

System Instructions



IPROXX 2

Document revision history

Version	Date	Modification, change
1.0	11/12	First release
2.0	03/14	Ratings plate
3.0	04/15	Technical specifications
4.0	06/17	Optional: <i>Bluetooth</i> ® (iOS)
5.0	03/18	FCC Warning and IC Warning
6.0	12/19	Optional: <i>Bluetooth</i> ® (Android)

Disclaimer and exclusion of liability

DewertOkin is not responsible for damage resulting from:

- failure to observe these instructions,
- changes made to this product which have not been approved by DewertOkin, or
- the use of replacement parts which have not been approved or manufactured by DewertOkin.

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1. General Information

1.1 About these system instructions

These instructions are intended specifically for the IPROXX 2 handset. These instructions are not operating instructions for the end product. They should be used only in conjunction with the installation instructions for the DewertOkin double drive or DewertOkin control unit to which the handset is connected.

	<div data-bbox="359 607 1380 667" style="background-color: yellow; padding: 5px;"> CAUTION</div> <p>The notices in these instructions must be followed! Following the guidelines during installation and connection procedures will help to minimize:</p> <ul style="list-style-type: none"> • the risk of accident and injury, and • damage to the drive system or the end product.
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These instructions have been written with due care and attention. However, we cannot guarantee that the data, images and drawings are complete and correct nor do we accept any liability for the information contained therein, unless required by law.



- We reserve the right to make unannounced technical changes in the course of our continual product improvement process!



1.2 Conventions used


- Triangular notice symbol: Notices which do not relate to safety are indicated in these instructions with a triangle.

Menu **YXZ** Names of buttons, displays, programs and menus in the smartphone are highlighted in bold

Explanations of warning notices

	<div data-bbox="359 1433 1380 1494" style="background-color: yellow; padding: 5px;"> CAUTION</div> <p>CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.</p>
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	<div data-bbox="359 1632 1380 1693" style="background-color: orange; padding: 5px;"> WARNING</div> <p>WARNING indicates a hazardous situation which, if not avoided, <i>could</i> result in death or serious injury.</p>
---	--



	<div data-bbox="359 1827 1380 1888" style="background-color: blue; color: white; padding: 5px;">NOTICE</div> <p>NOTICE is used to address practices which are not related to personal injury but may result in damage to the product or surroundings.</p>
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2. Safety notices

2.1 Proper and intended usage



The IPROXX 2 handset is used to operate DewertOkin drive systems. It is also used to lock and unlock the adjustment functions on beds used to care for sick people.



- It can be used for care purposes (CARE).
- It can be used in a hospital (HOSP).

	 CAUTION
	<p>This handset should only be used for the applications described above. Any other use is forbidden. Improper usage can lead to accidents or destruction of the unit. Such non-approved applications will lead immediately to the expiration of all guarantee and warranty claims on the part of the end-product manufacturer against the manufacturer.</p>

Improper usage

Be sure to follow the notices below concerning improper usage. You should include them in your product manual in order to inform the users of your end product.

	 WARNING
	<p>The IPROXX 2 handset not be used:</p> <ul style="list-style-type: none"> • near high-frequency surgical equipment or defibrillators, • in any environment where combustible or explosive gases or vapours (e.g., anaesthesiology) may be present, • in a humid environment or outdoors, or • in any application that will be cleaned with an automated washing system.

	 CAUTION
	<p>The IPROXX 2 handset may not be operated:</p> <ul style="list-style-type: none"> • by small children, • by frail or infirm persons without supervision, or • in the proximity of small children.

The handset can be used by children of 8 years and older, persons with reduced physical, sensory or mental capabilities, or persons with lack of experience or knowledge when they are supervised or instructed concerning the safe use of the device and when they understand the resulting risks. Do not allow children to play with this device. The cleaning and user maintenance must not be carried out by children without supervision.

- You should only use spare parts which have been manufactured or approved by DewertOkin. Only these parts will guarantee a sufficient level of safety.

Product labelling

- The rating plates shown are only an example. The specifications for your handset may differ from this illustration.



Rating plates (examples)

IPROXX 2

Model name

IPROXX 2/SMP/Bluetooth®

xxxxx	Article number
U in: 24 – 29V ~	Input voltage
Prod.date	Calendar week / year
Serial No.	Serial number
IPX6	Protection degree
FCC ID (optional)	Product identification for USA
IC ID (optional)	Product identification for Canada
SW: yyyy	Software
2.4Ghz	Radio frequency



Use in dry rooms only!



Conformity mark



Follow all special disposal instructions!



Always follow the instructions in the manual!

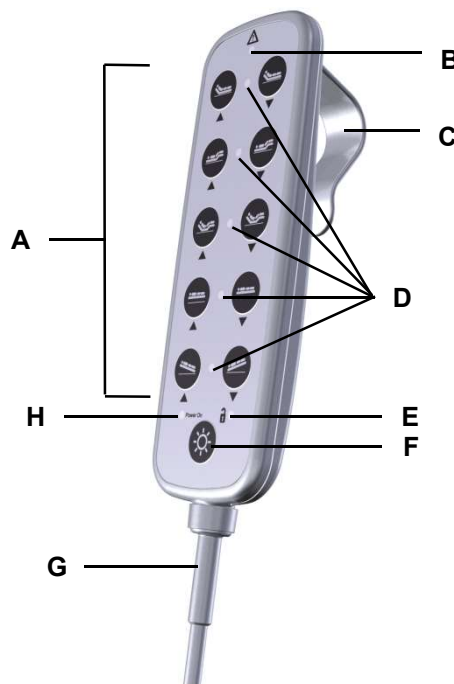
3. Handset description

The IPROXX 2 handset is used to control and adjust the end product. Adjustments are made using the keypad and the adjustment functionality can be locked or unlocked on the handset.

3.1 IPROXX 2 handset

The variants of the IPROXX 2 handset differ in the number of adjustment function keys (movement keys), the lock function, and the optional mounting clip. The following variations in the buttons and lock functions are available:

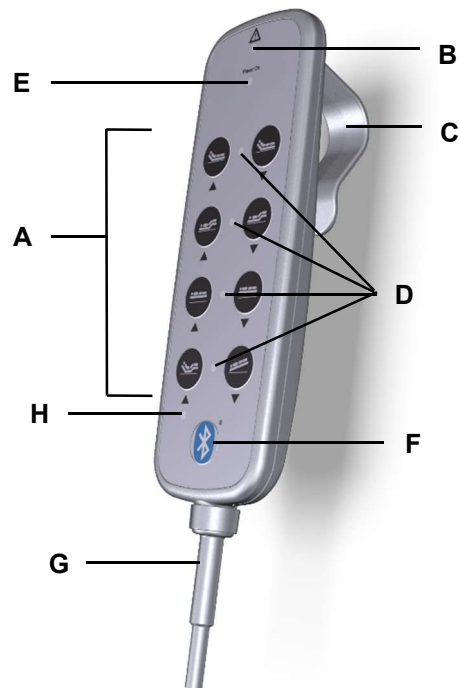
- IPROXX 2 with a maximum of 10 travel keys and 1 optional lamp key,
- IPROXX 2/SM with a maximum of 10 movement keys, 2-stage lock function and one optional lamp key,
- IPROXX 2/SM+ with a maximum of 10 movement keys, 3-stage lock function and one optional lamp key,
- IPROXX 2/SMP with a maximum of 10 movement keys, 3-stage lock function, one optional lamp key, with programmable key pairs,
- IPROXX 2/SMP/*Bluetooth*® with 8 movement keys, 3-stage lock function, with programmable key pairs and *Bluetooth*® interface



Example: Handset with 10 travel keys and lamp key

- | | |
|---|---|
| A Function and movement keys | B Function/CARE LED |
| C Mounting clip (optional) | D Status LEDs (only with the IPROXX 2/SMP model) |
| E Optional: Status LED (only for the IPROXX 2/SM, SM + and SMP models) | F Lamp key |
| G Connection cable for the handset | H Power-On/Battery LED |

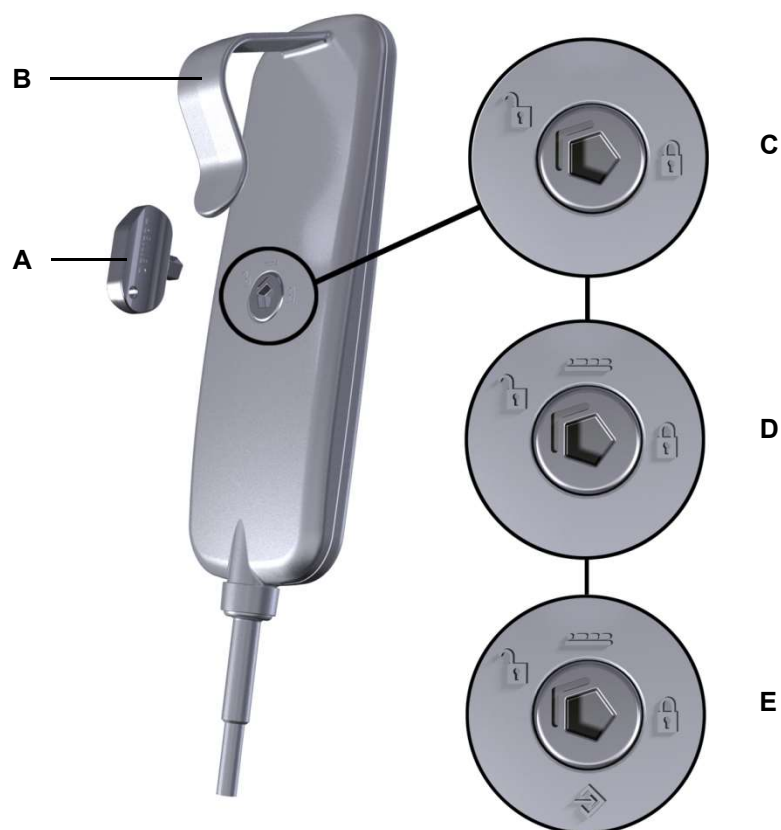
IPROXX 2/SMP/Bluetooth® handset



IPROXX 2/SMP/Bluetooth® handset

- | | |
|---|--|
| A Function and movement keys | B Function/CARE LED |
| C Mounting clip (optional) | D Status LED |
| E Power-ON LED | F <i>Bluetooth</i> ® key |
| G Connection cable for the handset | H Status LED for <i>Bluetooth</i> ® |

Rear of the handset, with turnkey lock



Turnkey lock on the rear of the handset (for the IPROXX 2/SM, SM + and SMP models)

- | | |
|--|--|
| A Socket key | B Mounting clip (optional) |
| C Turnkey lock with 2-stage locking function (for the IPROXX 2/SM model) | D Turnkey lock with 3-stage locking function (for the IPROXX 2/SM+ model) |
| E Turnkey lock with 3-stage locking function (for the IPROXX 2/SMP and IPROXX2/SMP/Bluetooth® models) | |

► The "Operation" Chapter includes information about operating the handset.

3.2 Technical specifications

Connection voltage	24 – 29 V DC
Protection degree	IPX6
Protection class	III
Radio frequency (Option: <i>Bluetooth®</i>)	2.4 GHz
Length x width x height (with mounting clip)	170 mm x 60 mm x 51 mm
Weight with cable	Approx. 300 g

Ambient conditions for operation, storage and transport

Transport / storage temperature	From -20 °C to +50 °C From -4 °F to +122 °F
Operating temperature	From +10 °C to +40 °C From +50 °F to +104 °F
Relative humidity	From 30% to 75%
Air pressure	From 800 hPa to 1060 hPa
Height	< 2000 m




4. Operation

- ▶ When this document refers to the model IPROXX 2/SMP, this also includes the model IPROXX 2/SMP/Bluetooth®.

4.1 General information

Ensuring single-fault protection (for the IPROXX 2/SM, SM + and SMP models)





For ensuring single-fault safety, drive motions can be disabled using the integrated lock function. This function makes use of an electro-mechanical switch to break the motor circuit.

	 CAUTION
	<p>Single-fault protection can only be ensured when the turnkey lock has been set to  (completely locked setting).</p>

- ▶ The "Enabling and Disabling the Key Functionality" section describes how to operate this locking mechanism.

4.2 Information on battery power


- ▶ If you are operating your system on battery power then observe the following notice.

	NOTICE
	<p>After it has been used to move your application (in the turnkey lock positions  or ), the IPROXX handset should be turned back to its locked position (turnkey lock position ). This prevents the system from gradually discharging when the battery is connected!</p>

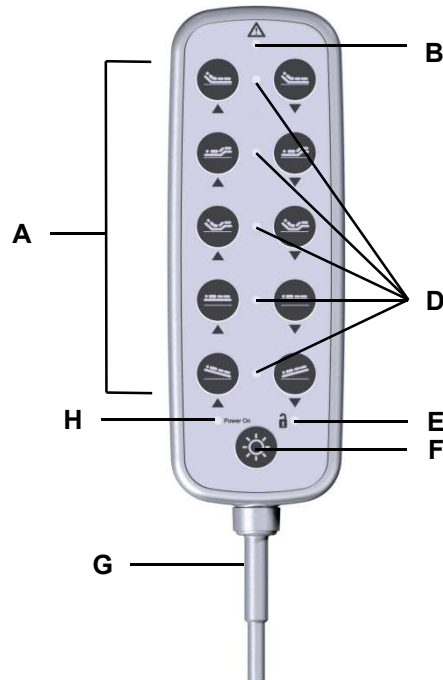
4.3 Connecting the handset to the drive system

During initial commissioning, connect the handset to the corresponding handset port on the DewertOkin drive system.

- ▶ A sticker on the drive system will indicate where the handset port is located.

	NOTICE
	<p>Only connect the components according to the specifications found on the sticker. Any other arrangement of connections may damage the drive system.</p>

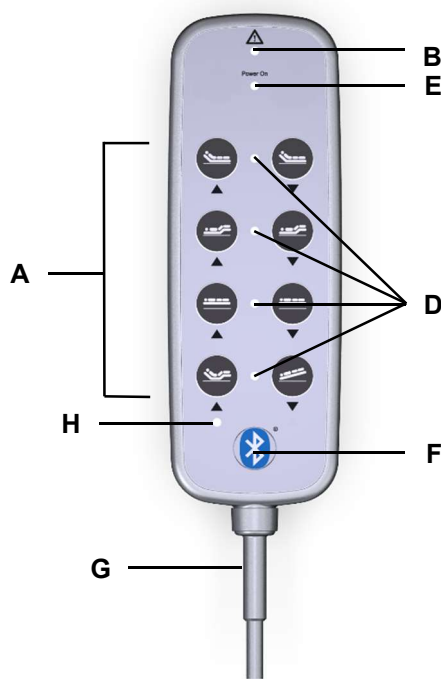
4.4 Key functions for the IPROXX 2 handset (an example)



IPROXX 2 handset with 11 keys

- | | |
|---|---|
| A Function and movement keys | B Function/CARE LED |
| C Status LEDs (only with the IPROXX 2/SMP model) | D Optional: Status LED (only for the IPROXX 2/SM, SM + and SMP models) |
| E Lamp key | F Connection cable for the handset |
| G Power-On/Battery LED | |



















4.5 Key functions for the IPROXX 2/SMP/*Bluetooth*[®] handset



Keypad of the IPROXX 2 handset, with 8 movement keys and *Bluetooth*[®]

- | | |
|--|---|
| A Function and movement keys | B Function/CARE LED |
| C Status LEDs | D Power-ON LED |
| E <i>Bluetooth</i> [®] key | F Connection cable for the handset |
| G Status LED for <i>Bluetooth</i> [®] connection | |

- The IPROXX 2/SMP/*Bluetooth*[®] handset model still acts as the "master" (main control unit), while the app (smartphone) is only an additional function for additional adjustment options.

Key	Function	Adjusting motion	
	Adjustments to back section	 Upward	 Downward
	Adjustments to leg section	 Upward	 Downward
	Reset of back and leg sections	 Upward	 Downward
	Adjustment to stroke	 Upward	 Downward
	Anti-Trendelenburg	 Head upward / foot downward	
	Trendelenburg	 Head downward / foot upward	
	Turns lamp on and off		
	Switch <i>Bluetooth</i> [®] on and off Switch the teach-in (discovery) mode on and off		

4.6 Enabling and disabling the key functions mechanically

Using the lock function

The keys can be enabled or locked by using the key to rotate the turnkey lock located on the rear of the IPROXX 2. The positions of the turnkey lock are marked by icons.

Icons on the rear of the handset.

Icon/symbol	Meaning
-------------	---------



Function keys and travel keys are locked (for models SM, SM+ and SMP)



Function keys and travel keys are unlocked (for models SM, SM+ and SMP)



Partial unlocking of functions: The patients can operate certain functions themselves (for the models SM+ and SMP).

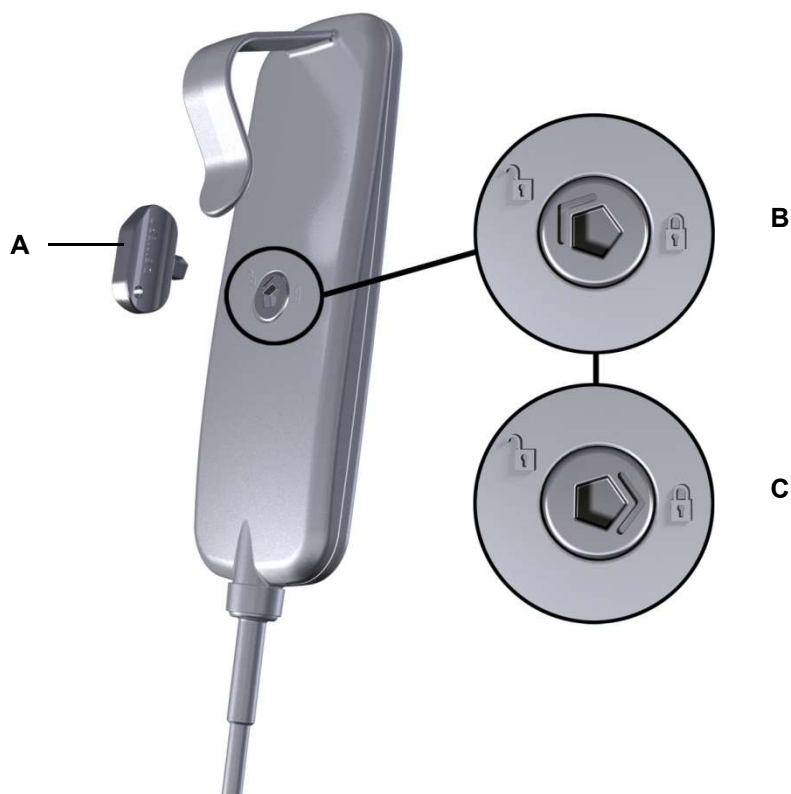


Changing mode: for nurses (for model SMP)

Variants of the locking function

The handset model IPROXX 2/SM has a 2-stage locking function. The models IPROXX 2/SM+ and IPROXX 2/SMP have a 3-stage locking function (SMP = programming mode for nursing staff).

Functionality of the handset model IPROXX 2/SM



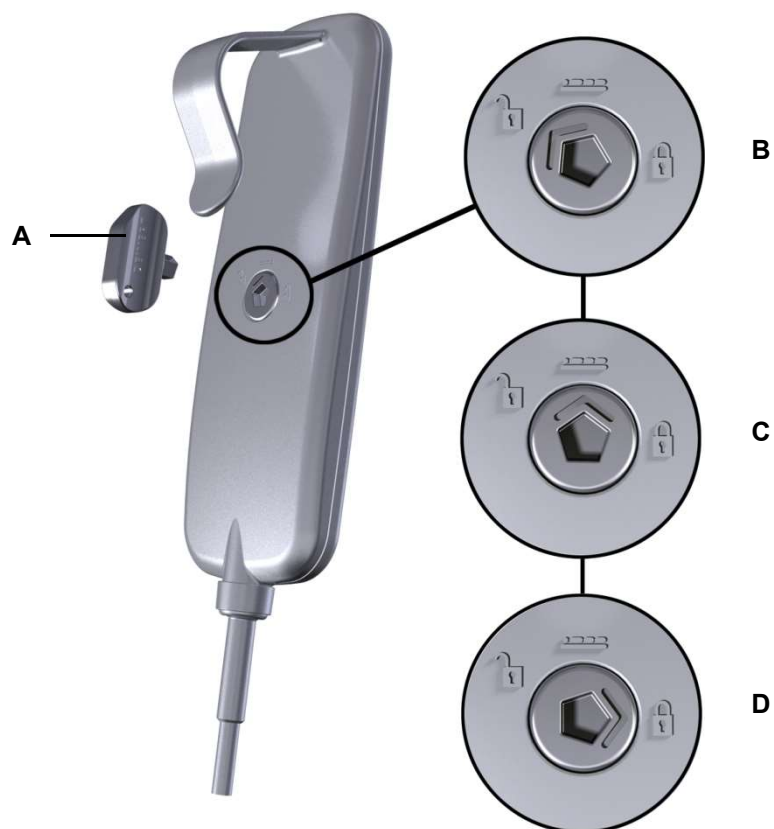
Rear of handset IPROXX 2/SM

A Socket key

B Handset keys are unlocked

C Handset keys are locked

Functionality of the handset model IPROXX 2/SM+



Rear of handset IPROXX 2/SM+

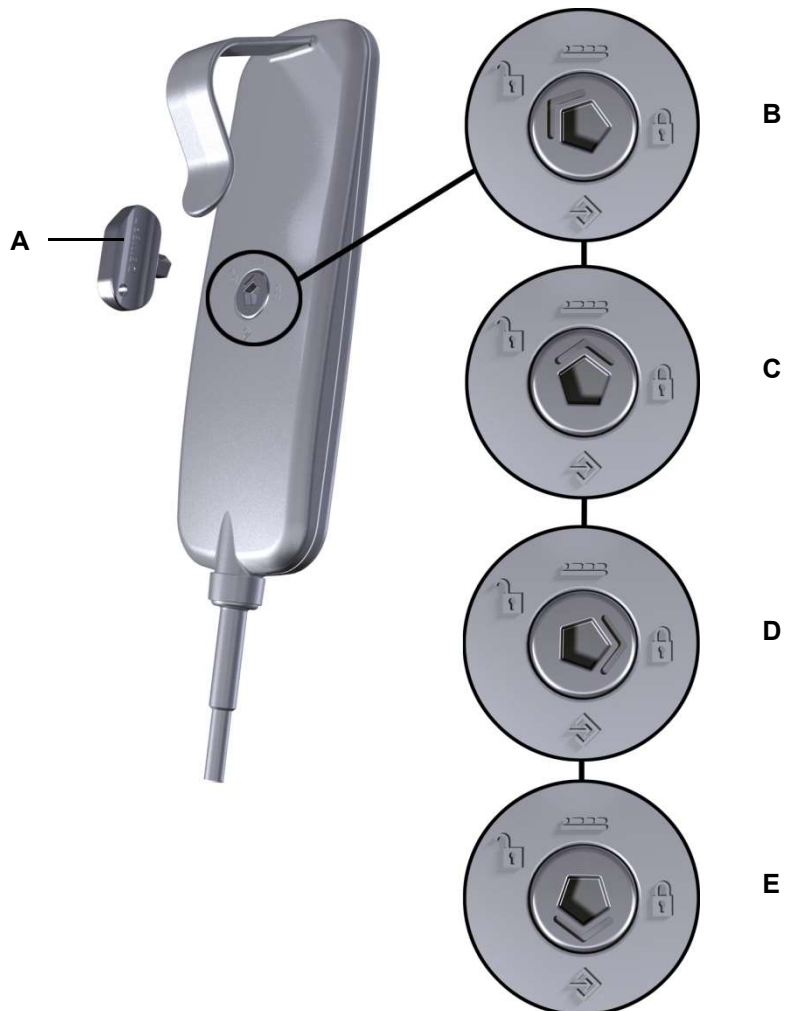
A Socket key

C Functions enabled for the patient

B Handset keys are unlocked

D Handset keys are locked

Functions of the handset model IPROXX 2/SMP (Bluetooth®)




Rear of handset IPROXX 2/SMP (Bluetooth®)



- | | |
|---|------------------------------------|
| A Socket key | B Handset keys are unlocked |
| C Functions enabled for the patient | D Handset keys are locked |
| E Programming mode for nursing staff | |

4.7 Key functions

4.7.1 Locking the keys


Rotate the turnkey on the back side of the handset in order to lock the key functions.

- 1 Insert the socket key in the turnkey lock.
- 2 Turn the key until the arrow on the turnkey lock is pointing towards  (as shown in the illustrations on pages 17, 18 and 19). The function and movement buttons on the handset are now completely locked and disabled.
- 3 You can verify that the functions are disabled by pressing on a button.

	 CAUTION
	<p>Press on a movement button in order to double check that the functions are locked and disabled. If there is still a resulting motion despite the block, then the handset should be replaced.</p>


4.7.2 Unlocking the keys (for the IPROXX 2/SM, SM+ and SMP(*Bluetooth*®) models)

Rotate the turnkey on the back side of the handset in order to unlock the key functions.

- 1 Insert the socket key in the turnkey lock.
- 2 Turn the key until the arrow on the turnkey lock is pointing towards  (as shown in the illustrations on pages 17, 18 and 19).
- 3 The function and movement buttons on the handset are now enabled.



4.7.3 Unlocking functions for the patient (for the IPROXX 2/SM+ and SMP(*Bluetooth*®) models)

For the handset models IPROXX 2/SM+ and SMP, it is possible to enable some of the operating functions for the patient.

- 1 Insert the socket key in the turnkey lock.
- 2 Turn the key until the arrow on the turnkey lock is pointing towards  (as shown in the illustrations on pages 18 and 19).
- 3 The function and travel keys on the handset are now partially enabled.

4.7.4 Enabling the programming function for nursing staff (for the IPROXX 2/SMP(*Bluetooth*®))

When using the handset model IPROXX 2/SMP(*Bluetooth*®), the key lock function can be programmed by the nursing staff.

- 1 Insert the socket key in the turnkey lock.
- 2 Turn the key until the arrow on the turnkey lock is pointing towards  (as shown in the illustration on page 19). When set to this position, the handset cannot be used to carry out adjustment movements.
- 3 The key pair and function keys on the handset can be programmed by the nursing staff. Briefly press the particular key that you wish to enable. The function of the corresponding key pair is then enabled. The status LED for each key pair shows the status of those keys:
 - Status LED is on: That key pair is enabled for the patient.
 - Status LED is off: That key pair is enabled for the patient.
 - Status-LED *Bluetooth*® is on: *Bluetooth*® is enabled for the patient,
 - Status-LED *Bluetooth*® is off: *Bluetooth*® is enabled for the patient.
- 4 The *Bluetooth*® function must be enabled, before the smartphone / tablet can be used.
- 5 Turn the turnkey back until the arrow is pointing towards the . The movements corresponding to the unlocked keys are now possible.

4.8 Display functions

The IPROXX 2 handset features a function/CARE LED and a battery/power-on LED. The handsets with the lock function also feature a lock-status LED. They have the following functions:

Function/CARE LED

- illuminates when function or travel keys are pressed,
- illuminates continuously when there is a fault or error,
- does not illuminate for key press when there is a fault or error.

Battery/power-on LED

- can only illuminate if there is a battery connector on the control unit
- flashes when the battery is charging from mains power,
- illuminates continuously when powered from mains power cable without the battery,
- illuminates continuously when powered from mains power cable with a charged battery,
- is not illuminated when operating from battery power.

Status LED

- illuminates when you press an unlocked key pair,
- does not illuminate when you press a locked key pair,

Status LED for *Bluetooth*®

- illuminates green when *Bluetooth*® is enabled,
- flashes blue when the discovery mode for *Bluetooth*® is enabled,
- illuminates blue when a *Bluetooth*® connection has been established.

- The table of errors in the "Troubleshooting" Chapter describes how errors are displayed by the LED display.

4.9 iOS smartphone / tablet


4.9.1 Installing the app on your smartphone / tablet

- Open the app store
- Download the "**Dewert smart remote**" app from the app store






4.9.2 Discovering new devices on your iOS smartphone / tablet

The **IPROXX 2/SMP/Bluetooth®** model can be discovered on your smartphone so that you can use the smartphone / tablet app for operations.






Requirements:

- The Bluetooth® function in the smartphone / tablet is activated.
 - The handset is connected to a control unit.
 - The control unit is connected to the power supply.
- Before the discovery process, you should have configured all settings  for the patient, as described in section 4.7.4. Key 9 (*Bluetooth®*) **must** be activated (enabled).

a) Initial commissioning (before smartphone / tablet discovery)

- 1 Insert the key into the turnkey lock (on the IPROXX 2/SMP/Bluetooth®).
- 2 Turn the key until the arrow on the turnkey lock is set to "Changing mode" (). Then activate the *Bluetooth®* function as described in section 4.7.4.
- 3 Turn the turnkey back until the arrow is pointing towards the  (unlocked). The *Bluetooth®* LED should now be flashing blue.
- 4 Activate *Bluetooth®* on your smartphone / tablet.
- 5 Start the "**Dewert smart remote**" app. Go to Settings (). The available *Bluetooth®* devices will be shown.
- 6 Select the *Bluetooth®* device (IPROXX ...).
- 7 Pair with the smartphone / tablet.
- 8 You can use the app when the turnkey lock is set to either unlocked () or to patient mode (). Function enabled for patients are then shown in the app.
- 9 The status LEDs are illuminated in green next to key pairs that are enabled. They are not lit for key pairs that are disabled.

b) Discovery for more smartphones / tablets




- 1 Insert the key into the turnkey lock (on the IPROXX 2/SMP/*Bluetooth*[®]).
- 2 Turn the key until the arrow on the turnkey lock is set to "Changing mode" (). Then activate the *Bluetooth*[®] function as described in section 4.7.4.
- 3 Turn the key until the arrow on the turnkey lock is set to unlocked (). Then press the *Bluetooth*[®] button. The *Bluetooth*[®] LED should now be flashing blue.
- 4 Activate *Bluetooth*[®] on your smartphone / tablet.
- 5 Start the "**Dewert smart remote**" app. Go to Settings (). The available *Bluetooth*[®] devices will be shown.
- 6 Select the *Bluetooth*[®] device (IPROXX ...).
- 7 Pair with the smartphone / tablet.
- 8 You can use the app when the turnkey lock is set to either unlocked () or to patient mode (). Function enabled for patients are then shown in the app.
- 9 The status LEDs are illuminated in green next to key pairs that are enabled. They are not lit for key pairs that are disabled.






ACHTUNG


Up to seven smartphones / tablets can be saved. When saving an additional (eighth) smartphone / tablet, the data from the oldest device is overwritten.

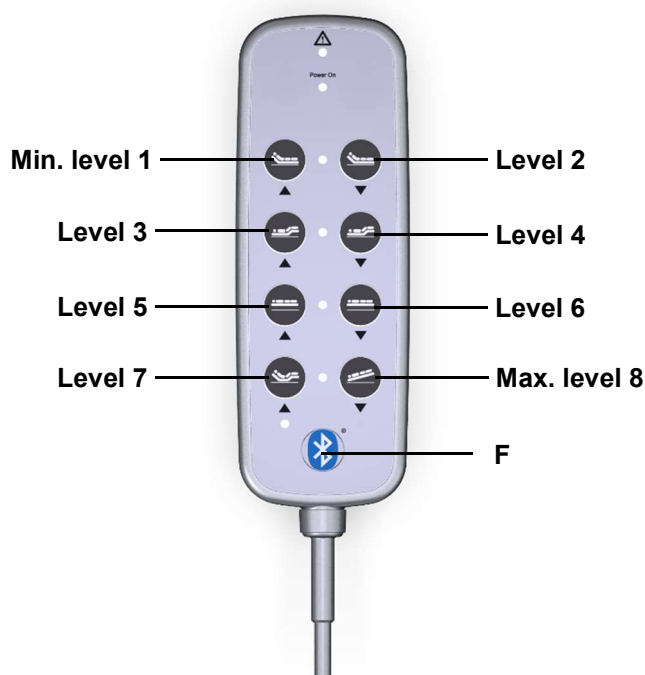
c) Using smartphones / tablets that have already been discovered.

- 1 Insert the key into the turnkey lock (on the IPROXX 2/SMP/*Bluetooth*[®]).
- 2 Turn the turnkey back until the arrow is pointing towards unlocked () or patient mode ().
- 3 Activate *Bluetooth*[®] on your smartphone / tablet.
- 4 Start the "**Dewert smart remote**" app. The smartphone / tablet will automatically pair with the most recently used IPROXX 2 handset.
- 5 If you wish to change to another IPROXX 2 handset, press the Settings button () and disconnect the other connections. Then select another IPROXX 2 handset.

4.9.3 Setting the range threshold

- 1 Insert the socket key in the turnkey lock.
 - 2 Turn the key until the arrow on the turnkey lock is pointing towards  (as shown in the illustration on page 19).
 - 3 Depending on the desired range (refer to the figure below): Press and hold the corresponding level key. At the same time, press the *Bluetooth®* key. This confirms the range level setting.
 - 4 Turn the key until the arrow on the turnkey lock points to  or . Then remove the key.
- ▶ If the handset is outside of the set *Bluetooth®* range, the app's movement keys are deactivated and the message "**Device is out of range**" is shown.
 - ▶ The specified range is displayed on the first page in the settings (Range) of the app; it is the same for all smartphones / tablets.


NOTICE	
	<p>The desired range is dependent on the environment (obstacles, WIFI, radio interference, etc). The set range level can be viewed in the app.</p> <p>Keep visual contact. The range should be set as low as possible for safety reasons.</p>




Each key represents a different range level for the *Bluetooth®* connection

F *Bluetooth®* key

4.9.4 Deleting a connection between the smartphone and the IPROXX 2 handset

- 1 Go to the "Settings" on the smartphone / tablet and select **Bluetooth®**.
- 2 Press the icon  next to the entry IPROXX
- 3 Select "Forget This Device".
- 4 Select "Forget This Device" to confirm and delete the connection to that device.
 - ▶ To re-establish the connection, follow the steps in section 4.9.2 "Discovering new devices on your iOS smartphone / tablet".

4.9.5 App settings

Various settings can be made after clicking on the  icon:


Rename device

- 1 Touch the "Name" button. The "Rename handset" window opens.
- 2 Enter a new name and save it.

Changing the user interface

- 1 Touch the "User interface" button to change the layout.

Under-bed light ON/OFF

- 1 Touch the button for the under-bed light () to switch the light on or off.

Optional bed light ON/OFF

- 1 Touch the button for the bed light () to switch the light on or off.

Customizing the security settings

- 1 Touch the "Security" button. The "Safety lock" settings are displayed.
 - Under "Auto Lock", you can set the time that the app remains open (after the last touch). You can specify a time between 10 and 30 seconds.
 - Under "Unlock", you can set the time that the app needs for unlocking. You can specify a time between 1 and 6 seconds.
- 2 Touch the "Security" button. The "PIN CODE & TOUCH ID" settings are displayed. You can specify a PIN code or touch ID here to protect the application from unauthorized use.

4.9.6 Unlocking the Auto Lock feature on the smartphone / tablet

The Auto Lock is automatically switched on after the specified time of 10 - 30 seconds; this is shown using the lock icon.



- 1 Press the lock icon until the app has been unlocked. The time remaining (1 - 6 seconds) until the end of the unlock process is indicated by a progress bar (circle diagram).

4.9.7 Resetting to factory default settings

Any paired device and smartphone / tablet profiles will be deleted when you reset to the factory default settings.

- 1 Insert the key into the turnkey lock (on the IPROXX 2/SMP/*Bluetooth*[®]).
- 2 Turn the turnkey until the arrow is pointing towards the ↗ (Changing mode).
- 3 Press and hold the *Bluetooth*[®] button until the blue LED (the status LED) flashes twice. The paired device is then deleted from the list of discovered devices. All settings on the IPROXX 2 handset are reset to the factory setting.

4.9.8 Self-test of the IPROXX 2 handset

The IPROXX 2 handset carries out a self-test in the following situations:

- When switching from locked mode to programming mode or to patient mode
- When switching between the patient mode and the nursing staff mode
- When the handset is started

If one or more keys are pressed or jammed during the self-test, the handset will switch to an error mode and the error will be displayed as follows:

- The corresponding locking LEDs for the affected key pairs flash yellow

The handset must be switched off before it can be switched on and operated again. Pull the connector, wait 30 seconds, and then reconnect the connector plug.

- ▶ The handset will also switch to error mode whenever a movement key is pressed for more than 60 seconds on the handset or in the app.

4.9.9 Malfunctioning of the permanent connection between the IPROXX 2 and smartphone / tablet

If the permanent connection between the smartphone and the IPROXX 2 handset is interrupted, the app displays the message "**Pairing Status**". You should delete the connection data on the smartphone / tablet to remedy this error.

4.10 Android smartphone / tablet


4.10.1 Installing the app on your smartphone / tablet

- Open the play store
- Download the "Dewert remote for beds" app from the play store





4.10.2 Discovering new devices on your Android smartphone / tablet

The **IPROXX 2/SMP/Bluetooth®** model can be discovered on your smartphone so that you can use the smartphone / tablet app for operations.





Requirements:

- The *Bluetooth®* function in the smartphone / tablet is activated.
 - After a request was made by the smartphone / tablet, access to the location has been permitted.
 - The handset is connected to a control unit.
 - The GPS function is activated (depending on smartphone / tablet).
 - The control unit is connected to the power supply.
- Before the discovery process, you should have configured all settings  for the patient, as described in section 4.7.4. Key 9 (*Bluetooth®*) **must** be activated (enabled).




a) Initial commissioning (before smartphone / tablet discovery)

- 1 Insert the key into the turnkey lock (on the IPROXX 2/SMP/*Bluetooth®*).
- 2 Turn the key until the arrow on the turnkey lock is set to "Changing mode" (). Then activate the *Bluetooth®* function as described in section 4.7.4.
- 3 Turn the turnkey back until the arrow is pointing towards the  (unlocked). The *Bluetooth®* LED should now be flashing blue.
- 4 Activate *Bluetooth®* on your smartphone / tablet.
- 5 Start the "**Dewert smart remote for beds**" app. Select one of the available Bluetooth® devices shown.
- 6 Select the *Bluetooth®* device (IPROXX ...).
- 7 Pair with the smartphone / tablet.
- 8 You can use the app when the turnkey lock is set to either unlocked () or to patient mode (). Function enabled for patients are then shown in the app.
- 9 The status LEDs are illuminated in green next to key pairs that are enabled. They are not lit for key pairs that are disabled.




b) Discovery for more smartphones / tablets

- 1 Insert the key into the turnkey lock (on the IPROXX 2/SMP/*Bluetooth*[®]).
- 2 Turn the key until the arrow on the turnkey lock is set to "Changing mode" (). Then activate the *Bluetooth*[®] function as described in section 4.7.4.
- 3 Turn the key until the arrow on the turnkey lock is set to unlocked (). Then press the *Bluetooth*[®] button. The *Bluetooth*[®] LED should now be flashing blue.
- 4 Activate *Bluetooth*[®] on your smartphone / tablet.
- 5 Start the "**Dewert smart remote remote for beds**" app. Select one of the available *Bluetooth*[®] devices shown.
- 6 Select the *Bluetooth*[®] device (IPROXX ...).
- 7 Pair with the smartphone / tablet.
- 8 You can use the app when the turnkey lock is set to either unlocked () or to patient mode (). Function enabled for patients are then shown in the app.
- 9 The status LEDs are illuminated in green next to key pairs that are enabled. They are not lit for key pairs that are disabled.

c) Using smartphones / tablets that have already been discovered.

- 1 Insert the key into the turnkey lock (on the IPROXX 2/SMP/*Bluetooth*[®]).
- 2 Turn the turnkey back until the arrow is pointing towards unlocked () or patient mode ().
- 3 Activate *Bluetooth*[®] on your smartphone / tablet.
- 4 Start the "**Dewert smart remote remote for beds**" app. The smartphone / tablet will automatically pair with the most recently used IPROXX 2 handset.
- 5 If you wish to change to another IPROXX 2 handset, press the Settings button () and disconnect or switch to another connection. Then select another IPROXX 2 handset.

4.10.3 Setting the range threshold


- 1 Insert the socket key in the turnkey lock.
 - 2 Turn the key until the arrow on the turnkey lock is pointing towards  (as shown in the illustration on page 19).
 - 3 Depending on the desired range (refer to the figure below): Press and hold the corresponding level key. At the same time, press the *Bluetooth®* key. This confirms the range level setting.
 - 4 Turn the key until the arrow on the turnkey lock points to  or . Then remove the key.
- ▶ If the handset is outside of the set *Bluetooth®* range, the app's movement keys are deactivated and the message "**Device is out of range**" is shown.
 - ▶ The "Range" display can be found under "Device Settings and Information".

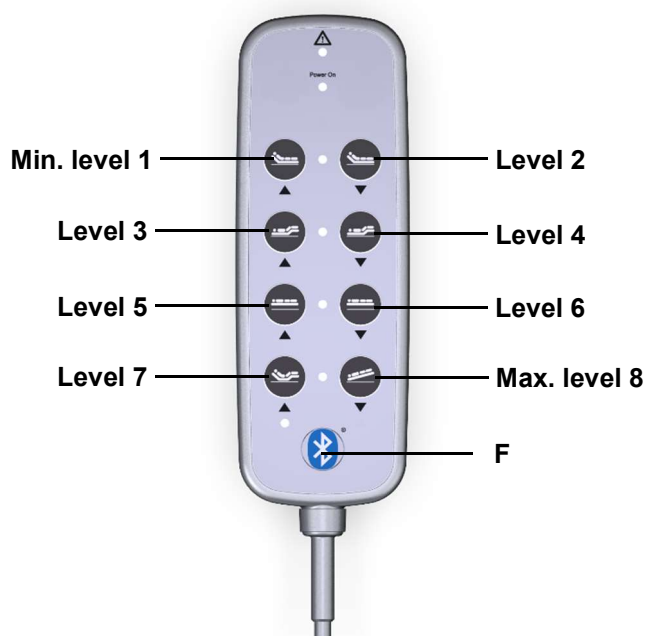


NOTICE

The desired range is dependent on the environment (obstacles, WIFI, radio interference, etc). The set range level can be viewed in the app.

Keep visual contact. The range should be set as low as possible for safety reasons.


- ▶ For smartphones / tablets, the range can also be set in the app (setting ) by selecting the level (1, 2, 3, etc.).




Each key represents a different range level for the *Bluetooth®* connection

F *Bluetooth®* key

4.10.4 Deleting a connection between the smartphone and the IPROXX 2 handset

- 1 Go to the "Settings" on the smartphone / tablet and select **Bluetooth**.
- 2 Press the icon  next to the entry IPROXX
- 3 Select "Disconnect".
 - ▶ To re-establish the connection, follow the steps in section 4.10.2 "Discovering new devices on your Android smartphone / tablet".

4.10.5 App settings

Various settings can be made after clicking on the  icon:

4.10.6 Device Settings and Information

Changing the name of the IPROXX 2 handset

- 1 Touch the "Rename Device" button. The "Rename Device" window opens. Any name may be specified.

4.10.7 General settings


Changing the user interface

- 1 Touch the "select interface from list" button to change the layout.

Select surface by article number

- 1 Touch the "select interface by item number" button to change the layout.

Under-bed light ON/OFF

- 1 Touch the button for the under-bed light () to switch the light on or off.

Customizing the security settings


- 1 Touch the button "use device's lock-screen" to use the lock screen of the device. The settings can be activated.
 - Under "time before lock", you can set the time that the app remains open (after the last touch). You can specify a time between 10 - 30 seconds.
 - Under "time before unlock", you can set the time that the app needs for unlocking. You can specify a time between 1 - 6 seconds.

4.10.8 Time until the device locks

The safety lock is automatically switched on after the specified time (5 - 30 seconds); this is shown using the lock icon.




4.10.9 Unlocking the safety lock feature on the smartphone / tablet

- 1 Press the lock icon  until the app has been unlocked. The time remaining until the end of the unlock process (1 - 6 seconds) is indicated by a progress bar (circle diagram).

4.10.10 Resetting to factory default settings

Any paired device and smartphone / tablet profiles will be deleted when you reset to the factory default settings.

- 1 Insert the key into the turnkey lock (on the IPROXX 2/SMP/*Bluetooth*[®]).
- 2 Turn the turnkey until the arrow is pointing towards the  (Changing mode).
- 3 Press and hold the *Bluetooth*[®] button until the blue LED (the status LED) flashes twice. The paired device is then deleted from the list of discovered devices. All settings on the IPROXX 2 handset are reset to the factory setting.

4.10.11 Self-test of the IPROXX 2 handset

The IPROXX 2 handset carries out a self-test in the following situations:

- When switching from locked mode to programming mode or to patient mode
- When switching between the patient mode and the nursing staff mode
- When the handset is started

If one or more keys are pressed or jammed during the self-test, the handset will switch to an error mode and the error will be displayed as follows:

The corresponding locking LEDs for the affected key pairs flash yellow

The handset must be switched off before it can be switched on and operated again. Pull the connector, wait 30 seconds, and then reconnect the connector plug.

- The handset will also switch to error mode whenever a movement key is pressed for more than 60 seconds on the handset or in the app.

4.10.12 Malfunctioning of the permanent connection between the IPROXX 2 and smartphone / tablet

If the permanent connection between the smartphone and the IPROXX 2 handset is interrupted, the app displays a message. You should delete the connection data on the smartphone / tablet to remedy this error.

5. Troubleshooting


LED signal/error	Meaning	Measure / Action
No movements can be carried out on the end product.	<ul style="list-style-type: none"> - The handset is locked. - The locking mechanism is malfunctioning. - The power supply or connecting cables are defective. - The battery is not charged or not connected. - The controller or drive is defective. 	<ul style="list-style-type: none"> - Use the turnkey to enable the handset. - Check the locking mechanism. - Check the power supply. - Check the connecting cables. - Connect and/or recharge the battery. <p>Please contact your supplier or sales agent.</p>
The function/CARE LED on the handset does not illuminate when a key is pressed.	There is an error in the control system.	Please contact your supplier or sales agent.
The function/CARE LED on the handset illuminates continuously, even when a key is not pressed. (Only for single-fault protected drive systems)	There is an error in the control system.	Please contact your supplier or sales agent.
The battery/power-on LED does not illuminate (handset is locked; with the exception of battery-operated mode).	There is a handset error.	Please contact your supplier or sales agent.
The battery/power-on LED is illuminated (handset is locked).	There is a handset error.	Please contact your supplier or sales agent.
The status LED is illuminated when locked.	There is a handset error.	Please contact your supplier or sales agent.
The status LED does not illuminate when enabled.	<ul style="list-style-type: none"> - There is a handset error. - There is a controller error. 	Please contact your supplier or sales agent.

6. Maintenance

Type of check	Explanation	Time interval
Check the function and safety of the electrical system.	A qualified electrician should carry out this inspection.	Periodic inspections can be carried out at intervals based on the risk assessment which you conduct for your end product.
Look over the housing periodically for any signs of damage.	Check the housing for breaks or cracks. The IP-class protection will be impaired by any breakage or cracks.	At least every six months.
Look over the plug-in connections and electrical access points for signs of damage.	Check that all electrical cables and connections are firmly seated and correctly positioned.	At least every six months.
Look over the cables for any signs of damage.	Check the connecting cables for pinching or shearing. Also check the strain relief and kink protection mechanisms, in particular after any mechanical load.	At least every six months.
Periodic functional test of the handset	Move the drive to the end positions in order to test the end switches.	At least every six months.

Cleaning and care

The IPROXX 2 was designed so that it would be easy to clean. Its smooth surfaces simplify the cleaning process.

NOTICE	
	<p>Never clean the handset in an automated washing system or with a high-pressure cleaner. Do not allow fluids to penetrate the handset. Damage to the handset could result.</p> <p>Do not use a cleanser that contains benzene, alcohol or similar solvents.</p>

- 1 Be sure to disconnect the handset cable from the drive or controller before you start cleaning.
- 2 Clean the IPROXX 2 handset using a moist cloth.
- 3 Be sure that you do not damage the connecting cables during the cleaning.

7. Disposal

7.1 Packaging material

The packaging material should be sorted into recyclable components and then disposed of in accordance with the appropriate national environmental regulations (in Germany according to the recycling law KrWG from 01.06.2012; internationally according to the EU Directive 2008/98/EC (Waste Framework Directive WFD as of 12.12.2008)).

7.2 Handset components

The IPROXX 2 handset consists of electronic components, cables and metal and plastic parts. You should observe all corresponding national and regional environmental regulations when disposing of the IPROXX 2 handset.

The disposal of the product is regulated in Germany by Elektro-G, internationally by the EU Directive 2012/19/EC (WEEE), or by any applicable national laws and regulations:



The IPROXX 2 handset should not be disposed of with normal household waste!

EG-Konformitätserklärung

Nach Anhang IV der EMV-Richtlinie 2014/30/EU

Nach Anhang IV der EU-Niederspannungsrichtlinie 2014/35/EU

Nach Anhang VI der RoHS-Richtlinie 2011/65/EU (inkl. Delegierte Richtlinie (EU) 2015/863)

Der Hersteller

EU Declaration of Conformity

In compliance with Appendix IV of the EMC-Directive 2014/30/EU

In compliance with Appendix IV of the LVD-Directive 2014/35/EU

In compliance with Appendix VI of the EU RoHS Directive 2011/65/EU (incl. Commission delegated Directive (EU) 2015/863)

The manufacturer

DewertOkin GmbH
Weststraße 1
32278 Kirchlegern
Deutschland - Germany

erklärt hiermit, dass das Produkt

declares that the following product

IPROXX 2¹⁾

IPROXX 2 SM¹⁾

IPROXX 2 SM+¹⁾

IPROXX 2 SMP¹⁾

die Anforderungen folgender EG-Richtlinien erfüllt:

meets the requirements of the following EU directives:

Richtlinie über elektromagnetische Verträglichkeit 2014/30/EU

Electromagnetic Compatibility Directive 2014/30/EU

Niederspannungsrichtlinie 2014/35/EU

Low Voltage Directive 2014/35/EU

DELEGIERTE RICHTLINIE (EU) 2015/863 DER KOMMISSION vom 31. März 2015 zur Änderung von Anhang II der Richtlinie 2011/65/EU des Europäischen Parlaments und des Rates hinsichtlich der Liste der Stoffe, die Beschränkungen unterliegen.

COMMISSION DELEGATED DIRECTIVE (EU) 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards the list of restricted substances.

Angewendete Normen

Applied standards:

- EN 60335-1:2012/A11:2014
- EN 55014-1:2006/A1:2009/A2:2011
- EN 55014-2:1997/A1:2001/A2:2008
- EN 61000-3-2:2014
- EN 61000-3-3:2013
- EN 62233:2008

Konstruktive Änderungen, die Auswirkungen auf die in der Montageanleitung angegebenen technischen Daten und den bestimmungsgemäßen Gebrauch haben, das Produkt also wesentlich verändern, machen diese Konformitätserklärung ungültig!

This declaration of conformity is no longer valid if constructional changes are made which significantly change the drive system (i.e., which influence the technical specifications found in the instructions or the intended use)!



Kirchlegern, Germany 29 November 2019

Dr.-Ing. Josef G. Groß
Geschäftsführer / Managing Director

¹⁾ mit DewertOkin Antriebssystem / with DewertOkin drive system

EG-Konformitätserklärung

(Ausführung 2,4GHz)

Nach Anhang VI der RED-Richtlinie 2014/53/EU

Nach Anhang VI der RoHS-Richtlinie 2011/65/EU
(inkl. Delegierte Richtlinie (EU) 2015/863)

Der Hersteller

EU Declaration of Conformity

(Version 2.4GHz)

*In compliance with Appendix VI of the RED-Directive
2014/53/EU*

*In compliance with Appendix VI of the EU RoHS
Directive 2011/65/EU
(incl. Commission delegated Directive (EU) 2015/863)*

The manufacturer:

DewertOkin GmbH
Weststraße 1
32278 Kirchlegern
Deutschland - Germany

erklärt hiermit, dass das Produkt

declares that the following product

IPROXX 2 SMP/Bluetooth® 1)

die Anforderungen folgender EG-Richtlinien erfüllt:

meets the requirements of the following EU directives:

**Richtlinie 2014/53 über die Harmonisierung der
Rechtsvorschriften der Mitgliedstaaten über die
Bereitstellung von Funkanlagen auf dem Markt**

RED Directive 2014/53/EU

**DELEGIERTE RICHTLINIE (EU) 2015/863 DER
KOMMISSION vom 31. März 2015 zur Änderung
von Anhang II der Richtlinie 2011/65/EU des Euro-
päischen Parlaments und des Rates hinsichtlich
der Liste der Stoffe, die Beschränkungen
unterliegen.**

**COMMISSION DELEGATED DIRECTIVE (EU)
2015/863 of 31 March 2015 amending Annex II to
Directive 2011/65/EU of the European Parliament
and of the Council as regards the list of
restricted substances.**

Angewendete Normen

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- EN 55014-1:2006/A1:2009/A2:2011
- EN 55014-2:1997/A1:2001/A2:2008
- EN 61000-3-2:2014
- EN 61000-3-3:2013
- EN 62233:2008
- EN 62479: 2010
- ETSI EN 300328 V2.1.1
- ETSI EN 301489-1 V1.9.2
- ETSI EN 300489-1 V2.2.0
- ETSI EN 300489-17 V3.2.0 (Draft)

Konstruktive Änderungen, die Auswirkungen auf die
in der Montageanleitung angegebenen technischen
Daten und den bestimmungsgemäßen Gebrauch
haben, das Produkt also wesentlich verändern,
machen diese Konformitätserklärung ungültig!

*This declaration of conformity is no longer valid if
constructional changes are made which significantly
change the drive system (i.e., which influence the
technical specifications found in the instructions or
the intended use)!*



Kirchlegern, Germany 29. November 2019

Dr.-Ing. Josef G. Groß
Geschäftsführer / Managing Director

1) mit DewertOkin Antriebssystem / with DewertOkin drive system

Additional information

IPROXX 2

The following standards and norms were used in the versions with at least IPX4 and higher in according to

- EN 60601-1:2006 + A1:2013, IEC 60601-1:2005 + A1:2012 (short description: Edition 3.1), Medical electrical equipment.
- EN 60601-1-2:2015, IEC 60601-1-2:2014 (short description: Edition 4.0), EMC

IEC/EN 60601-1, Section 7.8.1	Colours of indicating lights
IEC/EN 60601-1, Section 8.10	Components and wiring
IEC/EN 60601-1, Section 8.10.4.1	Operating voltage / Input voltage
IEC/EN 60601-1, Section 9.3	Hazards associated with surfaces, corners and edges
IEC/EN 60601-1, Section 11	Temperature
IEC/EN 60601-1, Section 13	Hazardous situation and fault conditions: 15W limited supply circuit
IEC/EN 60601-1, Section 15.4.7.1	Mechanical strength
IEC/EN 60601-1, Section 15.4.7.2	Accidental operation
IEC/EN 60601-1, Section 16.6	Leakage current: Touch current <100µA
IEC/EN 60601-1, Section 17	EMC

The following standards and norms were used in accordance with

- EN 60601-2-52, IEC 60601-2-52, (Particular requirements for the safety and essential performance of medical beds), the following standards have been used

IEC/EN 60601-2-52, Section 201.3.8	Applied Part B
IEC/EN 60601-2-52, Section 201.9.2.2.5	Hold to run controls / momentary contact switch
IEC/EN 60601-2-52, Section 201.9.2.3.1	Unintended movement: Means to deactivate IPROXX 2 SM, IPROXX 2 SM+, IPROXX 2 SMP
IEC/EN 60601-2-52, Section 201.11.6.5.101	Ingress of water: min IPX4
IEC/EN 60601-2-52, Section 201.11.1.1	Temperature
IEC/EN 60601-2-52, Section 201.15.3.4.1	Falling test
IEC/EN 60601-2-52, Section 201.15.4.4	Indicator lights "Ready for Normal Use" not required
IEC/EN 60601-2-52, Section BB.3.3.3	Dimensions for handles
IEC/EN 60601-2-52, Section BB.3.4.1	Operating forces

FCC WARNING

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.

Section 15.21 Information to user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

IC WARNING

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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