

USER MANUAL

850.060DM
850.120DM

DIGITAL LEVEL 60CM
DIGITAL LEVEL 120CM

EN ENGLISH

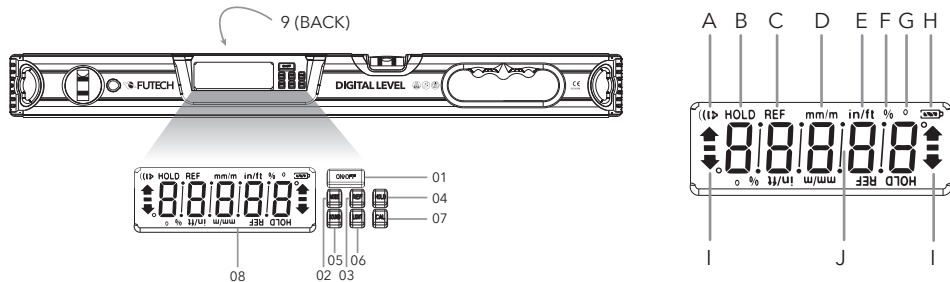
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OVERVIEW



■ DEVICE

- 01 ON/OFF button
- 02 MODE button
- 03 Reference Button
- 04 HOLD button
- 05 SOUND Button
- 06 LIGHT Button
- 07 Calibration button
- 08 LCD display
- 09 Battery cover

■ DISPLAY

- A Sound indicator
- B HOLD indicator
- C Reference indicator
- D mm/m measuring unit
- E in/ft measuring unit
- F % measuring unit
- G degree measuring unit
- H Battery indicator
- I Level indicators
- J Main display



SAFETY

Please read the complete safety instructions in the booklet delivered with this device.

When the product won't be used for a long time, extract the batteries.

BATTERY

Open the battery compartment [09] and insert the 2 x AAA batteries (DC 4.5V) . Make sure the batteries are in the correct position.

When batteries are less than 5% charged, the battery indicator [H] will start flashing.

FIRST TIME USAGE

Remove all protection foils.

USE

■ POWER ON/OFF

- To power on the product, press the On/Off button [01] shortly. The LCD display [08] turns on.
- To switch off the product, shortly press the ON/Off button [01]. The device powers off.

■ UNITS

Several units are available to show the slope. The

different options are: degrees (°), millimeter per meter (mm/m), percentage (%), inch/feet (in/ft).

- Press the Mode button [02] shortly to change the unit.

The selected unit is shown in the upper right corner of the LCD display [08].

■ BACKLIGHT

The display backlight increases visibility in less bright environments.

- Press the light button [06] to change the setting of the backlight.

■ AUTOMATIC SHUT OFF

To save battery power, the digital level will switch itself off if not used for a certain time. This time can be set to 5 minutes or 2 hours.

- Hold the Mode button [02] to select the preferred shut off time.

The LCD display [08] shows '5' for 5 minutes or '2H' for 2 hours.

When 2 hours is selected, the battery indicator [H] stays on the display to remind you the 2 hour function is active.

Default setting is 5 minutes.

NOTE

When the battery is less than 5% charged, the system automatically shuts off the product after 5 minutes. Holding the mode button [02] will not initiate the setting options.

■ ZERO REFERENCE

This function allows the user to set every slope as reference (0°). This feature is useful when measuring the same slope over and over or finding the difference between two slopes.

— SETTING REFERENCE

- Position the level under the required slope to use it as reference.
- Press the Reference button [03] to program that angle as reference slope.

To find, for example, the difference between that and a second slope, now hold the device on the second slope and the difference in angle is directly displayed.

— EXITING REFERENCE MODE

- Press the [03] Reference button shortly to deactivate the Reference function.

■ HOLD FUNCTION

The hold button is a useful functionality when you are not able to read the display while working.

- Press the Hold button [04] to freeze the read-out until you press the button again. 'HOLD' [B] is displayed on the LCD display.
- Press the Hold button [04] again to turn off the hold function.

■ SOUND NOTIFICATION

Sound assistance can be used for work in case that looking at the LCD is not possible.

- Press the Sound button [05] to enable the sound mode.

Once activated, a sound symbol [A] is visible on the LCD display [08].

- Press the Sound button [05] again to disable the sound mode.

The sound symbol [A] is no longer visible on the LCD display [08].

These beeps can be heard:

Continuous	0°	90°
Fast	0.1° → 0.9°	89.9° → 89.1°
Medium	1.0° → 4.9°	89.0° → 85.1°
Slow	5.0° → 10.0°	85.0° → 80.0°



The inclination arrows [1] provide the desired turning direction. When levelled (0° or 90°), the display shows two hyphens at both sides of the LCD Display [08].

■ CALIBRATING DEVICE

NOTE

Calibration is recommended before each use. An 'ERROR' message is displayed when the product tilts too much for- or backwards (to display an accurate reading).

Two different types of calibration are available:

— QUICK LEVEL/PLUMB CALIBRATION

This method is used to (level/plumb) calibrate the device quickly.

- Turn on the digital level
- Hold the device against a (flat) surface/wall making sure the level bubble is centered.
- When holding the device in this position, hold the calibration button [07] for 3 seconds.

When done properly, the LCD Display [08] will flash 'CAL' on the screen. The calibration process started.

When moving/tipping the device during this process, 'ERROR' appears on the [08] LCD Display.

- To exit the calibration mode after an error, shortly press the calibration button [07].

You can restart the procedure. The calibration process is done when the LCD display [08] shows 'RDY'. The device automatically leaves the calibration mode.

— CALIBRATION

- When calibrating the device, put the device on a flat surface (i.e. surface of table).

This surface will be the reference surface.

- When holding the device under this angle, hold the calibration button [07] and the Mode button [02] for 3 seconds.

The calibration process initiated and the LCD Display [08] shows 'CAL1'.

- Push the Calibration button [07] shortly and the LCD Display [08] starts flashing 'CAL1'.
- When the LCD Display [08] shows 'CAL2', rotate the device 180° in such a way that the device is in the same position, but the screen faces now away from the user.
- Push the Calibration [7] button shortly,
- 'CAL2' will flash on the [08] LCD Display.

When ready, the device will automatically exit the calibration mode.



■ MAINTENANCE

Repairs or services are not covered in this manual and should only be carried out by qualified trained technicians. Periodically, wipe the body with a dry cloth. Do not use abrasives or solvents on this instrument. For service, use only manufacturer's specified parts.

TECHNICAL SPECIFICATIONS

	850.060DM DIGITAL LEVEL	850.120DM DIGITAL LEVEL
Precision	± 0.1° for 0° and 90° ± 0.2° for other angles	
Protection	IP54	
Resolution	0.1°, 0.1%, 1/8", .125", 1 mm/m	
Optional units	in/ft - mm/m - ° - %	
Measurement range	4 x 90°	
Batteries	2 x AAA	
Battery life	± 100 hours (continuous use)	
Dimensions (l x w x h)	27 x 600 x 63 mm	27 x 1200 x 63 mm (120cm)
Weight	0.67 kg	1.29 kg
Working temperature	-10 °C < T < 50 °C	





DECLARATION OF CONFORMITY

Futech (Belgium) declares under its own responsibility that this device:

- 850.060DM Digital Level
- 850.120DM Digital Level

is in conformity with the standards

EN 61326-1:2013

Lier, Belgium,
March 30, 2023
Patrick Waüters

A handwritten signature in black ink, appearing to read 'Patrick Waüters', is written over a light gray background.

Potential misprints are reserved. Images used are not strict. All features, functionality and other product specifications are subject to change without notice or obligation.



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