltage output circuit. These mechanisms can detect faults such as undervoltage, overvoltage, overcurrent, and short circuits, and initiate appropriate protective measures;
- 3. Compatible with various models of Smartsafe intelligent terminals for remote control capabilities.

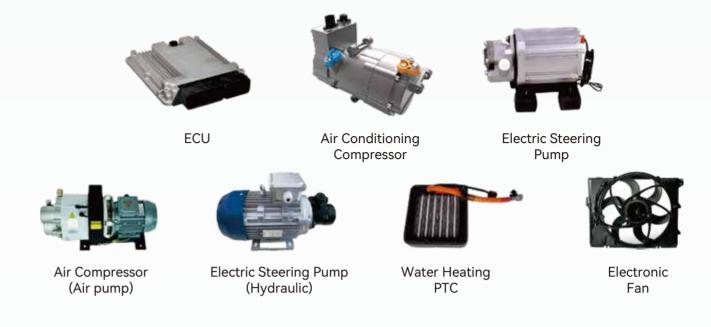
Functions

- 1. Low Voltage Output: Supports 0V50V, 0A15A DC output, adjustable voltage/current through knobs;
- 2. High Voltage Output: Supports 50V900V, 0A5A DC output, adjustable voltage/current through knobs;
- **3. Multiple Protections:** Supports high voltage input overvoltage, undervoltage protection, high voltage output overtemperature, short circuit, reverse polarity protection, low voltage output current limiting, short circuit protection;
- **4. Remote Control:** Can be used with ST13/P01/P03 devices, remote operation via Bluetooth connection.

Parameters

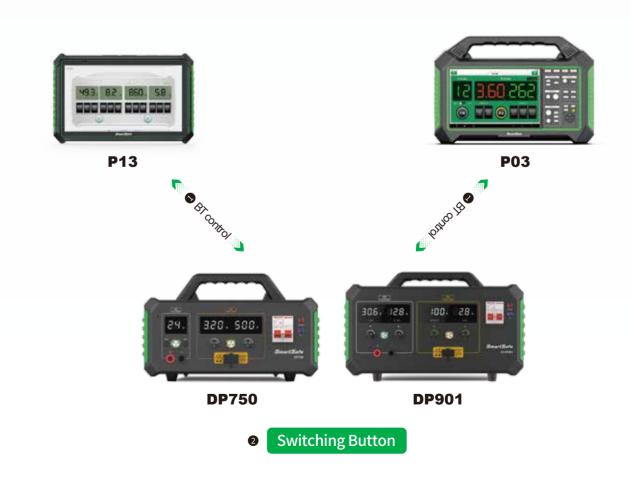
Power Supply	•	AC100-240V@20A	Communication	ВТ
Maximum Pov	wer	4000W Max	Display	LED Digital Tube
High Voltage (Outnut —	Voltage: 50~900V	Protection	Short-Circuit, Current-Limiting, OverVoltage, UnderVoltage, Over Temp
riigii vottage Output		Current: 0~5A	Working Temp	-10~65°C
Low Voltage Output ——————————————————————————————————		Voltage: 0~50V	Size	395x315x265mm
		Current: 0~15A	Weight	11kg
Front Panel High Voltage: Current knob, Voltage knob, High voltage switch button				
Low Voltage: Current knob, Voltage knob, Low voltage switch button				

Usage Scenarios



^{*} Suitable for but not limited to maintenance scenarios involving DP750/DP901 electrical devices

Operating Modes



40

EV Detection Tool

Wheel Equipment

LT150

EV Battery Lift



The LT150 is a professional lifting equipment designed for the disassembly and assembly of EV battery packs, which can quickly and safely complete the dismantling of battery packs and move them to the repair station. Equipped with a high-voltage insulation protection pad to protect the safety of maintenance workers.









Features

- 1. With a rated lifting capacity of up to 1.5T, it meets the needs for most electrical vehicle battery disassembly and installation in the
- 2. Utilizing laser materials and robot welding to ensure high precision and quality;
- 3. Powered by an asynchronous AC motor, the hydraulic gear pump drives the cylinder with the assistance of balancing support bars, ensuring smooth lifting and lowering;
- 4. Equipped with heavy-duty 360°swivel casters for easy mobility;
- 5. The platform surface is fitted with rubber insulation pads to prevent maintenance personnel from coming into contact with electricity.

Parameters

Voltage	AC90~264V/40~60Hz
Operating voltage	24V
Power	0.75KW
Rated lifting weight	1.5T
Minimum height	1100mm
Maximum height	1850mm

Platform width	800mm
Platform length	1260mm
Tilt angle	25∠
Ascending time	18s
Descending time	11s (descending speed adjustable)
Size	1260×800×1100mm

TT76

EV Maintenance Tool Trolley

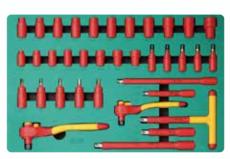


The TT76 is a specialized automotive repair tool trolley developed for the maintenance of electrical vehicles. It includes 76 commonly used insulated tools, offering comprehensive functionality, reliable quality, and a balance of practicality and cost-effectiveness.

- **Complete Range of Insulation Tools**
- High-quality Steel, Sturdy and Durable
- **Dual-color Handles, Oil and Scratch-resistant**

Features

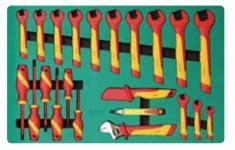
- 1. The handle is formed by aluminum alloy mold casting, exquisite and durable;
- 2. The side of the tool cart is designed with screwdriver placement holes and a tool card box;
- 3. The side mesh expands the functionality of the tool cart;
- 4. Heavy-duty stacked ball bearing slides extend the service life, lengthen the extension distance, allowing the drawers to be fully opened.



36-Piece Insulated Socket Tool Set Kit

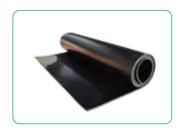


17-Piece Insulated Wrench and Pliers Tool Set Kit



22-Piece Insulated Wrench and Screwdriver Bit Tool Set Kit

Safety Protective Equipment







Insulating Mat

Safety Goggles

Insulation Protection Kit

Insulated Rescue Hook

(Including Protective Suit, Insulated Gloves, Insulated Boots)

CM4 Detection Tool

Wheel Equipment

LT240

Floor Plate Two Post Lift



Clear Floor Two Post Lift

LT240C



LT240C is a clear floor two post lift that adopts an electro-hydraulic power system, with a lifting capacity of 4.0T, suitable for sheet metal or machine repair and quick oil change stations.

The LT240 is a floor plate two post lift equipped with an electric hydraulic power system. Its steel structural columns are formed by thickened steel plate stamping and bending, and the exterior is treated with full powder coating, ensuring durability and longevity.

- **4.0T Lifting Capacity**
- **Pre-set Hydraulic Overload Protection**
- **Full Mechanical Safety Device**



Features

- 1. Lifting capacity of up to 4.0T, catering to common passenger car maintenance scenarios.
- 2. Adjustable tray with a minimum height of 100mm, suitable for sports car lifting;
- 3. 120% dynamic and 150% static load testing compliant with CE standards;
- 4. Pre-set rated hydraulic pressure with overload protection when lifting vehicles;
- 5. Column width of 2780mm, suitable for wide vehicles like SUVs and commercial vans;
- 6. Full-travel mechanical safety locks for easy and secure operation;
- 7. Professional cloth protective design, rubber door guard pads, foot protection bars, explosion-proof flow control valves;
- 8. All movable points use automatic lubrication oil-free bearings to ensure long-lasting durability.

Parameters

Power Supply	220V/380V
Max Lifting Weight	4.0T
Max Lifting Height	1930mm
Min Lifting Height	100mm
Total Height	2824mm
Distance between Columns	2780mm

Lifting Time	≤ 50S
Drive Mode	hydraulic drive
Machine Power	2.2kw
Hydraulic Oil 8Lwear-resist	ant hydraulic oil, provided by users
Hydraulic Power Unit 2.7ml/r	
Work Environment Temperature: 5~40°C Humidity: 30~95%	









Features

- 1. Lifting capacity of up to 4.0T, catering to common passenger car maintenance scenarios.
- 2. Adjustable tray with a minimum height of 100mm, suitable for low chassis and household vehicle models;
- 3. 120% dynamic and 150% static load testing compliant with CE standards;
- 4. Column width of 2780mm, suitable for large-width vehicles like commercial vans;
- 5. Full-travel mechanical safety locks, explosion-proof flow control valve, overload protection;
- 6. All movable points use automatic lubrication oil-free bearings, ensuring long-lasting durability;
- 7. Laser cutting and automated welding ensure reliable quality.

Power Supply	220V/380V
Max Lifting Weight	4.0T
Max Lifting Height	1930mm
Min Lifting Height	100mm
Total Height	3740mm
Distance between Columns	2780mm

Lifting Time	≤ 45S
Drive Mode	hydraulic drive
Machine Power	2.2kw
Hydraulic Oil 8Lwear-resistant hydr	aulic oil, provided by users
Hydraulic Power Unit 2.7ml/r	
Work Environment Temperature:	5~40°C Humidity: 30~95%

Wheel Equipment

LT245

Floor Plate Two Post Lift



Clear Floor Two Post Lift

LT245C

The LT245 is a floor plate two post lift equipped with an electric hydraulic power system. Its steel structural columns are formed by thickened steel plate stamping and bending, and the exterior is treated with full powder coating, ensuring durability and longevity.

4.5T Lifting Capacity







Features

- 1. Rated load 4.5T, suitable for vehicle inspection, repair, maintenance and other workstations.
- 2. Mechanical and hydraulic dual insurance that meets international standards ensures safe use.
- 3. Two steel wire ropes are connected synchronously to force the two sliding platforms to move synchronously, effectively preventing
- 4. The minimum lifting height is 105mm, suitable for repairing sports cars.
- 5. Equipped with a high-precision lifting arm return angle locking device to prevent detachment.
- 6. Heavy load carrying chain for safe lifting of vehicles.

Parameters

Power Supply	220V/380V
Max Lifting Weight	4.5T
Max Lifting Height	1930mm
Min Lifting Height	105mm
Total Height	2800mm
Distance between Columns	2980mm

Lifting Time	≤ 50S
Drive Mode	hydraulic drive
Machine Power	2.2kw
Hydraulic Oil	10L 46#(for summer) or 32#(for winter) wear-resistant hydraulic oil, provided by users
Hydraulic Power Unit	2.7ml/r
Work Environment	Temperature: 5~40°C Humidity: 30~95%

machine repair and quick oil change stations.





4.5T Lifting Capacity



Features

- 1. Rated load 4.5T, suitable for vehicle inspection, repair, maintenance and other workstations.
- 2. Mechanical and hydraulic dual insurance that meets international standards ensures safe use.
- 3. Two steel wire ropes are connected synchronously to force the two sliding platforms to move synchronously, effectively preventing

LT245C is a clear floor two post lift that adopts an electro-hydraulic power system, with a lifting capacity of 4.5T, suitable for sheet metal or

- 4. The minimum lifting height is 105mm, suitable for repairing sports cars.
- 5. Equipped with a high-precision lifting arm return angle locking device to prevent detachment.
- 6. Heavy load carrying chain for safe lifting of vehicles.

Power Supply	220V/380V
Max Lifting Weight	4.5T
Max Lifting Height	1930mm
Min Lifting Height	105mm
Total Height	3852mm
Distance between Columns	2980mm

Lifting Time	≤ 45S
Drive Mode	hydraulic drive
Machine Power	2.2kw
Hydraulic Oil	10L 46#(for summer) or 32#(for winter) wear-resistant hydraulic oil, provided by users
Hydraulic Power Unit	2.7ml/r
Work Environment	Temperature: 5~40°C Humidity: 30~95%

Detection Tool

CM4

EV1 EV Detection Tool

Wheel Equipment

LT840

Big Scissor Lift



LT840 is an Big Scissor Lift. The significantly thickened bridge plate ensures the accuracy of the four-wheel alignment cart. The high-precision insurance ensures the stability of the wheel alignment data. The X-support frame is made of solid steel and its anti-rust performance is greatly improved compared to the traditional square tube-type X-support frame. It has excellent performance and high durability.

LT840T

Ultra-thin Big Scissor Lift



LT840T is an ultra-thin wheel alignment lift that adopts whole-plate bending and high-strength bridge plates. The entire machine is made of alloy materials over a large area, with a solid structure and high-temperature spray-coated exterior treatment for durability.



4.0T Lifting Capacity



The Integrated Secondary **Lifting Support Plate**



High-strength and High-precision One-piecenon-welded 3-tooth Safety Gear



Features

- 1. Hydraulic synchronization, hydraulic lock and mechanical double safety device, automatically unlocking when lowered.
- 2. The oil cylinder parts are processed by high-speed fully automatic CNC lathes. It ensures excellent concentricity and smoothness, and the cylinder barrel is rolled and mirrored.
- 3. Imported seals, and imported ball valves, equipped with hydraulic explosion-proof devices.
- 4. Independent control box, 24V safety control circuit, good safety performance.
- 5. The X frame is made of high-quality alloy steel, laser-cut, solid steel plate, high strength, corrosion-resistant, and not easy to deform.
- 6. Shot blasting surface treatment, high-temperature spray treatment, and durability guaranteed.
- 7. Retractable secondary lifting panel.
- 8. All shaft positions are equipped with wear-resistant bearings and polymer wear-resistant sliders.

2201//2001/

9. Hidden scissor structure takes up little space.

Parameters

Power supply	2200/3800
Capacity of Main Lift	4000kg
Capacity of Sub-lift	4000kg
Initial Height	330mm
Main Lift Lifting Height	1850mm
Sub-lift Liting Height	480mm
Main Lift Platform Length	4500mm
Main Lift Platform Width	625mm

Sub-lift Platfor	m Length	1480~1680mm
Sub-lift Platfor	m Width	570mm
Net Weight		1847kg
Power		3kw
Drive Mode		Electro-hydraulic
Hydraulic Oil	16L 46# Antl-wear hy	draulic oll (self-purchase)
Air Pressure		6~8bar
Working Temp	erature	5~40°C
		-





High-strength Alloy Assist Arm for **Smooth Descent Under Full Load**



Solid Steel X Frame Pneumatic **Mechanical Safety Lock**



Features

- 1. Ultra-thin double-layer structure, the thickness is only 190mm.
- 2. Hydraulic synchronization, dual hydraulic systems, hydraulic locks and mechanical triple safety devices, automatically unlocking
- 3. The bridge plate is made of whole plate bending and welding, which is more precise and stronger.
- 4. The oil cylinder parts are processed by high-speed fully automatic CNC lathes. It ensures excellent concentricity and smoothness, and the cylinder barrel is rolled and mirrored.
- 5. The X frame is made of high-quality alloy steel, laser-cut, solid steel plate, high strength, corrosion-resistant, and not easy to deform.
- 6. Shot blasting surface treatment, high-temperature spray treatment, and durability guaranteed.
- 7. All shaft positions are equipped with wear-resistant bearings and polymer wear-resistant sliders.
- 8. Independent control box, 24V safety control circuit, good safety performance.

Power supply	220V/380V
Capacity of Main Lift	4000kg
Capacity of Sub-lift	4000kg
Initial height	190mm
Main Lift Lifting Height	1630mm
Sub-lift Liting Height	460mm
Main Lift Platform Length	4520mm
Main Lift Platform Width	655mm

Sub-lift Platform Length	1540~1750mm
Sub-lift Platform Width	600mm
Net weight	1899kg
Power	3kw
Drive mode	Electro-hydraulic
Hydraulic oil 16L 46# Antl-wear hyd	draulic oll (self-purchase)
Air Pressure	6~8bar
Working temperature	5~40°C

LT445

Four Post Lift



Scan for more information

LT445 is a fully automatic control insurance wheel alignment four post lift, equipped with an electronically controlled pneumatic insurance device. This enhances the overall high-level experience and convenience of use. It comes with insurance detection equipment, ensuring safety and reliability. The composite reinforced bridge plate design adds robust support.



Features

- 1. The oil cylinder parts are processed by high-speed fully automatic CNC lathes. It ensures excellent concentricity and smoothness, and the cylinder barrel is rolled and mirrored.
- 2. Electro-hydraulic system, wire rope transmission, enlarged oil cylinder for smooth lifting and lowering.
- 3. Shot blasting surface treatment, high-temperature spray treatment, and durability guaranteed.
- 4. Four-sided wire rope balance, very suitable for four-wheel alignment.
- 5. Fully automatic control of pneumatic unlocking belt detection.

Power Supply	220V/380V
Main Unit Rated Lifting Weight	4500kg
Trolley Rated Lifting Weight	2000kg
Initial Height	210mm
Main Lift Lifting Height	1700mm
Jacking Beam Rise	480mm
Platform Length	4510mm
Distance Between Columns	2830mm

Inner Distance of Runway	910~1010mm
Net Weight	1245kg
Power	2.2kw
Drive Mode	Electro-hydraulic
Hydraulic Oil 10L 46# Antl-w	vear hydraulic oll (self-purchase)
Air Pressure	6~8bar
Working Temperature	5~40°C