

User manual

TR303410HF

TR303417HF





Table of contents

Warning and safety regulations.....	3
Product description	5
Commissioning	5
Check the coverage area	5
The light indicator.....	6
Battery alarm	7
Battery change.....	7
Cleaning	8
Spare parts and accessories.....	8
Technical data	9
Explanation of symbols and approvals	10



Warning and safety regulations



- Batteries used must comply with the relevant IEC safety standards.
- Do not ingest/eat the battery, chemical burn hazard.
- Keep new and used batteries away from children.
- If the battery compartment cannot be closed securely, discard the product, and keep it away from children.
- Read the intended use before putting into service.
- Make sure that the user can lift their feet enough not to fall over the mat.
- The product is not water-resistant unless noted in product specification.

Contraindications

In general, the product cannot be used if:

- The disabled client/patient is mentally ill.
- The disabled client/patient is critically ill.
- The client/patient is unable to use the transmitters.

Lifetime after mounting of the device

The battery, if applies, must be replaced when the battery replacement information appears on the display and according to the user manual.

Lifetime is evaluated in relation to the pressure button. This is made according to the supplier's specification.

Lifetime battery (products using battery, only)

KNOP calculates the life of the batteries. See specification in the user manual.

Intended use

In general, the different variants of the medical device (transmitters/receiver system from KNOP Elektronik) are made as assistive aid for impaired/disabled patients to be able to call for assistance.

The various variants of the medical equipment consist of a combination of products (transmitter and receiver) designed to call for help to impaired/disabled patients; The transmitter-receiver system can be activated in different ways:

- For example, patients who actively do this and are aware that they are calling for help, such as e.g., people with walking difficulties who need help going to the toilet.
- Or disabled patients who are not aware that they are inadvertently putting pressure on the sendere.g. during a seizure.



- Or patients with intellectual and cognitive deficits who are not aware that a receiver is receiving a signal from their transmitter when they leave a house or room.

The system is not designed for critically or mentally ill persons.

General product description

The products manufactured by KNOP elektronik consist of several variants of transmitters and receivers that can be combined with each other. In addition, these products are used in combination with positioning and repeater systems.

These products are medical devices intended to call for assistance and are used for disabled/mobile people, such as those with walking difficulties who need help going to the toilet. The transmitters are activated, for example, by a sound or by pressure (e.g. by pressure with a finger or a breath through the mouth). The recipient is supervised by health care personnel or lay people in private homes.

The system is not designed for critically or mentally ill people.

Part of product	Function in the product system
Transmitter	The transmitter can send the signal obtained from the patient to the receiver monitored by the healthcare personnel or lay person. The transmitter products can be activated by button, sound, blow or movements.
Receiver	The transmitters can be coded into all the receivers and to several receivers at the same time. Some receivers also have a summon button for calling assistance from their coworkers.
Repeatersystem	If it is needed to cover a more comprehensive and larger area a repeater system is used. The repeater system also gives an increased functionality as e.g. that an alarm automatically is received at first at the healthcare person closest to the client.
Positionsystem	If a sender is equipped with a position receiver it can be used in connection with a Position system. Not all product variants include position receivers. Typically, it is seen in connection with nursing homes and security for patients with dementia. The receivers can be portable or stationary.



Product description

The TR30341XHF is a transmitter designed to send codes to KNOP wireless receivers.

The product can be used in front of the bed or at the door.

If the transmitter is encoded in a receiver with display, the patient's name, and apartment number, if any, can be shown in the display if this is encoded when the transmitter is activated.

It is also possible to get an alarm if the pressure switch is moved or kicked if this is programmed.

The product also has a built-in position receiver which is used in systems with position transmitters e.g. POS901.

Special settings of the product can be made via the KNOPtool.

Commissioning

The product is ready to use and only requires encoding in the desired receivers.

Check the coverage area

One person activates the TR30341XHF (as described above) at short intervals, while another person systematically walks around the area and marks on a sketch the building and the area where there is coverage. The sketch is placed in the office so that everyone who needs to use the system can see where there is coverage.

Outside the coverage area, alarms cannot be received.

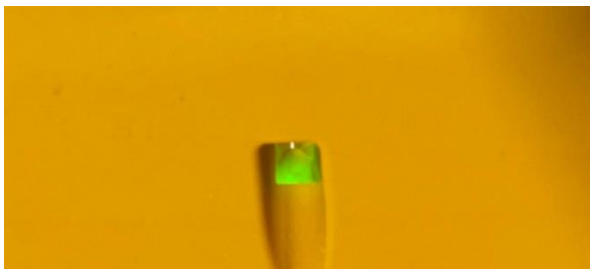
The coverage area can be extended by using a repeater system from Knop Elektronik.

Contact your retailer for more information.





The light indicator

The product has a visible light indicator as shown in the picture.



The indicator shows the following:

Step alarm: 


Lifting alarm : 

Kick alarm: 

It can take up to 2 seconds for the alarm to appear.

When one of the alarms is activated, the indicator will briefly turn green as above.

When the alarm is received by the receiver, the indicator lights up green again briefly. However, if the transmission has failed, the indicator lights up red.

Alarm received: 

Alarm failed: 

If failed, the product will repeat the transmission up to 2 times with 30 seconds interval.

If the indicator flashes red rapidly after activation, see section on battery alarm.



Battery alarm

Every time the product is activated, the battery is checked.

When the product is activated and the product has low battery voltage, the indicator flashes red quickly and the receiver with display shows "Low battery".

Low battery: 

Battery change

The product uses two lithium batteries, type CR2477.

To replace the batteries, remove the screws in the lid under the bottom and lift the circuit board out of the product.

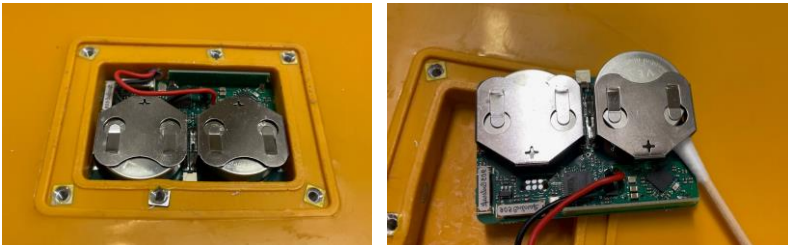
Gently push the battery out of the holder with the end of a cotton swab or similar.

Never use a metal object.

Carefully insert the new batteries into the holder WITHOUT the use of tools, as this may short-circuit the battery.

Use two CR2477 batteries - both batteries MUST always be changed at the same time.

IMPORTANT + must face upwards.



Then insert the printed circuit board and refit the cover.

Note: Do not use the product without lid or missing screw(s).



Cleaning

The product can be cleaned with a damp cloth or alcohol wipe.

Spare parts and accessories

Spare parts and accessories can be ordered on our website www.knop.dk



Technical data

Order number/Product size:	TR303417HF, 70x40cm TR303410HF, 110x70cm
Frequency HF:	869.2125 MHz (FM)
Range:	Up to 500 m of an unobstructed view to an RX901B ⁽¹⁾
Battery type:	2 pcs. 3V CR2477 type Lithium
Operating time (expected):	3 years at 5 transmissions per day.
Low battery alarm:	approx. 1/3 remaining capacity.
Surrounding environment:	Indoor use ≤ 90% non-condensing
Ambient temperature:	0°C to +40°C
Product color:	Care yellow
Density:	IP54
Weight:	3.5kg/8.5kg
Accessories:	See www.knop.dk .

The right to make changes is reserved.















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KNOP Elektronik A/S

⁽¹⁾ Measured outdoors with an unobstructed view between transmitter and receiver. In buildings, the range is reduced.



Explanation of symbols and approvals

	<p>This product complies with:</p> <table border="0"> <tr> <td>Directive 2017/745/EU</td> <td>MDR</td> </tr> <tr> <td>Directive 1907/2006/EU</td> <td>REACH</td> </tr> <tr> <td>Directive 2011/65/EU</td> <td>RoHS</td> </tr> <tr> <td>Directive 2012/19/EU</td> <td>WEEE</td> </tr> <tr> <td>ISO 14971:2019</td> <td>Risk Management for Medical devices</td> </tr> <tr> <td>EN 301 498-1 V2.2.3</td> <td>Electro Magnetic Compatibility</td> </tr> <tr> <td>EN 301 489-3 V3.1.1</td> <td>Electro Magnetic Compatibility</td> </tr> <tr> <td>EN 50130-4:2011 + 2014</td> <td>Immunity alarm systems</td> </tr> <tr> <td>EN 300 220-1 V3.1.1</td> <td>Short Range Devices</td> </tr> <tr> <td>EN 300 220-2 V3.1.1</td> <td>Short Range Devices</td> </tr> <tr> <td>EN 300 220-3 V2.1.1</td> <td>Short Range Devices</td> </tr> <tr> <td>EN 60601-1-2:2014 + 2015</td> <td>Electromagnetic compatibility (Medical)</td> </tr> <tr> <td>EN 62368-1:2020</td> <td>Electrical safety</td> </tr> <tr> <td>EN 50581:2012</td> <td>Hazardous substances</td> </tr> </table>	Directive 2017/745/EU	MDR	Directive 1907/2006/EU	REACH	Directive 2011/65/EU	RoHS	Directive 2012/19/EU	WEEE	ISO 14971:2019	Risk Management for Medical devices	EN 301 498-1 V2.2.3	Electro Magnetic Compatibility	EN 301 489-3 V3.1.1	Electro Magnetic Compatibility	EN 50130-4:2011 + 2014	Immunity alarm systems	EN 300 220-1 V3.1.1	Short Range Devices	EN 300 220-2 V3.1.1	Short Range Devices	EN 300 220-3 V2.1.1	Short Range Devices	EN 60601-1-2:2014 + 2015	Electromagnetic compatibility (Medical)	EN 62368-1:2020	Electrical safety	EN 50581:2012	Hazardous substances
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	<p>The product must not be used if the packaging is damaged.</p>																												
	<p>Medical Device Class 1, rule 1</p>																												
	<p>Manufacturer KNOP Elektronik A/S, Fabriksvej 20, DK-7600 Struer, Denmark</p>																												
	<p>Read the manual(s) before installation and commissioning at www.knop.dk.</p>																												
	<p>Interference may occur in an environment with equipment marked with this symbol.</p>																												
	<p>Must be protected against liquids.</p>																												
	<p>0 °C to +40 °C, temperature limit for transport/storage and use.</p>																												
	<p>The product must not be disposed of with normal household waste.</p>																												
	<p>Single Registration Number DK-MF-000025631</p>																												
	<p>Unique Device Identifier 05744002850496 05744002853497</p>																												
	<p>Product reference/product number/warning text TR303417HF TR303410HF</p>																												
	<p>Serial number Placed on the product</p>																												
	<p>Ingress Protection Code IP54</p>																												