Bedienungsanleitung
Operating instructions
Mode d’emploi
Istruzioni d’uso
Manual de instrucciones
Manual de instruções
Gebruiksaanwijzing
Brugsanvisning
Bruksanvisning
Bruksanvisning
Käyttöohje
Οδηγίες χρήσεως
Használati utasítás
Instrukcja obsługi
Инструкция по эксплуатации
Návod k obsluze
Návod na obsluhu
Upute za uporabu
Uputstvo za upotrebu
Navodila za uporabo
Ръководство за обслужване
Instrucționi de utilizare
Kullanma Talimatı
dalil الاستعمال
Lietošanas pamācība
Instrukcija
Kasutusjuhend
Инструкция з эксплуатації
Пайдалану бойынша басындық
取扱説明書
사용설명서
操作说明书
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.

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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

Obligation signs

Read the operating instructions before use.
2 Description

2.1 Use of the product as directed
The Hilti PRA 20G laser receiver is designed to detect the laser beam from rotating lasers. 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 Features
The receiver can either be held by hand or, using the corresponding holder, mounted on a measuring staff, telescopic staff, leveling staff, wooden batten or frame etc.

2.3 Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator showing the position of the receiver relative to the height of the laser plane</td>
<td>The position of the receiver relative to the height of the laser plane is shown by an arrow indicating the direction in which the receiver has to be moved in order to bring it exactly into alignment with the laser.</td>
</tr>
<tr>
<td>Battery status indicator</td>
<td>The battery status indicator shows the remaining battery capacity.</td>
</tr>
<tr>
<td>Volume level</td>
<td>When no volume level symbol is visible in the display, the volume level is set to zero (off). If one segment is shown, the volume is set to “quiet”. If two segments are shown, the volume is set to “normal”. If three segments are shown, the volume is set to “loud”.</td>
</tr>
<tr>
<td>Low battery indicator for the rotating laser</td>
<td>When the battery in the rotating laser requires charging, the corresponding symbol for the rotating laser appears in the display (provided that the receiver detects a laser beam from the PR 3-HWSG or PRI 36 rotating laser).</td>
</tr>
<tr>
<td>Units indicator</td>
<td>Shows the exact distance of the receiver from the laser plane in the desired measuring units.</td>
</tr>
</tbody>
</table>

2.4 Standard equipment includes:

1. PRA 20G laser receiver
2. Operating instructions
3. Batteries (size AA cells)
4. Manufacturer’s certificate
### 3 Technical data

Right of technical changes reserved.

**PRA 20G**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection range (area diameter)</td>
<td>With the PR 3-HVSG (typical): 2...150 m (6...475 ft)</td>
</tr>
<tr>
<td>Signal tone generator</td>
<td>3 volume levels plus mute setting</td>
</tr>
<tr>
<td>Liquid-crystal display</td>
<td>On both sides</td>
</tr>
<tr>
<td>Indicator range, distance from zero</td>
<td>± 52 mm (± 2 3/32 in)</td>
</tr>
<tr>
<td>Laser plane display range</td>
<td>± 0.5 mm (± 1/64 in)</td>
</tr>
<tr>
<td>Length of the receiving window</td>
<td>120 mm (4 3/32 in)</td>
</tr>
<tr>
<td>Center indication from top edge of casing</td>
<td>75 mm (3 in)</td>
</tr>
<tr>
<td>Marking notches</td>
<td>On both sides</td>
</tr>
<tr>
<td>Time without detection before automatic power off</td>
<td>15 min</td>
</tr>
<tr>
<td>Weight (including batteries)</td>
<td>0.25 kg (0.55 lbs)</td>
</tr>
<tr>
<td>Power source</td>
<td>2 AA-size batteries</td>
</tr>
<tr>
<td>Battery life</td>
<td>Temperature +20°C (68°F); approx. 50 h (depending on the quality of the alkaline batteries used)</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-20...+150°C (-4° F ... 122° F)</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-25...+60°C (-13° F ... 140° F)</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP 66 (in accordance with IEC 60529); except the battery compartment</td>
</tr>
<tr>
<td>Drop test height&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2 m (0.5 ft)</td>
</tr>
</tbody>
</table>

<sup>1</sup> The drop test was carried out using the PRA 83 receiver holder, dropped onto flat concrete under standard ambient conditions (MIL-STD-810G).

### 4 Safety instructions

#### 4.1 Basic information concerning safety

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.

#### 4.2 General safety rules

- **a)** Keep other persons, especially children, away from the area in which the work is being carried out.
- **b)** Check the condition of the tool before use. If the tool is damaged, have it repaired at a Hilti Service Center.
- **c)** Do not render safety devices ineffective and do not remove information and warning notices.
- **d)** The tool must be checked at a Hilti service center after it has been dropped or subjected to other mechanical stresses.
- **e)** If mounting on an adapter, check that the tool is fitted correctly.
- **f)** To avoid measurement errors, the receiving area must be kept clean.
- **g)** Although the tool is designed for the tough conditions of jobsite use, as with other optical and electronic instruments (e.g. binoculars, spectacles, cameras) it should be treated with care.
- **h)** Although the tool is protected against the entry of moisture, it should be wiped dry before being put away in its transport container.
- **i)** Operation of the tool close to the ears may cause hearing damage. Do not position the tool close to the ears.

#### 4.2.1 Electrical

- **a)** Keep the batteries out of reach of children.
- **b)** Do not allow the batteries to overheat and do not expose them to fire. The batteries may explode or release toxic substances.
- **c)** Do not charge the batteries.
- **d)** 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 present a risk of personal injury (burns).
- **f)** Do not attempt to open the batteries and do not subject them to excessive mechanical stress.
4.3 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) Measurements taken through or from panes of glass or through other objects may be inaccurate.
c) Use the tool only within its specified limits.
d) Use of the telescopic staff in the vicinity of overhead high voltage cables is not permissible.

4.4 Electromagnetic compatibility
NOTE
Only for Korea: This device is suitable for the electromagnetic radiation encountered in residential environments (Class B). It is intended mainly for use in residential environments but may also be used in other environments.

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).

5 Before use
5.1 Inserting the batteries
DANGER
Do not use damaged batteries.

DANGER
Do not mix old and new batteries. Do not mix batteries of different makes or types.

6 Operation
6.1 Switching the tool off and on
Press the on/off button.

6.2 Working with the laser receiver
The receiver can be used at distances (radiuses) of up to 75 m (240 ft). The laser beam is indicated visually and by a signal tone.

6.2.1 Using the receiver as a hand-held tool
1. Press the on/off button.
2. Hold the receiver in the plane of the rotating laser beam.

6.2.2 Working with the receiver in the PRA 80 receiver holder
1. Open the catch on the PRA 80.
2. Place the receiver in the PRA 80 receiver holder.
3. Close the catch on the PRA 80.
4. Switch the receiver on by pressing the on/off button.
5. Rotate the grip to bring it into the open position.
6. Secure the PRA 80 receiver holder on the telescopic staff or leveling staff by tightening the clamping knob.
7. Hold the receiver with the receiving window in the plane of the rotating laser beam.

6.2.3 Working with the receiver in the PRA 83 receiver holder
1. Push the receiver into the rubber sleeve of the PRA 83 at an angle until it fully encloses the receiver. Take care to ensure that the receiving window and the buttons are facing the front.
2. Fit the receiver, complete with the rubber sleeve, onto the grip section. The cover and grip section are joined together by the magnetic holder.
3. Switch the receiver on by pressing the on/off button.
4. Rotate the grip to bring it into the open position.
5. Secure the PRA 83 receiver holder on the telescopic staff or leveling staff by tightening the clamping knob.
6. Hold the receiver with the receiving window in the plane of the rotating laser beam.

6.2.4 Working with the PRA 81
1. Open the locking mechanism on the PRA 81.
2. Insert the receiver in the PRA 81 height transfer device.
3. Close the locking mechanism on the PRA 81.
4. Switch the receiver on by pressing the on/off button.
5. Hold the receiver with the receiving window in the plane of the rotating laser beam.
6. Position the laser receiver so that the distance display shows “0”.
7. Use the measuring tape to measure the desired offset distance.

6.2.5 Setting the measuring unit
The “Units” button can be used to set the desired accuracy of the digital display (mm/cm/off).

6.2.6 Volume adjustment
After switching the receiver on, the volume is automatically set to “normal”. The volume can be adjusted by pressing the “Volume” button. One of four settings can be selected: “Low”, “Normal”, “High” or “Off”.

6.2.7 Menu options
Press and hold the on/off button for two seconds when switching the receiver on. The menu is then shown in the display.
Use the “Units” button to switch between metric and imperial units.
Use the “Volume” button to assign the more rapid signal tone to the upper or lower area of the receiving window.
To save the settings, switch the receiver off.
NOTE Each setting made becomes effective the next time the tool is switched on.

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. Dry the equipment, observing the maximum temperatures given in the technical data.
   NOTE Especially in summer and winter, take care that the given maximum and minimum temperatures are not exceeded, e.g. when the equipment is stored in a motor vehicle.

7.2 Storage
1. Remove the appliance from its case if it has become wet. Dry and clean the tool, its transport container and accessories (while observing the permissible temperature range). Repack the equipment only once it is completely dry.
2. Check the accuracy of the equipment before it is used after a long period of storage or transportation.
3. Remove the batteries from the receiver before storing it for a long period. Leaking batteries may damage the receiver.

7.3 Transport
Use the original Hilti packaging or packaging of equivalent quality for transporting or shipping your equipment.
CAUTION Remove the batteries from the laser receiver before transporting or shipping it.

7.4 Hilti Measuring Systems Service
Hilti Measuring Systems Service checks the tool and, if deviations from the specified accuracy are found, recalibrates the tool and checks it again to ensure conformity with specifications. The service certificate provides written confirmation of conformity with specifications at the time of the test.
The following is recommended:
1. The tool should be checked at suitable intervals, depending on the frequency of normal use.
2. The tool should be checked at least once a year by a Hilti Measuring Systems Service Center.
3. The tool should be checked by a Hilti Measuring Systems Service Center if it has been abused in any way.
4. The tool should be checked by a Hilti Measuring Systems Service Center before being used for particularly important work.

8 Disposal
WARNING 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 electronic measuring tools or 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. Please help us to protect the environment.

9 Manufacturer’s warranty - tools
Please contact your local Hilti representative if you have questions about the warranty conditions.

10 FCC statement (applicable in US) / IC statement (applicable in Canada)
This device complies with part 15 of the FCC Rules and RSS-210 of the IC. Operation is subject to the following two conditions:
This device shall cause no cause harmful interference.

NOTE
Changes or modifications not expressly approved by Hilti may restrict the user’s authorization to operate the equipment.
We declare, on our sole responsibility, that this product complies with the following directives and standards:

Hilti Corporation, Feldkircherstrasse 100,
FL-9494 Schaan

Paolo Luccini
Head of BA Quality and Process Management
Business Area Electric Tools & Accessories
06/2015

Technical documentation filed at:
Hilti Entwicklungsgesellschaft mbH
Zulassung Elektrowerkzeuge
Hiltistrasse 6
86916 Kaufering
Deutschland