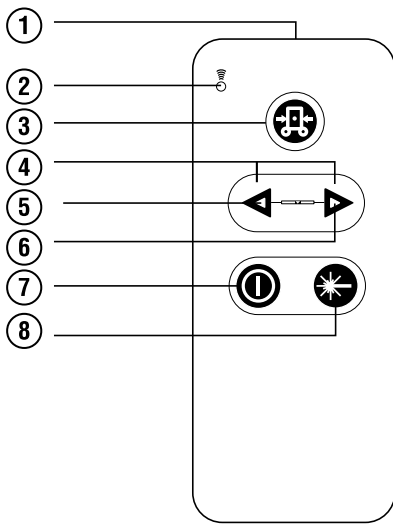


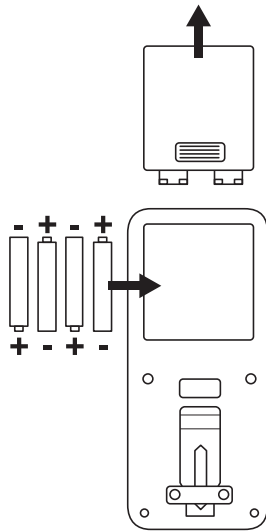
# HILTI

## PPA 20

<b>Operating instructions</b>	<b>en</b>
<b>Bedienungsanleitung</b>	<b>de</b>
<b>Mode d'emploi</b>	<b>fr</b>
<b>Istruzioni d'uso</b>	<b>it</b>
<b>Manual de instrucciones</b>	<b>es</b>
<b>Návod k obsluze</b>	<b>cs</b>
<b>Návod na obsluhu</b>	<b>sk</b>
<b>Gebruiksaanwijzing</b>	<b>nl</b>
<b>Manual de instruções</b>	<b>pt</b>
<b>Οδηγίες χρήσεως</b>	<b>el</b>
<b>Instrukcja obsługi</b>	<b>pl</b>
<b>Kullanma Talimatı</b>	<b>tr</b>
<b>사용설명서</b>	<b>ko</b>







# ORIGINAL OPERATING INSTRUCTIONS

## PPA 20 remote control unit

**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** These numbers refer to the illustrations. You can find the illustrations at the beginning of the operating instructions.

In these operating instructions, the designation "the tool" always refers to the PPA 20 remote control unit.

### Component parts **1**

#### PPA 20 remote control unit

- ① Signal transmission aperture
- ② Signal LED (blinks red when a signal is transmitted)
- ③ Target plate auto-centering button (possible only with the PP 11)
- ④ Self-centering buttons (press both simultaneously)
- ⑤ Button to move target axis to the left
- ⑥ Button to move target axis to the right
- ⑦ ON / OFF button
- ⑧ Laser beam mode button

en

## 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

#### Symbols

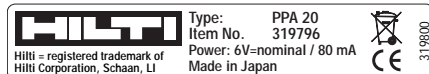


Read the operating instructions before use.



Return waste material for recycling.

#### Type identification plate



PPA 20

#### Location of identification data on the tool

The type designation and serial number can be found on the type 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 PPA 20 is used to switch the PP 10/11 pipe laser on and off, to activate horizontal alignment and to select the laser beam mode remotely.

Modification of the tool is not permissible.

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

### 2.2 Items supplied

- 1 PPA 20 remote control unit
- 1 PPA 20 operating instructions
- 4 Batteries (size AAA cells)

## 3 Technical data

Right of technical changes reserved.

### NOTE

Right of technical changes reserved.

Remote control operating range	In the pipe, from the front: 200 m (650 ft)
Dimensions (L x W x H)	155 mm x 68 mm x 20 mm (6.1" x 2.7" x 0.8")
Weight (including batteries)	0.2 kg (7 oz)
Power supply	4 size AAA cells
Battery life (alkaline batteries)	Temperature +20°C (68°F): approx. 8 months
Operating temperature range	-20... +50°C (-4 to 122°F)
Storage temperature range	-30... +60°C (-22 to 140°F)
Protection class	As per IP 56 (in accordance with IEC 60529)

### Working range of the remote control unit

Working range 1 (typical value)	Operating from the front: 200 m (650 ft)
Working range 2 (typical value)	Operating from the control panel side: 45 m (150 ft)
Working range 3 (typical value)	Operating from above: 25 m (80 ft)

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

### 4.2 Proper organization of the work area

- Avoid unfavorable body positions. Make sure you work from a safe stance and stay in balance at all times.**
- Use the tool only within its specified limits.

### 4.2.1 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).

### 4.3 General safety rules

- Check the condition of the tool before use. If the tool is found to be damaged, have it repaired at a Hilti service center.
- 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.
- 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.

- d) Check that your PPA 20 is responding only to your PP 10/11 and not to other PP 10/11 tools that may be in use on the jobsite.

#### 4.3.1 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 swell up.  
f) Do not attempt to open the batteries and do not subject them to excessive mechanical stress.

en

## 5 Before use



### NOTE

Only batteries recommended by Hilti may be used to power the tool.

### CAUTION

Do not use damaged batteries.

### DANGER

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

#### 5.1 Changing the batteries

1. The cover on the rear of the remote control unit moves when pushed in the direction of the arrow. Remove the cover in order to gain access to the batteries.
2. Remove the 4 old batteries and replace them with new ones.
3. Push the cover back into position until it engages.

## 6 Operation

#### 6.1 Working with the tool

The "lock" function must be deactivated on the laser tool. The PPA 20 remote control unit allows you to switch the laser tool on and off, to activate horizontal alignment and to select the laser beam mode remotely.

Press the applicable button on the remote control unit to activate the corresponding function.

#### 6.2 Working in standby mode (PP 10/11)

To allow the laser to be switched off, the ON/OFF button on the laser tool must have been previously pressed. Only the laser beam is switched off by the ON/OFF button on the remote control unit. The laser tool remains in standby mode (the standby LED on the tool blinks slowly).

When using the remote control unit, point the signal transmission aperture on the remote control unit toward the receiving window on the laser tool.

When switching the laser on, press and hold the on / off button for 2 seconds.

### NOTE

If the pipe laser is moved, it can no longer be switched on by the remote control unit. The message "Error" is shown on the display of the pipe laser and the laser beam blinks slowly.

Press the on / off button on the pipe laser and check that the laser is set up correctly.

#### 6.3 Checking accuracy

Please refer to the operating instructions for the PP 10/11.

## 7 Care and maintenance

#### 7.1 Cleaning and drying

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.
- Observe the temperature limits when storing your equipment. This is particularly important in summer or

winter if the equipment is kept inside a motor vehicle. (-30 °C to +60 °C).

#### 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 / F). Repack the equipment only once it is completely dry.

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

### 7.3 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 tested, 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.

### 7.4 Transport

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

#### **CAUTION**

Always remove the batteries before shipping the tool.

## 8 Disposal

#### **CAUTION**

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 and 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 and batteries 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.

## 9 Manufacturer's warranty - tools

Please contact your local Hilti representative if you have questions about the warranty conditions.

## 10 EC declaration of conformity (original)

Designation:	Remote control unit
Type:	PPA 20
Year of design:	2005

We declare, on our sole responsibility, that this product complies with the following directives and standards: until 19th April 2016: 2004/108/EC, from 20th April 2016: 2014/30/EU, 2011/65/EU, EN ISO 12100.

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