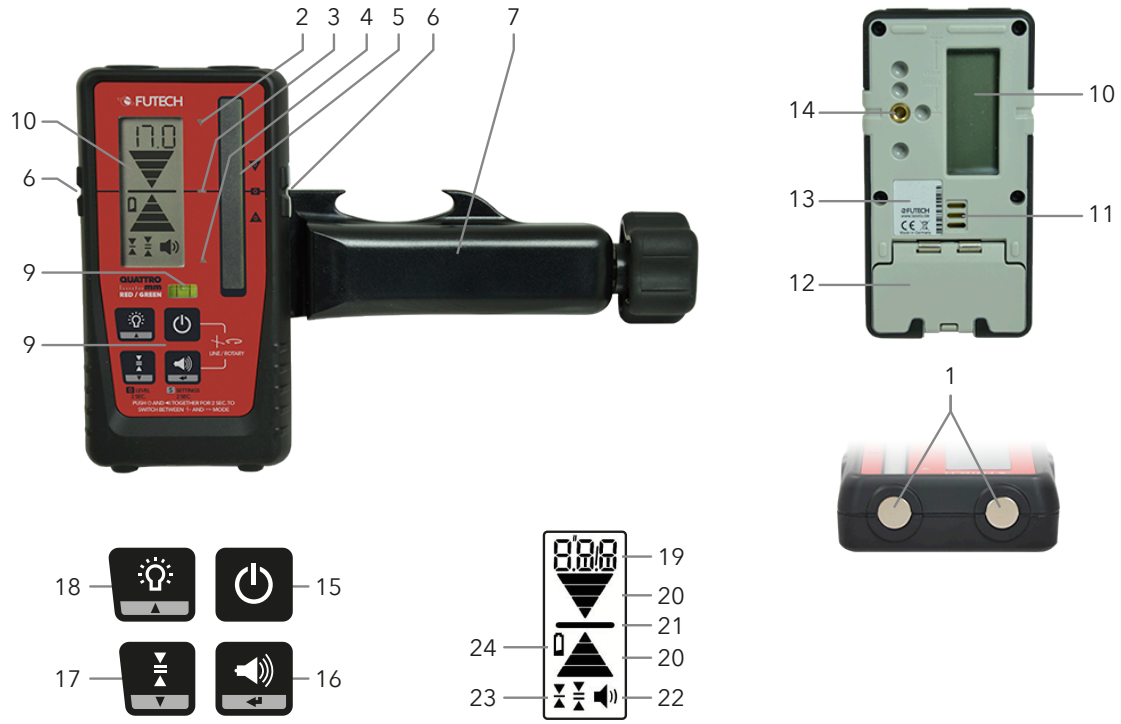
INSTRUCTION MANUAL [EN]

150.40.M – QUATTRO MM

OVERVIEW



1. Magnet
2. LED indicator(orange)
3. LED indicator(green)
4. LED indicator(red)
5. Laser sensitive area
6. Marking notch
7. Clamp
8. Keypad
9. Bubble vial
10. LCD display
11. Beeper
12. Battery cover
13. Type plate with serial number
14. Fixing thread of the clamp

Keypad

15. Power button On/Off
16. Beeper /Enter
17. Accuracy/ Arrow down
18. Grade LEDs /Arrow up

LCD Display

19. Numeric digits/text display
20. Grade indication arrow
21. On-grade indicator
22. Beeper indicator
23. Accuracy indicator
24. Battery indicator

Numeric digits/text display[19]

- Three Digits display either the numeric evaluation (*mm, cm, inch, or fractional inch*) or simple text messages.
- Resolution and decimal point is determined by the units of measure and the accuracy selected.

Grade indication arrow[20]

- Horizontal bar indicates on-grade
- Four individual levels of grade information for above and below grade. The arrow size increase if the distance from on-grade increases. The increment of arrow bars corresponds to the selected display accuracy.
- Out of beam display: A sequent of arrows indicates if the receiver has moved beyond the vertical reception range and will indicate in which direction to move to get back to laser beam. This function is only available in rotating laser mode.

Operations

Prior to initiate the self-test, check whether the batteries have been installed correctly inside the device.

Insert batteries

A. Open the Battery cover [12] by hand.
B. Insert the battery making sure that the pole of the battery is in the right position.
C. Close the Battery cover [12].

Note:

- Only use AA battery.
- Close the Battery cover[12] firmly to maintain IP67 water and dust protection.
- Remove the battery if the device is not used for a longer period.
- When low battery [24] is indicated, do not operate the device, and replace the battery immediately.

Switch ON/OFF

- Press the power button ON/OFF [15] to switch on the device. You hear one beep sound, and 'Lin' /'rot' displayed on Numeric digits/text display[19] . This means the device is switched on.
- Press again the power button ON/OFF[15]. The device beeps and 'OFF' displayed for one second on Numeric digits/text display[19] This means the device is switched off.
- In order to save the power, please switch off the device when the device is not in use.

Selecting rotary or line laser mode

If the device is not in the laser beam, it shows its detection mode:
'Lin' for line laser mode, and 'rot' rotating laser mode

- Hold the Power button ON/OFF [15] and Beeper /Enter button [16] simultaneously for about 3 seconds till a beep sounds.
- Text 'Lin' or 'rot' displayed on Numeric digits/text display[19]:
  - 'Lin' indicates the Quattro MM will detect line laser.
  - 'rot' indicates the Quattro MM will detect rotary laser.

Note:

- When the device is switched on, it starts in the operating mode used before it was switched off last time.
- if in line laser mode, the device detects only the line laser color which is first detected after switching on the device

Adjusting the volume

Press the Beeper/Enter button [16] cycles

- High: Beeper indicator[22] is displayed,' Hi' shows for one second on Numeric digits/text display[19].
- Low: Beeper indicator[22] is displayed, 'LOW' shows for one second on Numeric digits/text display[19].
- Off: no Beeper indicator[22] is displayed, 'OFF' shows one second on Numeric digits/text display[19].

Work with the laser receiver

- Switch on your construction laser. In case of line laser, activate the receiver mode on the laser.
- Switch on the device Quattro MM and select the correct laser type (rotary or liner laser) on your Quattro MM
- Move the device up and down/left and right through the laser beam until the LED indicator (green) [3] lights.
- The LED indicator (orange) [2] and the LED indicator (red) [4] show in which direction you should move the Quattro MM to find on-grade level.
- Mark the measured height at the Marking notch[6]

Note:

When you started using your Quattro MM with red laser level, you need to switch off and then switch on our Quattro MM to start working with a green laser level. Also, for switching from green to red, you need to power off/on the Quattro MM.

Adjusting the accuracy

- Press Accuracy/Arrow down button [17] once. The Numeric digits/text display[19] shows current accuracy setting on the LCD display [10].
- Press again, while the accuracy is displayed (within one second), to change the current selection. Subsequent presses will cycle through five accuracy options-Ultra fine/Fine/Medium/ Coarse/ Ultra coarse.

	mm	cm	inch	Fract.In	Display
Ultra fine	0,5	0,05	0,02	-	Flashing
Fine	1,0	0,1	0,05	1/8	Non-flash
Medium	2,0	0,2	0,1	1/4	Non-flash
Coarse	5,0	0,5	0,2	1/2	Non-flash
Ultra coarse	10,0	1,0	0,5	-	Flashing

Activate/deactivate LEDs

- Press Grade LEDs /Arrow up button [18].
- 'ON' appears on Numeric digits/text display[19] and three LED Indicators ([2], [3], [4]) flash for 3 seconds, The LEDs are activated, and the move direction is shown by the LEDs in addition to the display.
- Press Grade LEDs /Arrow up button [18] again to switch off the LED indications.

User defined on-grade level

An arbitrary level within-10 and +10 mm around the Marking notch [6] can be used as on-grade level.

- Hold the Accuracy/Arrow down button [17] for two seconds while the device is in laser beam.
- The device beeps one time, and an asymmetric symbol arrow[20] &[21] appears on LCD display[10]. This means the user defined on-grade level succeeds.
- When the laser beam is outside of allowed area (10 and +10 mm), you hear one beep sound and text 'E30' appears on Numeric digits/text display[19]. This means user defined on-grade level fails.
- Reset user defined on-grade level to default

- While the device is out of laser beam, hold the Accuracy/Arrow down button [17] for two seconds, the on-grade level is reset to default.
- If the device is switched off, the on-grade level is automatically reset to default.
- If you want to save the user defined on-grade level permanently, you can choose this option in the menu (see Menu Entries-OFS)

Use the menu

You can use the menu functions to edit settings. For most applications, the factory defaults are the best choice. We recommend changing settings only in special applications.

- Hold the Beeper /Enter button [16] for more than two seconds until the device beeping once and text 'SEn' displayed on Numeric digits/text display[19], enter the menu functions.
- Browse menu items by pressing the Accuracy/Arrow down button [17] or Grade LEDs /Arrow up button [18].
- Select menu items by pressing the Beeper /Enter button [16]
- When the menu item is selected, you may browse item values by pressing the Accuracy/Arrow down button [17] or Grade LEDs /Arrow up button [18].
- Select item value by pressing the Beeper /Enter button [16]
- Press he Power button ON/OFF [15] , exit the menu functions.

Menu Entries

'Sen' - Sensitivity: Hi(gh)/Low Default: *High*. Set it to *Low* if you have problems with disturbing sources like fluorescent or strobe lights.

- **'AvG '- Averaging: Hi(gh) / Low** Default: *Low*. Set it to *High* if you need to have more stable readings under difficult atmospheric conditions.
- **'Unt '- Unit: mm / cm / in(ch) / f(ract). in(ch)**
  Default: *mm*. Choose desired numeric elevation display unit.
- **o.o.b - Out of beam display: On/OFF** Default: *OFF*. Switch Out-of-beam display on and off. For a description see chapter LCD *Display*.
- **'OFS'-User-defined on-grade level: tmP(temporary) / PEr(manent)**
  Default: temporary. To deactivate the function, choose *OFF*. To save the user-defined on-grade level permanently, choose '*Per*'.
- **InF - Device Information** Find Information about Firmware Version (*Fw*), Device Code (*dc*) and Serial Number (*Sn*) here.

  Note:
  All menu settings will be retained when the device is turned off