IMPORTANT:	IMPORTANT :	IMPORTANTE:
Read Before Using	Lire avant usage	Leer antes de usar

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

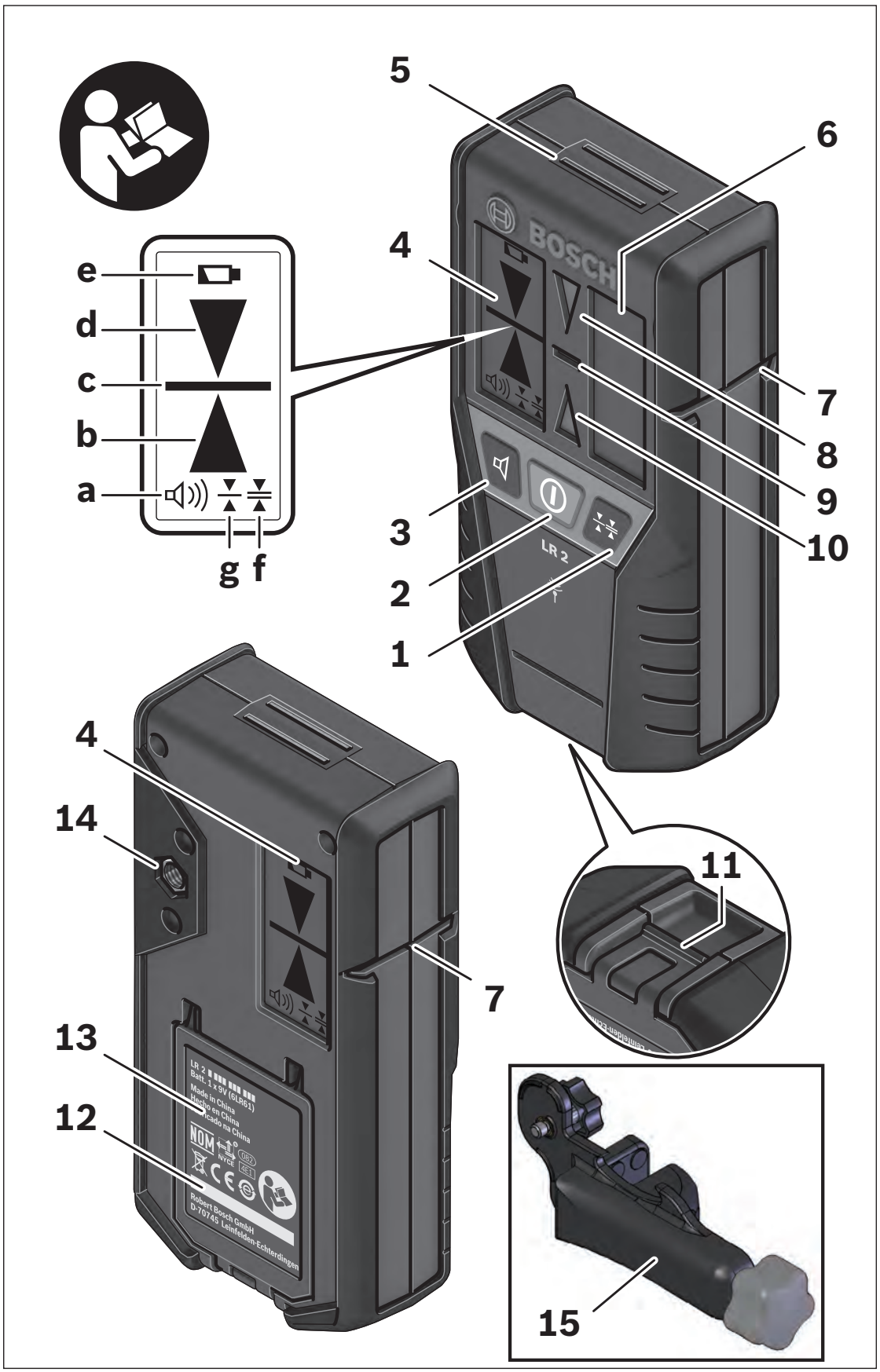
LR2

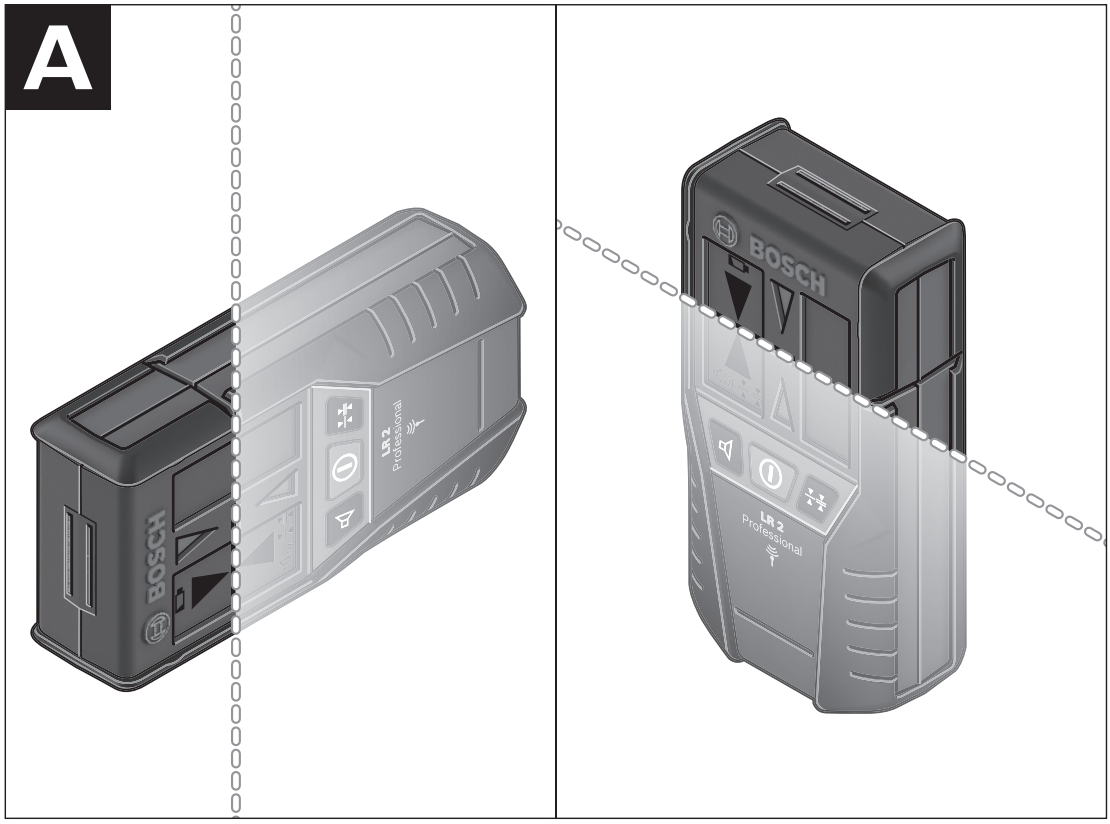
BOSCH

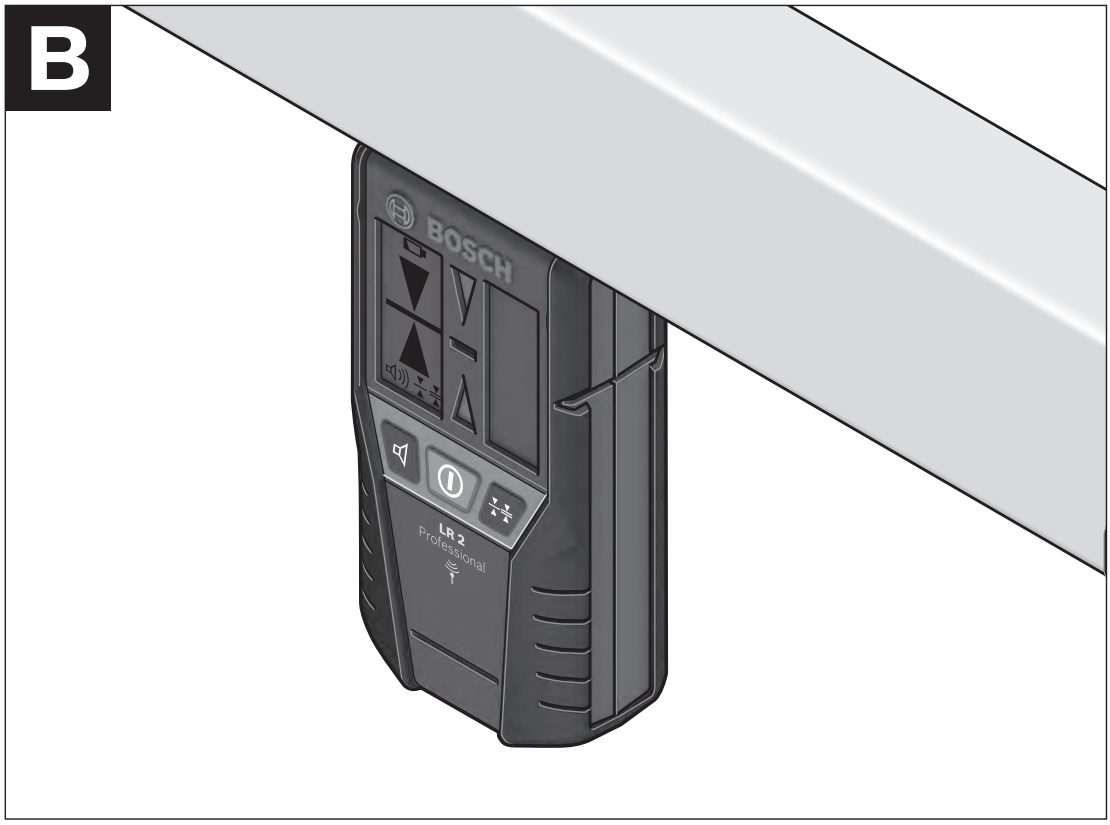
Call Toll Free for Consumer Information & Service Locations	Pour obtenir des informations et les adresses de nos centresde service après-vente, appelez ce numéro gratuit	Llame gratis para obtener información para el consumidor y ubicaciones de servicio

[redacted]

For English Version
See page 5







General Safety Rules

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

SAVE THESE INSTRUCTIONS

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

⚠ 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.

FCC Statement

⚠ 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 product 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.

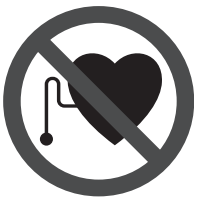
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio TV technician for help.

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.



Keep the measuring tool away from cardiac pacemakers. The magnet plate **5** generates a field that can impair the function of cardiac pacemakers.

Keep the measuring tool away from magnetic data medium and magnetically-sensitive equipment. The effect of the magnet plate **5** can lead to irreversible data loss.

Noise Information

The A-weighted sound pressure level of the audio signal at one meter distance is 85 dB(A).

Do not hold the tool close to your ear!

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 detecting pulsating line lasers.

Preparation

Inserting/Replacing the Battery

Alkaline batteries are recommended for the tool.

Pull the latch **11** of battery lid outward and open the battery lid **13**.

When inserting batteries, pay attention to the correct polarity.

When the battery indication e appears for the first time on the display **4**, the tool can still be operated for approx. 2 h.

- **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 Button for adjustment of the measuring accuracy
2 On/Off switch
3 Audio signal button
4 Display
5 Magnet plate
6 Reception area for the laser beam
7 Center mark
8 Direction LED “move downward”
9 Center-indication LED
10 Direction LED “move upward”
11 Latch of battery lid
12 Serial number
13 Battery lid
14 Mounting hole for M6 thread
15 Mounting Bracket (actual bracket may be different from the diagram)

Accessories shown or described are not part of the standard delivery scope of the product. A complete overview of accessories can be found in our accessories program.

Display Elements

a Audio signal indicator
b Direction indicator “move upward”
c Center indicator
d Direction indicator “move downward”
e Battery indication
f “Medium” adjustment indicator
g “Fine” adjustment indicator

Technical Data

Working range (typical)	17-165 ft (5-50m)
Receiving angle	90°
Measuring accuracy	
-”Fine” adjustment	±1mm
-”Medium” adjustment	±3mm
Operating temperature	14 °F... 122 °F (–10 °C ... +50 °C)
Storage temperature	-4 °F... 158 °F (–20 °C ... +70 °C)
Battery	1 x 9 V 6LR61
Operating lifetime, approx.	30hrs

Weight	0.44lb (0.2 kg)
Dimensions	5.9” x 2.9” x 1.6” (150x 74 x 41mm)

1) The working range can be decreased by unfavourable environmental conditions (e.g. direct sun irradiation).
2) The angular accuracy between the 45° laser line and the 90° laser line is max. ±0.4 mm/m.

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 **12** on the type plate.

Operation

Initial Operation

- **Protect the tool against moisture.**
- **Do not subject the tool to extreme temperatures or variations in temperature.**
  As an example, do not leave it in vehicles for longer periods. I 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 canbe impaired.

Setting Up the Tool (see figure A)

Position the tool at least 17ft (5m) away from the cross-line laser. Switch on the pulsating function on the cross-line laser, and select horizontal or vertical operation.

Note: Do not select cross-line operation, as otherwise faulty indications on the height of the laser beam can occur.

Position the tool in such a manner that the laser beam can reach the reception area **6**. Align the tool in such a manner that the laser beam runs laterally through the reception area (as shown in the figure).

Switching On and Off

- A loud audio signal sounds when switching on the tool. Therefore, keep the tool away from your ear or other person when switching on. The loud audio signal can cause hearing defects.

To **switch on** the tool, press the On/Off button **2**. All display indicators as well as all LEDs light up briefly and an audio signal sounds.

To **switch off** the tool, press the On/Off button **2** again. Before switching off, all LEDs briefly light up.

When no button is pressed on the tool for approx. 20 minutes and when no laser beam reaches the reception area **6** for 20 minutes, the tool automatically switches off in order to save the battery. The switching off is indicated by brief lighting up of all LEDs.

Selecting the Setting of the Center Indicator

With button **1**, you can specify with which accuracy the position of the laser beam is indicated as central on the reception area:

– "Fine" adjustment (indication **g** on the display),

– "Medium" adjustment (indication **f** on the display).

Whenever switching on the tool, the accuracy level "Medium" is set.

Direction Indicators

The position of the laser beam on the reception area **6** is indicated:

– via the direction indicators "move downward" d, "move upward" b or the center indicator c on the display **4** on the front and back side of the tool,

– via the LEDs "move downward" **8**, "move upward" **10** or the center-indication LED **9** on the front side of the tool,

– optionally via the audio signal (see "Audio Signal for Indication of the Laser Beam").

Tool too low: When the laser beam runs through the top half of the reception area **6**, the direction indicator b on the display and the corresponding direction LED **10** light up. When the audio signal is switched on, a slow-beat signal sounds. Move the tool upward in the direction of the arrow.

Tool too high: When the laser beam runs through the bottom half of the reception area **6**, the direction indicator d on the display and the corresponding direction LED **8** light up.
When the audio signal is switched on, a fast-beat signal sounds. Move the tool downward in the direction of the arrow.

Tool in center position: When the laser beam runs through the reception area **6** at the center mark **7**, the centre indicator c on the display and the corresponding center-indication LED **9** light up.
When the audio signal is switched on, a continuous signal sounds.

Audio Signal for Indication of the Laser Beam

The position of the laser beam on the reception area **6** can be indicated via an audio signal.

After the tool has been switched on, the audio signal is always set to the low volume level.

The volume level can be increased or switched off.

To change the volume level or switch off the audio signal, push the acoustic signal button **3** until the requested volume level is indicated on the display. At low volume level, the audio signal indicator a appears on the display with one bar; at high volume level, the indicator appears with three bars. When the audio signal is set to off, the indicator goes out.

Independent of the audio signal setting, a short beep sounds at low volume level each time a button is pressed on the tool.

Working Advice

Marking

When the laser beam runs through the center of the reception area **6**, its height can be marked at the center mark **7** right and left on the tool.

When marking, take care to align the tool exactly vertical (for horizontal laser beam), or horizontal (for vertical laser beam), as otherwise the marks are offset with respect to the laser beam.

Attaching with the Magnet (see figure B)

When a positive-lock attachment is not absolutely required, the tool can be attached to steel parts via the face side using the magnet plate **5**.

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.

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 laser and measuring tool products will be free from defects in material or workmanship for a period of three (3) years from date of purchase.

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 laser and measuring tool products, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Seller Authorized Service providers.

SELLER'S OBLIGATION AND YOUR REMEDY ARE FURTHER LIMITED AS FOLLOWS:

- **30-Day Money Back Refund or Replacement.** If you are not completely satisfied with the performance of your laser or measuring tool product, for any reason, you can return it to BOSCH 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 measuring tool product. A maximum of 2 returns per customer will be permitted.
- **First Year– OTC Warranty.** BOSCH will replace your laser or measuring tool product that has failed when used in conformance with product instructions and warnings, with a new laser or measuring tool product of comparable features, for free, any time during the first year after purchase. This warranty does not apply if your laser or measuring tool product fails solely due to the need for recalibration.
- **2- and 3-Year Exchange.** BOSCH will replace your laser or measuring tool product that has failed when used in conformance with product instructions and warnings, with a new or reconditioned laser or measuring tool product of comparable features, for an exchange cost. This warranty does not apply if your laser or measuring tool product fails solely due to the need for recalibration.

For details to make a claim under this Limited Warranty please visit

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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.