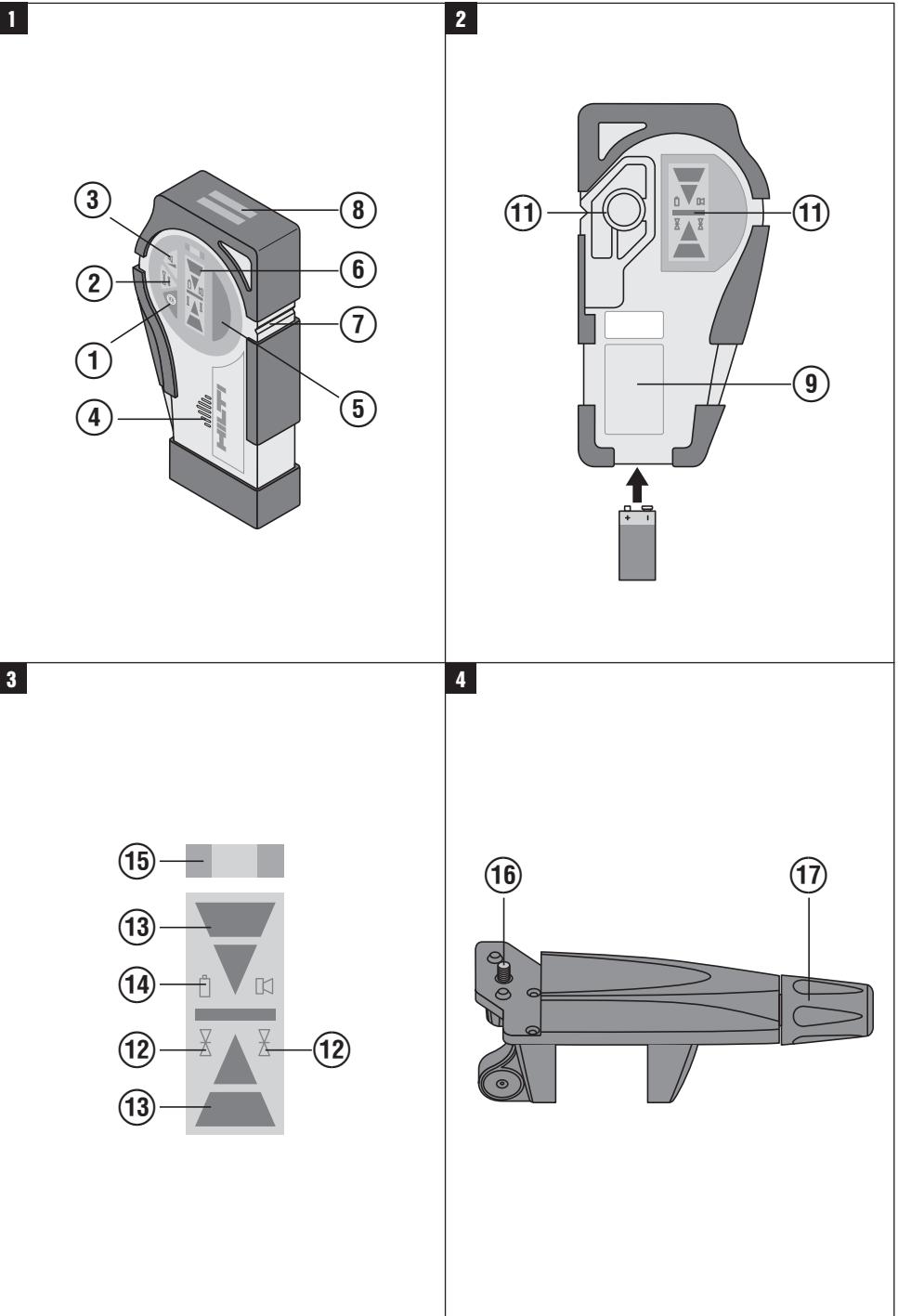
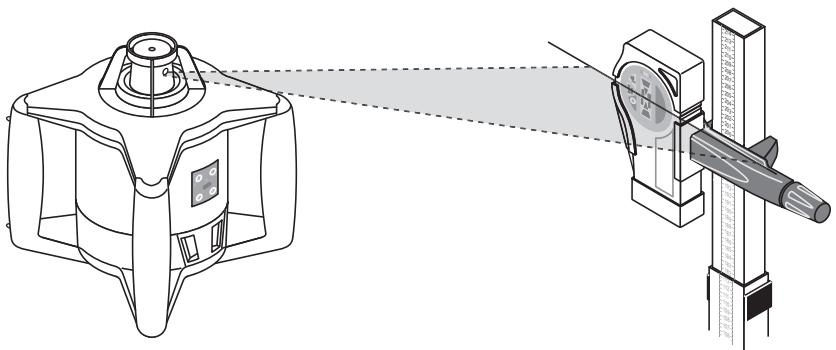


Bedienungsanleitung	de
Operating instructions	en
Mode d'emploi	fr
Istruzioni d'uso	it
Manual de instrucciones	es
Manual de instruções	pt
Gebruiksaanwijzing	nl
Brugsanvisning	da
Bruksanvisning	sv
Bruksanvisning	no
Käyttöohje	fi
Οδηγίες χρησεως	el
Használati utasítás	hu
Instrukcja obsługi	pl
Инструкция по эксплуатации	ru
Návod k obsluze	cs
Návod na obsluhu	sk
Upute za uporabu	hr
Navodila za uporabo	sl
Ръководство за обслужване	bg
Instructiuni de utilizare	ro
Kullanma Talimatı	tr
دلیل الاستعمال	ar
Lietošanas pamācība	lv
Instrukcija	lt
Kasutusjuhend	et
取扱説明書	ja
사용설명서	ko
操作 説 明 書	zh

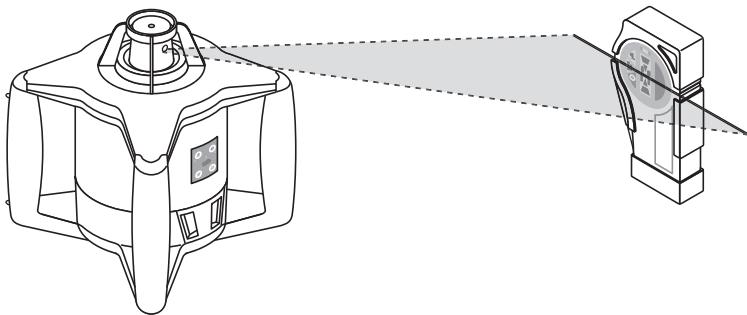




**5**



**6**



# ORIGINAL OPERATING INSTRUCTIONS

## PRA 22 remote control / laser receiver

**It is essential that the operating instructions are read before the tool is operated for the first time.**

**Always keep these operating instructions together with the tool.**

**Ensure that the operating instructions are with the tool when it is given to other persons.**

Contents	Page
1 General information	7
2 Description	8
3 Technical data	9
4 Safety instructions	9
5 Before use	10
6 Operation	10
7 Care and maintenance	11
8 Disposal	11
9 Manufacturer's warranty - tools	12
10 EC declaration of conformity (original)	12

**1** These numbers refer to the corresponding illustrations. The illustrations can be found on the fold-out cover pages. Keep these pages open while studying the operating instructions.

In these operating instructions, the designation "the tool" always refers to the PRA 22 laser receiver.

en

### Parts, operating controls and indicators **1**

#### PRA 22 laser receiver, front

- ① On/off button
- ② Tolerance setting button
- ③ Audible signal setting button
- ④ Audible signal aperture
- ⑤ Receiving area
- ⑥ Front display area (see detailed illustration)
- ⑦ Marking notch
- ⑧ Magnets

#### PRA 22 laser receiver, rear **2**

- ⑨ Battery compartment cover
- ⑩ Internal thread for mounting the receiver
- ⑪ Display area, rear

#### PRA 22 laser receiver display **3**

- ⑫ Indication of the selected tolerance
- ⑬ Indication of the position of the receiver relative to the laser plane
- ⑭ Battery status indicator
- ⑮ Spirit level

#### PRA 77 laser receiver holder **4**

- ⑯ Receiver securing screw
- ⑰ Measuring staff securing screw

## 1 General information

### 1.1 Safety notices and their meaning

#### DANGER

Draws attention to imminent danger that will lead to serious bodily injury or fatality.

#### WARNING

Draws attention to a potentially dangerous situation that could lead to serious personal injury or fatality.

#### CAUTION

Draws attention to a potentially dangerous situation that could lead to slight personal injury or damage to the equipment or other property.

#### NOTE

Draws attention to an instruction or other useful information.

### 1.2 Explanation of the pictograms and other information

#### Warning signs



General warning



Warning:  
explosive  
substances



Warning:  
caustic  
substances



Warning:  
electricity

**Symbols**

Read the operating instructions before use



Return waste material for recycling.

**Location of identification data on the tool**

The type designation and serial number can be found on the type identification plate on the tool. Make a note of this data in your operating instructions and always refer to it when making an enquiry to your Hilti representative or service department.

Type: \_\_\_\_\_

Serial no.: \_\_\_\_\_

**2 Description****2.1 Use of the product as directed**

The Hilti PRA 22 laser receiver is designed to detect the laser beam from rotating lasers.

The tool is designed to be used for determining and checking / transferring levels and inclined planes such as height marks and for setting out inclines.

The laser receiver can be used on its own or together with the PRA 77 laser receiver holder mounted on a measuring staff or telescopic staff.

The tool and its ancillary equipment may present hazards when used incorrectly by untrained personnel or when used not as directed.

Observe the information printed in the operating instructions concerning operation, care and maintenance.

Take the influences of the surrounding area into account. Do not use the tool where there is a risk of fire or explosion.

**Modification of the tool or tampering with its parts is not permissible.**

**2.2 Automatic cut-out**

If no laser beam is detected for longer than approx. 5 minutes, power to the tool is switched off automatically.

**2.3 PRA 22 display 3****NOTE**

The display of the PRA 22 laser receiver uses several symbols to indicate various modes or statuses.

Indication of the selected tolerance	This can be set by way of the tolerance adjustment button. When the symbol on the left lights, showing both arrows a slight distance apart with a broken line between them, then the tool is set to standard tolerance. When the symbol on the right lights, showing both arrows meeting at a line, then the tool is set to maximum tolerance.
Indication of the position of the receiver relative to the laser plane	Indicates the position of the receiver relative to the laser plane. An arrow indicates the direction in which the receiver has to be moved to bring it exactly into the plane of the laser beam.
Battery status indicator	The PRA 22 battery condition indicator. This lights when new batteries are required.
Volume level	When no volume level symbol is visible in the display, the volume level is set to zero (off). If the volume level symbol blinks, the volume level is set to "low" (quiet). If the volume level symbol is displayed constantly, the volume level is set to "high" (loud).

**2.4 Items supplied**

- 1 PRA 22 laser receiver
- 1 Operating instructions
- 1 Battery
- 1 Manufacturer's certificate

### 3 Technical data

Right of technical changes reserved.

#### NOTE

Right of technical changes reserved.

Operating range (diameter)	2 ... 150 m (6 to 450 ft)
Laser plane receiving range (10 m / 30 ft)	Fine: $\pm 1.0 \text{ mm (0.04 in)}$ / Medium: $\pm 2.0 \text{ mm (0.08 in)}$ / Standard: $\pm 3.0 \text{ mm (0.12 in)}$
Audible signal generator	2 volume levels plus mute setting
Liquid crystal display	On both sides
Receiving window	40 mm (1 3/4 in)
Center indication from top edge of casing	45 mm (1 3/4 in)
Marking notch (center)	On both sides
Receiver automatic power-off	When no beam is detected : 5 min
Dimensions	151 mm X 78 mm X 31 mm (5.9" x 3.1" x 1.2")
Weight	Including battery: 0.231 kg (0.4 lbs)
Power supply	Block: 9 V
Battery life	Alkaline batteries, Temperature +20°C (+68°F): 40 h
Operating temperature range	-20 ... +50°C (-4°F to 122°F)
Storage temperature	-25 ... +60°C (-22°F to 140°F)
Protection class	IP 64 in accordance with IEC 529
Receiver thread	Metric: 5 X 10 mm (0.4 in)

### 4 Safety instructions

In addition to the information relevant to safety given in each of the sections of these operating instructions, the following points must be strictly observed at all times.

#### 4.1 General safety rules

- Keep other persons, especially children, away from the area in which the work is being carried out.
- Check the condition of the tool before use. If the tool is found to be damaged, have it repaired at a Hilti service center.
- Have the tool repaired only at a Hilti service center.
- Do not render safety devices ineffective and do not remove information and warning notices.
- The tool must be checked at a Hilti service center after it has been dropped or subjected to other mechanical stresses.
- If mounting on an adapter, check that the tool is screwed on securely.
- To avoid measurement errors, the receiving area must be kept clean.
- Although the tool is designed for the tough conditions of jobsite use, as with other optical and elec-

tronic instruments (e.g. binoculars, spectacles, cameras) it should be treated with care.

- Although the tool is protected to prevent entry of dampness, it should be wiped dry each time before being put away in its transport container.
- To avoid hearing damage, hold the tool as far away as possible from your ear (and other persons' ears).
- To avoid confusion, check to ensure that no other tool of the same or a similar kind is in use in the immediate vicinity.

#### 4.1.1 Electrical



- Keep the batteries out of reach of children.
- Do not allow the batteries to overheat and do not expose them to fire. The batteries may explode or release toxic substances.
- Do not charge the batteries.
- Do not solder the batteries into the tool.

- e) Do not discharge the batteries by short circuiting as this may cause them to overheat and swell up.
- f) Do not attempt to open the batteries and do not subject them to excessive mechanical stress.
- g) Do not use damaged batteries.
- h) Do not mix old and new batteries. Do not mix batteries of different makes or types.

#### 4.2 Proper organization of the work area

- a) Avoid unfavorable body positions when working on ladders or scaffolding. Make sure you work from a safe stance and stay in balance at all times.
- b) Use the tool only within its specified limits.

#### 4.3 Electromagnetic compatibility

Although the tool complies with the strict requirements of the applicable directives, Hilti cannot entirely rule out the possibility of the tool being subject to interference caused by powerful electromagnetic radiation, leading to incorrect operation. Check the accuracy of the tool by taking measurements by other means when working under such conditions or if you are unsure. Likewise, Hilti cannot rule out the possibility of interference with other devices (e.g. aircraft navigation equipment).

#### 4.4 Liquids

Under abusive conditions, liquid may leak from the battery. **Avoid contact. If contact accidentally occurs, flush with water. In the event of the liquid coming into contact with the eyes, rinse the eyes with plenty of water and consult a doctor.** Liquid ejected from the battery may cause irritation or burns.

## 5 Before use



#### 5.1 Inserting the batteries 2

##### DANGER

Use only new batteries.

##### NOTE

The battery compartment can be opened most easily with a coin.

1. Remove the batteries from the packaging and insert them in the tool.
- NOTE** Only batteries recommended by Hilti may be used to power the tool.
2. Check that the battery terminals are positioned correctly as shown on the underside of each unit.

## 6 Operation



#### 6.1 Switching the tool off and on 1

Press the on/off button.

#### 6.2 Working with the laser receiver 5 6

The PRA 22 can be used at distances of up to 150 m and mounted on measuring staffs or telescopic staffs with the aid of the PRA 77 laser receiver holder.

1. Switch the tool on by pressing the on/off button.
2. Hold the PRA 22 laser receiver perpendicular to the plane of rotation of the laser beam.

**NOTE** The laser beam is indicated visually and by an audible signal.

#### 6.3 Settings

##### 6.3.1 Setting the detection tolerance 1

Set the desired tolerance by pressing the laser display tolerance setting button.

##### NOTE

One of the symbols shown in the illustration will appear in the display. Tolerance is set to "standard" when the tool is switched on.

##### 6.3.2 Adjusting the volume level 1

Set the desired volume level by pressing the audible signal adjustment button.

##### NOTE

The volume level is set to "off" when the tool is switched on.

Each press of the button changes the volume in the sequence normal / loud / off.

## 7 Care and maintenance

### 7.1 Cleaning and drying

1. Blow dust off the surfaces.
2. Do not touch the display areas or the receiving window with the fingers.
3. Use only a clean, soft cloth for cleaning. If necessary, moisten the cloth slightly with pure alcohol or a little water.  
**NOTE** Do not use any other liquids as these may damage the plastic components.
4. Observe the temperature limits when storing your equipment. This is particularly important in winter / summer if the equipment is kept inside a motor vehicle (30°C to +60°C / -22°F to +140°F).

### 7.2 Storage

Remove the tool from its case if it has become wet. The tool, its carrying case and accessories should be cleaned and dried (at maximum 40°C / 104°F). Repack the equipment only once it has dried completely and then store it in a dry place.

Check the accuracy of the equipment before it is used after a long period of storage or transportation.

Remove the batteries from the tool before storing it for a long period. Leaking batteries may damage the tool.

### 7.3 Transport

Use the Hilti toolbox or packaging of equivalent quality for transporting or shipping your equipment.

#### DANGER

**Always remove the batteries before transporting the tool.**

### 7.4 Hilti calibration service

We recommend that the tool is checked by the Hilti calibration service at regular intervals in order to verify its reliability in accordance with standards and legal requirements.

Use can be made of the Hilti calibration service at any time, but checking at least once a year is recommended. The calibration service provides confirmation that the tool is in conformance, on the day it is checked, with the specifications given in the operating instructions.

The tool will be readjusted if deviations from the manufacturer's specification are found. After checking and adjustment, a calibration sticker applied to the tool and a calibration certificate provide written verification that the tool operates in accordance with the manufacturer's specification.

Calibration certificates are always required by companies certified according to ISO 900x.

Your local Hilti Center or representative will be pleased to provide further information.

## 8 Disposal

#### DANGER

Improper disposal of the equipment may have serious consequences:

The burning of plastic components generates toxic fumes which may present a health hazard.

Batteries may explode if damaged or exposed to very high temperatures, causing poisoning, burns, acid burns or environmental pollution.

Careless disposal may permit unauthorized and improper use of the equipment. This may result in serious personal injury, injury to third parties and pollution of the environment.



Most of the materials from which Hilti tools or appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, Hilti has already made arrangements for taking back old tools and appliances for recycling. Ask Hilti customer service or your Hilti representative for further information.



For EC countries only

Do not dispose of electrical appliances together with household waste.

In observance of the European Directive on waste electrical and electronic equipment and its implementation in accordance with national law, electrical appliances that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.



Dispose of the batteries in accordance with national regulations.

en

## 9 Manufacturer's warranty - tools

Hilti warrants that the tool supplied is free of defects in material and workmanship. This warranty is valid so long as the tool is operated and handled correctly, cleaned and serviced properly and in accordance with the Hilti Operating Instructions, and the technical system is maintained. This means that only original Hilti consumables, components and spare parts may be used in the tool.

This warranty provides the free-of-charge repair or replacement of defective parts only over the entire lifespan of the tool. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty.

Additional claims are excluded, unless stringent national rules prohibit such exclusion. In particular, Hilti is not obligated for direct, indirect, incidental or consequential damages, losses or expenses in connection with, or by reason of, the use of, or inability to use the tool for any purpose. Implied warranties of merchantability or fitness for a particular purpose are specifically excluded.

For repair or replacement, send the tool or related parts immediately upon discovery of the defect to the address of the local Hilti marketing organization provided.

This constitutes Hilti's entire obligation with regard to warranty and supersedes all prior or contemporaneous comments and oral or written agreements concerning warranties.

## 10 EC declaration of conformity (original)

Designation:	Remote control / laser receiver
Type:	PRA 22
Year of design:	2006

We declare, on our sole responsibility, that this product complies with the following directives and standards:  
2011/65/EU, 2006/95/EC, 2004/108/EC.

### Technical documentation filed at:

Hilti Entwicklungsgesellschaft mbH  
Zulassung Elektrowerkzeuge  
Hiltistrasse 6  
86916 Kaufing  
Deutschland

**Hilti Corporation, Feldkircherstrasse 100,  
FL-9494 Schaan**

**Paolo Luccini**  
Head of BA Quality and Process Management  
Business Area Electric Tools & Accessories  
01/2012

**Matthias Gillner**  
Executive Vice President  
Business Area Electric Tools & Accessories  
01/2012



Hilti Corporation

LI-9494 Schaan

Tel.: +423/234 21 11

Fax: +423/234 29 65

[www.hilti.com](http://www.hilti.com)

Hilti = registered trademark of Hilti Corp., Schaan

W 3363 | 0313 | 00-Pos. 1 | 1

Printed in Germany © 2013

Right of technical and programme changes reserved S. E. & O.

331424 / A2



331424