LKF

Interaktiva Tjänster

- Display User´s Guide

1. General info about the display

The display is used to read collected and calculated values, activate and inactive the burglar alarm and to enter mobile phone numbers to be able to get alarms as SMS. You may also use the display to change settings.

Keyboard

With the exception of the usual keys for letters, numbers and symbols there are a number of special keys on the keyboard:

- ESC – (Escape) - To move a step back in the menus.

- TAB – (Tabulator) - To jump forward when you are writing text.

- CAPS LOCK – ("Lock Capital Letters") - To write upper-case letters.

- SHIFT – Used when writing text. When SHIFT key is pressed all letters are written as up
        per-case letters and all numbers are switched to as symbols marked above numbers
        on the keyboard.

- CTRL – (Control) - For special functions.

- SPACE – To make a space between letters and numbers when you are writing text.

- ALT – (Alternative) - Used with other keys to be able to write special symbols like €.

- ENTER - To enter a menus and to confirm a setting.

- BKSP – (Back Space) - To erase when writing text.

- F1, F2, F3 – Special keys for future use.

- F4 – To enter burglar alarm menu.

LEDs
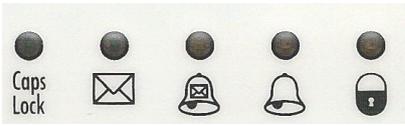
- Light on Caps lock indicates that Caps Lock is pressed.

- Light on "envelop" indicates that a new message have arrived.

- Light on "door bell with envelop" when a new alarm have been registered.

- Light on "door bell with out envelop" when the displays internal siren is active.

- Light on "lock" when the apartments burglar alarm is activated.

2. Navigation

- Press any number to jump directly to corresponding number in menu or move marker > <
  with down arrow and up arrow. Press ENTER to confirm.
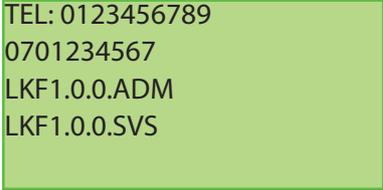
 + +
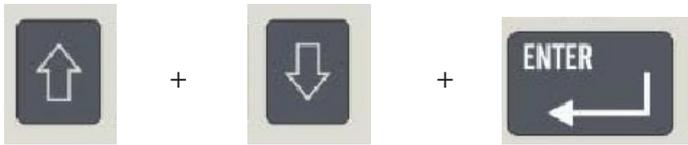
– Press ESC to go back.

The symbol # indicates the current value.

The display is lit when any bottom is pressed. The light turns off after no bottom have been pressed for a while.

3. Contact list and main menu

Press ESC to switch between contact list and main menu.

Contact list

TEL: 0123456789	Phone number for service
0701234567	Mobile number for service
LKF1.0.0.ADM	Address to administration (not used)
LKF1.0.0.SVS	Address to service (not used)

Main menu

> 1-Usage---------<	Heating account and temperature
2 Messages	To send and receive messages from the display
3 Alarm	Log list of all alarm
4 Settings	General settings

4. Reading average temperature

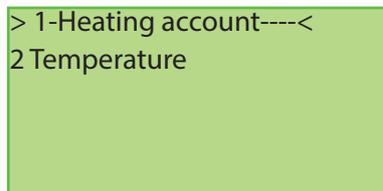Make sure to start from the main menu. Press ESC 1-2 times in order to go to main menu.
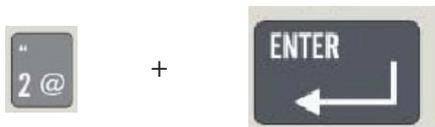

Main menu

```
> 1-Usage---------<
2 Messages
3 Alarm
4 Settings
```

In main menu please press button number 4 and then ENTER to enter usage menu.

 +

Usage menu

```
> 1-Heating account----<
2 Temperature
```

After entering usage menu please press button number 2 and ENTER to enter temperature. If no values are seen immediately please wait a while and they will be updated.

 +

Temperature menu

05-11-03:	19,9 C *	Average value for previous day
November:	20,0 C	Average value for present month
Oktober:	20.3 C	Average value for previous month
Höstperiod:	20.1 C	Average value for the period

It is possible to see if any measured value in any room have been below 18º or 17º C. This is indicated by one (*), or two stars (**), after the average value in the display.

05-11-03: 19,9 C *   During previous day at least one measured value have been below 18º C.

5. Reading heating account

Make sure to start from the main menu. Press ESC 1-2 times in order to go to main menu.

Main menu

```
> 1-Usage---------<
2 Messages
3 Alarm
4 Settings
```

In main menu please press button number 1 and then ENTER to enter usage menu.

   +

Usage menu

```
> 1-Heating account----<
2 Temperature
```
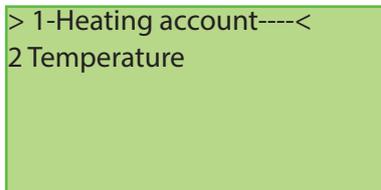
After entering usage menu please press button number 1 and ENTER to enter heating account. If no values are seen immediately please wait a while and they will be updated.

   +

Heating account

05-11-07:	1,50 kr	Value for previous day
November:	9,00 kr	Value for present month
Oktober:	40,00 kr	Value for previous month
Höstperiod:	49,00 kr	Value for period

Value: 49,00 kr means that the average temperature for the period have been below 21 grader and 49,00 kronor have been saved in heating costs.

Value: -30,00 kr means that the average temperature for the period have been above 21 grader and the cost is 30,00 kronor.

6. General info about alarm

Burglar alarm

When you enter an apartment with the burglar alarm activated, a warning signal is beeping from the display. At the same time an "Alert-ON-signal" is sent to the server. The alert signal includes the apartment address and the current time. To reset the alert signal ("inactivate the alarm") the PIN code needs to be entered before the alarm delay time have expired. The HomeNode sends an "Alert-OFF-signal" to the server and
the alarm is inactivated.

If the PIN code is not entered before the alarm delay time have expired:

• The burglar alarm siren is activated for 2 minutes. The siren stops immediately when the correct PIN code is entered.
• The stwatus at the server is set to "burglar alarm triggered" and if any mobile phone num bers are stored, SMS messages are sent to each number.
• The time for alarm is sent to the alarm log list.

If the occupancy sensors detects any movement the alarm starts immediately and the "Alert-ON-signal" is sent to the server.

Fire alarm

The smoke detector is working as a stand-alone device and operates independently of the system. The smoke detector use optical detection. A optical smoke detector have got a detection chamber with an advance photocell system with an IR-light. If any smoke enters the chamber the light is reflected towards the smoke particles and an alarm is activated. The optical smoke detector is the best type of smoke detector to detect fire in materials that generate little smoke. Fires that evolves during long period of time before the fire burst in to conflagration.

If the smoke detector is activated it sends a signal to the system. The display sounds and the text Fire alarm is appears on the display. After 60 seconds the burglar alarm siren starts and it can be stopped by pressing ENTER. It takes 10 seconds before the burglar alarm siren stops if ENTER is pressed. The burglar alarm siren also stops automatically after 2 minutes. The smoke detector turns off when there is no more smoke in the detection chamber.

The HomeNode sends an Fire alarm message to the server if the smoke detector is on for more then 90 seconds and if the fire alarm procedure isn't stopped by pressing ENTER on the display. The status at the server is set to "fire-alarm-activated" and if any mobile phone numbers are stored, SMS messages are sent to each number. The time for the alarm is sent to the alarm log list.

Inactivity alarm

As default the inactivity alarm is set to off. It is possible to activate the inactivity alarm function from the display.
The inactivity alarm send a signal to the server if the door contact or the occupancy senor doesn't change state during the inactivity time. The inactivity time can be set to 1 to 999 hours. If the door contact or the occupancy sensors doesn't change state during this time the following happens:

• "Inactivity alarm" appears on the display.
• The display sounds for 5 minutes, but if ENTER is pressed it stops.
• The HomeNode sends an alarm to the server. If ENTER is pressed before the 5 minutes have expired no message is sent to the server.
• If any mobile phone numbers are stored, SMS messages are sent to each number. The time for the alarm is sent to the alarm log list.

6.1 How to activate the burglar alarm

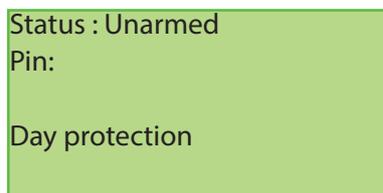Make sure to start from the main menu. Press ESC 1-2 times in order to go to main menu.

Main menu

```
> 1-Usage---------<
2 Messages
3 Alarm
4 Settings
```

In main menu please press F4 (button with lock symbol).

Burglar alarm menu

```
Status : Unarmed
Pin:

Day protection
```

Before entering PIN code, please make sure that the main door is closed and that any occupancy sensors are inactivated. Otherwise the following text will appear "OBS! SENSORER".

Choose between Day protection and Night protection by pressing ENTER, for details see burglar alarms settings.

Enter your 4-digit code. As default the PIN code is 0000. It very important to change both PIN codes according to instructions in burglar alarm settings!

E.g.

 + + +

THE ALARM IS ACTIVATED AND YOU HAVE 30 SECONDS TO LEAVE THE APARTMENT. This time may be changed according to instructions in burglar alarm settings.

Burglar alarm menu

Status : Waiting
Pin:

Day protection
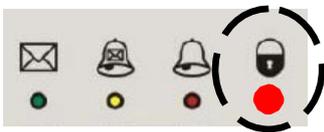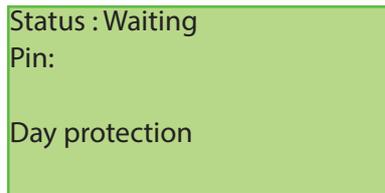
     The red LED placed beneath the lock symbol is blinking.

12

6.2 How to inactivate the burglar alarm

YOU HAVE 30 SECOUNDS TO INACTIVATE THE BURGLAR ALARM. This time may be changed according to instructions in burglar alarm settings.

When entering the apartment the display shows:

Burglar alarm menu

```
Status : Armed
Pin:

Day protection
```
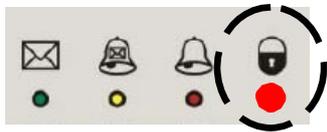
                    The red LED it on.

Enter your 4-digit PIN code to inactivate the burglar alarm.

E.g.   +   +   +

Burglar alarm menu

```
Status : Unarmed
Pin:

Day protection
```
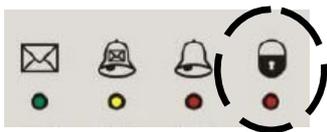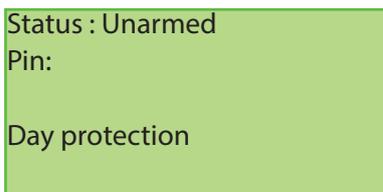
                    The red LED turns off.

6.3 Burglar alarm settings - Changing PIN code

As default PIN code 1 and PIN code 2 is 0000.

It is very important to change PIN code 1 and PIN code 2 before the burglar alarm is used

There are 2 PIN codes to the burglar alarm. PIN code 1 - Your own 4-digit code.
PIN code 2 - A temporary code that can be use by guests our during maintenance work.

On PIN code 1 you will always have your own code and on PIN code 2 you can temporary create a code that can be used by guests and during maintenance work. If PIN code 2 is not used please set it to the same PIN code 1.

•• •

Make sure to start from the main menu. To go to main menu please press ESC 1 to 2 times.

Main menu

```
> 1-Usage---------<
2 Messages
3 Alarm
4 Settings
```

•• •

In main menu please press button number 4 and ENTER to enter settings.

 +

Settings

```
>1-Language-----------<
2 Volume
3 Monitoring
4 Inactivity alarm
```

•• •
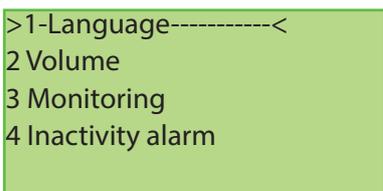
In settings menu please press button number 8 and ENTER to enter menu PIN code.

 +

PIN code

> 1-Change PIN1----<
2 Change PIN2

....
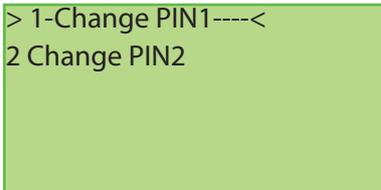
Choose which PIN code to change and press ENTER.

PIN code

Enter old PIN1: _

....
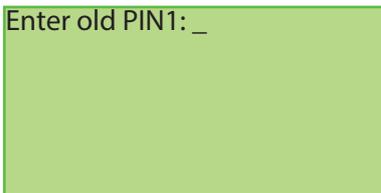
Enter old PIN code, default is 0000. Enter the digits and confirm with ENTER.
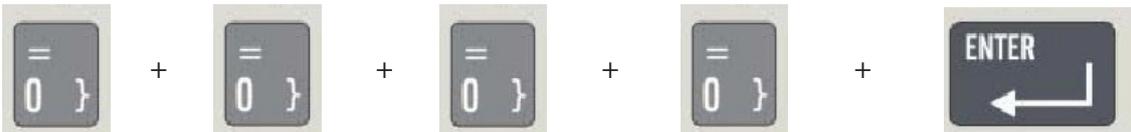
 + + + +

PIN code

Enter new PIN1: _

....

Enter a new 4 digit PIN code and confirm with ENTER.

E.g.   [8 (] + [8 (] + [4 ¤$] + [4 ¤$] + [ENTER]

PIN code

```
Repeat PIN1 :_
```

· ·

Enter a new 4 digit PIN code and confirm with ENTER.

E.g.   [8 (] + [8 (] + [4 ¤$] + [4 ¤$] + [ENTER]

PIN code

```
New PIN saved
```

· ·
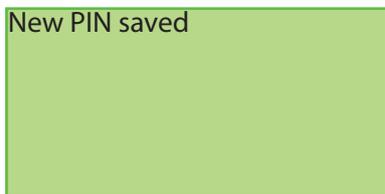
Repeat steps to change PIN code 2.

6.4 Burglar alarm settings - Day protection and Night protection

Day protection   Is used during day time when nobody is in the apartment. Occupancy sensor (only installed in apartments on first floor) and door contact is active.

Night protection   Is used during night when you are in the apartment. Only door contact is active.
So if you have an occupancy sensor in the apartment it will not activate the burglar alarm.

By pressing ENTER in the burglar alarm menu the system switch between Day protection and Night protection.


```
Status : Unarmed
Pin:

Day protection
```

```
Status : Unarmed
Pin:

Night protection
```

6.5 Burglar alarm settings - Alarm delay

Alarm delay is the time that will expire after you have pressed the PIN code until the alarm is armed. It is the time you have to leave the apartment after pressing PIN code. It is also the time you have to inactivate the alarm when you enter the apartment. The alarm delay can be set from 10 to 90 seconds.

In main menu please press button number 4 and ENTER to enter settings.

 +

Settings

```
>1-Language-----------<
2 Volume
3 Monitoring
4 Inactivity alarm
```
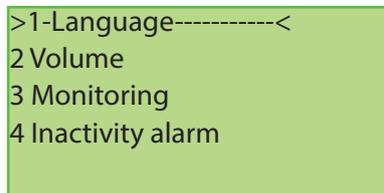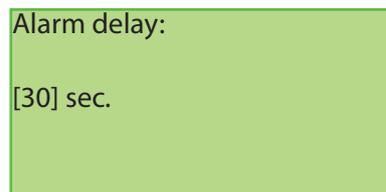
In settings menu please press button number 9 and Down-arrow-button twice and then ENTER to enter menu alarm delay.

 + + +

Alarm delay

```
Alarm delay:

[30] sec.
```

Enter new alarm delay time and press ENTER.

E.g. +

7. How to get alarms as SMS

It is possible to add mobile phone numbers to the system and to get a SMS message when there is an alarm. E.g. a SMS message is sent if the smoke detector is activated or if the burglar alarm is activated and there is a break in. It is possible to program 3 different mobile phone numbers to each type of alarm.

••• •

Make sure to start from the main menu. To go to main menu please press ESC 1 to 2 times.

ESC

Main menu

> 1-Usage---------<
2 Messages
3 Alarm
4 Settings

••• •

In main menu please press button number 4 and ENTER to enter settings.

4 $ +   ENTER

Settings

>1-Language-----------<
2 Volume
3 Monitoring
4 Inactivity alarm

••• •

In settings please press 9 and ENTER to enter SMS list.

9]   +   ENTER

SMS list

>1-Fire------------<
2 Break in
3 Other

••• •
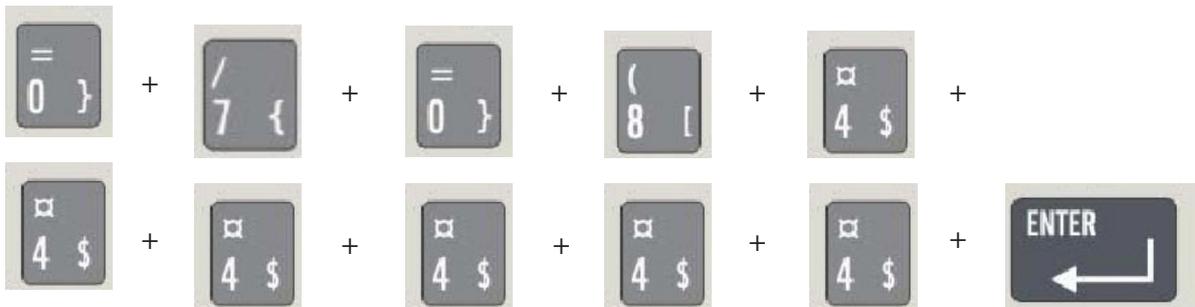
Press ENTER to program mobile phone numbers to the fire alarm.
It might take a while before the text below is seen. The system have to get the list from the database so it might take a while.

SMS list

SMS fire alarm
SMS1: [_____]
SMS2: [_____]
SMS3: [_____]

• •

Enter mobile phone numbers and press ENTER to save.

SMS list

SMS fire alarm
SMS1: [0708444444]
SMS2: [_____]
SMS3: [_____]

AFTER NEW NUMBERS ARE ENTERED, IT IS IMPORTANT TO WAIT AT LEAST 3-4 MINUTES BEFO-RE ENTERING THE SMS LIST.

After a few minutes it is possible to enter the SMS list and see if correct numbers are stored.

• •

Move the marker "_" with arrow-keys. Always save by pressing ENTER.

To change incorrect number just move the marker "_" with arrow-keys and type new number.

• •
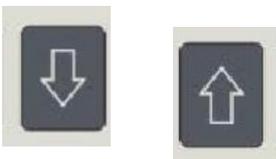
8. All menus

Contact list

TEL: 0123456789	Phone number for service MOB:
0701234567	Mobile number for service
LKF1.0.0.ADM	Address to administration (not used)
LKF1.0.0.SVS	Address to service (not used)

Press ENTER or ESC to enter main menu.

Main menu

> 1-Usage---------<	Heating account and temperature
2 Messages	To send and receive messages from the display
3 Alarm	Log list of all alarm
4 Settings	General settings

Press any number to move marker > < direct to certain row, or move cursor with arrow-keys. Press ENTER to confirm. Press ESC to go backwards.

Usage menu

> 1-Heating account----<	Heating account
2 Temperature	Average temperature

Heating account

05-11-07: 1,50 kr	Value for previous day
November: 9,00 kr	Value for present month
Oktober: 40,00 kr	Value for previous month
Höstperiod: 49,00 kr	Value for period

Temperature menu

|	
05-11-03: 19.9 C *	Average value for previous day
November: 20.0 C	Average value for present month
Oktober: 20.3 C	Average value for previous month
Höstperiod: 20.1 C	Average value for the period

Messages

With the display it is possible to send text messages to other apartments that have the system installed. The function is called Boendes Meddelande System.

1 In-Box	Recevied BMS
2 Write message	To write a new BMS
3 Out-Box	Messages sent
4 My BMS address	Own BMS address

In-Box
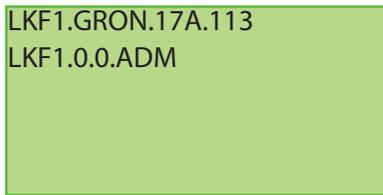
LKF1.GRON.17A.113	Address to last message received.
LKF1.0.0.ADM	Address to previous message received.

The In-Box can store 15 messages. The text "Box is empty" is seen if no message have arrived. New messages are marked with *. Select message to read by moving marker >----< up and down. Press ENTER to read.
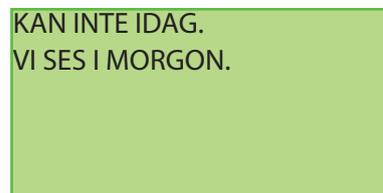
How to read a message

```
05-04-05-19:05:1
HEJ KARIN. ÅKER 20.00
VI SES VID BILEN.EVA
```

Press DEL to delete a message. Press ESC to keep the message and to go to In-Box. Press ENTER to write a reply.
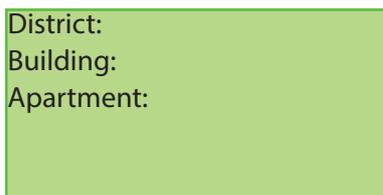
Write message

```
KAN INTE IDAG.
VI SES I MORGON.
```

A message can be written in all 4 lines. Before sending the system automatically adds the date. Press DEL to erase. When text is ready press ENTER to enter BMS address to receiver.

To write BMS-address

```
District:
Building:
Apartment:
```

Discrict e.g. LKF1.
Street: Street address e.g. JAGA.
Number of street address e.g. 21.
Apartment number e.g. 134.

Each BMS contains 4 fields. Between each field there is a dot. The dot is written automatically. In each field there are maximum 4 signs. If you will reply on a message the address is already written. If you write a new message you have to enter the BMS-address.

District: You always have to write 4 signs e.g. LKF1. Press ENTER to go to Street address.
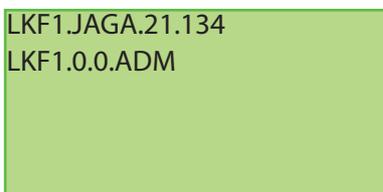
Street: You always have to write 4 signs. In general the street is the first 4 letters in the street name. Press ENTER to go to building.

Building: Write the street number e.g. 21. Press ENTER to go to apartment. Apartment: Write the apartment number e.g. 134.

Apartment: Write the apartment number e.g. 134.

Press ENTER to send message. The message is saved in the Out-Box.

Out-Box

```
LKF1.JAGA.21.134
LKF1.0.0.ADM
```

Address of last message.
Address of previous message.

The Out-Box contains the 15 latest messages. Move marker >----< up and down and press ENTER to read a message. When ENTER is pressed the message is shown as below.

To read message

```
KAN INTE IDAG.
VI SES I MORGON
```

The text "Box is empty" is seen if no messages have been sent. Press DEL/BKSP to delete a message an to go to Out-Box. Press ESC to keep message and to go to Out-Box. Press ESC again to go to main menu.

My BMS address

```
My BMS address:

LKF1.JAGA.57.135
```

The BMS-address for the apartment

My BMS address

```
1 Break in
2 Smoke detector
3 Leakage alarm
4 Freeze alarm
5 Power Supply
6 Inactivity alarm
7 Emergency alarm
```

Log file of break in alarms.
Log file of fire alarms.
Not used.
Not used.
Log file of power alarms.
Log file of inactivity alarms.
Not used.

Break in – log file

```
1 ÅÅ-MM-DD tt:mm
2 ÅÅ-MM-DD tt:mm
3 ÅÅ-MM-DD tt:mm
```

The 10 latest alarms.

Fire alarm – log file

```
1 ÅÅ-MM-DD tt:mm
2 ÅÅ-MM-DD tt:mm
3 ÅÅ-MM-DD tt:mm
```

The 10 latest alarms.

Only "true" fire alarms appears. The smoke detector have to be activated for more then 90 seconds. If somebody resets the fire alarm by pressing ENTER on the display the fire alarm will not be sent to the server and therefore it will not appear on the log file.

Fire alarm – How to turn off

```
Fire alarm
Press ENTER
to cancel
```

Press ENTER (within 5 minutes) to prevent a false alarm to be sent to the server.

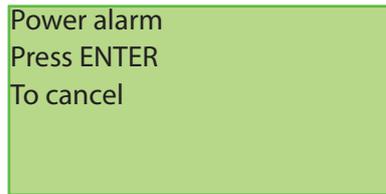This message is apperas as soon as the smoke detector is activated.

Power alarm – log file

```
1 ÅÅ-MM-DD tt:mm
2 ÅÅ-MM-DD tt:mm
3 ÅÅ-MM-DD tt:mm
```

The 10 latest alarms.

Power alarm – how to turn off

```
Power alarm
Press ENTER
To cancel
```

Press ENTER (within 5 minutes) to prevent a false alarm to be sent to the server.

This message appears as soon as the power is off. The display is beeping. It takes 5 minutes before the alarm is sent to the server. If you press ENTER within 5 minutes the alarm is cancelled. If the alarm is sent to the server a SMS will be sent to programmed mobile phone numbers.

Inactivityt alarm – log file

```
1 ÅÅ-MM-DD tt:mm
2 ÅÅ-MM-DD tt:mm
3 ÅÅ-MM-DD tt:mm
```

The 10 latest alarms.

Inactivity alarm – how to turn off

```
Inactivity alarm
Press ENTER
to cancel
```

Press ENTER (within 5 minutes) to prevent a false alarm to be sent to the server.

This message appears as soon as the inactivity time have expired. The display is beeping. If you press ENTER within 5 minutes the alarm is cancelled. If the alarm is sent to the server a SMS will be sent to programmed mobile phone numbers.
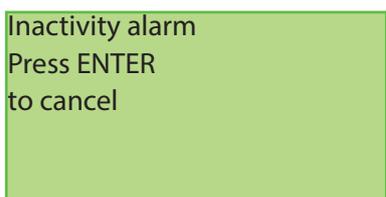
Settings

1 Language	The language used on the display.
2 Volume	Volume when pressing buttons.
3 Monitoring	To activated/inactivate.
4 Inactivity alarm	To activated/inactivate.
5 Inactivity time	To set inactivity time.
6 Window sensors	To activated/inactivate (not used).
7 Power Alarm	To activated/inactivate.
8 PIN codes	To change PIN codes.
9 SMS list	List of mobile phone numbers programmed.
10 Phone list	List of phone numbers programmed (not used).
11 Alarm delay	To set alarm delay time.
12 Expected temp.	Desirable temperature for each room (not used).
13 System info	Version on system and display.

Language

Select language:	
1 Svenska #	Select 1 and press ENTER.
2 English	Select 2 and press ENTER.

Volume – Lev el of volume on the display

Sound volume:	Select high volume by pressing 1 and ENTER.
1 High	Select low volume by pressing 2 and ENTER.
2 Low #	Turn volume off by pressing 3 and ENTER.
3 Off	

Selecting 3 will turn off volume when pressing buttons and when a new message arrives. If 3 is selected the display will still beep for 5 minutes when there is a fire alarm or power alarm. To cancel these alarms press ENTER. Power alarm function can be turned off by inactivating function.

Monitoring

Monitoring:	Select 1 and press ENTER. Monitoring is on.
1 Enabled	Select 2 and press ENTER. Monitoring is off.
2 Disabled #	

As default monitoring is off. By selecting on the tenants approves that movements detected by door contact or occupancy detector is sent to the server and is updated on the apartments webpage. The monitoring is updated regardless if the burglar alarm is on or off. If monitoring is off movement will only be updated if the burglar alarm is activated. A user name and password prevents any unauthorized person to visit the webpage.

Inactivity alarm

```
Inactivity alarm:
1 ON
2 OFF    #
```

Select 1 and press ENTER. Inactivity alarm is on.
Select 2 and press ENTER. Inactivity alarm is off.

As default inactivity alarm is off. By selecting on the tenant approves that the system sends an inactivity alarm if no movement have been noticed during the inactivity time.

Inactivity time

```
Time to alarm:


[999] hour
```

Select any time between 1 – 999 hours. Press ENTER to confirm.

Inactivity time – Time that have to expired without any update on door contact or occupancy detector before an inactivity alarm is activated. Press ESC to leave menu without making any changes.

Power alarm

```
Power alarm:
1 Enabled        #
2 Disabled
Battery #
```

Select 1 and ENTER. When there is a power alarm the display is beeping.
Select 2 and ENTER.
Status. When battery power is used "#" appears.

When power alarm is on the display will start to beep if there is a power failure. The battery backup makes sure there is power to the system. The system sends a message to the server. Power failure can be due to short circuit or no power from the power company. The display is beeping for 5 minutes and will stop if the power is on again. If the power is still off after 5 minutes a power alarm is sent to the server and a message is sent to programmed mobile phone numbers.
If the power alarm is off there will still be a message sent to the server but there is no beeping in the display. As default the power alarm is on.

PIN codes

```
1 Change PIN1
2 Change PIN2
```

To change PIN code 1
To change PIN code 2

It if possible to have 2 different PIN codes in order to temporary use one for quests or maintenance work.

SMS list

```
1 Fire
2 Break in
3 Other
```

List of mobile phone numbers for fire alarms.
List of mobile phone numbers for burglar alarms.
List of mobile phone numbers for other alarms (e.g. power alarms).

SMS list – fire alarm

```
SMS fire alarm:
SMS1:[0706123456]
SMS2:[            ]
SMS3:[            ]
```

Enter mobile phone number 1 for fire alarm.
Enter mobile phone numbers 2.
Enter mobile phone numbers 3.

SMS list – break in

Mobile phone number for burglar alarms.

SMS list - ohter

Mobile phone number for other alarms.

Alarm delay

```
Alarm delay:

[30]  sec.
```

Enter time between 10 – 90 secounds. Press ENTER to save.

Expected temp. (not used)

```
Room 1 temp.
Room 2 temp.
3 Finns ej
4 Finns ej
```

Select 1 and ENTER to see/change desirable temperature for room 1.
Select 2 and ENTER to see/change desirable temperature for room 2.
Room 3 not available.

Expected temperature is used to program desirable temperature for each room. The values can be used to optimize and change the heating system. This function is currently not used.

As default all values are set to 21 C.

```
Room   1 temp.: [21] C
```

System info

HNH ver.: 03	Version on system hardware.
HNS ver.: PIC-1.1N	Version on system software.
DISH ver.: 20	Version on display hardware.
DISS ver.: 48ALLPIC	Version on display software.

LKF