

IMPORTANT: Read Before Using

IMPORTANT : Lire avant usage

IMPORTANTE: Leer antes de usar

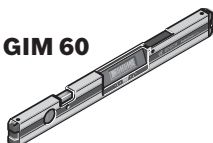


Operating/Safety Instructions

Consignes de sécurité/d'utilisation

**Instrucciones de funcionamiento
y seguridad**

GIM 60



GIM 120



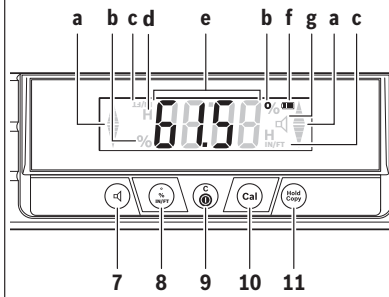
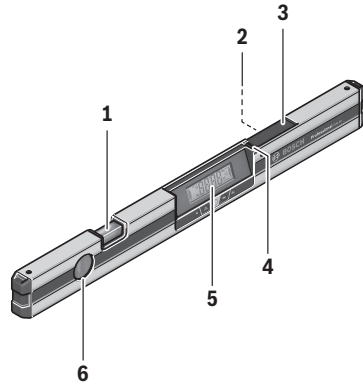
BOSCH

Call Toll Free for Consumer Information and Service Locations

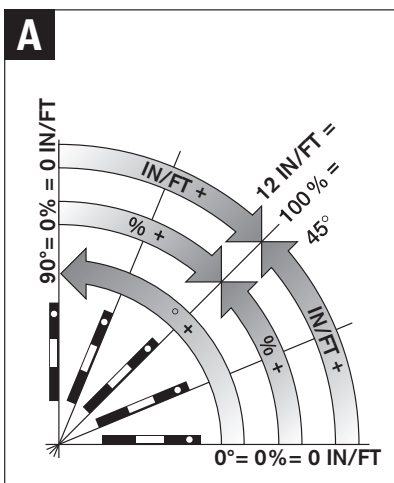
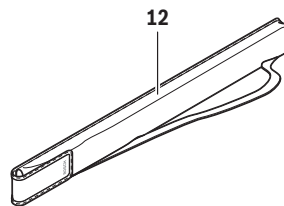
Pour obtenir des informations et les adresses de nos centres
de service après-vente, appelez ce numéro gratuit

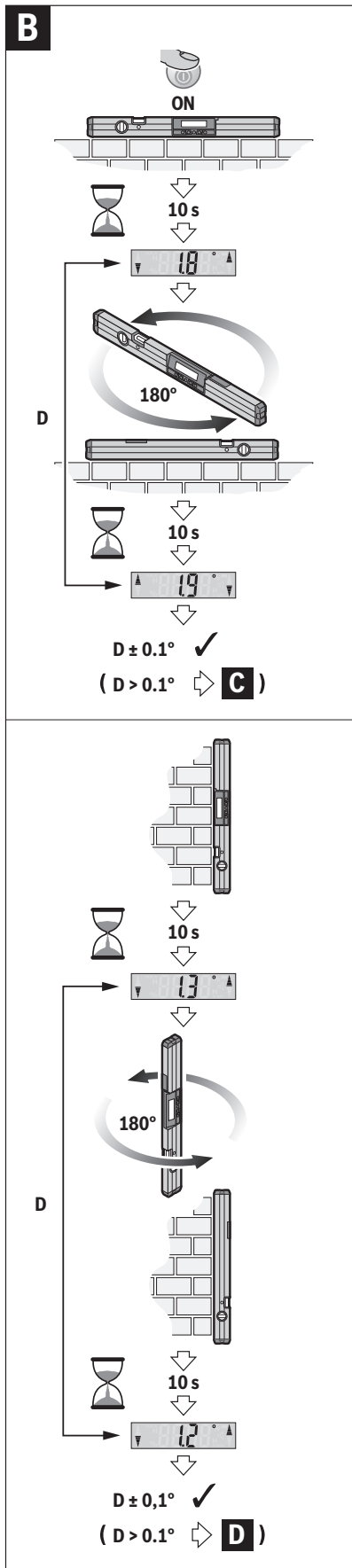
Llame gratis para obtener información para el consumidor
y ubicaciones de servicio

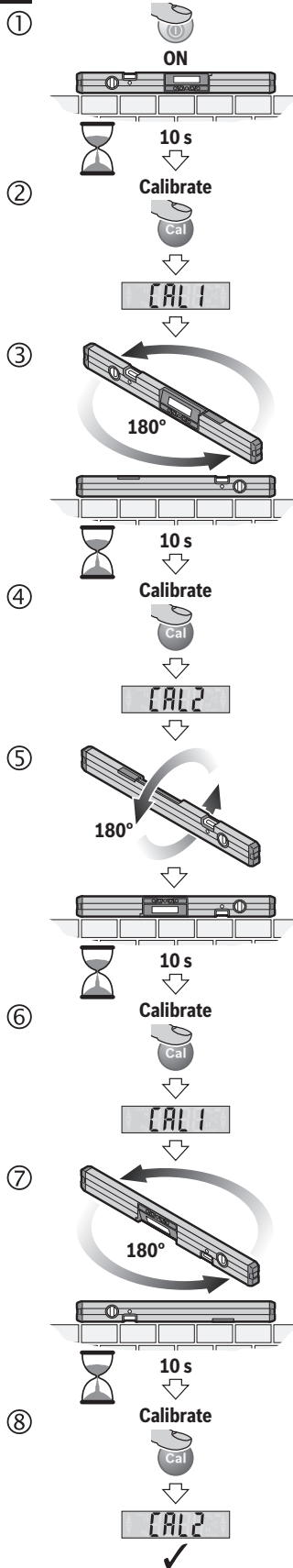
**For English
Version
See page 6**

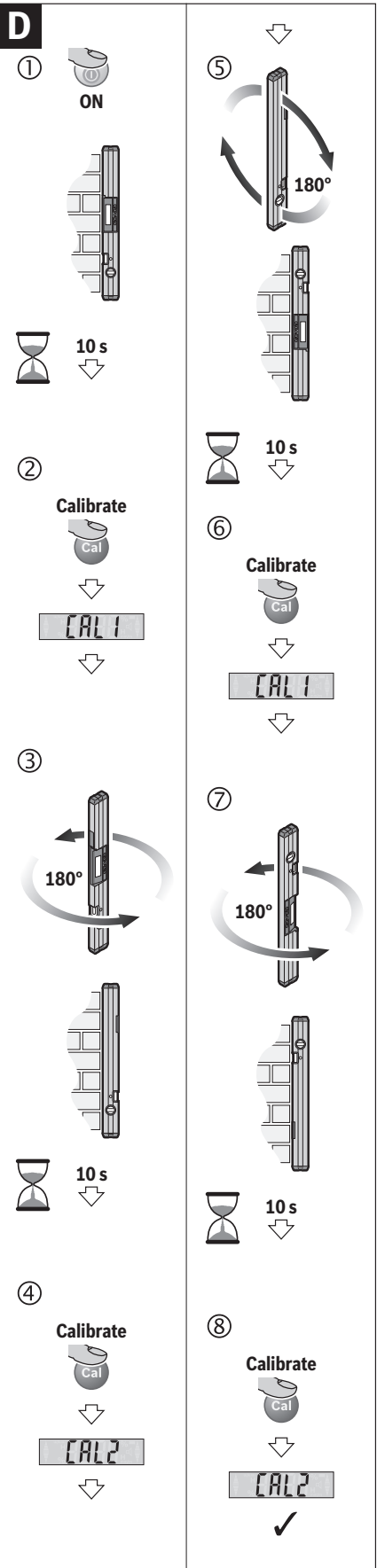


GIM 60
GIM 120





C



General Safety Rules

⚠ WARNING Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Electrical safety

Batteries can explode or leak, cause injury or fire. To reduce this risk, always follow all instructions and warnings on the battery label and package.

DO NOT short any battery terminals.

DO NOT charge alkaline batteries.

DO NOT mix old and new batteries. Replace all of them at the same time with new batteries of the same brand and type.

DO NOT mix battery chemistries.

Dispose of or recycle batteries per local code.

DO NOT dispose of batteries in fire.

Keep batteries out of reach of children.

Remove batteries if the device will not be used for several months.

Maintenance

DO NOT use this digital level for any purpose other than those outlined in this manual. This could result in serious injury.

ALWAYS use only the accessories that are recommended by the manufacturer of your digital level. Use of accessories that have been designed for use with other digital levels could result in serious injury.

Repair and servicing must always be performed by a qualified repair facility. Repairs performed by unqualified personnel could result in serious injury.

Technical Data

Digital level	GIM 60	GIM 120
Article number	3 601 K76 710	3 601 K76 810
Dimensions		
– Length	24 in / 608 mm	49.2 in / 1250 mm
– Width	1.06 in / 27 mm	1.06 in / 27 mm
– Height	2.3 in / 59 mm	2.3 in / 59 mm
Measuring range	0–360° (4 x 90°)	0–360° (4 x 90°)
Measuring accuracy		
– 0°/90°	±0.05°	±0.05°
– 1–89°	±0.2°	±0.2°
Operating temperature	14 °F...122 °F / –10 °C...+50 °C	14 °F...122 °F / –10 °C...+50 °C
Storage temperature	–4 °F...158 °F / –20 °C...+70 °C	–4 °F...158 °F / –20 °C...+70 °C
Alkaline Batteries	4 x1.5V LR6 (AA)	4 x1.5V LR6 (AA)
Operating time, approx.	100 h	100 h
Automatic switch-off after approx.	30 min	30 min
Weight according to EPTA-Procedure 01/2003	1.5 lbs / 0.7 kg	2.9 lbs / 1.3 kg
IP 54 (dust and splash proof)	•	•

The digital level can be clearly identified with the serial number **2** on the type plate.

Intended Use

The digital level is intended for quick and precise angle measurements.

Features

The numbering of the product features shown refers to the illustration of the digital level on the graphic page.

- 1** Spirit level for horizontal alignment
- 2** Serial number
- 3** Battery lid
- 4** Latch of battery lid
- 5** Illuminated display
- 6** Spirit level for vertical alignment
- 7** Audio signal button
- 8** Button for changing the unit of measure
- 9** “ON/OFF” button
- 10** Button for calibration “Cal”
- 11** “HOLD/COPY” button
- 12** Protective pouch

Display elements

- a** Alignment arrows
- b/c** Units of measure: °; %; IN/FT
- d** “H” indicator for “HOLD” memory value
- e** Reading
- f** Battery indicator
- g** Indicator for audio signal

Assembly

Inserting/Replacing the Batteries

Use alkaline (4 x AA) batteries to operate the digital level.

⚠ WARNING Ensure polarity of each battery matches the marking on the battery lid. Incorrect battery polarity may cause fire or personal injury.

To open the battery lid **3**, press on the latch **4** and fold the battery lid up. Insert the batteries.

Battery Indicator

The battery indicator **f** always displays the current battery status:

-  The battery is over 90 % full
-  The battery is between 60 % and 90 % full
-  The battery is between 30 % and 60 % full
-  The battery is between 10 % and 30 % full

 The empty battery indicator flashes. The battery level is under 10 %. Once the battery indicator begins flashing, you can measure for approximately another 15-20 minutes until the tool shuts down.

Always replace all batteries at the same time. Do not use different brands or types of batteries together.

Remove the batteries from the digital level when not using it for longer periods. When storing for longer periods, the batteries can corrode and self-discharge.

Operation

Initial Operation

⚠ CAUTION Protect the digital level against moisture and direct sun light.

⚠ CAUTION Do not subject the digital level to extreme temperatures or variations in temperature. As an example, do not leave it in vehicles for a long time. In case of large variations in temperature, allow the digital level to adjust to the ambient temperature before putting it into operation. In case of extreme temperatures or variations in temperature, the accuracy of the digital level can be impaired.

⚠ CAUTION The contact surfaces and contact edges of the digital level must be clean. Protect the digital level against impact and shock. Debris particles or deformations can lead to faulty measurements.

⚠ CAUTION Avoid heavy impact to or dropping down of the digital level. After severe exterior effects to the digital level, it is recommended to carry out an accuracy check (see "Checking the Measuring Accuracy") each time before continuing to work.

Switching On and Off

Press the "ON/OFF" switch **9** to switch the digital level on or off.

If no button on the digital level is pressed for approx. 30 mins or the grade of the digital level is not changed by more than 1.5°, then the grade measurement and the display are automatically switched off to save the battery.

Checking the Measuring Accuracy (see figure B)

Check the accuracy of the digital level each time before using, after extreme temperature changes as well as after heavy jolts or impact.

Before measuring angles <45°, the accuracy check should take place on a level and horizontal surface; before measuring angles >45°, on a level and vertical surface.

Switch the digital level on and place it on the horizontal or vertical surface.

Wait for 10s and write down the measured value.

Rotate the digital level (as shown in the figure) by 180° around its vertical axis. Wait again for 10s and write down the second measured value.

Calibrate the digital level only when the difference between both reading values is greater than 0.1°.

Calibrate the digital level in the position (vertical or horizontal), in which the difference of the measured values has been determined.

Calibration for Horizontal Surfaces (see figure C)

The horizontal surface used to calibrate the tool cannot slope more than 5°. If the slope is greater than 5°, the calibration is discontinued and "—" will display.

- ① Switch the digital level on and place it onto the horizontal surface so that the spirit level **1** faces upward and the display **5** faces you. Wait for 10s.
- ② Then press the "Cal" calibration button **10** until "CAL1" appears on the display. Then the measuring value will flash on the display.
- ③ Turn the digital level 180° around the vertical axis so that the spirit level still faces upward, but the display **5** faces away from you. Wait for 10s.
- ④ Then press the "Cal" calibration button **10** again. "CAL2" will be shown on the display. Then the measuring value (no longer flashing) will appear on the display. The digital

level has now been recalibrated for this surface.

- ⑤ Afterwards you must calibrate the digital level for the opposite surface. For this, turn the digital level around its horizontal axis so that the spirit level **1** faces downward and the display **5** faces you. Place the digital level onto the horizontal surface. Wait for 10s.
- ⑥ Then press the “**Cal**” calibration button **10** until “**CAL1**” appears briefly on the display. Then the measuring value will flash on the display.
- ⑦ Turn the digital level 180° around the vertical axis so that the spirit level still faces downward but the display **5** is facing away from you. Wait for 10s.
- ⑧ Then press the “**Cal**” calibration button **10** again. “**CAL2**” will be shown on the display. Then the measuring value (no longer flashing) will appear on the display. The digital level has now been recalibrated for both horizontal surfaces.

Note: If the digital level is not turned around the axis shown in the figure in steps ⑤ and ⑦, **then the calibration cannot be completed** (“**CAL2**” is not indicated in the display).

Calibration for Vertical Surfaces (see figure D)

The vertical surface used to calibrate the tool cannot slope more than 5°. If the slope is greater than 5°, the calibration is discontinued and “---” will display.

- ① Switch the digital level on and place it against the vertical surface so that the spirit level **6** faces upward and the display **5** faces you. Wait for 10s.
- ② Then press the “**Cal**” calibration button **10** until “**CAL1**” appears on the display. Then the measuring value will flash on the display.
- ③ Turn the digital level 180° around the vertical axis so that the spirit level still faces upward, but the display **5** faces away from you. Wait for 10s.
- ④ Then press the “**Cal**” calibration button **10** again. “**CAL2**” will be shown on the display. Then the measuring value (no longer flashing) will appear on the display. The digital level has now been recalibrated for this surface.
- ⑤ Afterwards you must calibrate the digital level for the opposite surface. For this, turn the digital level around its horizontal axis in such a manner that the spirit level **6** faces downward and the display **5** faces you. Place the digital level against the vertical surface. Wait for 10s.
- ⑥ Then press the “**Cal**” calibration button **10** until “**CAL1**” appears on the display. Then the measuring value will flash on the display.
- ⑦ Turn the digital level 180° around the vertical axis so that the spirit level still faces downward but the display **5** is facing away from you. Wait for 10s.
- ⑧ Then press the “**Cal**” calibration button **10** again. “**CAL2**” will be shown briefly on the display. Then the measuring value (no longer flashing) will appear on the display. The digital level has now been recalibrated for both vertical surfaces.

Note: If the digital level is not turned around the axis shown in the figure in steps ③ and ⑦, **then the calibration cannot be completed** (“**CAL2**” is not indicated in the display).

Changing the Unit of Measure (see figure A)

You can change between the units of measure “o”, “%” and “IN/FT” at any time. For this, press the button for changing the unit of measure **8** as often as required until the desired setting is

displayed in indicator **b/c**. The current measuring value is automatically converted.

The unit-of-measure setting is retained when switching the digital level on or off.

Switching the Audio Signal On/Off

The audio signal can be switched on/off with the audio signal button **7**. When the audio signal is switched on, indicator **g** appears in the display.

When you switch on the digital level, the audio signal is switched on as standard.

Measured-value Indication and Alignment Aids

The measurement on the digital level changes with the movement of the tool. The display will stop on the measurement once your digital level is stationary on the desired position.

The measurement on the display will rotate 180 degrees with the digital level, so the display can be read for overhead work.

The digital level uses arrows on the display to show which direction it has to be tilted in order to reach the target value. In standard measurements the target value is the horizontal or vertical, in the **"Hold/Copy"** function it is the stored measuring value.

When the target value is reached, the arrows disappear and a continuous audio signal sounds when the audio signal is switched on.

Measuring Functions

The **"Hold/Copy"** button **11** has two functions:

- Holding (**"Hold"**) a measured value, even when the digital level is moved afterwards (e.g., because the digital level is in a position in which the display cannot be read);
- Copying (**"Copy"**) a measured value.

"Hold" function:

- Press the **"Hold/Copy"** button **11**. The current measuring value **e** is held on the display and stored, and indicator **"H"** flashes.
- Press the **"Hold/Copy"** button **11** again to end the **"Hold"** function. The stored value is deleted. Normal measuring is continued.

"Copy" function:

- Long press the **"Hold/Copy"** button **11**. The current measuring value **e** is copied and indicator **"H"** will flash 3 times on the display before returning to normal measuring.
- Press the **"Hold/Copy"** button **11**. The stored measuring value **e** is shown on the display and indicator **"H"** flashes.
- Place the digital level in the location to which the measuring value is to be transferred. When doing so, the alignment of the digital level is irrelevant. The alignment arrows **a** show which direction the digital level has to be moved in to reach the grade you want to copy. When the stored grade is reached, an audio signal sounds and the alignment arrows **a** disappear.
- Press the **"Hold/Copy"** button **11** again to return stored measurement. Indicator **"H"** is shown flashing on the display.
- Long press the **"Hold/Copy"** button **11** to store a new value.
- To delete a **"Hold"** value, press the **"ON/OFF"** button **9**.

Maintenance and Service

Store and transport the digital level only in the supplied protective pouch.

For safe and proper working, always keep the digital level clean.

Do not immerse the digital level in water or other fluids.

Wipe off debris using a moist and soft cloth. Do not use any cleaning agents or solvents.

In case of repairs, send in the digital level packed in its protective pouch **12**.

If the digital level should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an authorized after-sales service centre for Bosch power tools. Do not open the digital level yourself.

In all correspondence and spare parts orders, please always include the 10-digit article number given on the type plate of the digital level.

ENVIRONMENT PROTECTION

Recycle raw materials and batteries instead of disposing of waste. The unit, accessories, packaging and used batteries should be sorted for environmentally friendly recycling in accordance with the latest regulations.



LIMITED WARRANTY OF BOSCH LASER AND MEASURING TOOL PRODUCTS

Robert Bosch Tool Corporation ("Seller") warrants to the original purchaser only, that all Bosch lasers and measuring tools will be free from defects in material or workmanship for a period of one (1) year from date of purchase. Bosch will extend warranty coverage to two (2) years when you register your product within eight (8) weeks after date of purchase. Register on-line. If you choose not to register your product, a one (1) year limited warranty will apply to your product.

30 Day Money Back Refund or Replacement -

If you are not completely satisfied with the performance of your laser and measuring tools, for any reason, you can return it to your Bosch dealer within 30 days of the date of purchase for a full refund or replacement. To obtain this 30-Day Refund or Replacement, your return must be accompanied by the original receipt for purchase of the laser or optical instrument product. A maximum of 2 returns per customer will be permitted.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Center. To make a claim under this Limited Warranty, you must return the complete Bosch laser or measuring tool, transportation prepaid, to any BOSCH Factory Service Center or Authorized Service Center. Please include a dated proof of purchase with your tool. For locations of nearby service

centers, please use our on-line.

THIS WARRANTY PROGRAM DOES NOT APPLY TO TRIPODS AND RODS. Robert Bosch Tool Corporation ("Seller") warrants tripods and leveling rods for a period of one (1) year from date of purchase.

THIS LIMITED WARRANTY DOES NOT APPLY TO OTHER ACCESSORY ITEMS AND RELATED ITEMS. THESE ITEMS RECEIVE A 90 DAY LIMITED WARRANTY.

To make a claim under this Limited Warranty, you must return the complete product, transportation prepaid. For details to make a claim under this Limited Warranty please visit.

ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO ONE YEAR FROM DATE OF PURCHASE. SOME STATES IN THE U.S., AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S., AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

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