



Dual Grade Laser Mikrolaser ML4

Rugged design – All ML4 models are built to be strong and job-site tough. The mechanical/optical unit is mounted in sealed water-proof aluminium housing, in fact the laser will run if submerged 3 m. The housing has an integrated handle for ease of handling.

Ease of set up – Setting up the laser is very simple. Just place the laser approximately horizontal, then the automatic self-leveling will correct the beam's position up or down.

Ease of use – The ML4 utilizes an integrated LCD display and a touch button control panel.

The functions are:

- Grades in both X- and Y-axis.
- Reversing the grade setting (\pm).
- Rotation (electronic) of optical axis.
- Manual/Automatic selection.
- Lateral adjustment, Left/Right for ML4V.
- Selection of rotational speed.
- Brightness of display.

Remote control – All ML4 models come standard with an IR remote control.

The remote control functions are:

- Stand-by.
- Reversing the grade setting (\pm).
- Rotation of optical axis.
- Lateral adjustment, Left/Right for ML4V.

Power save feature – Whenever the ML4 is placed in the case the power is turned off automatically.

Power sources – The ML4 on-board battery is a standard 7.2V NiCad rechargeable battery, such as Makita™ type.

The battery is easy to exchange without any tools. The battery is widely available from tool outlets or via your Mikrofyń dealer at a very low cost.

Alternative power sources available as accessories:

- 130 or 230AC volt power converter.
- 12-volt battery cable with alligator clip.
- 12-volt battery cable for cigarette lighter.

Battery life & recharging – One charge lasts for approximately 20 hours. Re-charging takes less than 1 hour. Changing of the battery is possible due to the front-loading battery compartment and ease of access.

Standard Package

- Instrument.
- Handheld detector w/clamp.
- Battery charger.
- Battery.
- Remote controller.
- User's manual.

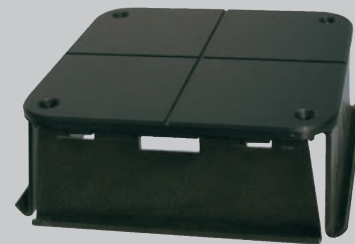
Alternative accessories

Besides the many standard accessories included in the case, you can add even further to the functionality of your laser. Lots of accessories give you plenty of possibilities.



Telescope

The telescope gives you an even better view in the direction of your target.



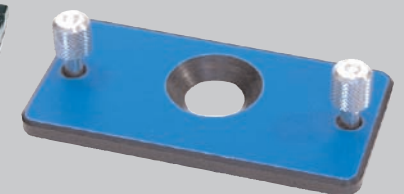
Top with Blind

The blind is perfect at a worksite when several lasers are used at the same time. You choose which direction you want to work in and the blind makes sure that other laser beams do not interfere with your laser beam.



Extern Power Supply

Adding an extern power supply to your laser gives you even more running time and thus more advantages.



Battery Door for Extern Power Supply

The battery door easily replaces the standard door when using an extern power supply.



Z-fitting

The Z-fitting gives you a laser in place lying or positioned on a tripod.



Big Slope-fitting (ML4B)

The Big Slope-fitting gives you a laser in place with a vertical laser beam lying or positioned on a tripod.

Technical specifications

Working distance (diameter):	from 800m to 1600m
Accuracy:	2mm/100m
Automatic leveling range:	± 18%
Grade adjustment range:	
ML4 X:	-10% to +12%
ML4B X:	-10% to +110%
Y:	-10% to +10%
Y:	-10% to +10%
Can be reversed (±) manually or by remote control.	
Lateral adjustment left/right for ML 4V:	± 18%
Manual or by remote control.	
Optical axis rotation:	± 18%
Electronic. Manual or by remote control.	
Rotational speed:	100-900 rpm
In steps of 100 rpm.	
Laser/Optics	
Diode:	670 nm
Maximum output:	1 mW
Beam diameter:	12 mm
Optics and windows are AR coated.	
Battery:	7.2 V NiCad rechargeable 1.4 Ah.
Completely recharged in less than one hour.	
Operational time approximately 20 hours.	
Waterproof:	
Yes (IP68)	
Dimensions:	
17 x 18 x 24 cm	
Weight:	5 kg

Optional ML4 models

ML4V:	Vertical standard
ML4VD:	Visual Diode standard
ML4VVD:	Vertical + Visual Diode standard
ML4B:	Steep Slope standard
ML4BVD:	Steep Slope + Visual Diode standard

Visual Diode: Stronger diode (635nm, 5mW).
The working distance exceeds 1600m when using a Mikrofyn machine detector.

Vertical: Features automatic self-leveling when working vertically.

Steep Slope: Enables you to work with steep slopes in the X-axis – up to 110.00%

Split Beam: Features a split beam, which means it emits two beams, perpendicular to each other.



All Mikrofyn lasers are supplied in a sturdy carrying case. The case will fit the laser and all necessary accessories – your laser receiver, the charger, extra battery, wall bracket and everything else will fit into the case. The case is compact so it can be stowed under or behind the seat in your car and you don't have to worry about wear and tear as the laser is well protected by the case.

MikrofynPower

One battery powers all lasers, saves you money and makes life easier

- All MIKROFYN Lasers are powered by an on-board 7.2V NiCad rechargeable standard battery.
- The battery is easy to exchange without any tools.
- The battery is widely available from tool outlets.
- Standard battery = low price.
- One charge lasts for approximately 20 hours (30 hrs pipe laser).
- 1 hour fast charger.
- The front-loading battery compartment means ease of access.
- More: www.mikrofyn.com



ML10:
Level Laser

ML11:
Single Grade Laser

ML13:
Dual Grade Laser

ML14:
Dual Grade Laser

ML15:
Level Laser

ML2
Level Laser

ML3
Single Grade Laser

ML4
Dual Grade Laser

MLP120
Pipe Laser



MIKROFYN

MIKROFYN A/S · Bondovej 16 · 5250 Odense SV · Denmark · www.mikrofyn.com

Since the start in 1987 Mikrofyn A/S has placed itself among the top-five worldwide manufacturers of professional precision lasers and machine control systems.
The profits of the business are reinvested in new products and growing the business.
Mikrofyn is built upon sound principals of developing and manufacturing state-of-the-art products, supported by experts and cooperating with outstanding professional local distributors.

Authorized Mikrofyn Distributor:

www.kornbeck.dk

GB 04-2007 2.000

4064001