

x-tronic balancer

THE MOBILE MEASUREMENT DEVICE

Innovation

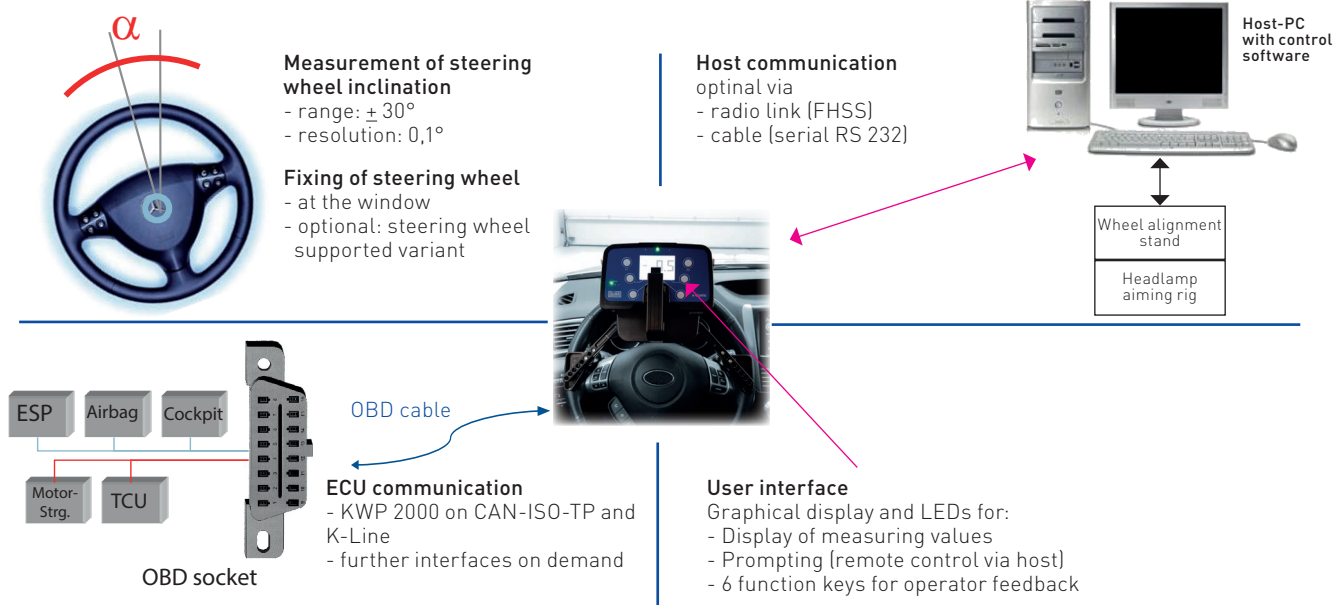
- x-tronic balancer is a mobile measurement device
- » to measure the inclination of the steering wheel of vehicles
 - » to fix the inclination of the steering wheel to 0°
 - » for communication between test stand PC and vehicle electronics (as an option)

The current inclination is permanently displayed on the LC display. Furthermore the device evaluates the measurement values and signals the evaluation via LEDs and beeper. The measured data are transmitted to the test stand PC via cable or wireless.

Using the integrated diagnostics interface of the balancer (option), the test stand PC can do diagnostics tasks and ECU parameter set-up in parallel to the chassis adjustment tasks.



» x-tronic balancer



» x-tronic balancer DI

x-tronic balancer

Application

- » Measuring device and tool for adjustment of the wheel geometry in wheel alignment stands
- » Measuring device and auxiliary device for the toe angle setting considering the steering angle hysteresis
- » Measuring device and diagnostics interface for ESP sensor calibration, level regulation, headlamp aiming
- » Diagnostics interface for independent electronics tests in parallel to wheel alignment

Nutzen

- » Anzeige und Auswertbarkeit der Lenkradneigung zur Kontrolle des Einstellprozesses

Technical data x-tronic balancer

Steering-wheel inclination measurement	
Measurement range	±30°
Resolution	0,1°
Accuracy	0,2° from -10° to +10°, Lateral inclination error < 1% to 45°
Time constant	Mittelwert parametrierbar
Transfer area of the wind screen support	100 mm continuously variable, distance to the wind screen can be adapted via adapter pieces
Option: transfer area steering wheel clamping	60 mm continuously variable (hooks at the back side of the device)
Host Interfaces	
Cable: RS232	2 (1 channel for firmware update)
Radio link:	FHSS, WLAN (option)
Vehicle interfaces	
CAN - Bus	4 parallel physical CAN-channels according to specification 2.0B
K-/L-Line (option) max. 3 modules	2x2 channels per module, multiplexed, ref. to ISO 9141-2
Further vehicle interfaces	Possible via universal extension slots: on request

x-tronic balancer for „track test“

1. The x-tronic balancer can be extended by different modules to a mobile measuring system on the test track. By means of a wireless steering wheel balancer (SWB) the steering angles are recorded on a test track. Conclusions to the chassis geometry can be drawn. Additionally wireless ECU communication on test track by carlink or SWB DI. Dynamic values can be read out of the control units and be related to one another.



2. In this test the steering wheel balancer with wireless module will be taken into the passenger compartment together with our tablet PC. The steering wheel balancer will be mounted on the steering wheel. The data recording will be started by pressing a function key on the steering wheel balancer. Now the driver drives straight ahead at low speed along the test track.

3. From now on, the steering wheel balancer provides measuring values with relative time stamps to the tablet PC. At the end of the test track the data recording will be stopped by pressing a second function key on the steering wheel balancer.

The measuring values will be graphically displayed on the tablet PC and analysed statistically (min, max, average). In the charging station of the tablet PC the data set of measuring values can be transmitted together with a vehicle number to a host.

* The photos or figures of the assembly and testing systems in the flyer are not showing the complete installation. The requirements of the machinery directive (2006/42/EG) will only be met by other supplementary scope of supply or - on delivery of uncompleted machines - those requirements must be fulfilled by the manufacturer of the (complete) machine. Flyer x-tronic balancer, Version F

