

# DIGITAL ADAS

Solutions for the diagnosis and calibration of driver assistance systems



UNRIVALLED COVERAGE

**47**

Panels and  
accessories

**90**

Manufacturers

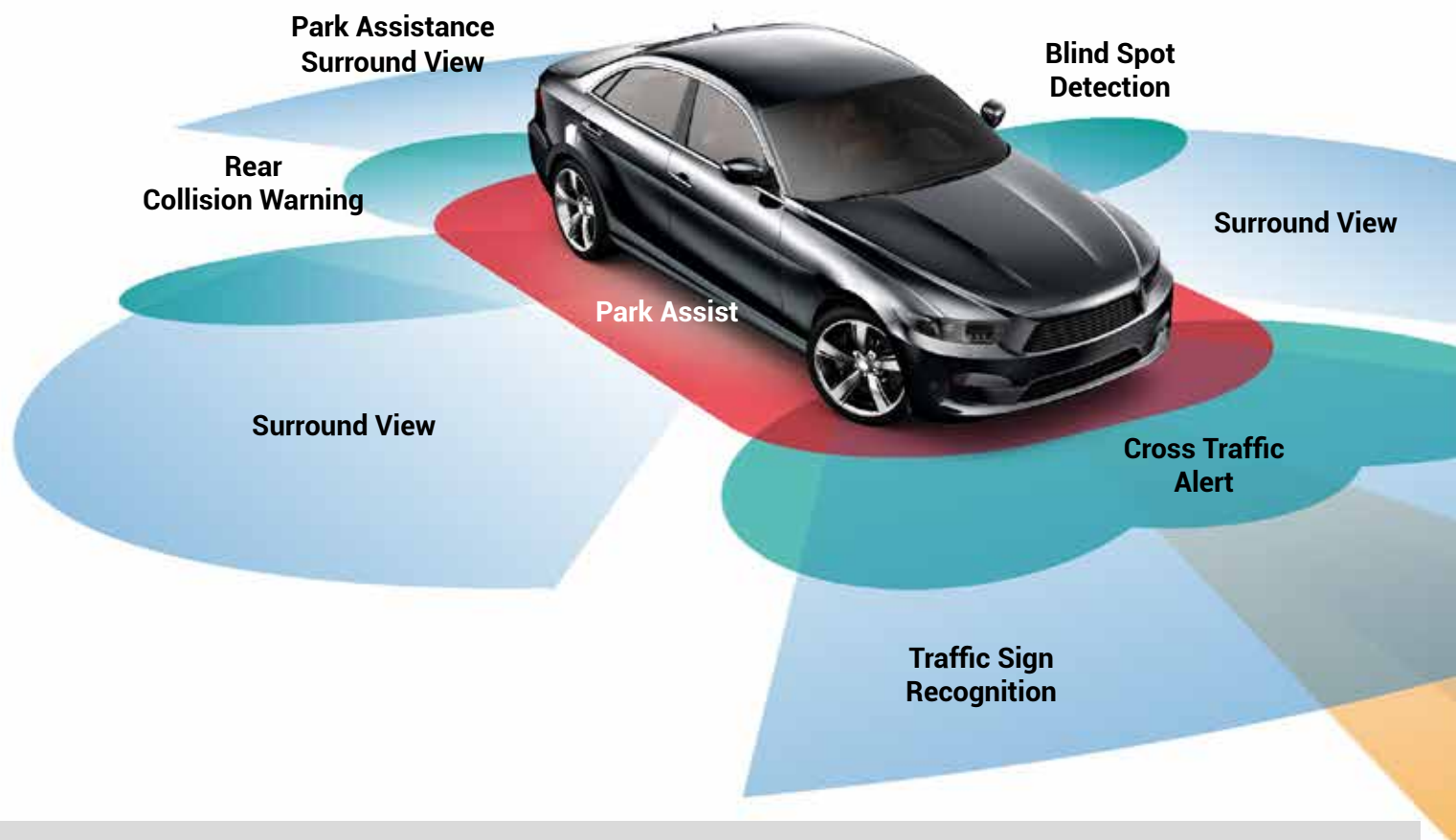
**TEXA**

# Specialists in the control of ADAS

Designed to guarantee safety and comfort while driving, the ADAS (Advanced Driver Assistance Systems) are increasingly common in latest-generation vehicles.

Cameras, radars, LIDARs and sensors must be recalibrate when replaced, but even when actions that affect them are required, such as: **replacing the windscreen, bumper, repairing the suspension, aligning the wheels, changing the tyres, replacing the engine control unit**, etc.

Knowing how to intervene in this field requires skill to keep pace with the times and be able to offer customers first-class assistance.



*TEXA's solutions **meet the specifications required by vehicle manufacturers and guarantee a coverage that is unique on the market:***

ACURA  
ALFA ROMEO  
ASTON MARTIN  
AUDI  
BENTLEY  
BMW  
BUICK  
CADILLAC  
CHEVROLET  
CHRYSLER  
CITROEN  
CUPRA  
DACIA  
DAF  
DAIHATSU  
DODGE  
DS  
EVO  
FIAT

FORD  
FREIGHTLINER  
GENESIS  
GMC  
HEULIEZ BUS  
HOLDEN  
HONDA  
HYUNDAI  
INDCAR  
INFINITI  
INTEGRAL  
INTERNATIONAL  
IRISBUS  
IRIZAR  
ISUZU  
IVECO  
JAC MOTORS  
JAGUAR  
JEEP

KENWORTH  
KIA  
KING LONG  
LAMBORGHINI  
LANCIA  
LAND ROVER  
LEXUS  
LINCOLN  
MACK  
MAN  
MARCO POLO  
MASERATI  
MAZDA  
MERCEDES-BENZ  
MINI  
MITSUBISHI  
NEOPLAN  
NISSAN  
OPEL

PETERBILT  
PEUGEOT  
PORSCHE  
RAVON  
RENAULT  
RENAULT SAMSUNG  
RENAULT TRUCKS  
ROLLS-ROYCE  
SAAB  
SCANIA  
SCION  
SEAT  
SETRA  
SKODA  
SMART  
SSANGYONG  
SUBARU  
SUZUKI  
TATRA

TEMSA  
TOYOTA  
TROLLER  
VAN HOOL  
VDL BOVA  
VDL BUS & COACH  
VDL BUS CHASSIS  
VOLKSWAGEN  
VOLKSWAGEN  
VOLVO  
VOLVO BUS  
VOLVO TRUCKS  
WRIGHT BUS  
XEV

# A complete 360-degree offer impossible to do without

TEXA helps repair professionals operate on these sophisticated active safety devices, with a **complete multi-brand offer** that includes:

- **RCCS 3 Digital (Radar and Camera Calibration System 3)**
- **CCS (Camera Calibration System)**
- **A large availability of specific panels and accessories**
- **ADAS TRUCK kit**
- **Specialised training**

TEXA's solutions allow both **static and dynamic calibrations** and reset the ADAS correctly, **guaranteeing the safety** of the drivers and the technician who performs the diagnosis and calibrations.

The **IDC5 software** guides technicians step-by-step throughout all the phases, thanks to the **help sheets** specifically developed for each vehicle, offering an extensive **CAR** and **TRUCK** coverage, at least 30% higher compared to other solutions on the market.



Lane Departure  
Warning

Emergency Braking  
Pedestrian Detection  
Collision Avoidance

Adaptive Cruise  
Control

Long-Range Radar (~250 m)

LIDAR (~150 m)

Camera (~80 m)

Short/Medium Range Radar (~20 m)

Ultrasound (2-4 m)

# RCCS 3 Digital

## a top-of-the-range solution

The unit, designed and engineered by TEXA, is available in two versions: **RCCS 3 Digital** and **RCCS 2 with Panels**.

RCCS 3 Digital is the top product in terms of performance and speed as it uses the digital representation of the panels, whereas RCCS 2 with Panels is intended to use physical target panels.

TEXA's solutions offer a comprehensive simple, quick and precise adjustment which can be used both with the **toe and thrust axis check kit** and in the **optical alignment mode**.

Two versions, two way approaches but a unique result: **maximum safety for drivers and technicians who performs the calibrations**, made possible by the high practicality and precision of RCCS range.

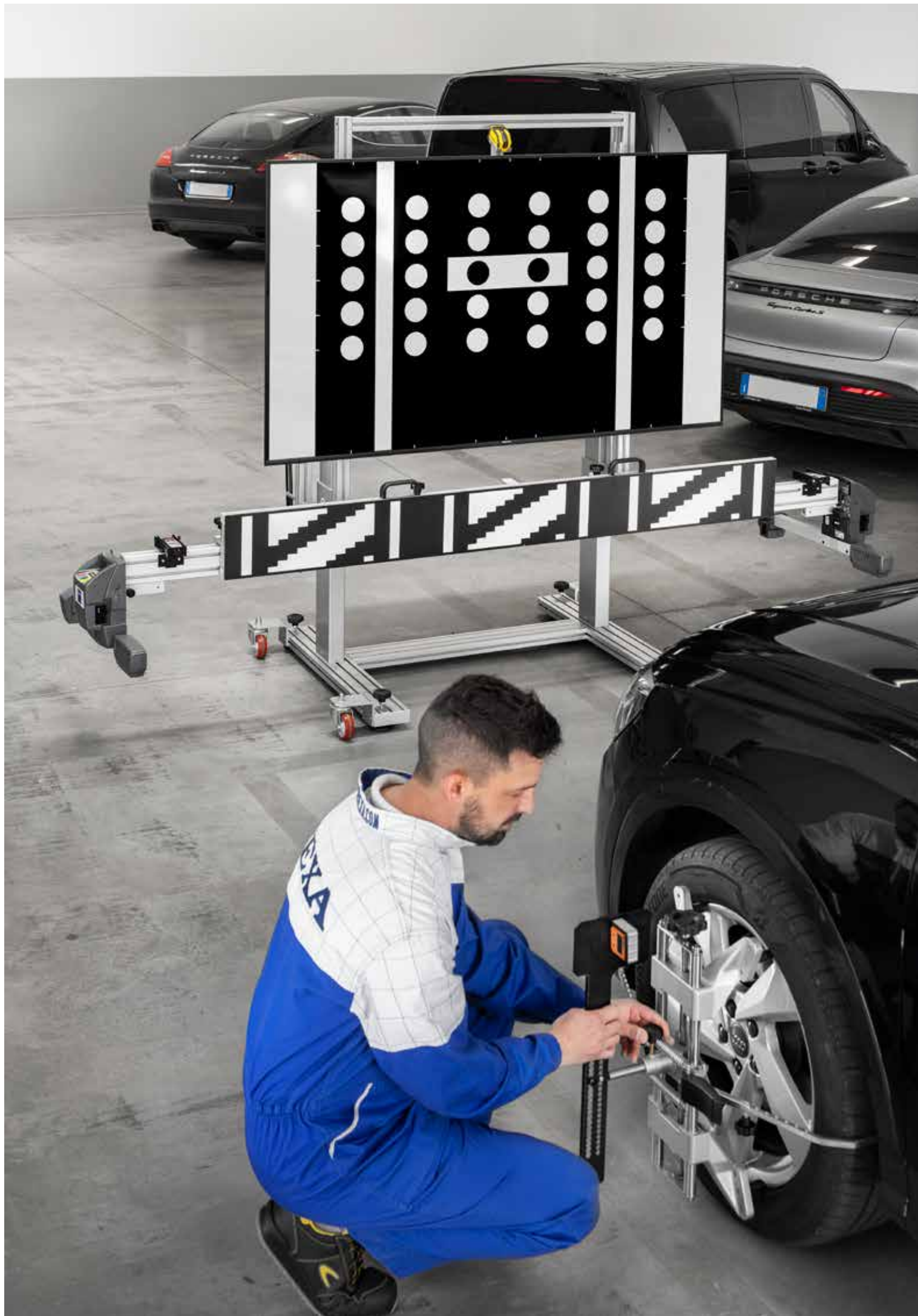


***RCCS 3  
Digital***

***RCCS 2  
with  
Panels***







# RCCS 3 with Monitor

## the digital innovation for calibrating ADAS

**RCCS 3 with Monitor** is TEXA's solution for setting radars, LIDARs, cameras and sensors through the digital representation of the panels.

In fact, it is equipped with a **75-inch HD screen, 4K definition**, which always offers an optimal display, meeting the **1:1 proportion ratio in line with the specifications of every manufacturer**.

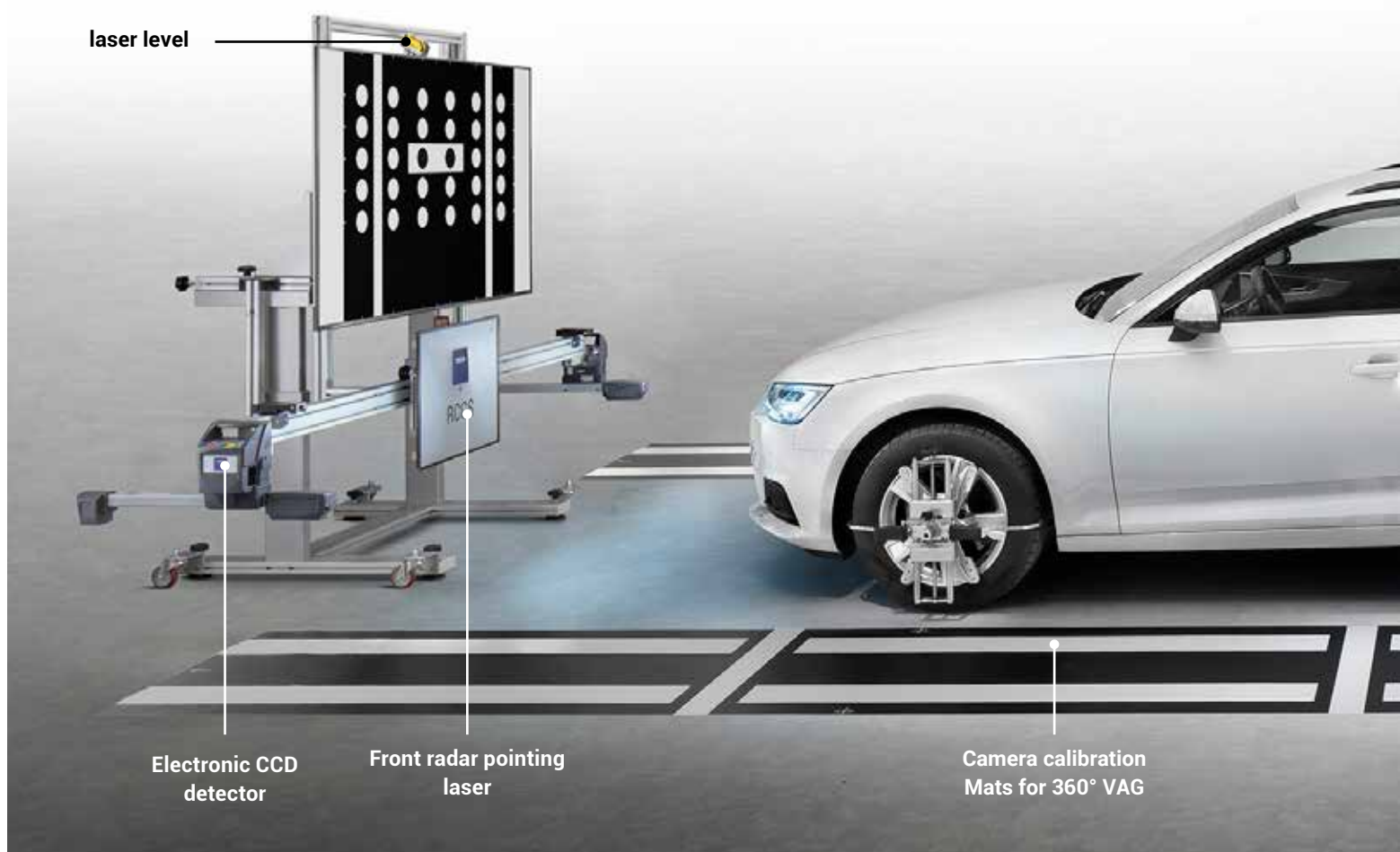
Furthermore, it is important to highlight that it does **not deform nor resize** the images.

This way workshops are sure to operate in the most correct safe way, without risking alterations the vehicle's behaviour on the road.

RCCS 3 communicates with the IDC5 software and guides the mechanic, step-by-step, to the quick and automatic identification of the vehicle. The panel is selected and set in the monitor, with no possibility of error.

Thanks to continuous **software updates** that each time offer new vehicles and eventually new panels, and to the essential **help sheets** edited per make and model, users are sure to complete any operation with maximum precision and to the highest standards, relying on an extraordinary coverage.

Furthermore, the digitalisation of the panels allows **clearing considerable space in the workshop** that would otherwise be occupied by multiple physical panels.





**1:1 proportion ratio**  
in line with  
the specifications  
of every manufacturer

**Robust, but easy  
to move and adjust**

**Easy to use**  
thanks to the digitalisation  
of the panels



Clamp on wheel rim with CCD  
electronic detector

ACS device

Doppler  
simulator



# Intelligence and safety thanks to the Mini “on-board” PC

An actual **Mini PC** built into the unit, installed in the RCCS 3 guarantees the use of an intelligent system that **synchronises the ICD5 software and the TEXA unit perfectly.**







The **images** of the panels are transmitted and **positioned automatically**, based on the vehicle selection made. They are displayed through a linear, safe and quick process.



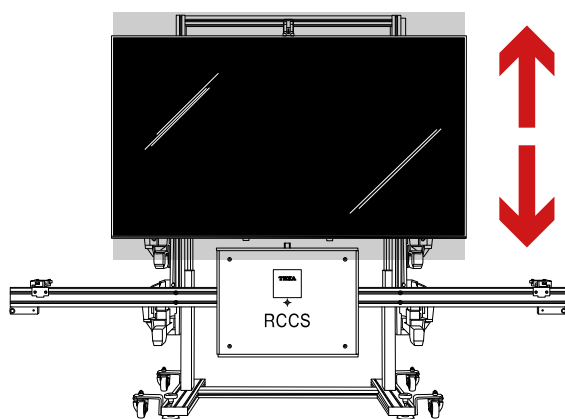
# Precise, simple and quick adjustments and movements

RCCS is made up by a very robust main support, which height can be adjusted thanks to its electrical operation. Using practical knobs, **it can be easily adjusted laterally & tilted forward**.

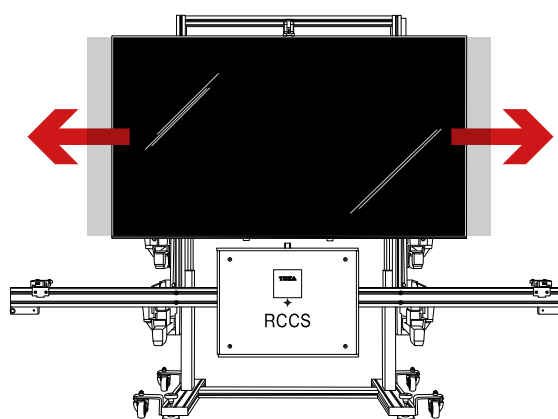
An adjustment wheel and a laser level allow also performing accurate side movements. On top of the unit there is another laser level, very useful for finding the centre of the vehicle simply pointing it onto the front logo. The horizontal adjustment bar is equipped with two distance measurers and a reflecting plate, the latter with a central laser for the front radar's aiming.

RCCS 3 is easy to move within the workshop thanks to its **oversized pivoting wheels**.

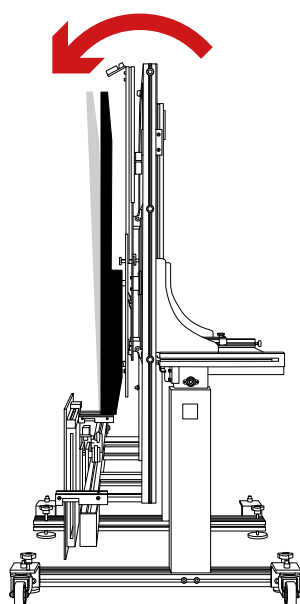
This technological equipment allows positioning RCCS 3 and aligning it correctly with respect to the vehicle and to the floor **easily**, with **absolute precision** and in complete **safety**.



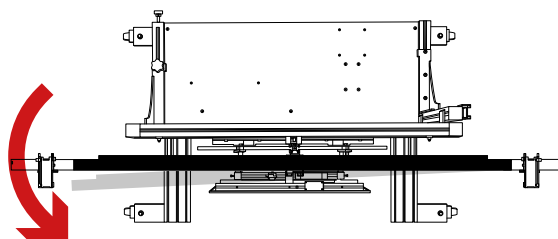
***Vertical moving***



***Side shifting***  
*only in the version*



***Forward tilting***



***Rotation & Adjustment***

*Side shifting*

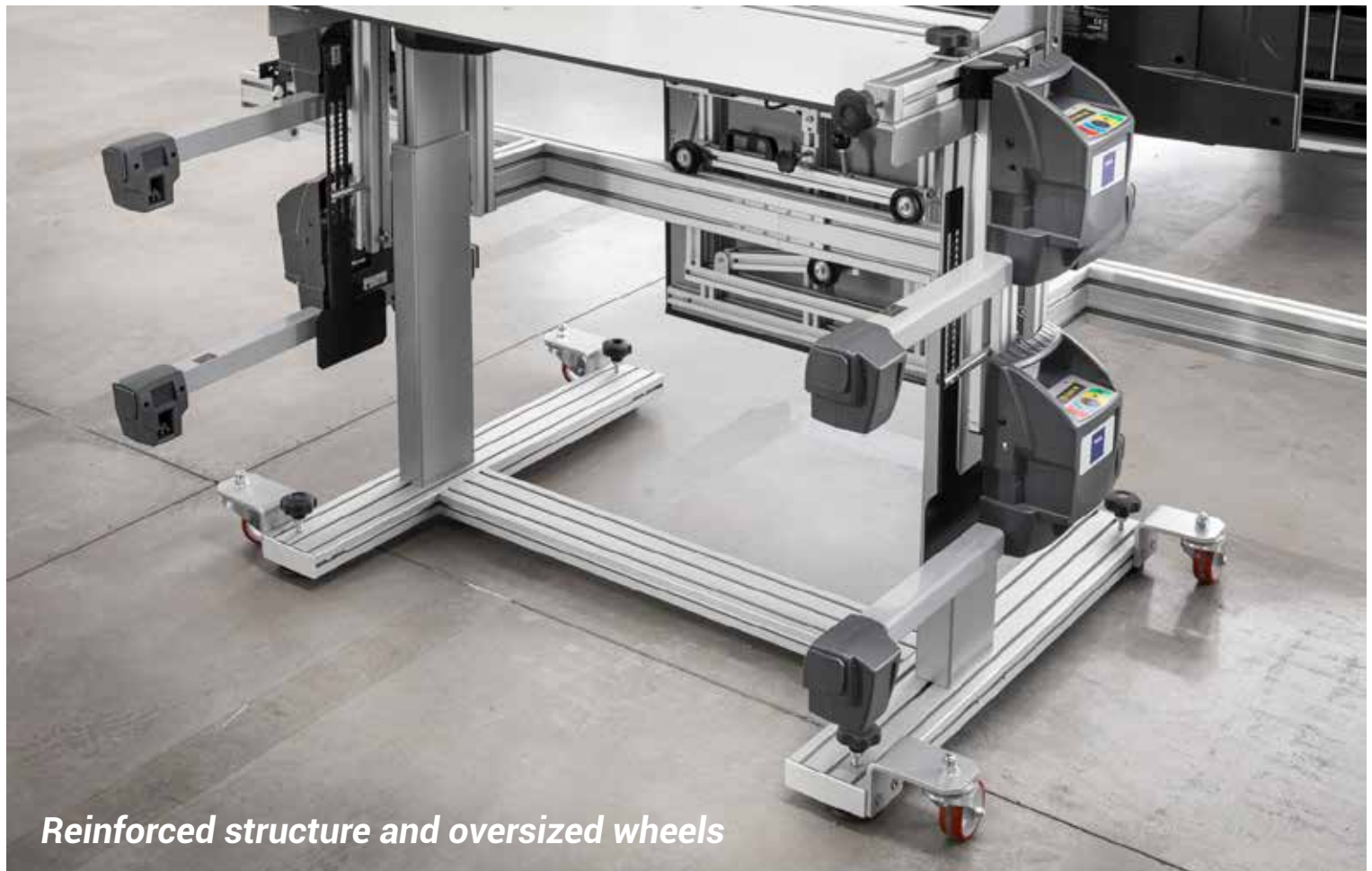




***Rotation & Adjustment***  
*Version with Monitor and with Panels*







# Absolute accuracy a complete, turnkey job

Before any calibration, other than verifying the alignment of RCCS 3 with respect to the vehicle, it is important to also check the **wheel alignment of the vehicle** you are working on.

To this end, in order to offer an even more complete and professional service, RCCS 2 and RCCS 3 Digital, in both versions, can be equipped with **four CCD electronic detectors** that can be installed either on the wheels, using the rim-clamping system, or on the sides of the horizontal adjustment bar.

The lightness of the detectors and the absence of connection cables between the front and the back, confer maximum practicality and **absolute accuracy** when measuring the vehicle angles.

Truly a **complete, turnkey job**.







# An ad-hoc solution for wheel alignment and toe

The high accuracy when checking the vehicle alignment is also guaranteed by the use of the **TOE AND THRUST ANGLE CHECK**, the software application that allows carrying out two types of operations:

- a **quick check of the alignment** of RCCS 3 digital with respect to the vehicle's thrust angle and to the workshop's floor;
- checking the **wheel toe**.

These procedures are essential for preparing the vehicle for the following camera and/or radar calibration phase.



*CCD electronic detector, equipped with infrared sensors.*



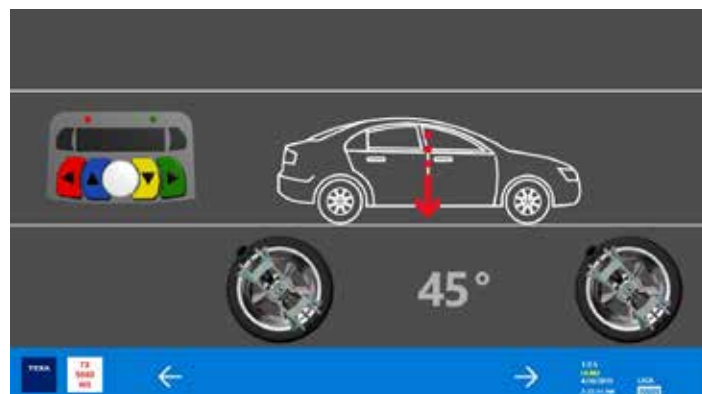
## How it works

The operator first fits the four CCD detectors to the wheels and checks wheel alignment. He then removes the CCD sensors from the front wheels and mounts them on the RCCS 3's adjustment bar to align the structure correctly with respect to the vehicle's thrust line (referred to the back axle).

Below there is a practical example of **unit alignment** and **wheel toe** using the dedicated software:



During the wheel alignment check, the software lets you enter the diameter of the tires, then displays the nominal ranges for toe, semi-toe and thrust angle.



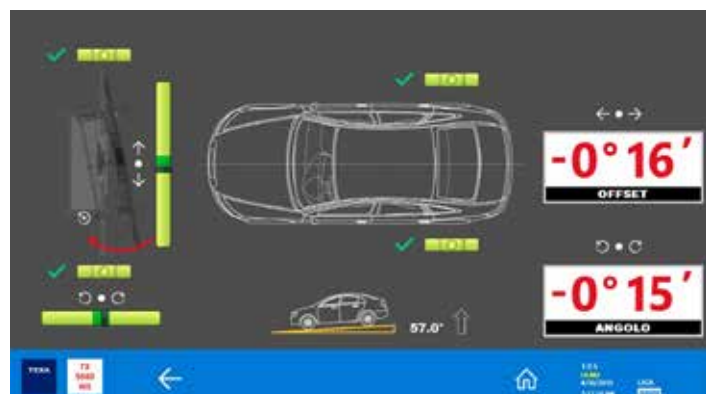
Mount the 4 sensors on the clamps and check run out. Push the vehicle back until the clamps are at an angle of 45°. Now push the vehicle forwards to return the clamps to the vertical position.



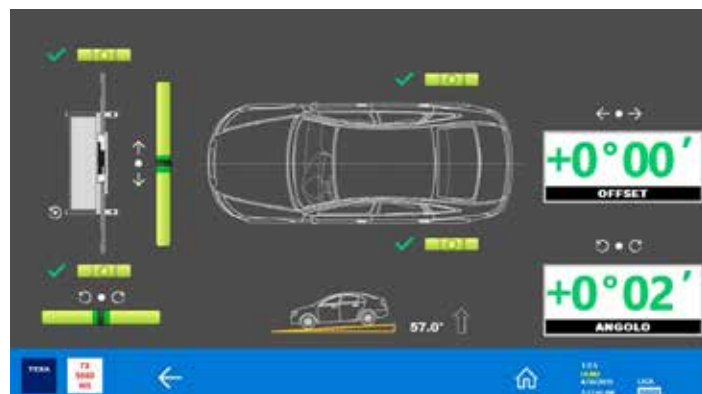
The 4 CCD detectors must be parallel to the work surface and the steering must be centralised. When these conditions are achieved, the display reads out "STOP".



Summary screen showing data measured by the four CCD sensors compared to the manufacturer's nominal figures. Provided the measured values fall within the range of tolerance, the RCCS 3 structure can now be positioned.



The message "OFFSET" shows how much the RCCS 3 structure is misaligned with respect to the vehicle's centreline. "ANGLE" shows the structure's angle of yaw with respect to the vehicle's centreline.



The structure is correctly aligned with the vehicle and the radar or camera system can now be calibrated.

# Excellent Performance even with the optical alignment

As well as the version with toe and thrust axis check, RCCS 3 is also available in the **highly performing optical alignment** mode. This configuration uses **wheel clamps** and was designed to complete all the operations on radars and cameras in a quick and precise way.

In order to align the vehicle, two practical aiming targets are used, onto which the lasers of the two distance measurers on the unit's main axis are addressed.



## Latest generation laser technology

The distance measurers provided by TEXA are the ideal solution to meet the most severe professional and precision criteria requested by workshops worldwide.





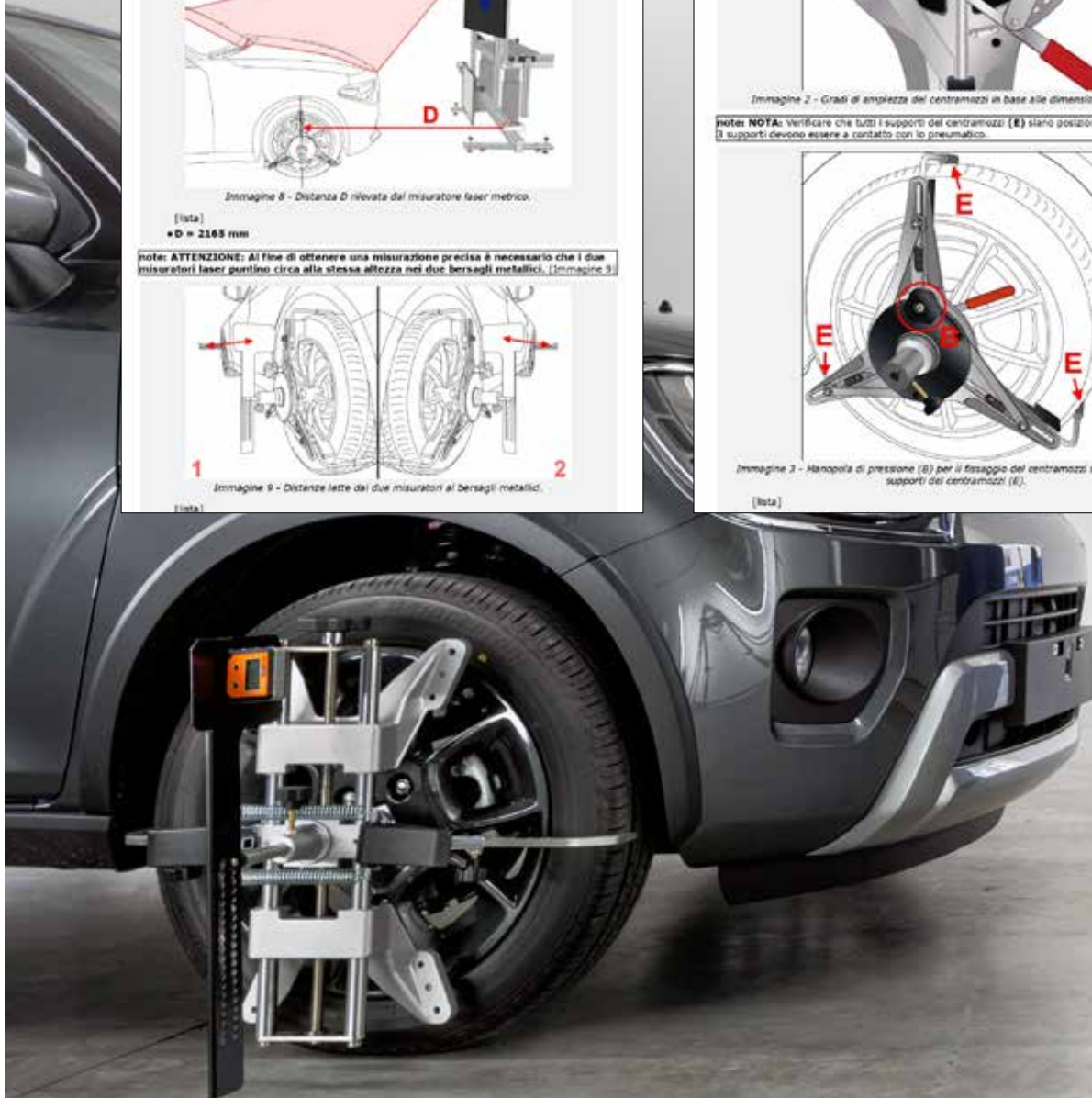
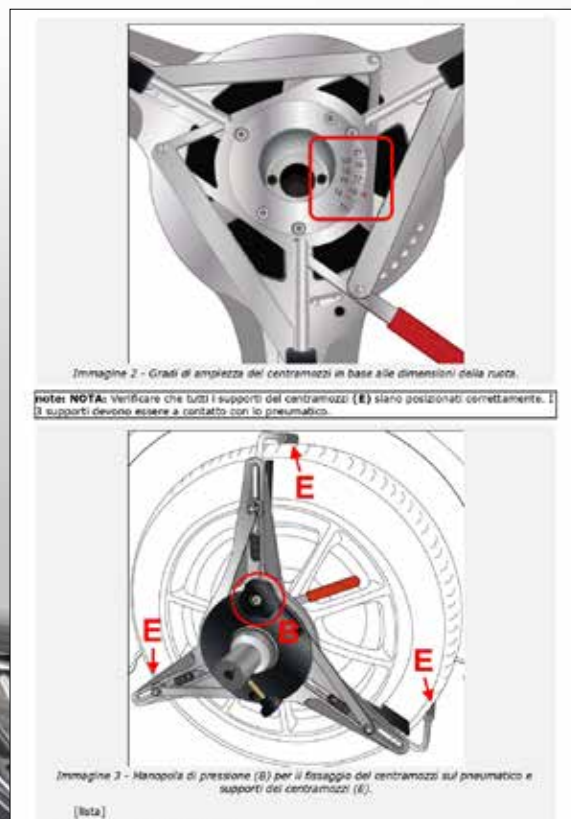
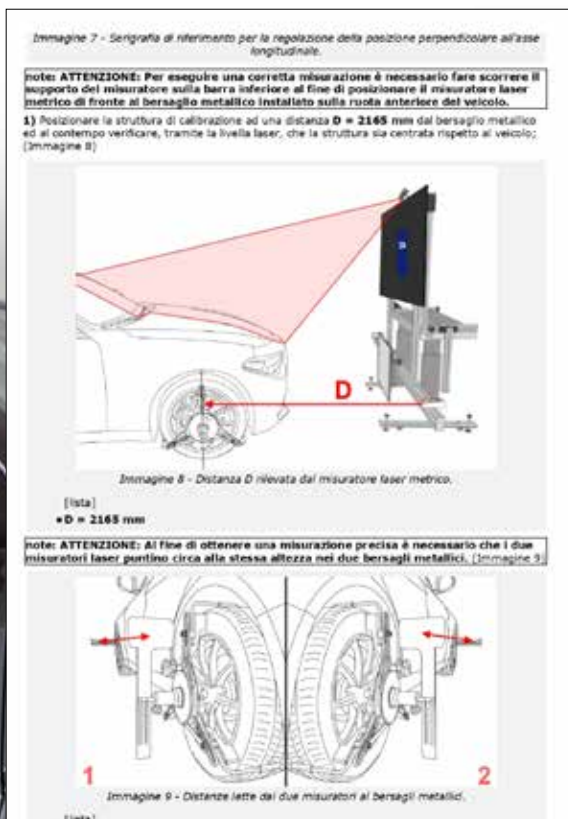


# With the IDC5 software information to support all operations

TEXA's solutions must be used in combination with the **IDC5 diagnostic software** that allows completing any operation quickly.

In fact, the application provides specific **diagnostic help sections** for each make/model, with the instructions (such as panel height, distance from the vehicle, alignment, etc.) for the **correct positioning of the unit**, guiding you step-by-step throughout the procedures.

Furthermore, at the end of the calibration, you can print a report to hand over to the customer with the evidence of the operations carried out.







# A large range of accessories for a complete solution

TEXA's ADAS solutions can be used in combination with other optional devices to work in depth on other electronic driver assistance systems, among which:

## ACS (All-Around Calibration System)

ACS allows **calibrating 360° cameras and Dopplers\*** for **VAG Group** (AUDI, SEAT, SKODA, VOLKSWAGEN, LAMBORGHINI) vehicles.

It is made up by an aluminium structure that has two horizontal panels and two vertical magnetic boards. The base has three housings for three distance measurers dedicated to verifying the correct alignment with respect to the vehicle.

TEXA's solution is featured by a **great practicality** being equipped with wheels that allow moving quickly within the workshop.



\* The rear and side radars can be calibrated using the TEXA Doppler Simulator.

## IR Calibration Target and Night Vision System

They are two very useful accessories as they allow **calibrating the infrared camera**, in a short time and with maximum precision, for the **Mercedes** and **VAG Group** vehicles in which it is installed. It is an essential device from the point of view of road safety, which helps drivers detect in advance people or animals in the dark. Positioned in front of the vehicle, the IR Calibration Target and Night Vision System **simulate the presence of a warm body**.





## Blind spot radar reflector

It is an essential device for calibrating the ultrasonic radars installed in vehicles of the makes **HYUNDAI, HONDA, KIA, LEXUS, MAZDA, MITSUBISHI, SUBARU, TOYOTA**. It is made up by a metal reflector cone, a laser and a goniometer jig to help the technician position the pyramid cone correctly. It can be used both for the **front radars** and for the **side** and **rear** radars.



## Doppler Simulator

This accessory also is needed to calibrate the blind spot radar. However, in this case it is an active simulator that responds to the frequency generated by the rear radar in **MAZDA** and **VAG Group** vehicles.

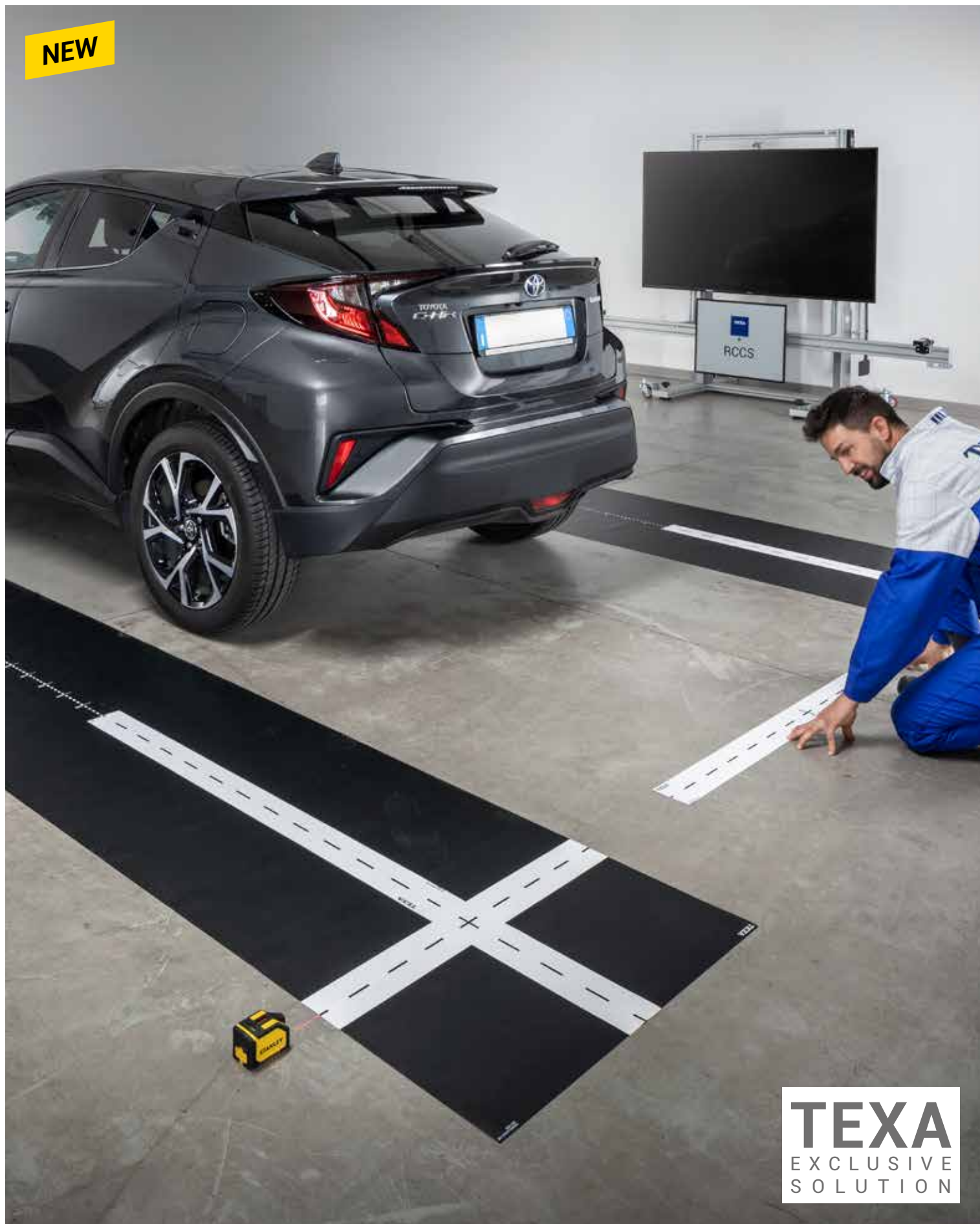




## 360° mats for TOYOTA, LEXUS, SCION and SUZUKI

A modular kit that allows calibrating the 360° vision system in **TOYOTA**, **LEXUS**, **SCION** and **SUZUKI** vehicles equipped with this technology.

**NEW**



**TEXA**  
EXCLUSIVE  
SOLUTION

# Calibration targets and accessories

To calibrate different ADAS components, RCCS 3 uses **47 special panels and accessories** covering the models of **90 manufacturers**.

## CAR calibration targets



**CITROEN/PEUGEOT, KIA/HYUNDAI,  
FIAT 500X, FIAT DUCATO X290,  
JEEP RENEGADE Type 2**  
(front)



**MERCEDES**  
(front)



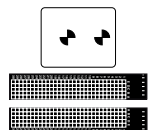
**NISSAN/INFINITI**  
(front)



**NISSAN Type 1**  
(front)



**NISSAN Type 2**  
(front)



**RENAULT/SMART**  
(front)



**VAG**  
(front)



**TOYOTA Type 1**  
(front)



**TOYOTA Type 2**  
(front)



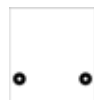
**HONDA**  
(front)



**HONDA Type 2**  
(front)



**ALFA ROMEO Type 1**  
(front)



**MAZDA**  
(front)



**MAZDA Type 2**  
(front)



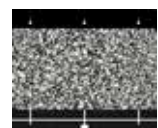
**SUBARU with calibration jig**  
(front)



**MITSUBISHI/SUZUKI**  
(front)



**KIA/HYUNDAI**  
(front)



**SUZUKI IGNIS/ISUZU TRUCK**  
(front)



**IVECO DAILY**  
(front)



**DAIHATSU Type 1**  
(front)

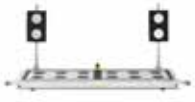


**DAIHATSU Type 2**  
(front)

The targets can be perfectly integrated with the RCCS 3 and CCS.

Check the complete and always up-to-date ADAS coverage: [www.texa.com/diagnostic-coverage](http://www.texa.com/diagnostic-coverage)

## Additional kits



**ACS** (All-Around Calibration System)



Doppler Simulator  
**VAG** and **MAZDA**



Radar Calibration Frame  
**MAZDA**



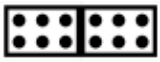
**VAG night vision**  
(front)

**NEW**



**MERCEDES night vision**  
(front)

## CAR 360°/rear camera calibration



**VAG**  
(rear)



**VAG**  
(360° cam.)



**MERCEDES Type 1**  
(rear)



**MERCEDES Type 2**  
(rear)



**OPEL INSIGNIA**



**TOYOTA, LEXUS,  
SCION, SUZUKI**  
(360° cam.)

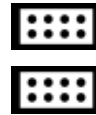
**NEW**



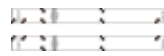
**NISSAN QASHQAI**  
(rear)



**MITSUBISHI**  
(rear)



**MITSUBISHI, NISSAN, MAZDA**  
(360° cam.)



**KIA/HYUNDAI**  
(rear)



**NISSAN X-TRAIL**  
(rear)



**SSANGYONG**  
(rear)

**NEW**

## CAR radar calibration



Positioning jig kit  
**RADAR VOLVO**



**LASER SCANNER (LIDAR) VAG**  
(front)



Blind spot cone support kit



Blind spot cone  
**TOYOTA/SUBARU/HONDA**



Blind spot cone  
**KIA/HYUNDAI/MAZDA**



Blind spot cone  
**MITSUBISHI**



# Specific training for the world of ADAS

TEXA believes offering customer training to be particularly important. Adequate technical competence and the correct use of diagnostic tools are critical factors for the success of a workshop business.

The teaching methods used in the courses are based on an ideal mix of theory and practical elements.

Practice plays a fundamental part, as it combines testing and simulations with the TEXA diagnostic tools owned by the repairers, stimulating a more active and dynamic participation and effective learning.

## **AOM 230 ADVANCED DRIVER ASSISTANCE SYSTEMS (ADAS) FOR CAR**

**AIM:** From 31st March 2021 any vehicle repairer should follow UK Insurance Industry Requirements (IIR) for safely repairing vehicles equipped with advanced driver assistance systems. This course will give the candidates the knowledge and certification to meet the new legislation.

There are both theory and practical elements to the course so that candidates can practice what they have learnt.

**DURATION:** 2 Days

**For more information on the course, please email [edu.uk@texa.com](mailto:edu.uk@texa.com).**

## **D9T: DIAGNOSIS AND CALIBRATION OF THE DRIVER ASSISTANCE SYSTEMS - TRUCK ADAS**

**AIM:** By attending the D9T course, you will study the technical features and operating modes of the advanced driver assistance systems on heavy-duty vehicles, such as the lane departure warning, adaptive cruise control, blind spot detection.

Furthermore, the teaching module helps learning the position and functions of the technologies involved: radars, multifunction camera, sensors and actuators, infrared camera, ultrasonic sensors. Practical examples of static and dynamic calibration will be introduced, performing diagnostic and troubleshooting procedures using TEXA equipment.

**DURATION:** 8 hours



# TEXA

Founded in Italy in 1992, TEXA is today a world leader in the design, industrialisation and production of multi-brand diagnostic tools, exhaust gas analysers, air conditioning charging stations and telediagnostic devices, for cars, bikes, trucks, boats, and agricultural vehicles. TEXA is present all over the world with a widespread net of distributors: it commercialises directly in Brazil, France, the UK, Germany, Japan, Spain, the US, Poland and Russia through its subsidiaries. TEXA currently employs more than 700 people around the world, including over 150 engineers and specialists working in Research and Development. Over the years, TEXA has received a large number of prizes and awards for innovation, in many countries worldwide. All TEXA tools are designed, engineered and built in Italy, using extremely modern automated production lines which guarantee maximum precision. TEXA is particularly committed to the quality of its products: it obtained the strictest certifications, such as the TISAX (Trusted Information Security Assessment Exchange), a standard defined by the VDA, the German Association of the Automotive Industry, which guarantees the highest level possible of information and know-how protection against increasingly frequent cyber-attacks. It joins other certifications, such as the IATF 16969, specific for first automotive suppliers; the VDA 6.3, another method by German manufacturers that established itself as an international point of reference; and the ISO/IEC 27001 in the information security field.

## WARNING

The trademarks and logos of vehicle manufacturers in this document have been used exclusively for information purposes and are used to clarify the compatibility of TEXA products with the models of vehicles identified by the trademarks and logos. Because TEXA products and software are subject to continuous developments and updates, upon reading this document they may not be able to carry out the DIAGNOSTICS of all the models and electronic systems of each vehicle manufacturer mentioned within this document. References to the makes, models and electronic systems within this document must therefore be considered purely indicative and TEXA recommends to always check the list of the "Systems that can be diagnosed" of the product and/or software at TEXA authorised retailers before any purchase. **The images and the vehicle outlines within this document have been included for the sole purpose of making it easier to identify the vehicle category (car, truck, motorbike, etc.) for which the TEXA product and/or software is intended.** The data, descriptions and illustrations may change compared to those described in this document. TEXA S.p.A. reserves the right to make changes to its products without prior notice.



To check out the extensive coverage of TEXA products, go to:  
[www.texa.com/coverage](http://www.texa.com/coverage)

To check on IDC5 compatibility and minimum system requirements, go to:  
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