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# iCube II

User Guide



**PHONAK**  
life is on

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## 1. Welcome

iCube II is designed specifically for use by the hearing care professional.

Please read this user guide carefully to benefit from all the features of the iCube II.

For further information, please visit the Phonak website [www.phonakpro.com](http://www.phonakpro.com)

Phonak – life is on [www.phonakpro.com](http://www.phonakpro.com)



CE mark applied: 2020

## 2. Description

The intended use of this device is the wireless transfer of fitting data from the PC to the client's hearing instruments.

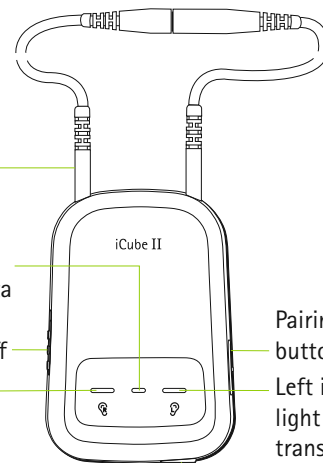
Rear neckloop opening

Neckloop plugs

Middle indicator light (battery state and PC data transfer)

On/Off

Right indicator light (data transfer)



Pairing button

Left indicator light (data transfer)


Mini USB charging input



Wireless iCube II USB adapter

### 3. iCube II accessories (optional)

- USB cable, 3 m (10 ft)
- iCube II desktop stand

 Contents may vary depending on country.

### 4. Getting started

#### 4.1 Setting up the power supply

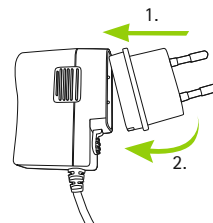
Select the adapter for your country.



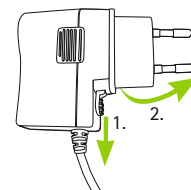
US

EU

1. Insert the top round end of the adapter into the round corner of the power supply.
2. Click the tail of the adapter in to lock it into place.



1. To remove, pull back the tab on the power supply.
2. Pull the adapter upwards to remove it.



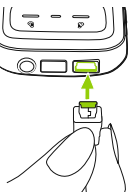
#### Power supply specification

Power supply output voltage: 5.0V DC 1000mA 5W LPS  
Charger input voltage: 100-240V AC 50/60Hz 0.2A USB  
Cable specifications: length <3m

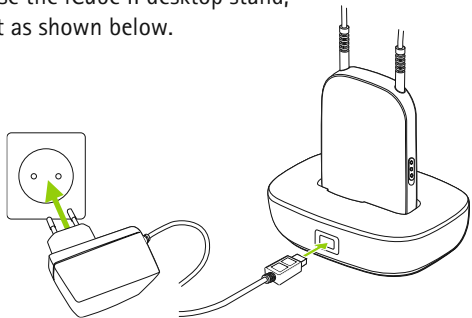
## 4. Getting started

### 4.2 Charging the battery

Plug a mini-USB plug into the iCube II and plug the power supply into a power outlet.



If you use the iCube II desktop stand, install it as shown below.



It is recommended to charge iCube II whenever it is not in use. This way it will be sufficiently charged and ready for the next fitting session.

**i** iCube II desktop stand is available as an option.

### Battery notes

- i** When charging iCube II for the first time, leave it to charge for at least three hours (even if the middle indicator light changes to green color earlier).
- i** Charging a depleted battery will take approx. 2 hours. It is safe to leave iCube II connected for longer periods, even if not in use.
- i** A new battery's full performance is achieved only after three complete charge and discharge cycles.
- i** The iCube II battery can be charged several hundred times. If the operating time of your iCube II reduces substantially, please contact your local Phonak representative.

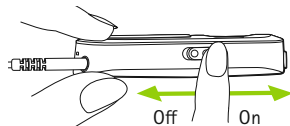
## 4. Getting started

### 4.3 Operating time

Fully charged, your iCube II will operate for up to twelve hours of continuous fitting.

### 4.4 Switching iCube II on and off

Slide the switch as shown to switch iCube II on or off.



❗ Once iCube II is fully operational, the middle indicator light will blink slowly.

❗ Switch iCube II off when not in use and while charging. The middle indicator light will stop blinking.

### 4.5 Target fitting software requirements

Before using iCube II, ensure that Target 4.0 or a later version is installed on the fitting PC.

## 5. Connecting iCube II to your computer

iCube II is shipped with a pre-paired wireless USB adapter to ensure a quick and easy set-up of the wireless connection with your fitting PC.



iCube II may also be connected with any Bluetooth capable PC if a USB socket is not available at all or via a USB cable if a wireless connection is not possible.

### 5.1 Connecting wirelessly

#### Automatic connection

To connect iCube II with the fitting PC make sure that Phonak Target 4.0 and newer is installed. Plug the iCube II USB adapter into a free USB port on your fitting PC.


❗ Make sure the iCube II USB adapter is plugged in a USB port on the fitting PC. Do not use a USB extension cable to connect it.

## 5. Connecting iCube II to your computer

Switch iCube II on and the connection will be established automatically as soon as Phonak Target is started.

- ❗ The USB adapter is pre-paired with iCube II. After replacement of either the adapter or iCube II, a manual pairing is required as described below.

### Manual pairing

Switch iCube II on and press the pairing  button for 2 seconds to start the pairing mode.

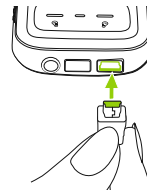
When in pairing mode, all indicator lights will rapidly blink back and forth. In Phonak Target, go to **Tools**, select **Device pairing** and click **Pairing** in the **iCube II USB adapter** section.

Follow the steps of the iCube II pairing assistant. It will guide you through the pairing process.

- ❗ A manual pairing is also required after a reset to factory settings.

## 5.2 Connecting via USB cable

To connect iCube II via USB cable, insert the mini-USB plug into iCube II and the other end into a free USB port on the fitting PC. Phonak Target 4.0 or newer will automatically detect iCube II and it can be selected as the fitting device.



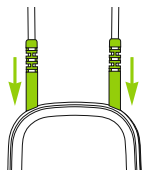
- ❗ Use the optional USB hub if there are no free USB ports on your computer.

## 6. Using iCube II

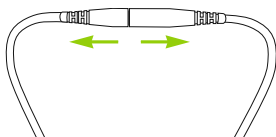
Before using iCube II, make sure the battery is sufficiently charged. If the middle indicator light is orange, please charge iCube II. Make sure that iCube II is selected and shown as the fitting device in Phonak Target.

### 6.1 Wearing iCube II

Make sure both ends of the neckloop are firmly plugged into the iCube II.



Open the neckloop by unplugging the connector in the middle of the neckloop and place iCube II around your client's neck.



Close the neckloop to allow the built-in antenna to operate correctly.

### 6.2 Detecting and programming hearing instruments

For a wireless fitting, the assignment of the left/right hearing aid is done in Phonak Target. Make sure that iCube II is selected as fitting device and click **Connect**.

The detected devices will be shown to assign (or reassign) each hearing instrument to the desired side (left or right). Click **Continue**.

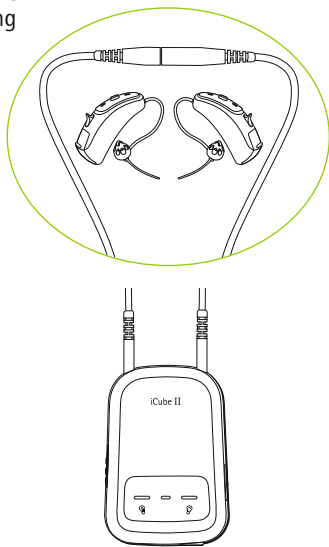
Follow the instructions on the screen to finish the detection.



## 6. Using iCube II

### 6.3 Programming hearing instruments on your desk

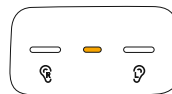
If you need to program hearing instruments outside of the client's ears (e.g. to prepare the hearing instruments before a fitting session), place the hearing instruments on a flat surface and put the neckloop of iCube II around them as shown in the picture.



## 7. Indicator lights

There are 3 indicator lights on iCube II for an easy indication of the battery, connection and fitting status.

Middle indicator remains solid orange



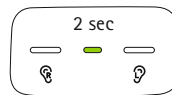
Charging

Middle indicator remains solid green



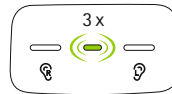
Charging complete

Middle indicator is solid green for 2 s



iCube II starting up

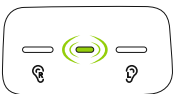
Middle indicator slowly blinking 3 times



iCube II switching off

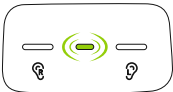
## 7. Indicator lights

Middle indicator slowly blinking



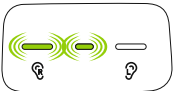
On, no active connection to fitting PC

Middle indicator regularly blinking



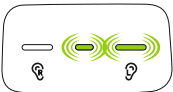
Active connection to fitting PC

Right and middle indicator rapidly blinking



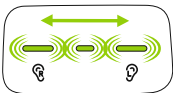
Programming right hearing instrument

Left and middle indicator rapidly blinking



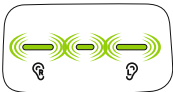
Programming left hearing instrument

All indicators rapidly blinking back and forth



Pairing mode enabled

All three indicators rapidly blinking

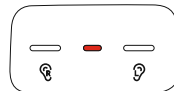


Updating firmware on iCube II

**i** The middle indicator light will change to orange color when the battery gets low. Make sure to charge iCube II after the fitting session.

**i** Phonak Target will display a notification when a new firmware version for iCube II is available.

Middle indicator remains solid red



Malfunction, please refer to troubleshooting section

## 8. Troubleshooting

<i>Causes</i>	<i>What to do</i>
<b>iCube II is no longer recognized by the computer to which it was previously paired.</b>	
<ul style="list-style-type: none"><li>• The iCube II USB adapter is disconnected from the fitting computer.</li><li>• iCube II is out of range.</li></ul>	<ul style="list-style-type: none"><li>• Plug in the iCube II USB adapter.</li><li>• Move iCube II closer to your computer.</li></ul>
<b>iCube II turns off.</b>	
<ul style="list-style-type: none"><li>• The battery is empty.</li></ul>	<ul style="list-style-type: none"><li>• Charge iCube II.</li></ul>
<b>iCube II is unresponsive and the middle indicator is lit solid red.</b>	
<ul style="list-style-type: none"><li>• This may indicate a malfunction.</li></ul>	<ul style="list-style-type: none"><li>• Switch iCube II off and wait for 20 seconds before switching on again.</li><li>• If iCube II is connected to the fitting PC via cable, disconnect it from the cable and perform reboot as described above.</li></ul>

<i>Causes</i>	<i>What to do</i>
<b>A second or different iCube II cannot be connected to the fitting PC.</b>	
<ul style="list-style-type: none"><li>• Only one iCube II can be paired with the fitting PC.</li></ul>	<ul style="list-style-type: none"><li>• If you use the USB adapter, press the pairing button on iCube II to connect it with your computer.</li><li>• If you do not use the USB adapter, make sure your Bluetooth device is switched on and in pairing mode to establish the connection.</li></ul>

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## 9. Service and warranty

### 9.1 Local warranty

Please ask your local Phonak representative, where you purchased your device, about the terms of the local warranty.

### 9.2 International warranty

Phonak offers a one year limited international warranty, valid as of the date of purchase. This limited warranty covers manufacturing and material defects. The warranty only comes into force if proof of purchase is shown. The international warranty does not affect any legal rights that you might have under applicable national legislation governing sale of consumer goods.

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### 9.3 Warranty limitation

This warranty does not cover damage from improper handling or care, exposure to chemicals, immersion in water or undue stress. Damage caused by third parties or non-authorized service centers renders the warranty null and void.

Serial number:

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Date of purchase:

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## 10. Compliance information

### Europe:

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#### Declaration of conformity

Hereby Phonak AG declares that this Phonak product is in compliance with the essential requirements of the Medical Device Regulation (EU) 2017/745 as well as the Radio Equipment Directive 2014/53/EU. The full text of the EU Declaration of Conformity can be obtained from the manufacturer or the local Phonak representative whose address can be taken from the list on <https://www.phonak.com/com/en/certificates.html> (Phonak worldwide locations).

### Australia/New Zealand:

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**R-NZ**

Indicates a device's compliance with applicable Radio Spectrum Management's (RSM) and Australian Communications and Media Authority (ACMA) regulatory arrangements for the legal sale in New Zealand and Australia. The compliance label R-NZ is for radio products supplied in the New Zealand market under conformity level A1.

### The Phonak iCube II is certified under:

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USA	FCC ID: KWC-ICUBE2
Canada	IC: 2262A-ICUBE2

### The Phonak iCube II USB adapter is certified under:

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USA	FCC ID: 079BT402
Canada	IC: 11512A-BT403

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## 10. Compliance information

### Notice 1:

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. 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.

### Notice 2:

Changes or modifications made to this device not expressly approved by Phonak may void the FCC authorization to operate this device.

### Notice 3:

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules and ICES-003 of Industry Canada. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device 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 device 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 device and receiver.
- Connect the device 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.

### Notice 4:

Japanese Radio Law and Japanese Telecommunications Business Law Compliance. This device is granted pursuant to the Japanese Radio Law (電波法) and the Japanese Telecommunications Business Law (電気通信事業法). This device should not be modified (otherwise the granted designation number will become invalid).

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## 10. Compliance information

### Emission standards:

EN 60601-1-2:2015, IEC 60601-1-2:2014,  
EN 55011:2009+A1, CISPR11:2009/AMD1:2010,  
CISPR22:1997, CISPR32:2012, ISO 7637-2:2011,  
CISPR25:2016, EN 55025:2017

### Immunity standards:

EN 60601-1-2:2015, IEC 60601-1-2:2014,  
EN 61000-4-2:2009, IEC 61000-4-2:2008,  
EN 61000-4-3:2006+A1+A2,  
IEC 61000-4-3:2006+A1+A2, EN 61000-4-4:2012,  
IEC 61000-4-4:2012, EN 61000-4-5:2014,  
IEC 61000-4-5:2014, EN 61000-4-6:2014,  
IEC 61000-4-6:2013, EN 61000-4-8:2010,  
IEC 61000-4-8:2009, EN 61000-4-11:2004,  
IEC 61000-4-11:2004, IEC 60601-1 (§ 4.10.2):2005,  
ISO 7637-2:2011

Any serious incident that has occurred in relation to the device should be reported to the manufacturer representative and the competent authority of the state of residence. The serious incident is described as any incident that directly or indirectly led, might have led or might lead to any of the following:

- the death of a patient, user or other person
- the temporary or permanent serious deterioration of a patient's, user's or other person's state of health
- a serious public health threat.

To report an unexpected operation or event, please contact the manufacturer or a representative.

Diligent and routine care of your iCube II contributes to outstanding performance and a long service life. To ensure a long service life, Phonak AG provides a minimum of a five year service period after phase out of the respective product.

For more information regarding features, benefits, setup, use and maintenance or repairs of your accessories – contact the manufacturer representative. Additional information can be found in the Data Sheet of your product.

For any information regarding the repair service of the hearing aid accessories please contact the manufacturer representative.

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## 10. Compliance information

**Intended use:** The intended use is to transfer fitting data from the fitting PC to the clients hearing aids. The fitting data is transferred from the fitting PC to iCube II via Bluetooth connection using a wireless USB Bluetooth adapter. iCube II is converting the data into a 10.6MHz wireless signal that is transferred to the hearing aids using its neckloop antenna. It can be used with any wireless Phonak hearing aid from the Venture, Quest, Spice+ and Spice generation.

**Target population:** hearing care professionals that create individual fittings for Phonak hearing aids.

**Indications:** Presence of hearing loss and therefore fitting of hearing aids with individual fitting.

**Contra-Indications:** none.

**Use environment:** iCube II is suitable for professional healthcare facility environment like audiologist offices.

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### **Antenna information:**

Antenna type: External neck loop antenna

Operation frequency: 10.6 MHz (wireless link to hearing aids) 2.402-2.480 GHz / 79 Channel FHSS (Bluetooth)

Occupied bandwidth (99% BW): 500 kHz

Modulation: 8DPSK (wireless link to hearing aids) GFSK, Pi/4DQPSK, 8DPSK (Bluetooth)

Magnetic Field Strength @ 10m: < -21 dB $\mu$ A/m



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## 11. Information and description of symbols



With the CE symbol, Phonak AG confirms that this Phonak product meets the requirements of the Medical Device Regulation (EU) 2017/745 as well as the Radio Equipment Directive 2014/53/EU.

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This symbol indicates that the products described in these user instructions adhere to the requirements for an applied part of Type B of EN 60601-1. The surface of the device is specified as an applied part of Type B.

---



This symbol indicates that it is important for the user to read and take into account the relevant information in this user guide.

---



This symbol indicates that it is important for the user to pay attention to the relevant warning notices in these user guides.

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Important information for handling and product safety.

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Temperature transport and storage:  
-20° to +60° Celsius  
(-4° to +140° Fahrenheit).  
Temperature operation:  
0° to 40° Celsius  
(+32° to +104° Fahrenheit)

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Keep dry.

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## 11. Information and description of symbols



Humidity transportation and storage:  
<90% (non-condensing).  
Humidity operation:  
<95% (non condensing)



Atmospheric pressure: Transportation,  
storage and operation: 500 hPA to  
1060 hPA.



The symbol with the crossed-out  
garbage bin is to make you aware  
that this device may not be thrown  
away as normal household waste.  
Please dispose of old or unused device,  
at waste disposal sites intended for  
electronic waste, or return it to your  
group company for disposal. Proper  
disposal protects the environment and  
health.



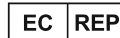
The Bluetooth® word mark and logos  
are registered trademarks owned  
by Bluetooth SIG, Inc. and any use  
of such marks by Phonak is under  
license. Other trademarks and trade  
names are those of their respective  
owners.



Japanese mark for certified radio  
equipment.



Indicates the medical device  
manufacturer, as defined in Medical  
Device Regulation (EU) 2017/745.



Indicates the Authorized representa-  
tive in the European Community. The  
EC REP is also the importer to the  
European Union.



The device is a medical device.

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## 12. Important safety information

The following pages contain important safety information.

### Hazard warnings

⚠ The following is only applicable for persons with active implantable medical devices (i.e. pacemakers, defibrillator, etc.)

Keep the wireless hearing aid or wireless accessory at least 15 cm (6 inches) away from the active implant. If you experience any interference do not use the wireless hearing aids and contact the manufacturer of the active implant.

Please, note that the interference can also be caused by power lines, electrostatic discharge, airport metal detectors etc.

Keep magnets (e.e battery handling tool, EasyPhone magnet, etc.) at least 15 cm (6 inches) away from the active implant.

⚠ Keep this device out of reach of children aged under 3 years and mentally challenged people or pets.

⚠ Changes or modifications to the device that were not explicitly approved by Phonak are not permitted.

⚠ Opening the device might damage it. If problems occur which cannot be resolved by following the remedy guidelines in the troubleshooting section of this user guide, consult your local Phonak representative.

⚠ This product has an embedded, non-replaceable battery. Do not attempt to open the product or remove the battery as this may cause injury and damage the device.

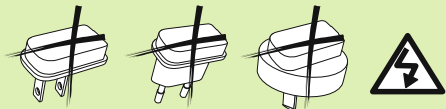
⚠ Only use accessories approved by Phonak AG, to avoid any electrical shock.

⚠ Using the device, its connectors or cables in any way contradictory to their intended purpose as described in this user guide (e.g. wearing the USB cable around the neck) can cause injury.

⚠ When operating machinery, ensure that no parts get caught in the machine.

## 12. Important safety information

- ⚠ For charger, use only EN60950- and/or EN60601-1 certified equipment with an output rating of 5 VDC, min. 500 mA.



- ⚠ Caution: electric shock. Do not insert plug alone into electrical outlets.
- ⚠ Do not use the device in explosive areas (mines or industrial areas with danger of explosions, oxygen rich environments or areas where flammable anesthetics are handled) or where electronic equipment is prohibited.
- ⚠ Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

- ⚠ Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

- ⚠ Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the iCube II including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

### Information on product safety

- ① Protect the device from excessive moisture (bathing, swimming), heat (radiator, car dashboard) or direct skin contact when sweating.
- ① Do not drop the device. Dropping it onto a hard surface can damage the device.

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## 12. Important safety information

- ① Do not disconnect the neckloop while the device is transmitting signals to the hearing aids.
- ① Protect the device connectors, plugs, charging slot and power supply from dirt and debris.
- ① Never use a microwave or other heating devices to dry the device.
- ① The digitally-coded, inductive transmission technology used in the device is highly reliable and experiences virtually no interference from other devices. It should be noted, however, that when operating the hearing system near computer equipment, larger electronic installation or other strong electromagnetic fields, it may be necessary to be at least 60 cm (24") away from the interfering device to ensure proper operation.
- ① Keep the device of at least 10 cm away from any kind of magnets.

- ① Do not connect an USB cable exceeding 3 meters (9 feet) in length to the device.
- ① When the device is not in use, turn it off, keep the neckloop closed and store it safely.

### Other important information

- ① If you use several devices in the same building, be aware that their inductive field can disturb one another if within a range of 2 meters (6 feet). This may even occur when used in different rooms.
- ① High-powered electronic equipment, larger electronic installations and metallic structures may impair and significantly reduce the operating range.
- ① If the hearing aids do not respond to the device because of an unusual field disturbance, move away from the disturbing field.

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## 13. Care and maintenance

### Cleaning of the device

Use a lint-free cloth for cleaning. Dry cleaning is preferred. If necessary, the surface can be cleaned with mild soapy water. However, the cloth should be damp and not dripping wet to prevent moisture from entering the device.

Do not use aggressive substances such as solvents or paint thinners as these can impair the surface.

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## Notes

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