



MAKE A DIFFERENCE



SMARTER

CROWN

CUBE

WARRANTY

Cameras and Targets: 36 months
Computer and Printer: subject to the industry practice
Other Parts: 12 months



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2019

**LAWRENCE-AUTO
MACHINERY CO., LTD.(USA)**



WORLD-LEADING WHEEL ALIGNMENT MANUFACTURER



LAWRENCE Wheel Alignment

Smarter 3D Wheel Alignment

Smarter 3D wheel alignment system strives for excellence with its innovative software interfaces and rich measurement functions. The core technology lies in intelligence, which relieves users from drudgery operation.



T9
T6
LS10
LS8
LS6

Crown 3D Wheel Alignment

Crown 3D wheel alignment system has won the customer's trust around the world. Its three dimensional display system and stable measurement functions make itself a crown of king.



I9
I6
I5
RS10
RS8
RS6

Cube 3D Wheel Alignment

Cube 3D wheel alignment system brings a lot of benefits with its two-column design and flexible installation feature. Easy operation and unique software greatly increase efficiency for users.



CUBE 11
CUBE 10

COMPANY PROFILE

Founded by Dr. M. Lawrence Wilson in New York, USA, Lawrence Auto Machinery (USA) possesses a senior technical R&D team and mature brand operation system. Its complex laboratory is dedicated to studying vehicle driving posture and providing strict product standards.



Guangzhou Lawrence Auto Machinery Co., Ltd., authorized and invested by Lawrence Auto Machinery (USA) as the sole agent in the Asia-Pacific region, is a large modern manufacturing enterprise engaged in technology introduction and application, equipment production, marketing and after-sales service.

Lawrence is well known for technology innovation in the automotive aftermarket, and has launched three generations of 3D wheel alignments, namely Smarter, Crown and Cube. Lawrence have brought vivid, intelligent and user-friendly alignment experience to the world, setting itself as the new benchmark of the industry and the world leader in the wheel alignment industry.

With the advantages of industry-leading quality and perfect service system, Lawrence products have benefited customers in over 60 countries and regions including the United States, Britain, France, Brazil etc, with long-term cooperative relationship and high international popularity.



720° panoramic display technology



Lawrence Smarter Series fully 3D interfaces program

Normal 2D interfaces program

FIVE METHODS TO IDENTIFY REAL 3D

Rolling Compensation

Fake: Static measurement or fake rolling compensation.

Real: Rolling compensation is a must.

Analysis: Only real rolling compensation can measure wheel driving posture while static measurement or simulated fake rolling compensation cannot perform value calculation.



Camera Beam

Fake: Level camera beam is a must.

Real: No need for level camera beam.

Analysis: Real 3D needs no level beam while fake 3D demands horizontal beam like CCD, thus influence caused by lift height deviation for fake 3D cannot be avoided.

Lift Platform

Fake: The two runways have to be on the same horizontal line, otherwise they will severely affect camber measurement.

Real: Horizontal lift runways cast little influence on accuracy. Hence even 50-80mm horizontal difference is acceptable.

Analysis: Fake 3D applies traditional CCD measurement models, so absolute horizontal level is needed as zero position for reference.



Camera Replacement

Fake: Once a camera is broken, the whole camera beam is required to be sent back to the factory for camera replacement and calibration.

Real: Once a camera is damaged, replacing the broken one then performing on-site calibration will solve the problem.

Analysis: Fake 3D needs platform like CCD to make calibration, which normal users usually lack.

Wheel Adaptor

Fake: The adaptors have to closely contact with the rims.

Real: Common installation.

Analysis: Fake 3D cannot make eccentricity compensation. Its accuracy is decided by physical accuracy of targets and adaptors, and relative setting between studs and rims, either of whose deformation will lead to measuring deviation.



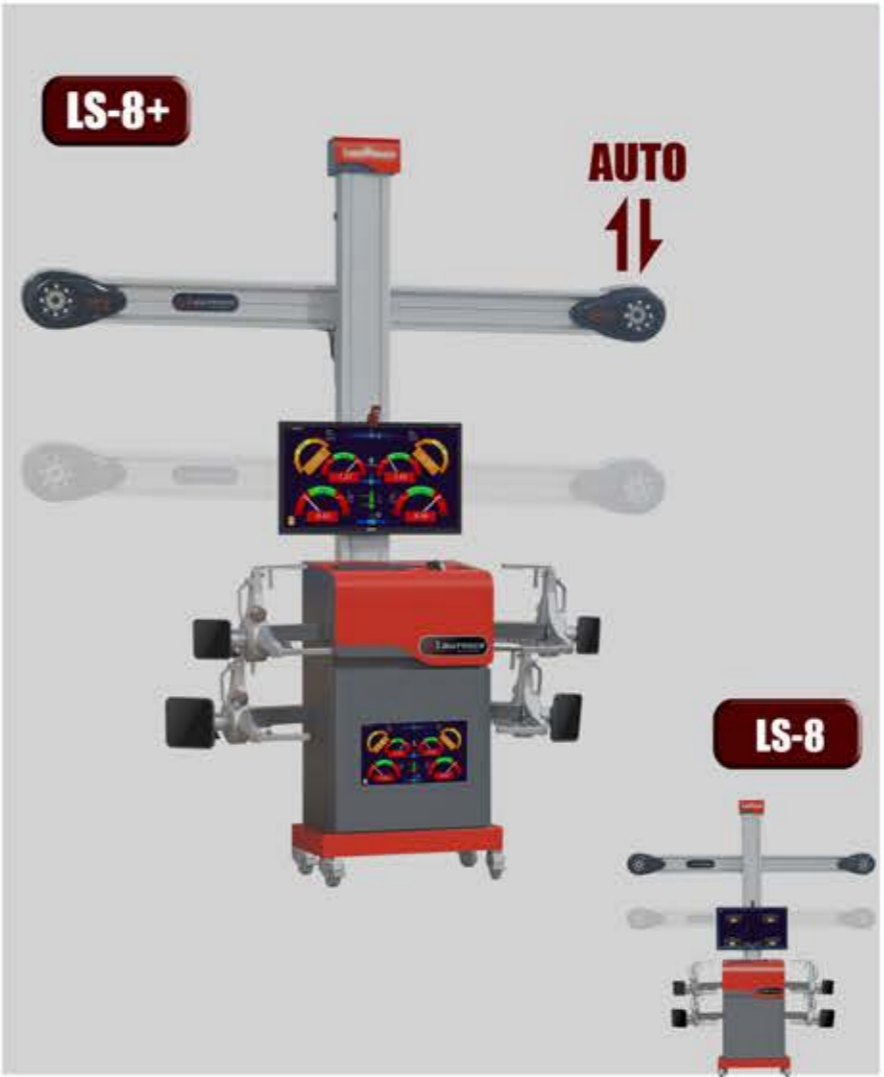
WORLD-LEADING WHEEL ALIGNMENT MANUFACTURER



SMARTER SERIES

- 6.4M USB3.0 HD Industrial Camera
- Patented Hand Recognition Function
- Patented Intelligent Digital Display
- Three Points Wheel Adaptor
- Mini black Tech Target
- Ride Height Measurement

SMARTER Series



SOFTWARE ADVANTAGES

- 3D Display System
- Two Adjustment mode
 - 3-Dimensional Mode
 - 2-Dimensional Mode

Features

01 Patented Intelligent Digital Display

- Friendly greeting in starting up
- Warm reminding during operation
- Interaction between operator and equipment
- Synchronized data
- Prompt numbers
- Instruct steps
- Help words

02 Patented Hand Recognition Function

Covering target 3 times to zoom
Global origination with patent
Synchronized with the latest technology
Humanized function, uplifting efficiency

Great Human-computer Interaction

03 Mini Black Tech Target

Made of special polymeric material with high resistance
More durable and sun-filter, service life up to ten years
Suitable for difficult working conditions

04 Three Points Wheel Adaptor

Newly developed technology
Easy to grip the tire, eliminating metal-to-metal contact and subsequent rim damage

05 Quick Clamping Adaptor(Optional)

Newly developed and with patent
Easy to grip the tire, eliminating metal-to-metal contact and subsequent rim damage
Can work with bigger tires

06 6.4M USB3.0 HD Industrial Camera

Newly upgraded industrial camera with high definition
More stable measurements and faster

07 Smarter Alignment Software

Displaying vehicle from 720° viewing angle
Authentic image, simple and easy to understand
Real-time measurement, high efficiency
Patented system, unique and reliable

720° unique visual experience

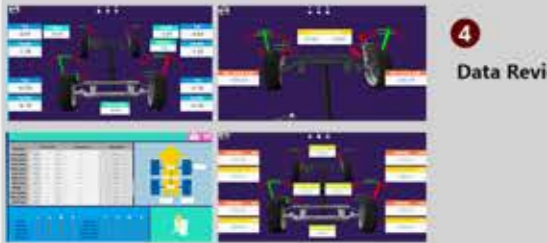
SOFTWARE ADVANTAGES



Quick Mode

Expert Mode

- 3 The program will switch between "Quick Mode" and "Expert Mode" based on operator's requirements



4 Data Review

- 5 Toe-out-on-turn, S.A.I. Caster, Max turning Angle, Wheel Offset, Axle Offset, Wheel Rolling Radius measurement, R/KM, Setback, Thrust angle

LS-6+



LS-6

T6-M



T6+

SOFTWARE ADVANTAGES



- 6 Intelligent Database & Data updating



- 7 Vivid Video

Features

08

Smarter Kingpin Measurement Mode

Three modes for kingpin measurement
Intelligent identification of any mode according to user's operation



09

Smarter Auto Tracking System

Auto camera beam synchronized with the up and down of the vehicles
Continuously monitoring on target position, offering feedback of target state any time



10

Smart-TOE1

The backlash has no influence on toe adjustment
Adjust the toe without steering wheel holder for vehicles with big backlash
The steering will be always center



11

Smart-TOE2

More special cars can be aligned, such as Audi, which demands for positive toe during adjustment
Turn the front wheels left or right and access difficult adjustment points while still displaying centered toe readings
Reduce the redundant steps in front toe adjustments



12

Ride Height Measurement

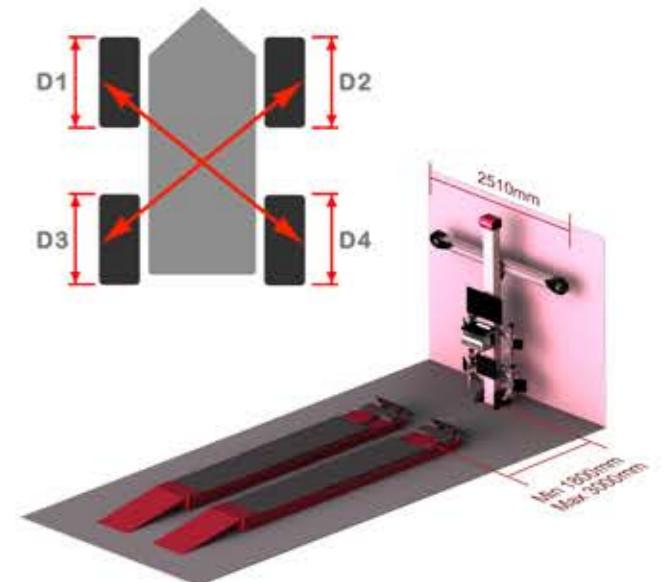
Equipped with function of ride height measurement
Largely facilitating wheel alignment for high-end vehicle models
Detecting of vehicle suspension



13

Cross Diagonal

Identifying vehicle frame or structural conditions
Good helper in alignment adjustment



ACCESSORIES



Mini Black Tech Target



Three Points Wheel Adaptor



AutoTrack Column



Fixed Column



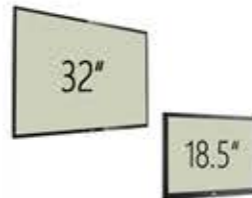
Turn Plate



Quick Clamp Adaptor
Optional



CD & Dongle



Monitor 32 & 18.5 inch



PC



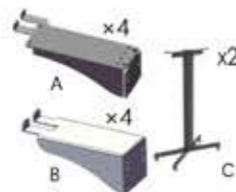
Printer



Luxury Cabinet



All-in-one Console with
Built-in CPU



Wheel Clamp Adaptor



Drive-on Camera



Wheel Chock



Wheel Clamp & Strap



Clamp Extendor
Optional



A Wheel Holder
B Brake Pedal Depressor
C Antistatic Needle



CROWN SERIES

- 5.0M USB3.0 HD Industrial Camera
- Quick Clamping Adaptor
- Mini Black Tech Target
- Hand-held Aligner
- 3D Display System

CROWN SERIES

Crown Series

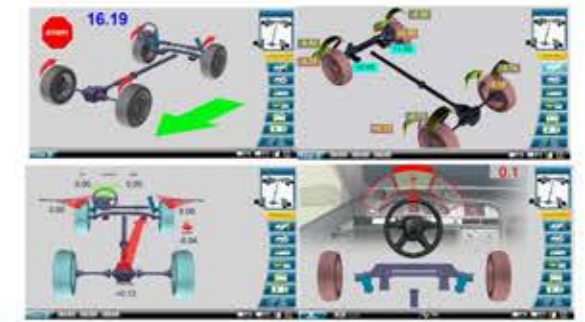
19+



RS-8+



SOFTWARE ADVANTAGES



1 3D Display System



2 Two Adjustment mode

Features

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Newly developed and with patent
Easy to grip the tire, eliminating metal-to-metal contact and subsequent rim damage
Can work with bigger tires



02 Patented Intelligent Digital Display

Warm reminding during operation
Synchronize Data
Prompt Numbers
Instruct Steps



03 Mini Black Tech Target

Made of special polymeric material with high resistance
More durable and sun-filter, service life up to ten years
Be suitable for difficult working conditions



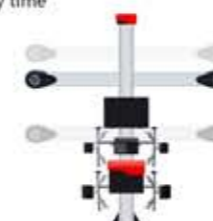
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More stable measurements and faster



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Auto camera beam synchronized with the up and down of the vehicles
Continuously monitoring on target position, offering feedback of target state any time



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07 Smart-Toe2

More special cars can be aligned, such as Audi, which demands for positive toe during adjustment
Turn the front wheels left or right and access difficult adjustment points while still displaying centered toe readings
Reduce the redundant steps in front toe adjustments



SOFTWARE ADVANTAGES



Quick Mode

Expert Mode

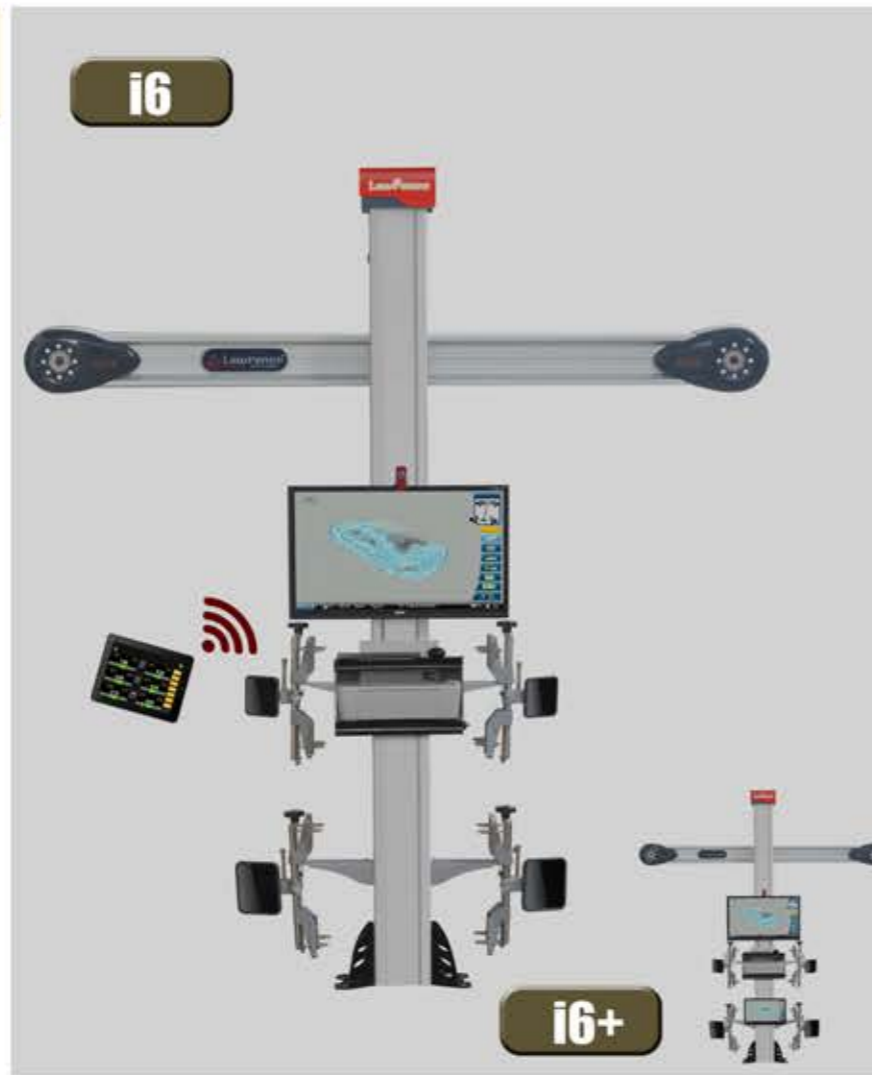
- 3 Toe-out-on-turn measurement & Max Turning Angle



- 4 Data Review



- 5 Car Body Dimension & Printout



i6

i6+

RS-6

RS-6+

SOFTWARE ADVANTAGES



- 6 Intelligent Database & Data updating



- 7 Vivid Video



- 8 Android Screens

Features

Jack Up Adjustment

08

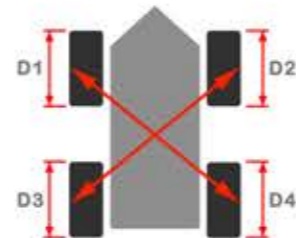
After alignment measurement, the values can be frozen for jack up adjustment



10

Cross Diagonal

Identifying vehicle frame or structural conditions
Good helper in alignment adjustment



09

Fixed Model Aid

For fixed models, the program can guide the operators to achieve the best height of vehicles for alignment measurement



11

Hand-held Aligner

Built-in wifi LAN system
Data display synchronized with monitor
Identify selected model automatically
Remote-control each step
Free software update
Android system all applicable



12

Engine Cradle Adjust

Provide visual reference for simultaneous SAI and caster adjustment for vehicles with front sub-frames or cradles



13

Drive-on Camera Aid

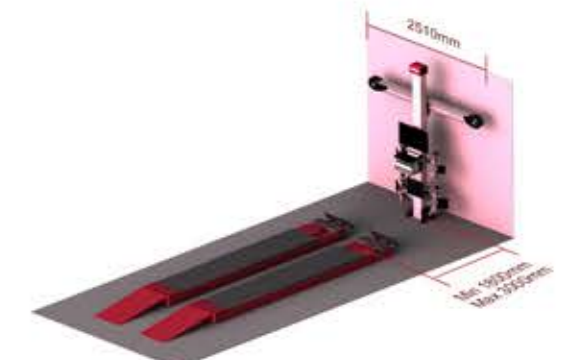
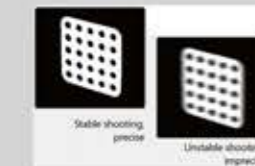
The drive-on camera aid helps guide the proper parking of the vehicle to be aligned, ensuring safety and efficiency



14

Image Stabilizing System

Self-developed technology
No limit for rolling compensation, easy operation
Cameras shoot on targets consistently for stable and accurate reading



ACCESSORIES



Mini Black Tech Target



Quick Clamp Adaptor
Optional



AutoTrack Column



Fixed Column



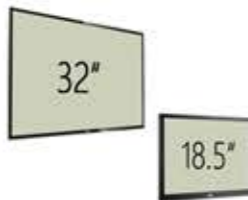
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Three Points Wheel Adaptor
Optional



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Monitor 32 & 18.5 inch



PC



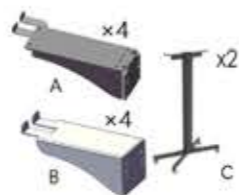
Printer



Luxury Cabinet



All-in-one Console with
Built-in CPU



Wheel Clamp Adaptor



Drive-on Camera



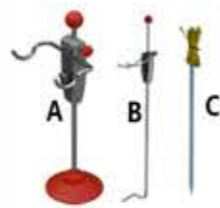
Wheel Chock



Wheel Clamp & Strap



Clamp Extendor
Optional



A Wheel Holder
B Brake Pedal Depressor
C Antistatic Needle

CUBE SERIES INTERPRETATION

Cube 3D wheel alignment greatly meets the site requirements with two-post design, making installation more flexible and convenient. It's suitable for lift and pit platforms and it can measure both cars and light trucks. The idea of Cube is to serve more customers with its fantastic functions.

» Cube 11

- ✓ Flexible installation, suitable for more site requirements
- ✓ Synchronized calibration provides accurate measurement.
- ✓ No need for on-site calibration, achieving maximum efficiency.
- ✓ IAA lifting system.

» Standard Configuration

3D Alignment Program, Aluminum Column, Collapsible Console, Four Wheel Adaptors, Unique Black Tech Targets, Branded Computer, 21.5 inch Monitor, Branded Printer, Drive-on Camera, Mouse, Keyboard, Turnplates, Wheel Chocks, Steering Wheel Holder, Brake Pedal Depressor, Antistatic Needle

Cube design, leading innovation.



TECHNICAL PARAMETERS

Measurement Function

Basic Measurement: toe, camber, caster, kingpin inclination, setback, thrust angle
Additional Functions: Smart Toe, max turning angle, toe-out-on-turn, tire radius, tire rotations rate, axle offset, wheel offset, track/wheelbase, two-wheel measurement, vehicle lifting measurement, alignment platform level detection, toe constant value measurement

Measurement Range and Accuracy

Items	Camber	Caster	S.A.I.	Toe	Setback	Thrust Angle	Wheel Offset	Axle Offset
Range	±45°	±40°	±40°	±30°	±5°	±5°	—	—
Accuracy	±1'	±1'	±1'	±1'	±1'	±1'	±1mm	±1mm

Equipment Specifications

1	Operating Temperature	-30° C-50° C
2	Power Consumption	300W
3	Power Consumption (for auto beam)	350W
4	Wheel Size	279.4mm-609.6mm
5	Tire Diameter	No Limit
6	Track Width	1220mm-2450mm
7	Wheel Base	1600mm-4700mm
8	Power Requirement	110-240V 50/60Hz
9	Profile of Wheel Adaptor	11-24 inch
10	Profile of Target	Small 27cm*27cm Mini 14cm*14cm
11	Rolling Compensation Style	Backward / Forward
12	Camera Resolution	6.4 - 5 Mega pixel
13	Suggested Distance from Camera to Turnplate	1.6m-2.5m

Cube 10

Dual-column Design

Exquisite and fashionable, saving space for installation and operation greatly

Designed Specially for Pits

On-site calibration, more precise

Optional Display System

- ✓ CUBE 10+: Dual display system
- ✓ CUBE 10: Single display system



Standard Configuration

3D Alignment Program, Aluminum Column, Collapsible Console, Four Wheel Adaptors, Unique Black Tech Targets, Branded Computer, 21.5 inch Monitor, Branded Printer, Drive-on Camera, Mouse, Keyboard, Turnplates, Wheel Chocks, Steering Wheel Holder, Brake Pedal Depressor, Antistatic Needle

Next New Arrival



You can also

Get what you need instantly from the System, e.g.

The latest specifications

The latest program

The new functions to add

The instructions for use

Ask for help from the System, e.g.

Check the program

Upgrade the machine

Fix advice

**Share your thoughts with us on the System,
Let's grow and progress together!**

Note

Comment & Suggestion:



For more infos, please visit: www.lawren3d.com