



# MLT 3000 2.0

NEXT LEVEL  
HEADLIGHT TESTING

made by MAHA  
 made  
in  
Germany



# “STAND ALONE”-VERSION

WITH PC CONNECTIVITY

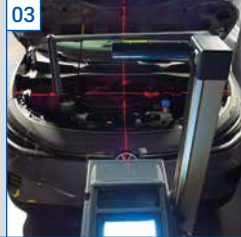
## OPTIMISED COMPONENTS FOR MAXIMUM EFFICIENCY



The new capacitive 7" touchscreen makes it particularly user-friendly and efficient to operate.



Use of a modern lithium battery that has a longer life and shorter charging times.



Standard, horizontally-oriented laser alignment unit enabling the MLT to be aligned precisely and simply in relation to the vehicle.

## CONFIGURATION OPTIONS TO SUIT YOUR NEEDS



Additional vertical line laser that alternatively enables alignment along the longitudinal axis of the vehicle and thus increases the number of vehicles that can be tested (e.g. for SUVs).



Optical adjustment aid on the front of the device displaying the vertical and horizontal adjustment range using coloured LEDs to more easily adjust the vehicle headlights.



Reliable Bluetooth and cable connection, allowing flexible connectivity in a test lane by means of EUROSYSYSTEM software.

## PROVEN DEVICE COMPONENTS WITH HIGHEST LEVEL OF USER-FRIENDLINESS



The MLT 3000 2.0 has a robust light collecting box with a large Fresnel lens for simple and quick positioning in relation to the vehicle.



It is equipped with a wear-free precision guide column for comfortable and precise height adjustment of the light collecting box.



The vertical guidance of the light collecting box is maintenance-free and runs particularly smoothly thanks to the ball bearing guide rollers.

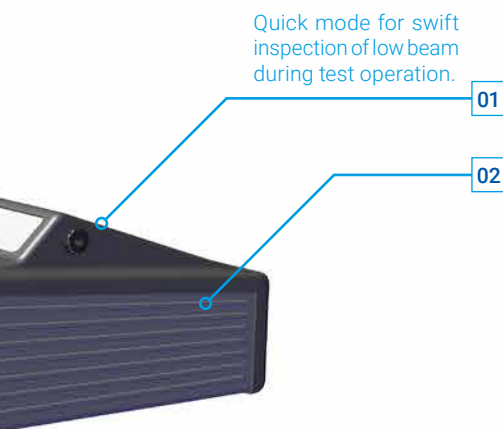
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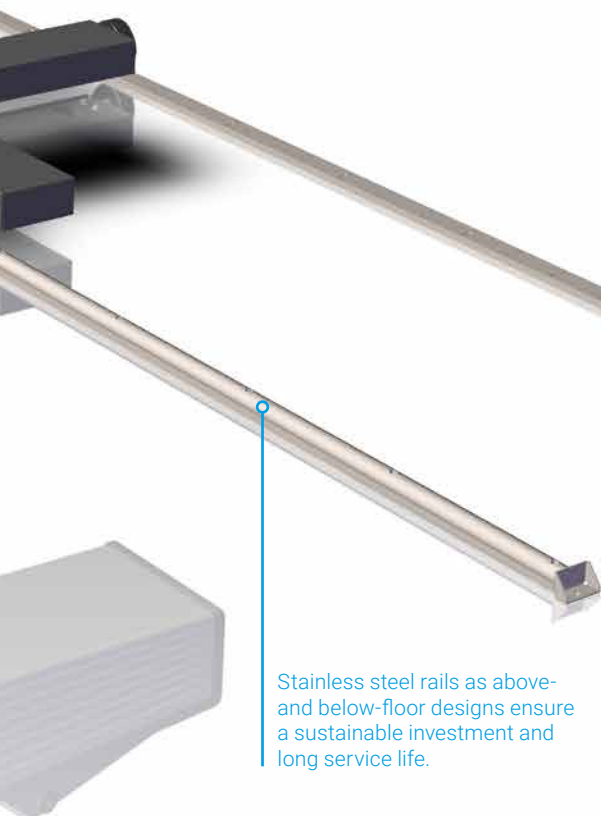
Optimised camera system consisting of a high dynamic range CMOS camera with a special filter, which reduces the average testing times of complex matrix headlight systems.

05

Lower and lighter device feet for simpler handling and positioning of the MLT in front of the vehicle.



06



## FREE UPDATES FOR FUTURE LIGHTING SYSTEMS



Regular software updates are essential due to constant innovations in the area of headlights. The required updates are available to download for free on the MAHA homepage. They can then be installed quickly and easily via a web interface, directly via a connected PC or by means of a USB stick. The MLT 3000 2.0 therefore allows you to test the most modern headlight systems and is a future-proofed investment.

## PRECISE MEASUREMENT TECHNOLOGY EVEN FOR FUTURE LIGHTING SYSTEMS

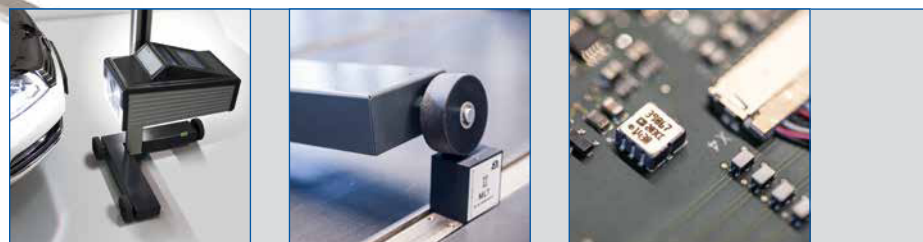


State-of-the-art lighting systems with variable cut-off are no challenge for the MLT 3000 2.0.

Within fractions of a second, the integrated CPU analyses the contour of the cut-off line.

Pronounced blue fringing in the area of the cut-off line is reliably evaluated by the integrated control electronics.

## ELECTRONIC LEVELLING COMPENSATES FOR UNEVENNESS



The electronic levelling system compensates for unevenness in the set-up area and is thus an absolute highlight of the MLT 3000. A deviation of only a few millimeters already results in an incorrect assessment of the measurement results. The deviations detected by the position sensor are automatically compensated by the MLT 3000 software, thus avoiding incorrect measurements.

# RECOMMENDATIONS

## FOR THE HEADLIGHT TEST STATION

The headlight tester and test station function as a single measurement unit for identifying the cut-off line. The MLT 3000 2.0 surpasses all requirements here. Test stations need to be designed in such a way that incorrect measurement results can be ruled out.



- The inclination\* of the base surfaces for the headlight tester and the vehicle should not exceed 1.5%.
- The difference between the inclinations of the left and right driving surface should be no greater than 0.5%. In particular, the surfaces must not slope in opposite directions.
- At all other measurement points of the driving surfaces, the unevenness\* should not exceed 3 mm/m.

### TECHNISCHE DATEN

Application range	Testable headlight types	Paraboloid, projection system and free form
	Testable light sources	Bilux, Halogen, XENON and LED
Measuring range	above	Hotspot 0 – 800 mm / 10 m (0 – 8 %) Pitch angle 0 – 300 mm / 10 m (0 – 3 %)
	below	0 – 700 mm / 10 m (0 – 7 %)
	left	0 – 1000 mm / 10 m (0 – 10 %)
	right	0 – 1000 mm / 10 m (0 – 10 %)
	Height of light center	240 – 1500 mm
	Measuring distance	100 – 500 mm
Intensity	Luminosity	0 – 125.000 cd (Candela)
	Illuminance	0 – 200 lx (Lux)
Error margins	Intensity	+/- 5 %
	Deviation from an axis	+/- 5'
Working range	Temperature	+5 – +40 °C
	Relative humidity	20 – 80 %
	Power supply	100 – 240 V, 50/60 Hz AC / 12 V DC
Red line laser	Laser class	2M
	Wavelength	638 nm

\* The inclination of the test area corresponds to how much the test area tilts away from the horizontal base line, expressed as an angle. Unevennesses are height deviations with regard to the line of inclination, measured at various points.