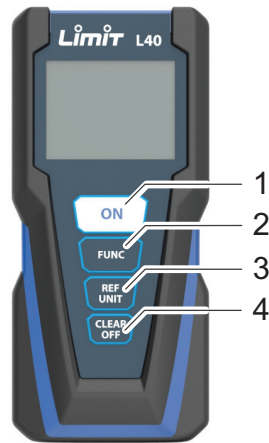
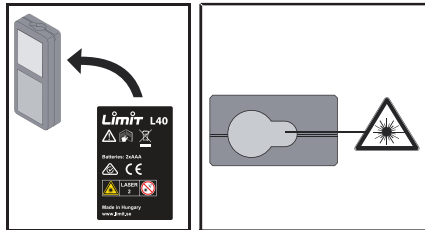


# Limit L40



www.limit.se

|                  |                        |                                |
|------------------|------------------------|--------------------------------|
|                  | <b>LASER</b><br>2      |                                |
| IEC 60825-1:2014 | $\lambda=635\text{nm}$ | $P_{\text{av}}=0.95\text{mW}$  |
|                  |                        | $t_p \rightarrow 400\text{ps}$ |



|                              |                      |                              |  |
|------------------------------|----------------------|------------------------------|--|
| <b>ON</b>                    |                      | <b>ON</b> 2 sec              |  |
|                              | 2 x AAA              |                              |  |
| <b>ON</b>                    |                      | <b>FUNC</b> 1 x              |  |
|                              |                      | 2 x                          |  |
|                              | 8.532 m              |                              |  |
| <b>REF UNIT</b> 2 sec = UNIT |                      |                              |  |
| 0.000 m                      | 0'00"1/16, 0 in 1/16 |                              |  |
| 1 x <b>REF UNIT</b> =        |                      |                              |  |
| 2 x <b>REF UNIT</b> =        |                      | <b>CLEAR OFF</b> 2 sec = OFF |  |

## en User Manual

### Overview

- 1) On / Measure                      3) Measurement Reference / UNIT  
2) Area / Volume                    4) Clear / Off

### Instrument Set-up

#### Introduction



The safety instructions and the user manual should be read through carefully before the product is used for the first time.



The person responsible for the product must ensure that all users understand these directions and adhere to them.

#### Technical data

|  |  |
|--|--|
| Accuracy with favourable conditions *    | $\pm 2.0 \text{ mm} / \pm 0.08 \text{ in}^{***}$ |
| Accuracy with unfavourable conditions ** | $\pm 3.0 \text{ mm} / \pm 0.12 \text{ in}^{***}$ |
| Range with favourable conditions *       | 0.2-40 m / 0.6-131 ft                            |
| Range with unfavourable conditions **    | 0.2-30 m / 0.6-98 ft                             |
| Smallest unit displayed                  | 1 mm / 0.04 in                                   |
| Laser class                              | 2  |
| Laser type                               | 635 nm, < 1 mW                                   |
| Ø laser point at distances               | 6 / 18 mm<br>10 / 30 m                           |
| Protection class                         | IP54   |
| Autom. laser switch off                  | after 90 s                                       |
| Autom. power switch-off                  | after 180 s                                      |
| Battery durability (2 x AAA)             | up to 5000 measurements                          |
| Dimension (H x D x W)                    | 115 x 53 x 25 mm<br>4.5 x 2.14 x 1 in            |
| Weight (with batteries)                  | 95 g / 3.4 oz                                    |
| Temperature range:                       |  |
| - Storage                                | -25 to 70 °C<br>-13 to 158 °F                    |
| - Operation                              | 0 to 40 °C<br>32 to 104 °F                       |

\* favourable conditions are: white and diffuse reflecting target (white painted wall), low background illumination and moderate temperatures.

\*\* unfavourable conditions are: targets with lower or higher reflectivity or high background illumination or temperatures at the upper or lower end of the specified temperature range.

\*\*\* Tolerances apply from 0.2 m to 5 m with a confidence level of 95%.  
With favourable conditions the tolerance may deteriorate by 0.1 mm/m for distances above 5 m.  
With unfavourable conditions the tolerance may deteriorate by 0.15 mm/m for distances above 5 m.

#### Message Codes

If the message **Error** does not disappear after switching on the device repeatedly, contact the dealer.  
If the message **InFo** appears with a number, press the Clear button and observe the following instructions:

| No. | Cause   | Correction                                |
|-----|---|---|
| 204 | Calculation error                                 | Perform measurement again.                |
| 252 | Temperature too high                              | Let device cool down.                     |
| 253 | Temperature too low                               | Warm device up.                           |
| 254 | Battery voltage too low for measurements          | Change batteries.                         |
| 255 | Received signal too weak, measuring time too long | Change target surface (e.g. white paper). |
| 256 | Received signal too high                          | Change target surface (e.g. white paper). |
| 257 | Too much background light                         | Shadow target area.                       |
| 258 | Measurement outside of measuring range            | Correct range.                            |
| 260 | Laser beam interrupted                            | Repeat measurement.                       |

#### Laser classification

|  |                      |
|--|----------------------|
| Wavelength   | 635 nm               |
| Maximum radiant output power used for classification | 0.95 mW              |
| Pulse repetition frequency                           | 320 MHz              |
| Pulse duration                                       | >400ps               |
| Beam divergence                                      | 0.16 mrad x 0.6 mrad |

#### Care

- Clean the device with a damp, soft cloth.
- Never immerse the device in water.
- Never use aggressive cleaning agents or solvents.

#### Areas of responsibility

##### Responsibilities of the person in charge of the instrument:









- To understand the safety instructions on the product and the instructions in the User Manual.
- To be familiar with local safety regulations relating to accident prevention.
- Always prevent access to the product by unauthorised personnel.

##### Responsibilities of the manufacturer of the original equipment:

The company below is responsible for supplying the product, including the User Manual in a completely safe condition.

[www.limit.se](http://www.limit.se)

Manuals on following languages are available on [www.limit.se](http://www.limit.se): Norwegian, Danish, Polish, Estonian, Lithuanian, Latvian, French, Greek, Italian, Dutch, German, Portuguese and Spanish

| Function               | Button   | Description  | Additional   | Display                                 |
|------------------------|--|--|--|---|
| On / Measure           |   | Press - as usual - turn on<br>Start measurement by pressing once again   |  |   |
| Continuous measurement |   | When pressed for 2 seconds - start of continuous mode / tracking   |  |   |
| Area                   |   | 1x press = area<br>Start measurement by pressing "ON" again when pressed "ON" for 2 seconds - start of continuous mode / tracking (no min/max)   |  |   |
| Volume                 |   | 2x press = volume<br>Start measurement by pressing "ON" again when pressed "ON" for 2 seconds - start of continuous mode / tracking (no min/max) |  |   |
| Reference              |   | 1x press = change reference to front<br>2x press = change reference to back  | Remarks:<br>• reference front is only valid for 1 measure<br>• when device starts it is always set "measuring from back" |   |
| Units                  |   | Press for 2 seconds to change unit to next selectable unit (in loop)   |  | <b>0,000m</b><br>0' 00" 1/16, 0 in 1/16 |
| Clear                  |   | Press = clear last value   |  |   |
| Off                    |  | As usual - press for 2 seconds to turn off   |  |   |