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X-431 ADAS Mobile

MAKE SMART ADAS CALIBRATION EVEN SMARTER

Foldable

Portable

Easy-to-use

Launch Tech USA Co., Ltd

Sales@launchtechusa.com (**sales**)

Support@launchtechusa.com (**customer service**)

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X-431 ADAS MOBILE

Advanced Driver Assistance System Calibration

About X-431 ADAS Mobile

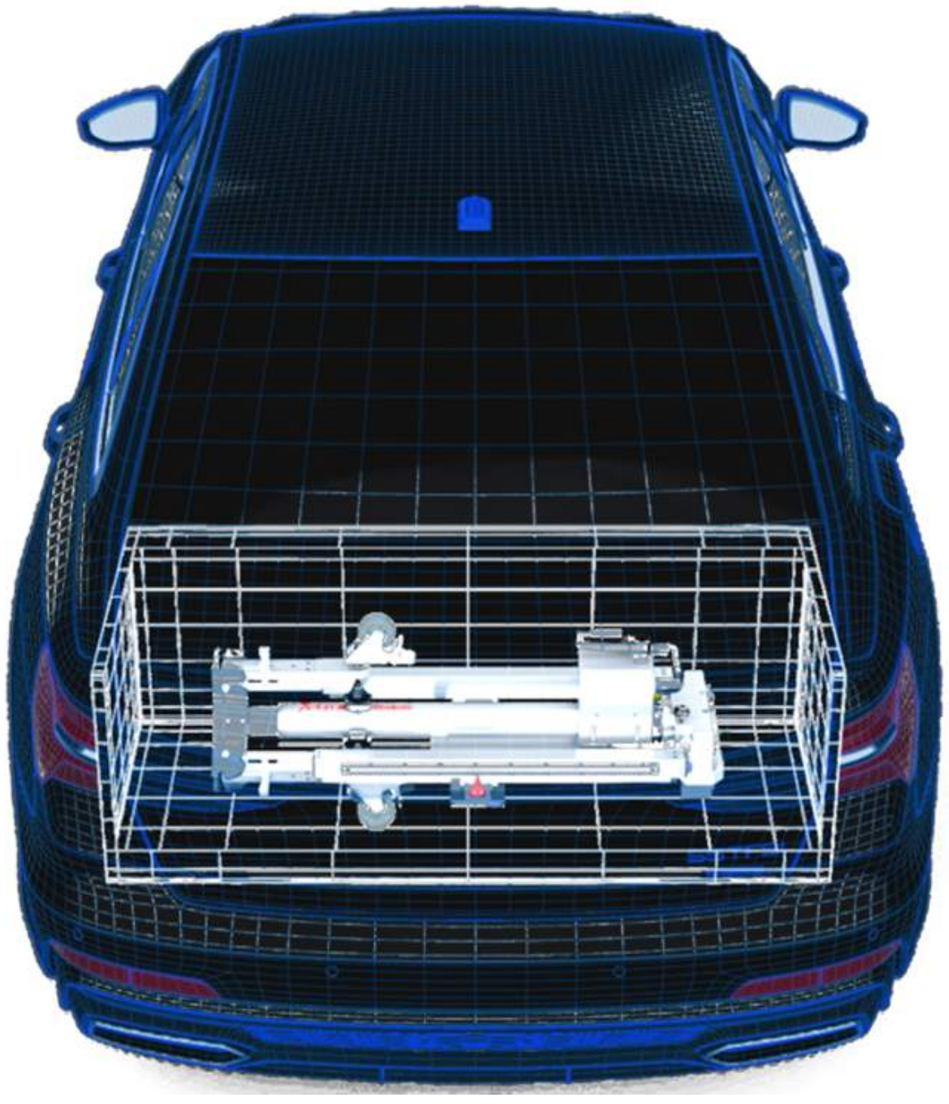
Introducing the ultra portable ADAS calibration solution, featuring OE standard targets advanced ADAS software, the X-431 ADAS Mobile provides one-stop calibration service. The tower frame shape features two arms and a base that are retractable. The X-431 ADAS Mobile is compact enough to place into the trunk of a mid-size vehicle. A wide range of models of more than 50 makes are supported for various ADAS calibrations. Calibrations are initialized within seconds while guided by a Professional Line Launch X-431 diagnostic scan tool. This process is streamlined for usability and practicality.

Superb Craftsmanship Equals Premium Quality

The sleek and dynamic characteristics of the X-431 ADAS Mobile unit's frame is composed of aluminum alloy which makes for an ultralight design that weighs in at 31kg.

Foldable Design Allows for Portability

Designed for Space Challenged Workshop Settings



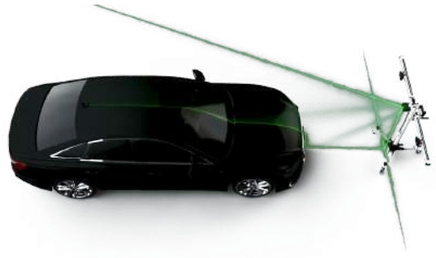
Innovative and Practical Design

There is no assembly required. Simply unfold the tower frame and be ready to calibrate. The X-431 ADAS mobile is meant for use in a workshop setting environment and other areas where there is no direct light and environmental elements.

Storage Pressure-free

The base and arms are both foldable. After the calibration has been completed, the X-431 ADAS Mobile could be perfectly placed into the car trunk.

Precise Measurement

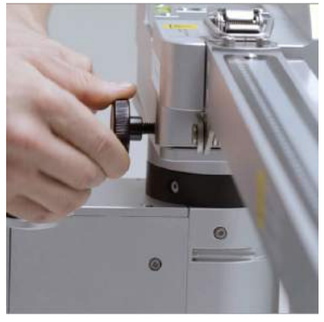


Laser Shooting Positioning

The laser aids and accessories help create a vehicle centerline that is precise and dictated by the specifications of the X-431 diagnostic scan tool.

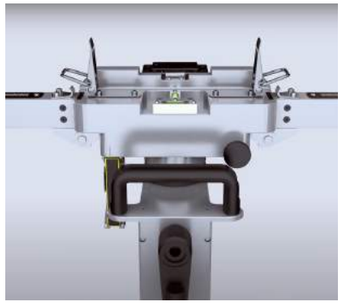
Prompt Height Value

Use the laser range finder to measure the height from the arm to the ground. An instant precise height tolerance value is preset in Launch scan tool's APP for all vehicles. No more settings and calculations are required by users.



Quick Alignment

The fine-tuning knob on the back could adjust the position of the arms. Work with the cross laser to quickly complete alignment between X-431 ADAS Mobile and the vehicle to get parallelized and centralized.



Safety Snap Lock Design

The safety snap lock design ensures the arms no sagging after a long-time use, and thus keep the targets stable in their accurate positions.

One-step Parking Safety Mechanism

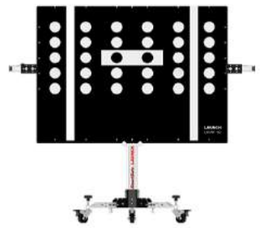
One step down to the foot pedal of the rolling caster to prevent the tool from moving, guaranteeing the calibration jobs well performed smoothly and efficiently. Just pull or push the lever, the base holder easily getting folded and unfolded. Start calibration or place X-431 ADAS Mobile to a corner for next calibration, make decision at your best convenience.

A Complete Placement Less than 2 Minutes

With X-431 ADAS Mobile exclusive accessories added in the package, as well as the scientific-laser measurement, for a newbie in general, it usually takes about 5 minutes to finish the first step of calibration for the placement of X-431 ADAS Mobile. If a skilled technician, 2 minutes are enough to place X-431 ADAS Mobile in its exact position.

Quick Calibration

Tap the ADAS icon on the main menu of a LAUNCH scan tool to enter the calibration procedure directly with automatically VIN code recognition.

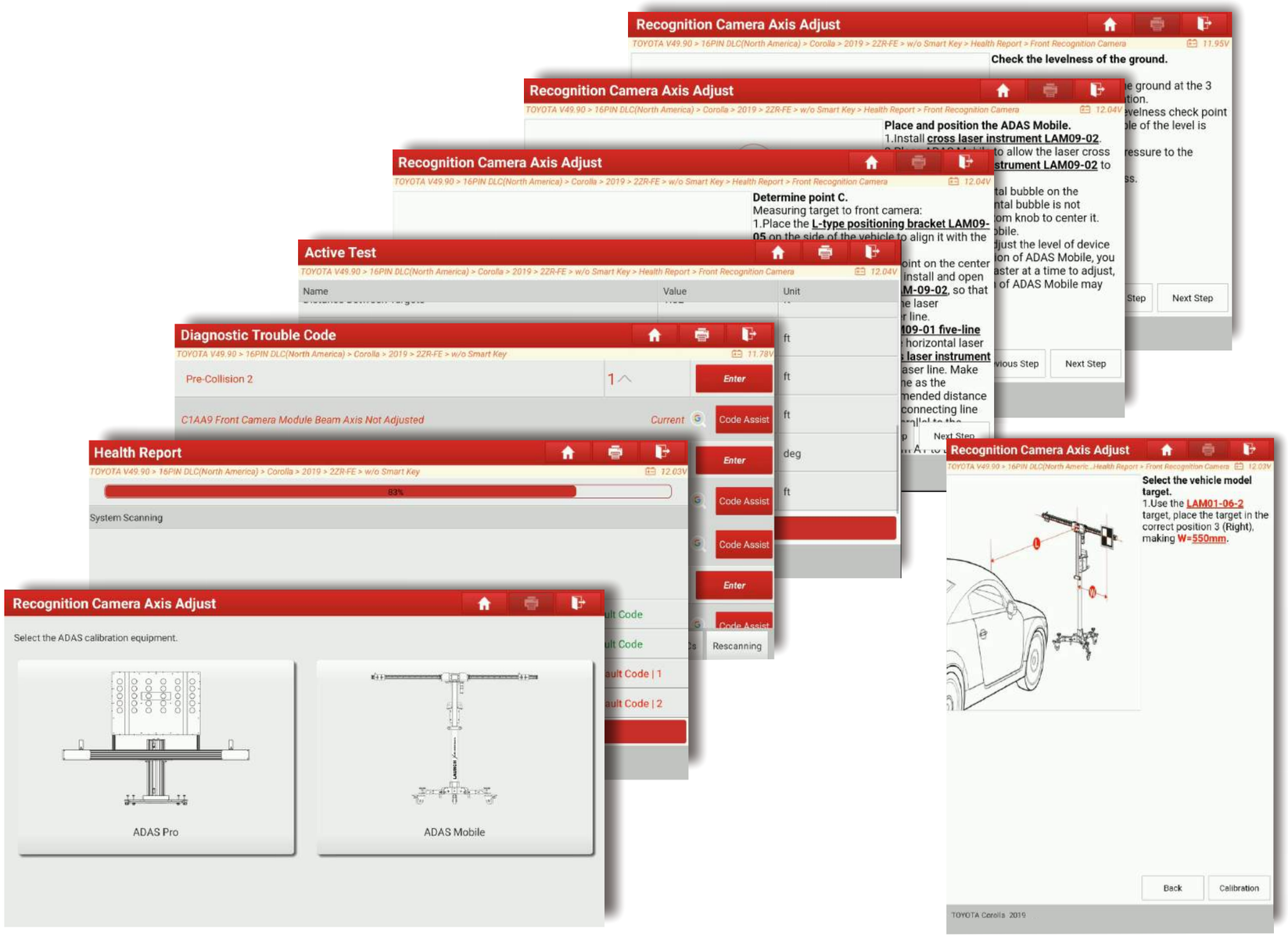


Support Static and Dynamic Calibrations

The X-431 ADAS Mobile supports static and dynamic calibrations to satisfy your needs. Choose the scan tool serial number and enter the ADAS activation code to activate the ADAS software and start full calibration travel. There are 6 systems of ADAS available to get calibrated currently, including LDW, ACC, RCW, AVM, BSD and NVS.

Step-by-step Operating Instructions

The professional diagnostic software with a Launch scan tool provides detailed graphic operating instructions to help users quickly know how to complete calibration well step by step. A wide range of models of more than 50 makes are supported for various ADAS calibrations.



Applicable Scan Tools

This list is continuously updating.

Vehicle Coverage

ASIAN

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

EUROPEAN

Mercedes-Benz, BMW, Audi, Volkswagen, Land Rover,Jaguar, Volvo, Fiat, Opel, Seat, Skoda, Renault,Citroen, Smart, Mini, Peugeot, Porsche, and more.

AMERICAN

GM, Ford, Chrysler, Buick, Cadillac, Chevrolet, Dodge, Jeep, Lincoln, and more.

This list is continuously updating.

Available Targets (continuously updating)

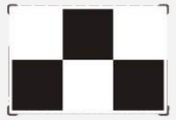
Lane Departure Warning (LDW)

LAM01-11

Alfa Romeo

LAM01-04-L

Honda Ⅰ



LAM01-04-R

Honda Ⅰ

LAM01-17

Honda Ⅱ

LAM01-20

Honda Ⅲ

LAM01-09

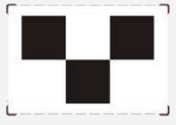
Hyundai/Kia

LAC01-13

Hyundai/Kia

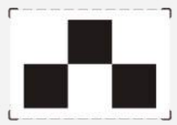
LAM01-10

Mazda Ⅰ



LAM01-16-L

Mazda Ⅱ



LAM01-16-R

Mazda Ⅱ

LAM01-01

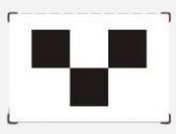
Mercedes

LAM01-19-L

Mitsubishi

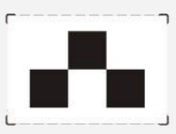
LAM01-19-R

Mitsubishi



LAM01-07-L

Nissan Ⅰ



LAM01-07-R

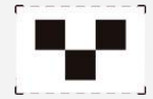
Nissan Ⅰ

LAM01-12-L

Nissan/Renault

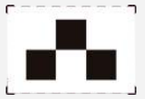
LAM01-12-R

Nissan/Renault



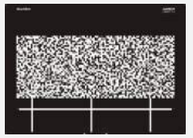
LAM01-23-L

Sprinter-LDW



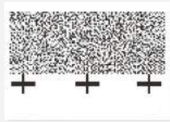
LAM01-23-R

Sprinter-LDW



LAM01-15

Subaru Ⅰ



LAM01-21

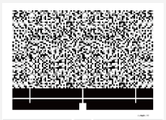
Subaru-LDW

LAM01-18-L

Suzuki

LAM01-18-R

Suzuki



LAM01-25

Suzuki-LDW

LAM09-08

Target Extension Rod Ⅰ

LAM09-09

Target Extension Rod Ⅱ

LAM01-06-1

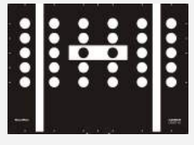
Toyota Ⅰ

LAM01-06-2

Toyota Ⅱ

LAM01-06-3

Toyota Ⅲ



LAM01-02

VW

Adaptive Cruise Control (ACC)

LAM05-02

ACC Reflector

LAC05-03

Corner Reflector

LAC05-04

Doppler Simulator

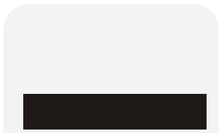
Available Targets (continuously updating)

Around View Monitoring (AVM)/Rear Collision Warning (RCW)

LAC04-06
Cadillac

LAC04-07
Ford

LAC04-01
Honda


LAC04-02
Honda

LAC04-12-01
Hyundai

LAC04-12-02
Hyundai

LAC02-02
Mercedes

LAC04-08-01
Mercedes

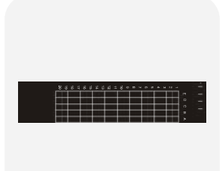
LAC04-08-02
Mercedes

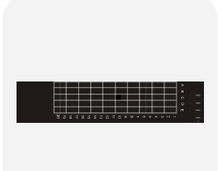
LAC04-13
Mitsubishi

LAC04-11
Nissan

LAC04-15
Nissan

LAC04-24
Nissan-RCW


LAC04-10-01
Renault

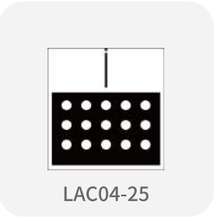

LAC04-10-02
Renault

LAC04-16-1
Toyota-AVM

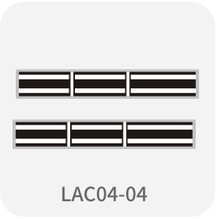
LAC04-16-2
Toyota-AVM

LAC04-16-3
Toyota-AVM

LAC04-16-4
Toyota-AVM


LAC04-25
Toyota-RCW

LAC02-03
VW


LAC04-04
VW

LAC04-14
VW

Night Vision System (NVS)

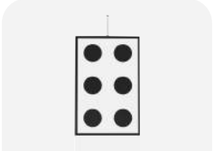
LAC06-01
Audi/GM/VW

LAC06-02
Mercedes

Lidar Target

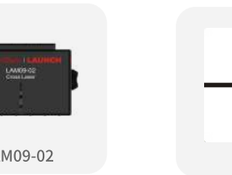
LAC05-06
Audi/VW

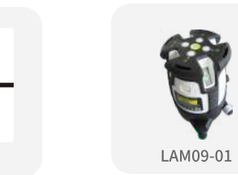
Other Targets


LAC04-17
Honda-Lane Watch

Main Accessories

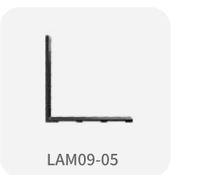
LAM09-04
Auxiliary Mirror

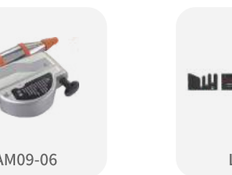

LAM09-02
Cross Laser Module

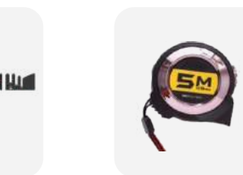

Cross Sticker

LAM09-01
Five-line Laser Device

LAM09-03
Laser Reflector


LAM09-05
L-shaped Positioning Bracket


LAM09-06
Plumb Line


LAM09-07
Target Storage Bracket

Tape

ADAS Mobile Product Configuration Reference

STANDARD/COLLISION

	Config Code	Description	Quantity	Standard	Collision	Vehicle Make
Main Frame	—	Calibration Frame	1	√	√	—
	—	Laser Range Finder	1	√	√	—
Accessories	—	Five-line Laser Device LAM09-01	1	√	√	—
	—	Cross Laser Module LAM09-02	1	√	√	—
	—	Laser Reflector LAM09-03	1	√	√	—
	—	Auxiliary Mirror LAM09-04	1	√	√	—
	—	L -shaped Positioning Bracket LAM09-05	1	√	√	—
	—	Plumb Line LAM09-06	1	√	√	—
	—	Target Storage Bracket LAM09-07	1	√	√	—
	—	Cross Sticker	10	√	√	—
	—	Tape	1	√	√	—
	—	User Manual	1	√	√	—
	—	ADAS Activation Card	1	√	√	—
LDW Targets	701020005	VW /Audi-LDW LAM01-02	1	√	√	Audi/Porsche/Seat/Skoda/VW
	701020008	Toyota-LDW LAM01-06-1	1	√	√	Citroen/Peugeot/Toyota
	701020009	Toyota-LDW LAM01-06-2	1	√	√	Citroen/Peugeot/Toyota
	701020010	Toyota-LDW LAM01-06-3	1	√	√	Citroen/Peugeot/Toyota
	701020013	Hyundai/Kia-LDW LAM01-09	1	√	√	Citroen/Fiat/Hyundai/Jeep/Kia/Peugeot
	701020006	Honda-LDW LAM01-04-L	1	√	√	Honda
	701020007	Honda-LDW LAM01-04-R	1	√	√	Honda
	701020021	Honda-LDW LAM01-17	1	√	√	Honda
	701020026	Honda-LDW LAM01-20	1	√	√	Honda
	301250042	Hyundai/Kia-LDW LAC01-13	1	√	√	Hyundai/Kia
	701020014	Mazda-LDW LAM01-10	1	√	√	Mazda
	701020019	Mazda-LDW LAM01-16-L	1	√	√	Mazda
	701020020	Mazda-LDW LAM01-16-R	1	√	√	Mazda
	701020004	Mercedes-LDW LAM01-01	1	√	√	Mercedes/Nissan/Sprinter
	701020024	Mitsubishi-LDW LAM01-19-L	1	√	√	Mitsubishi
	701020025	Mitsubishi-LDW LAM01-19-R	1	√	√	Mitsubishi
	701020011	Nissan-LDW LAM01-07-L	1	√	√	Nissan
	701020012	Nissan-LDW LAM01-07-R	1	√	√	Nissan
	701020016	Nissan/Renault-LDW LAM01-12-L	1	√	√	Nissan/Renault/Smart
	701020017	Nissan/Renault-LDW LAM01-12-R	1	√	√	Nissan/Renault/Smart
	701020018	Subaru-LDW LAM01-15	1	√	√	Subaru
	701020022	Suzuki-LDW LAM01-18-L	1	√	√	Suzuki
	701020023	Suzuki-LDW LAM01-18-R	1	√	√	Suzuki
LDW Targets Extension Rod	701020027	Target Extension Rod I LAM09-08	1	√	√	—
	701020028	Target Extension Rod II LAM09-09	1	√	√	—

Note: All the targets and accessories can be purchased separately. The configuration instructions above are for reference only. Please refer to the actual shipped products and packing list.

ADAS Mobile Product Configuration Reference

STANDARD/COLLISION

	Config Code	Description	Quantity	Optional	Collision	Vehicle Make
Radar Targets	701020034	ACC Reflector LAM05-02	1	optional	√	Audi/BMW/Hyundai/Jeep/Kia/Mini/ Mitsubishi/Nissan/Porsche/Romeo/ Seat/Skoda/Suzuki/VW
	301250041	Doppler Simulator LAC05-04	1	optional	√	Audi/Seat/VW
	301250038	Corner Reflector LAC05-03	1	optional	√	Honda/Mazda/Mitsubishi/Subaru/Toyota
Lidar Target	701010061	VW/Audi LAC05-06	1	optional	√	Audi/VW
RCW&AVM Targets(Asian)	307010023	Honda-AVM LAC04-01	4	optional	optional	Honda
		Honda-AVM LAC04-02	1	optional	optional	Honda
		Hyundai-AVM LAC04-12-01	1	optional	optional	Hyundai
		Hyundai-AVM LAC04-12-02	1	optional	optional	Hyundai
		Nissan-RCW LAC04-11	1	optional	optional	Nissan
RCW&AVM Targets(American)	307010024	Cadillac-AVM LAC04-06	1	optional	optional	Buick/Cadillac/Chevrolet/GMC/Holden
		Ford-AVM LAC04-07	2	optional	optional	Ford/Lincoln
RCW&AVM Targets(European)	307010025	VW-RCW LAC02-03	1	optional	optional	Audi/Seat/Skoda/VW
		VW-AVM LAC04-04	1	optional	optional	Audi/Skoda/VW
		Mercedes-RCW LAC02-02	1	optional	optional	Mercedes
		Mercedes-RFK LAC04-08-01	1	optional	optional	Mercedes
		Mercedes-RFK LAC04-08-02	1	optional	optional	Mercedes
		Renault-AVM LAC04-10-01	1	optional	optional	Renault
		Renault-AVM LAC04-10-02	1	optional	optional	Renault
NVS Calibrator	301250039	VW-NVS LAC06-01	1	optional	optional	Audi/GM/VW
	301250040	Mercedes-NVS LAC06-02	1	optional	optional	Mercedes
Aluminum alloy box	701020057	Aluminum alloy box for Main Frame	1	optional	optional	—
	701020058	Aluminum alloy box for Accessories	1	optional	optional	—
	701020059	Aluminum alloy box for ACC Reflector	1	optional	optional	—
	701020060	Aluminum alloy box for Mounting plate	1	optional	optional	—

Note: All the targets and accessories can be purchased separately. The configuration instructions above are for reference only. Please refer to the actual shipped products and packing list.

ADAS Mobile Product Configuration Reference

OPTIONAL

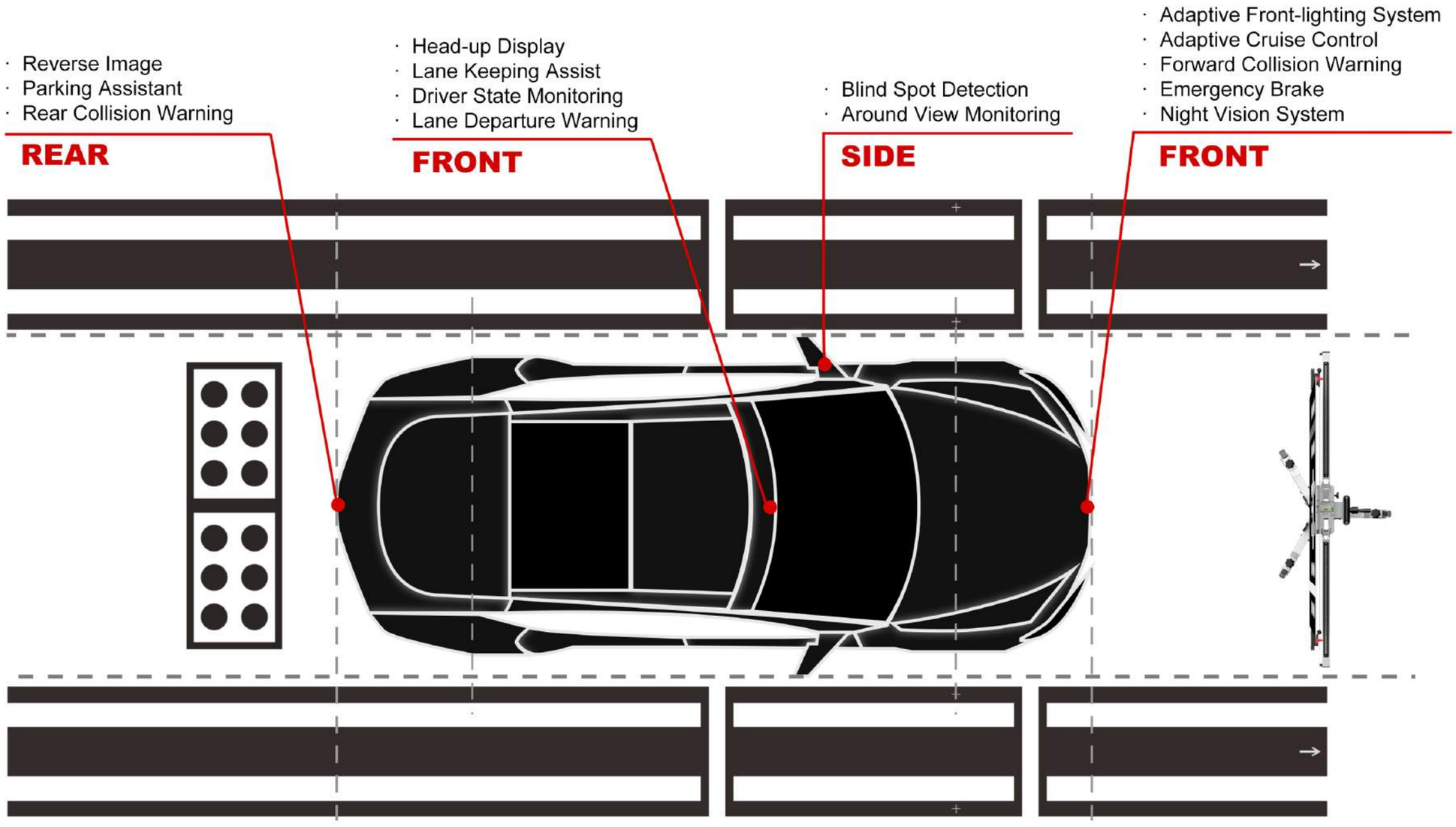
	Config Code	Description	Quantity	Optional	Vehicle Make
LDW Targets	701020015	Romeo-LDW LAM01-11	1	optional	Romeo
	701020041	Sprinter-LDW LAM01-23-L	1	optional	Sprinter
	701020042	Sprinter-LDW LAM01-23-R	1	optional	Sprinter
	701020040	Subaru-LDW LAM01-21	1	optional	Subaru
	701010062	Suzuki-LDW LAM01-25	1	optional	Suzuki
RCW&AVM Targets	301250037	VW-AVM LAC04-14	2	optional	Audi/VW
	301250035	Mitsubishi-AVM LAC04-13	2	optional	Mitsubishi
	301250036	Nissan-RCW LAC04-15	1	optional	Nissan
	701010069	Nissan-RCW LAC04-24	1	optional	Nissan
	701010070	Toyota-RCW LAC04-25	1	optional	Toyota
	701010045	Toyota-AVM LAC04-16-1	4	optional	Toyota
		Toyota-AVM LAC04-16-2	6	optional	Toyota
		Toyota-AVM LAC04-16-3	2	optional	Toyota
		Toyota-AVM LAC04-16-4	2	optional	Toyota
Other Targets	701010046	Honda-Lane Watch LAC04-17	1	optional	Honda

Note: All the targets and accessories can be purchased separately. The configuration instructions above are for reference only. Please refer to the actual shipped products and packing list.

Workspace Requirements

of X-431 ADAS Mobile Static Calibration

1. Enough space around the vehicle and level work area are required to complete the calibration procedures.
2. There are no large obstacles in the work area.
3. There is no light intrusion to the targets.
4. There is no light intrusion to the front camera area.
5. There is no wind intrusion to sway or move the targets.

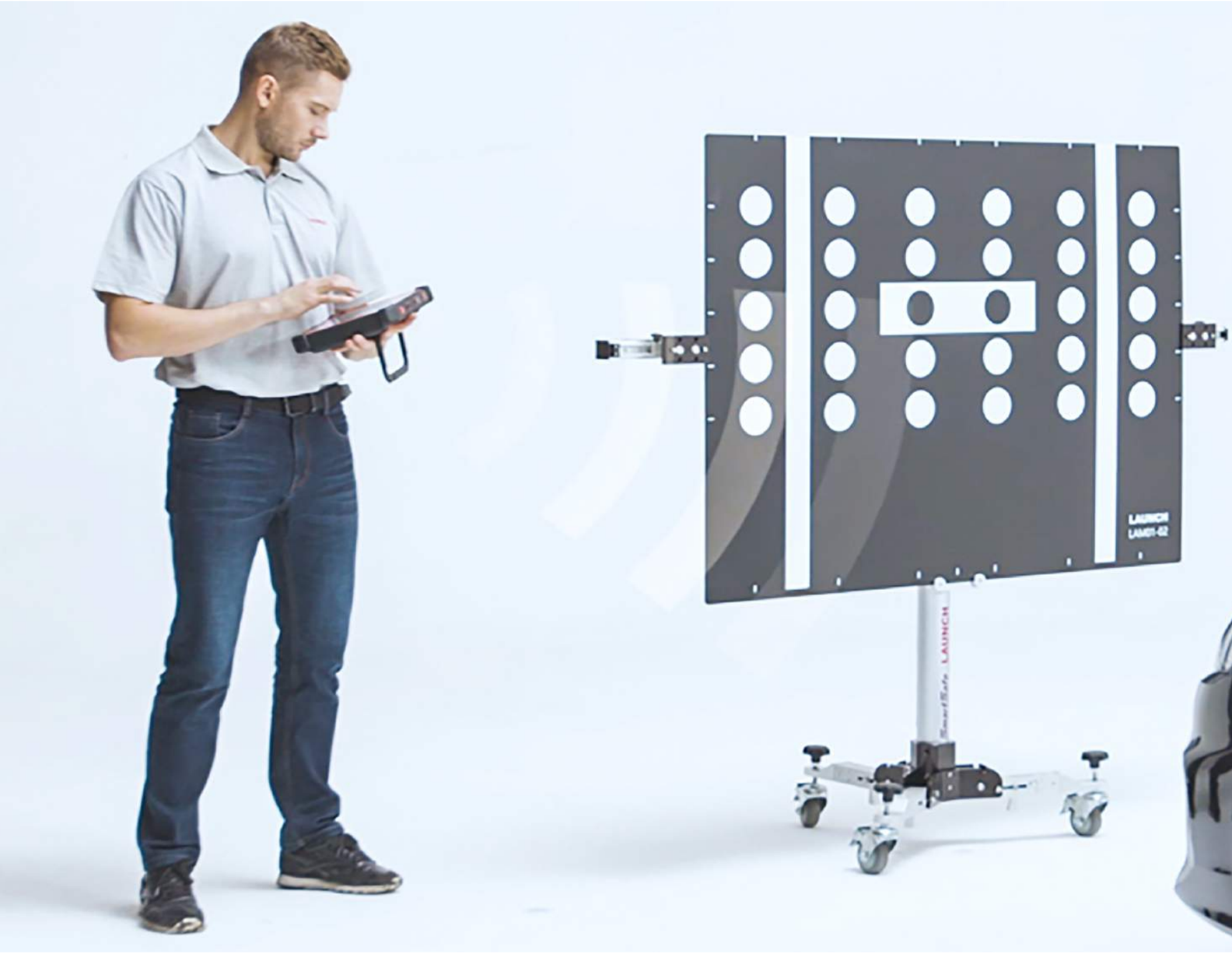


X-431 ADAS MOBILE Calibration System Solutions

Recommendation size: 5m x 9m

*For standardized measurement about specific workstation size requirement and operation details, please refer to X-431 ADAS Mobile calibration tool user manual instructions.

4 Steps of ADAS Mobile Calibration



In most cases, a vehicle is required to get calibrated in following 5 occasions.

1. The front camera has been replaced.
2. The windshield has been removed, installed or replaced.
3. The chassis structure has been changed/adjusted.
4. One of the vehicle level sensors of the wheel damping electronics or the level control has been replaced.
5. The sensor installation is incorrect.

1 POSITIONING

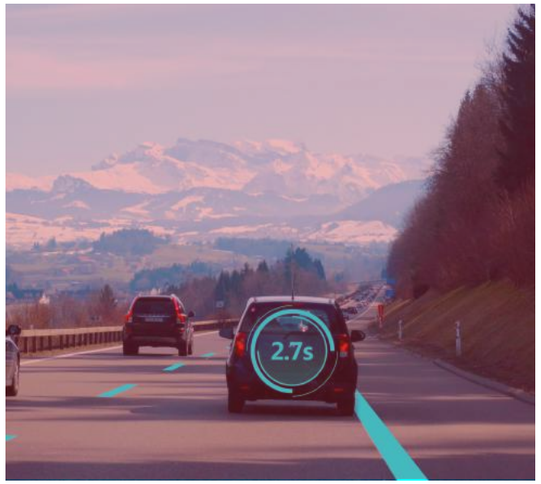
2 START ADAS APPLICATION

3 PERFORM CALIBRATION STEP BY STEP

4 ADAS REPORT

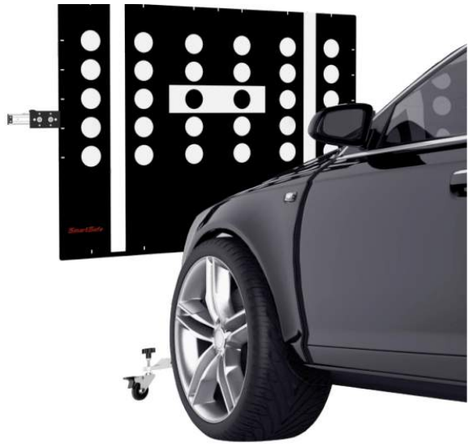
About ADAS

With various sensors, including mmWave radar, laser radar, single/binocular cameras, satellite navigation sensor and more, ADAS(Advanced Driving Assistant System) assists drivers in driving, parking, collision avoidance and navigation functions. The data of the vehicle's surroundings during the driving process will be collected, simultaneously static and dynamic objects will be identified, detected and traced. Integrating with the navigation map data, all data will get performed in systemically computing and analyzing, so that drivers can be aware of possible dangers in advance. ADAS increases vehicle and road safety in an effective and efficient way, and improves the driving experience.



About Static Calibration

It is performed by an ADAS calibration tool frame and targets. A static calibration requires professional diagnostic software with a scan tool to fulfill the calibration procedures. Before a static calibration, the work station should prepare a standardized area to get started. If not a qualified work area in normal conditions, it will affect the accuracy of the calibration.



About Dynamic Calibration

It doesn't require an ADAS calibration frame, but requires a test drive at a prescribed steady speed in a clear lane markings road with straight lines under favorable weather conditions. It requires professional diagnostic software with a scan tool to initiate the learning process and fulfill the calibration procedures.

6 Systems Of ADAS

LDW

LDW Lane Departure Warning

By the front windshield camera sensor detecting the lane lines ahead in the road, LDW system will alert the driver if the vehicle is about to veer out of lane. The system will correct the vehicle back into lane and avoid collisions.

BSD

BSD Blind Spot Detection

By the mmWave radar sensor on the rear bumper of the vehicle detecting other vehicles approaching the rear of the driver's vehicle - a common blind spot area. When the driver activates the turn signal, BSD system will alert the driver with an indicator light if there is a vehicle nearby. Some vehicles with active control system function can modify the direction of the vehicle to avoid a collision.

AVM

AVM Around View Monitoring

By the camera sensors detecting the surrounding environment of the vehicle and the system's stitching computing on the graphics, the data of the vehicle's surroundings through a virtual bird's-eye view will display on the automobile control. AVM as the main implementation way of IPA function, it assists drivers with parking.

ACC

ACC Adaptive Cruise Control

By the front mmWave radar sensor detecting other vehicles in the front of the driver's vehicle, ACC system will adjust the driver's vehicle maintain a safe distance from vehicles ahead based on the preset value. The automobile will decide speeds by itself. ACC system assists drivers with braking if there is an emergency.

RCW

RCW Rear Collision Warning

By the rear sensor detecting other vehicles approaching the rear of the driver's vehicle, once the driver activating a brake, the double flashing lights on will alert the vehicles next to if the latter approaching quickly and a collision may occur.

NV

NV Night Vision

By the front night vision sensor detecting the front vision of the vehicle, NV system assists the drivers with seeing a clear vision of the surroundings ahead at night. The humans and animals are easily visible on the screen in thermal imaging mechanism to guarantee safe driving.

FAQs

When is ADAS calibration necessary?

Most ADAS sensors are very precisely located throughout the vehicle and require calibration if their positions are disturbed in any way. This can occur in a collision, even a minor fender bender, parts replacement and service work such as windshield replacement, suspension repairs or wheel alignment. Even one degree could cause a camera or sensor to miss a target or object. This would require the ADAS components to be precisely calibrated to the exact OEM specifications.

Preparation for ADAS calibration?

Before performing ADAS calibration, please check for:
1. No damage of ACC sensors.
2. No deformation of ACC frame.
3. Ensure the tires are properly inflated.
4. Apply the parking brake and keep the doors closed.
5. Connect scan tool to the vehicle, make sure that no fault codes exist except ADAS related fault codes.
6. Please do not lean on the vehicle during the calibration process.

What are the requirements for the workspace?

1. The floor surface of the work area is even and enough space is around the vehicle to complete the calibration procedures. (Recommendation size: 5m x 9m)
2. There are no large obstacles in the work area.

What's the advantage of X-431 ADAS Mobile?

X-431 ADAS Mobile is a foldable and portable ADAS calibration tool. The unique fully foldable design minimizes the transporting risk, speeds up the setup procedure and can be calibrated in various places. It performs ADAS sensors calibration on a wide range of vehicle brands and is quick and effective. It uses professional diagnostic software with a scan tool to fulfill the calibration procedures.

How can I get the X-431 ADAS software?

You can get the latest ADAS software by updating the vehicle software in your X-431 diagnostic tools.

How to install the X-431 ADAS Mobile?

No installation required for ADAS Mobile, it can be used straight out of the box.

Do I need a training to use X-431 ADAS Mobile?

Not necessary. You can follow the guideline from the software step by step to carry ADAS calibration. Meanwhile it is suggested to read the user manual carefully before use.

Which X-431 diagnostic tool supports ADAS calibration function?

Most of X-431 diagnostic tools support ADAS calibration function, such as X-431 Throttle III, X-431 Throttle, X-431 Torque III, X-431 Torque, X-431 Turbo, X-431 PAD II AE, etc.

Can I use one ADAS activation code to bind more than one diagnostic tool so that I can perform ADAS calibration function on different scanners?

No. One activation code is limited to one diagnostic tool. If you would like to change to another diagnostic tool for ADAS calibration, please contact the local dealer for support.

How to activate or unbind ADAS calibration tool in the diagnostic tool?

There will be a card with activation code attached in the ADAS package. When you use the ADAS equipment for the first time, click ADAS module in the diagnostic tool and input activation code according to the indication.
If you want to unlink the ADAS calibration tool, please contact the local dealer for more supports.

What if my car is not parking in the level ground during ADAS calibration?

It is suggested to perform ADAS calibration in the level ground. However, ADAS Mobile also provides adjustment function to level the position at certain angles. There is a control button under the frame to fix the level issue.

What to do if the activation code is lost?

If the activation code is lost before activation, and it is caused by transportation or the product itself, you can contact the local dealer for support. If it is lost due to personal reasons, you will need to purchase a new activation card.
It doesn't matter if the activation code is lost after activation, the ADAS calibration equipment will be working normally once activated.

How do I know what target panel should be used for different vehicles?

During the calibration process, the software will provide step-by-step instructions including what panel to be used for different vehicle models and a list of other specific tools required.
You can get the vehicle compatible information including what target to be used and what ADAS system can be supported by searching on the ADAS platform from your scan tool.

How to tell if the ADAS calibration successes or not?

At the end of the calibration process, there will be a dialog telling if the calibration successes or not, a report will be generated automatically. While the calibration completes, the previous fault codes will be erased in the meanwhile.

Can I order extra target panels for certain vehicle models after the purchase of ADAS calibration tool?

Yes, there are a series of optional target panels for different vehicle models are available for order. Please contact the local dealer for more information.