

User manual

PU901

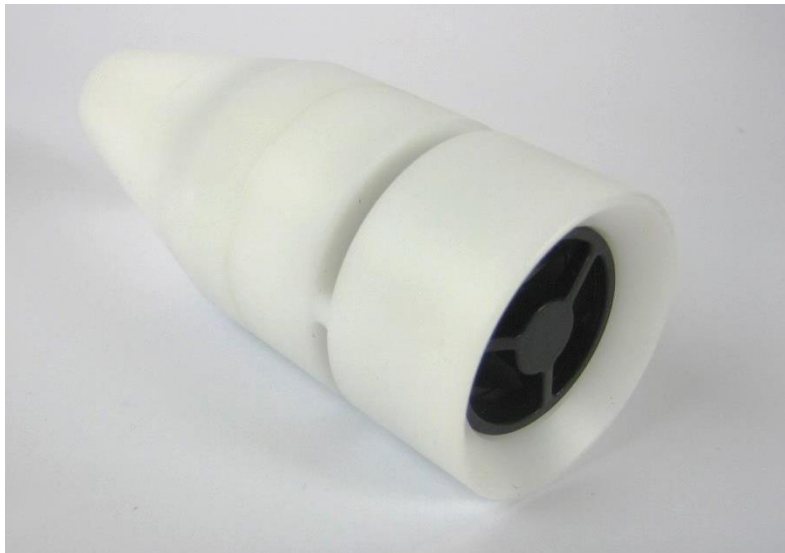




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Warnings and safety instructions



- The battery in this product must compile with the relevant IEC safety standards for batteries.
- Do not consume or eat the battery as there is a risk of chemical burns.
- Keep new and used batteries away from children.
- If the battery compartment cannot be closed properly, discard the product and keep it away from children.
- Read the intended use before using.
- 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 product is designed to activate a KNOP 900 series wireless receiver when a user presses the button.

PU901 can be used when the user cannot activate an alarm with a pull cord or push button.

PU901 must be coded into the receiver and the receiver must be switched on for the system to work.

Pay attention to the range as described in the section "Checking the coverage area".

Testing and commissioning

After installation, it is important that the user tests the product by blowing against the propeller.

Staff should receive an alarm to their alarm system/receiver.

Refer to the instruction manual of the receivers used.

Check the coverage area

One person activates PU901 (as described above), while another person systematically walks around the area and makes a sketch of 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 increased by using a repeater system from KNOP Elektronik.

Contact your retailer for more information.



Location

PU901 should be positioned so that the user can easily blow straight into the propeller. The push contact can be mounted on e.g. a gooseneck, contact your retailer for more information.

Service

When the user blows hard enough on the propeller to activate PU901, it will flash a green light. The receiver will give an acknowledgement, after which PU901 will glow steady green, indicating that the transmission was successful.

If the transmission fails, PU901 repeats the transmission up to 2 times at 30 second intervals.

Battery alarm

If the battery in PU901 is low, the receiver will display "Low battery" when an alarm is received from PU901.

Changing the battery

The top and bottom of the PU901 can be unscrewed without tools.



The battery is gently pressed out of the holder, for example with a cotton swab or a match.

Never use a metal object.

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

Use a CR2477 battery.

IMPORTANT + must be facing up.

After replacing the battery, check PU901 as described under "Testing and commissioning". It takes about 1 minute after battery replacement before it can be activated.

Main menu

Use the head



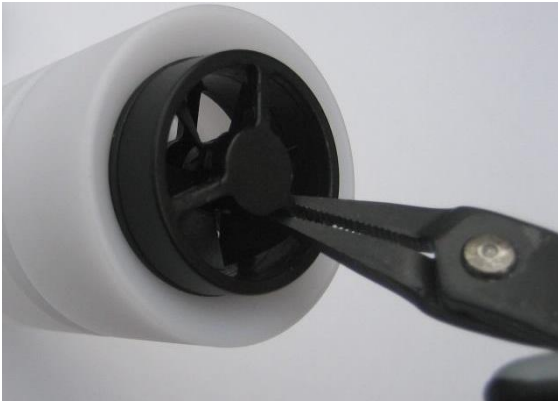
Cleaning

The product can be cleaned with a moist cloth or tissue.

The propeller can be gently pulled out with pliers or other tools and cleaned.

The product is then thoroughly tested.

If necessary, the propeller can be replaced with a new one. See section "Accessories".



Spare parts and accessories

Spare parts and accessories can be ordered from Knop Elektronik A/S at www.knop.dk.



Technical data

Frequency HF:	869.2125 MHz
Range:	Up to 500 m of unobstructed view to an RX901B ⁽¹⁾
Battery type:	CR2477, lithium 3V 950 mAh (PU900/901 before serial number 57024 used CR2354)
Battery life (expected):	Up to 5 years with 5 activations per day. ⁽²⁾
Low battery alarm:	At approx. 1/3 of residual capacity
Surrounding environment:	Indoor use. ≤ 90% non-condensing
Ambient temperature:	0°C to +40°C
Cabinet type:	White polyoxymethylene
Cabinet dimensions:	Ø: 43mm L: 106mm
Density:	IP65
Connections:	None, wireless communication.
Weight:	115g

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





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

⁽²⁾ Expected battery life depends on usage and battery brand.



Explanation of symbols and approvals

	This product complies with: 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
	The product must not be used if the packaging is damaged.
	Medical Device Class 1
	Manufacturer KNOP Elektronik A/S, Fabriksvej 20, DK-7600 Struer, Denmark
	Read the manual(s) before installation and commissioning www.knop.dk .
	Interference may occur in an environment with equipment marked with this symbol.
	Must be protected against liquids.
	0 °C to +40 °C, temperature limit for transport/storage and use.
	The product must not be disposed of with normal household waste.
	Single Registration Number DK-MF-000025631
	Unique Device Identifier PU901: 05744002850403 PU901P: 05744002850380
	Product reference PU901: Blow switch PU901P: Blow switch with position
	Serial number Placed on the product
	Ingress Protection Code IP40