



Wheel Alignment System

Innovative Flexible Advanced

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FCAR FD-505S

Suspended Wheel
Alignment System

Innovative Reliable High-Performance



No cabinet



No beam



No PC

THE LATEST TECHNOLOGIES BRING THE BEST WHEEL ALIGNMENT EXPERIENCE.

Breakthrough suspended design

The aligner units are fixed in the holders installed in 2-post car lifts. It won't occupy any on-ground space compared to traditional aligners.



Compact package

The whole package of FD-505S is extremely small and compact. It is only 65kg in weight, easy to carry and can save more shipping cost.



Easy to install

With just a few steps, the aligner set can be installed in less than 30 minutes. Once it's well fixed, no need to move at each alignment process.



Pentad HD camera matrix

FD-505S comes with 5 high-accuracy cameras which capture details from every little corner and output the most reliable alignment data.





Self-developed alignment software

After years of experience, FCAR has developed an advanced technology with the most intuitive software to give any alignment technician the tools needed for an easy and fast alignment.



Test report with fast result

FCAR's latest alignment system is able to capture all readings and details in just a few minutes. And it takes only 2 minutes to print the test report.



Tablet operated

Fully operated by a tablet, FCAR wheel aligner is fully mobile and allows you to perform alignments on two-post car lift.



Sync display with Android TV

FD-505S can also connect with all kinds of Android TV set. The tablet and TV can work simultaneously for demonstration in workshops.

FD-505S IS APPLICABLE FOR THE FOLLOWING SITUATIONS:

- Accelerated or uneven tire wear.
- After replacing the worn suspension or steering.
- Traction, floating or other handling or operation problem.
- Repair after collision.

Quick and easy setup with fast result.



1 Measure angles

- ☒ Install targets
- ☒ Enter into system

Takes only 10 minutes.



2 Select the vehicle

- ☒ Choose specific model or enter Fast Alignment

Takes only 30 seconds.



3 Push compensation

- ☒ Video-speed imaging for fast roll-back compensation

Takes only 2 minutes.



4 Print your results

- ☒ Check on car wheels

Takes only 2 minutes.



5 Make adjustment

- ☒ Create a live, real time measurement

Software Details:



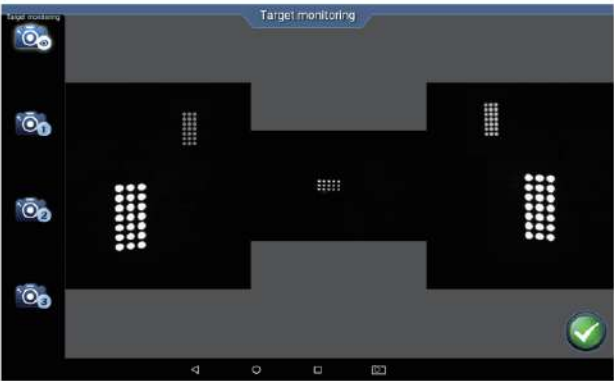
Advanced settings



Language settings



Select model



Target monitor



Print report



Push compensation



Test result



Wheel data

Full package set:



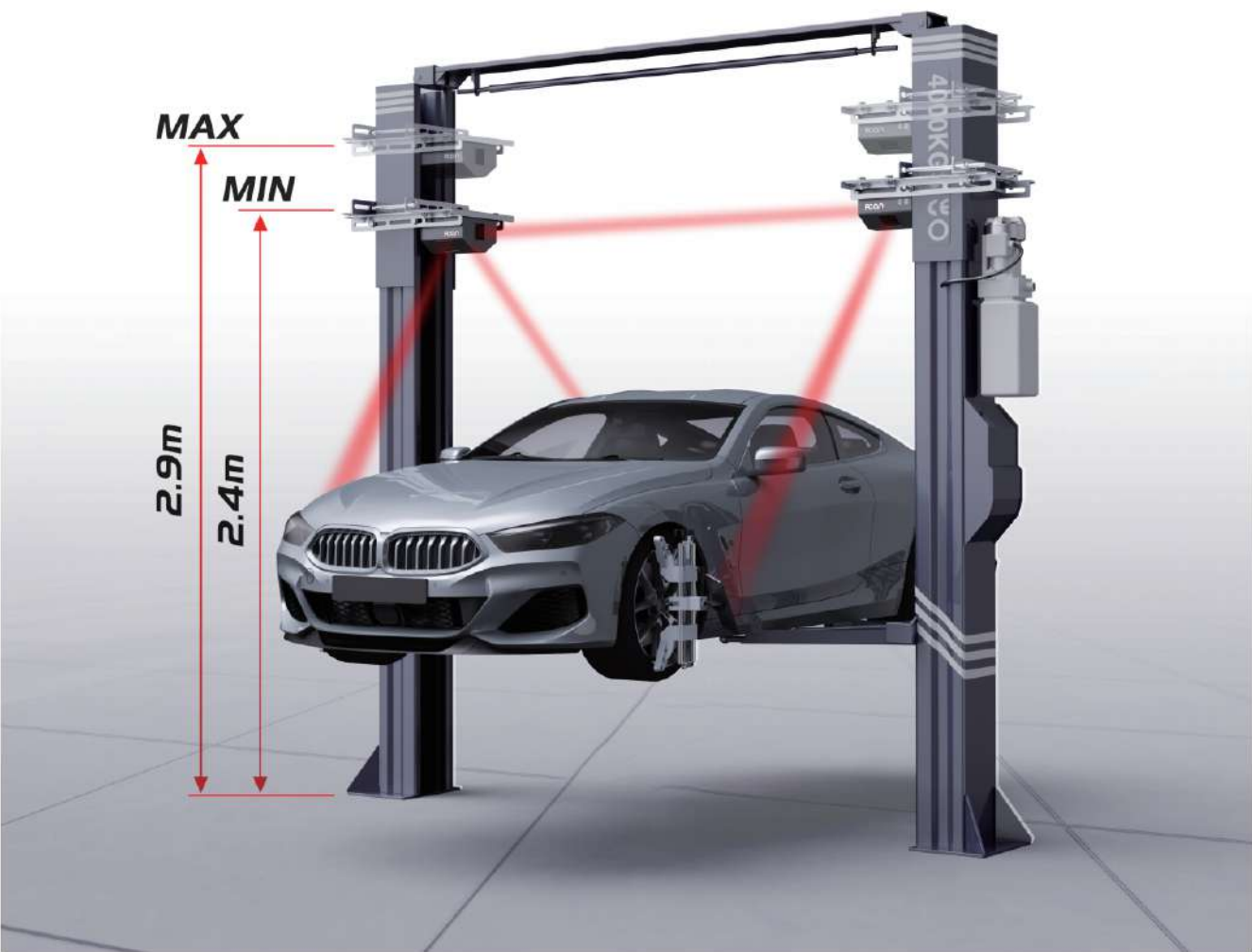
Technical Parameters

Ground Test		FD-505S
Basic Functions	Camber	✓
	Caster	✓
	KPI	✓
	Toe	✓
	Setback	✓
Extensive Functions	Thrust	✓
	Rear axle yaw	✓
	Wheel deviation	✓
	Axis deviation	✓

Lift Test		FD-505S
Basic Functions	Camber	✓
	Caster	✓
	KPI	✓
	Toe	✓
	Setback	✓
	Thrust	✓

Technical Parameters	Precision	Variable
Toe	$\pm 2'$	$\pm 20^\circ$
Camber	$\pm 2'$	$\pm 10^\circ$
Caster	$\pm 6'$	$\pm 20^\circ$
KPI	$\pm 6'$	$\pm 20^\circ$
Setback	$\pm 2'$	$\pm 5^\circ$
Thrust	$\pm 2'$	$\pm 5^\circ$
Track width difference	$\pm 2\text{mm}$	
Axle distance	$\pm 2\text{mm}$	

Installation Guide



FCAR FD-505

Portable 5D Wheel Alignment System

Movable Design Wide Adaptation High Accuracy



MAIN FEATURES OF FD-505



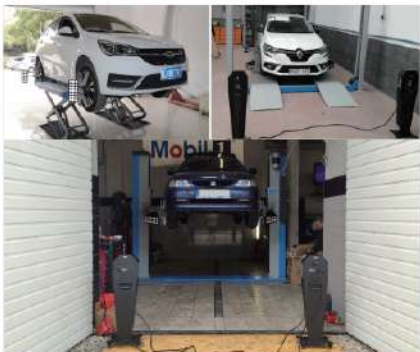
Portable and Space-Saving Design

The biggest advantage of FD-505 is the ability to be moved around as you need. Two movable stands can switch to different stations easily, which meets the needs of high efficient workshops.



Self-Developed Alignment Software

The software on FD-505 is 100% developed by FCAR team. After years of R&D, there are thousands of car models included in FCAR database. And still the database is enlarging and updating every year.



For All Types of Car Lifts

FD-505 is adapted to all kinds of car lifts, no matter scissor, 2-post or 4-post types. It is no doubt that FD-505 is able to work in all small or big workshops and garages.



No Need to Assemble

The aligner units are already fully assembled in FCAR factory. You can use it directly without all the complicated and time-wasting procedures of installation.



5 HD Camera Matrix

With the newest 5D technologies, FD-505 features 5 HD cameras to capture every little detail of adjustment and output more accurate data compared to traditional 3D aligners.



All-at-Hand Operations

The operator can monitor the wheel alignment operations with a tablet, flexible and can walk around to check on the car condition any time.



Sync Display with Android TV

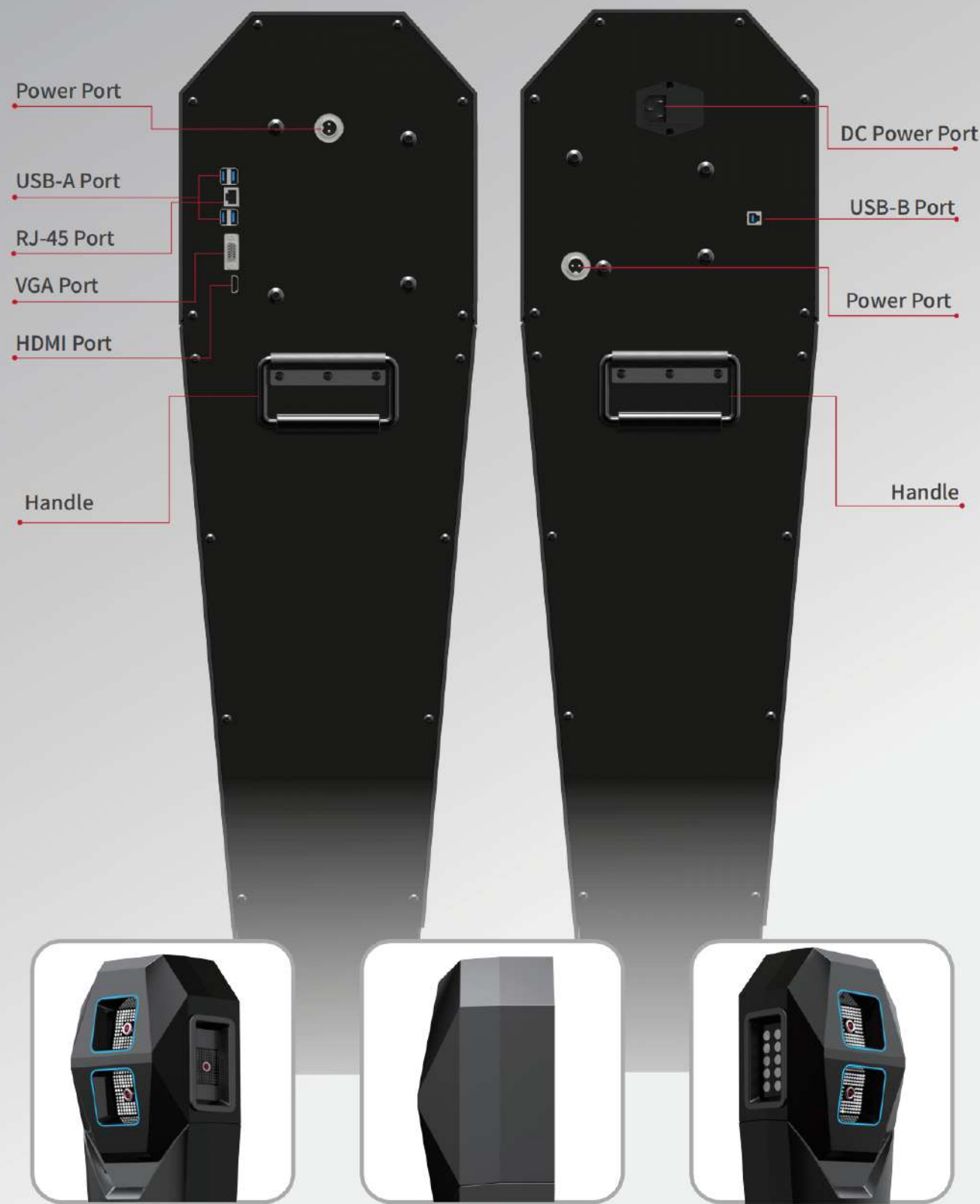
The tablet of FD-505 can connect with Android TV to share display via software projection or HDMI cable. The tablet and TV can work simultaneously for dimension in workshops.



WIFI Connection

The tablet and PC fully communicate via WIFI connection, a PC inside the camera stand which can operate using keyboard and mouse.

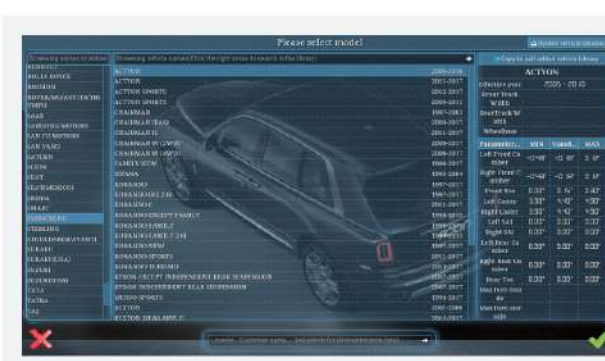
DESIGN AND LAYOUT



QUICK AND EASY SETUP WITH FAST RESULT



1 Measure Angles
Install targets
Enter into system



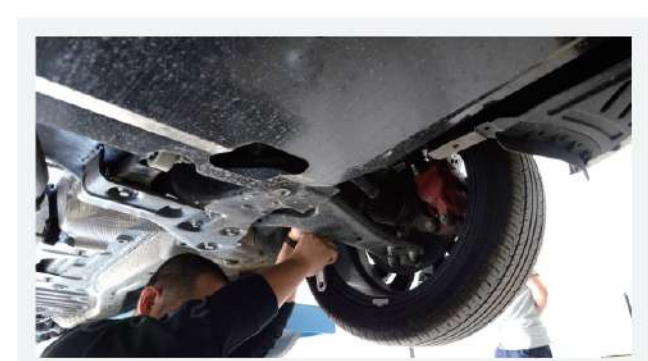
2 Select Vehicle Model
Choose specific model or enter Fast Alignment



3 Push Compensation
Video-speed imaging for fast roll-back compensation

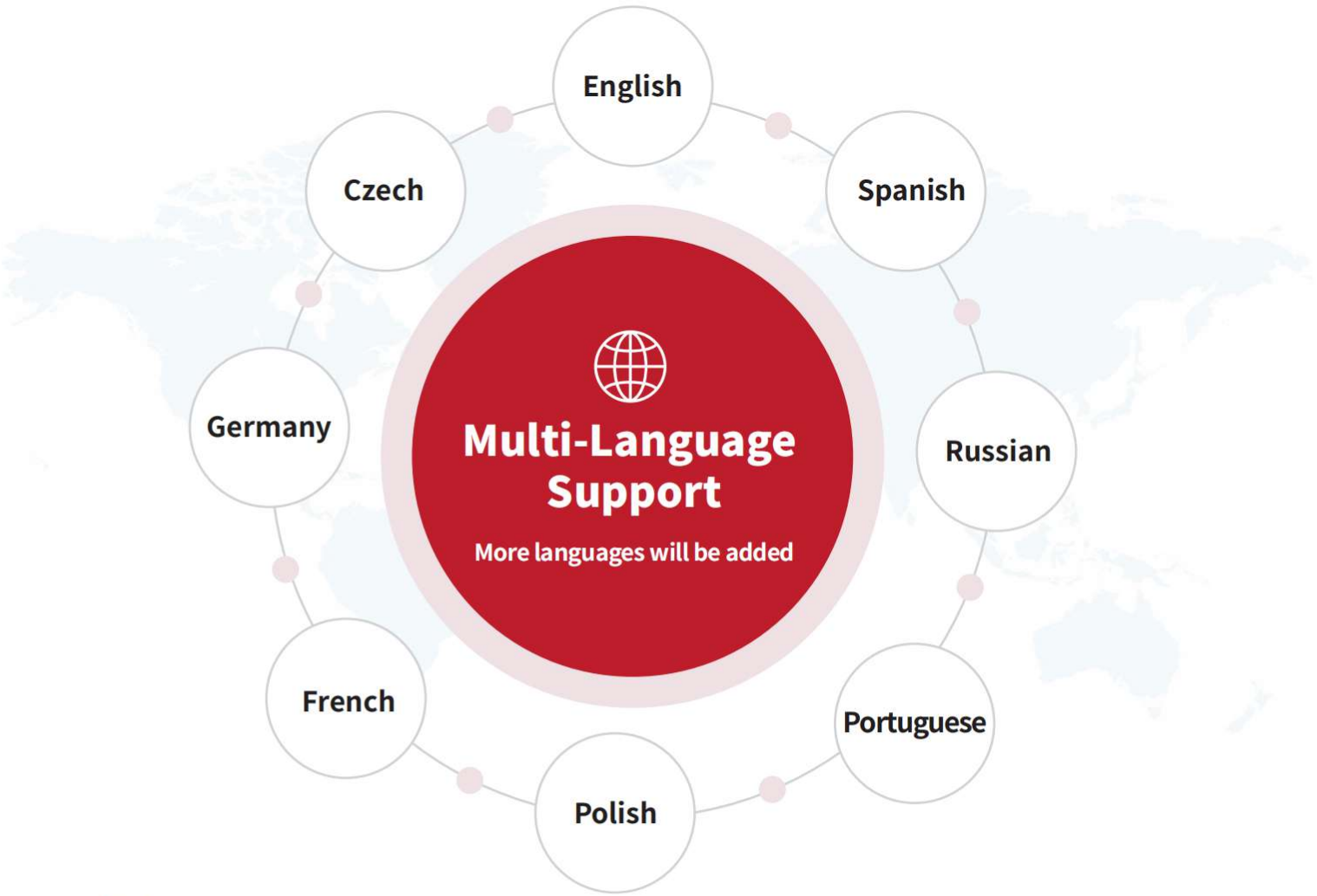


4 Print Your Results
Check on car condition



5 Make Adjustment
Create a live, real time measurement

Full package set



Technical Parameters

Ground Test		FD-505
Basic Functions	Camber	✓
	Caster	✓
	KPI	✓
	Toe	✓
	Setback	✓
Extensive Functions	Thrust	✓
	Rear axle yaw	✓
	Wheel deviation	✓
	Axis deviation	✓

Lift Test		FD-505
Basic Functions	Camber	✓
	Caster	✓
	KPI	✓
	Toe	✓
	Setback	✓
	Thrust	✓

Technical Parameters	Precision	Variable
Toe	±2'	±20°
Camber	±2'	±10°
Caster	±6'	±20°
KPI	±6'	±20°
Setback	±2'	±5°
Thrust	±2'	±5°
Track width difference	±2mm	
Axle distance	±2mm	

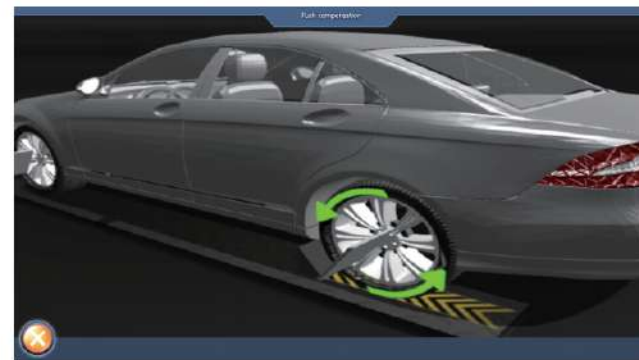
Software Details



Select Mode



Standard Data



Push Compensation



Measure Caster



Fault Detection



Save Record



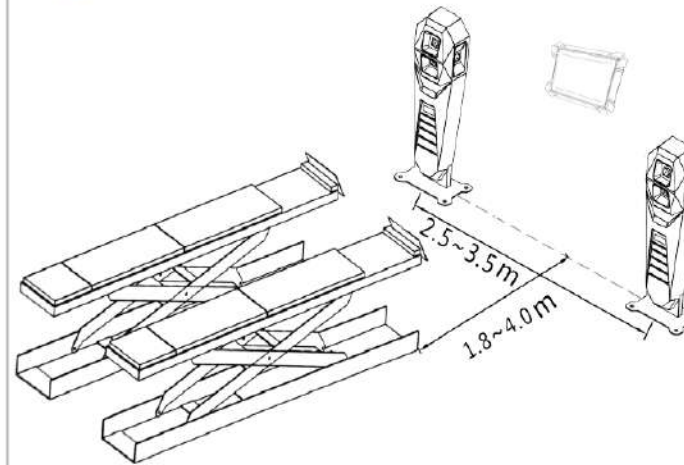
Humanized Settings



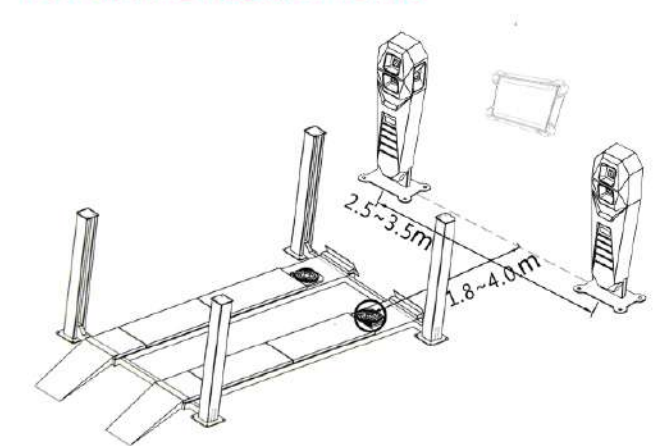
Exposure Adjustment

Installation Methods

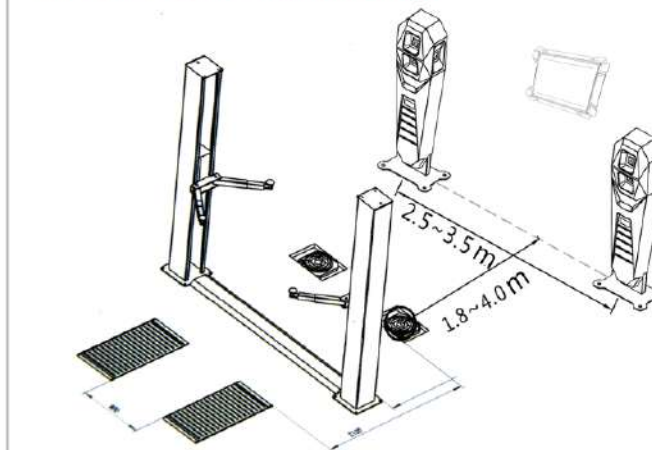
Large scissors installation method



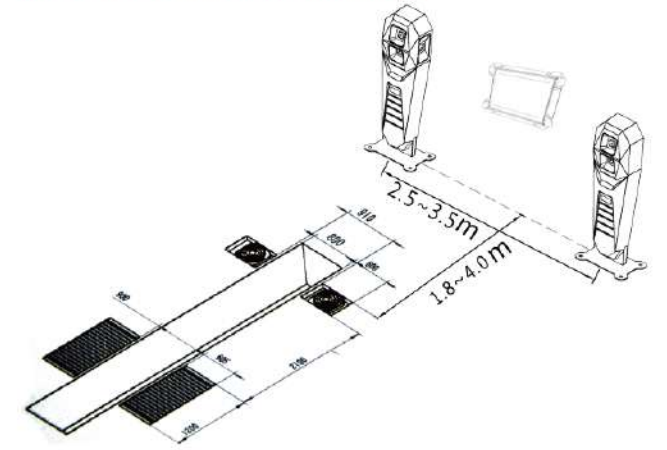
Four columns installation method



Two columns installation method



Pass-through installation method





Fast results with quick setup time

Step 1 Measure angles



- ✓ Install targets
- ✓ Enter into system

Step 2 Select the vehicle



- ✓ Enter Fast alignment

Step 3 Print your results



- ✓ Check on car wheels

Step 4 Check on car wheels



- ✓ Follow the adjustment instructions

FCAR 3D WHEEL ALIGNER

WORKSHOP SOLID HELPER

Fast Measurement, High Accuracy



Body Shake



Car Deviation



Tire Wear



Steer Wheel Shake

Product advantages

Brand-new technology



No beam



User-friendly interface



5MP high-accuracy camera



Self-developed 3D software

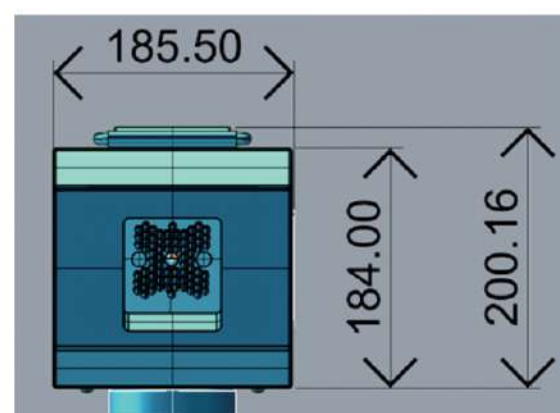


10.5" HD Android tablet



Adjustable column height(200mm)

unit:mm



Details of software



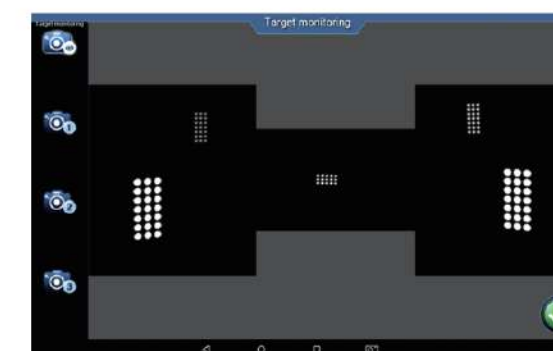
Language Settings



System Settings



Select Model



Target Monitoring



Push Compensation



Adjust Wheel



Test Result



Print Report

Functioninstruction

Ground Test		FD-305
Basic Functions	Camber	✓
	Caster	✓
	KPI	✓
	Toe	✓
	Setback	✓
Extensive Functions	Thrust	✓
	Rear axle yaw	✓
	Wheel deviation	✓
	Axis deviation	✓

Ground Test	Ground Test	Ground Test
Toe	±2'	±20°
Camber	±2'	±10°
Caster	±6'	±20°
KPI	±6'	±20°
Setback	±2'	±5°
Thrust	±2'	±5°
Track width difference	±2mm	
Axle distance	±2mm	

Accessories

			
Aligner unit	F7S tablet	Iron pipe	Rectangular target
			
Four-jaw clamp	Steering wheel holder Brake retainer	Turn plate	Transition block
			
Wedge block	Clamp hanger	12V power adaptor	24V DC power adaptor

Installation guide

Note: Please adjust the distance between two bases according to the site.

