



Manual



Version 1.4.5

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1 General safety instructions

The Setup Wizzard by CP autosport simplifies and accelerates the measurement of your chassis. However, the following precautions have to be observed in the application.

1.1 Intended Use

The Setup Wizzard is designed exclusively for the purpose specified by the manufacturer use.

To maintain functionality, the system has to be serviced once a year by the manufacturer.

The Setup Wizzard is used for chassis measurement of race cars.

The specifications of the operating manual must be observed for every application.

The Setup Wizzard can be used only for vehicles with a wheel load of up to 500 kg.

The setup Wizzard system is maintenance-free, besides the annual service.

1.2 Warnings on hazards due to misapplications

In case of improper use and disregard of notes following hazards may occur:

The measured values can be falsified.

The system could be damaged (mechanically and/or electrically).

The platforms could tilt.

The vehicle could be damaged especially in the area of chassis components and brakes.

When ignoring the safety instructions the user could be injured.

1.3 Description of protection measures

To avoid the above-mentioned dangerous situations as good as possible, please note the following:

The immediate work area around the vehicle to be measured has to be shut off.

Commissioning and operation of the system may only be performed by trained personnel.

The Setup Wizzard can only be used on a flat and stable surface.

The height difference between the footprints of the platforms must not exceed 45 mm.

The system is approved for vehicles with a maximum wheel load of 500 kg.

Depending on the selected version of the Setup Wizzard, the wheel load, inclinometer and track lasers must be calibrated annually to ensure precise operation permanently.

If the optional jack stands are used, the aid of another protection (for example, accordingly positioned jack stands) need to be used to work under the vehicle.

It must be avoided at all times, to look directly into the laser beam!

Moreover, hazards can occur in the field of electrical- and moving parts (for example, accumulators, insert plates).

The complete setup Wizzard system must be stored in the included flight case and must be protected against moisture and salt water at all times.

Lids and drawers of the flight case are to be closed with both hands. The flight case shall not stay open.

Lifting the flight case must be done with at least two persons.

2 Introduction

Dear Customer,

Thank you for choosing the CP Setup Wizzard.

This manual shows you the functionality of the CP Setup Wizzard and explains the work with the system and its components step by step.

The CP autosport GmbH wishes you a lot of success for the future and is available for questions and problems you may have.



3 Advantages of the Setup Wizzard

During the measurement, the vehicle is not on the tire, but on the setup wheels. Thereby, the accessibility to the chassis components is much easier.

Variations in dimensions and stiffness of the tire due to manufacturing tolerances, the air pressure and wear do not effect the measurement.

The ball rolls of the setup wheels eliminate the friction in the contact patch almost completely. Thereby, the chassis can move free of forces in the wheel contact patch.

In summary, it can be said that the CP Setup Wizzard wheel significantly simplifies and accelerates the chassis-measurement and -adjustment. It can now be carried out by just one person without any problems within the shortest possible time.

By radio transmission, no disturbing cables are needed and the mounting and dismounting of the system is much faster.

The complete measuring system is housed in a compact flight case for safe and easy transportation.

The consistent system with quality components increases the measurement accuracy and repeatability significantly.

In addition, the likelihood of human error is drastically reduced by the automated processes.

Another advantage of the system is that the measurement wheels can be changed universally. There is a wheel adapter, which can be replaced easily and inexpensively, in case the connection to the vehicle or the entire vehicle is changed.



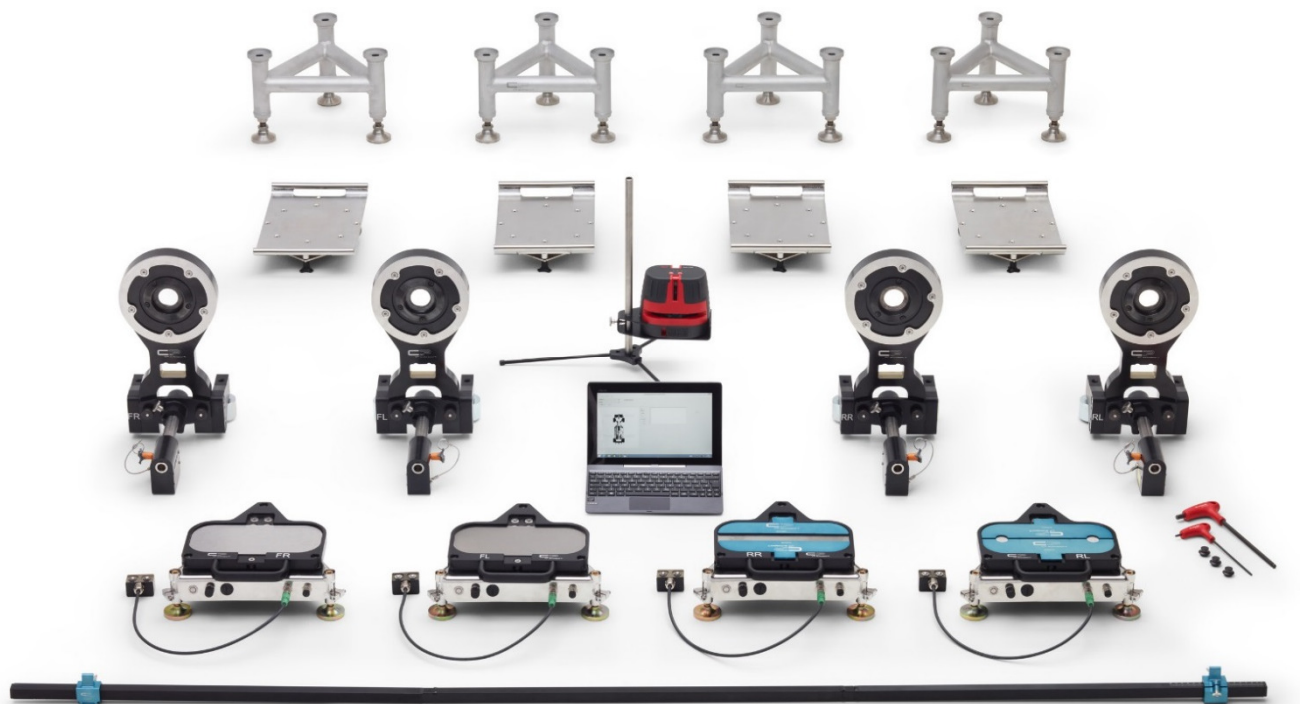
4 Scope of delivery

The scope of delivery of the measuring-wheel system includes the following (depending on the version):

- 1 transport box
- 4 measurement platforms
- 4 setup wheels with vehicle-specific wheel adapters
- 4 inclinometers with 0,5m data cables
- 2 sets insert templates (2 + 2)
- 1 levelling laser with accessories (stand + 3 levelling sleeves)
- 1 netbook
- 4 toe measuring laser
- 1 battery chargers
- 8 eneloop accumulators
- 1 three-part gauge ruler
- 2 Allen keys (to align the platform)

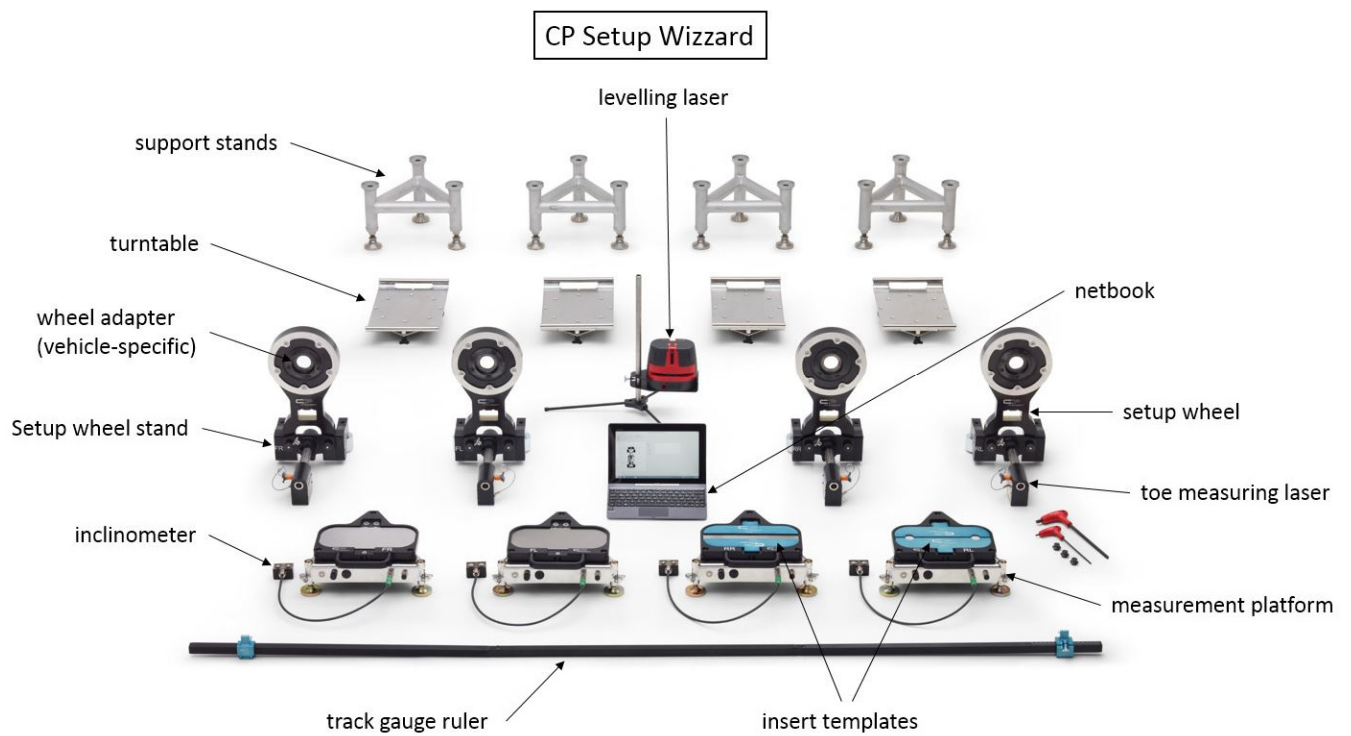
Optional:

- 4 safety stands
- 1 tarpaulin including 4 template plates
- 1 digital levelling scale
- 4 turnplates
- 4 track rulers
- 1 height gauge



5 Overview of the components

This chapter is a brief overview of the individual components of the Setup Wizzard by CP autosport. Setup Wizzard is both the name of the overall system and the software.



6 Preparation and mounting

The following section describes and explains the mounting and the adjustment of the CP Setup Wizzard step by step.

6.1 Adjusting the universal feet of the setup wheel

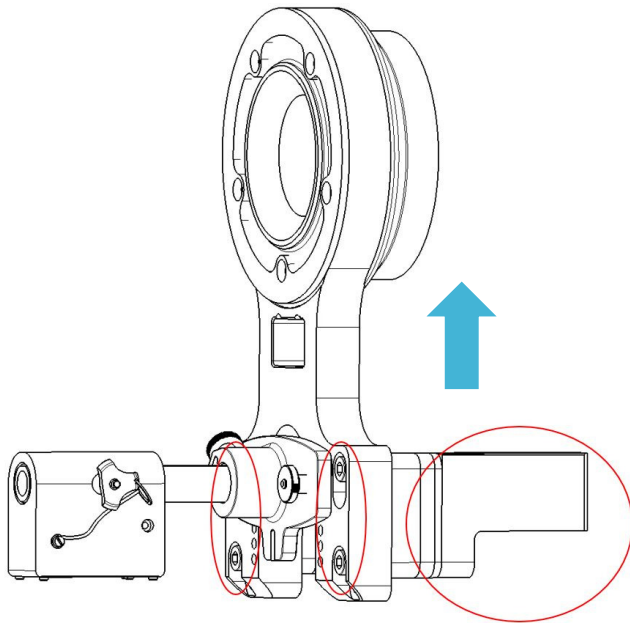
The universal feet of the setup wheel have to be adjusted to the static tire radius and the offset of the rims. To this end, the vehicle standing on the tires is measured and the real tire radius is determined. This radius is adjusted using the various shims (1mm, 2mm, 4mm, 8mm) and the different foot positions. Doing so, the foot can also be rotated, to realise a wider range of adjustment (possible radius: 300 mm - 360 mm).

The first foot position (upper screw connection, foot flat side up) has a wheel radius of 300 mm without shims. By means of shims, the radius can be increased to 315 mm in 1mm increments. The second foot position (lower screw connection, foot flat side up) has a wheel radius of 315 mm (up to 330 mm by means of shims). In the third foot position (upper screw connection, flat side turned down) the wheel radius is 330 mm (up to 345 mm by means of shims). In the fourth foot position (lower screw connection, flat side turned down) the wheel radius is 345 mm (up to 360 mm by means of shims).

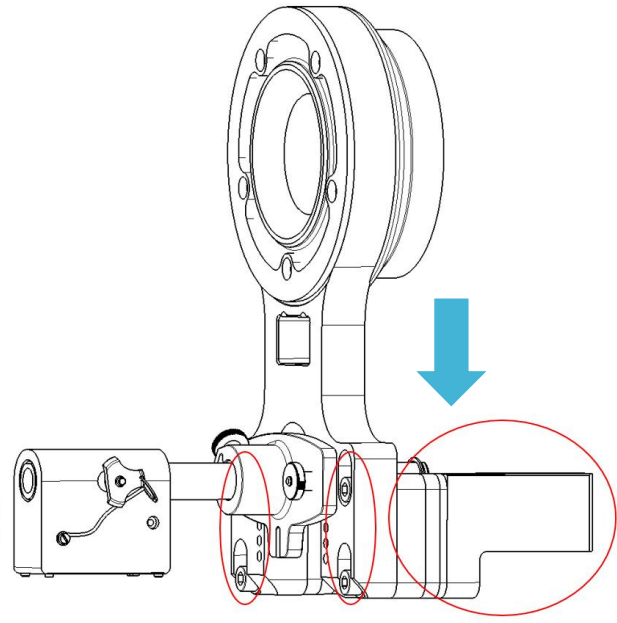
The offset (position of the spherical rollers) can also be adjusted using shims (5mm, 10mm and 20mm) and two slot positions (possible offset: 10 mm - 77.5 mm). With help of the offset of the setup wheels, the responsiveness of the measurement system to camber angle changes at the vehicle can be adjusted to the behaviour of the vehicle wheels.

Overview of setting options

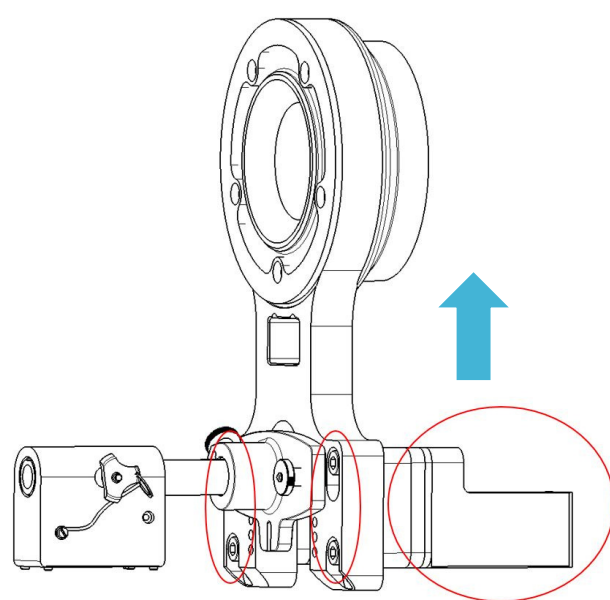
Position		Setting area	
Foot	Roller	Height [mm]	Offset [mm]
1		300-315	
2		315-330	
3		330-345	
4		345-360	
	A		10-50
	B		37,5-77,5



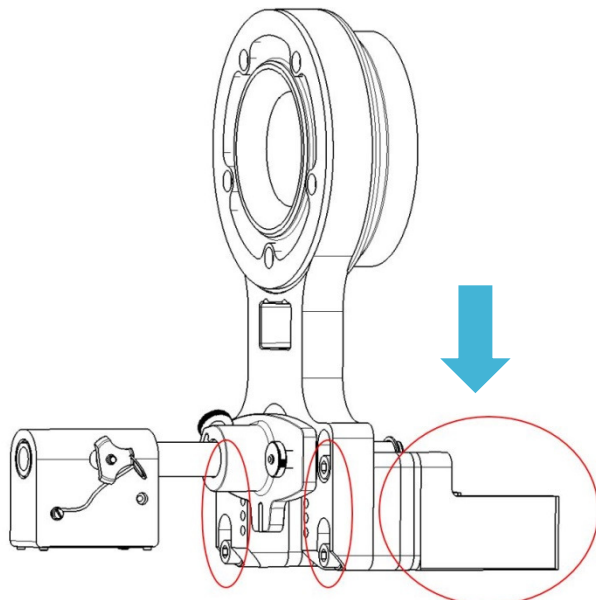
foot position 1



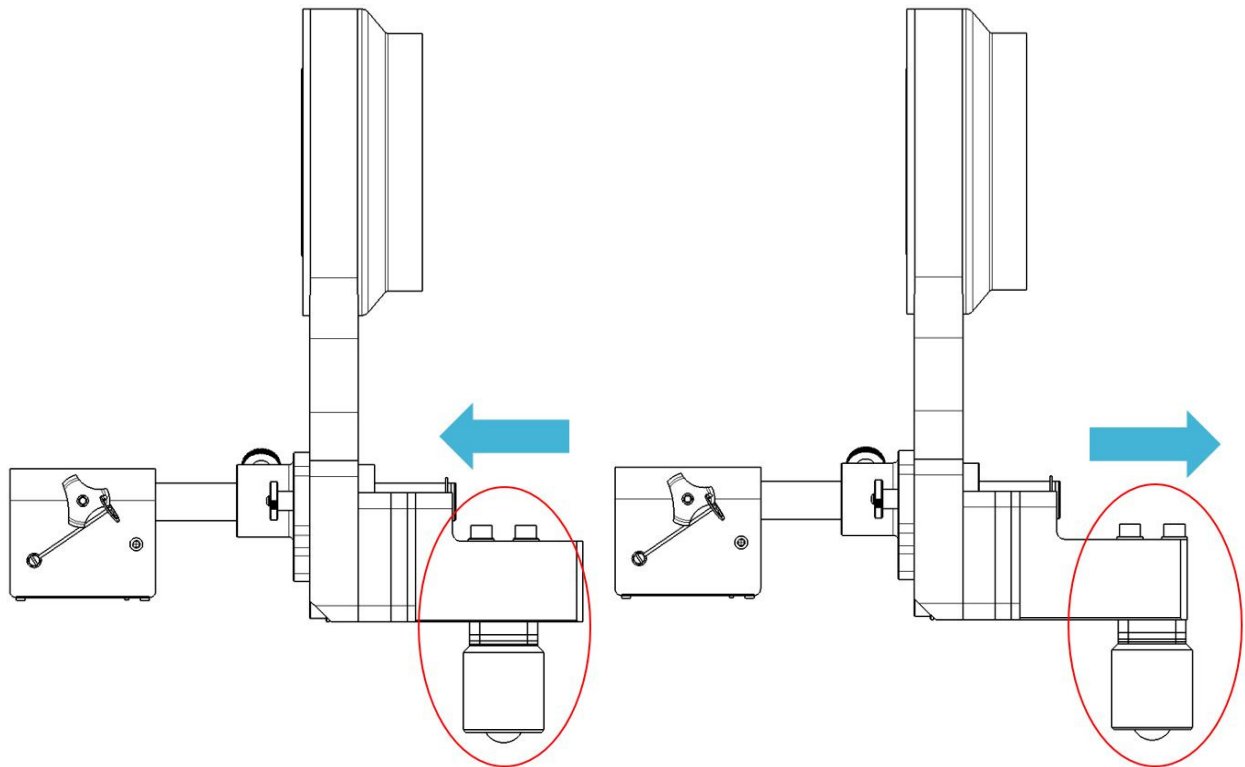
foot position 2



foot position 3



foot position 4

*ball roller position A**ball roller position B*

Important

Screw depth depending on shim package:

M10: min. 15mm / max. 20mm

M8: min. 5mm / max. 16mm

6.2 Positioning the measurement tables

First, the vehicle is lifted on the desired position and the 4 measuring tables below are put up. The centre of the table footprint should be located as close as possible below the wheel contact point.

To simplify this adjustment for future measurements, a separate positioning template can be created, or the optional supplied tarpaulin with template plates can be used.

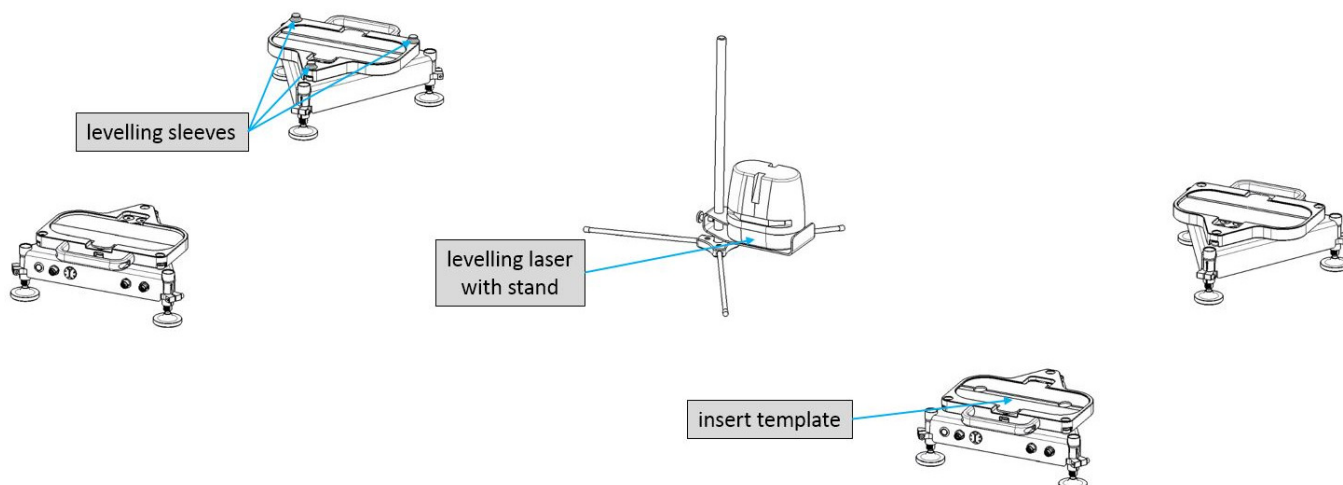
Important

The labelling of the measuring wheels and wheel load scales must be respected and complied with:

FL	= Front Left
FR	= Front Right
RL	= Rear Left
RR	= Rear Right

6.3 Levelling the measuring tables

The four measuring tables have to form a horizontal, flat surface. The levelling laser is placed on its stand at a fixed point on the ground between the four measuring tables. For a more precise alignment, we recommend shortening the laser stand and positioning it centrally under the vehicle. The laser must not be moved during the alignment of the measurement tables. The three levelling sleeves are sequentially inserted into the boreholes of the measuring tables.



Now the levelling laser is switched on and, if necessary, adjusted in height. During operation of the laser, it is essential to ensure that the pendulum is not beside the stop (no laser beam visible/"TILT" LED blinks). The feet of the measuring tables are adjusted with an 8-Allen key, so that the laser beam coincides with the marking of the levelling sleeves. When all the tables are adjusted, the feet are secured to prevent tampering with an 4-Allen key and the levelling laser is switched off.



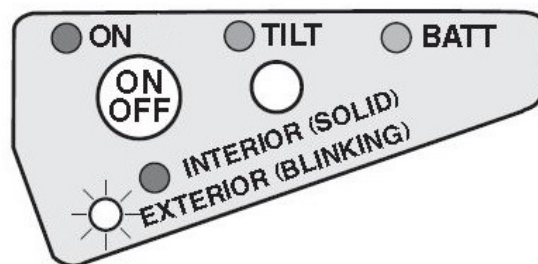
Do not look directly into the laser beam!

Explanations regarding the display of the levelling laser:

ON/OFF	push once: on Push twice: blinking beam Push 3 times: off
TILT	laser pendulum at stop
BATT	battery empty
INTERIOR	constant beam for inside use
EXTERIOR	blinking beam for outside use

Important

Follow the manual of the laser!





The feet have an adjustment of **45 mm** and the optional safety stands have an additional adjustment of **90mm**.

6.4 Placing the vehicle on platforms

The 4 measuring tables are positioned and the vehicle can be prepared for the measurement. There are two different options for this purpose. ***Please note the safety instructions!***

6.4.1 *Use of setup wheels*

Now the wheels are replaced by the setup wheels. Please pay attention to the caption of the setup wheels. The wheels should be tightened with the same torque as the real wheels.

Thereafter, the measuring tables are placed back on the marked positions under the vehicle and the vehicle is then gently discharged on the ball rolls of the measuring wheels.

6.4.2 *Use of the turntables*

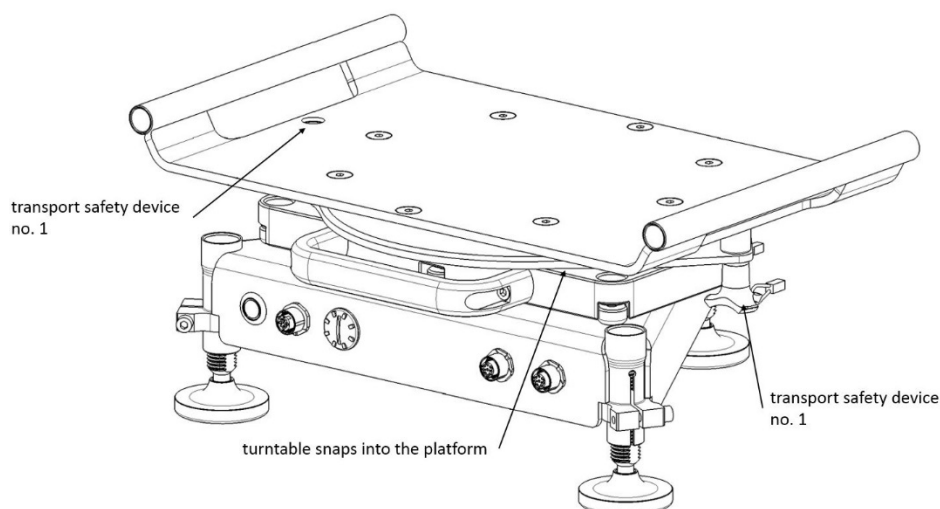
Please use the optional turntables to place the vehicle with its wheels on the platforms. These allow a tension-free compression of the chassis and steering movements during the measurements.

Caution: The use of the turntable is not permitted in combination with the safety stands!

Important

The vehicle has to be put as gently as possible on the platforms to avoid damage of the measurement technology. For lowering the vehicle on the wheel load scales, always remove the stencil sheets and reinsert them after the procedure. Without the inserted stencils, a measurement of the vehicle is not permitted!

The turntables are placed on the platforms so that they snap in the cavity of the platform and remove the transport safety devices. The vehicle is then carefully let down on the turntables. Here, care must be taken that the vehicle is let down as close as possible to the centre of the turntables. To work with the turntables no stencil sheets are needed.

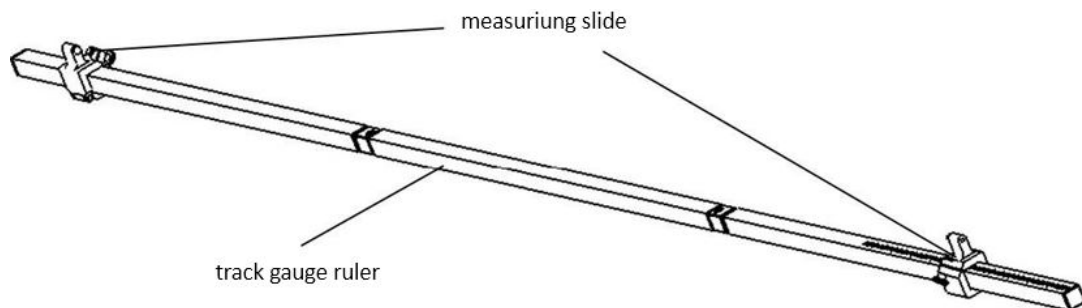


6.5 Toe laser adjustment

To consider the different axle geometries of the front and rear axles, the measuring wheels must be adjusted on the vehicle. The distance between the toe laser of the front axle must correspond to the distance of the laser of the rear axle and the lasers of one axis must be symmetrical to the centre of the vehicle.

To position the toe laser, the track width difference between the front and rear axle must be determined. Therefore, the track gauge ruler is used. There are two different versions of track gauge rulers.

6.5.1 *Track gauge ruler version 1*



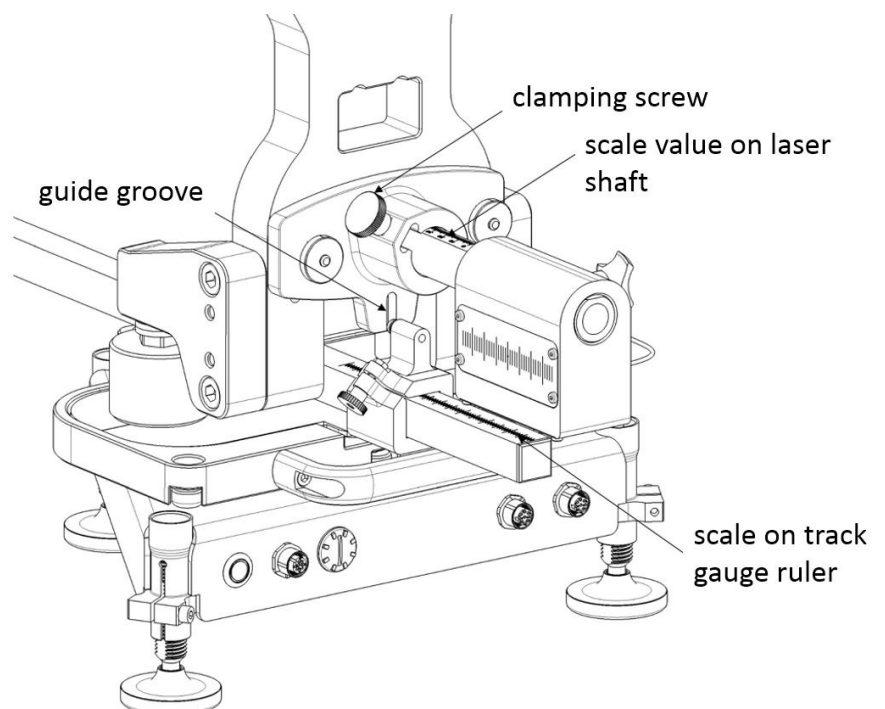
The first version of the track gauge ruler consists of three pipes, which are plugged together, and two measuring slides.

The toe lasers on the first axis are set at a fixed value on both sides by moving them on the laser shaft. The measuring slide on the scale side of the gauge ruler is set to this value and fixed. After that, the gauge ruler is held at the first vehicle axle. Therefore, the gauge ruler is pushed through between the feet of the setup wheel. The fixed measuring slide is pushed into the guide groove. The second measuring slide (on the side without scale) is now moved on the gauge ruler, so that it sits in the guide groove. For the further adjustment this second measuring slide should not be moved.

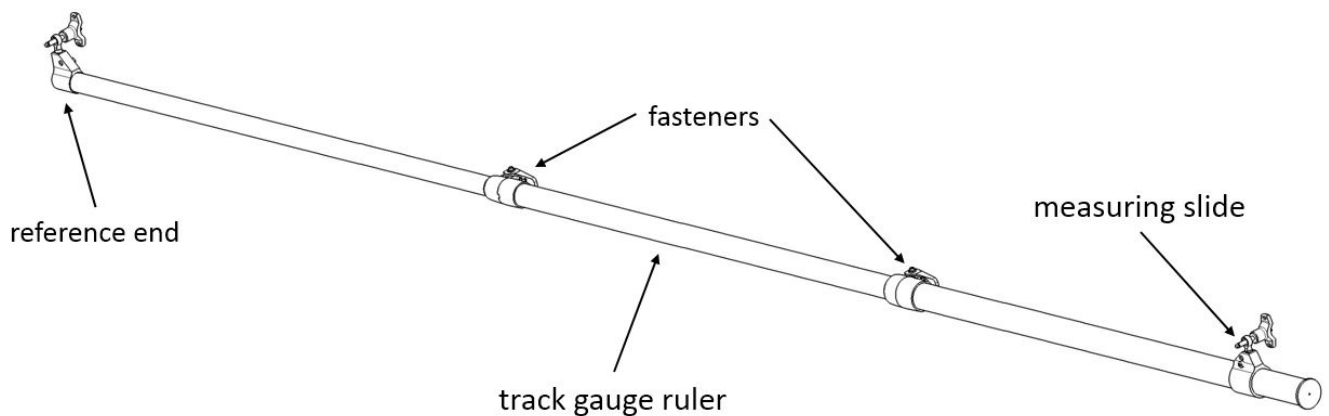
Thereafter, the operation is performed on the second axle. By moving the measuring slide on the scale side of the guide groove, the track width difference is recorded and can be directly read off. Due to the range in the scale of 1:2, the read off value can directly be set on both sides of second vehicle axle. Therefore, the track laser is moved in the dimension of the difference on the laser shaft.

Should the track width vary during the wheel alignment, for example by changes of the camber adjustment, the toe lasers have to be readjusted before the final track measurement.

It is advisable to mark the ruler to check that the slide is not misaligned.



6.5.2 *Track gauge ruler version 2*



The second version of the track gauge ruler consists of three telescoping tubes, which can be fixed with two fasteners. The measurement is executed between the fixed reference end and the measuring slide, whereby the measuring slide is moving on a range in the scale of 1:2.

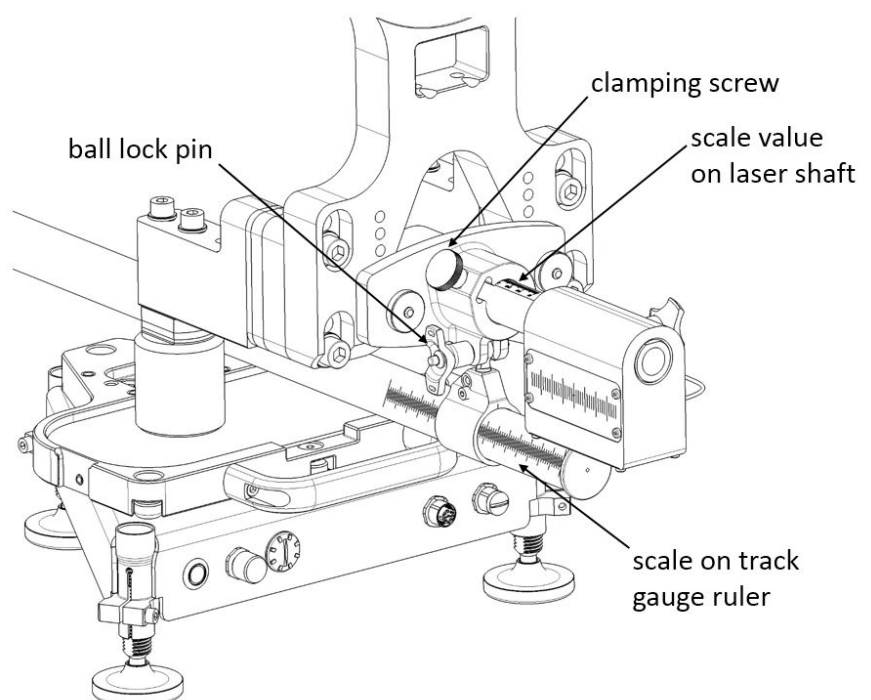
The track gauge ruler has to be pulled out to the right length and fixed for measuring the track width of the car. Once adjusted, the length between measuring front and rear axle must not be changed. A change of the length would falsify the results.

With the ball lock pins at the reference end and the measuring slide, the track gauge ruler is mounted at the left and right setup wheel of the first axle. After that, the measured value is read off at the measuring slide and adjusted double-sided on the laser shaft at the measured axle. The adjustment is made by releasing the clamping screw and moving the laser on the laser shaft.

Next the track gauge ruler (the length must not be changed!) is used to measure the track width of the second axle. Therefore the ruler is slid between the feet of the setup wheel and fixed analogue to the measurement on the first axle. The new measured value is double-sided (scale 1:2) adjusted at the laser shafts of the second axle.

If the track width should seriously change during chassis tuning, for example because of camber angle changes, the toe lasers have to be adjusted again before the final measurement.

It is advisable to affix a marking on the track gauge ruler to specify the length for future measurements.



6.6 Function test of the toe measuring laser

Before delivery, our CP Setup Wizzard components are subject to intensive quality controls and functional tests. This ensures that an accurate measurement of the vehicle is possible.

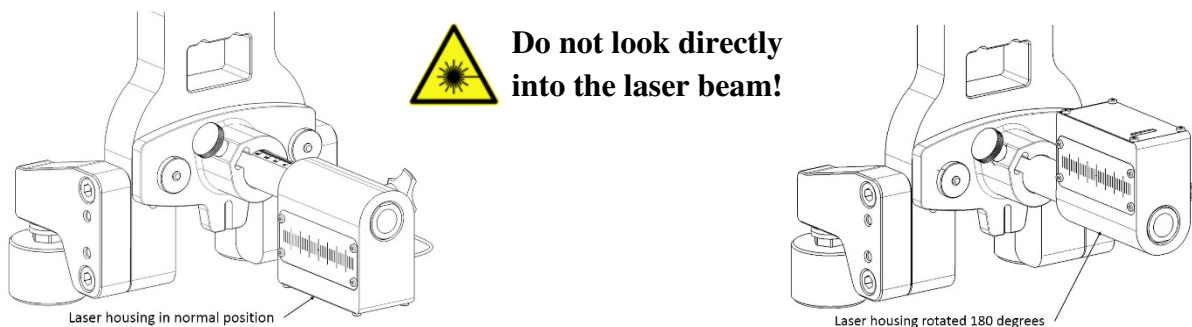
However, in order to ensure the correct functioning of the toe laser after inadequate use or improper storage, you can perform the following tests.

First, it must be ensured that the setup wheel is fixed completely and immobile.

The laser beam position is read off and recorded on the scale of the other axis or marked with a bar.

Thereafter, the ball lock pins, with which the laser housing is positioned on the laser shaft, is removed as well as the laser housing. The housing is rotated around the axis of the ball locking pins by 180 degrees, plugged onto the shaft again and fixed to the ball lock pins. The case is now headfirst above the shaft, but the laser beam is still in the same direction as before.

If the laser beam continues to point the same point as before the rotation, it is ensured that the laser housing is operating properly.



Now, it can still be examined whether the laser wave is straight or whether the mounting flange is perpendicular to the shaft.

To test the shaft, it is turned by 180 degrees around its axis, so that the scale on the shaft is at the bottom. The position of all the other parts will be maintained. If the laser beam points to the same point as before the rotation, it is ensured that the laser wave is straight.

The mounting flange can now also be rotated by 180 degrees around the shaft axis to test its perpendicularity.

6.7 Camber angle sensor adjustment

The camber angle sensor is calibrated and adjusted when shipped from the factory. It is recommended to check it and to adjust the zero point in regular intervals.

In order to adjust the zero point, the system is equipped with a calibration frame. This is placed on top of the platform, so that the two alignment pins slide into the bore holes provided. Please note that the magnets for the secure positioning are free of metal chips and that the frame rests on the platform accurately. Subsequently, the sensor is inserted. Here, the alignment of the sensor is important. When inserting into the frame, the spring-loaded elements in the sensor housing must point downwards towards the platform.

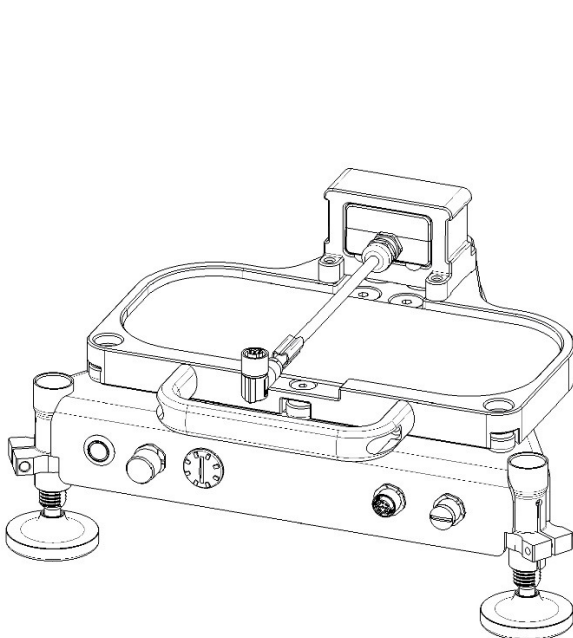


Abb. 6.7.1 Platform with calibration frame and sensor

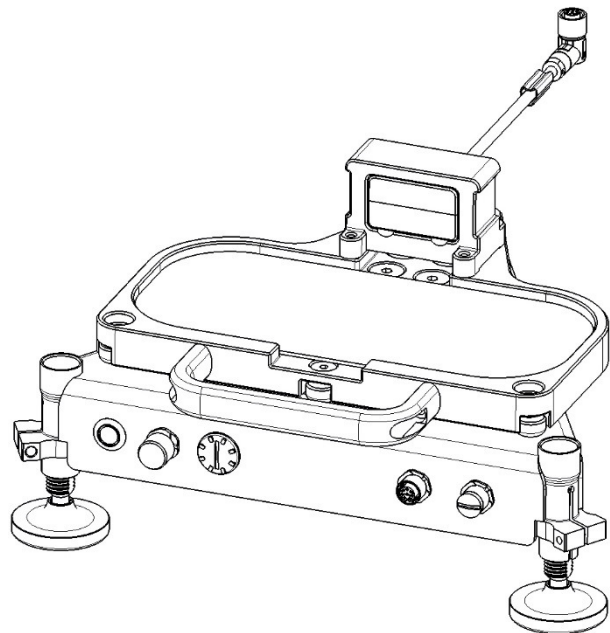


Abb. 6.7.2 Platform with calibration frame turned by 180 degrees and sensor

Picture 6.7.1 and 6.7.2 shows the schematic structure of the calibration frame on the platform with inserted inclinometer. It should be noted that the illustration of the cable only serves to illustrate the orientation of the camber angle sensor. The cable must be connected to the platform during the measurement and adjustment of the sensor!

Under the menu item "Adjustment" → "inclinometer" of the software, the platform and the connected camber angle sensor is selected. A pop-up window for the adjustment then opens (picture 6.7.3). If the camber angle sensor is positioned safely in the calibration frame on the platform, the "Start" button is pressed.

The software automatically saves the inclination of the sensor and then asks you to turn the calibration

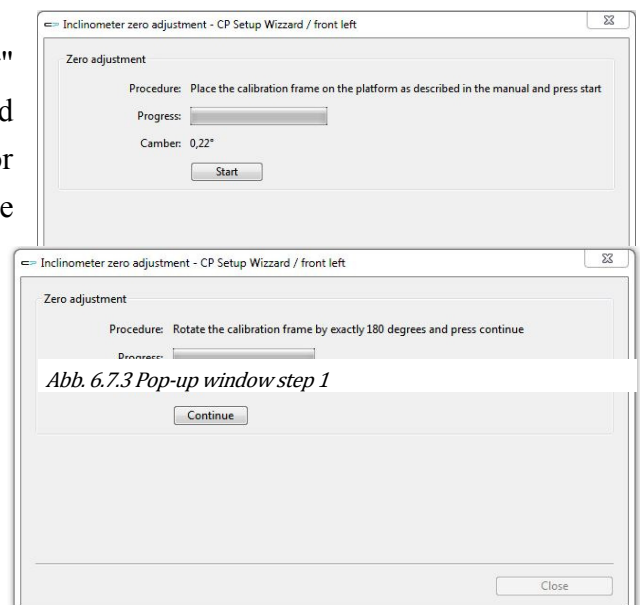


Abb. 6.7.3 Pop-up window step 1

frame by 180 ° to turn (picture 6.7.4). Once the frame is positioned back safely after the rotation, the "continue" button is pressed.

Abb.6.7.4 Pop-up window step 2

The new inclination of the sensor is also stored internally and then the average of the two values is calculated and the zero point is adjusted (picture 6.7.5). This process is repeated for the three remaining platforms.

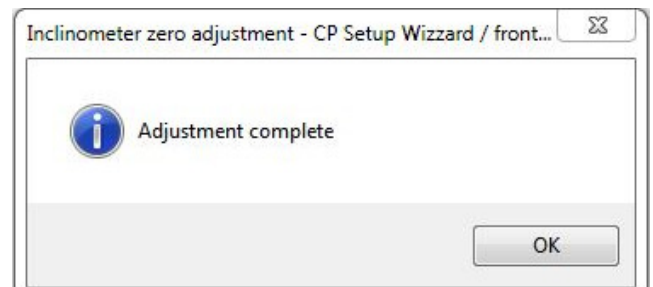


Abb. 6.7.5 Pop-up window step 3

7 Software & Electronics

7.1 First steps



The software CP Setup Wizzard is already installed on the included netbook and can be started by clicking on the link on the desktop. The data transmitted from the measurement platforms via Bluetooth is processed and displayed by the software.

At the time of delivery, the four measuring platforms are already paired with the netbook and thus the system is ready for immediate use without much preparation.

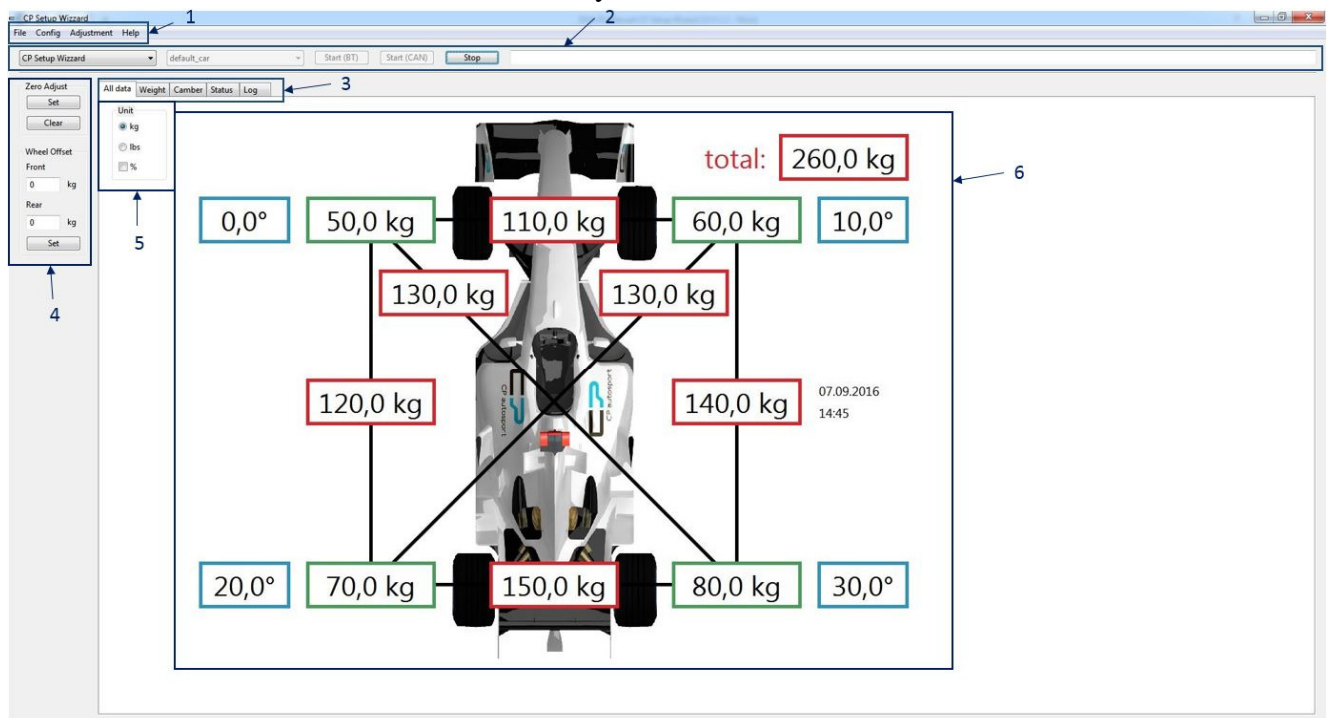
After starting the software, the connection to the active measurement platforms is automatically made and displayed in the software interface by pressing the "Start" button.

The Setup Wizzard software provides the following applications:

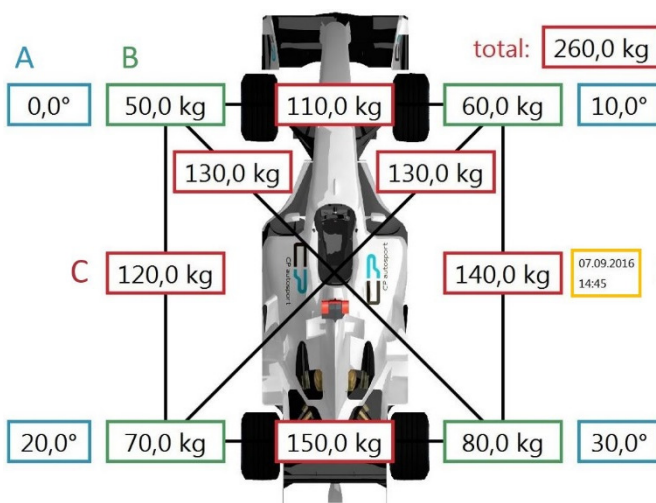
- Chassis measurement
 - Toe angle measurement
 - Camber angle measurement
 - Measurement of wheel loads
- Adjustment of camber angle sensors
- Taring of load cells and inclinometers
- Managing multiple measuring systems of the type *Setup Wizzard by CP autosport*

7.2 User interface

The user interface of the software is essentially divided into 6 sections:



- Buttons to control the program functions' configuration, calibration and help
- Managing multiple CP Setup Wizzard systems including start and stop button to activate / deactivate the data transmission
- Program tabs to control the display
- Tare function and entering the difference between the vehicle wheel and the setup wheel
- Selection of the units used, percentage display and zero offset
- Display of the measured data



- A. Camber angle for each wheel
- B. Wheel load for each wheel (measured)
- C. Load distribution (calculated) [axle load, diagonal load, vehicle weight]
- D. Date and time (current)

7.3 Configuration

On delivery of the CP Setup Wizzard, the four measuring platforms are already coupled to the netbook and configured as a system. The data transmission takes place via a secure Bluetooth connection between the devices. In the event that you want to connect several measuring platforms to one computer, perform the following steps.

7.3.1 *Step 1: Pairing the platforms via Bluetooth*

The measuring platforms must be coupled to the PC first. This procedure is performed once for each platform and then does not need to be repeated.

On Windows PC select "Start" → "Control Panel" → "Devices and Printers" → "Add Device".

The coupling mode of the platforms is enabled by pressing the button of an activated measurement platform for 5 seconds until the active coupling mode is signalled via LED blink code (3x flashing, 1s repetition). The measurement platforms finish the pairing mode automatically for safety reasons after 60 seconds.

The measuring platform appears in the list of devices after a brief time and can be selected and added.

If an older Windows version is used, you must select "enter pairing code of the device" in the next window. The code is always "1234".

A modern Windows version queries the correctness of a code randomly generated. This is always to be confirmed with "Yes", since the measuring platform has no comparative indication of the code.

The measuring platform is now paired to the PC. This process is carried out separately for all 4 platforms.

Important Instructions

- The coupling procedure should never be performed if there is a suspicion that a competitor or other foreign people listen to the radio communication at this time. Otherwise, there is a possibility that these transmitted measurements can be hacked or falsified.
- Devices already coupled with the PC being used are not listed in the search for potential coupling devices. To pair this again, the unit in question must first be deleted from the list of available devices.
- Each measuring platform can be coupled with up to 8 PCs. If this number is exceeded, the measuring platform loses the oldest couplings.
- If a USB radio module is used with the PC, this cannot be used with multiple PCs, without the measuring platforms losing their coupling. To avoid this problem each PC should have its own USB radio module.
- In case of connection problems with laptops, netbooks or tablets, it should be checked first whether the radio communication is not disabled to save power.

7.3.2 Step 2: Configuration of the PC software

The PC software can manage multiple measuring systems. For each applied system, the four measuring platforms used must be assigned.

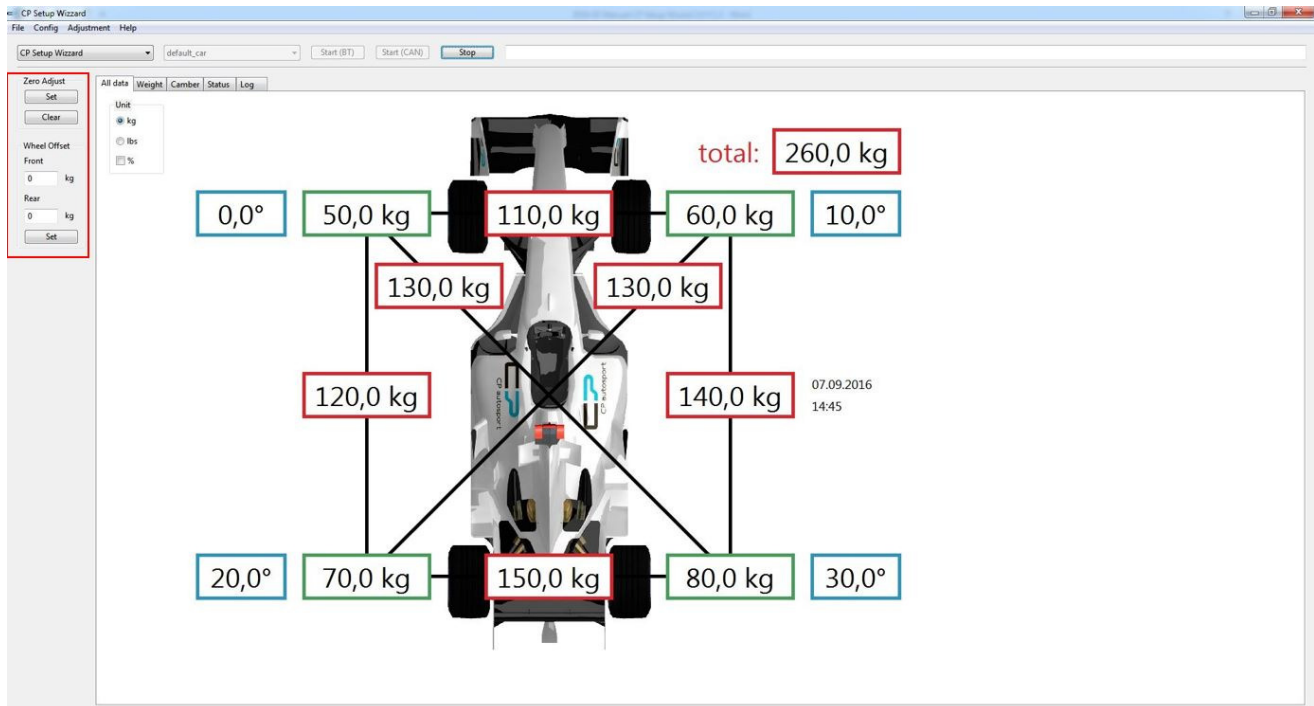
For this, the menu item "Config" → "Systems" is clicked in the PC software.

For operation via radio each of the four wheel positions must be assigned to a measuring platform. In the selection list only those sites are listed that have been previously coupled to the PC. To facilitate the assignment, the measuring platforms have stickers stating their designation.

The assignment of the devices for the radio connection is optional if only wired CAN communication is used. Likewise, the configuration of the CAN bus is optional in case of wireless communication.

7.4 Taring

The buttons on the left side of the user interface are used to adjust the zero point of the wheel load measurement.



7.4.1 *Shifting the zero point*

The zero point determined by the calibration of the load cell of the weight measurement can be moved with the taring function "Zero Adjust". To do so, click the "Set" button to define a new zero point and to cancel the displacement click the "Clear" button.

7.4.2 *Entering the difference to the vehicle wheel*

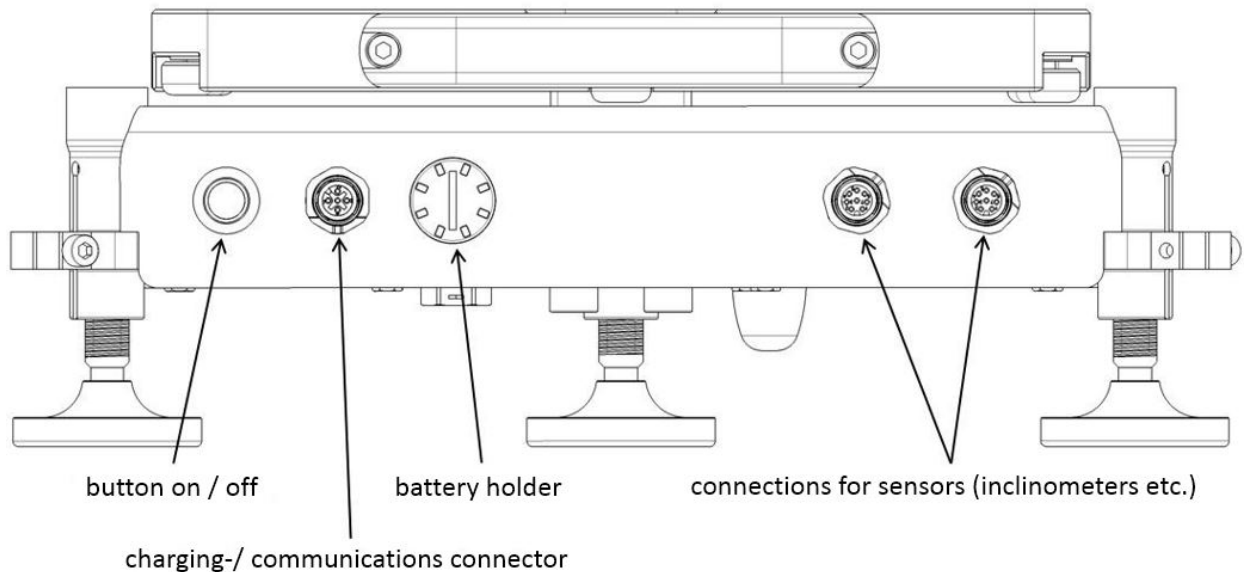
With the "Zero Adjust" function, the difference between the weight of the vehicle wheel and the weight of the setup wheel can be entered. This is then included in the calculation of the single wheel loads during the measurement.

To this end, one vehicle wheel each of the front and of the rear axle is weighed and the difference to the weight of a setup wheel of each axis is calculated. If the vehicle wheel is heavier than the setup wheel, the difference is entered at the appropriate axis with a positive sign. Should the vehicle wheel be lighter than the setup wheel, the difference is entered with a negative sign.

Only by pressing the "Set" button, the entered values are calculated in the measurement.

If the input is to be reversed, the value "0" must be entered on the desired axis and the "Set" button must be pressed.

7.5 Measuring platform



On the front of the measuring platforms there is a button which switches the platform on and off by one short press. This button also has an LED indicator, which indicates the status of the platform.

Blink code of the platform:

Device status	LED
Off	LED off
Device starts	LED illuminates for 1s
Switched on	1x flash, 1s repetition
Connected with Software	2x flash, 1s repetition
Radio link pairing	3x flash, 1s repetition

Via the charging- / communications connector, the platform can be loaded and a CAN communication can be made via a data cable.

The battery holder houses two batteries of the type AA enloop, which can be removed and charged or replaced as needed. It is expressly prohibited to use batteries for the operation of platforms, as this would damage the measurement electronics of the platforms in case of accidental charging.

Via the two connections for sensors on the right side of the platform front, external measuring sensors can be connected. The order when connecting does not matter, because the electronic of the platform automatically recognizes the connected sensor and processes the data appropriately.

7.6 Accumulators

There are two eneloop batteries AA in each of the 4 measurement platforms. These can be loaded using the supplied charger depending on the version in the platform via the charging electronics of the flight cases, or outside of the platform.

We recommend to use a suitable overvoltage protection, to protect the chargers from voltage surges in the respective power supply (accessories list Setup Wizzard).

The cover plate on the bottom of the track laser must be unscrewed to change the two AA batteries.

The three D batteries of the levelling laser can be changed after opening the flap on the bottom of the laser.



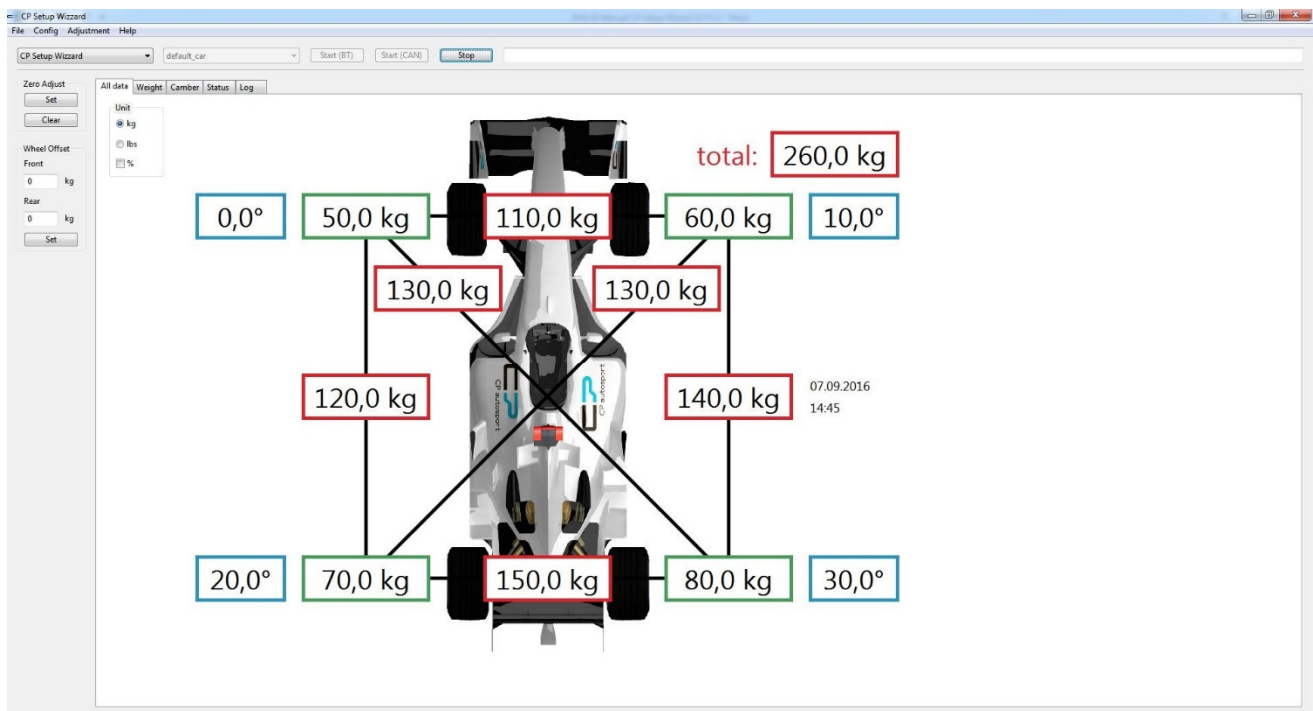
8 Measuring the vehicle

The operation menu is always placed at the top of the screen. The respective function is activated or branched to another menu by clicking on the buttons.

8.1 Wheel loads

To start the measurement, click "Start" and the current measured values are stated in kg.

If desired, the user can output the values in percentage.



8.1.1 *Tare*

With the "Zero Adjust" function on the main screen the current zero point is set.

The measurement platforms can be tared and adapted to the measuring conditions before the current measurement.

8.2 Measurement of camber

The camber can be measured with the optional camber sensors (inclinometers). For the measurement of the camber, the sensors must only be connected and inserted in the setup wheels. Here the tongued pressure fittings in the housing of the inclinometer must point downwards to the direction of the platform.

8.3 Measurement of toe angle

To measure the toe angle of the car, all four lasers must be activated.

These each project a laser beam to the scale of the laser housing of the other axis on the same side of the vehicle.



**Do not look directly
into the laser beam!**

The track values of the rear wheels can be read on the scale on the front axle and the track values of the front wheels on the scales on the rear axle.

The lasers are equipped as standard with a millimetre scale. When reading the values, it is important to read the values in the centre of the laser beam. If the beam is too far upwards or downwards, there may be slight variations.

If the values are compared with conventional measurements, it can be converted using the following formulas:

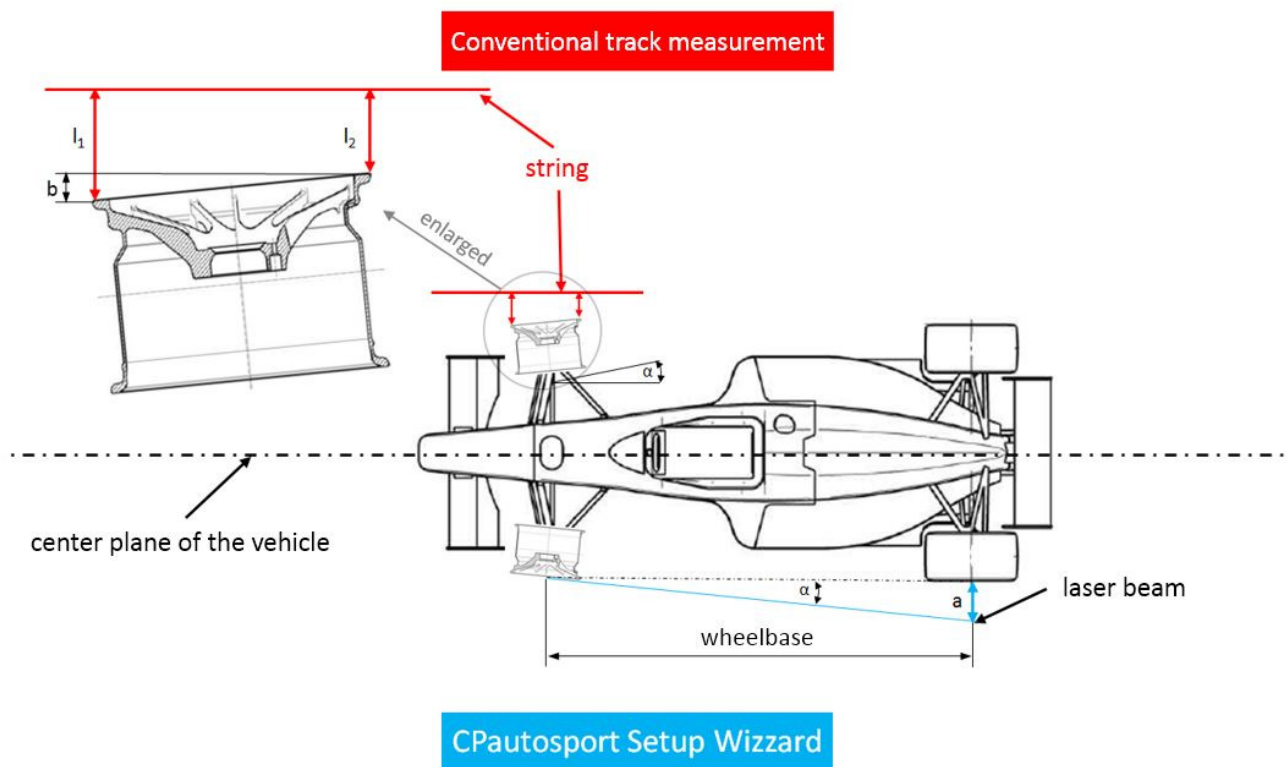
Measurement with 2 rulers at the rim:

$$\text{Measurement rim [mm]} = \frac{\text{measured values laser [mm]} \times \text{rim diameter [mm]}}{\text{wheelbase [mm]}}$$

Toe angle in minutes:

$$\text{Toe angle [min]} = \text{measured value laser [mm]} \times \frac{3438}{\text{wheelbase [mm]}}$$

Alternatively, customized scales on which the desired value can be read directly can be ordered.

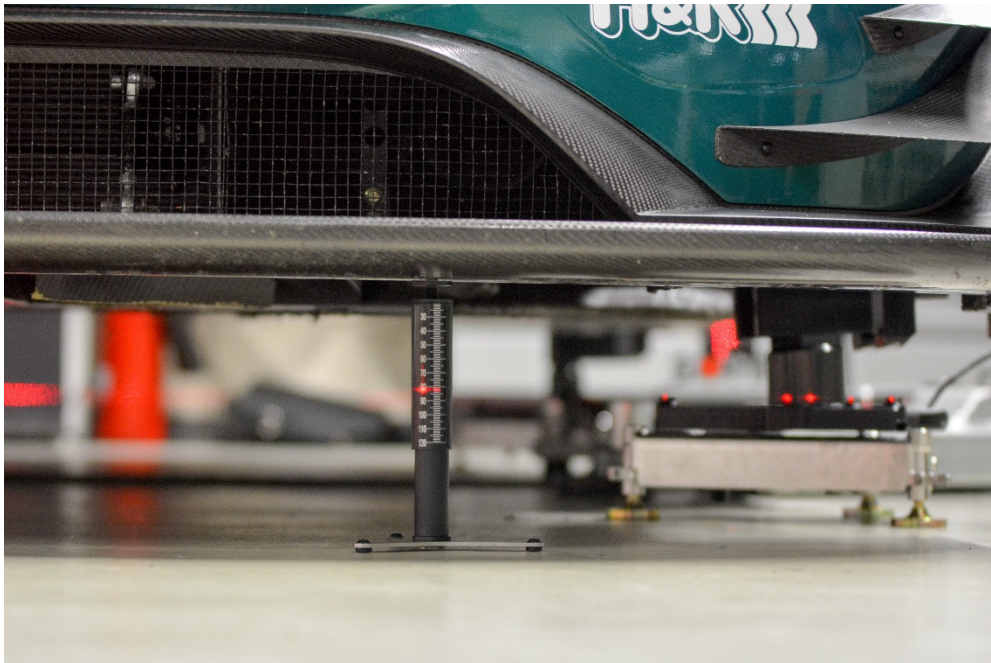


The Setup Wizzard has the same reading accuracy of the measurements on the ruler but reaches an approximately 6 times higher accuracy compared to conventional toe surveying systems with string and ruler. This is due to the higher distance of the measuring point to the scale. Thereby, the deflection of the measured value is strongly increased. In case of toe changes, the value measured in conventional systems changes only slightly, so that a fine measuring system is necessary in order to detect the toe change accurately. Due to the stronger deflection of the measured value with the Setup Wizzard, the measuring system can provide more accurate results. In this way, the reproduction of measurement results is considerably improved.

8.4 Measuring of vehicle height

With the optional altimeter, the vehicle height can easily and conveniently be measured. To this end, the levelling laser, which was used for the alignment of the platforms, is left at its place and the altimeter is positioned at the desired location under the vehicle. It is important that the levelling laser is not shifted and matches the markings on the levelling sleeves of all platforms.

The laser beam of the laser is used for reading the vehicle height at the altimeter. The altimeter is unlocked and pushed to the desired measurement point from below by spring force. Depending on the type and nature of the measurement point, two measuring tips of a different size can be used. Also, an eventual difference between the underbody and the measurement point can be balanced using the unscrewed measuring tips.



The difference between the wheel contact area on the platform and the level of the laser is already considered in the scale. When the setup wheels are set correctly, the vehicle height over the roadway can be measured directly.

9 Maintenance

The Setup Wizzard system consists exclusively of high quality components and is maintenance-free. The CP autosport GmbH prescribes a revision of the system each year to guarantee the quality and precision of the measurements.

If the accumulators should be damaged or broken differing to the annual revision, only the exchange against equivalent accumulators is allowed. An exchange against batteries could cause damages inside the platforms and is prohibited.

10 Technical data Setup Wizzard

Wheel load scale:

Measuring range	0 - 500 kg per wheel
Accuracy	± 0,1%
Height	100mm + 45mm
Optional stand	210mm + 90mm
Total height	310mm + 135mm
Battery lifetime	min. 15h in operation

Camber sensor:

Measuring range	± 10°
Accuracy	± 1% (based on the measurement range)

Radio transmission:

	2,4 GHz
Range	Up to about 30m (line of sight)
Battery lifetime	min. 8h in operation

Toe laser:

Operating time	about 500h
Power supply	2 standard AA batteries
Laser class	I
Wavelength	650 nm

Levelling laser:

Workspace	60 m
Levelling range	± 8°
Accuracy	Below 3 mm @ 30m line length
Laser class	II
Wavelength	630 - 650 nm
Power supply	3 „D“- alkaline batteries
Protection class	Water resistant, not submersible
Operating temperature	-18°C to 49°C
Dimensions Transport case	900 x 730 x 750 mm (W x H x D)
Product weight	140 kg



11 EG Conformity Declaration

EC Conformity Declaration

according to Low Voltage directive 2014/35/EU as well as EMV Directive 2014/30/EU

Machine design (trade name): Setup Wizzard by CP autosport

Product/function/model/type: Setup Wizzard 2.0

Serial number/year of construction: from 2016

was developed, constructed and produced on own responsibility by:

Producer/authorized representative: CP autosport GmbH

and complies with relevant regulations of Low Voltage directive 2014/35/EU and EMV Directive 2014/30/EU.

The following harmonized standards (official journal of the EC), European draft standards respectively national norms and technical specifications (references) were applied:

EN ISO 12100:2010, DIN EN 62368-1:2016-5, EN 55022, EN 6100-6-2.

The technical documents were created in accordance with Appendix III of the Low Voltage directive 2014/35/EU and EMV Directive 2014/30/EU and can be submitted to the responsible market surveillance authority upon request.

Responsible for the documentation: CP autosport GmbH

The operating instructions corresponding to the machine is present.

Büren, 19.02.2018 Thomas Casey, CEO

Place, date

Name, function of the authorized representative

Stamp, signature of the authorized representative

12 Manufacturer contact

CP autosport GmbH

Dornierstraße 7

D-33142 Büren

Phone: +49 (0) 2955 / 4849-553

support@setupwizzard.com

www.cp-autosport.com