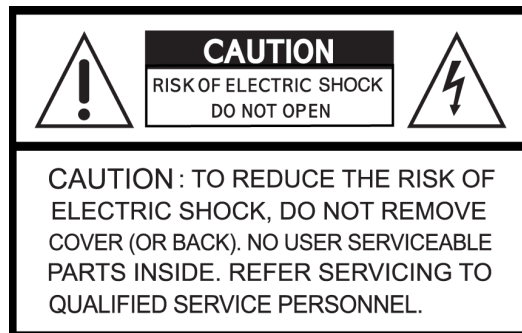1

User Manual

Introduction

Thank you for purchasing the KATHREIN Digital Systems GmbH outdoor siren. Please take the time to read the following safety and installation information carefully and attentively before using the outdoor siren. It is imperative to comply with these instructions in order to ensure the safe operation of the device. If you have any further questions, please contact your local retailer or KATHREIN Digital Systems GmbH directly. Your outdoor siren was developed and built with state-of-the-art technology and complies with European and German standards.

Please keep this manual safe to be able to answer possible questions in the future. The manual is an integral part of the product even in case it is resold to a third party.

Disclaimer

All technical details and descriptions in this manual were compiled with the greatest care. However, KATHREIN Digital Systems GmbH cannot entirely exclude mistakes in this manual. Therefore, we do not assume any legal responsibility or liability resulting from wrong information in this manual. Descriptions, technical illustrations and technical data are subject to change without notice according to technical progress. In addition, KATHREIN Digital Systems GmbH reserves the right to change the product and the manual without prior notice. We do not assume any guarantee with regard to the content of this document. We appreciate any comments on mistakes or inaccuracies which may help us to improve this product and this manual.

⚠	**CAUTION** RISK OF ELECTRIC SHOCK DO NOT OPEN	⚡
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		

⚡ This symbol is intended to attract the user's attention to the potential risk of dangerous unprotected voltage inside the housing. This may lead to electric shock.

⚠ This symbol is intended to attract the user's attention to user and maintenance instructions in the manual and documents enclosed with the product.

WARNING:

TO MINIMISE THE RISK OF ELECTRIC SHOCK, YOU MUST NOT EXPOSE THIS PRODUCT TO WET AND MOIST CONDITIONS AT ANY TIME.

All KATHREIN Digital Systems GmbH products are lead-free and meet the requirements stated under the European Directive on the Restriction of Hazardous Substances (RoHS). This guarantees that the entire production process and the product itself are free of lead and of all listed hazardous substances.

This product was tested and complies with the regularities for a class of digital devices stated under FCC part 15. These limits were specified to provide reasonable protection against harmful exposure when operating the device in a commercial environment. This product generates, uses and may emit radio energy. It may in addition interfere with other radio communication systems if not installed or used according to this manual. Using the device in residential areas may cause disturbances to be possibly remedied at the user's expense.

Hereby KATHREIN Digital Systems GmbH declares that the outdoor siren FAS 100 (order number 2220000006, EAN 4021121548833) is in conformity with the relevant provisions of Directive 1999/5/EG.

Conformity:

The declaration of conformity is available at http://www.kathrein-ds.com in the download section of the respective product. Alternatively, you can request the declaration of conformity directly from us:

KATHREIN Digital Systems GmbH
Anton-Kathrein-Str. 1–3
83022 Rosenheim, Germany

Important Safety Information

⚠️ **WARNING**

The warranty claim will expire in case of damages resulting from the non-observance of this manual.

We do not assume any liability for consequential damages.

We do not assume any liability for damages to persons and/or material whatsoever which result from improper handling or noncompliance with the safety instructions. The warranty claim will expire in such cases!

The outdoor siren FAS 100 is equipped with a high-quality housing. However, please observe the following safety instructions:

- Operate the outdoor siren only with the provided power supply or batteries.
- Handle the outdoor siren with care, heavy vibration or bumps may damage the device.
- Do not install the outdoor siren close to strong electric power lines or magnetic fields, as this may impair the transmission quality significantly.
- Do not install the outdoor siren directly on iron or aluminium surfaces, as this may impair the wireless transmission significantly. Use a non-conducting material to insulate the device from the installation surface.
- Persons (including children) with limited physical, sensory, or mental abilities and/or lacking experience and/or knowledge must not use this product.
- Keep children away from the product and other connected electrical appliances at all times. The outdoor siren includes small parts they can swallow. Lay cables expertly so that they are neither bent nor otherwise damaged. Install the outdoor siren out of children's reach. Do not leave packaging materials unattended, as they may be dangerous for playing children.
- Use a damp cloth to clean the outdoor siren's surface, then dry it. Cleaning agents will damage the surface.
- The outdoor siren can be installed outside and has the IP56 protection class.

Malfunctions and Defects

If you notice any kind of defect, remove the batteries or disconnect the power supply from the outdoor siren FAS 100 and contact your retailer or KATHREIN Digital Systems GmbH directly. Any further usage of the system may lead to fire or electric shock!

Intended Use

The KATHREIN Digital Systems GmbH outdoor siren FAS 100 is intended for building security and alerting purposes. Any other use than that described in this manual is not permitted and will void any warranty or guarantee as well as liability claims. The same applies if the device is modified or retrofitted.

Disposal

Do not dispose of the device with domestic waste!

This product complies with the EU Directive on waste electrical and electronic equipment (WEEE) and therefore must not be disposed of with domestic waste. Dispose of the device via your local collection point for waste electronic equipment!

This product contains software programs subject to the GPL free software license.

This product contains software that was developed by third parties and/or software subject to the GNU General Public License (GPL) and/or the GNU Lesser General Public License (LGPL). We will send you the source code of these programs on request. The GPL and/or LGPL code used and offered in this product is EXCLUSIVE OF ANY GUARANTEE WHATSOEVER and is subject to the copyright of one or several authors. For further details, please refer to the GPL and/or LGPL code of this product and to the terms of use of GPL and LGPL.

You can read the complete license text at http://www.gnu.org/licenses/gpl-2.0.html. For an unofficial German translation, please go to

http://www.gnu.de/documents/gpl.de.html.

Outdoor Siren FAS 100

Product description:

The outdoor siren FAS 100 features an IP56 protection class and, in case of alarms, alerts you by activating the siren and a stroboscope. The outdoor siren can also alert in case of tampering, low battery, or radio communication interferences.

1. Mounting hole

2. Fastening screw for LED cover

3. Mains adapter input
   To connect a 9V 1A mains adapter (not included) to operate the siren without batteries.

4. Power switch
   The outdoor siren can be operated with four batteries or alternatively a 9 V mains adapter.

   The switch can be set to three positions:

   - **BT4:** If you want to operate the outdoor siren with batteries, set the switch to BT4.
     If an additional 9 V mains adapter is connected, the siren uses the power from the mains adapter and the batteries only in exceptional cases as redundant power supply.
   - **Off:** Power supply by batteries is deactivated. Use a 9 V power supply unit to continue to operate the outdoor siren.
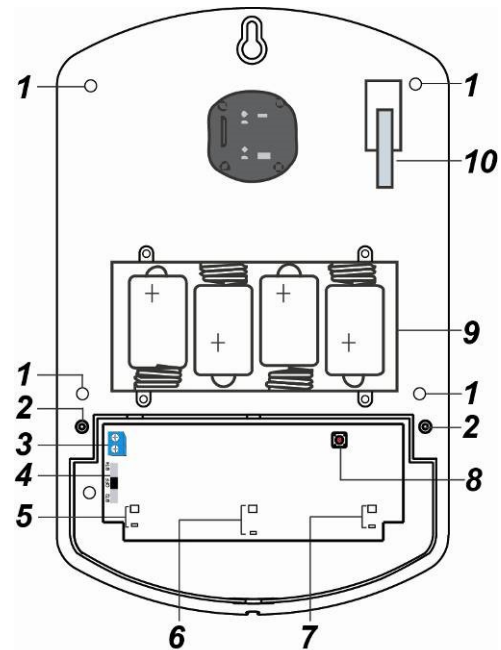   - **BT2:** Do **not** use this setting (reserved)!

5. LED group 3

6. LED group 2

7. LED group 1

8. Learn button

9. Battery compartment

10. Tamper contact

Scope of delivery:

- Outdoor siren FAS 100
- 4 x wall plugs
- 4 x 4 mm x 30 mm Phillips head screws
- 4 x 1.5 V D alkaline batteries (already installed in housing)

Working environment:

-10° C – 45° C (14° F – 113° F)

Connecting the outdoor siren FAS 100 and putting it into operation

1. Open the outdoor siren FAS 100 by unscrewing the screws on the bottom.
2. Unscrew both screws of the LED cover and remove the cover.
3. Supply the outdoor siren with power (see power supply descriptions above).
4. Open the web interface of the alarm panel and go to the menu "Sensors" → "Add" and press "Start."
5. Press the learn button in the siren. The outdoor siren FAS 100 confirms this with a brief audio signal and the LEDs 1 and 3 illuminate.
6. Add the outdoor siren FAS 100 to the alarm panel.

Range test:
To test the signal strength at the desired installation location, perform a range test.
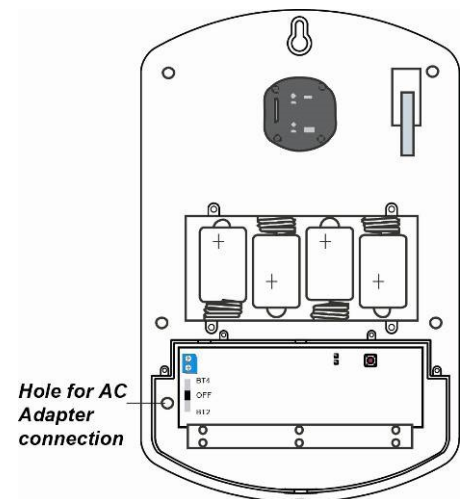
1. Open the alarm panel menu "Sensors" → "Range" and press "Start".
2. Press the Learn button of the outdoor siren.
3. The sensor and the signal strength should be indicated. The higher the indicated number the better the reception (1–9).
4. Click "Stop" to end the test.

Please note:

If there is no signal at the installation location or the signal strength is below 4 or frequently falls below this level (signal fluctuations of 2 to 3 are normal), we recommend using a repeater to improve the signal.
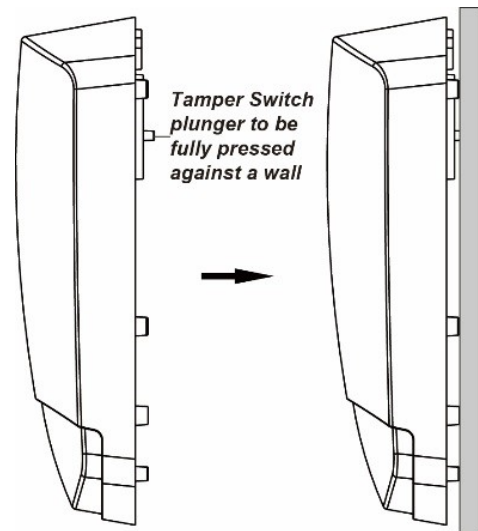
Connecting the outdoor siren to the mains adapter:

1. Drill a hole (see figure on the right) through the foot of the outdoor siren to connect the power cables of the power input.
2. Loosen the screws of the power input.
3. Insert the cable of the mains adapter through the drilled hole on the back and connect it to the power input (3). It is important to connect the dashed + wire of the mains adapter to the lower + input of the power input and the – wire to the upper input.
4. Tighten the screws of the DC power input.
5. Plug the mains adapter into a socket.

Hole for AC Adapter connection

Installation of the outdoor siren:

1. It is recommended to deactivate the siren during the mounting/installation (remove power supply).
2. Fasten the outdoor siren FAS 100 to a wall using the provided screws.
3. The tamper contact protrudes from the siren's housing. If the siren is removed from the wall, it triggers the audio alarm of the siren. If there are notches (roughcast etc.) on your wall, make sure that the tamper contact is pressed during the installation and insert something between tamper contact and wall if necessary.
4. Reestablish the power supply.
5. Retighten the LED cover and close the front of the outdoor siren again.

Tamper Switch plunger to be fully pressed against a wall

Additional settings

- If you want to change the siren settings (name, area, zone), click on "Edit" in the sensor list.
    - o If you want to assign the siren to both areas, first switch SW1 to "ON."
    - o Activate the setting "all areas" and save it by clicking on "OK."
    - o The siren sounds a confirmation beep.
    - o Switch SW1 to "OFF."
- In the menu "Sensors" ("Panel") → "Sirens" you can set which alarms shall be sounded by "External siren(s)."

Supervision:

The outdoor siren sends a supervisor signal every 30 to 50 minutes. If the signal is not received by the alarm panel, the web interface shows the status "Out of order."

Alarm simulation

1. You can test the siren's function by simulating an alarm or triggering the tamper contact.
2. **Warning:** The siren is very loud (110 dB). Deactivate the sound either by disarming the alarm panel or by removing the batteries.

Alarm memory:

If an alarm was triggered, the outdoor siren FAS 100 sounds a (trumpet) signal when disarming to make you aware of the alarm. This signal cannot be deactivated!

Duration of the audio alarm:

The audio alarm of the outdoor siren FAS 100 is set to a duration of three minutes. If the alarm panel interrupts the alarm before the duration ended, the outdoor siren will stop as well.

Reset:

You can delete the memory and configuration of the outdoor siren FAS 100 by removing the power supply completely, holding the learn button pressed and reestablishing the power supply. After 3 to 5 seconds, the siren will beep once and the LEDs illuminate once in sequence. Then, you can release the learn button.

Siren settings

- This menu allows you to configure "external" sirens that are added to the alarm panel. It is **not** possible to configure the internal siren of the alarm panel in this menu.
- All settings in this menu are only transmitted and saved on the siren(s). The options will then display "on" again.
- To transmit the selected setting, select "on" or "off" and press "apply now".
- The sirens will sound a notification sound to acknowledge that the new settings have been received.
- The new configuration is sent to all connected sirens. If you want to set multiple sirens differently, you need to add them later to the alarm panel or temporarily disconnect the ones you do not want to change from their power supply.
- It is not possible to display the current setting of a siren.
- Tamper contact on/off
  Deactivates the tamper contact of all currently connected "external" sirens for one hour (useful e.g. to change the batteries).

  Notes:
  - If the tamper contact is disabled, the siren does not transmit status updates to the alarm panel anymore. During that time, you cannot see the current status of the contact via the menu "Sensors" → "List".
  - If you open the siren without disabling the tamper contact, the acoustic alarm of the siren will sound – even if the siren is not connected to the alarm panel! In this case, you should wear ear protection and disconnect the siren as quickly as possible from its power supply.
- Confirmation signal on/off (in Arm/Disarm mode)
  With this function active, the siren will sound one signal tone when arming and two signal tones when disarming the alarm panel.

  Notes:
  If the tamper contact of the siren is open when arming or disarming the alarm panel, five short acoustic signals sound even though the confirmation tone is disabled. This can happen before the alarm panel displays an open tamper contact, giving you the possibility to react before a tamper alarm is triggered.

- Input on/off
  If this function is active, the external siren(s) sound(s) confirmation signals for the duration of the defined delay until the system is armed.

Advanced settings:

This menu allows you to configure your outdoor siren FAS 100. The most recently transmitted settings are saved and displayed here. To change the settings, simply select how your outdoor siren shall act and, then, click on "submit."

- **Device**
  Select the outdoor siren that you want to configure.

- **Alarm volume**
  Define the siren's volume in case of alarms (loud, medium, low, mute).

- **Doorbell**
  Specify, whether the siren is to give an acoustic signal by means of the "Doorbell function."

  Note:

  In the menu "Settings" → "Panel" → "Area settings" → "Sound settings", you can also disable the doorbell sound for all sirens.

- **Activate siren in home mode**
  Specify, whether the siren is to trigger an alarm in case of a burglary while the alarm panel is in home mode.

- **Activate siren in arm mode**
  Specify, whether the siren is to trigger an alarm in case of a burglary while the alarm panel is in arm mode.

- **Activate siren strobe**
  Specify, whether the LEDs of the siren are to flash after the acoustic alarm has ended until the system is disarmed again.

- **Confirmation strobe**
  Specify, whether the siren is to flash for confirmation, when the alarm mode of the alarm panel changes (Arm/ Home / Disarm).

  Note:

  If you disable the "confirmation signal" in the siren settings above, the confirmation strobe is also disabled irrespective of this setting.

- **Exit strobe**
  Specify, whether the LEDs of the siren are to flash for confirmation during the delay when leaving.

- **Entry strobe**
  Specify, whether the LEDs of the siren are to flash for confirmation during the delay when entering.

  Note:

  If you disable the "input" in the siren settings above, the entry and exit strobe is also disabled irrespective of these settings.

- **Trigger strobe**
  Specify whether the siren is to give a visual signal via the three LEDs in case of an alarm. If activated, the external siren flashes continuously, until the acoustic alarm has ended.

- **Volume upon arming**
  Define the volume of the confirmation sound when arming.

- **Volume upon disarming**
  Define the volume of the confirmation sound when disarming.

Warning sounds and signals of the outdoor siren:

Status	Audio signal	Signal lamps
Arm/Home	1 beep	The 3 LEDs light up once
Disarm	2 beeps	The 3 LEDs light up once one after another
Arm (low battery)	3 beeps	The 3 LEDs light up three times
Disarm (low battery)	3 beeps	The 3 LEDs light up three times one after another
Arm (tamper)	5 beeps	The 3 LEDs light up five times simultaneously
Disarm (tamper)	5 beeps	The 3 LEDs light up five times one after another
Sabotage alarm	Continuous beep until the alarm duration has expired	The 3 LEDs constantly flash simultaneously
Entrance/exit audio signal	Continuous beep until the alarm duration has expired	Constant flashing

For your notes

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