

User guide

LAK901 M





Table of contents

Intended use 3

First time use 4

The LED 4

Home screen 6

Alarm/sound activation..... 7

Main menu 8

Main Menu - Off (Hibernate) 9

Main menu - Settings 10

Main menu - Settings - Light & Sound..... 11

Main menu - Settings - Product name 13

Main menu - Settings - Password 14

Main menu – Settings - Language 15

Software update of LAK901 16

Cleaning 16

Disposal..... 16

Factory defaults 16

Restart of product 16

Spare parts and accessories..... 16

Technical data LAK901 17

Explanation of symbols and approvals 18



Intended use

Intended use

LAK901M is a listening monitor in another room, it is designed to work exclusively with LAK901.

LAK901 / LAK901M is intended to assist the patient and staff in situations where the patient cannot activate a normal calling system, but can call with sound.

The operation is menu built in a graphic screen and is operated on the keyboard.

The LAK901 must be connected to power via a micro-USB cable.







First time use

The LAK901M must be connected to a power supply via a Micro USB adapter. When connecting the charger, the product switches on automatically, otherwise press briefly and the product switches on.

The first time the product is switched on, the desired language must be selected.



Press   to select the language.

 Press  to accept the new language.

The LED

The LED indicates a fault/warning or powered on.

Green Connected adapter or external power supply.
Green flash The product is off (hibernating).
Red flash Error.



Connections

There are four connectors in the product.

1. External power supply
2. Connection to LAK901.
3. Sound out.
4. Adapter connector, MicroUSB.



8

1

External powersupply.

Connection to LAK901

Sound out.

MicroUSB adapter.

1. Minus
- 2.
3. 8-15V @100mA
- 4.
- 5.
- 6.
- 7.
- 8.



Home screen

The device must be connected to power via MicroUSB and LAK901 before the product will work correctly.

The screen turns off automatically after approx. 15 seconds after last operation.

By pressing one of the keys, the display lights up, after which the status is shown.

At the top, the name of the user is displayed if this is entered or product name.



Home screen options:



Name of e.g. the product or place.



Microphone is active and nothing is heard.

Microphone is active and nothing is heard.



Microphone is deactivated e.g. turned off by timer.



The connection is disconnected or LAK901 is turned off.



Listening volume



NOTE: The listening volume is turned down completely!



Lower listening volume.



Higher listening volume.



Microphone in LAK901 are turn on.



Microphone in LAK901 are turn off.



The time past since last alarm.

Press   to change listening volume.





Alarm/sound activation

As soon as a sound is heard in the LAK901, a green ear is displayed and the operating options appear.





- MUTE Mute sound.
- MUTE Demute sound.
- CANCEL Stop alarm and mute sound for 10 minuts.
- CANCEL Abort canceltimer.

Press   to change the listening volume.




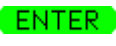


Main menu

By pressing  and  simultaneously and holding them down for 1 second, either on screen off or in the home screen, the main menu appears. However, the product must be on.




General operation in the menu:



Current function of  .

In this example, the function of  the button is  (accept) and the function of  the button is  (cancel/exit)



The green arrow shows which menu item can be selected by pressing . Press   to move the green arrow either up/down or right/left in the menu.

Note: After approx. 30 seconds of inactivity the menu returns to the home screen automatically.



Main Menu - Off (Hibernate)



ENTER Select **Hibernate** and press **Ent**.
EXIT **Esc** Exit menu.



YES **Ent** Accept/Confirm.
EXIT **Esc** Exit menu.

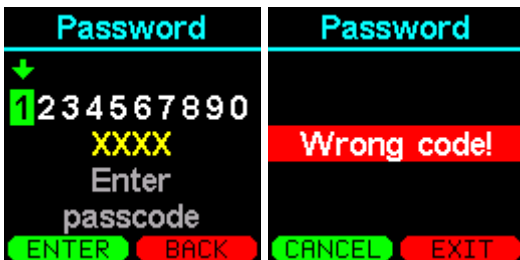


Main menu - Settings



- ENTER** Select **Settings** and press **Ent**.
- EXIT** **Esc** Exit menu.

If a password has been programmed, this must now be entered.



- Change the value (0 - 9).
- ENTER** **Ent** Select number.
- BACK** **Esc** Delete the last digit or exit menu.

In case of incorrect code:

- CANCEL** **Ent** Try again.
- EXIT** **Esc** Exit menu.

The settings menu now appears:



The software version are displayed in the first line, this cannot be changed.

S/W: 1.0.0 Software version.

- ENTER** Select a menu item and press **Ent**.
- EXIT** **Esc** Exit menu.



Main menu - Settings - Light & Sound



ENTER Select **Light & Sound** and press **Ent**.
EXIT **Esc** Exit menu.



ENTER Select the desired menu and press **Ent**.
EXIT **Esc** Exit menu.



Sound mode: *Always sound:* The speaker is always active.
Before alarm: The speaker becomes active before the alarm time has elapsed on LAK901.
With alarm: The speaker becomes active together simultaneous with alarm from LAK901.



Alarm melody: The melody played by alarm.
Alarm volume: The volume of the alarm.
Button sound: The volume of a keystroke.
Backlight: Display brightness.
Light function: *Off:* The display is off by sound and alarm.
Activity: The display turns on by sound and alarm.
Dimmed: The display turns on by sound and alarm otherwise dimmed.

Detector level: Detector level of auto mute.





Backlight	Light function	Detector level
Low level → Medium level High level	Off → Activity Dimmed	 
SAVE EXIT	SAVE EXIT	Save? SAVE BACK

- SAVE**  Save settings.
- EXIT**  Exit menu.



Main menu - Settings - Product name

The name of this LAK901M can be changed to a more telling name e.g. "Peterson", which in this example is the client of this product. It is an optional feature that can be used. By default, LAK901M is displayed.




- ENTER** Select **Product name** and press **Ent**.
- EXIT** Press **Esc** Exit menu.




-   Change the letter.

- ENTER** **Ent** Select the letter.
- BACK** **Esc** Delete last letter.

- ENTER** **Ent** 1 second to switch between lowercase and uppercase letters.
- ENTER** **Ent** 3 seconds to jump to the save icon.
- BACK** **Esc** 3 seconds to exit the menu.

-  Switches between normal and special letters.



- ENTER** To save the name, select the symbol  and press **Ent**.
- EXIT** **Esc** Exit menu.



Main menu - Settings - Password

To avoid accidental change of settings, the menu can support with a password. The password is a four digit code.

The code "0000" means no code!

Once a password has been created, it must be entered before accessing the settings menu.

To delete a password, enter "0000"!



ENTER Select **Password** and press **Ent**.
EXIT **Esc** Exit menu.



↑ **↓** Change value (0 to 9).

ENTER **Ent** Select number.

BACK **Esc** Delete the last digit.

BACK **Esc** Hold down the key for 2 seconds to exit the menu.



SAVE **Ent** Save code.

EXIT **Esc** Exit menu.

Note: It can only be saved when all four digits are selected.



Main menu – Settings - Language

Set the desired language in the product.



ENTER Select **Language** and press **Ent**.
EXIT **Esc** Exit menu.



ENTER **Ent** Change the language.
ENTER **Ent** Select new language.
EXIT **Esc** Exit menu.



Software update of LAK901

It is possible to update the software in LAK901, as well as download and upload setup with KNOPtool.

For a more detailed description, refer to KNOPtool at www.knop.dk.

Cleaning

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

Disposal

The product must not be disposed of with ordinary household waste but treated in accordance with the municipality's instructions for electronic waste.

Factory defaults

Hold **Esc** and connect power while the LED flashes red.

Hold down the button until the LED lights up green.

Then release the **Esc** button.

Restart of product

Hold down **Esc** for approx. 30 seconds until the product restarts. Then release the **Esc** button.

The product can then be turned on again by pressing **Ent**.

Spare parts and accessories

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



Technical data LAK901

Display:	Graphic LCD.
Menu texts:	6 languages: Danish, Norwegian, Swedish, Finnish, German and English.
Surrounding environment:	Indoor use. <90% humidity non-condensing.
Ambient temperature:	0-40 ° C
Enclosure type:	White ABS
Cabinet dimensions:	65 x 120 x 20 mm.
Density:	IP20
Weight:	100g

The right to make changes is reserved.

All rights reserved.

© **KNOP** Elektronik A/S

Explanation of symbols and approvals

	<p>This product complies with:</p> <p>Directive 1907/2006/EU REACH Directive 2011/65/EU RoHS Directive 2012/19/EU WEEE 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</p>
	The product must not be used if the packaging is damaged.
	<p>Manufacturer KNOP Elektronik A/S, Fabriksvej 20, DK-7600 Struer, Denmark</p>
	Read the manual(s) before installation and commissioning.
	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.
	<p>Product reference LAK901M: Sound monitor</p>
	<p>Serial number Placed on the product</p>
	<p>Ingress Protection Code IP20</p>