

Wirefree Burglar Alarm SYSTEM 1000 E.A.S.

Installation and Operating Instructions



1. Contents

1. Contents	page	1	13. System Operation	9
2. Introduction		2	14. Anti-jamming	9
3. Kit Contents		2	15. Changing the Batteries	10
4. Safety Notes		2	16. Troubleshooting	11
5. Declaration of Conformity		2	17. Maintenance	11
6. How the System Works		3	18. Specifications	11
7. Planning your System		3	19. Optional Accessories	12
8. Accessories		4	20. Guarantee Conditions	13
9. Coding		4	21. Appendix: Door Contact (optional)	13
10. Fitting the Batteries		5	22. Drilling Template	16
11. Checking the Components		6		
12. Installation		7		

2. Introduction

The Wirefree Burglar Alarm System 1000 can provide protection for flats and detached family houses. It is simple to install and to operate. The alarm system is armed with a wirefree remote keyfob on exit from your property and disarmed on return. If, during this time, a movement is detected by the PIR, the siren will be activated for two minutes. The siren is installed on the outer wall of the building. The control panel is contained in the siren, so no wiring is needed. Solar cells convert the sun's energy into electrical power, while batteries provide power for the system at night or on overcast days.

3. Kit Contents

Check the contents:

- siren
- RF keyfob
- 2 wirefree PIR sensors
- 4 self-adhesive sticky pads for the PIRs
- 8 fixing screws and wall plugs
- installation and operating instructions with drilling template

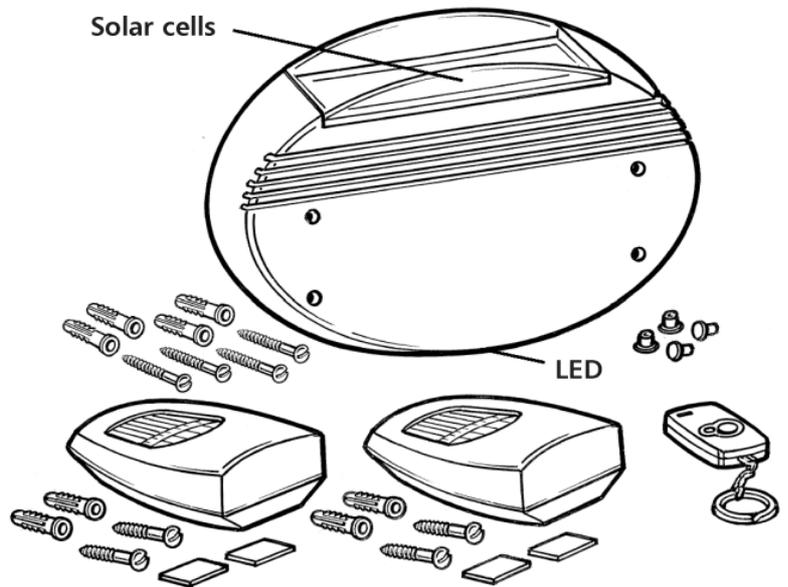


fig. 1

4. Safety Notes

- The PIRs must not come into contact with rain or humidity. They are suited for indoor use only.
- Before drilling, make sure that there are no electric cables hidden in the wall.
- As the siren is very loud, ensure that it is not operated close to a person's ear (especially a child's ear).
- Do not mount the control panel close to metal fittings or other objects which may disturb radio signal transmission.
- Do not install any damaged units (e.g. by shipping damage). If in doubt, ask your customers service or supplier. Repairs should be carried out by qualified persons or your customers service only.
- To clean the components, use a dry or moistened cloth. Do not dip the components into water.
- If the alarm system is not operated for a longer period of time, the batteries should be removed.
- Do not let children play with the components, and keep pets off the devices. Make sure that children do not take individual parts into their mouth.
- Please read the battery safety notes carefully (see section 15.4).



Do not dispose of packaging material, used batteries or products as household waste. Please use your recycling system. Details are available from your local authority.

5. Declaration of Conformity

Indexa GmbH declares the Wirefree Burglar Alarm SYSTEM 1000 complies with the standards of 1999/5/EG.



6. How the System Works

The keyfob sends an RF signal which activates or deactivates the siren. In the armed state, when a PIR senses a movement in its detection path, it sends an RF signal to the siren to activate. The siren then sounds for two minutes, and the system is in the armed state again. The system may be deactivated at any time with the keyfob. Always deactivate the system before entering your property.

A delay of 10 seconds enables you to activate or deactivate the system inside your property.

7. Planning your System

Before installing the components, you should plan their positions and check the function of the components in these positions.

Fig. 2 shows an example:

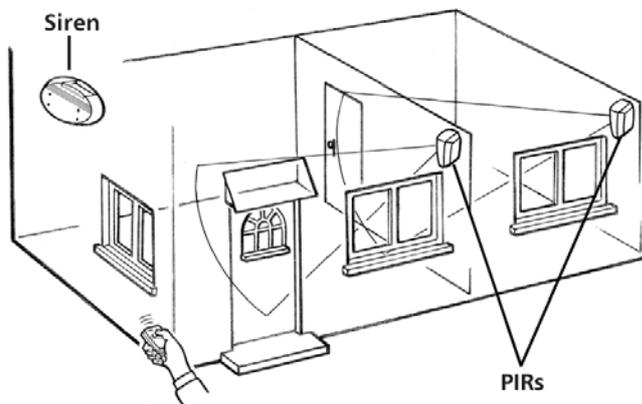


fig. 2

Important points to consider:

- Do not mount the siren close to metal fittings such as metal downpipes or satellite dishes which may affect radio signal transmission.
- The siren should be mounted at an outer wall, preferably in south direction, as this is where the solar cells work best. Otherwise it can be mounted in east or west direction. North direction will work too, but in this case the batteries will be used more. The solar cells also provide power when the sky is cloudy. However, you should make sure that the solar cells are not placed in the shade of trees, walls or roofs. Remember that the sun is in a lower position in the winter than in the summer.
- An anti-tamper switch protects the siren against tampering. However, you should install the siren as high as possible to make tampering more difficult.
- The siren is for outdoor use, but it should be protected from direct rain.
- The siren should be installed at a place where it can reach the radio signals transmitted by the keyfob. You should also be able to hear the bleeping sounds of the siren.
- Your property is monitored by PIR sensors located indoors. High security is not necessarily achieved by a great number of sensors, but by reasonably installing them in key positions. Choose areas that will probably be entered by a burglar, such as corridors, staircases or entrances.
- The PIRs must be fitted in radio range of the siren. The outdoor range is up to maximum 30m. This range is reduced by walls and ceilings (especially reinforced concrete) as well as other sources of interference, e.g. radio transmission from other devices in the frequency range of 433MHz such as radio headsets. As such disturbances may change within a longer period of time, we recommend that you install the PIRs within the maximum radio range. Whenever possible, locate the sensors as close to the siren as you can.
- The PIRs react to warm moving bodies, e.g. a person's movement within their detection range (up to approx. 8m at 90° and a height of approx. 2,3m; see fig.3).
- A room can best be monitored, if the PIR is located in one of the corners.
- As the PIR reacts to warmth, it should not be positioned near a heat source such as radiators, air conditioning, windows, stoves, fax machines or in draughty areas.

- Pets may also trigger an alarm. When the system is armed, keep pets out of areas protected by PIR sensors. If this is not possible, install the PIR upside down so that there is an area beneath the rays left for the pet. In this case it is necessary to check the detection range especially thoroughly.
- How quick a movement is detected depends also on the ambient temperature. A movement can be detected more quickly in a cold environment.
- Movements that are at right angles to the PIR are detected more quickly than movements towards the PIR. Install the PIRs in positions where a burglar would pass the PIR at right angles.

Detection range of the PIR (from the side, from above)

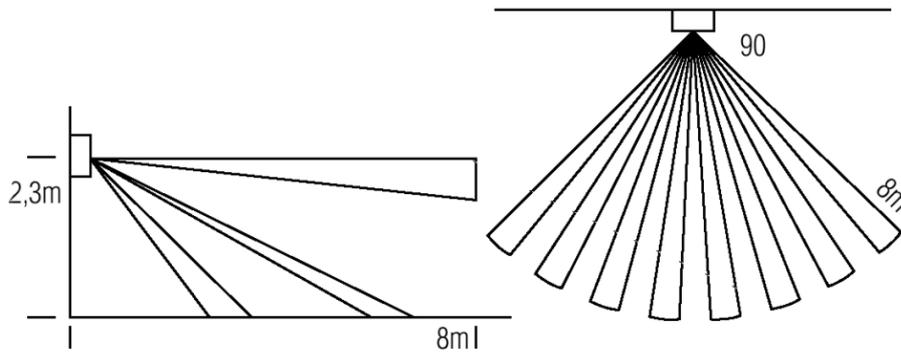


fig. 3

8. Accessories

The kit contains two PIRs and a wirefree remote keyfob. The system can easily be expanded by adding additional PIRs. Additional keyfobs are also available. You can protect doors and windows with the door contacts available as accessories. Accessory components must be adjusted to the codes of the original system before use. This system will not work with wirefree accessories from other wirefree alarm systems (see section 19 and 21).

9. Coding

For your security, each system is factory preset to an individual code. On the keyfob and PIRs are labels with a row of numbers comprising of "0" and "1". It is important that all the components have the same identical row of numbers. This number is called the house code.

Please note your house code here:

--	--	--	--	--	--	--	--	--	--

Should you wish to expand your alarm system, you need this house code. If the numbers on the components are not identical, please ask your supplier.

10. Fitting the Batteries

⚠ We recommend you to use good quality alkaline batteries (e.g. Duracell).

10.1. Keyfob

The keyfob is supplied with a 12V battery. Lightly loosen the screw at the back side of the casing, and pull out the transit battery protective tab. Retighten the screw.

Press either the "ON" or "OFF" button to check that the LED lights. If the LED does not light, the battery may need replacing.

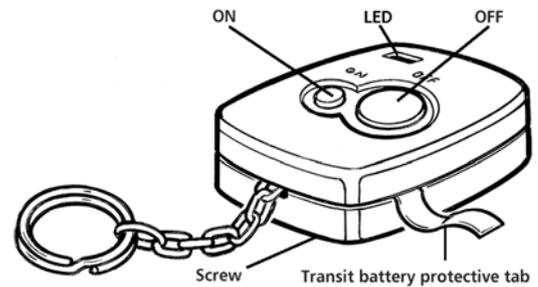


fig. 4

10.2 Siren

Remove the cover by releasing the six screws (see fig. 5). Switch the Power On/Off switch to the OFF position. Check that the anti-tamper jump link covers both pins. (Factory set to cover both pins: anti-tamper circuit disabled.)

Insert six D-cell alkaline batteries (type LR 20 or MN 1300) in the compartments so they face the same direction and have the same polarity.

Now the siren must learn the house code from the keyfob. Turn the Power On/Off switch on the keyfob to ON. The LED illuminates for 20 seconds, signalling the self-learn period.

Press the Power On/Off button on the keyfob within the 20 seconds. Two beeps are heard, and the LED goes out to confirm that the siren has learned the house code.

The siren can be operated with six or three batteries. If you use only three batteries, their operational life is reduced accordingly. The batteries must be located in matched terminals, i.e. AAA or BBB.

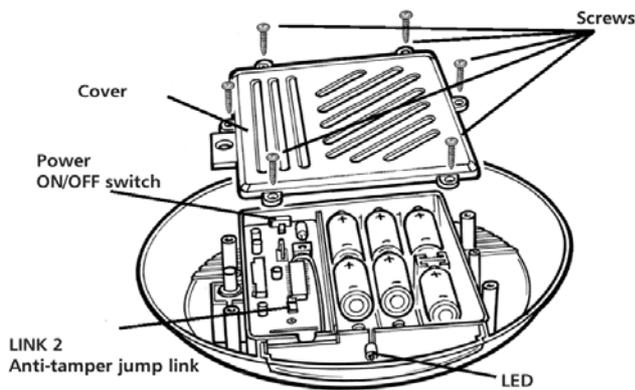


fig. 5

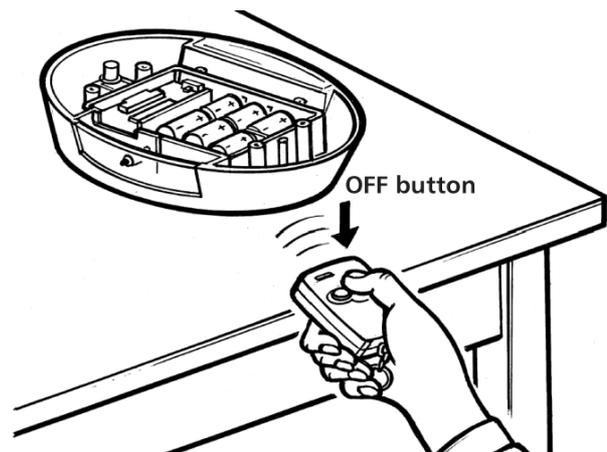


fig. 6

10.3 PIR Sensors

Remove the screw to release the back casing. Place a 9V alkaline battery in the connector. Make sure that both links are covered, so the PIR is in the test mode.

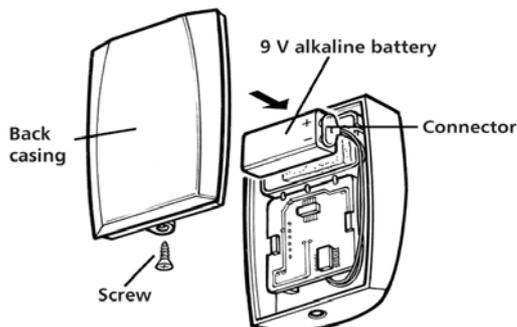


fig. 7

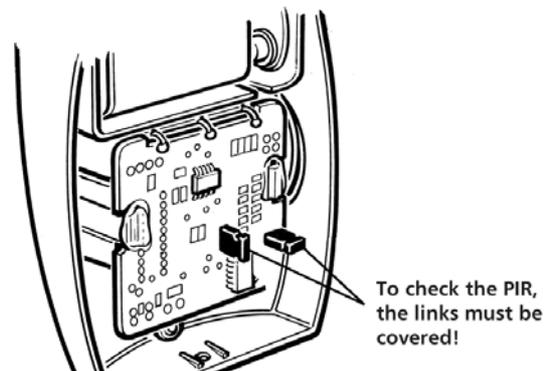


fig. 8

11. Checking the Components

11.1 Keyfob

To arm the siren, press the ON button on the keyfob once. The siren emits a bleep, and the LED flashes once. If the siren does not react, keep a minimum distance of 1m to the keyfob and press the ON button once more.

To disarm the siren, press the OFF button on the keyfob. The siren beeps twice, and the LED flashes.

11.2 Panic Alarm

The system has a panic alarm facility. Hold the keyfob ON or OFF button down for at least 3 seconds. The siren will sound for 15 seconds. After this, the siren stops automatically. The siren cannot be silenced with the keyfob if the panic alarm is activated.

WARNING: The siren is loud. Take precautions to prevent damage to your hearing.

11.3 PIR Sensors

First check the radio link to the siren. Place a PIR sensor on a table or on the floor, and wave a hand in front of the lens. The LED behind the lens will flash (if the LED and the power saver jump link are still covered). The LED on the bottom of the siren should also flash once.

Check that the PIR sensors activate the alarm. To arm the siren, press the ON button on the keyfob. The siren emits a bleep, and the LED flashes once. After 10 seconds the siren emits a second bleep. Now the system is armed! Repeat the test with the PIR sensor, the siren should trigger an alarm after 10 seconds. To silence and to disarm the siren, press the OFF button on the keyfob. The siren beeps five times, and the LED flashes once.

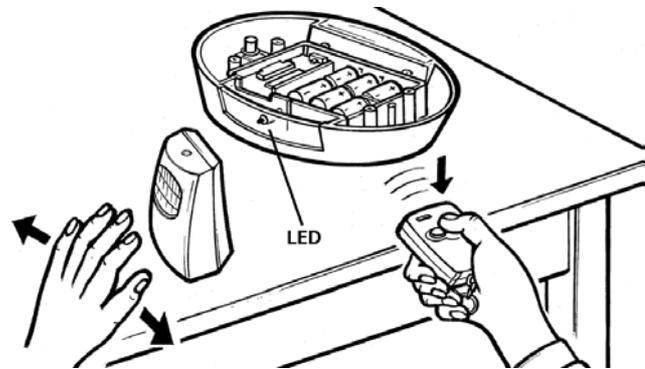


fig. 9

12. Installation

12.1 Checking the Function of the System at the Place of Installation

Before installing the PIRs and the siren, repeat the steps described in section 11.3 with the components in the positions where you want to install them (see "Planning your System"). Hold the components provisionally in the intended positions, and check the detection range of the PIRs and the radio link to the siren. If necessary, change the locations. If the system operates correctly, you can continue with the installation.

12.2 Setting the PIR Sensors to Operating Mode

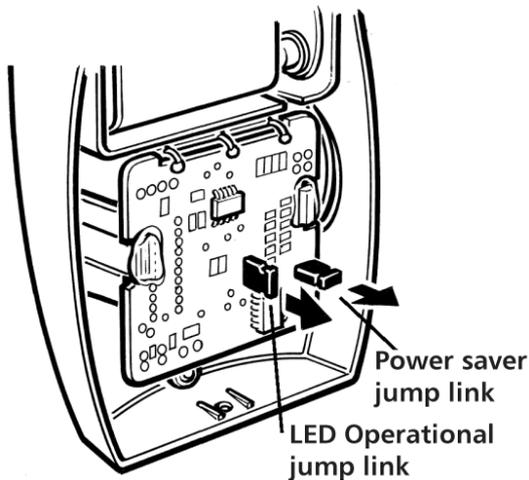


fig. 10

If you leave the LED operational jump link fitted (it connects both pins), the LED behind the lens flashes when the PIR sensor detects a warm moving body. This is only important when you are installing the PIR. It helps you to test the detection range at the place of installation. If you are content with the installation, you should remove the LED operational jump link and store it by replacing it on one of the pins. Now the LED does not flash, and battery power is saved.

When operating the system, you should also move the power saver jump link from covering both pins, to covering only one pin. The PIR will send a signal to the siren when it is triggered, whether the system is armed or not. Removing the power saver link provides an off-period of approx. five minutes between two radio signals to save battery power. If you want to test your system, you have to wait five minutes to avoid the effects of the off-period.

- ⚠ After having installed and checked the PIR sensors, you should remove both power saving links in the PIR sensor. Otherwise the batteries will be discharged too quickly.

12.3 Installation of the PIR sensors



fig. 11

The PIRs can be fixed to the wall with self-adhesive pads supplied or with screws. Ensure that the casing screw is at the bottom. If screwing to a flat wall, use the two predetermined breaking points at the top and the bottom of the back casing. If screwing to a corner, use the two predetermined breaking points on the right and on the left of the back casing.

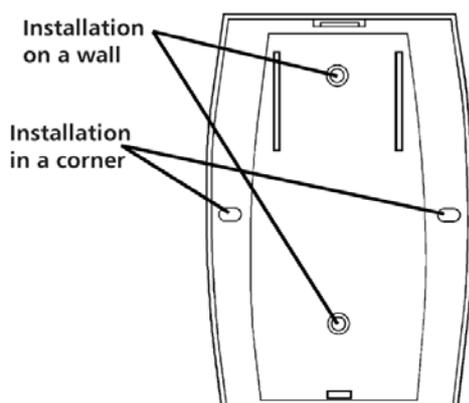


fig. 12

Break through the holes, and use the back casing as a template to mark the position for the fixing holes. Warning: Before drilling, make sure that there are no electric cables hidden in the wall. Drill the holes and use the masonry plugs and screws supplied to fix the back casing to the wall. Clip the PIR to the back casing and secure it with the casing screw. When using self-adhesive pads, stick them to the back side of the casing and press the PIRs firmly to the mounting surface.

12.4 Setting the Siren to Operating Mode

The anti-tamper jump link is factory set in disable mode with the jump link covering both pins. If the siren is installed to an even surface, the anti-tamper spring jump link is pressed down. If the siren is forced from its mounting, the anti-tamper switch will trigger an alarm. If you want to enable the anti-tamper jump link, make sure the switch stays pressed when the siren is installed (check when the siren is mounted to uneven surfaces). Remove the link from both pins and replace it covering one pin.

With the battery fitted, the siren will sound. Press the OFF button on the keyfob to silence the alarm. The LED lights and the siren bleeps five times. Now fix the cover using the six screws supplied. Do not press the anti-tamper spring down otherwise it will reset the alarm to activate. If this happens, press the OFF button on the keyfob.

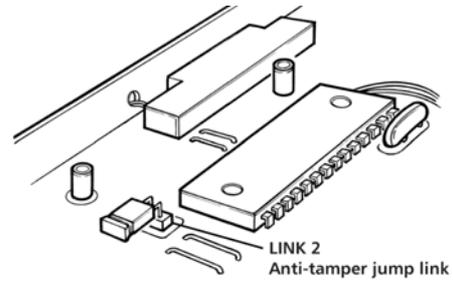


fig. 13

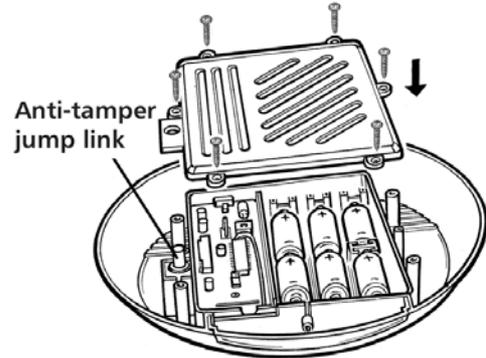


fig. 14

12.5 Installing the Siren

Use the template supplied (section 22), and mark the positions for the four fixing holes. Check by the template that the anti-tamper spring will not be positioned over a hollow in the mounting surface. If it does, change the fixing location or disable the anti-tamper switch by covering both pins with the link.

Drill the four holes to a depth of 25mm and insert the masonry plugs. **Warning:** Before drilling make sure that there are no electric cables hidden in the wall. Drop the four fixing screws supplied through the holes in the siren and keep them in place with tape before you climb the ladder. (This will help you find the location of the fixing holes).

With the LED at the bottom, align the siren with the drilled holes and secure it to the wall with the four fixing screws. Fit the weatherproof caps over the screw holes.

WARNING: If the anti-tamper switch is enabled, do not lift the siren off the mounting surface, otherwise the siren will sound.

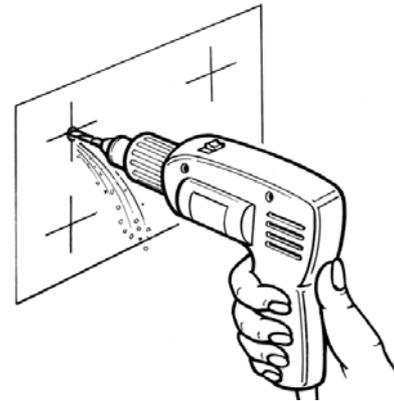


fig. 15

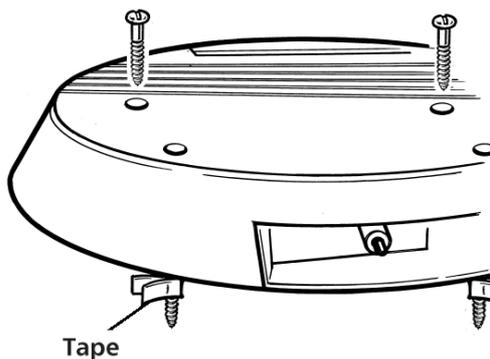


fig. 16



fig. 17

13. System Operation

Action	Command	Confirmation
To arm	Keyfob: Press the ON button	Siren bleeps once, LED flashes once. Further bleep after 10 seconds.
Panic alarm	Keyfob: Hold down the ON or OFF button for 3 seconds	Siren sounds for 15 seconds
To disarm	Keyfob: Press the OFF button	Siren bleeps twice (1), LED flashes once

(1) If the siren bleeps five times when disarmed, this is to warn you that an alarm has been triggered during your absence.

Siren Tones

Tone	Meaning
One bleep	Armed
Two bleeps	Disarmed
Two loud bleeps	House code accepted
Five bleeps	Disarmed, siren has been triggered
Full siren	Siren sounds for 2 minutes (for 15 seconds in the case of tampering), and then resets automatically.

14. Anti-Jamming

The System is fitted with an anti-jamming circuit. If it receives an unwanted radio signal for more than 30 seconds, it will trigger the siren for 15 seconds and then revert back to the previous status. The anti-jamming circuit is factory set in disable mode. If you wish to enable the anti-jamming circuit, cover both pins of LINK 1 (factory set, the link covers only one pin). If the anti-jamming circuit often triggers an alarm, you probably live in an area with strong radio interferences. In this case you should disable the anti-jamming circuit by removing LINK 1 and replace it by covering only one pin.

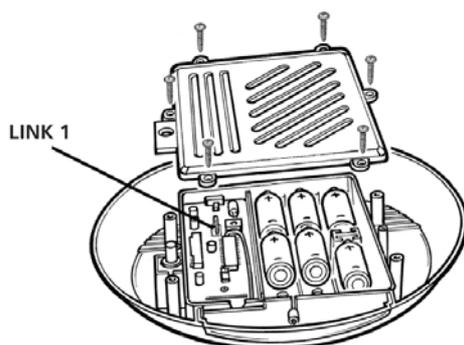
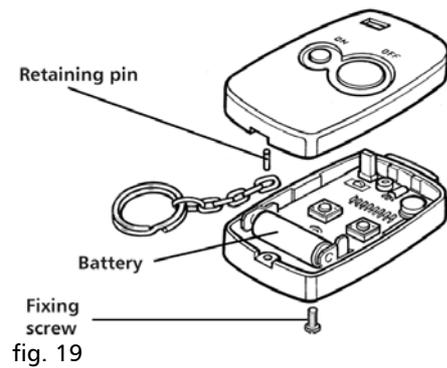


fig. 18

15. Changing the Batteries

15.1 Keyfob



When the LED on the keyfob does not light when you press the ON/OFF buttons, the battery may need replacing. Remove the fixing screw and separate the casing. Ensure the replacement battery (12V, type 23 A) is correctly fitted (check for polarity), and replace the case. Take care not to lose the chain retaining pin.

15.2 PIR Sensors

If a red LED flashes behind the lens, the batteries need replacing. We recommend that you check the batteries every six months and, if necessary, replace them (9V alkaline batteries). Note: Make sure that the two links inside the PIRs cover only one pin (see section 12.2).

15.3 Siren

When the siren is operated normally, the LED flashes after each command. If the LED does not flash, the batteries need to be replaced. The operational life of the batteries in the siren depends on the type of the batteries, their use and the light conditions for the solar cells. Replace the batteries by six alkaline mono cells of good quality.

15.4 Battery Safety Notes

- Use only alkaline batteries of good quality. Do not use rechargeable batteries because of their self-discharge.
- Never insert old and new batteries together. (Always replace all batteries at the same time.)
- Use only batteries of the same type.
- Check that the batteries are correctly fitted regarding their polarity.
- Always remove old or used batteries from the components.
- Opening or burning batteries is highly dangerous.
- Never let children play with batteries. Swallowing batteries can lead to serious health problems.
- Do not short the battery poles.

16. Troubleshooting

Problem	Solution
Alarm sounds for no apparent reason.	<ul style="list-style-type: none"> - Check that the batteries in the PIRs and the door contact are correctly fitted and tightly connected. ⚠ When the batteries are almost empty, the following may occur: If you are at home and the PIR sensor detects your movements, the system will become armed and the siren will sound. This happens even though you have not armed the system. - If this happens, replace the batteries in the PIR sensors. Check that the links have been removed (see section 12.2). - The anti-tamper switch on the siren may be not fully depressed. Place something underneath the switch, reposition the siren or disable the anti-tamper spring (see section 12.4). - The anti-jamming circuit reacts to radio interferences. Remove LINK 1 (see section 14).
The siren does not react to commands transmitted by the keyfob.	<ul style="list-style-type: none"> - Check or change the keyfob battery. - The distance between keyfob and siren is either too short or too long.
The siren does not trigger an alarm.	<ul style="list-style-type: none"> - Check arming by pressing the ON button. - Consider that the PIRs have an off-period of 5 minutes. Enter the detection range after 5 minutes. - Consider the delay when entering or leaving your property. - Check or change the batteries in the siren. - Check or change the batteries in the keyfob. - The distance between the PIR or the keyfob and the siren is too long. Shorten the distance. - The radio link is disturbed.

17. Maintenance

We recommend that you check the batteries in the PIRs every six months and, if necessary, replace them. The batteries can be checked by arming the system and triggering the sensor (remember the off-period of the PIR). The siren should sound.

If the siren does not react or the siren tones are too faint, the batteries in the siren need replacing. We recommend that you check the batteries in the siren every year.

The casing can be cleaned with a dry or moistened cloth. We recommend that you clean the cover of the solar panel in the siren at least once a year.

18. Specifications

Siren 1000 ZS

Operating voltage:	4.5V DC
Power supply:	solar cells (max. 5V) and 6 alkaline mono batteries 1.5V
Note:	The system can also be operated with 3 mono batteries. With 3 batteries, the operational life is reduced accordingly.
Operational life of batteries:	max. 2 years, depending on battery quality, use and light conditions
Mounting place:	On an outer wall with the solar cells facing the sun. The siren should be protected from direct rain.
Wirefree receiver:	433.92 MHz
Coding:	self-learning code (10-digit)
LED display:	to confirm commands
Siren:	105 dB(A)
Duration of alarm sound:	max. 2 minutes; 15 seconds in case of tampering or jamming
Entry/exit delay:	approx. 10 seconds
Anti-jamming circuit:	The siren is triggered if the system receives an unwanted radio signal for more than 30 seconds (can be enabled with LINK 1).

Anti-tamper switch: Activates the siren if it is forced from its mounting (can be enabled with LINK 2).
 Operating temperature: -20°C to +40°C (typical)

Wirefree PIR sensor 1000 P

Sensor: passive infrared
 Angular coverage: approx. 90°
 Detection range: approx. 8m (mounting height of approx. 2.3m recommended)
 Transmitter frequency: 433.92 MHz
 Range: max. 30m (outdoors)
 Coding: 10-digit code (wire links)
 Operating voltage: 9 V DC
 Battery: 9 V alkaline
 Display: LED (can be disabled by removing the jump link)
 Power saving: off-period of 5 minutes between signals (can be enabled with power saver jump link)
 Operating temperature: 0°C to 40°C
 Use: indoors

Wirefree keyfob1000 R

Transmitter frequency: 433.92 MHz
 Range: max. 30m (outdoors)
 Coding: 10-digit code (wire links)
 Operating voltage: 12 V DC
 Battery: type 23A, 12 V
 Display: LED
 Operating temperature: -10°C to +50°C

19. Accessories

The system can be expanded with the addition of the following accessories:

- wirefree keyfob 1000 R
- wirefree PIR sensor 1000 P
- wirefree door contact 1000 M (see section 21)

To convert the code into your house code, remove the wire links in the accessory components. Instructions are supplied with the components.

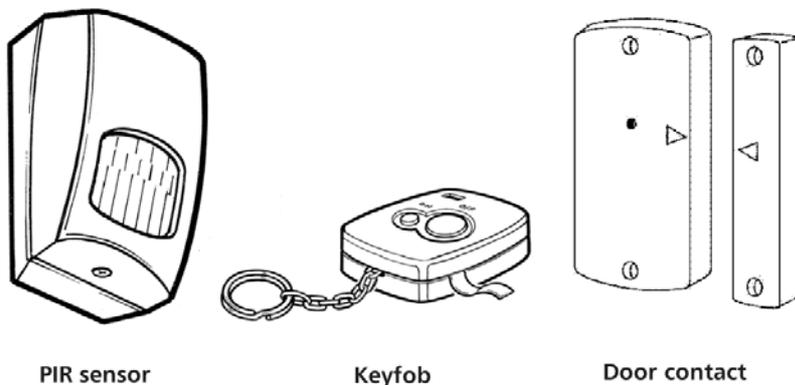


fig. 20

20. Guarantee Conditions

The following conditions that describe preconditions and extent of our guarantee leave the dealer's warranties according to the purchase contract untouched.

Before sending a product back or handing it to your dealer, please contact our helpline to discuss the problem in advance. Maybe your problem can be solved by phone.

We offer the following guarantee to the first purchaser of this product:

- According to the following conditions (No. 2-7), we will repair any damage caused to the product due to faulty workmanship, if it was reported to us immediately after noticing and within 24 months from delivery. This guarantee does not apply to minor differences from standard quality that are irrelevant for value and performance capability of the product and to damage resulting from chemical or electrochemical effects of water or abnormal environmental conditions.
- We will repair free of charge faulty parts or, at our discretion, exchange them for faultless parts. Exchanged parts will become our property.
- The guarantee expires, if repairs or modifications are carried out by unauthorized persons or if our products are provided with accessories that are not suitable for them. The guarantee also expires if modifications of original parts are carried out.
- Repairs or exchanges carried out under guarantee do not extend the guarantee period and do not start a new guarantee period. The guarantee period for spare parts ends with the guarantee period for the complete product.
- The guarantee is always limited to the customary price of the product.
- Further claims, especially claims for damages that occur to persons or things other than the product are excluded, as long as no liability is ordered by law. No compensation can be claimed in the case of burglary or failure of the product.
- Please send the faulty product free of domicile. Shipments that are not free of domicile will not be accepted. Repairs can only be carried out if an explicit description of the faults is supplied. Please send in only complete systems that are well packaged.

NOTE: An alarm system can only be seen as a supplement to mechanical security measures. It is no substitute for your duties of care and for sufficient insurance cover.

21. Appendix: Wirefree Door-Contact 1000 M (optional)

The optional door contact can be used to secure single doors or windows. The door contact contains a reed contact that is closed by a magnet on the opposite side. If the magnet is removed, the contact opens, and an alarm signal is transmitted to the siren.

21.1. Coding

When you receive the door contact, it is not factory preset to any special code. Please follow the instructions on the packaging of the door contact 1000 M to adjust the code to your system.

21.2 Fitting the Battery

The door contact is supplied with a battery. To operate the door contact, slowly pull out the protective tab. (If this is difficult, loosen the screws at the back of the casing, and retighten them after pulling out the protective tab.)

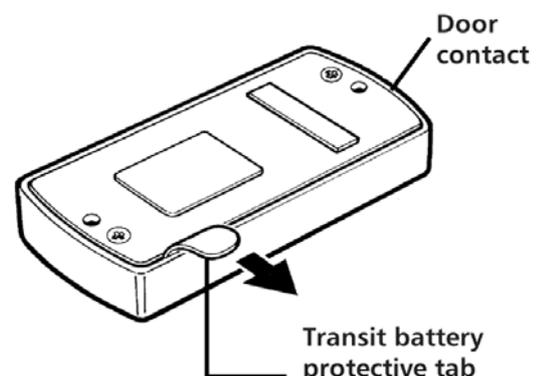


fig. 21

21.3 Checking the Function

Place the door contact and the magnet so that the arrows are facing towards each other. Arm the system by pressing the ON button on the keyfob. The siren bleeps once, and the LED flashes. After ten seconds, the siren bleeps once again. Now the system is armed. Pull the magnet away from the door contact. The LED is green, and the siren should trigger an alarm after an entry delay of ten seconds. If the siren does not sound, check the battery and the code. To silence the alarm and to disarm the system, press the OFF button on the keyfob. Before installing the door contact, also check the function in the position where you want to install it.

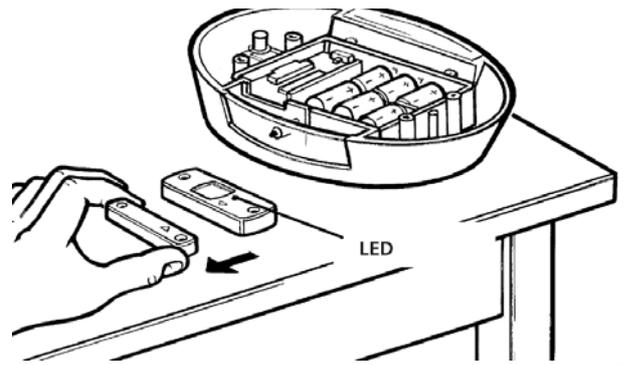


fig. 22

21.4 Installation

The magnet is fixed to the door or window and the door contact to the door- or window frame (or vice versa; this does not affect the function of the door contact). The parts can be installed on the right or left side of a door or window; this does not affect the function either.

Advice: Installing the door contact on the bottom side of a window allows you to open the window at the top without an alarm being triggered.

The two arrows can help you to bring the magnet and the door contact into line. The distance between magnet and door contact should not exceed 5 mm.

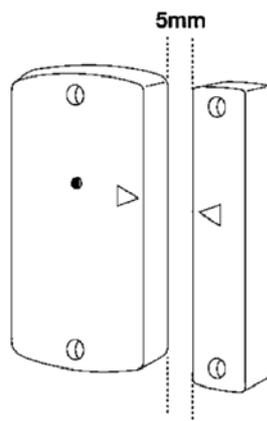


fig. 23

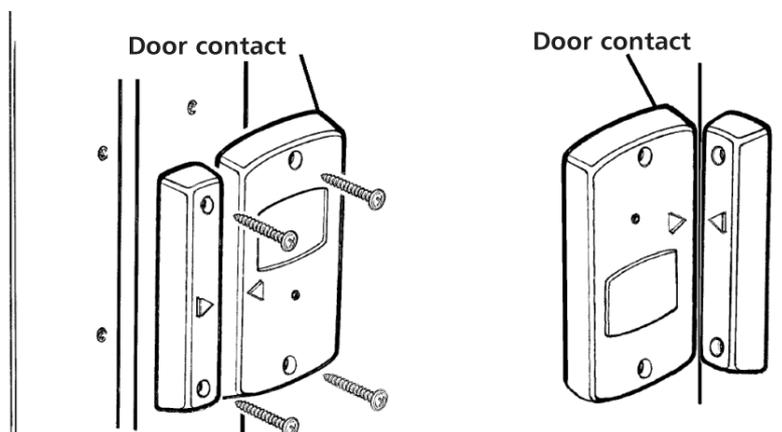


fig. 24

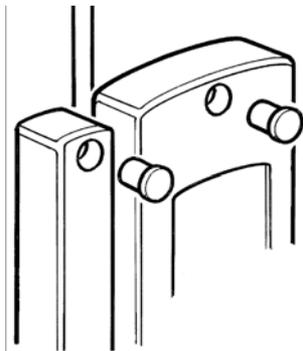


fig. 25

The parts should be arranged according to the kind of frame they are fixed on (see fig. 24 and 25). The parts can be fixed to the wall with the self-adhesive pads supplied or with screws. When installing the door contact to a window, pay attention to the length of the screws. Then fit the four caps over the screw holes.

21.5 Changing the Battery

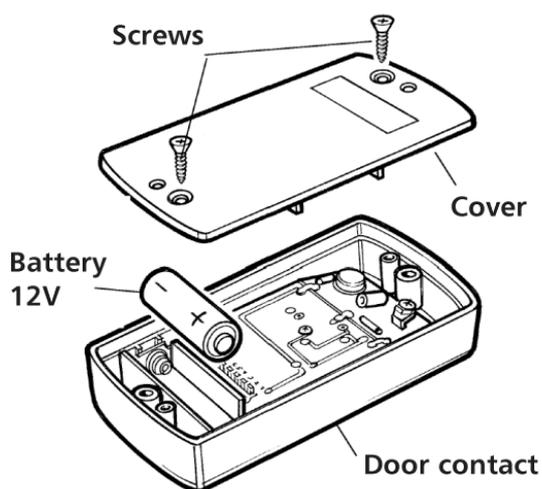
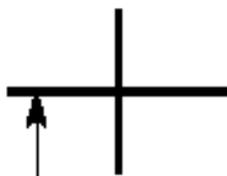
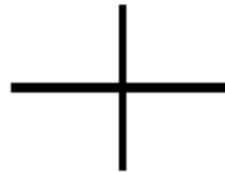


fig. 26

If the LED on the door contact flashes red when the door contact is opened, the battery needs to be replaced. Remove the two screws and separate the casing. Insert a new battery (12 V, type 23A), and replace the casing.



position of the
anti-tamper spring



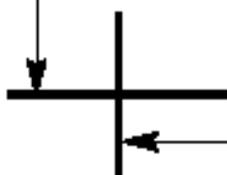
22. Drilling Template

- Hold the template to the mounting position, and check that it is horizontal.
- Mark the positions for the fixing holes.
- Remember that the casing of the siren is bigger than the template!
- The anti-tamper spring must be positioned on the same level as the back of the casing, otherwise the siren will sound.

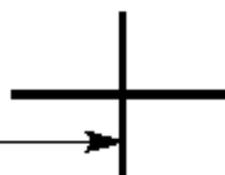
WARNING:

If the anti-tamper switch is enabled, do not take the siren off the wall after the anti-tamper spring is depressed. If the siren sounds, press the OFF button on the keyfob to silence the alarm.

180 mm



78mm



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