

**IMPORTANT:**  
Read Before Using

**IMPORTANT :**  
Lire avant usage



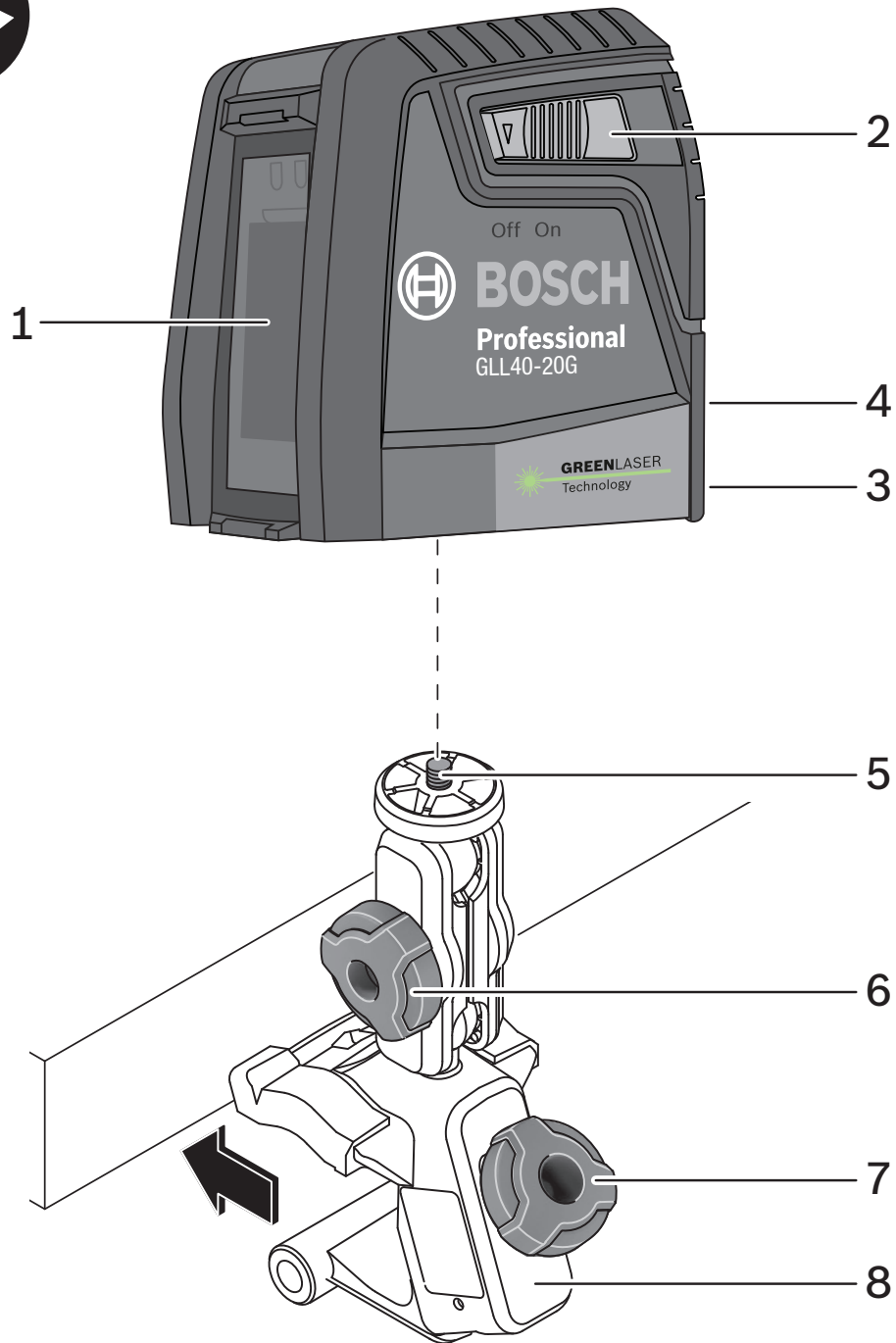
**Operating / Safety Instructions**  
**Consignes d'utilisation / de sécurité**

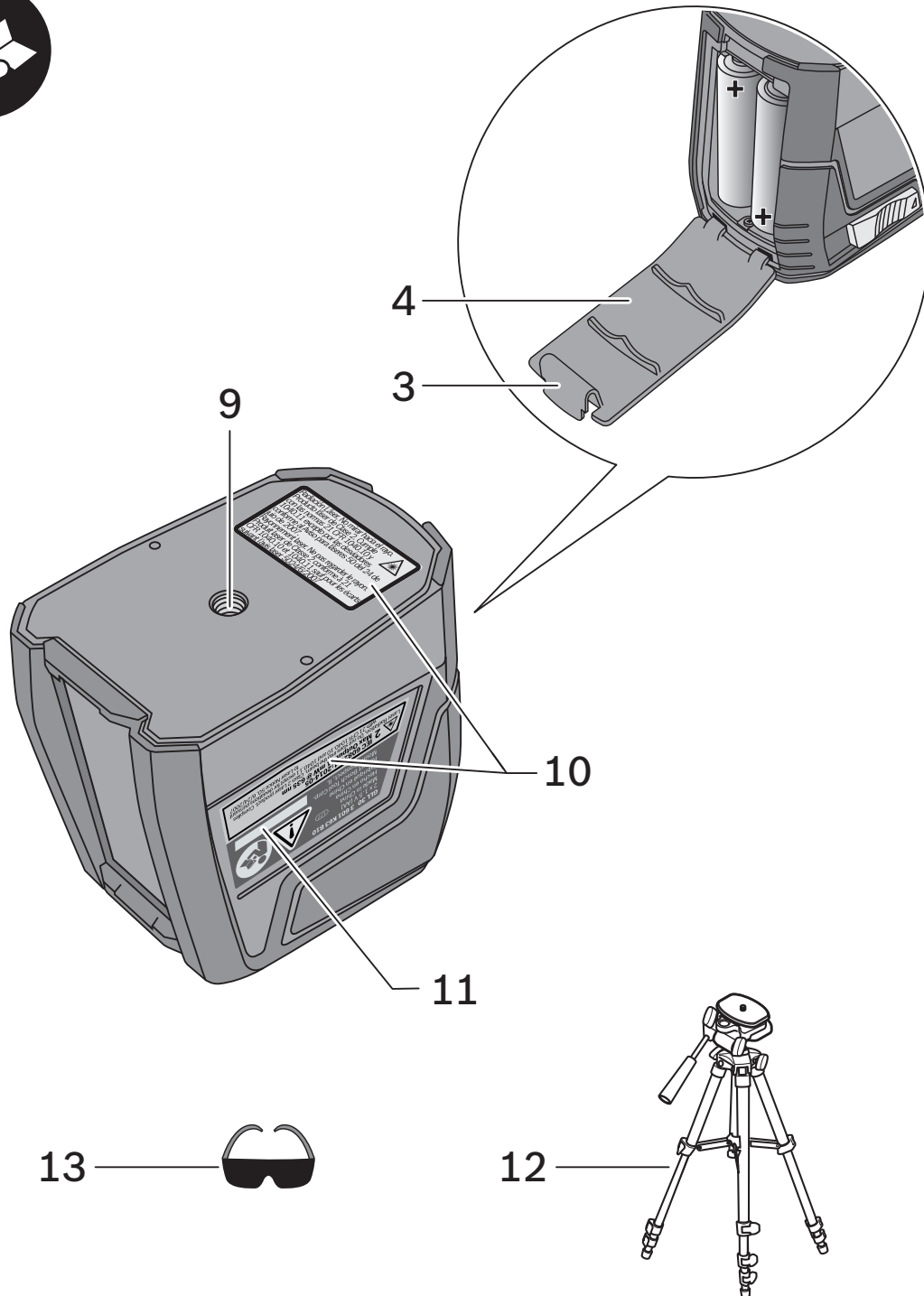
**GLL40-20G**

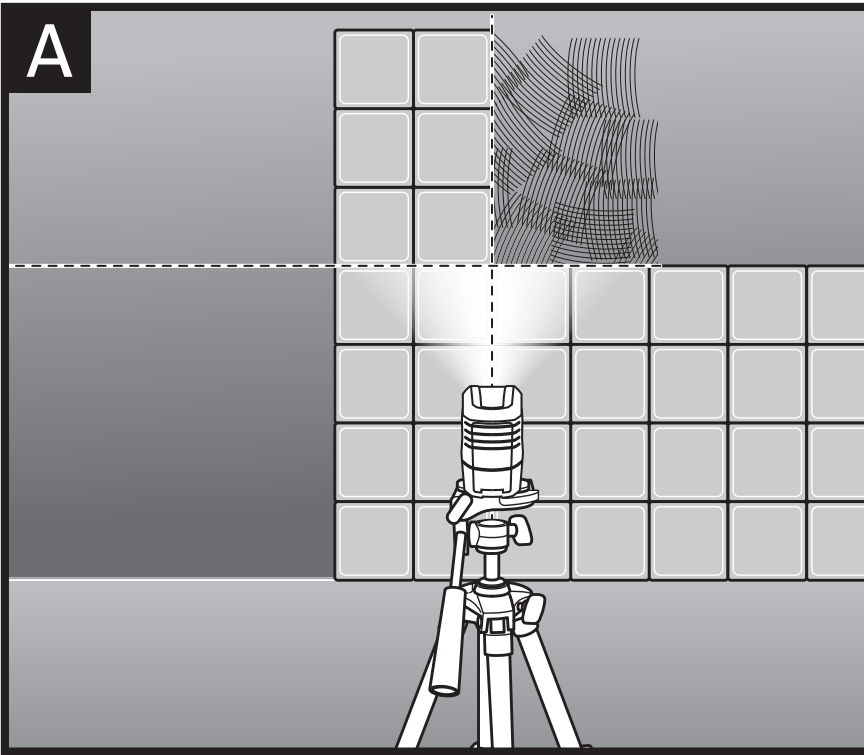


**BOSCH**

**English Version**  
See page 5





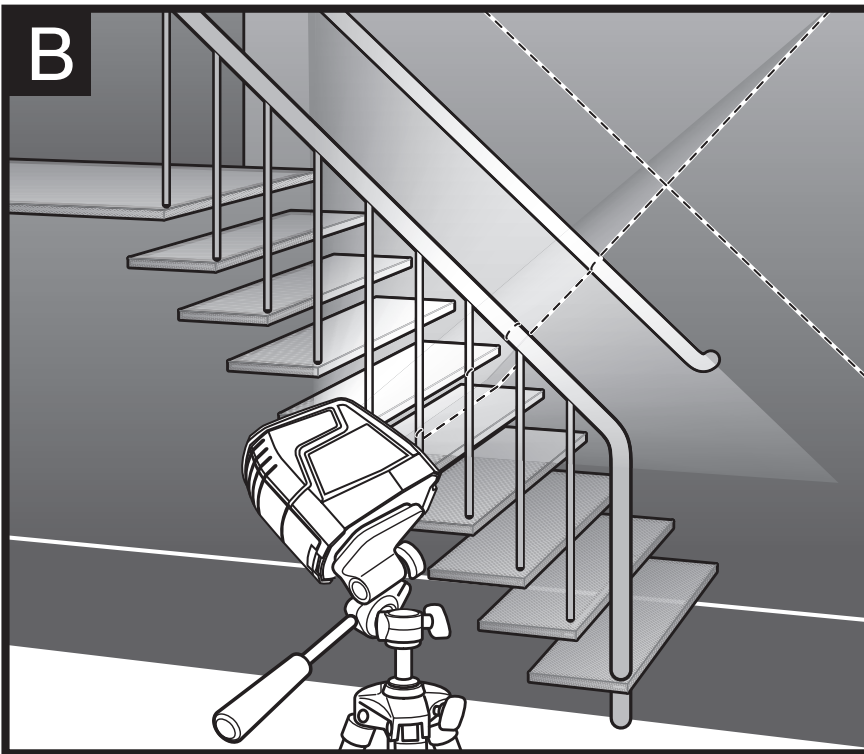


**⚠ WARNING**

Make sure that this device and the tool are securely mounted before operation.

**⚠ AVERTISSEMENT**

Assurez-vous que cet appareil et l'outil sont solidement assujettis avant de les utiliser.






**⚠ ADVERTENCIA**

Asegúrese de que este dispositivo y la herramienta estén montados de manera segura antes de su utilización.

## Safety Symbols

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.

|   |  |
|---|--|
|    | This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death. |
|    | Read manual symbol - Alerts user to read manual.   |
|  | WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.  |

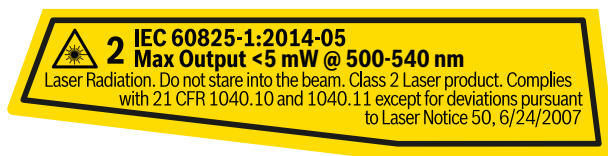
## General Safety Rules



**WARNING** Read all instructions. Failure to follow all instructions listed below may result in hazardous radiation exposure, electric shock, fire and/or serious injury. The term “tool” in all of the warnings listed below refers to your mains-operated (corded) tool or battery-operated (cordless) tool.



**WARNING** The following labels are on your laser tool for your convenience and safety. They indicate where the laser light is emitted by the tool. **ALWAYS BE AWARE** of their location when using the tool.



**Do not direct the laser beam at persons or animals and do not stare into the laser beam yourself.** This tool produces laser class 2 laser radiation and complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007. This can lead to persons being blinded.

**DO NOT remove or deface any warning or caution labels.** Removing labels increases the risk of exposure to laser radiation.

Use of controls or adjustments or performance of procedures other than those specified in this manual, may result in hazardous radiation exposure.

**ALWAYS make sure that any bystanders in the vicinity of use are made aware of the dangers of looking directly into the laser tool.**

**DO NOT place the laser tool in a position that may cause anyone to stare into the laser beam intentionally or unintentionally.** Serious eye injury could result.

**ALWAYS position the laser tool securely.** Damage to the laser tool and/or serious injury to the user could result if the laser tool fails.

**ALWAYS use only the accessories that are recommended by the manufacturer of your laser tool.** Use of accessories that have been designed for use with other laser tools could result in serious injury.

**DO NOT use this laser tool for any purpose other than those outlined in this manual.** This could result in serious injury.

**DO NOT leave the laser tool “ON” unattended in any operating mode.**

**DO NOT disassemble the laser tool.** There are no user serviceable parts inside. Do not modify the product in any way. Modifying the laser tool may result in hazardous laser radiation exposure.

**DO NOT use the laser viewing glasses as safety goggles.** The laser viewing glasses are used for improved visualization of the laser beam, but they do not protect against laser radiation.

**DO NOT use the laser viewing glasses as sun glasses or in traffic.** The laser viewing glasses do not afford complete UV protection and reduce color perception.

**DO NOT use any optical tools such as, but not limited to, telescopes or transits to view the laser beam.** Serious eye injury could result.

**DO NOT stare directly at the laser beam or project the laser beam directly into the eyes of others.** Serious eye injury could result.

### **Work area safety**


**Keep work area clean and well lit.** Cluttered or dark areas invite accidents.

**DO NOT operate the laser tool around children or allow children to operate the laser tool. Serious eye injury could result.**

**DO NOT use laser tools, attachments and accessories outdoors when lightning conditions are present.**

**Do not operate the measuring tool in explosive environments, such as in the presence of flammable liquids, gases or dusts.** Sparks can be created in the measuring tool which may ignite the dust or fumes.

### **Electrical safety**

** WARNING 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.

### **Personal safety**

**If laser radiation strikes your eye, you must deliberately close your eyes and immediately turn your head away from the beam.**

**Do not make any modifications to the laser equipment.**



**Stay alert, watch what you are doing and use common sense when operating a tool. Do not use a tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating a tool may result in serious personal injury or incorrect measurement results.

**Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

**Use caution when using laser tools in the vicinity of electrical hazards.**

### **Magnets**

**Keep the tool, positioning device, and laser target plate away from cardiac pacemakers.** The magnets of the tool and laser target plate generate a field that can impair the function of cardiac pacemakers.



**Keep the tool, positioning device, and laser target plate away from magnetic data medium and magnetically-sensitive equipment.** The effect of the magnets of the tool and laser target plate can lead to irreversible data loss.

### **Use and care**

**Use the correct tool for your application.** The correct tool will do the job better and safer.

**Do not use the tool if the switch does not turn it on and off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.

**Store idle tool out of the reach of children and do not allow persons unfamiliar with the tool or these instructions to operate the tool.** Tools are dangerous in the hands of untrained users.

**Maintain tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the operation. If damaged, tool repaired before use.** Many accidents are caused by poorly maintained tools.

**Use the tool, accessories, etc., in accordance with these instructions and in the manner intended for the particular type of tool, taking into account the working conditions and the work to be performed.** Use of the tool for operations different from those intended could result in a hazardous situation.

### **Service**

**Have your tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the tool is maintained.

**Develop a periodic maintenance schedule for tool. When cleaning a tool be careful not to disassemble any portion of the tool since internal wires may be misplaced or pinched or may be improperly mounted.** Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia, etc. may damage plastic parts.

**SAVE THESE INSTRUCTIONS**

## Intended Use

The tool is intended for determining and checking horizontal and vertical lines. The measuring tool is suitable exclusively for operation in enclosed working sites.

## Features

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

- |  |  |
|--|--|
| <b>1</b> Laser beam outlet                         | <b>7</b> Fastening screw of flexible mounting device |
| <b>2</b> On/Off switch                             | <b>8</b> Flexible mounting device                    |
| <b>3</b> Latch of battery lid                      | <b>9</b> Tripod mount 1/4"-20                        |
| <b>4</b> Battery lid                               | <b>10</b> Laser warning label                        |
| <b>5</b> 1/4"-20 screw of flexible mounting device | <b>11</b> Serial number                              |
| <b>6</b> Locking screw of flexible mounting device | <b>12</b> Tripod*                                    |
|  | <b>13</b> Laser viewing glasses*                     |

\*not included.

## Technical Data

|  |                                      |
|--|--------------------------------------|
| <b>Model Number</b> .....                  | <b>GLL40-20G</b>                     |
| Article number .....                       | 3 603 K63 V10                        |
| Working range .....                        | 40 ft (12 m) <sup>1)</sup>           |
| Levelling Accuracy .....                   | ±5/16" @ 30 ft (±0.8 mm/m)           |
| Self-levelling range, typically .....      | ±4°                                  |
| Operating temperature .....                | 41° F to 104° F (+5° C to +40° C)    |
| Storage temperature .....                  | -4° F to 158° F (-20° C to +70° C)   |
| Max. altitude .....                        | 6560 ft (2000 m)                     |
| Relative air humidity, max. ....           | 90%                                  |
| Pollution degree according IEC 61010 ..... | 2 <sup>2)</sup>                      |
| Laser class .....                          | 2                                    |
| Laser type .....                           | 500-540 nm, <5 mW                    |
| Mount threading .....                      | 1/4"-20                              |
| Batteries .....                            | 2 x AA 1.5V                          |
| Weight .....                               | 0.5 lb (0.25 kg)                     |
| Dimensions .....                           | 3.2" x 2.3" x 3.3" (81 x 58 x 84 mm) |

The tool can be clearly identified with the serial number on the type plate.

<sup>1)</sup> The working range can be decreased by unfavorable environmental conditions (e.g. direct sun exposure).

<sup>2)</sup> Conductive pollution occurs, or dry, non-conductive pollution occurs which becomes conductive due to

condensation which is expected. In such conditions, equipment is normally protected against exposure to direct sunlight, precipitation, and full wind pressure, but neither temperature nor humidity is controlled.

## Preparation

### Inserting/Replacing the Battery

Use only alkaline batteries.

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

When inserting, pay attention to the correct polarity according to the representation on the inside of the battery compartment.

When the batteries are low, the laser beams flash 0.3 s off, 0.3 s on, a total of 3 times, repeating this cycle every 1 minute.

Always replace all batteries at the same time. Only use batteries from one brand and with the identical capacity.



**WARNING** Remove the batteries from the tool when not using it for extended periods. When storing for extended periods, the batteries can corrode and discharge themselves.

## Operation

### Initial Operation



**WARNING** Protect the tool against moisture and direct sun irradiation.

**Do not subject the tool to extreme temperatures or variations in temperature.** As an example, do not leave it in vehicles for longer periods. In case of large variations in temperature, allow the tool to adjust to the ambient temperature before operation. In case of extreme temperatures or variations in temperature the accuracy of the tool can be impaired.

**Avoid heavy impact or falling of the tool.** After heavy exterior impact on the tool, an accuracy check should always be carried out before continuing to work (see “Leveling Accuracy”).

**Switch the tool off during transport.** Slide the On/Off switch **2** to the “Off” position when transporting the measuring tool. This locks the leveling unit, which can be damaged in case of intense movement.

### Switching On and Off



**WARNING** Do not leave the switched on tool unattended and switch the tool off after use. Other persons could be blinded by the laser beam.



**WARNING** Do not point the laser beam at persons or animals and do not look into the laser beam yourself, not even from a large distance.

To switch on the tool, slide the On/Off switch **2** to the “On” position. Immediately after switching on, the tool sends laser beams from the laser beam outlets **1**.

To **switch off** the tool, slide the On/Off switch **2** to the “Off” position. When switching off, the leveling unit is locked.

## **Application**

The measuring tool is used for determining and checking horizontal and vertical lines.

## **Automatic Leveling**

### **Working with Automatic Leveling**

Position the tool on a level and firm base or to a tripod **12**.

After switching on, the leveling function automatically compensates irregularities within the self-leveling range of  $\pm 4^\circ$ . The leveling is finished as soon as the laser beams no longer move.

If the measuring tool surface deviates more than  $4^\circ$  from the horizontal plane, then the automatic leveling function is not possible and the laser beams will flash. The lines will flash 1 s off 3 s on continually.

In this case, bring the tool to the level position and wait for the self-leveling to take place. As soon as the tool is within the self-leveling range of  $\pm 4^\circ$ , then the laser lines will continuously light up.

In case of ground vibrations or position changes during operation, the tool is automatically level again. To avoid errors, check the position of the horizontal and vertical laser line with regard to the reference points upon re-leveling.

## Working Advice

**Always use the center of the laser line for marking.** The width of the laser line changes with the distance.

### Attaching with the Flexible Mounting Device

With the flexible mounting device **8**, you can fasten the measuring tool to different objects ranging in thickness between  $\frac{1}{2}$  and  $2\frac{3}{8}$  in (12 and 60 mm), such as vertical or horizontal boards or pipes.

Loosen the fastening screw **7** of the flexible mounting device, mount the flexible mounting device to the desired location and tighten the fastening screw again.

Place the measuring tool via the tripod mount **9** onto the  $\frac{1}{4}$ -20 male thread **5** of the flexible mounting device and screw it on applying moderate force. Do not overtighten the measuring tool, otherwise it can become damaged.

Roughly adjust the flexible mounting device before switching on the measuring tool. To do this, loosen the locking screw **6** for the flexible mounting device and move the measuring tool until horizontally positioned at the desired height. Retighten the locking screw.

### Working with a Tripod (Accessory)

A tripod **12** offers a stable, height-adjustable measuring support. Place the tool via the tripod mount **9** onto the  $\frac{1}{4}$ -20 male thread of the tripod and screw the locking screw of the tripod tight.

### Laser Viewing Glasses (Accessory)

The laser viewing glasses **13** filter out the ambient light. This makes the red light of the laser appear brighter to the eyes.





**WARNING** Do not use the laser viewing glasses as safety goggles. The laser viewing glasses are used for improved visualization of the laser beam, but they do not protect against laser radiation.



**WARNING** Do not use the laser viewing glasses as sunglasses or in traffic. The laser viewing glasses do not provide complete UV protection and reduce color perception.

## Maintenance and Service

**Keep the tool clean at all times.**

**Do not immerse the tool into water or other fluids.**

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

**Regularly clean the surfaces of the laser beam outlets in particular, and pay attention to any fluff of fibers.**

**If the tool should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an authorized after-sales service center for Bosch power tools.**

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

## ENVIRONMENT PROTECTION



Recycle raw materials & batteries instead of disposing of waste. The unit, accessories, packaging & 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. Product registration card must be complete and mailed to Bosch (postmarked within eight weeks after date of purchase), or you may register on-line at [www.boschtools.com/Service/ProductRegistration](http://www.boschtools.com/Service/ProductRegistration). 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 service locator

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.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., OR PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

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