

Mikrofyn Lasers



MikrofynLasers™
Meet the jobsite tough
Mikrofyn construction
laser-series



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Nine Great
Mikrofyn
Lasers

- all with unique
features to
meet specific
contractor needs...

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The jobsite
tough Mikrofyn
Pipe Laser

- easy to use, easy
to afford, hard to
do without...

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MikrofynLasers™

Mikrofyn single slope laser ML23

Rugged design – The ML23 model is built to be strong and job-site tough. The mechanical/ optical unit is mounted in a sealed, waterproof aluminum housing. 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 horizontally, then the automatic self-leveling will correct the beam's position up or down.

Ease of use – The ML23 utilizes a large, uplighted display and a userfriendly 5 button keyboard.

The functions are:

- > Single grade $\pm 15\%$
- > Manual/Automatic selection
- > Selection of rotation speed 300/600 rpm
- > Brightness of display
- > Beam masking
- > Possibility to lock the grade
- > Height alert
- > Customer name in the start menu

Power sources – The ML23 external battery is a standard 7.2V Ni-MH 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 Mikrofyn 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 connector.

Battery life & recharging – One charge lasts for approximately 30 hours. Re-charging takes approximately 1 hour. Changing of the battery is possible due to the front-loading battery compartment and ease of access.

Standard Package

- > Instrument
- > HS10 Handheld Receiver
- > Carrying case
- > Battery charger
- > Battery
- > User's manual

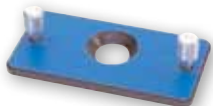
Technical specifications

Working distance (diameter):	800 m
Accuracy:	1,5mm/30m
Automatic leveling range:	$\pm 5^\circ$
Grade adjustment range:	0 to $\pm 15\%$
Rotational speed:	300 & 600 rpm
Laser/Optics	
Diode:	635 NM
Maximum output:	2,7 mW
Optics and windows are AR coated.	
Battery:	7.2 V Ni-MH rechargeable 3.0 Ah. Completely recharged in approximately one hour. Operational time approximately 30 hours.
Operating temperature	-20° to +55 °C (-4° to +131°F)
Storage temperature (without batteries)	-40° to +70 °C (-40° to +158°F)
Waterproof:	Yes (IP68)
Dimensions:	17 x 17 x 24 cm
Weight:	5 kg
Optional model ML23M with an external socket:	The external socket gives the opportunity to power the laser from a 12V battery.

Accessories



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



Battery Door for External Power Supply
 The battery door easily replaces the standard door when using an external power supply.



Battery
 All Mikrofyn lasers use the same type of rechargeable batteries. The batteries are inexpensive and a new one can be picked up at the local hardware store.



External Power Supply
 Adding an external power supply to your laser gives you even more running time and thus more advantages.



12V DC Battery charger
 With the 12V DC charger option you can even recharge your MIKROFYN lasers from the cigarette lighter in your car.

HS10 Handheld Receiver

The HS10 has a unique LCD display, bright LED for laser detection, and audio guidance for right level. All these features makes it very easy to use.





Mikrofyn dual slope laser ML24

Rugged design – The ML24 model is built to be strong and job-site tough. The mechanical/ optical unit is mounted in a sealed, waterproof aluminum housing. 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 horizontally, then the automatic self-leveling will correct the beam's position up or down.

Ease of use – The ML24 utilizes a large, upright display and a userfriendly 5 buttons keyboard.

The functions are:

- > Dual grade $\pm 15\%$
- > Manual/Automatic function
- > Selection of rotation speed 300/600rpm
- > Brightness of display
- > Beam masking
- > Possibility to lock the grade
- > Height alert
- > Customer name in the start menu

Remote control – The two-way remote control can control all the ML24 functions 60 m away.

Power sources – The ML24 external battery is a standard 7.2V Ni-MH 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 Mikrofyn 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 connector.

Battery life & recharging – One charge lasts for approximately 30 hours. Re-charging takes approximately 1 hour. Changing of the battery is possible due to the front-loading battery compartment and ease of access.

Standard Package

- > Instrument
- > HS10 Handheld receiver w/clamp
- > Carrying case
- > Battery charger
- > Battery
- > User's manual

Technical specifications

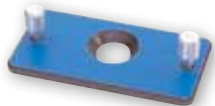
Working distance (diameter):	800m
Accuracy:	1,5mm/30m
Automatic leveling range:	$\pm 5^\circ$
Grade adjustment range:	$\pm 15\%$ in both axis.
Rotational speed:	300 & 600 rpm
Laser/Optics	
Diode:	635 nm
Maximum output:	2,7mW
Optics and windows are AR coated.	
Battery:	7.2 V Ni-MH rechargeable 3.0 Ah. Completely recharged in approximately one hour. Operational time approximately 30 hours.
Operating temperature	-20° to +55 °C (-4° to +131°F)
Storage temperature (without batteries)	-40° to +70 °C (-40° to +158°F)
Waterproof:	Yes (IP68)
Dimensions:	17 x 18 x 24 cm
Weight:	5 kg
Optional model ML24M with an external socket:	The external socket gives the opportunity to power the laser from a 12V battery.

Accessories



Telescope

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



Battery Door for External Power Supply

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

Battery

All Mikrofyn lasers use the same type of rechargeable batteries. The batteries are inexpensive and a new one can be picked up at the local hardware store.



12V DC

Battery charger

With the 12V DC charger option you can even recharge your MIKROFYN lasers from the cigarette lighter in your car.



RC24

Remote control

RC24 is a two-way remote which can control all functions of the ML24 laser up to 60m away.



External Power Supply

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

HS10 Handheld Receiver

The HS10 has a unique LCD display, bright LED for laser detection, and audio guidance for right level. All these features makes it very easy to use.



Nine Great Mikrofyn Lasers



- all with unique features to meet specific contractor needs...

- do you want to work on first class..?

The Mikrofyn ML10-15 laser series is the most rugged, easy to use, function packed multipurpose laser you can buy.

Just look at the ML14i multipurpose laser.

The ML14i is

- > a fully automatic self leveling laser
- > a semi automatic dual grade laser
- > remote controlled from the HS14 combined handheld laser receiver
- > features a 90° split beam
- > plumb function
- > advanced scanning functions for increased visibility
- > vertical function projecting a vertical plane across the worksite
- > remote controlled alignment function

The laser has

- > a visible rotating laser beam
- > user selected rotating speed etc.
- > multiple scanning and search functions

For quick setup the laser is self leveling and it even warns you if it has been disturbed. The ML14i is completely waterproof and, of course, crash proof. All functions and settings chosen by the user are clearly displayed on the large LCD display.

- what more can you possibly ask for?

Easy to setup and use

Look at the front panel of the ML14i. Then you'll understand why it's so easy to setup and use.

Everything at a glance

Who wants a keypad when they can have a crisp and clear LCD display

with all current settings displayed? Entered X and Y slope values, RPM selected, battery status, and mode selections are clearly displayed and can be overlooked at just a glance. Now there are no more excuses for mistakes in the setting of the laser.

Waterproof or just protected against rain?

Is a laser waterproof when it can withstand water and rain (IPX6)? - We don't think so. All Mikrofyn lasers are tested to withstand 3m head of water (IP68) - now that's waterproof! This also means that our lasers are completely dustproof.

The most accurate laser in its class

Mikrofyn is renowned for producing precision lasers. We have used this experience to design the mechanics to a high standard ensuring an unbeatable accuracy of 5mm/100m.

Built like a crash helmet - The lasers are built to be strong and robust. The rotor head, gearbox and electronics are incased in a very robust housing made of the same composite material as used for crash helmets.

Selection of slope in both X and Y - As something very special for a laser in this price class, the ML14i can work with grades up to 10% in both the X and Y direction.

Select the scan mode - The ML14i works with a visible laser beam. The unique scan function, where the laser beam scans rapidly back and forth, increases visibility by as much as 20 times compared with normal rotation.

Select the rotation speed - With selectable rotation speed from 0 to 600 RPM the ML14i laser will meet all your needs - even if you choose to use the laser for machine control.

Power ON - Set up the laser roughly - push the ON/OFF button - wait a little while until the automatic self-leveling function has adjusted the vertical and horizontal axes - and you are ready to GO.

Setting the slope - It's easy to set the correct slope. The LCD display always shows the slope entered.

Automatic or manual mode - For some operations the laser has to be switched from automatic to manual mode. This and all other functions can be remote controlled from the HS14 combined 2-way remote control and laser receiver.

Uniform power plant - All Mikrofyn lasers use the same type of rechargeable batteries. The batteries are inexpensive and a new one can be picked up at the local hardware store. It only takes one hour for a complete recharge that will allow you to work for another 30 hours. Batteries can be changed without tools.





Technical specifications	ML10x or ML10ld	ML11x or ML11ld	ML13x or ML13ld	ML14i or ML14ld	ML15i
Working range (diam)	300m or 500m	300m or 500m	300m or 500m	300m or 500m	500m
Accuracy	5mm/100m	5mm/100m	5mm/100m	5mm/100m	5mm/100m
Self leveling	Yes ($\pm 5^\circ$)	Yes ($\pm 5^\circ$)	Yes ($\pm 5^\circ$)	Yes ($\pm 5^\circ$)	Yes ($\pm 5^\circ$)
Battery: 7.2 V Makita™ type - 1.4 Ah. Battery life, approx.**: Recharge time, approx.:	30 hours 1 hour	30 hours 1 hour	30 hours 1 hour	30 hours 1 hour	30 hours 1 hour
Operation temperature	-20° to 55°	-20° to 55°	-20° to 55°	-20° to 55°	-20° to 55°
Environment	Waterproof (IP68)*	Waterproof (IP68)*	Waterproof (IP68)*	Waterproof (IP68)*	Waterproof (IP68)*
Laser receiver w/clamp (adjustable)	HS10 (Standard)	HS10 (Standard)	HS10 (Standard)	HS14 (Standard)	HS14 (Standard)
Shock proof carrying case	Yes	Yes	Yes	Yes	Yes
Model specific functions					
Horizontal level laser	Yes	Yes	Yes	Yes	Yes
Alarm function if disturbed	Yes	Yes	Yes	Yes	Yes
Grade adjustment range, semi-automatic:		0 - 10% Single Grade	0 - 10% Dual Grade	0 - 10% Dual Grade	
Rotation speed	Fixed at 600	Fixed at 600	Fixed at 600	0/30/60/180/360/600	0/30/60/180/360/600
Split Beam (90°)			Yes	Yes	Yes
Vertical operation			Yes	Yes	Yes
Plumb function			Yes	Yes	Yes
Scan function				Yes	Yes
Remote Control				Yes (HS14) two-way remote	Yes (HS14) two-way remote
Visible laser beam			Yes (plumb only)	Yes - Yes (super bright)	Yes (super bright)
Working range Visible (diam)				60m - 120m	120m
Remote controlled Search-and-scan function				Yes	Yes
Remote controlled Search-and-align function				Yes	
Wall bracket and goggles	optional	optional	optional	standard	standard
Laser/Optics:					
Diode:	650 nm	650 nm	650 nm	635 nm	635 nm
Maximum output:	2.5 mW or 4.9 mW	2.5 mW or 4.9 mW	2.5 mW or 4.9 mW	2.5 mW or 4.9 mW	4.9 mW
Laser class:	Class 3A	Class 3A	Class 3A	Class 3A	Class 3A
Laser Receiver specification					
Bright red LED for laser detection	HS10		HS14		
Bright red LED for laser detection	Yes		Yes		
LCD display for laser detection	Yes (front and rear)		Yes (front and rear)		
Audio guidance	Yes		Yes		
LCD display for laser settings			Yes		
Remote control			8 channel 2-way radio		
Range for remote operation			Up to 60m (typical)		
Environmental	Waterproof (IP68)*		Waterproof (IP68)*		
Battery Operation	9V standard Alkaline		9V standard Alkaline		
Battery life	min.100 hours**		min.100 hours**		
Power saving functions	Yes (adjustable)		Yes (adjustable)		

*waterproof to 3m head of water. Battery compartment IP65
**temperature dependent



Nine Great Mikrofyn Lasers



Mikrofyn Multipurpose Laser ML10x and ML10ld

- > accurate level laser
- > truly waterproof to 3m head of water
- > self leveling for quick set-up
- > laser and accessories supplied in carrying case including HS10 laser receiver
- > see technical specifications on page 5 for full details

Mikrofyn Multipurpose Laser ML11x and ML11ld

- > accurate single slope laser
- > truly waterproof to 3m head of water
- > large LCD display showing current settings
- > alarm function if disturbed
- > self leveling for quick set-up
- > power saving function
- > supplied in carrying case including HS10 laser receiver
- > see technical specifications on page 5 for full details

Mikrofyn Multipurpose Laser ML13x and ML13ld

- > accurate dual slope laser
- > truly waterproof to 3m head of water
- > features vertical operation without need of bracket
- > plumb function for transferring points up through multiple floors
- > split beam (90°) for setting out corners and aligning walls and foundations
- > large LCD display showing current settings
- > supplied in carrying case including HS10 laser receiver
- > see technical specifications on page 5 for full details

- do you want a multipurpose laser that fits your needs..?

Yes - why not buy a laser that is perfectly suited for your job..?

We call the laser series "multipurpose lasers" because they are just that. You can always find a Mikrofyn laser that will cover your exact needs - whatever your job might be. Like no other manufacturer we have looked into our customers' daily problems and needs for special applications to solve their job efficiently.

If your need is for a tough level laser that will work every day - that's self leveling and easy to use - and will work with machine control - we offer you the ML10x.

If you instead need a laser for installing and laying out walls and foundation corners - checking parking lots sloping in both directions or transferring points up through multiple floors - we offer you the ML13x.

- do you want a multipurpose laser sturdy as a crash-helmet..?

100% watertight and shock-proof

You know the situation - your laser is accidentally knocked over and ends up in a puddle of water. If the water doesn't destroy your laser the shock will. That's why we have designed your Mikrofyn laser to withstand a 2m drop and survive at the bottom of the lake 3m below the water surface.

All Mikrofyn multipurpose 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.

When transporting your laser you don't have to worry about wear and tear as the laser is very well protected by the case.

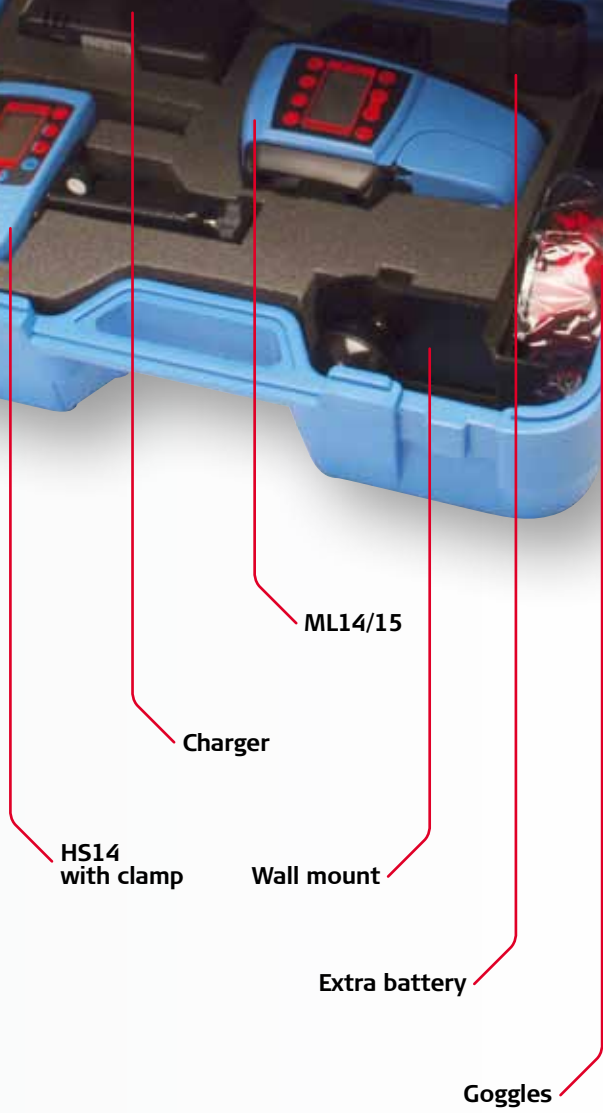


Mikrofyn HS10 handheld receiver

- > unique LCD display for guidance on both front and rear side
- > bright LED for laser detection
- > audio guidance to right level
- > truly waterproof to 3m head of water
- > one finger is all you need for total control
- > see technical specifications on page 5 for full details

- do you want total control with unique laser receivers?

Mikrofyn laser receivers include the HS10 and the HS14. Both receivers have the unique LCD-display, bright LED for laser detection, audio guidance for right level and they are of course 100 % waterproof. Also, with just one finger you get total control with the HS14 2-in-1 remote control and hand-held receiver. This combines the laser receiver and the remote control in one small sensor unit for your convenience.



Nine Great Mikrofyn Lasers



Use your Mikrofyn lasers for:



Machine control for dozers, graders, excavators etc.

Mikrofyn Multipurpose Laser ML14i and ML14ld

- > visible laser beam at a range of 60m
- > dual slope laser
- > truly waterproof to 3m head of water
- > selectable rotation speed
- > fully automatic "search-and-align" function
- > fully automatic "search-and-scan" function
- > split beam, vertical operation, plumb function, scanning, etc.
- > see technical specifications on page 5 for full details

Mikrofyn Multipurpose Laser ML15i

- > extra powerful laser diode
- > visible laser beam at a range of 120m
- > truly waterproof to 3m head of water
- > fully automatic "search-and-scan" function
- > horizontal level laser
- > selectable rotation speed
- > split beam, vertical operation, plumb function, scanning, etc.
- > see technical specifications on page 5 for full details

SmartSlope™ Automatic Slope Check

Mikrofyn presents the new and improved software for our Mikrofyn multipurpose laser series. The SmartSlope™ feature improves the overall accuracy of the ML11, ML13 and ML14 lasers when working with slope.

It is widely known that aluminium tripods shift with temperature. The SmartSlope™ solves the problem in the most advanced way by measuring the current temperature, memorising it and comparing it with the initial

temperature. The laser re-levels and reenters the slope automatically if there is any change in temperature. If there is no change in temperature, the SmartSlope™ re-levels every ten minutes. This ensures you the best possible precision.

If you have signed a service contract the SmartSlope™ can be added to older lasers by a free software update during service.



Pipe works



Construction work



Laser mounted on a batter board



Drainage works and sloping surfaces



One battery, nine lasers
Low cost off-the-shelf rechargeable standard battery fits all Mikrofyn multipurpose lasers.

Standard battery
No need for expensive special battery packs to power Mikrofyn multipurpose lasers.

The battery is easy to change without tools
The battery is available from local tool shops or from your Mikrofyn distributor.

One hour recharging provides 30 hours working time
Recharging takes less than one hour.



HS14 Handheld receiver and remote control

- do you also miss an extra hand for the remote control..?

Mikrofyn has solved the problem: The HS14 is a 2-in-1 combined remote control and hand-held receiver.

With Mikrofyn you don't have to use both hands to remote control the beam adjustment on your laser.

We have combined the laser receiver and the remote control in one small sensor unit for your convenience. One finger is all you need to have total control.

2-way radio communication

Instead of IR we use 2-way radio communication for the HS14 remote control. This gives you a number of advantages - for example the freedom to move around as you no longer have to be on the right side of the laser in order to target the IR eye.

A total of eight selectable radio channels ensure undisturbed functionality and convenient access to all laser functions across the work site, typically as far as 60m away from the laser.

Added functionality

The 2-way radio enables the laser to "communicate" with the HS14 remote control. This ability is used during the "search-and-scan" function where the laser automatically detects the laser receiver and immediately starts scanning at the right location - you can now mark, drill or hammer at the exact height using the clearly visible laser beam.

- do you want a laser that runs for 30 hours and recharges in just one..?

We will save you a fortune

When you add up the cost of buying standard batteries you will know why all Mikrofyn lasers are powered by a commonly used rechargeable battery (Makita™ type). The one-hour charger automatically shuts off when the battery is fully charged. This feature protects from over-charging batteries.

- do you want a multipurpose laser with a fast and easy setup..?

Fast and Easy Setup

Fully automatic self-leveling allows the operator to setup with just the push of one button. No level bubbles or screws to adjust! During work, the automatic self-leveling keeps the beam horizontal, even if the laser is exposed to knocks and vibration.

Alarm function

If the laser is exposed to shock or vibrations whilst working in the slope mode you will be warned by the level alarm.



Nine Great Mikrofyn Lasers

- do you want a function packed multipurpose laser..?

Perpendicular reference function

Position the laser in the vertical position on the batter board, tripod or on the floor. The plumb beam and the rotating laser beam now forms a perfect 90° angle and it becomes very easy to construct foundation corners or to erect walls in a perfect

Use your Mikrofyn lasers for:



Vertical function



Wall-mount when installing ceiling grids



Plumb function



Scan function using "search-and-align"

- do you want a multi-purpose laser waterproof to 3m head of water..?



Waterproof - or just protected against rain?

Mikrofyn lasers are designed and manufactured in Scandinavia. That's why our lasers are built to survive the sometimes harsh Scandinavian climate.

You might think that a laser is waterproof if it can withstand water and rain (IPX6) - we don't. A temperature drop caused by chilled rain will make these lasers suck moisture like a sponge.

That's why all Mikrofyn lasers are tested to survive submersion to 3m head of water (IP68) - now that's truly waterproof.

perpendicular angle to the reference as well as checking the plumb.

Visible laser beam function

For many interior applications the visible laser beam will give you more opportunities and better flexibility - you can now use both hands when work-

ing with heavy tools or in awkward positions. Mikrofyn gives you the choice between two powerful lasers visible at distances up to 60 or 120 meters.

Unique "search-and-align" function

Position the laser over the reference point - walk up to the other end of

the factory hall and place the HS14 combined receiver and remote control over the other reference point - press one button and the laser automatically aligns itself. A very practical function if you are alone and 6m up a scaffold. Works both in horizontal and vertical mode.



Dual slope and visible beam



Scan function using "search-and-scan"



Align function using "search-and-align"



Self leveling laser function

- do you want an interior multipurpose laser that is as tough as they get..?

Take the toughest exterior laser you can buy - then add the functionality of the best interior lasers you can find - then you've got the Mikrofyn multipurpose lasers ML14*i* and ML15*i*

Both lasers feature visible laser beams, and - as if this wasn't enough - the

scanning function will increase visibility by as much as 20 times, ensuring greater distance and better visibility in bright sunlight.

Remote control

Both lasers are supplied with the unique HS14 combined 2-way remote control and laser receiver.

The HS14 is in essence labor saving. It will enable you to have remote access to all laser functions across the entire work site. Eight selectable radio channels will ensure undisturbed functionality in a crowded worksite.



The jobsite tough Mikrofyn Pipe Laser

- easy to use,
easy to afford,
hard to do without...

- do you want to
work in first class..?



The Mikrofyn MLP120 Pipe Laying Laser is designed to function under all jobsite conditions. It is manufactured using first class materials to provide contractors a rugged, reliable and easy-to-use instrument, available in 4 different models.

Rugged design for harsh job conditions
MLP120 is built to be strong and job-site tough. The round all aluminum housing ensures perfect sealing plus provides a rugged protective enclosure for the mechanics, optics, and electronics of the MLP120. MLP120 is rated to a depth of 9m (30') head of water.

Working with MLP120 you will realize what "easy-to-use" really means

- > All features of the MLP120 can be controlled by an IR remote control
- > The MLP120 is so small that it will fit into a 120mm (4 3/4") pipe
- > The MLP120 uses a high intensive red LED display (not LCD), which can easily be seen from the top of the manhole. The display shows: % slope entered, left-right line adjust position, line adjust travel range, battery capacity, and cross axis level

- > An optional string-line loop or hook for simple alignment is available

The MLP120 is a smart laser as well as easy to use

- > A fast blinking laser beam will communicate to the crew at the end of the pipe that the battery needs recharging and that the MLP120 will shut off in 2-4 hours
- > The slow blinking laser beam signals that the laser is self leveling
- > A very fast blinking beam communicates that the IR remote is being received by the MLP120. This feature is especially helpful in second day setups through-the-pipe
- > If the temperature exceeds 50° C the Laser automatically decreases the power to protect the Laser diode but at 65° C the Laser still works - what other Laser will do that?

The MLP120 control panel is easy to use! Five tactile keys:

- > Increases the grade
- > Decreases the grade
- > Lateral alignment left
- > Lateral alignment right
- > On/Off Power key

Easy to set up

The MLP120 features a built-in, rear end, folding carrying handle and only needs a rough set up:

- > Full self-leveling system: SL range +55% to -20%, no need to tilt the instrument housing!
- > Self calibrating
- > Large cross axis compensation $\pm 10\%$

Unique full range self leveling

Most other lasers have to be tilted for grades greater than 10%, but not the MLP120. This feature saves time and makes setup easier.

Customize the MLP120

Unlike other pipe lasers the MLP120 has built-in software user options that your local Mikrofyn distributor can activate.

Examples of software options:

- > Change the LED display to read % or ‰
- > Slope lock - allows the grade to be changed from the remote control
- > Disable the remote control
- > Enable direct drive so the beam moves simultaneously with the grade being entered



Trivet with 50mm (2") vertical fine height adjustment of trivet pole.



Bright beam provides excellent visibility under all light conditions. The special optics delivers a high quality beam.

A telescope to facilitate the aim can be mounted on the MLP120



The MLP120 target has a special coating that gives the already bright beam maximum luminosity.



Mikrofynd is a customer driven company. Besides the mentioned software options we have responded with hardware modifications to the MLP120 to deliver a different spot size and beam power plus longer legs, special trivet etc. We will be delighted to respond to any special request your job might dictate.

Free software upgrades

Mikrofynd furnishes free software upgrades that your service center can load without opening your MLP120. This feature allows you to take advantage of new developments.

- > Simple to use control panel
- > Small size - 120x270mm (4 3/4" x 10 2/3")
- > Large grade range -15% to 50%
- > Full self-leveling range - no tilting required
- > Large cross axis compensation range ±10%
- > Internal self calibrating technology
- > High quality bright beam
- > Low cost off-the-shelf rechargeable battery
- > 1-Hour charging system
- > Easy to remove handle/clamp with tripod mount
- > Heavy duty waterproof carrying case
- > Complete range of accessories
- > Totally water proof (9m/30' head of water)

Full function remote control with DirectDrive™

The MLP120 standard version includes an IR remote control. It features the same functions as the control panel. All changes are made by DirectDrive™, so there is no waiting time.

Choose between 3 or 4 leg setup

The MLP120 allows the operator to choose whether to use a 3-leg setup or 4-leg setup on centerline in 15-30 cm (6-12") pipe. Set of 12 legs in 3 different lengths is part of the large list of accessories.

Great Battery/Charging System!

No need for expensive special battery packs to power the MLP120 - 30 hours continuous operation from a low cost rechargeable battery. The MLP120 on-board battery is a standard 7.2V Ni-MH rechargeable battery, such as the Makita type. 1 battery is included with each package. The battery is easy to exchange without tools. The battery is available from local tool shops or your Mikrofynd distributor. Hot swapping of the battery is possible due to the rear-loading battery compartment and ease of access.

Charger Options

- > All MLP120 packages include a choice of 230 or 130V AC or 12V DC chargers.
- > One Hour Fast Charger - the batteries furnished with the MLP120 are recharged in approximately 1 hour. A red LED indicates when the battery is charging. The charger automatically shuts off when the battery is fully charged. This feature protects from over-charging batteries

One hour recharging provides 30 hours working time

One charge lasts for approximately 30 hours. Recharging takes less than one hour.

Alternative power sources

- > 12VDC adapter w/cable-alligator clips
- > 12V DC adapter w/cable-cigarette connector
- > NiMh battery - 50% more runtime



MIKROFYND MLP120 remote control offers DirectDrive™ = no wait.



MIKROFYND MLP120 gives the contractor extra flexibility with 3- or 4 leg setup and different leg length.



With the 12V DC charger option you can even recharge your MIKROFYND MLP120 from the cigarette lighter in your car.



The MIKROFYND MLP120 battery is very easy to exchange without use of any tools.



The jobsite tough Mikrofyn Pipe Laser

The MLP120 is dressed to meet the daily challenges

MLP120 is delivered in a sturdy, waterproof carrying case.

MLP120 Standard case (Shown with accessories)

- > Instrument
- > Battery charger
- > Battery
- > Remote control
- > Target set
- > User's manual

Length: 41 cm-16 in
Depth: 33 cm-13 in
Height: 17 cm- 7 in



MLP120 Trivet case (Shown with accessories)

- > Instrument
- > Battery charger
- > Battery
- > Remote control
- > Target set
- > Trivet
- > User's manual

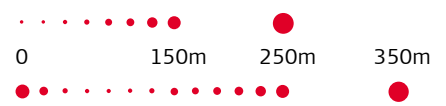
Length: 41 cm-16 in
Depth: 33 cm-13 in
Height: 17 cm- 7 in



Standard beam or long range beam?

The C model is focused to provide the smallest beam from 0 to 60m (0 -200'). The LD models will provide a smaller beam beyond 60m (200') than the C model, but it will be larger at shorter ranges than the C models. The chart to the right shows the beam comparisons. To most users the beams will be the same from 60 to 100m (200'-330').

Standard beam advantage



Long distance beam advantage

Technical specifications

Laser:	Diode, HeNe quality
Wavelength:	635 nm
Beam power:	< 5mw
Beam diameter:	10mm Ø (7/16")
Accuracy:	2mm/100m (1/40" per 100 ft)*
Self leveling range:	Cross axis: ±10% Automatic cross axis compensation: Yes
Battery:	7.2V Makita™ type - 1.4 Ah. Completely recharged in less than one hour Operational time approximately 30 hours
Remote control:	Infrared, approx. 125m (400')
Waterproof:	Yes (IP68) 9m (30') head of water
Operating temperature:	-20° to +65 °C (-4° to +150°F)
Dimensions	11.6 cm Ø x 27 cm (4.57" Ø x 10.63")
Weight:	6.6 lbs. (3 kg)

MLP120 models

MLP120 C	= Circular
MLP120 CP	= Circular Power
MLP120 LD	= Long Distance (Beam focused at 60m / 200')
MLP120 LDP	= Long Distance Power

Type	Recommended max working distance	Grade range	Self leveling
MLP120 C	Min. 200m (620')	-15 to +50%	-20 to +55%
MLP120 CP	Min. 250m (770')	-15 to +50%	-20 to +55%
MLP120 LD	Min. 250m (770')	-15 to +50%	-20 to +55%
MLP120 LDP	Min. 300m (920')	-15 to +50%	-20 to +55%

Mikrofyn Waterproof

All Mikrofyn lasers will survive 3 meters (10') head of water

Waterproof or just protected against rain..?

Is a laser waterproof when it can withstand a few inches of rain? (IPX6) – we don't think so – all Mikrofyn lasers are tested to withstand 3m (10') head of water (IP68) – now that's waterproof. This also means that our lasers are completely dustproof.



Authorized Mikrofyn Distributor:



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