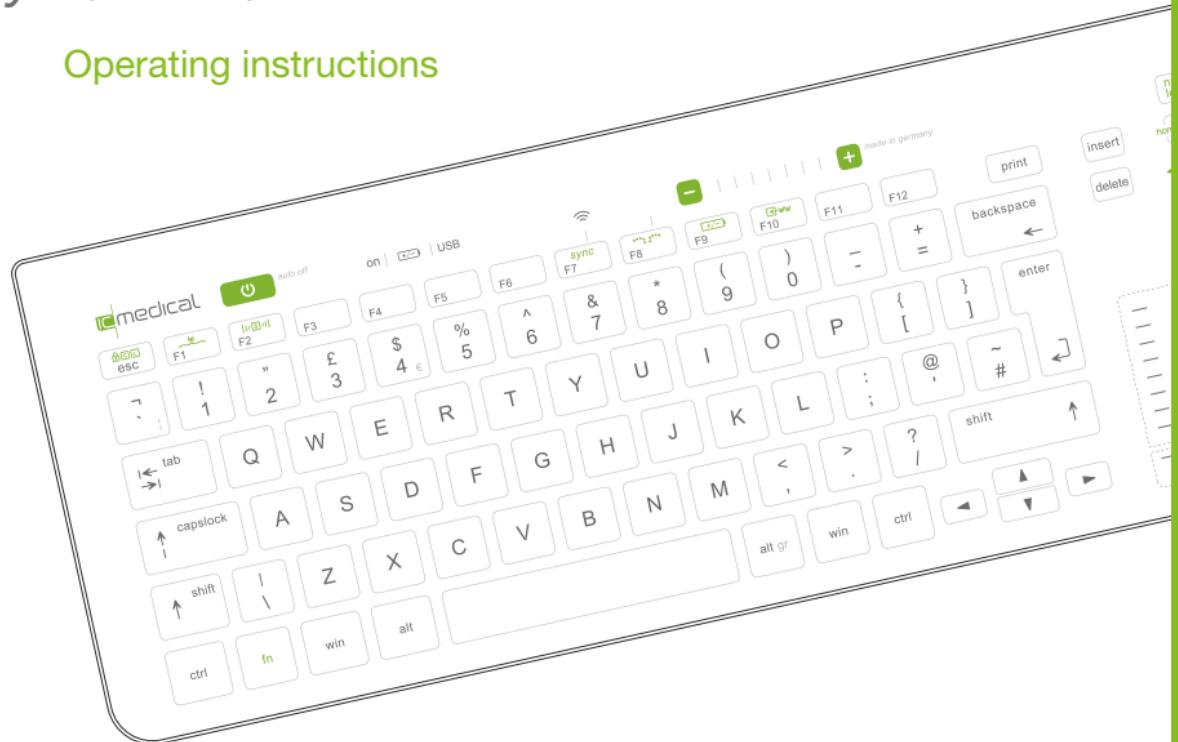


IC Keys (HT-200)

Operating instructions



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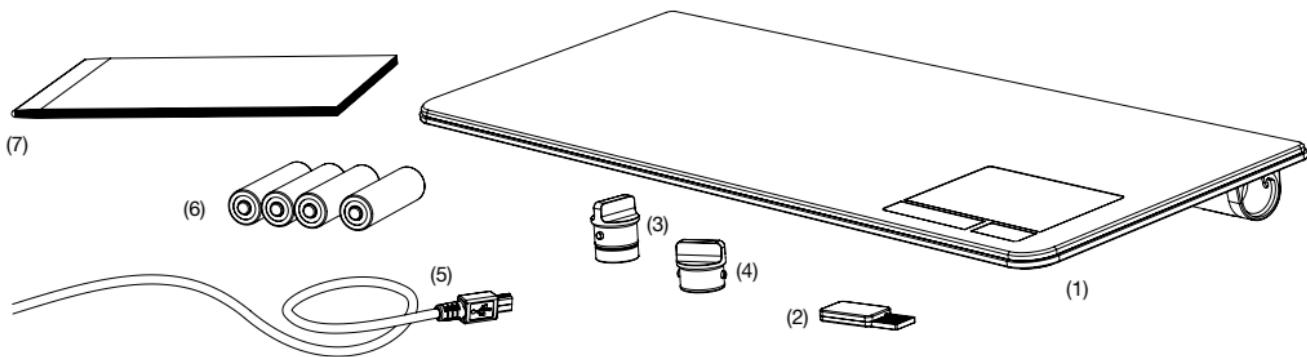
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1. General

Congratulations on the purchase of this high-quality keyboard!

Before using IC Keys for the first time, please read these instructions carefully and take note of them. Safety instructions in this document. Only in this way can you use all functions safely and reliably.

1.1 Scope of supply



Keyboard (1)

USB wireless dongle (2)

Battery cover (3)

USB cover (4)

USB cable 1.8 m (5)

4x batteries AA (6)

Operating instructions, warranty conditions, Quickstart (7)

Explanation of the flags:

= WARNING! Ignoring this can result in personal injury.



= NOTE! Ignoring this can result in faulty functionality.



= CAREFUL! Ignoring this can result in damage to the appliance.



= Tips for handling the device.

1.2 Safety instructions

For your safety and to avoid damage, please note in particular the following safety instructions.



WARNING! Personal injury! Do not connect the keyboard to life-preserving products.

WARNING! Cut injuries to the skin can be caused by splinters of glass or sharp objects. Do not drop the keyboard – the glass could crack.

WARNING! Personal injury! Never use a damaged product! Withdraw the product from active usage and mark it as not functional.



CAREFUL! Damage to the device. Do not expose the IC Keys to any strong oscillations; this can damage the electronics.

CAREFUL! Damage to the device. When transporting by plane the battery and USB cover must be opened to facilitate unhindered pressure compensation.

CAREFUL! The keyboard is waterproof pursuant to IP64 if battery and USB cover are screwed on.

CAREFUL! If you are not intending to use the device for a long time, remove the batteries from the keyboard.



NOTE! Unintended input. When using an electrotome (radio interference irradiation) lock the keyboard via the clean-lock function (cf. „3.4 Key lock“ on page 26).

NOTE! Unintended input. Do not use any mains adapter without any earthing.

NOTE! Faulty functionality of the product! The IC Keys should not be exposed to any direct sunlight. In this regard, please observe the operating and storage temperatures in „8.1 Technical data“ on page 43.

Please note the separately marked safety information in these instructions for use; any violation of these results in the expiry of the guarantee claims.

Please note that in the event of changes and/or independent repairs to the product, the guarantee claims will expire.

1.3 Working with the keyboard and trackpad

Writing with IC Keys requires a certain familiarisation phase as the response characteristics differ fundamentally from a standard keyboard. With a conventional keyboard, the fingers rest on the keys and do not initiate any process until a key is pressed. With IC-Keys, an impact is triggered with every touch (approach) of the glass surface. The touch characteristics are therefore more comparable to a smartphone or tablet PC: The sensitivity of the glass surface can be individually set. Please note that unnecessarily high sensitivity can result in erroneous input.

The trackpad works precisely in the way familiar from a laptop. It has three fields, the cursor field and a right-hand and left-hand key. On the left-hand side of the cursor field there is also a vertical slider, discernible by the horizontal bars. With this slider, it is possible to quickly slide documents or pages horizontally, comparably to the wheel of a computer mouse.

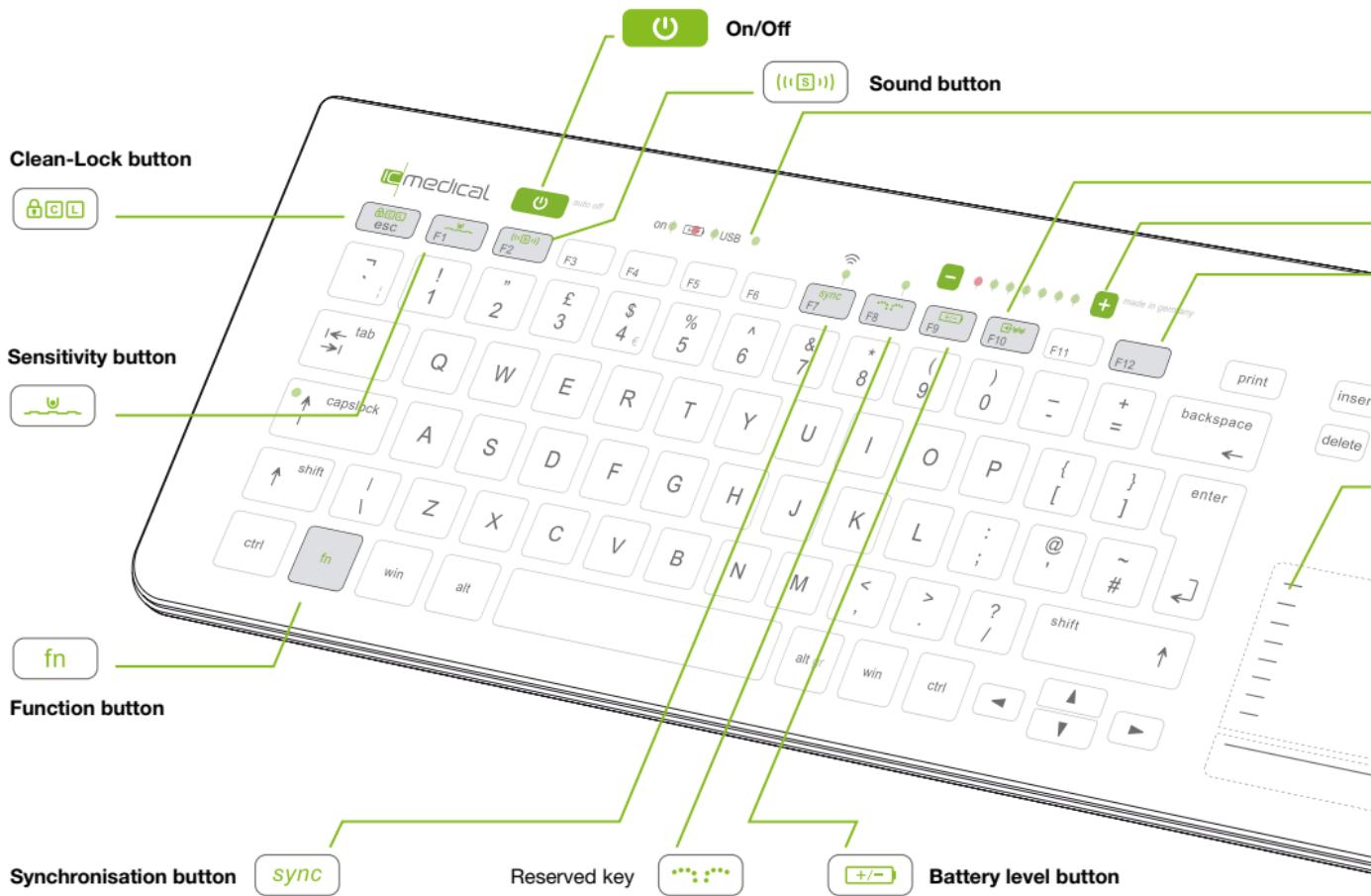


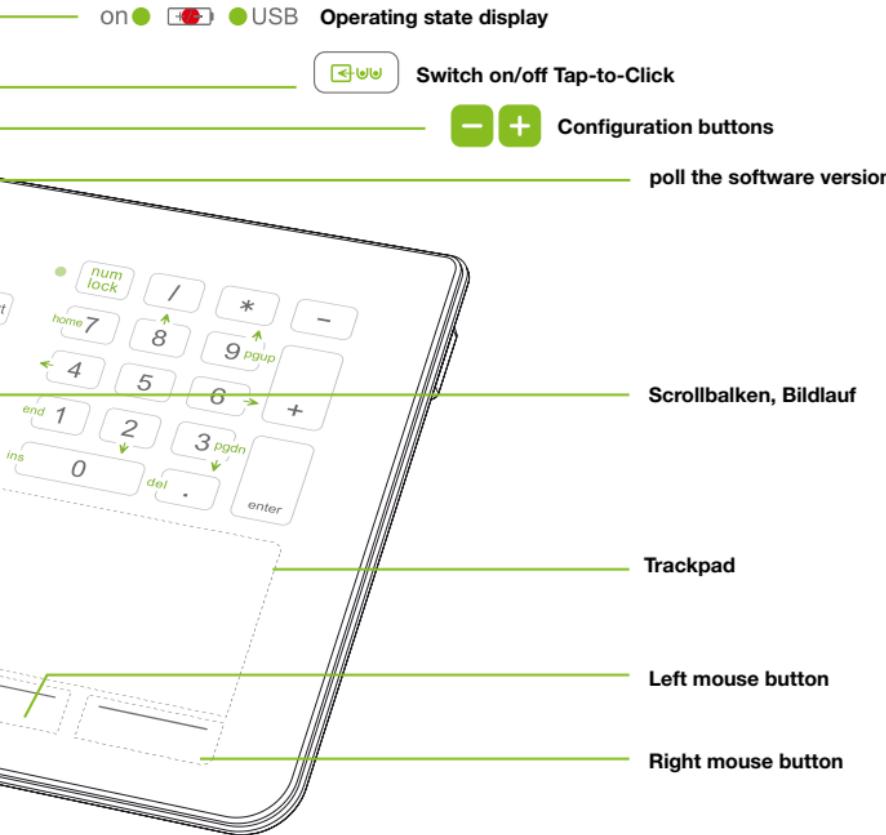
The trackpad supports the tap-to-click function. More detailed information on this *cf. „3.2 Settings of the trackpad“ on page 24*



It is possible at any time to operate a computer mouse parallel to the trackpad.

Working with medical gloves at the keyboard is possible. It should be noted here that the touch characteristics change as a result of the gloves and the sensitivity of the keyboard may have to be set higher (*cf. „3.1 Setting of the key and trackpad sensitivity“ on page 23*).





1.4 Special function keys and displays

With the special function keys settings can be made to the keyboard.

The keyboard has some LEDs which display different operating modes of the keyboard. The respective positions can be found in the device presentation.

LED status

off  on  flashing 

2. Start-up

In order to be able to work quickly with the keyboard, read the Quick-start instructions. Further information about the functions can be found in these instructions for use.

2.1 Use of the keyboard with USB cable

- 1 Connect the keyboard with the attached USB cable to a free USB socket on your computer.
- 2 The keyboard is ready for operation immediately; the green LED behind the USB symbol starts to light up.



NOTE! The on key of the keyboard has no function during the USB cable connection.

- 3 Close the battery compartment with the battery cover to protect the electronics from dirt, moisture and cleaning agent or disinfectant.



NOTE! Do not insert any batteries during operation with the USB cable.



NOTE! Never use USB extensions, USB hubs or USB cables that are longer than 3m.

2.2 Use of the keyboard via radio (wireless)

- 1 Insert the batteries supplied into the keyboard and close the battery compartment with the battery cover (cf. „4.1 Use of batteries“ on page 29).



NOTE! When closing the battery compartment, no key may be touched until the on key has lit up as the keyboard calibrates itself in this period of time. If a key is touched nevertheless, it can result in malfunctions. To correct this, restart the keyboard by opening and closing the battery compartment again.

- 2 Close the USB socket with the respective USB cover.
- 3 Plug the USB radio dongle into a free USB socket of your computer. A blue LED on the USB radio dongle starts to light up.

Please do not touch the exposed contacts of the USB radio dongle.

- 4 Switch on the keyboard by pressing the on key. A start tune sounds out and the green LED next to the on symbol starts to light up.
- 5 Now synchronise the keyboard with the USB radio dongle („2.2.2 Synchronisation with the USB radio dongle“ on page 20).

2.2.1 Switching the keyboard on/off



The keyboard is switched on/off by pressing the on key. In switched-on mode, the LED next to the on symbol lights up. The keyboard has an energy-saving mode. This is activated 7 minutes after your last input. When you use the keyboard again, simply switch it on again via the on key.

If the keyboard is connected to a computer using a USB cable, this is always switched on as long as the computer is switched on. In this mode, the on key is without any function.

2.2.2 Synchronisation with the USB radio dongle

A synchronisation is only necessary in wireless operation. Proceed as described in „2.2 Use of the keyboard via radio (wireless)“ on page 16. To connect the keyboard and the USB radio dongle, you need to synchronise them. This process is only necessary during the first start-up.

To do so, proceed as follows:

1 Switch the keyboard on and place this as close as possible to the USB radio dongle (approx. 15cm).



2 Keep the fn key pressed and also press the sync key. The LED above the sync key starts to flash. If the LED lights up permanently, the synchronisation has been completed and the keyboard is ready for use. The LED goes out after a short space of time. If the LED should flash in a faster rhythm, the synchronisation process has been terminated. Please check the USB radio dongle as described in

„2.2 Use of the keyboard via radio (wireless)“ on page 16 and start the synchronisation process again.



NOTE! The use of several keyboards in direct proximity is possible. The following should be noted during synchronisation. To connect the right keyboard with the right computer, the synchronisation must be carried out in direct proximity to the respective radio dongle. A synchronisation with a wrong computer can be avoided by only switching on the computer that is intended for the keyboard and carrying out the synchronisation.

3. Setting options

3.1 Setting of the key and trackpad sensitivity

The touch sensitivity of the keyboard can be set in 6 levels.

When delivered, the sensitivity level 4 is the default setting (4 green LEDs light up between the +/- keys).



To change the sensitivity, keep the fn key pressed and also press the sensitivity key. Then set, keeping the fn key pressed, the required value with the +/- keys.

3.2 Settings of the trackpad



To switch the tap-to-click function on or off, keep the fn key pressed and also press the tap-to-click key (F10). If you press again, you switch the function on or off (on delivery, tap-to-click is deactivated).



= Tap-to-Click off



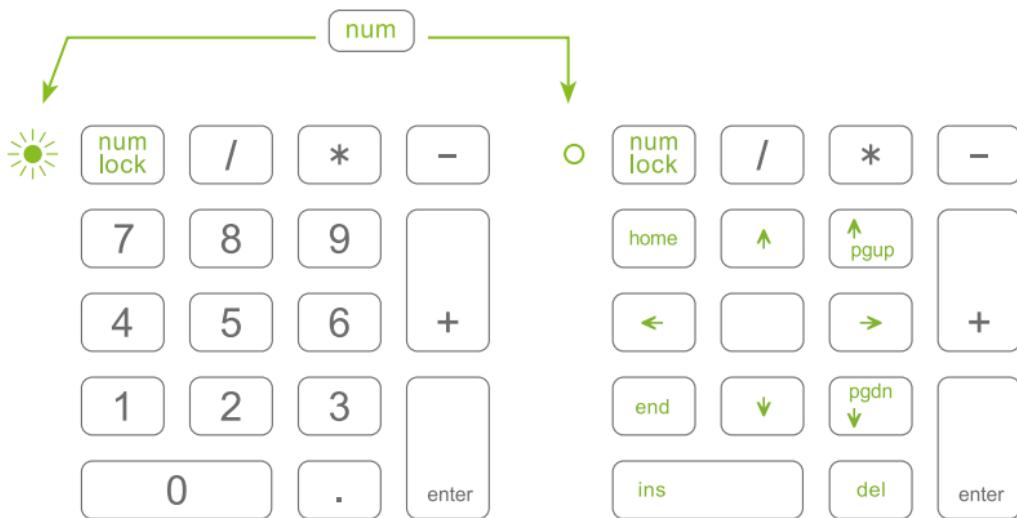
= Tap-to-Click on

TIPP

You can improve the cursor speed by opening the properties of the mouse in the system control of your computer and there under cursor options adapting the cursor speed to your requirements.

3.3 Switching the Numlock function on/off

With the num key, the functioning of the number block can be changed. To switch the function on or off, press the num key. If „num“ is active, the LED next to the key lights up. The keys now have the higher-level functions.



3.4 Key lock

To clean or disinfect the keyboard, the entire keypad and the trackpad must be locked against input.



For this, keep the fn key pressed and also press the lock key.



The red LED behind the lock key lights up. In this interval, the keyboard is locked against input and can be cleaned or disinfected. To release the keys again, repeat the process; the red LED goes out.

3.5 Setting the volume

The volume of the keyboard can be set in 6 levels.



To change the volume, keep the fn key pressed and also press the sound key as well. Keeping the fn key pressed, then set the required value with the +/- keys.



To save electricity, the acoustics can also be shut down completely (red LED).

4. Batteries / rechargeable batteries

4.1 Use of batteries

Insert the batteries with the minus pole first into the battery compartment and close this with the battery cover (see also the battery insertion symbol on the housing shell for this).

Only use new, completely charged batteries. Four batteries of the size AA, R6 or LR6 are required for this. Due to their greater energy density, we recommend alkaline manganese batteries.



CAREFUL! Never use batteries from different manufacturers! Do not use any batteries that are damaged or have leaked!



NOTE! If the red LED behind the battery symbol is lit up, the batteries need to be changed immediately.

4.2 Use of rechargeable batteries

Rechargeable batteries of the size AA can also be inserted into the keyboard.

We recommend rechargeable batteries with a low self-discharge. The LED bar display that displays the battery charge status can possibly react differently when rechargeable batteries are used as rechargeable batteries have a lower voltage fluctuation compared to batteries.



NOTE! It is not possible to charge the rechargeable batteries via the USB cable. The rechargeable batteries need to be fully charged in a charging device envisaged for this purpose.

4.3 Polling of the energy reserve



Keep the fn key pressed and also press the battery key.

On the LED bar display, the current charge status of the batteries is then displayed. The more green LEDs light up, the more energy is available.

4.4 Note regarding battery change



If the energy reserve of the batteries/rechargeable batteries is almost used up, the LED behind the battery symbol starts to flash. Please now have new batteries ready to replace the existing ones.



If the LED behind the battery symbol lights up permanently, the keyboard is locked and the batteries need to be changed.

5. Cleaning / Disinfecting

5.1 General information

To clean the glass area, a conventional glass cleaner available from shops is to be used. To clean the housing shell made of ABS plastic, do not use any cleaning agent that contains abrasive particles as these can cause scratches to the surface. Please take note of the designated purpose of the respective cleaning agent. The disinfecting should be done with a conventional wipe-down disinfectant available in shops. The concentration of Isopropanol of the respective disinfectant should be < 70% so as not to damage the surface.

To avoid any unwanted input during cleaning, activate the key lock (cf. „3.4 Key lock“ on page 26).



NOTE! The keyboard may only be disinfected with wipe-down disinfectant. Disinfectant wipes available in shops are highly suited for this.



CAREFUL! When using the keyboard with a USB cable, it should be ensured that no moisture or cleaning or disinfectant agent can penetrate into the USB socket of the keyboard! Moisture and/or aggressive cleaning agents can damage the sensitive electronics.

Do not use any abrasive agents / abrasive sponges; these can scratch the keyboard.

Ensure that no drops of the cleaning agent are left on the keyboard, particularly where the glass and the body of the keyboard meet.

No cleaning agent may penetrate the interior of the keyboard!

Although the plastic is resistant to almost every cleaning agent, the housing shell should only be treated with a much cleaner as necessary.



CAREFUL! Excessive use of cleaning agents can result in discolouring of the plastic.

6. Maintenance, care and storage

6.1 Maintenance and care

Every now and then, the rubber feet should be rubbed down with alcohol. The keyboard then has a better grip again on the base.

Further information can be found in Chapter „5. Cleaning / Disinfecting“ on page 32.

6.2 Storage

When you are not intending to use the keyboard for a long time, please note the following:

- Store the keyboard in a cool, dark and dry place
- Remove the batteries from the keyboard (they could leak)
- Store the battery cover and the USB cover separately from the keyboard (moisture, pressure compensation)

7. Support

7.1 Support information

Internet: www.icmedical.de

Mail: support@icmedical.de

If the error descriptions on the Internet do not help you further, you can also use the telephone support. For this, have the series number and the current software status of your keyboard at hand (cf. „7.2

Polling of the current software version“ on page 37)

Phone: +49 – (0) 7181-706050

7.2 Polling of the current software version

fn + F12

To poll the software version, keep the fn key pressed and also press the F12 key. A certain number of LEDs then light up between the +/- keys. Number and order of the LEDs indicate the current status. Check your software version on our support page on the Internet.

Example: 

TIPP

Keep up to date with your keyboard and register on our Internet site. We will notify you as soon as updates or current software versions are available.

7.3 Firmware update

The software of the keyboard is constantly being improved. The currently available software version can be found on the Internet at:

<http://www.icmedical.de/services>

If the version number available on the Internet is higher than that of your keyboard, you should carry out an update.

Proceed as follows:

- 1** Connect the keyboard with the attached USB cable to a computer.
- 2** Download the necessary installation program from the Internet.
- 3** Start the installation program on your computer.

- 4 Follow the instructions of the installation program. The LED behind the battery symbol flashes during the update.



CAREFUL! During the installation process, do not under any circumstance remove the USB cable.

- 5 The program reports that the update process has been successful.
- 6 Wait until the start tune sounds out and the keyboard starts again.
- 7 Close the program.
- 8 The keyboard is now ready for use again and has the current software.

7.4 FAQ

Current questions and answers can be found on our website.

Independent triggering of keys	Appliances that work with strong electromagnetic fields, such as mobile phones, electrotomes, etc. can trigger malfunctions in direct proximity to the keyboard. Only operate such appliances at a large distance from the keyboard.
Individual keys do not work	<p>When changing the batteries (at the moment when the battery compartment was closed) keys were pressed by mistake.</p> <p>Open the battery cover and then ensure that you do not touch any key for several seconds when you close the battery cover. The keyboard needs this period of time to calibrate itself correctly.</p>
Individual keys no longer work correctly	<p>Check the battery charge status and change the batteries as necessary.</p> <p>Open and close the battery compartment (reset).</p>

The radio connection between-computer and keyboard does not develop	<p>The USB radio dongle is inserted the wrong way round in the computer. Check whether the blue LED on the USB radio dongle lights up.</p> <p>The batteries in the keyboard are empty.</p> <p>A „synchronisation“ of keyboard and computer has not yet been done.</p>
The keyboard cannot be synchronised	<p>Open the battery cover, wait a few seconds and close it again. Repeat the synchronisation process.</p> <p>The USB radio dongle is inserted the wrong way round in the computer. Check whether the blue LED on the USB radio dongle lights up.</p> <p>The batteries in the keyboard are empty. To support the synchronisation, move the keyboard as close as possible to the USB radio dongle during the synchronisation.</p>

8. Technical information / FCC Statements

8.1 Technical data

Keyboard

- Width: 408 mm
- Depth: 145 mm
- Height: max 30 mm
- Weight: approx. 840 g, without batteries
- Standby time in battery operation: up to 90 days
- Operational time in battery operation: typically 11 days, with 8h operating time per day without interruption
- Operating temperature / storage temperature: 5 °C up to 35°C / 0 °C up to 55 °C
- Up to height above sea level: 2000 m
- Humidity: 0% up to 90% rel. without condensation

USB wireless dongle

- Width: 15 mm
- Length: 34.3 mm
- Height: 4.2 mm
- Weight: 2 grams

- Range: approx. 10 m
- Radio frequency: 2.4 GHz with AES 128-bit encryption

Supported operating systems

- from Windows® 98, Linux

Approvals

- CE; RoHS; IP64
- FCC

8.2 Order numbers

101 200 – IC Keys (HT200) German

101 201 – IC Keys (HT200) French

101 203 – IC Keys (HT200) English

101 210 – USB wireless dongle

101 212 – USB cover

101 213 – USB cable

101 214 – Battery cover

8.3 FCC Statements

Statement according to Part 15.105

This equipment 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.

Statement according to Part 15.19

This device complies with Part 15 of the FCC Rules.
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.

Statement according to Part 15.21

Changes or modifications made to this equipment not expressly approved by the party responsible for compliance may void the FCC authorization to operate this equipment.

8.4 Guarantee

see supplementary sheet „Warranty conditions“

IC Medical GmbH assumes no liability for damage to property or injury to persons caused by non-compliance with the instructions for use and improper handling.

8.5 Disposal

Your IC Medical product has been designed and manufactured with high-quality materials and components that can be recycled and reused. Electrical and electronic devices should be disposed of separately from household waste at the end of their service life. Please dispose of this device at your local municipal collection point or recycling centre. In the European Union, there are different collection systems for electrical and electronic devices.



Help to preserve the environment in which we live!



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