

Beissbarth MLD 815 – Digital headlight measurement and adjustment



- TÜV-certified (prototype technical release)
- Cross and alignment laser
- CMOS camera for real-time image processing
- Integrated printer

Digital headlight testing with MLD 815:



Interactive color touch-screen display

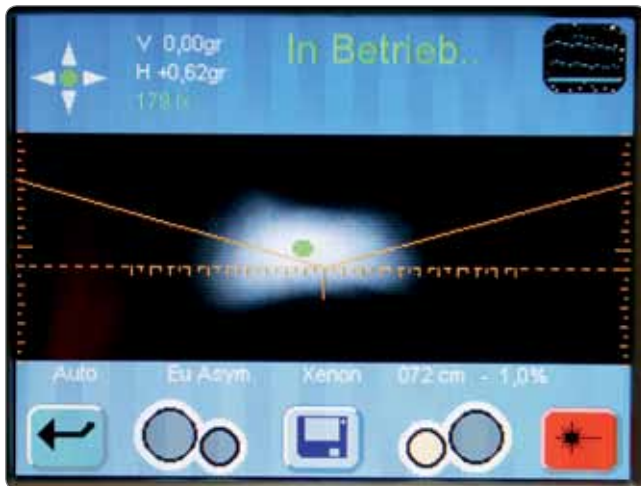


- TÜV-certified (prototype technical release*)
- Cross and alignment laser for precise positioning
- For all light sources and glare-free high-beam systems (DLA**, Matrix)
- CMOS camera for real-time image processing
- Integrated printer
- Test results in real time
- Comparison between measured and limit values and unambiguous red/green evaluation
- Precise definition of the cut-off line without disrupting blue fringe

* TÜV certificate in line with StVZO § 50: MLD 815 is TÜV-certified by prototype technical-release examination in accordance with the directives for testing headlight adjustment/test equipment (German Road Traffic Type-Approval Law StVZO §50 paragraph 5).

** Dynamic Light Assist

intelligent, fast and precise



Images displayed in real time

- Digital LCD colour display (5.7") with 262,000 colours
- Touch-screen function (operation with gloves is possible)
- Intuitive and simple user guidance
- Visual and acoustic signals support the measurement procedure
- Menu featuring 7 languages
- Operating panel can be rotated by 180° for different areas of application (e.g. for general inspections or for the adjustment at the workshop)
- Independent operation thanks to battery
- All types of light sources (xenon, bi-xenon, LED, bi-LED, halogen)
- Glare-free high beam (with MLD 815 Matrix/DLA, order number 1 692 104 329)
- All types of vehicles (passenger cars, trucks, motorcycles)
- All types of headlights (main headlights, fog lamps, auxiliary lamps)
- Measuring height (optical center): 24–145 cm
- Measured values: Horizontal and vertical deviation (pitch angle), intensity, roll angle, yaw angle
- Digital precision: +/-1 cm on a 10-meter measuring distance



COMS camera with high resolution and frame rate

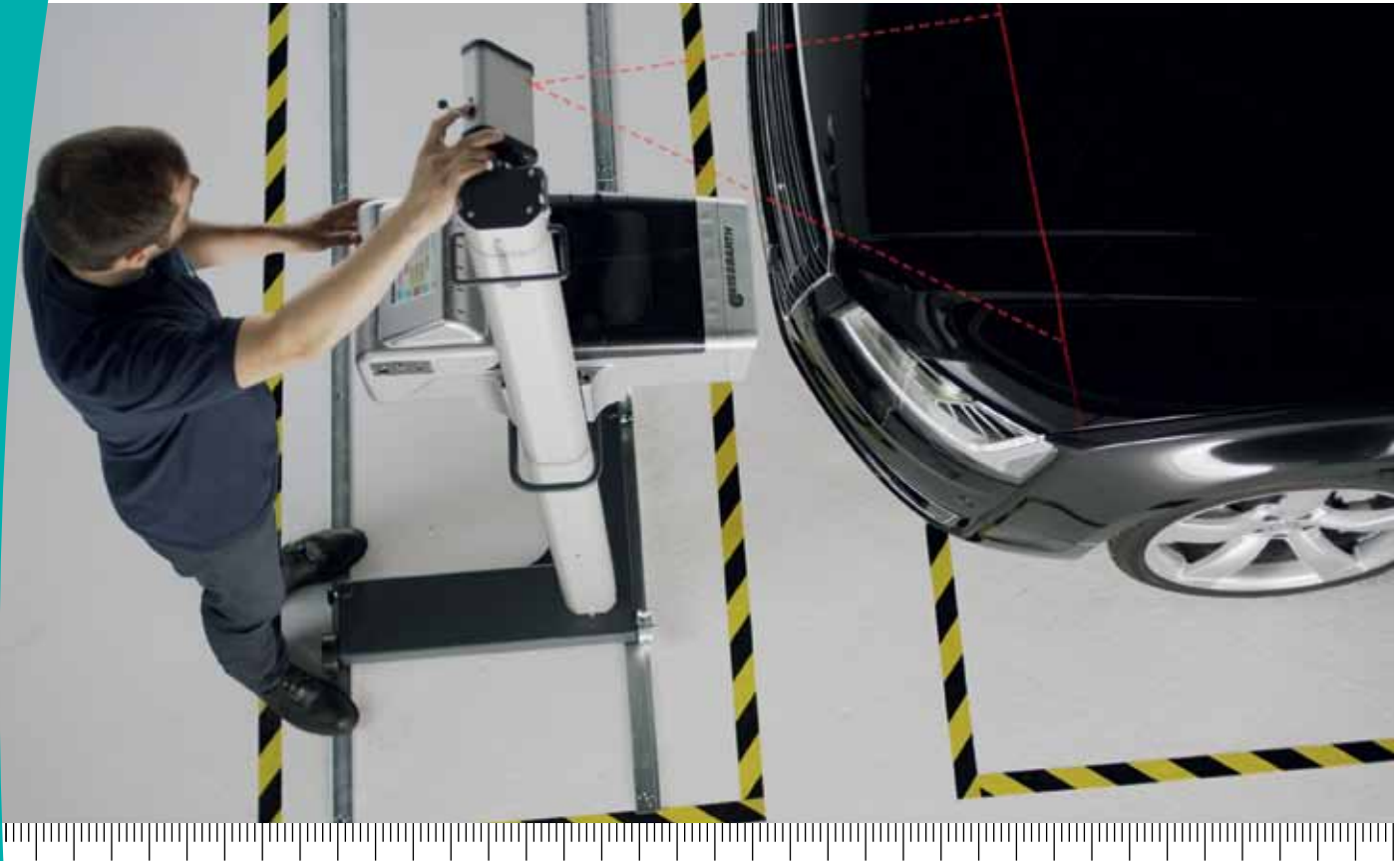


Integrated printer



Operating panel can be rotated by 180° (operation with gloves is possible)

Laser precision for accurate measurement



Alignment laser

Scratch-proof glass lens (Ø 230 mm)

Top precision thanks to laser technology

- The alignment laser on the upper part of the MLD 815 column helps aligning the light box with the vehicle
- The cross laser eases alignment with the headlight particularly in case of LED and xenon lighting systems
- High-quality optics with large, scratch-proof glass lens (Ø 230 mm)

Cross laser

Light-box alignment with two-dimensional level



Leveling at the test area in accordance with the current directive



Entspricht
neuesten
Messplatz-
anforderungen

German Road Traffic Type-Approval Law StVZO § 29 general-inspection headlight-test directive

- MLD 815 alignment (leveling) on the test area complies with the latest requirements placed on test areas in workshops.
- Two-dimensional level for the horizontal leveling of the light box
- Levelable 3-wheel trolley
- Levelable rail system (3m) for above and in-ground installation as optional accessory

Levelable trolley



Levelable rail system (optional)

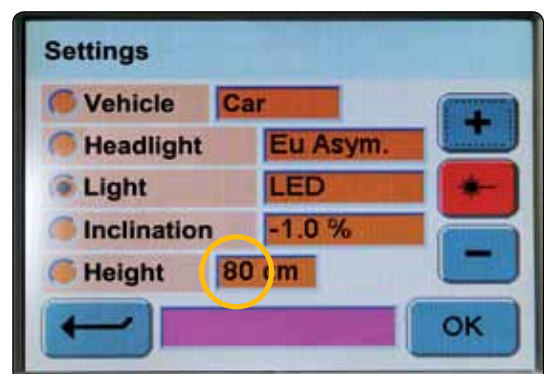


State-of-the-art design for precise working

- Lightweight design thanks to the finite element method (FEM)
- Super-simple height adjustment due to maintenance-free counterweight system with quadruple-mounted rollers
- Easy guiding thanks to handles on the column (upper handle) and at the light box (lower handle)



- Column can be turned 30° on the low-friction bush bearing
- Protected against dust and splash water
- Top mechanical stability for reliable transverse movement
- Height-measurement sensor (optional)



The height-measurement sensor automatically measures the installation height of the headlight (240 to 1450 mm) and shows the measured height on the display.

Test results via Bluetooth® with quick and neatly arranged results on the PC



Accurate display of the test results on the workshop computer

Optional: visualization on the workshop computer

- Data transfer to PC via Bluetooth®
- User interface eases intuitive operation
- Database function
- Printing and archiving
- Adjustment of the colour scheme by the user: light/dark depending on the lighting conditions



Test results on the tablet computer



Light and dark background can be selected

Reliable checking and adjustment of permanent high beams



Adjustment of a headlight with DLA high-beam assistant (test image via ECU diagnosis right on the vehicle)

Adjustment of headlights with glare-free high beam (e.g. Dynamic Light Assist DLA and Matrix Beam)

Currently, the version MLD 815 Matrix/DLA (order number 1 692 104 329) assists the operator at both of the common procedures:

- Mechanical adjustment of the vertical cut-off line (e.g. DLA)
- Position of the vertical cut-off line read out by means of the MLD 815 software – with an accuracy level based on angular minutes (e.g. Matrix Beam)

Communication with the vehicle:

- Vehicle preparation and activation of the basic setting via OBD
- Triggering individual test images (see illustration above) using an application for ECU diagnoses
- Information on the position of the cut-off line is sent back to the vehicle via application for ECU diagnoses (in case of Matrix Beam)



Adjustment of a headlight with Matrix LED technology (test image via ECU diagnosis right on the vehicle)



Accurate display on the MLD 815 screen

Leveled test bay LTB 100



Test equipment in accordance with § 29 StVZO – German general-inspection headlight-testing directive

LTB 100: Safe base for accurate measurements

Workshop floors often feature a significant slope and unevenness. The LTB 100 levelable test bay meets all requirements the German general-inspection headlight-testing directive on rider 4, § 29 StVZO places on the test bay.

LTB 100 complies with the well-defined tolerances and dimensions given by the new headlight test directive:

- The areas must not exceed the maximum allowed inclination of 1.5 % and must be aligned.
- The headlight-tester set-up area must not exceed the max. unevenness of ± 1 mm on a 1-meter distance.
- The allowed unevenness of the tracks depends on the length of the test bay



Installation as test lane or drive-through solution (optional)



LTB 100: Patented design for the 0 to 40 mm height adjustment for axle loads of up to 2.5 t



Leveled vehicle test bay LTB 100
with rail-mounted Bosch MLD 815
headlight tester

LTB 100 at a glance:

- Suitable for subsequent installation onto the workshop floor (min. installation height: 54 mm)
- Suitable for installation onto workshop pits (in combination with the optional pit drive-in protection)
- Extendable for drive-through solution (optional)
- Compensation and fine adjustment by means of 4 wheel set-up elements (4-meter version)
- Maximum allowed axle load: 2.5 t
- Test-system length above ground: 4 269 mm (4 m version incl. drive-on ramps)
- Adjustable height compensation: 0 to 40 mm
- Modular construction (4 m, optionally extendable to 6 m)

Scope of delivery

Scope of delivery	Order number
LTB 100 (4 m)*	1 692 100 030
Extension 2 m	1 692 100 031

Special accessories

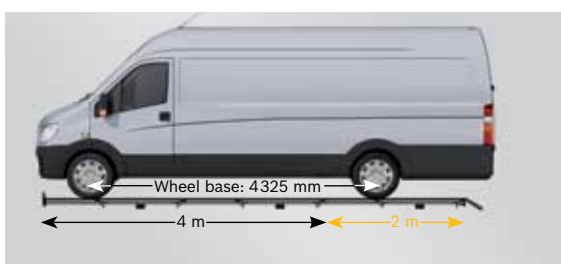
Set of drive-on ramps	1 692 100 032
Pit drive-in protection (4 m)	1 692 100 033
Pit drive-in protection extension (2 m)	1 692 100 037

Service/assembly accessories

Service kit (assembly pattern; supporting pliers)**	1 692 100 034
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* Screw anchors for the assembly are not included.

** Accessories can be reused for additional LTB units.



LTB 100: Extension to 6 m (optional)

General prerequisites concerning the properties of the foundation and the ground:

Max. difference in height on 4 m/6 m: 0–40 mm

The ground must comply with Eurocode 2, DIN EN 1992

- Concrete quality: at least C20/25
- Please note the manufacturer specifications

Technical data MLD 815

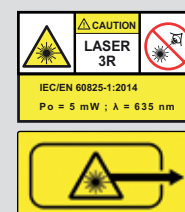
Light intensity	Candela
Illumination	0 - 150 000 Lux/1 m 0 - 240 Lux/25 m
Orientation (in %, cm, °)	
Low beam	0% - 10% (0 - 1 000 mm)
High beam	0% - 10% (0 - 1 000 mm)
Top and bottom, right and left	0% - 6% (0 - 600 mm)
Measuring height (optical centre above ground level)	240 - 1 450 mm
LCD colour screen	5.7", 262 000 colours
CMOS camera	640 x 480 VGA, Frame rate: 60 fps
Laser class	3R
Plug voltage (input voltage of the battery charger)	100 - 240 V / 50 - 60 Hz
Supply voltage (integrated battery)	12 V
Operating temperature (°C)	+ 5 bis + 45 °C
Weight	35 kg
Size of the device (W x D x H)	660 x 695 x 1 780 mm

Order numbers

MLD 815 Standard (with printer)	1 692 104 323
MLD 815 DLA/Matrix (with printer)	1 692 104 329

Optional accessories

Software upgrade for glare-free high-beam systems (for MLD 815 Standard)	1 692 105 115
Rail (3 m)	1 692 105 080
Rail extension (1.5 m)	1 692 105 112
Height-measurement sensor	1 692 105 066
PC-Software with Bluetooth®-Kit	1 692 105 145
Cover	1 692 105 079



Labeling laser aperture

Subject to technical modification and changes to scope of delivery. Pictures may sometimes show special accessories or similar versions. Please contact your Beissbarth dealer for a binding up-to-date quotation.

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