| IMPORTANT:<br>Read Before Using | IMPORTANT :<br>Lire avant usage | IMPORTANTE:<br>Leer antes de usar |
|---|---|---|

**Operating/Safety Instructions**
**Consignes de fonctionnement/sécurité**
**Instrucciones de funcionamiento y seguridad**

# GPL 2

# BOSCH

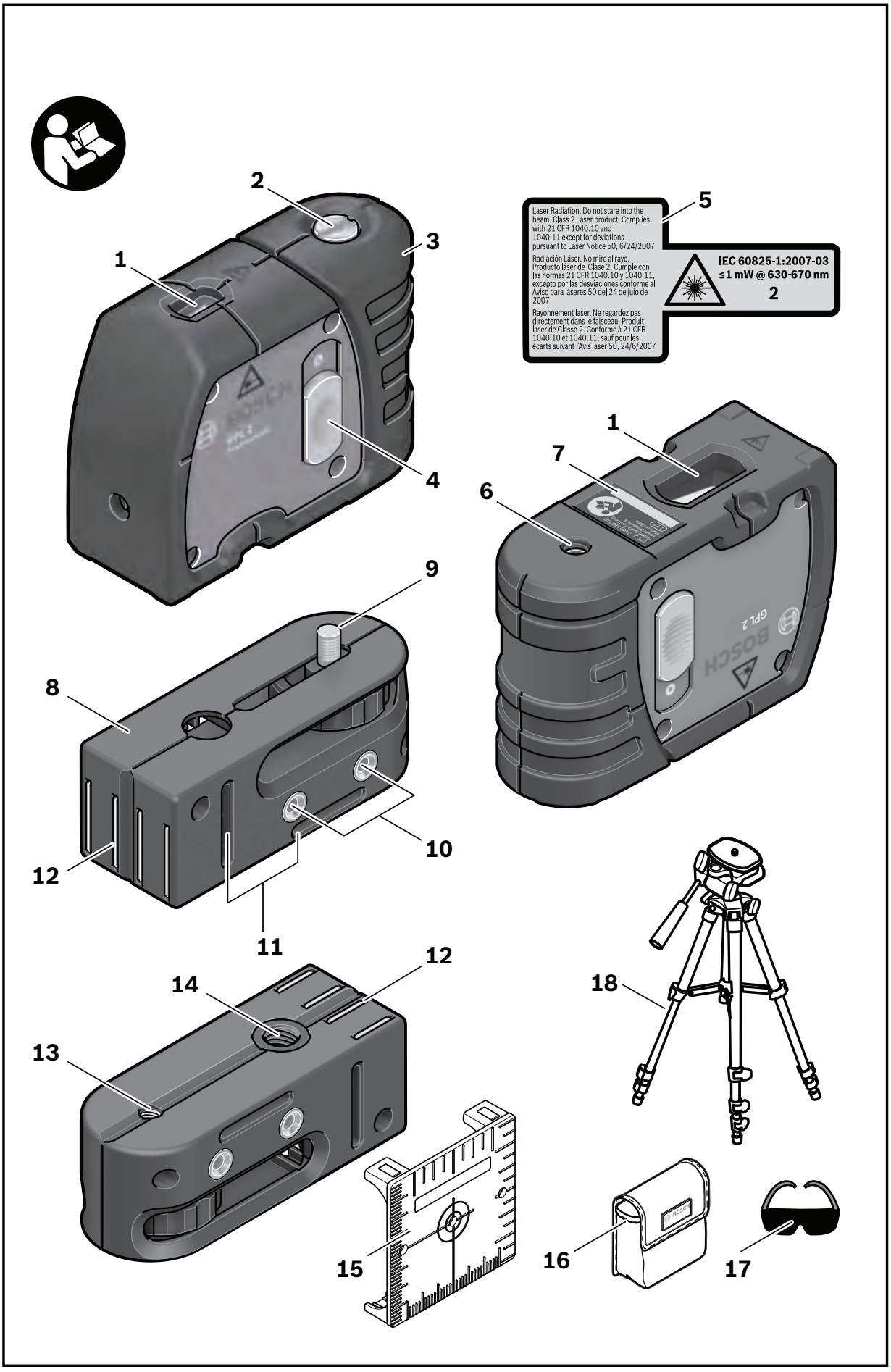
**Call Toll Free for Consumer Information & Service Locations**

**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**

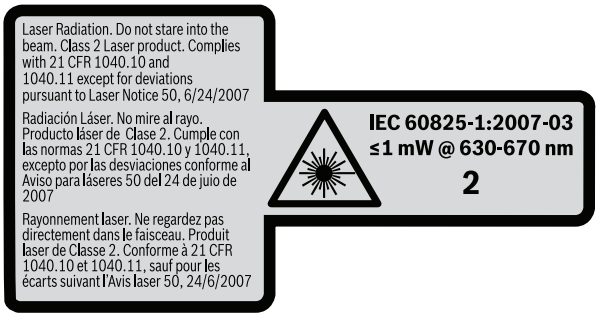
[redacted]

**For English Version**
**See page 3**

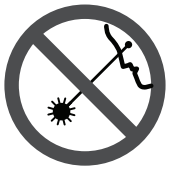


# General Safety Rules

**⚠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.




**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.

**⚠CAUTION** 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.

**SAVE THESE INSTRUCTIONS**

### FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**⚠WARNING** **Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### 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.

### 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.**

### Personal safety

**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.

### Multiple-Purpose Attachment

**Keep the multiple-purpose attachment 8 away from cardiac pacemakers.** The magnets **12** generate a field that can impair the function of cardiac pacemakers.

- **Keep the multiple-purpose attachment 8 away from magnetic data medium and magnetically-sensitive equipment.** The effect of the magnets **12** 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 must be repaired by the authorized Bosch service center before further 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.

## Intended Use

This tool is intended for accurate transfer of plumb point from floor to ceiling.

## Preparation

### Inserting/Replacing the Battery

**Alkaline batteries are recommended for the tool.**

To open the battery compartment **3**, turn the latch **2** in clockwise direction to position and pull off the battery lid. Insert the batteries provided.

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

Position the battery lid to the bottom of the housing and then push it upward. To lock the battery lid, turn the latch 2 in counterclockwise direction to the position.

When the laser beams flash slowly during operation,the batteries are low. When the flashing begins, the tool can be operated for approx. 8 h.

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.

## Features

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

**1** Exit opening for laser beam
**2** Latch of battery lid
**3** Battery lid
**4** On/Off switch
**5** Laser warning label
**6** Tripod mount 1/4”
**7** Serial number
**8** Multiple-Purpose Attachment
**9** Locking screw for Multi-Purpose Attachment
**10** Screw holes of Multi-Purpose Attachment
**11** Opening for strap attachment
**12** Magnets
**13** 1/4” tripod mount on Multi-Purpose Attachment
**14** 5/8” tripod mount on Multi-Purpose Attachment
**15** Laser Target*
**16** Belt Pouch*
**17** Laser viewing glasses*
**18** Tripod*

*The accessories illustrated or described are not included as standard delivery.

## Technical Data

| | |
|---|---|
| Working range (typical) | 100 ft (30m) |
| Leveling Accuracy | |
| Minimum Factory Accuracy | up to 1/8-in at 30 ft (up to 3 mm/10 m) |
| Typical Accuracy | up to 1/16-in at 30 ft (up to 2 mm/10 m) |
| Self-leveling range (typical) alongside the: | |
| – lateral axis | ±3° |
| Leveling duration, typically | <3s |
| Operating temperature | 14 °F... 104 °F (–10 °C ... +40 °C) |
| Storage temperature | -4 °F... 158 °F ( –20 °C ... +70 °C) |
| Relative air humidity, max. | 90 % |
| Laser class | 2 |
| Laser type | 635 nm, <1 mW |
| Tripod mount | 1/4-20 |
| Batteries | 3 x 1.5 V LR6 (AA) |
| Operating lifetime, approx. | 24 h |
| Weight | 0.5lb (0.25kg) |
| Dimensions | 4-1/8” x 3-1/8” x 1-5/8” (105 x 80 x 42 mm) |

Please observe the article number on the type plate of your tool. The trade names of the individual tools may vary.

The tool can be clearly identified with the serial number **7** on the type plate.

## 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 putting it into 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”). Do not use the tool when the laser emitting cover has been damaged after heavy exterior impact on the tool. Many accidents are caused by poorly maintained tools.

**Switch the tool off during transport.** When switching off, the leveling unit, which can be damaged in case of intense movement, is locked.

### Switching On and Off

To **switch on** the tool, slide the On/Off switch **4** upward so that **“I”** is indicated on the switch. Immediately after switching on, the tool sends a laser beam out of each exit opening **1**.

**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 off** the tool, push the On/Off switch **4** downward so that **“0”** is indicated on the switch. When switching off, the leveling unit is locked.

### Setting the Automatic Switch-off

By default, the tool automatically shuts off 20 minutes after being switched on. The automatic switch-off can be set from 20 minutes to 8 hours. For this, switch the tool on, then immediately off, and then on again within 4 s. To confirm the change, all laser beams will flash quickly for 2 s after switching on the second time.

**Do not leave the switched on tool unattended and switch the tool off after use.** Other persons could be blinded by the laser beam. When switching on the tool the next time, the automatic switch-off is set to 20 minutes again.

### Working with Automatic Leveling

Position the tool on a level and firm support, attach it to the holder **8** or to the tripod **18**.

After switching on, the automatic leveling function automatically compensates irregularities within the self-leveling range from ±5° (longitudinal axis) and ±3° (lateral axis). The leveling is finished as soon as the laser points do not move any more.

If the automatic leveling function is not possible, e.g. because the surface on which the tool stands deviates by more than 5° (or 3° from the horizontal plane) the laser beams flash rapidly.

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 ±5° or ±3° respectively, all laser beams light up continuously again.

In case of ground vibrations or position changes during operation, the tool is automatically leveled in again. To avoid errors by moving the tool, check the position of the laser beams with regard to the reference points upon re-leveling.

### Working Advice

**Always use the center of the laser point for marking.** The size of the laser point changes with the distance.

## Leveling Accuracy

### Influences on Accuracy

The ambient temperature has the greatest influence. Especially temperature differences occurring from the ground upward can divert the laser beam.

As thermal fluctuation is largest close to the ground, the tool, if possible, should be mounted on a commercially available tripod and placed in the center of the working area.

Apart from exterior influences, device-specific influences (such as heavy impact or falling down) can lead to deviations. Therefore, check the accuracy of the tool each time before starting your work.

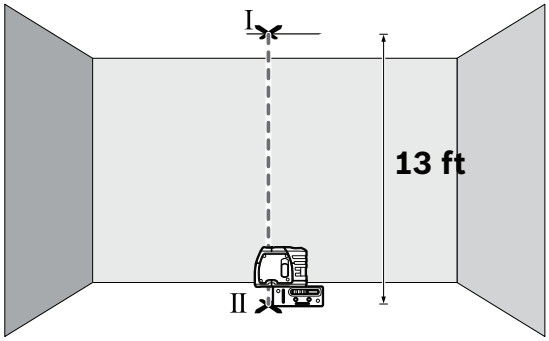
Should the tool exceed the maximum deviation during one of the tests, see recalibration procedure or have it recalibrated by a Bosch after-sales service center.

### Checking the Vertical Leveling Accuracy

For this check, a free measuring distance of approx. 13 ft between floor and ceiling on a firm surface is required.

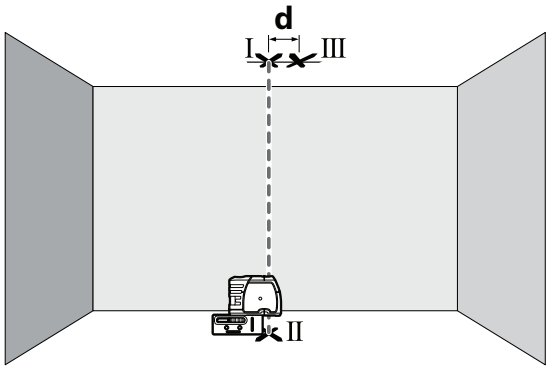
– Draw a straight line on the ceiling.

– Mount the tool to the holder or a tripod. Switch the tool on and rotate it in such a manner that the bottom plumb beam can be seen on the floor.




– Position the tool in such a manner that the upper plumb beam points against the line on the ceiling. Allow the tool to level in.

Mark the center of the upper laser point on the line on the ceiling (point I). Also, mark the center of the laser point on the floor (point II).




– Rotate the tool by 180°. Position it in such a manner that the center of the bottom laser point is directed on the already marked point II and the upper laser point is directed against the line on the ceiling. Allow the tool to level in. Mark the center of the upper laser point on the line on the ceiling (point III).

– The difference d of both marked points I and III on the ceiling results in the actual deviation of the tool to the plumb line.

On the measuring distance of 2 x 13 ft = 26 ft , the maximum allowable deviation is:

26 ft x ±0.0036 in/ft = ±3/16 in.

Thus, the difference d between points I and III should not exceed 3/16 in (max.).

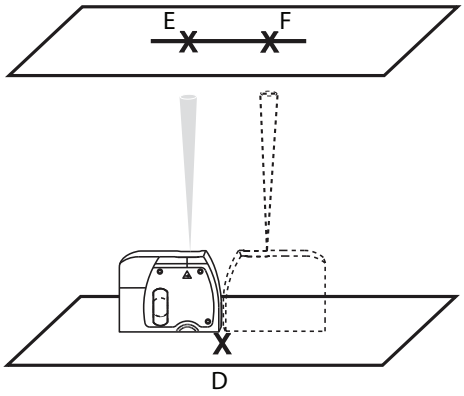
### Recalibration Procedure (Up & Down Beams)

All tools are calibrated when processed through the Bosch quality control program. This process assures that the customer receives a superior product which conforms to the Product Specifications. Although tools have been calibrated before reaching our customers, it contains many precision machined parts which may be affected if the instrument is subjected to abuse. Therefore, if the device is ever dropped

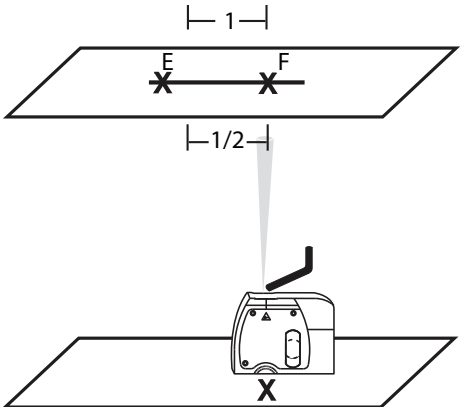
or sustains significant impact, the user should check calibration by following these steps:

### Calibrating the Top and Bottom Beams

1. Choose your recalibration site. To get the most accurate calibration possible, it is best to use a floor/ceiling distance greater than 10’ (the greater distance, the better the accuracy). Floor/Ceiling (top of doorway) distance of approximately 10’.




2. Turn the tool off.
3. Remove the calibration plug on the side of tool with a flathead screw-driver. Set the plug where it will not be lost.
4. Draw a straight line on the ceiling.
5. Turn the tool on.
6. Place the tool on the floor (on its accessory so that you can see the down laser beam on the floor).
7. Align the tool so that the top laser beam hits the line on the ceiling.
8. Mark the down laser beam on the floor, Mark D. Mark the up laser beam on the ceiling, Mark E.
9. Rotate the tool 180 degrees and align the down beam with the mark on the floor.




10. Mark the up beam on the ceiling, Mark F. You should have two marks on the ceiling.
11. Compare the two marks on the ceiling. If the two marks are on the same point, the unit does not need to be calibrated. If the two marks are not on the same point, proceed to step 12.
12. Turn the tool off.
13. Insert the 2mm Allen wrench into the side calibration port. The objective is to get the laser beam halfway between the two marks on the ceiling. Turn the Allen wrench clockwise or counter clockwise to move the laser beam.
14. Turn the tool on and check the position of the beam to see if it is exactly halfway between the marks on the ceiling. If the beam is not correctly positioned, repeat steps 12–14 until the beam is at the correct position.
15. Plug the side calibration plug on the tool.
16. Calibration is complete.

# Applications

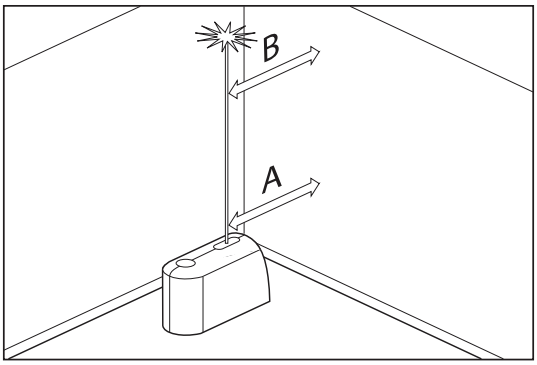
### Plumbing a surface

1. Position tool close to the surface to be plumbed.
2. Turn on tool.
3. Measure distance A at a point relatively close to tool and make a note of the distance.
4. Measure distance B at a point further away from tool and make a note of the distance.

Note: The greater the distance between the two points of measurement, the greater the accuracy.

5. Compare distance A with distance B. If distance A equals distance B, then the surface is plumb. If distance A does not equal distance B, then the surface is not plumb and should be corrected.

**Plumb**

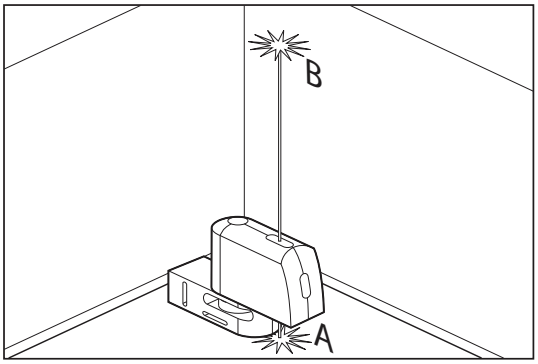



### Transferring points with the plumb beam

1. Mark the point to be transferred (labeled A in this illustration).
2. Use the Mounting accessory or a Tripod to position the plumb down beam over point A.
3. The plumb up beam will transfer this point along a perfectly vertical axis to point B.
4. Mark point B.

Note: This process may be reversed.

**Plumb Transfer**




# Use with Attachments

To fasten the tool on the Multiple-Purpose Attachment **8**, screw the locking screw **9** of the Multiple-Purpose Attachment into the 1/4" tripod mount **6** on the tool and tighten. To rotate the tool on the Multiple-Purpose Attachment, slightly loosen the screw **9**.

- Rotate the tool on the Multiple-Purpose Attachment **8** sideward or toward the rear to make the bottom plumb beam visible.
- Rotate the tool on the Multiple-Purpose Attachment **8** to project heights with the horizontal laser beam.

With the Multiple-Purpose Attachment **8**, the tool can be attached as follows:

- Mount the Multiple-Purpose Attachment **8** to a commercially available camera tripod via the 1/4" tripod mount **13**. For fastening to a commercially available construction tripod, use the 5/8" tripod mount **14**.
- The Multiple-Purpose Attachment **8** can be fastened to steel parts via the magnets **12**.
- The Multiple-Purpose Attachment **8** can be fastened to drywall or wood walls with screws. For this, insert screws with a minimum length of 2 in. into the screw holes **10** of the Multiple-Purpose Attachment.
- The Multiple-Purpose Attachment **8** can also be fastened to pipes or similar beams using a commercially available strap by threading it through the opening **11** for strap attachment.

### Working with the Tripod (Optional Accessory)

A tripod **18** offers a stable, height-adjustable measuring support. Place the tool via the tripod mount **6** onto the 1/4" male thread of the tripod and screw the locking screw of the tripod tight.

### Working with the Measuring Plate (Optional Accessory)

With the measuring plate **15**, it is possible to project the laser mark onto the floor or the laser height onto a wall.

With the zero field and the scale, the offset or drop to the required height can be measured and projected at another location. This eliminates the necessity of precisely adjusting the tool to the height to be projected.

The measuring plate **15** has a reflective coating that enhances the visibility of the laser beam at greater distances or in intense sunlight. The brightness intensification can be seen only when viewing, parallel to the laser beam, onto the measuring plate.

### Laser Viewing Glasses (Optional Accessory)

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

- **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.

## Maintenance and Service

**Store and transport the tool only in the supplied protective case.**

**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 at the exit opening of the laser 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.

In case of repairs, send in the tool packed in its protective case **16**.

### 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

**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 or ca.

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.

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.

THIS LIMITED WARRANTY APPLIES ONLY TO PRODUCTS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT YOUR LOCAL BOSCH DEALER OR IMPORTER.