

Leica Lino ML180 / ML 90

Multipurpose line laser for layouts at long distances



Leica Lino ML90 and ML180 multiline lasers "Setting up walls faster than ever before!"

The idea behind the development:

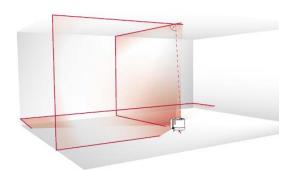
Combination of ease of use of a multi line laser with the high accuracy and Smart Targeting function of a rotation laser.

- Especially designed for longer distances in larger spaces.
- Precise line projection of 90° angles
- Ideal for interior & exterior layouts
- Clever Receiver XCR catch for Lino ML 180





Leica Lino ML90 and ML180 multiline lasers The pro team for 90° layouts!



Leica Lino ML90

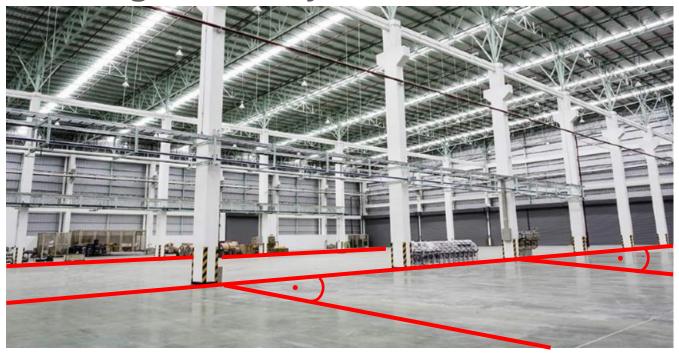
- 2 vertical lines, 1 horizontal line,1 plumb
- Manual vertical line adjustment within ± 4°



- 3 vertical lines, 1 horizontal line,1 plumb
- XCR catch for Smart Targeting and remote control of vertical lines
- Manual vertical line adjustment within ± 4°



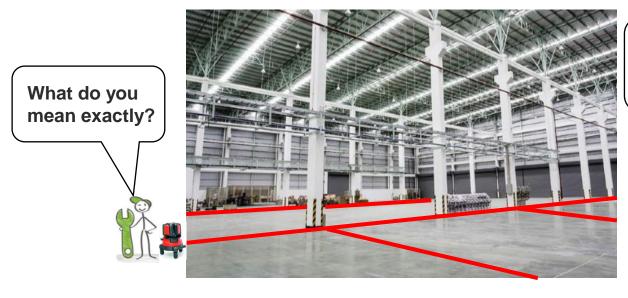
Drywall layouts in large spaces Challenge for every tradesmen



- Line is not visible anymore receiver is needed
- Cumbersome to target marks on the opposite wall to adjust the line laser.
- 90° angles need to be aligned



Drywall layouts in large spaces Cumbersome working with conventional lasers



Turn the line laser a bit to the left, so that we target our mark on the wall.



Workflow with conventional line laser

- 1. Position line laser on reference point.
- 2. Adjust laser line to target on opposite wall.

 Mostly done with 2 persons: one adjusts the line laser, the 2nd person checks the targeting on opposite wall and informs the first person how to rotate the line laser.

 This is cumbersome and needs quite some time.

Our Solution with ML 180 One man operation with Smart Targeting



Workflow with ML 180 and XCR Catch receiver

- 1. Position Lino ML 180 on reference point.
- 2. Adjust laser line to target on opposite wall.

 Only one person is needed. On opposite wall with the mark, Smart targeting is switched on, the receiver is held on the mark and the Lino ML adjusts itself automatically to the receiver.

Geosystems

Smart targeting Higher working efficiency

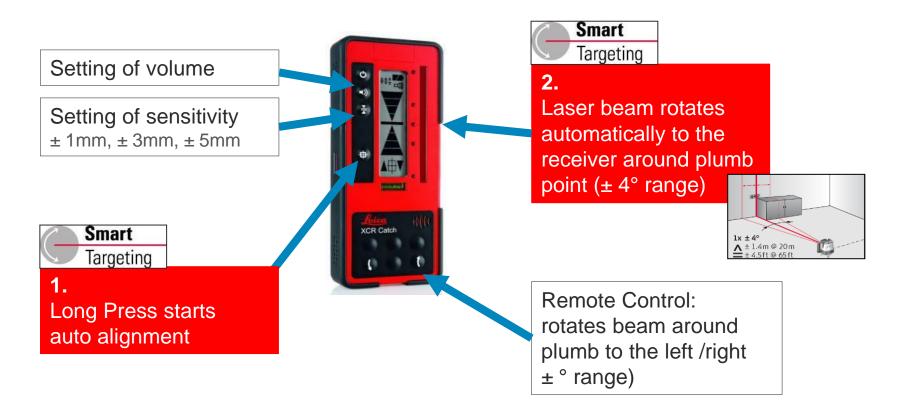




- Quick and efficient working on long distances
- Easy to use, self-explaining, no manual needed
- Automatic targeting is accurate: no errors due to inaccurate laser beams
- One-person workflow: No 2nd person needed
- No walking back and forth if working alone on site



XCR Catch: More than just locating lines Smart Targeting and Remote Control



^{*} The usual line detection of standard receivers is also covered up to 100m, remote control and Smart Targeting works up to 50m



Highly accurate Self Levelling Avoid costly errors



Two times more accurate than average pendulum based leveling solution

Leveling/Line accuracy:
+/- 0.7 mm @ 10 m

 Precision eliminates errors due to inaccurate line projection

- Important for work on larger spaces with longer distances
- Swiss engineering designed this innovative and unique electronic levelling system



Versatile

Different applications, indoor and outdoor



Key application

90° line angles support all kind of layout work

Other applications:

Height transfers for distances from 5m up to 50m, plumbing up/down, simple levelling..

Target Groups

Interior finishing layouts at larger spaces, dry wall, partition wall, metalworkers,.. exterior brick layout or frame construction,..



Additional Benefits



Flexible Power Concept

Rechargeable NiMH batteries are exchangeable with Alkalines, recharging during operation is possible.



Drywall work

Long folding legs enable to position it next to- or over drywall profiles



Manual fine adjustment
 Easy and exact vertical aligning



Additional Benefits



No displacement
 90° angle is rotated over plumb in a ± 4° range.

Displacement avoided as no manual repositioning of the line laser necessary.



Effortless positioning

Plumb beam is located on the outer edge of the housing for closer positioning towards a wall or in a corner – simplifies layouting.



Protect / DASS Service Concept
 by Leica Geosystems, 3 years warranty (2+1)



Leica Lino ML 180 / ML 90 **Technical Data**

	Lino ML 180	Lino ML 90
Range* / with XCR catch	20m / 100m	20m / 100m
Range Remote Control	50m	No RC function
Levelling / Line accuracy	± 0.7 mm @ 10 m	± 0.7 mm @ 10m
Self levelling range	± 5.0 °	± 5.0 °
Self levelling time	< 10 sec.	< 10 sec.
Smart Targeting	Yes, with XCR Catch	No Smart Targeting
Vert. fine adjustment ± 4°	Remote and manual	Manual adjustment
Tripod thread	5/8"	5/8"
Laser type	Class II / 635 nm	Class II / 635 nm
Protection class	IP 54 (XCR Catch: IP65)	IP 54
Batteries	NiMH / Alkaline	NiMH / Alkaline
Operation time NiMH	12 h	15 h

^{*} dependent of light conditions

Products

Leica Lino ML 180

Leica Lino ML 90





The ML 180 is motorized and offers great benefits with Smart Targeting and Remote Control from the receiver XCR Catch. The Lino ML 90 has no motor, it offers the same accuracy with a manual knob for fine adjustment. For line locating, the ML 90 can be combined with the Lino RVL 100 or Lino RVL 80 receiver – which is available as accessory.



Overview Lino ML Products

Description	Article No.
Leica Lino ML 180 Pack	784438
Leica Lino ML 90 Pack	784437
XCR Catch receiver	842018
ML rechargeable NiMH battery	842019
ML charger with plugs	842020
ML carrying case empty	842855
Alkaline battery tray empty	842856



Marketing Material

- Internet Homepage
- Press Release
- Word Flyer
- DIN A4 Flyer
- Sales Presentation
- Poster (data on mediasource)
- Fotos (data on mediasource)
- Roll up Banner
- Animations
- Video
- Quick Start in every package



Appendix Positioning and Competition



Different key applications and target groups Lino ML 180 and Rugby 640

Lino ML 180

Key Application:

90° layouts from 5m up to 50m.

Advantage:

fast and easy layouts due to 3 vertical lines in 90° angles, less repositioning is necessary. Smart Targeting Function

Target groups:

Interior finishing layouts at larger spaces, dry wall, metalworkers, Exterior brick layout or frame construction

Rugby 640

Key Application:

Exterior levelling/layout up to 400m.

Advantage:

High accuracy up to 400m, site proof and rugged with IP 67

Target groups:

Concrete Work, General Construction, ...



Different key application and target groups Lino L4P1 and Lino ML 180

Lino ML 180



Right angle layouts for distances from 5m up to 50m.

Target Groups:

Interior finishing at larger spaces: dry wall, partition wall, metalworkers, installation work,...

Exterior layouts: layout of brick walls, frame construction

Lino L4P1



Key Application:

Interior 90° layouts, interior levelling or plumbing up to 15 – 20 m

Target Groups:

Drywall work, wooden layouts, other interior finishing trades such as electrician, HVAC, plumbing,...



ComparisonLino ML 180 to Lino L4P1

Leica Lino ML 180	Lino L4P1
3 vt lines, 1 hz line, 1 plumb point	3 vt lines, 1 hz line, 1 plumb point
Visible range up to 20m, range w. receiver up to 100m, range remote control up to 50m	Visible range up to 15m, range w. receiver up to 80m
Levelling/Line accuracy: 0.7mm@ 10m	Line accuracy: 1.5mm @ 10m
Smart Targeting function	No Smart Targeting function
XCR catch receiver with integrated remote control function	Standard receiver without remote control function
Vertical fine adjustment manual and remote	Vertical fine adjustment manual
Placement above dry wall possible	Placement above dry wall possible
12h working time with NiMH, battery tray for Alkaline included	24h working time with Li-lon, battery tray for Alkaline included



Competition Comparison Leica Lino ML 180 vs Stabila LA 180

Lino ML 180

Key Application:

Interior and exterior 90° layouts

Technical specs are identical

- + small, compact and ergonomic housing
- + smart power concept, comes with rechargeable batteries and Alkaline tray

Stabila LA 180

Key Application:

Interior and exterior 90° layouts

Technical specs are identical

- + housing simplifies to check 90° angles
- Big and bulky housing
- device comes with 4 Alkaline batteries,
 no rechargeable batteries in scope
 (available separately as accessory)



Competition Comparison Leica Lino ML 180 vs Geofennel FL80

Lino ML 180

Key Application: Interior and exterior 90° layouts

- + Smart Targeting Function up to 50m
- + Electronic levelling with high levelling accuracy (0.7mm @ 10m)
- + XCR catch with 2 large windows for easy catching of lines

Geofennel FL80

Key Application: Interior 90° layouts,



- + Automatic Tracking Function up to 30m
- Standard pendulum based levelling with lower levelling accuracy (2 mm @ 10m)
- Small detection window on receiver, window is only on one side



Competition Comparison Leica Lino ML 180 vs Nestle Octoliner

Lino ML 180

Key Application:

Interior and exterior 90° layouts

- + Remote control vertical adjustment
- + Smart Targeting function
- + high levelling accuracy (0.7mm @ 10m)
- + smart power concept, comes with recharg. batteries and Alkaline tray
- + range with receiver up to 100m

Nestle Octoliner

Key Application:

Interior 90° layouts, drywall



- + 4 vt lines, 1 hz line, plumb
- + Electronical levelling
- lower levelling accuracy (1.5mm @ 10m)
- No Smart Targeting Function
- No Remote Control
- Low range with receiver (only 50m)



