

Use instruction EasyAlarm WRL HOME®

Wireless sensors



Wired components

Motion detector



DIN I/O Module



Siren- or remote switch



Alarm



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1. CAPABILITY CHARACTERISTICS

Dear customer

Warmly wish good luck. You made a good choice. **EasyAlarm®** is a universally useable alarm unit with integrated ADAD (Automatic Dial and Announce Device). The most important features are listed below. Please read this instruction manual carefully before using the unit and pay attention especially to the safety notes. Thank you.

1.1 Functionality

- **EasyAlarm® monitors your house or apartment**, through the microphone (noise detection) and/or through the motion sensor. Further sensors like smoke detector; door-contact can be easily integrated.
- **EasyAlarm® calls automatically**, as soon as a sensor is triggered. Up to nine calling numbers can be programmed. These numbers will be dialled automatically until an acknowledgement of any party is received.
- **EasyAlarm® provides security**, as it calls automatically as soon as the panic button has been pressed. The called party not only receives an alarm, she or he can listen into the monitored room during the phone connection. Through the integrated loudspeaker and microphone, a hands-free communication can be established with the person seeking assistance. With this information at hand the person answering the alarm is put in a better position as for assessing the situation.
- **EasyAlarm® puts you in contact**, as a check call (by entering a Pin code) can be initiated at any time by the supervising person and a hands-free communication can be established with the person in the monitored room.
- **EasyAlarm® is very simple** due to fully voice-guided operation. You only enter the telephone number(s) of your alarm disposition.
- **EasyAlarm® is remote programmable**, the alarm numbers and the alarm sequence are re-programmable over the phone by an authorised person.
- **EasyAlarm® is made to match** to your individual requirements. Unwanted sensors-alarm can be disabled easily.
- **EasyAlarm® can be used as remote-switch**. With the appropriate accessory for example a light or siren can be activated or deactivated during the phone connection.
 - Siren EA-SIR-RJ45-RJ45 (Siren module)
 - 230VAC-load EA-ACDC-SWI-RJ45-RJ45 (Switching module)

1.2 Type of protection

Generally there are three different kinds of protection of an object:

1. Perimeter protection, in which the areas most risky points are guarded, like main-, terrace- and basement-doors and windows on the ground floor are protected through contact sensors. - Another step is the safeguarding of preferably all entrance to the object. Not safeguarded entrances pose a security risk, as detection of motion inside the object does not take place. These kinds of safeguarding are especially recommended to the owner of pets as they could be the reason for false alarms (motion detectors).
2. Important areas are protected through motion sensors, through which a burglar is most likely to pass through, such as corridors or living rooms. In the expansion stage every room can be safeguarded on its own. This is the cheapest way of safeguarding, but can only be used if you do not move yourself inside this area if the system is armed. Another disadvantage is, that a burglar can only be detected if he is already inside the object.
3. The combination of the above mentioned safeguarding ways, which closes gaps in the perimeter protection by means of inside detectors (motion detectors). Here the trespasser will be detected either he enters the object or the latest when he is inside it. Away of safeguarding, which provides the degree of safety

In any case it is recommended to use smoke detectors. Here you should know that every electrical appliance inside the house poses a possible fire risk. Safeguarded should be with one detector per floor first of all the corridors. Just as important are such as nurseries, as well as bed- and living room, also to be equipped with at least one detector.

Fire detector save life

2. SAFETY INSTRUCTION

2.1 Approval

Declaration of Conformity

According to the R&TTE Directive 1999/5/EC of 09.March 1999

Manufacturer's Name: Leitronic AG

Manufacturer's Address: Engellostrasse 16, CH-5621 Zufikon, Switzerland

declares that the product

Product Name: EasyAlarm

Model Number: EA-8-WRL

conforms to the following product specifications:

Safety (R&TTE, Article 3.1a): EN60950: 1992+A1+A2+A3+A4

EMC (R&TTE, Article 3.1b): EN 50081-1, 1992

EN 50082-1, 1997 Class B

Radio spectrum: EN 300 220

ETS 300 683

Telephone: CTR21 as specified in Council Decision 98/482/EC

Supplementary Information

The product herewith complies with the requirements of the following Directives and carries the CE marking accordingly:

the EMC directive 89/336/EEG

the Low Voltage Directive 93/68/EEC

Zufikon, 1. April 2008



Silvan Tognella

2.2 Telephone connection

EasyAlarm® is designed to connect to an analogue telephone line. This connection should remain in service after a mains power. These are:

- analogue PSTN
- analogue port of an ISDN terminal (ISDN-NT has to be reprogrammed for emergency operation at the ab-port)
- analogue port of a private exchange using UPS (Uninterruptible power supply 1h buffering)
- GSM Interface with approval, i.e. EA-GSM-Interface from Leitronic.

Not suitable:

- Voip or cable modem, as in case of power loss it is not functional!

The voltage of the telephone network is defined in EN 41003. It is higher than 40 V and therefore please beware for electrical hazard and disconnect

2.3 Wireless sensors

433.92MHz => permit according to description of wireless-sensors.

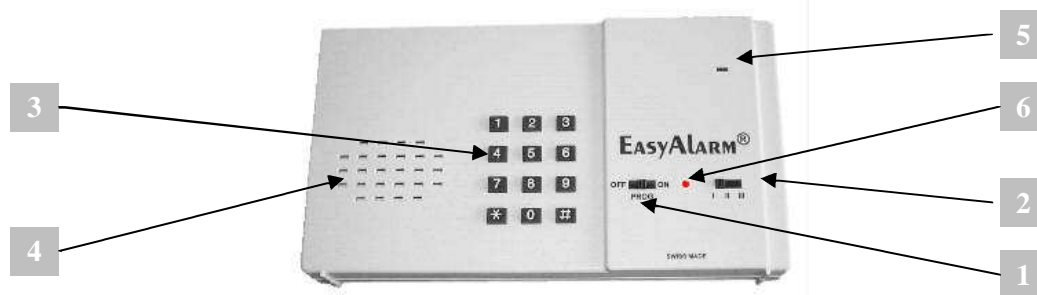
2.4 Power supply

A transformer according to the safety regulation EN60950 provides power supply, or by 9V battery. It is located on the rear side of the device.

2.5 Safety notes

- Do not bring the device into contact with water.
- Do not open the device (exception: opening the battery cover for exchange).
- Replace the 9V-battery as soon as the announcement "battery error" is announced.
 - **Please note: The telephone cord must be disconnected before opening the battery compartment because otherwise you can get in contact with the telecommunication voltage!**
- Check alarm functions and start a *test-call*, before the system is put in service.
- Check from time to time the range of the emergency button according to section 5.5.5
- In case that **EasyAlarm®** is used to monitor children, the supervising person must be in a suitable distance to take immediate care for the child. **EasyAlarm®** does not replace personal supervision!
- The same applies to handicapped persons, **EasyAlarm®** is not a substitute of a personal care taker!
- Radio transmission between the sensor and **EasyAlarm®** can be disturbed through another systems
- An alarm by telephone is only successful if the alarmed party takes care of the following points:
 - ➔ Alarm must not be answered by an answering machine or equal equipment
 - ➔ Mobile phones can be out of range (e.g. underground car park, shielded rooms, remote areas..)
 - ➔ Take care of the charging condition of the mobile phone
 - ➔ Loud noise can prevent you from hearing the ringer
- **All the electrical connections have to be potential free. Observe the regulation according to EN60950.**

3. SET VIEW / FUNCTION ELEMENTS



1 Function switch

Position	Information
OFF	Device is switched off
PROG	Programming mode: Entering of calling numbers, calling number sequence, PIN-Code ...
ON	Device is in <i>supervision mode</i>

2 Selection switch

Position	Monitoring functions in armed state (<i>Function switch</i> on position ON)
I	Part set (present) => Alarm is triggered by radio sensor other than internal type plus wired sensors Noise monitor and internal radio sensors is inactive.
II	Set (absent) => Alarm is triggered by all radio sensor plus wired sensors Noise monitor is inactive.
III	Set (absent) => Alarm is triggered by all radio sensor plus wired sensors Noise monitor is activate with highest sensitivity

Note: Emergency call / Panic / Smoke / Technical / 24h-sensors are enabled all the time, independent from the position of the function switch or arm/disarm-state.

3 Keypad

When *function switch* is on position PROG, you can enter the calling numbers or do further programming. If *function switch* is on position ON pressing any key will start a test call.

Keys are marked with **1 2 3 4 5 6 7 8 9 * 0 #** in the following sections.

4 Loudspeaker

The integrated loudspeaker is used for voice guidance during the programming as well as for hands-free communication during *phone connection*.

5 Microphone

Is used during *hands-free connection* active. Case is noise monitor switch on for the room noise monitoring.

6 LED

Status of LED	Operation mode
Green	<i>Waiting period</i>
Green brief flashing every 4 seconds, also if acoustical monitoring is active by exceed set noise level	Supervision mode activated
Green is on and off for 4 seconds alternatively	Supervision mode deactivated
Orange	<i>Phone connection</i>

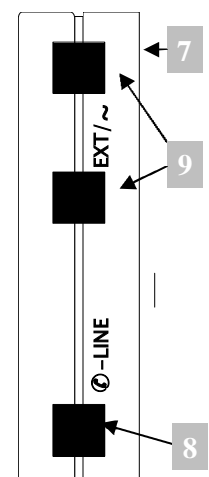
7 Battery compartment

The 9V-battery is used as a backup during power failure. **Please note: The telephone cord must be disconnected before opening the battery compartment because otherwise you can get in contact with the telecommunication voltage!**

8 Telephone jack (☎-LINE)

The plug must be locked in the jack to disconnect press pawl.

9 External ports (EXT/~) for accessories and power supply.



4. SETUP

4.1 Safety instructions

- **Function switch** must be shifted to OFF and telephone-cord must be disconnected before any wiring work is done on the AC-adapter or connecting cable.
- Adapter wire, telephone wire, motion detector wire are all potential free to 230VAC power supply, that is no need to power earth.
- The EXT/~-jack from **EasyAlarm®** can connect with sensor like motion detector and more components. Please pay attention according to section 10.

4.2 Installation

EasyAlarm® must be connected to the analogue telephone line and to the 230VAC power supply. The ideal location of the alarm-unit is in the centre of the supervised object to obtain best possible connection with the radio-sensors. Pay attention, the **EasyAlarm®** should be mounted at a high of at least 1 meter to get good radio reception. **EasyAlarm®** must not put in cabinet or drawer, because some material (especially metal shield) can weaken the radio reception.

1. Slide *function switch* to OFF
2. Insert 9V battery into compartment on rear side.
 - **Please note: The telephone cord must be disconnected before opening the battery compartment because otherwise you can get in contact with the telecommunication voltage!**
3. Connect cable of AC-adapter into one of the EXT-ports of the alarm unit and plug AC-adapter to main socket 230V

Optional wired sensors

Operation with motion detector BBT-PIR-RJ45 => Detail ↗ section 10.1

Operation with alarm contactor => Detail ↗ section 10.2

4. Place motion detector in wanted position, Connect cable to the other EXT-port of the alarm unit

Telephone connection

5. Plug enclosed telephone-cord (5) into **☎-Line-Jack** of alarm unit and connect it with the telephone network
 - ➡ **If you share line with modem/telephone please proceed according to section 9.6**

Program calling number(s) => Details according to section 5.1









6. Slide *function switch* to PROG
7. Enter * * <n> (selected calling number: Standard n = 1..9)
 - ➡ **Corresponding calling number will be announced, followed by message “to modify press star”**
8. Press * and enter calling number
9. Slide *function switch* to OFF

Select user language / record individual message ↗ Details according to section 5.3








10. Shift *function switch* to PROG
11. Enter * * #
 - ➡ **Current individual message will be announced followed by “to modify press *, to stop press #”**
12. Select language for user announcements: (facultative)
Press key **1** to **4** to select user languages: 1 for German, 2 for French, 3 for English GB, 4 for Italian
13. Press * and start speaking
14. Press # to finish recording, max. duration is 12 seconds
 - ➡ **New individual message will be announced. You can repeat steps 12 to 14 until text is fine!**
15. Shift *function switch* to OFF

Learn-in the Info/Switch-Module ↗ Details according to section 5.5.6.3

16. Plug in the Info/Switch-Module into 230V-mains socket
17. Slide *function switch* to PROG
18. Enter * * * # **1**
 - ➡ **Announcement „Zone, to modify press star“**
19. Press black button on the lower edge of the housing for at least 5 seconds until the colour of the LED changes from green to red.
20. Press key *
 - ➡ **The Info/Switch acknowledges the learn-in signal with a beep and the Status-LED expires**
21. Slide *function switch* to OFF
22. Option EA-SWI-WRL (230V-Output): Plug load into the Euro-cord

Common radio components & details according to section 5.5								
	Nova 43	Nova 4x	Key WRL	Nova 50	Nova 30	Nova 90	Nova 71	EA-CON*)
								
	Arm/Disarm			Emergency	Smoke	Motion	Contact	
Sensor function	9=Telecommand 8=Emergency (not with Key) #1=ON/OFF			7=Panic 8=Emergency #1=ON/OFF	1=Fire	3..6 = 24h / Intern / Entry/Exit / Extern 0=Remote lock (Nova 71 only) #1=ON/OFF		

*) Concentrator (combines up to 10 Nova 71-sensors to one single zone) & section 5.5.6.2

Sensor function		Siren
1	Fire ➡ Alarm in <i>hands-free connection</i>	
2	Technical detector ➡ Alarm in <i>hands-free connection</i>	
3	24h-alarm ➡ Alarm in <i>listening-in connection</i>	
4	Internal sensor (un-delayed) ➡ Alarm in <i>listening-in connection</i>	
5	Entry/Exit-sensor (delayed) ➡ Alarm in <i>listening-in connection</i>	
6	External sensor (un-delayed) ➡ Alarm in <i>listening-in connection</i>	
7	Panic alarm (un-delayed) ➡ Alarm in <i>listening-in connection</i>	✗
8	Emergency call ➡ Alarm in <i>hands-free connection</i>	
9	Telecommand (Arm / Disarm)	-
0	Remote lock (Arm / Disarm) with supervision	-
#0	Delete a wireless zone	-
#1	Activation/deactivation of 230VAC-output of the Info/Switch module	-

Zone	Sensor function	Wireless components									Location
		Nova 43	Nova 4x	Key WRL	Nova 50	Nova 90	Nova 30	Nova 71	EA-CON	Glass-break	
0		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Learn in radio-sensor => Details according to section 5.5

23. Slide *function switch* to PROG

24. Enter * * *

25. Press 0 to 9 according to desired zone (per zone can organize one sensor only)

26. Press 0 to 9 according to sensor function type (see table above)

➡ **Message „Zone n, to modify press star” announced**

27. Press * and start learn-in process according to the specified transmitter type. Details according to section 5.5.6. If you want to change proceed with step 24.

➡ **A successful learn-in will be confirmed with a beep tone. By activating the transmitter again, a loud beep tone will be generated with every transmission => range check**

28. Slide *function switch* to OFF

Program PIN-code => Details according to section 5.4

29. Slide *function switch* to PROG

30. Press key # => **You can prevent the alarm unit from unintended re-programming by pressing ***

31. Enter PIN-code (4 to 7 digits)

32. Press key # and re-enter PIN-code for confirmation

33. Press key # => **New PIN-code will be announced**

34. Slide *function switch* to OFF

Unit is now ready to use => Details according to section 6

35. Slide *selection switch* to the requested position (I/II/III) and slide *function switch* to ON

5. PROGRAMMING

Important notes:

- All the programmed parameters remain stored even EasyAlarm® is off
- You can prevent your system from unintended re-programming according to (see section 5.4.1). If the programming is locked, when the *function switch* is on position PROG. Follow by message „programming deactivated, PIN“ will be announced

5.1 How to program new calling numbers

EasyAlarm® supports nine calling numbers that can be programmed as follows:

1. Slide *function switch* to PROG
2. Enter *** * <n>** (selected calling number: Standard **n** = 1..9)
→ *Select number will be announced followed by “to modify press star”*
3. If you like to change this calling number, press *****, otherwise proceed with step 5
4. Enter new calling number. To delete an existing number enter ***** and proceed with step 5
5. Slide function switch to OFF

Notes:

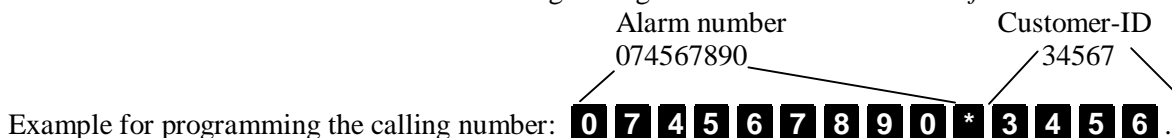
- Every keystroke will be acknowledged by a beep
- Key **#** programmes a dialling delay of 5 seconds, provided it is entered between two digits, e.g. a delay is essential in a private exchange (first digit + **#** + calling number).
- If your private exchange needs a flash pulse to start an internal call, following programming is possible:
2 # followed by the extension number.
- Key ***** is used as separator for Point-ID protocol (see section 5.1.1).
- If a programming error occurs, put *function switch* to OFF and repeat point 1 to 5.

Important notes:

- Calling number 1 cannot be deleted due to safety reasons.

5.1.1 Point-ID (Contact-ID) alarm protocol

If the alarm should be transferred to a alarm organisation using the Point-ID (Contact-ID) protocol, the alarm number has to be followed by key ***** and the customer-ID. EasyAlarm forwards the protocol to this alarm number and connects hereafter to the following calling number in standard *hands-free connection* mode



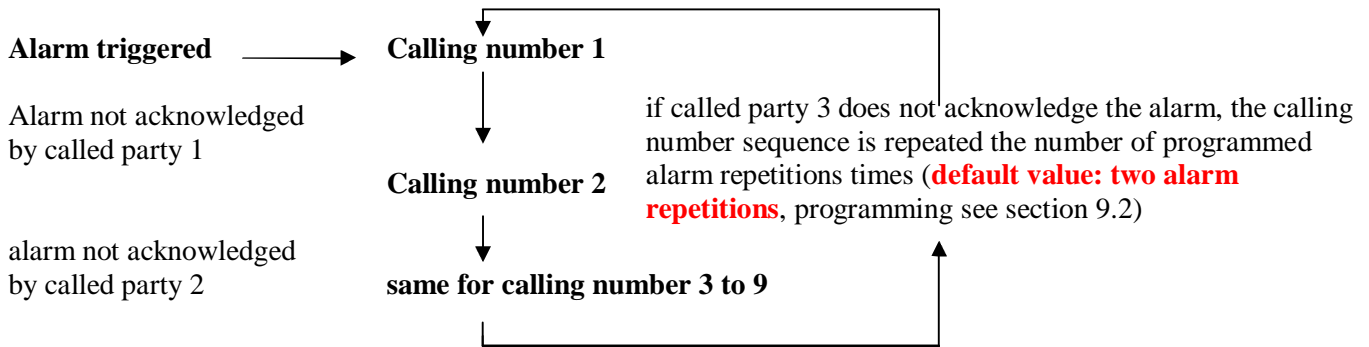
Note:

- The first character *****, that follows the alarm number will not be transmitted (=> separator). The customer ID is a four digit code. In case of an alarm the following codes are transmitted according to the **<Alarm reason>** and the **<Zone>**.

Code	<Alarm reason>	<Zone>
602	Alarm due to cyclic test	900
602	Alarm due to remote programming "***#"	900
381	Alarm due to radio supervision	Radio zone 000..009
301	Alarm due to power failure	900
384	Alarm due to low battery of a radio sensor	Radio zone 000..009
102	Alarm due to missing activity (presence verification)	Radio zone 000..009
601	Alarm due to key-press (test-call)	900
132	Alarm due to noise monitoring	900
140	Alarm due to hardware sensor 1	901
140	Alarm due to hardware sensor 2	902
140	Alarm due to hardware sensor 3	903
137	Alarm due to radio sensor tamper	Radio zone 000..009
140	Alarm due to radio sensor	Radio zone 000..009
154	Alarm due to technical detector	Radio zone 000..009
120	Alarm due to panic button	Radio zone 000..009
120	Alarm due to emergency button	Radio zone 000..009
111	Alarm due to fire sensor	Radio zone 000..009

5.2 Designation of the calling number sequence

5.2.1 Standard sequence



The alarm is acknowledged by pressing **DTMF 0** (see section 6.8.5).

5.2.2 How to program calling number sequence

1. Slide *function switch* to PROG
2. Enter *** * 0**
→ **Current calling number sequence will be announced followed by “to modify press star”**
3. To maintain the current programming, go to point 5. Otherwise enter *****
4. Enter the desired sequence (max. 9 digits)
5. Slide *function switch* to OFF

Sample for programming calling number sequence:

- a) '123' => calling number 1 will be dialled, followed by calling number 2, followed by calling number 3.
- b) '111133322' => first calling number 1 will be dialled (4 call attempts are made), followed by calling number 3 (3 call attempts are made), followed by calling number 2 (with 2 call attempts).

Notes:

- The calling number sequence is factory set to '123456789', but a general reset will NOT RESET the calling number sequence!
- In case of an un-programmed or deleted calling number, the calling number sequence will continue with the next number of the sequence.
- If a dialled number is busy and another call attempt is programmed, the *waiting period* before re-dialling is 30 sec.
- If the calling number changes within the sequence, dialling of a new number starts without delay.
- You can demand the difference alarm sequence in each selection switch (I/II/III), this typical of alarm sequence definite in (see section 9.9)

5.3 How to select user language / How to record individual message

An individual announcement can be recorded as follows:

1. Shift *function switch* to PROG
2. Enter *** * #**
→ **Current individual message will be announced followed by “to modify press *, to stop press #”**
3. Select language for user announcements: (facultative)
Press key **1** for first user language or key **2** for second user language
4. Press ***** and start speaking
5. Press **#** to finish recording, max. duration is 12 seconds
→ **New individual message will be announced**
6. Shift *function switch* to OFF

Note:

- Repeat step 3 and 5 until you are satisfied with individual message.

5.3.1 Remote recording of individual message during handsfree connection

1. Enter **DTMF * * # #**
→ **Current individual message will be announced followed by “to modify press *, to stop press #”**
2. Select language for user announcements: (facultative)
Press **DTMF 1** to **DTMF 4** according to desired user language (i.e. 1=DE/2=FR/3=GB/4=IT)
3. Start recording by sending **DTMF ***, start talking (max. 12 s) and finish by sending **DTMF #**.
→ **New individual message will be announced**
4. Wait until the message “Abort” confirms the end of the programming

Note:

- Remote recording can be enabled / disabled according to section 9.8.1.

5.4 How to program PIN-Code

You can change remote access PIN-code as follows:

1. Slide *function switch* to PROG

2. Press **#**

➔ *You can prevent the alarm unit from unintended programming by pressing *****.*

3. Enter desired PIN-code (4 to 7 digits!)

4. Press **#**

5. Re-enter PIN-code for confirmation

6. Press **#**

➔ *If PIN-code is re-entered correctly it will be announced. If you selected program locking the additional message „programming inactive: PIN“ will be announced. In case of an incorrect programming the message announced „Error“ will not be stored => old PIN-code remains active.*

7. Slide function switch to OFF

5.4.1 Lock program mode

If you initiated programming new PIN-Code with key ***** the program mode is locked unless you unlock by re-entering PIN-code. This feature prevents from unintentional reprogramming during operation.

5.4.2 Unlock program mode

Having the programming blocked as described in section 5.4.1, you can unlock as follows:

1. Slide *function switch* to PROG

➔ *Message „Programming inactive: PIN“ will be announced*

2. Enter PIN-code and press **#**

➔ *By entering correct PIN-code you will hear a confirmation beep, otherwise message „Error“*

3. Slide function switch to OFF

5.5 Programming of wireless sensors (zones)

You have to learn in all the wireless-sensor to let the alarm unit know, what sensors belongs to the system.

Each sensor has a unique address (one out of 16million codes). During the learn-in process the sensor transmits a special signal to avoid false learn-in of another sensor (like a activated motion-sensor).

The alarm unit can handle up to 10 zones. The zone number (0..9) is used to identify the location of the sensor in alarm. The order of the zone and the sensor function is individual for each alarm-system.

Notes:

- A zone can handle only one sensor, but using a concentrator you can combine up to 10 magnet-contacts (Nova 71) to one zone.
- The sensor function can program in each zone individually.

5.5.1 Detector function (defining kinds of alarm and telephone connection)

Sensor function 🔊 => Wireless siren will be activated in case of an alarm		Monitored if	Alarm delay Entry delay	Alarm connection ..	Alarm announcement:
7	Panic	Armed and disarmed	No	<i>Listening-in</i>	“Emergency call activated”
8	Emergency 🔊		Yes	<i>Hands-free</i>	“Emergency call activated”
1	Smoke 🔊		Yes	<i>Hands-free</i>	“Alarm due to fire, zone n ”
2	Technical det. 🔊		Yes	<i>Hands-free</i>	“Alarm due to technical det., zone n ”
3	24h 🔊	Armed only	No	<i>Listening-in</i>	“Alarm due to zone n ”
4	Intern ¹⁾ 🔊		No	<i>Listening-in</i>	
5	Entry/Exit ²⁾ 🔊		Yes	<i>Listening-in</i>	
6	Extern ³⁾ 🔊		No	<i>Listening-in</i>	
9	Telecommand	Arm / Disarm (Nova 43 or Key WRL)			
0	Remote lock	Arm / Disarm incl. radio supervision (Nova 71)			
#0	Delete zone	Delete a wireless zone			
#1	ON/OFF	Activation/Deactivation of 230VAC-output of the Info/Switch module			

Internal detector: 1) Internal wireless sensors (like motion sensors) that **are not monitored** if the system is part-set (selection-switch on pos. I). So you can walk through this areas if you are at home.

Entry/Exit detector: 2) Entry/Exit-sensors (f.e. door-contact on main-entrance-door) which trigger an alarm if the system is not disarmed within the entry delay period (20 seconds).

External detector: 3) Wireless sensors that protect the outer skin of the house and protect the object even if you are at home.

5.5.2 Define zones

The alarm unit can handle up to 10 zones (zone 0 to 9). Please write down the transmitter type and sensor function in the table at section 4.2 after the learn-in process, in order that later you need handle on it again.

5.5.3 Learn in transmitters

1. Slide *function switch* to PROG
2. Enter * * *
3. Press key 0 to 9 according to desired zone
4. Press key 0 to 9 according to transmitter type (to handle the kinds of alarm and telephone connection see table 5.5.1)
➔ *Message announce „Zone n, to modify press *“*
5. Press * and start learn-in process according to the specified radio component.
➔ *A successful learn-in will be confirmed with a beep tone. By activating the transmitter again, a loud beep tone will be generated as long you are within transmitting range. You can control this way by reception range and to select the best suitable location of the unit.*
6. Slide *function switch* to OFF

Important note:

- Zones with sensor function 1 (Fire) to 6 (Extern) or 0 (Remote lock) are automatically supervised for the periodical status-signal. If the periodical signal is missing for a given period (see section 9.11.1) the system announces the “missing” zone and in armed state an alarm will be triggered.

5.5.4 Delete a zone

1. Slide *function switch* to PROG
2. Enter * * *
3. Press key 0 to 9 according to the zone to be deleted
4. Press key # 0
➔ *Announcement “ zone n to modify press star”*
5. Press key *
6. Slide *function switch* to OFF

Important note:

- If the tamper contact of a telecommand key switch or remote lock (sensor function 9 and 0) is detected the appropriated zone will automatically deleted. Therefore you have to check, that the alarm-unit is switched off, if you want to change the battery. Otherwise you have to re-program it.

5.5.5 Check radio reception

You can check or optimise location of alarm unit as follows:

1. Slide *function switch* to PROG
2. Enter * * * * and press wireless button/sensor
➔ *Each time if you activate a learned-in sensor, the alarm unit announces its zone number. An unknown sensor provokes a beep. Any other signal or noise will be passed directly to the loudspeaker.*
3. Slide *function switch* to OFF

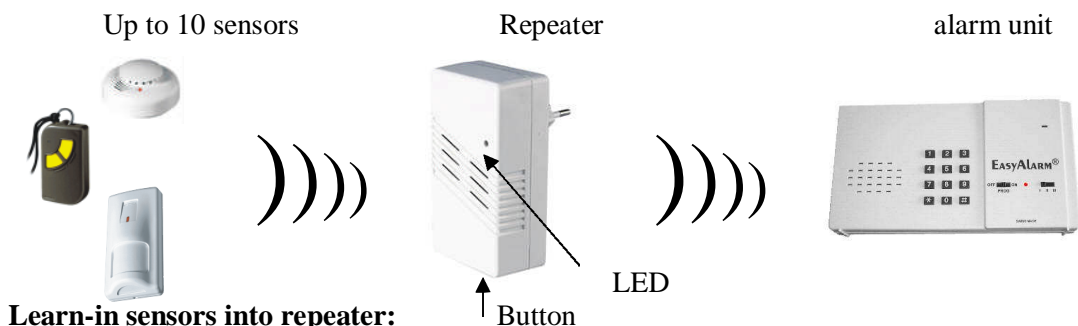
Note:

- You can optimise location of alarm unit regarding the following points:
 - a. Place alarm unit as far away from possible emitters
 - b. Do not place alarm unit near a shielding cover
 - c. Place the alarm unit in the centre of the wireless sensors, to minimize transmission range.

5.5.6 Wireless components

5.5.6.1 Repeater

The repeater can expand the range for up to ten wireless detectors .



Learn-in sensors into repeater:

1. Press button on front of the box until the colour of the LED changes into red (about 5 second)
➔ **Confirmed with one beep**
2. Proceed learning-in process according to transmitter type (timeout after 2 minutes)
➔ **One dual tone as soon as the transmitter is recognized => LED change into green (stand by)**
➔ **Two dual tones as soon as the transmitter is recognized and a prior programmed entry get overwritten. *) => LED change into green (stand by)**
➔ **3 beeps means no transmitter recognized within timeout => LED change into green (stand by)**
3. Repeat Item 1. and 2. for all emitters (max. memory 10 emitters)

Note:

*) If you try to learn-in more than 10 sensors, the “oldest” one will be replaced (first in -> first out)

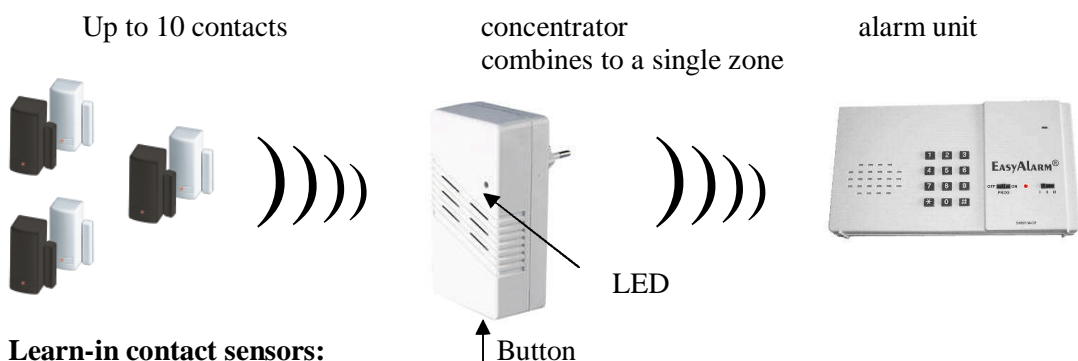
Repeater test:

1. Press button on front of the box shortly
➔ **Confirmed with one beep**
2. If success learn-in within 2 minutes will have
➔ **One beep for every detected transmission (up to 8 beeps by very good reception)**

LED indication	Status: remark
Green *)	Stand by *) blinking: Mains power loss
Red	Register process
Red blinks shortly	Received detector signal is transferred to alarm unit

5.5.6.2 Concentrator for contact sensors

The concentrator combines up to ten wireless contact sensors to a single alarm zone (e.g. instantaneous perimeter protection => type: extern). The zone will be reported as closed if all contacts are in the neutral position (LED green). If a contact is in alarm position the entire zone is deemed to be open (LED yellow). The status control (battery/supervision) of the detectors will also be concentrated, which means notification of a dysfunction occurs as soon as one detector is defective.



Learn-in contact sensors:

1. Press button on front of the box until the LED colour changes into red (about 5 second)
➔ **Confirmed with one beep**
2. According to emitter instruction guide, program within 2 minutes
➔ **One dual tone as soon as the transmitter is recognized => LED change into green (stand by)**
➔ **Two dual tones as soon as the transmitter is recognized and a prior programmed entry get overwritten. *) => LED change into green (stand by)**
➔ **3 beeps means no transmitter recognized within timeout => LED change into green (stand by)**
3. Repeat step 1. and 2. for all contacts (max. memory 10 sensors)

Notes:

*) If you try to learn-in more than 10 contacts, the “oldest” one will be replaced (first in -> first out)

Delete all contact zones (factory reset)

1. Press the button on front of unit until LED turns red (about 5 sec)
➡ **Confirmed with one beep**
2. Continue pressing button until LED changes to green (about 5sec)
➡ **Cyclic dual tone confirms factory reset**

Learn-in concentrator into alarm unit / functional test:

1. Prepare alarm unit for programming of zones according to section 4.2
Possible sensor function: 24h / intern / entry/exit / extern (with radio supervision every 65min)
2. Press button on front of the box briefly
➡ **Confirmed with one beep => concentrator sends its address code (LED blinks red briefly)**
3. Within two minutes programmed detectors are signal as follow:
➡ **One beep for every register emitter (up to 8 beeps by very good reception)**

LED indication	Comment
Green *)	Standby: all contact detectors in neutral position
Red *)	State of alarm: at least one contact detector is state of alarm or announce immediately
Red	Programming operation
Red blink shortly	Received detector signal is transferred to alarm unit

*) Blink in cycles: a malfunction occurred

- a. At least one contact sensor had send low battery status => start functional test
- b. The radio-supervision (status) of at least one sensor is missing. Due to this problem the concentrator stops sending his status report, so after a while the alarm unit will announce "sensor error, zone n"
- c. Mains power loss on concentrator => Alarm unit announces "battery error, zone n"

5.5.6.3 Info/Switch-Module

The Info-Module signals the operating status of the alarm unit on a second location (e.g. Entry/Exit range). The changes in status (Arming/Disarming/Error/Entry-Exit-period) are acoustically acknowledged with audio signals and the operating status (Disarmed/Stay/Armed) is indicated with the Status-LED. In the case of an alarm (refer symbol 📞) the integrated siren is activated during the time of the telephone-connection. With the Info/Switch-Module a 230V-output can be activated from a distance during the telephone connection by **DTMF 6** or deactivated by **DTMF 4** or by ON/OFF-sensors (function type #1) => e.g. to activate floodlight.

Installation/Learn-in procedure

1. Plug in the Info/Switch-Module into 230V-mains socket
2. Slide *function switch* to PROG
3. Enter *** * * # 1**. ➡ **Announcement „Zone, to modify press star“**
4. Press black button on the lower edge of the housing for at least 5 seconds until the colour of the LED changes from green to red.
5. Press key *****
➡ **The Info/Switch acknowledges the learn-in signal with a beep and the Status-LED expires**
6. Slide *function switch* to OFF
7. Option EA-SWI-WRL (230V-Output): Plug load into the Euro-cord

Status indication during operation

Alarm unit status	Signal	Status indication LED
Disarm	1xBeep	green
Error / Warning	Multi-tone => Error announcement through alarm unit!	green flashing
Stay	1xBeep	yellow
Armed	1xBeep	red
Alarm	Siren (Time-out: 2 Minutes)	red flashing
Entry/Exit delay	Beep every second	yellow flashing

Note:

- If the Info/Switch was separate from the mains power and is again put in and/or after a mains failure the last status signal is audible and the status indicator flashes

Output (switch) during operation (only EA-SWI-WRL)

Switch status	LED indication
Inactive (open)	-
Activated (closed)	Red

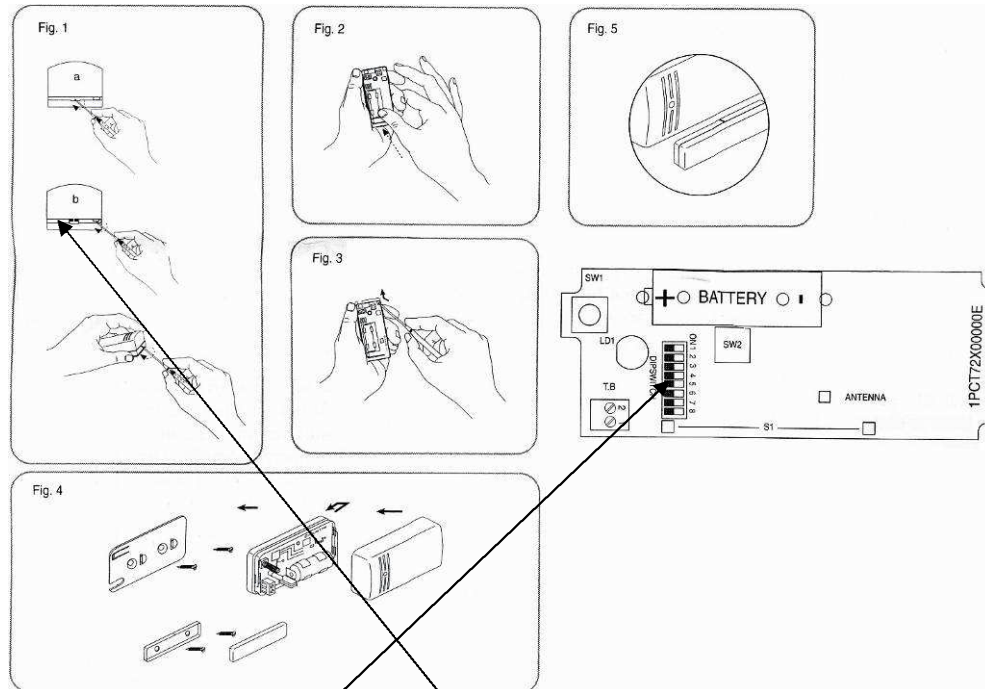
Notes:

- Output can be switch on/off during phone connection by pressing **DTMF 6/4** or by ON/OFF-sensors (function type #1)
- The switch can be toggled by pressing the button on the lower edge of the housing.
- The switch remains in his last position even after a mains-loss.



5.5.6.4 Nova 71 (Contact sensor / Remote lock)

The wireless contact transmitter can be operating on one hand directly as the status detector of the magnet, or on the other hand it is possible to connect external wired contacts to the transmitter. A combination of the two is also possible.



Assembly instruction

- Open the detector (Fig. 1) and remove the 3V-lithium battery from the plastic bag and insert it (Fig. 2), paying attention to the correct polarity
- Remove the circuit board carefully with a flat screwdriver (Fig. 3).
- Remove the base plate by pushing in/down the interlock on the left corner and removing the base plate. Tighten the base plate with the provided screw (Fig. 4).
- Slide the casing back under the base plate and put the circuit board back in.
- Set DIP-switches according to you needs (* = Default value)**

DIP	Function
1-3	No used
4	Internal reed contact (Magnet contact) ON: Disabled OFF*: Enabled
5	Determinate external contact ON: Normally Closed (NC) OFF*: Normally Open (NO)
6	Response time for external contact ON: Slow (500ms for operation with external magnets) OFF*: Fast (10 ms for operation with shock sensors)
7	Determinate HOLD-Status of transmitter ON: There will be a 2.5 min dead time between two transmission (Restore will be send immediately) => battery saving modus OFF*: Every change of state will be transmitted
8	Determinate Transmit power ON: RF low power (If transmitter is close to receiver) OFF*: RF high power



Use internal reed contact:

- Open the magnet and tighten it with provided screws parallel to the transmitter. **The magnet must be in line with the lower end of the housing, next to the DIP-switches!**
- The function led should illuminate on opening and closing of the window/door.
- The gap between magnet and transmitter must be below 35mm if window/door is closed.

Use with external contact:

- In addition or alternate to the internal reed contact you can use an external contact connected to screw terminal (i.e. external magnet, glass-breaking and vibration detectors).
- The cullet detector/glass breakage detector has a sensitivity radius of 2m. It should be mounted onto the inside of the window with a distant of at least 2 cm to the window frame.
- The vibration detector should be mounted onto the window frame.

Preparation procedure for programming:

If the detector is not open, open it by sliding a slotted screwdriver next to the LED between upper and lower shell, twist it and thus lifting the upper shell up..

The two kinds of triggering of these detectors:

- ✓ Is the detector set off, it transmits to the reception, which trigger an alarm immediately and start calling the first alarm number. This kinds of the detector is called the immediate detector (e.g. glass breakage detector or window contact (external), no entrance area)
- ✓ If the detector is triggered, it transmits to the reception, which first waits for a certain time (latency = 30 sec), in which you can deactivate the monitoring of the reception or switch to part set (position I). This kind of detector is called Entry/ Exit (e.g. contact of main door)

Learn-in procedure: Close upper shell of the contact => LED illuminates after a few seconds, If not, open upper shell again, wait 3 seconds and close upper shell.

Sensor functions: Technical, 24h, intern, Entry/ Exit, extern, remote lock (with status report every 65 minutes), ON/OFF

Important note:

- **If the tamper contact of a remote lock is detected the appropriated zone will automatically deleted. Therefore you have to check, that the alarm-unit is switched off, if you want to change the battery.**

5.5.6.5 Nova 50 (Panic / Emergency)



This transmitter is ready to be learned-in immediately.

Learn-in procedure:

Keep button pressed

Sensor functions:

Panic / Emergency / ON/OFF

5.5.6.6 Nova 43 (Telecommand: 2 Channel)



This 2-channel transmitter is ready to be programmed in immediately and can be used either as an emergency transmitter as well as a telecommand for arming or disarming. Each function has to be assigned to a different zone number. The top button, marked with a dot, is for arming the system, the lower button for disarming.

Learn-in procedure channel 1:

Keep ONE button pressed

Sensor function:

Telecommand / ON/OFF

Learn-in procedure channel 2:

Keep BOTH buttons pressed

Sensor functions:

Panic / Emergency / ON/OFF

5.5.6.7 Nova 4x (Telecommand: 2 Channel)



This 3-channel transmitter is ready to be programmed in immediately. Each function has to be assigned to a different zone number.

Learn-in procedure channel 1:

Keep key  or  pressed

Sensor functions:

Telecommand / ON/OFF


Learn-in procedure channel 2:

Keep key  pressed

Sensor functions:

Panic / Emergency / ON/OFF

Learn-in procedure channel 3:

Keep key  pressed

Sensor functions:

Panic / Emergency / ON/OFF

5.5.6.8 Key WRL (Key switch)



The telecommand lock is for arming and disarming the alarm unit. Turning the key counter clockwise disarms the system (green LED on the transmitter illuminates), turning the key clockwise arms the system (red LED illuminates) and starts the *exit delay*.

Instruction for assembly:

- The telecommand lock has an especially hard-wearing and weather-proof aluminium casing and is to be mounted on the wall near the entrance either in – or outside.
- Open the casing of key switch with the help of the provided special tool.
- Remove the two recessed head screws, which hold the circuit board inside.
- Mount the housing of the lock to a flat wall with two screws.
- Re-insert the circuit board and tighten the screws.
- Put the upper shell back onto the casing of the key switch with the help of the special tool.

Preparation procedure for programming in:

Remove the upper shell of the detector after removing the screws with the provided special tool. Install the provided 9V battery and detector on to a wall. With four screws, which are at least 45mm long. Paying attention to mounting it onto a flat surface and that the sabotage contact on the back is pressed in. put the shell back on. Bolt the upper shell with the four special screws.

Learn-in procedure: Turn the key clockwise until the red and green LED illuminate alternately

Sensor function: Telecommand

Important note:

- **If the tamper contact of a key switch is detected the appropriated zone will automatically deleted. Therefore you have to check, that the alarm-unit is switched off, if you want to change the battery.**

5.5.6.9 Nova 90 (motion detector)



Assembly instructions:

- The radio motion detector reacts to change in heat movement. It is to be mounted looking into the room at a heights of ca. 2.30m. it is best to mount in a corner.
- Open the detector and remove the screw, which hold the circuit board.
- Remove the circuit board and break away the designated parts of the lower shell.
- Mount the lower shell to a wall with the provided screws, reinsert the circuit board and then close the detector.
- An integrated LED makes it possible to conveniently check the surveillance area. You might need to move the circuit board a few millimetres up or down
- Keep in mind not to mount the detector above heat sources, such as fax machines, radiant heater or air conditioner, or across from the window. The lens of the detector is not to be covered with a curtain or other covers, as then no surveillance takes place.

Preparation procedure for programming:

If not yet open, open the detector with a screwdriver on the bottom and remove the upper- from the lower shell. Take the 3V-lithium battery from its wrapping and install it, paying attention to correct polarity.

Generally there are three ways to program this detector:

- ✓ **As internal sensor.** This sensor is not monitored if the *selection switch* is in position I. This means that you can move freely around the house without setting off an alarm. If the *selection switch* is on position II/III and the system is armed, any motion will trigger alarm.
- ✓ **As Entry/Exit sensor.** If the system is armed any motion will trigger an alarm after a waiting period (entry delay) of 20 seconds. During this period you can disarm the system with your telecommand or key switch .
- ✓ **As external sensor.** If the system is armed any motion will trigger an alarm without delay independent from the position of the *selection switch*.
- ✓ **As presence detector.** In this role the detector looks for motion within a certain time frame. Implementation of this function comes under surveillance of a person in need of care. The detector should be positioned in such a way (corridor, kitchen, bathroom) that it is triggered through activity of the person in need of care at least every 24h. If this does not happen, the radio alarm unit starts dialling the stored emergency member.



Mode jumper: **FULL SIGN: no latency period between alarm detection**
NORM: 2.5 min latency period (battery saving mode)

Learn-in procedure: Close upper shell of motion detector => LED immunities after a few seconds, if not open upper shell again and close after waiting 3 seconds.

Sensor functions: Intern, Entry/ Exit, Extern (with status report every 65 minutes)

5.5.6.10 Nova 30 (Smoke detector)



Mounting instruction:

- The radio detector is to be mounted on the ceiling in the middle of the room.
- It has a detection area of 40sqm. First remove the red protection cap.
- Turn the bottom shell of the smoke detector counter clockwise and separate it from the rest of the detector.

Preparation for programming:

Open the battery cover on the bottom of the detector.

Learn-in procedure: insert battery.

Sensor function: fire (with status report every 65 minutes)

5.5.6.11 Acoustic glass breakage detector



Mounting instruction

- The acoustic glass breakage detector is to be mounted across from glass surfaces and thus monitors large surface of glass such as winter gardens.
- The detector listens into the room and detects the typical frequencies of breaking glass. For this the pane of glass needs to have at least a size of 30x30 cm
- Keeping in mind that curtains and furniture can absorb sound and that you don't install the detector more than 5m from the glass pane.

Preparation for programming:

Open the detector and remove the 3V-lithium battery from its wrapping, install it, paying attention to correct polarity. The detector is configured from the factory in such a way that you don't have to do anything else.

Learn-in procedure: Close upper shell of motion detector => LED immunities after a few seconds, if not open upper shell again and close after waiting 3 seconds.

Sensor function: 24h (with status report every 65 minutes)

5.6 Alarm criteria's according to the position of the selection switch I/II/III

EasyAlarm® standard modern is programmed as:

- ✓ Sensor-1- alarm contact (motion detector) monitoring in all positions of the *selection switch* (I/II/III)
- ✓ Acoustical monitoring enabled on *selection switch* position III only.

EasyAlarm® acoustical monitoring sensitivity in different address it depend on the selection switch table list as follow:

Pos.	Alarm condition
III	Highest sensitivity => alarm will be triggered if the noise level exceeds 2-3 times within a short period
II	Medium sensitivity
I	Low sensitivity => alarm will be triggered if the noise level exceeds several times within a long period

Motion detector and noise monitor positions of the selection switch. This setting can be changed as follows:

A) Add up the entire individual values according to following table that your needs => Total= **n**.

Value	Explanation
1	Acoustical monitoring is disabled on position III (high sensitivity)
2	Acoustical monitoring is disabled on position II (medium sensitivity) (=factory setting)
4	Acoustical monitoring is disabled on position I (low sensitivity) (=factory setting)
8	Wired sensor 1 monitoring is disabled on position III
16	Wired sensor 1 monitoring is disabled on position II
32	Wired sensor 1 monitoring is disabled on position I

Example: Acoustical monitoring shall be disabled on position I+III and wired sensor on position II
=> **n** = 1 + 4 + 16 = 21

Selection switch on I: monitoring sensor-1

Selection switch on II: acoustical monitoring in medium sensitivity

Selection switch on III: monitoring sensor-1

B) In case you would like to have an entry-delay for the sensor-1-contact, add following values:

Value v	Explanation
0	Alarm due to sensor-1 without any delay (=factory setting)
64	Alarm due to sensor-1 is delayed (entry-delay according to section 9.3)

Example: Alarm due to sensor-1 shall be delayed => **v** = 64

C) Program the total value (**s** = **v** + **n** = 64 + 21 = 85) as follows:

1. Slide *function switch* to PROG

2. Enter *

3. Enter 2 6 8 4 <n>

(Example: 2 6 8 4 8 5)

4. Enter #

5. Enter 2 6 8 4 <n> to confirm

(Example: 2 6 8 4 8 5)

6. Enter #

➡ **Correct programming => acknowledge beep** ➡ **Incorrect programming => announcement „error“**

7. Slide *function switch* to OFF

Notes:

1. In case of incorrect programming, slide *function switch* to OFF and repeat step 1 to 7.

2. Factory setting: **s** = 6

a. The acoustical monitoring: is locked on positions I and II

b. Sensor-1 alarm contact: alarm trigger without delay on all the positions.

6. OPERATION

6.1 Self check at power on

After power on the alarm unit checks battery, mains power supply and telephone-line conditions. If one of these tests fails an appropriate message will be announced (battery error/power failure/line-check error).

Three beep: Mains power loss AND battery low at the same time!

Quickly handle the announce problem, otherwise the alarm functions are not guaranteed.

6.1.1 Auto-detection of wired sensor

EasyAlarm® detects the connected motion sensor automatically during the switching on procedure (factory setting) and corresponding supervision will be activated.

Important notes:

- By disconnecting the motion detector during operation, an alarm is triggered with the announcement: „Alarm due to sensor 1, sensor failure”!
- By connecting the motion detector during operation, an alarm is triggered with the announcement: „Alarm due to sensor 1”!

6.2 Arm / Disarm system

After power on **EasyAlarm®** automatically arms the system. During operation **EasyAlarm®** can be armed/disarmed using the remote control or during any telephone connection using DTMF 7 and 9.

➡ **Announce “supervision activated “ or “supervision deactivated”**

6.2.1 Announcement of open contact sensors

If the system is set to arm all open wireless contacts expect the ones with entry/exit functionality will be announced:

➡ **Announcement: “zone x,y,z, is open”**

After the exit period remaining wireless contacts will be announced. These zones will be auto by-passed (monitoring temporary disabled). If one of these zones returns to the closed position, the by-pass will be removed and the system starts to monitor the corresponding zone.

Note:

- The state of the contact (open/close) after power-up can be selected according to section 9.11.2. The default value is: all contacts are open! The state of any contact zone will than be auto-synchronised after the first transmission (opening/closing or status report every 65min)

6.3 Exit delay (inactive waiting period when the system change to armed state)

The system remains inactive for 20 seconds after power on, after arming or changing the position of selection switch. This period is underlined with a cyclic beep through then **Info/Switch-Module**. If you press a key of the alarm unit the following reactions will occur:

Key	Action
5	Announcement of the monitored functions (Exit delay period will be restarted)
7	Immediately EasyAlarm® changes to disarmed state
9	Immediately EasyAlarm® changes to armed state and the <i>exit delay</i> period starts again.
Others	Test-call (☎ section 6.10) will be made to the first calling number

Notes:

- The entry/exit period 20 seconds can be adjusted according to section 9.3
- If there are unacknowledged alarms, their number and the reason of the last alarm will be announced.
- Battery low of a wireless sensor will be announced: “Battery fault, Zone n”
- Missing status reports of a wireless sensor will be announced: “Sensor fault, Zone n”
- The **Info/Switch-Module** signals any fault with a multi-tone to warn the user. Quickly handle the announce problem, otherwise the alarm functions are not guaranteed.

6.3.1 Announcement of the monitored functions

The monitored functions corresponding to the position of the *selection switch* will be announced:

"Supervision I/II/III <deactivated>" followed by enabled (activated) monitoring functions:

Wireless zones with sensor function 0..7	➡ Announcement:	"due to zone n"
Acoustical monitoring	➡ Announcement:	"due to noise"
Sensor-1-monitoring	➡ Announcement:	"due to sensor 1 activated"
Sensor-2-monitoring	➡ Announcement:	"due to sensor 2 activated"

Notes:

- Zones with sensor function panic/emergency (type 7+8) and telecommand (type 9+0) will NOT be announced.
- If at power up the output is active, the corresponding announcement will be made.

6.4 Info/Switch-Module-Status indication

Alarm unit status	Signal	Status indication LED
Disarm	1xBeep	green
Error / Warning	Multi-tone => Error announcement through alarm unit!	green flashing
Stay	1xBeep	yellow
Armed	1xBeep	red
Alarm	Siren (Time-out: 2 Minutes)	red flashing
Entry/Exit delay	Beep every second	yellow flashing

6.5 Supervision mode

6.5.1 LED indication

In *active supervision mode*, the LED is flashing every 4 seconds. The LED is also lit, if the acoustical monitoring is activated and the selected noise level is reached.

LED: acoustical monitoring inactive



LED: acoustical monitoring activated



LED: inactive mode



6.6 Alarm release

6.6.1 ..independent from state of arming (armed / disarmed)

Factory set alarm cause ¹⁾	Active by			Entry delay	Alarm connection	Announce the alarm cause	Siren
	I	II	III				
Panic	✓	✓	✓	Instantaneously	<i>Listening-in</i>	“Emergency call activated”	✗
Emergency ²⁾	✓	✓	✓	Delayed	<i>Hands-free</i>	“Emergency call activated”	🔊
Smoke	✓	✓	✓	Delayed	<i>Hands free</i>	“Alarm due to fire zone n”	🔊
Technical	✓	✓	✓	Delayed	<i>Hands free</i>	“Alarm due to technical detector, zone n”	🔊
24h	✓	✓	✓	Instantaneously	<i>Listening-in</i>	“Alarm due to zone n”	🔊

1. Factory setting cause of alarm (user specific changes not mentioned)

2. An emergency call will be triggered, if the button has been activated for one second. After a pre alarm period of 20 seconds the text “emergency call activated” is announced. A pre warning announcement is used to avoid false alarms (i.e. technical error like power failure, unwanted emergency calls). During the pre warning period the alarm can be cancelled by pressing the emergency button respectively by pressing key **0** or telecommand (arm/disarm)

6.6.2 ..if system is armed only

Factory set alarm cause ¹⁾	Active by			Entry delay	Alarm connection	Announce the alarm cause	Siren
	I	II	III				
Intern	✗	✓	✓	Instantaneously	<i>Listening-in</i>	“Alarm due to zone n”	🔊
Entry/Exit	✓	✓	✓	Delay	<i>Listening-in</i>		
Extern	✓	✓	✓	Instantaneously	<i>Listening-in</i>		
Noise	✗	✗	✓	Instantaneously	<i>Listening-in</i>	“Alarm due to noise”	✗
Sensor 1 ²⁾	✓	✓	✓	Instantaneously	<i>Listening-in</i>	“Alarm due to sensor 1”	✗
Sensor 2 ³⁾	✗	✗	✗	Instantaneously	<i>Listening-in</i>	“Alarm due to sensor 2”	✗
Power failure ⁴⁾	✓	✓	✓	Delay 1 min.	<i>Hands-free</i>	“Alarm due to power failure”	✗

1. Factory setting causes of alarm (user specific changes not mentioned)

2. Sensor 1 can also be used as a presence verification sensor (see section 6.6.5)

3. Sensor 2 can be enabled according to section 10.2.3.2

4. **EasyAlarm®** monitors mains voltage and triggers an alarm if power loss is longer than 10 to 20 minutes (time-out according to section 9.4). The mains power monitoring does not start if after power up the mains power is not detected. In this case the message „power failure“ will be announced. After any mains power detection **EasyAlarm®** automatically start power monitoring.

6.6.2.1 New alarm release

After an alarm **EasyAlarm®** remains inactive during a waiting period of two minutes. Only if at expiration of this waiting period an alarm event (wired sensor or wireless contact) occurs again, a new alarm is released.

Note:

- After an alarm through sensor-1/2 or a wireless contact the sensor **MUST** return to its rest condition before a new alarm can be triggered.

6.6.3 ..due to status report check (wireless sensors 0..6)

Wireless sensors with sensor function 0..6 are sending their status (battery condition/alarm condition/tamper) every 65 minutes. If this status report is missing for more than 10 hours (due to battery low, out of range ...)

EasyAlarm® will proceed as follows:

- ➔ System is disarmed: Announcement “detector malfunction, zone **n**” every 10 minutes
- ➔ System is armed: 1 minute before an alarm is triggered there is an announcement “alarm due to detector malfunction, zone **n**”. After this period **EasyAlarm®** dials the alarm-number(s) and establishes a hands-free connection.

Notes:

- After the alarm the appropriated sensor is temporarily disabled until a new status report is detected.
- If a status report failure occurs quite often, please start a range check according to section 5.5.5.
- All wireless sensors check their battery condition => in case of low battery the **EasyAlarm®** will announce “battery fault, zone **n**” every time the systems will be armed or disarmed!

6.6.4 ..due to tamper

If the system is armed **EasyAlarm®** dials the programmed number(s) as soon the tamper of a wireless sensor is activated and establishes a *listening-in* connection

➔ **Alarm announcement:** „Alarm due to sensor sabotage, zone **n**“

Important Note:

- If the appropriated sensor is a key switch or remote lock (sensor function 9 and 0) the zone will automatically be deleted. Therefore you have to check, that the alarm-unit is switched off, if you want to change the battery of the key or remote lock. Otherwise you have to re-program it.

6.6.5 ..due to missing activity (presence verification)

If there is not motion detected within a period of 24 hours **EasyAlarm®** triggers an alarm, provided programming is set to presence verification (☞ section 9.10). Before starting the alarm there is a pre warning period of ten minutes. If activation is detected (motion detected or emergency button pressed) within this period, the alarm is cancelled; otherwise **EasyAlarm®** establishes a *hands-free connection*.

➔ **Alarm announcement:** „Emergency call due to sensor “

6.7 Alarm delay / Pre warning period / Entry delay

An alarm can be delayed due to following reasons:

- ✓ An alarm sensor in the area of the entrance must be delayed to have enough time to switch off the supervision mode before **EasyAlarm®** dials the first calling number.
- ✓ A pre warning announcement is used to avoid false alarms (i.e. technical error like power failure, unwanted emergency calls). During the pre warning period the alarm can be cancelled by pressing the emergency button respectively by pressing key **0**.

➔ **Alarm announcement:** „Alarm acknowledged“

Notes:

- The entry/exit delay 20 seconds period can be adjusted according to section 9.3
- If an alarm has been triggered by pressing the emergency button, cancellation of the alarm is only possible, if the button has been released for min. 3 seconds before pressing it again.

6.7.1 Entry delay signalling though Info/Switch-Module

This period is underlined with a cyclic beep through then **Info/Switch-Module**.

6.8 Phone connection

The colour of the indicator LED changes to orange during telephone connection.

6.8.1 Time-out

There is a timer running in the *phone connection* mode. *Phone connection* is kept up for two minutes. Ten seconds before disconnection, the called person hears the announcement “abort”. He/she can restart timer using **[DTMF 3]** at any time.

6.8.2 Announcements

At the beginning of each *phone connection* the following information will be announced: *Individual message* followed by the cause of alarm and the instruction to acknowledge alarm by pressing **[DTMF 0]**. In a *Listening-in* connection you get announcement: „to speak press 1“. This announcement is repeated every 8 seconds, until a *tone-dialling command* is entered.

Notes:

- At the beginning of any *phone connection* battery state will be checked and announced if low
- The numbers of unacknowledged alarms is announced.

6.8.3 Listening-in connection

Possible *tone-dialling commands* during the *listening-in connection*

DTMF	=> Every valid command will be signalled
0	Terminate <i>phone connection</i> and acknowledge alarm
1	Switching to hands-free mode and restart <i>connection time-out</i>
2	Repeat announcements (<i>Individual message</i> / Cause of alarm)
3	Restart <i>connection time-out</i> (2 minutes)
4	Deactivate output (i.e. switching off 230VAC load)
5	Announcement of current supervision mode as well as condition of the output
6	Activate output (i.e. switching on 230VAC load)
7	Change to <i>inactive supervision mode</i> (I, II, III)
8	Terminate <i>phone connection</i> without acknowledgment
9	Change to <i>active supervision mode</i> (I, II, III) => All monitoring functions re-activated
* * 0	Announcement of calling number sequence
* * <i>n</i>	Announcement of calling number <i>n</i> (<i>n</i> = 1..9)
Following <i>tone-dialling command</i> can be used for remote programming, provided the programming is not blocked (see section 9.8.1)	
* * #	Trigger an alarm for test reasons ➡ Cause of alarm announcement "alarm due to programming"
* * <i>n</i> * followed by the new calling number	announcement and change of calling number <i>n</i>
* * # #	Record individual message => according to section 5.3.1.

6.8.4 Hands-free connection

The commands during *hands-free connection* are identical to the commands by listening in connection, by press **[DTMF 1]**.

Important notes:

- *Hands-free connection* must be terminated using **[DTMF 0 or 8]**. Otherwise a busy tone signal appears until *phone connection* is terminated due to time-out.
- By selecting *hands-free connection* an activated siren (optionally) is automatically deactivated. If requested, the siren can be activated or deactivated by **[DTMF 6 or 4]**.

6.8.4.1 Adjustment of hands-free volume

During *hands-free connection* you can increase volume by pressing local key **#** or decrease by pressing locale key *****. Level can be adjusted in fifteen steps (1dB each) and remains stored.

6.8.5 Acknowledge alarm / Terminate connection

A called party can choose between acknowledgment by pressing **[DTMF 0]** or passing on alarm to next party in calling number sequence by pressing **[DTMF 8]**.

Important notes:

- There is no alarm repetition, if an alarm will be triggered by pressing any key of the alarm unit (test call).
- An alarm can be confirmed and terminated by pressing key **0** of the alarm unit or by pressing the wireless emergency button for a second time.
- If the alarm is programmed to a pager, the called person can confirm alarm during remote-access after dialling-in.

6.9 Alarm repetition

If an alarm has not been acknowledged by passing all the calling numbers in the sequence, a number of alarm repetitions can be programmed (see section 9.2). Factory setting: two alarm repetitions.

6.10 Test call

If alarm unit is switched to ON it is possible to start a test call as follows:

1. Select calling number by pressing key **<n>** ($n=1 \dots 9$)
➔ **Announcement:** „Calling number **<n>**“ => **If selected calling number is not programmed the message “Error” will be announced and the first calling number will be dialled instead**
2. Wait until *hands-free connection* is established and speak
3. Terminate *phone connection* by pressing **0** or slide *function switch* to OFF

Notes:

- After two minutes *phone connection* will automatically terminate if called party does not give any *tone-dialling commands* (i.e. called subscriber can disconnect using **DTMF 0** or restart timer using **DTMF 3**).
- During *inactive waiting period* after power on key **9** and **7** activate or deactivate the monitoring of the supervision. Key **5** starts the announcement of the current supervision mode (see section 6.3.1)
- The volume of *hands-free connection* can be adjusted as described in section 6.8.4.1

6.11 Dialling-in (check call)

If the alarm unit is switched to ON you can dial in from any telephone set as follows:

1. Dial phone number of the **EasyAlarm®**
2. Let it ring for two ringing cycles and disconnect (hang up)
3. Redial after 20 seconds => **EasyAlarm®** answers call after two ringing cycles and waits for the PIN-Code

After entering the correct PIN-Code **EasyAlarm®** establishes a *listening-in connection*

➔ **Announcement** „to stop press 0, to speak press 1“

If no *tone-dialling command* is entered, the *phone connection* will be terminated after two minutes *connection time-out*. The supervised person can also terminate the phone connection by pressing the emergency button.

Important: In case that there are unconfirmed alarms, the quantity as well as the last reason of the alarm will be announced! An unacknowledged alarm will be confirmed by entering **DTMF 0**!

Notes:

- The two-step dialling in procedure is for security reasons to avoid detecting of the alarm unit coincidentally by an unknown caller. Direct dialling in as well as other number of ringing cycles can be selected (see section 9.7)
- If the PIN-code is incorrect or not entered within 15 seconds, **EasyAlarm®** disconnects after the announcement „PIN error, abort“ => try again and enter correct PIN.
- PIN-code is factory set to 9797. For safety reasons we recommend changing PIN-code and program your individual code according to the manual.
- If a successful dialling-in should be signalled with five gong-signals and directly establish hand free connection, **EasyAlarm®** can be programmed according section 9.7.3.

6.12 Answering an incoming call

An incoming call, signalled by a parallel-connected phone, can be answered as follows (*Function switch* ON):

6.12.1 ..by pressing the radio - emergency button

a *hands-free connection* is established => Disconnect by pressing the emergency button once again.

6.12.2 ..by pressing any key of the alarm unit

a *hands-free connection* is established => Disconnect by pressing key **0**.

7. USEFUL NOTES

7.1 Tone-dialling command

If you want to use **EasyAlarm®** to its full potential a tone-dialling telephone is necessary. Nowadays most of the telephones in use are working on tone dialling, also called DTMF or in-band signalling. Older telephones are using pulse dialling. In case there is no tone-dialling telephone available, the features shown in section 6.8.3 cannot be used

Note:

- An acoustic coupler can be purchased in electronic shops.

7.2 User information

7.2.1 Signals (beeps)

A single beep tone is used as a confirmation.

Three beep: Mains power loss AND battery low at the same time!

7.2.2 Announcement audible in loudspeaker of EasyAlarm®

Announcement	Message / Cause
„Individual message“	First message in case of an alarm
Abort	Disconnection caused from the change of the position of the <i>selection switch</i>
Alarm acknowledged	Disconnection by pressing key 0 or emergency button
Alarm due to fire zone <i>n</i>	Alarm triggered by smoke sensor (sensor function 1) on <i>n</i>
Alarm due to sensor <i>n</i>	Alarm call due to wired sensor <i>n</i>
Alarm due to technical detector zone <i>n</i>	Alarm due to technical detector on zone <i>n</i>
Alarm due to zone <i>n</i>	Alarm due to sensor (function 3..7) on zone <i>n</i>
Battery error	Battery is low => battery test after power on (function switch from PROG to ON)
Battery error, zone <i>n</i>	Announce if a low battery of wireless sensor (zone <i>n</i>) is detected Notes: <ul style="list-style-type: none">➡ If the zone <i>n</i> is a concentrator than one of the learned-in contact sensors has a low battery status or there is a mains power loss at the concentrator itself➡ If there is a mains power loss at the repeater, than the first repeated zone would also announce low battery status.
Calling number <i>n</i>	Calling number <i>n</i> (<i>n</i> = 1..9)
Calling number sequence	Calling number sequence
Detector malfunction, zone <i>n</i>	Status report missing at zone <i>n</i>
Emergency call activated	Emergency call, initiated by emergency button
Emergency call deactivated, alarm acknowledged	Emergency call confirmed
Error	Incorrect programming => the old value remains stored
Line check error	Telephone line check after power on was negative => dial tone missing
Output activated	Output switch activated
PIN	Request to enter PIN-Codes by locked programme
Power failure	Mains power missing => Mains power is tested after switching on the unit
Programming deactivated: PIN	Request to enter PIN-Code to unlock programming
Supervision (I/II/III) <due to noise/sensor <i>n</i> > activated	Announcement of the monitored alarm functions at current position of the <i>selection switch</i> (I/II/III) triggered by pressing key 5 during the <i>inactive waiting period</i> (☞ section 6.3.1)
Supervision (I/II/III) activated	Announcement in active supervision mode at current position of the <i>selection switch</i> (I/II/III)
Supervision (I/II/III) deactivated	Announcement deactivated supervision mode at current position of the <i>selection switch</i> (I/II/III)
Supervision due to sensor activated	Presence verification activated (wired sensor 1)
to modify press *, to stop press #	Recording of <i>individual message</i>
Unacknowledged alarms: <i>n</i>	Quantity of unacknowledged alarms
Zone x, y, z, is open	The monitor zone stay in active supervision open

7.2.3 Announcements audible in the handset of called subscriber

as well as during *hands-free connection* in loudspeaker of **EasyAlarm®**

Announcement	Message / Cause
„Individual message”	First message in case of an alarm or reaction on DTMF 2 .
Abort	<i>Phone connection</i> will be terminated
Alarm acknowledged	Disconnection by pressing key 0 or emergency button
Alarm due to detector malfunction, zone n	Status report missing at zone n
Alarm due to fire zone n	Alarm triggered by smoke sensor (sensor function 1) on zone n
Alarm due to noise	Alarm triggered by noise activity (Note: according to <i>selection switch</i> position I, II, III the alarm can be delayed)
Alarm due to power failure	Mains power loss => Mains power off from 10 to 20 minutes alarm call to the subscriber.
Alarm due to programming	A test call was initiated due to remote programming (see section 9.8.2)
Alarm due to sabotage, zone n	Tamper alarm at zone n
Alarm due to sensor n	Reason of alarm: alarm contact n .
▪ sensor failure	▪ Disconnection of sensor during operation
Alarm due to zone n	Alarm due to sensor (function 3..7) on zone n
Alarm due technical detector zone n	Alarm due to technical detector on zone n
Battery error	Battery is low => battery test before <i>phone connection</i> is established
Battery error, zone n	Announce if a low battery of wireless sensor (zone n) is detected Notes: ➡ If the zone n is a concentrator than one of the in-in contact sensors has a low battery status or there is a mains power loss at the concentrator itself ➡ If there is a mains power loss at the repeater, than the first repeated zone would also announce low battery status.
Emergency call activated	Emergency call, initiated by emergency button
Output <activated / deactivated>	Confirm through press < DTMF 6 / DTMF 4 >
PIN	Request to enter PIN-Code after dialling in (remote access)
PIN error, abort	Wrong PIN-code => <i>Phone connection</i> terminated
Power failure	Mains power missing => Mains power is tested after switching on the unit
Programming acknowledged	Successful remote programming of a calling number or calling number sequence
Programming, abort	Faulty remote programming of a calling number or calling number sequence
Sensor error, zone n	Motion sensor is set to presence verification
Supervision (I/II/III) < due to noise / sensor n > activated	Confirmation of DTMF 5 : announcement of the activated supervision functions, indicating the supervision modes in accordance to the position of the <i>selection switch</i> (I/II/III)
Supervision (I/II/III) activated	Confirmation of DTMF 9 : Switch to <i>active supervision mode</i> an announce monitoring functions at current position of the <i>selection switch</i> (I/II/III)
Supervision (I/II/III) deactivated	Confirmation of DTMF 7 : Switch to <i>inactive supervision mode</i> an announce monitoring functions at current position of the <i>selection switch</i> (I/II/III)
Unacknowledged alarms: n	Quantity of unacknowledged alarms
Zone x, y, z, stay open	The monitor zone stay in active supervision open

7.3 Functional checks

7.3.1 Test-call

We strongly advise to make a *test-call* to check functionality of **EasyAlarm®** before starting operation.

7.3.2 Test alarm functions

Even though the alarm unit is maintenance free (except the battery) a periodical function test should be carried out, especially:

- Emergency button as well as radio sensors
- Acoustical monitoring

7.4 Battery check / replacement

7.4.1 Alarm unit

If you hear „Battery error“ or three beep after switching on the battery should be replaced immediately as follows:

1. Slide *function switch* to OFF
2. Disconnect **EasyAlarm®** from the **telephone network, by removing the telephone cord**
3. Open battery compartment and remove old battery
4. Insert new battery and close battery compartment
5. Reconnect telephone cord to **EasyAlarm®**

Notes:

- Always use fresh 9V-batteries
- Dispose the old battery properly

7.4.2 Sensor

If you hear the announcement „Battery error, zone n“ the battery of the appropriated wireless component should be replaced immediately as follows. Pay attention to the note here that is special indication for sensor in question.

Important notes:

- **If the battery of the telecommand key switch or remote lock is low, please put function switch of the alarm unit to off, before you try to replace the battery. Otherwise a detected tamper would delete the zone and you have to do the learning-in again**
- **The announce for low battery on a zone can be because a mains power loss of the repeater or concentrator => section 5.5.6.1 and 5.5.6.2**

7.5 Maintenance

Slide *function switch* to OFF and remove telephone cord. Clean **EasyAlarm®** if necessary using a moistened cloth and dry it afterwards.

Note:

- Do not use cleaning agents or solvent

8. TROUBLE SHOOTING / ERROR HANDLING

Most problems can be checked and solved with help of the following chart. If the problem remains after consulting this chart in details, please get in touch with your local dealer or contact the info line of your country.

8.1 Telephone connection / Telephone communication

Symptoms	Cause and /or remedy
LED is not lit after switching ON	Replace battery
Announcement „programming deactivated: PIN“ by an attempt of reprogramming	Programming function is locked => to be unlocked according to section 5.4.2
Announcement „Beep Beep Beep“	Mains loss and low battery at the same time!
Announcement „battery error“	Battery is low => replace battery
Announcement „power failure“	Power failure, transformer not connected
Announcement „line check error“	No dial tone has been detected: <ul style="list-style-type: none"> Unit is not connected with the telephone network Telephone network failure Another telephone working on the same phone line is occupying the line already
No dial tones are audible during <i>test call</i> => no tones are audible during the dialling procedure	<ul style="list-style-type: none"> ⇒ Plug in telephone cord ⇒ Check the telephone cord ⇒ Start <i>test-call</i> with different telephone
Test call does not call selected calling number: Announcement „calling number <i>n</i> error“	<ul style="list-style-type: none"> Calling number <i>n</i> (=2..9) is not programmed => Calling number 1 will be dialled instead
Test call does not establish <i>phone connection</i> : Announcement „calling number <i>n</i> “ => dial tone audible	<ul style="list-style-type: none"> Calling number is wrong Called party is not answering the phone
Remote access using dialling-in not possible => EasyAlarm® is not responding to the call	<ul style="list-style-type: none"> The dialling function is programmed for the two step modus (☞ section 0)
Remote access using dialling-in not possible => disconnection after entering of PIN-code	Wrong PIN-code entered => call again
EasyAlarm® does not react on <i>tone-dialling commands</i>	Current telephone does not support <i>tone-dialling commands</i> or has not been configured => for example pulse dialling

8.2 Acoustical monitoring

Symptom	Cause and /or remedy
Noise is not triggering an alarm	<ul style="list-style-type: none"> Factory setting supports monitoring of acoustics only on pos. III of selection switch. (programming can be altered ☞ section 5.6) The unit has been deactivated by DTMF 7 => LED alternatively 4s on / 4s off By switching on the unit or after triggering an alarm, the acoustical monitoring is not active during the <i>waiting time</i> of 20 seconds (☞ section 6.5) => LED is lit constantly during the <i>waiting time</i>! Depending on the position of the selection switch, an alarm is triggered with a different delay. Every time the noise exceeds the pre set level, the LED is on (☞ section 6.5.1)

8.3 Motion detector (wired sensor 1)

Symptom	Cause and / or remedy
LED is on during WALK TEST, but no alarm is triggered	<ul style="list-style-type: none"> Active/inactive by switching on the unit or between two alarms is not expired Supervision has been temporarily deactivated (deactivation) Supervision is deactivated at current position of the <i>selection switch</i> (I/II/III) (☞ section 5.6) Motion detection is programmed to verify presence (☞ section 9.10), an alarm is only triggered if no motion is detected over a programmed time. Test mode => check section 10.2.4

WALK TEST has been set, but LED is not on	<ul style="list-style-type: none"> Power supply of the motion detector is missing (=> check cable, connector and power supply) Power supply not on since two minutes (stabilize time of PIR-motion detector)
There is no motion and the WALK TEST LED is not on, but alarming with periodical announcement „alarm sensor <i>n</i> “ is spoken	<ul style="list-style-type: none"> Power supply of the motion detector is missing (check cable, connector and power supply) => further announcement „power failure“ The motion detector has been connected (additional announcement „sensor 1 activated“ or disconnected (additional announcement “sensor failure”) after power on => factory setting automatically recognizes a connected Plug & Protect-motion detector
„Alarm due to sensor <i>n</i> “ is announced, but the motion detector has been temporarily deactivated	<ul style="list-style-type: none"> The power supply of the unit has been cut off for a short period The <i>function switch</i> has been switched to PROG or OFF after temporarily deactivation.

8.4 Wireless sensors

Symptom	Cause and /or remedy
Announcement “zone <i>n</i> is open”	<ul style="list-style-type: none"> Contact sensor (zone <i>n</i>) is open if you try to arm the system One of the contactor sensor of a concentrator (zone <i>n</i>) is open if you try to arm the system At power up of the alarm unit all contacts are initialised as open by default (see section 9.11.2). After 65 minutes (status report interval) all contacts should be synchronised (open/closed)
No alarm call out, although the sensor LED is on	<ul style="list-style-type: none"> Sensor not learned in Sensor deactivated at current position of the <i>selection switch</i> Detector is not monitored if system is disarmed or during exit delay, respectively. Prevent to receive the disturbance in 433.92Hz Detector is out of reception range.
No alarm call out, the sensor LED is off	<p>No power supply on detector</p> <p>It is possible to adjust detector so that it doesn't announce every event, but rather only after a delay period (e.g. 2.5 minutes with motion detector). Please take note of the adjustment possibilities in the specific detector instruction manual.</p>
Announcement “detector malfunction, zone <i>n</i> ”	<ul style="list-style-type: none"> Sensor failure (check power supply!) Sensor is outside of reception area Interference during reception
Battery alarm Announcement “battery error, zone <i>n</i> ”	<p>Change battery of detector according to instruction</p> <p>Note:</p> <ul style="list-style-type: none"> The cause of the battery failure of a zone can also be an power failure off repeater or concentrator, if a detector is programmed in via one of these extra components => see section 5.5.6.1 and 5.5.6.2
Rhythmic blinking of detector display	Battery of detector has to be replaced according to instruction
Unit can't be activated nor deactivated via the telecommand key switch or remote lock	<p>If the tamper contact of a telecommand key switch or remote lock (sensor function 9 and 0) is detected the appropriated zone will automatically deleted. Therefore you have to check, that the alarm-unit is switched off, if you want to change the battery. Otherwise you have to re-program it.</p>

9. SPECIAL PROGRAMMING

Important notes:

- All parameters remain stored even if **EasyAlarm®** is switched off or without battery. Therefore reprogramming is only essential if parameters have to be changed.
- Programming mode can be locked to secure against unintended programming during operation (see section 5.4.1). If lock is activated, the announcement „programming inactive: PIN“ will be announced if *function switch* is shifted to PROG.
- Attention: Changing these parameters below does influence the operating mode. Therefore only necessary parameters should be changed. Please test behaviour before putting the unit back into operation!
- A programming error can be corrected by repeating the programming steps accordingly.

9.1 Factory settings (Default-Values)

EasyAlarm® can be reset to default values as follows:

OFF <input type="checkbox"/> ON PROG	Keep 3 and # pressed simultaneously	OFF <input type="checkbox"/> ON PROG	Release keys	Prog. 4	OFF <input type="checkbox"/> ON PROG
---	--	---	-----------------	---------	---

9.2 Alarm repetition

An alarm is triggered, as soon as the alarm criterion is fulfilled and the *waiting period* has expired. In some cases it might be useful to repeat an alarm as long until an acknowledgement is received.

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 5 3 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	--------------------------	-------	---	-------	---	---

Value	Comment
0	EasyAlarm® calls the alarm numbers within the calling number sequence just once
1..9	EasyAlarm® starts calling the calling numbers within the calling number sequence until the alarm is confirmed by DTMF 0 or until the programmed value is reached! (<i>factory setting=2</i>)

9.3 Entry/Exit delay

The appropriated register **4 8** can be read-out or modified as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 4 8 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	--------------------------	-------	---	-------	---	---

Value	Comment
0..255	Time in seconds (<i>factory setting=20</i>)

9.4 Mains power loss timeout

The appropriated register **6 3** can be read-out or modified as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 6 3 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	--------------------------	-------	---	-------	---	---

Value	Comment
1..255	Period for mains power loss, before a alarm is activated : in 10 minute steps ! (deviation:-10/+0min) (<i>factory setting =2, i.e.. alarm is triggered if the mains voltage precipitates during 10..20min</i>).

9.5 Signalling

9.5.1 Signalling through alarm unit

It is possible to signal the inactive waiting period with one beep every two seconds. Proceed as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 0 5 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	--------------------------	-------	---	-------	---	---

Value	Signalling..			
	Mains loss at power-on	Selected mode after power-on	Exit Beep every 2 sec.	Entry: 2 Beep
0	✗	✗	✗	✗
1	✓	✗	✗	✗
2	✓	✓	✗	✗
3	✓	✓	✓	✗
4	✓	✓	✓	✓

9.5.2 Signalling during phone connection (announcements)

The cause of alarm will be repeated every 8 seconds during connection until a DTMF command is received. This corresponding register **2 0** can be read out or modified as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 2 0 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

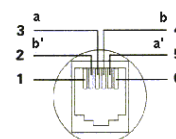
Value	Comment
0	No repetitions => one announcement at the beginning of the connection
1..254	Cycle of repetition in steps of seconds (<i>factory setting=8</i>) i.e: Value=30 announcement every 30 s
255	Special case: Individual message announced just once (WITHOUT cause of alarm)

9.6 Shared line with telephone/modem

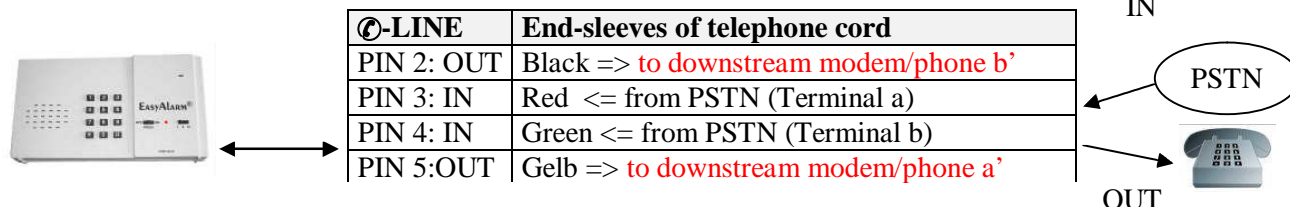
If you want to use **EasyAlarm** in combination with a downstream telephone/modem you must set dialling delay as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 2 4 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comments
0	No dialling delay (=factory setting)
1	Dialling delayed (=Option PLUS)



9.6.1 Wiring with cord with end-sleeves



9.6.2 Wiring Switzerland with T+T- SW06



1. Plug adapter SW06 into wall plate
2. Connect FCC-cord between alarm unit and adapter SW06
3. Plug „downstream” phone into T+T-Jack of adapter SW06

9.6.3 Wiring Germany with TAE-N-Plug



1. Plug adapter TAE-N into first N-Jack of wall plate
2. Connect FCC-cord between alarm unit and adapter TAE-N
3. Plug „downstream” phone into TAE-F-Type-Jack of wall plate

9.7 Dialling in

9.7.1 Program ringing cycles

The number of ringing cycles until **EasyAlarm**® answers the call can be read out or modified as follow:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 4 7 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
0	EasyAlarm ® does not answer any call
2..9	EasyAlarm ® answers call after Value ringing cycles (factory setting: Value=2)

9.7.2 Dialling in sequence

Behaviour on dialling-in mode can be read out or modified as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 7 0 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
0	EasyAlarm® answers call directly after the programmed ringing cycles
1	EasyAlarm® answers call after a two-step dialling -in sequence (2 ringing, hand up, wait 20 sec, dialling in again (=factory setting))

9.7.3 Connection mode after dialling-in

Phone connection mode after dialling-in can be read out or modified as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 7 1 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
0	EasyAlarm® does not signal a dialling in and switches to listening-in connection (=factory setting)
1	EasyAlarm® establishes hands-free connection announced by five gong signals.

9.7.4 Handling of incoming calls

Answering incoming call by pressing the emergency button or any key can be selected as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 7 2 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
0	EasyAlarm® is not responding by activation of the emergency button or any key of the alarm unit
1	Call can be accepted by pressing the emergency button or any key of alarm unit (=factory setting)

9.8 Remote programming

The calling numbers as well as the sequence of the calling numbers are programmable during *phone connection*. This function is disabled (factory setting), but can be enabled as follows:

9.8.1 Enabling of remote programming

Remote programming can be read out or modified as follows:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 7 6 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
0	EasyAlarm® cannot be remote programmed (=factory setting)
1	EasyAlarm® is ready for remote programming.

9.8.2 Remote programming of calling number and calling number sequence

If remote programming is enabled calling numbers/sequence can be re-programmed during *phone connection*:

- Enter **DTMF * * n** (n => see chart below)
 - ➔ Current calling number/ calling number sequence will be announced. If you want to change, continue at point two. Otherwise enter **DTMF #**.
- Enter **DTMF ***
- Enter new number/sequence
 - ➔ After entering of the last digits, wait ten seconds. New number/ sequence will be announced, followed by the request to enter **DTMF n** to confirm change. If you do not confirm within 10 seconds or if another key is pressed the message „programming: abort“ will be announced. In this case the old value remains active.

<n>	Comment	Programming according to
0	Calling number sequence (max. 9 digits)	Section 5.2.2
1	Calling number 1 (max. 24 digits)	Section 5.1
..	Calling number .. (max. 24 digits)	
9	Calling number 9 (max. 24 digits)	
#	SPECIAL - CASE: Phone connection is terminated and a test call is initialised with the current calling number sequence and calling numbers => announcement: “Alarm due to programming“	

9.9 Calling number sequence depending from position of selection switch I/ II/III

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 7 5 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
0	EasyAlarm® dialling not depend on switch position I/II/III, same calling sequence(= <i>factory setting</i>)
1	EasyAlarm® dialling depend on switch position I/II/III, with different calling sequence => the calling sequence as describe in section 5.2.2

9.10 Setting presence verification time out

If there is no activation within this period, an alarm is triggered after a pre programmed time.

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 6 7 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
0	Presence verification is switch off (= <i>factory setting</i>)
6..255	Time –out in steps of 10 min.(min. 60min, max. 42.5h). in case during this time no action detected, trigger an alarm by sensor monitoring. Value=144 (144x10min = 1440min = 24h)

9.11 Wireless sensor

9.11.1 Supervision time-out for (status report monitoring)

Some wireless sensors report their status every 65 minutes (among others low battery, alarm contact, tamper). It can be happen the detector fails technically, or the radio channel experience interference during reception, or the detector is on the boarder of reception area. If a detector does not report its status within supervision time then **EasyAlarm®** will trigger an alarm.

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 2 2 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
10..30	Supervision time in steps of 20 min. (max. 10h). factory setting=30 (30x20min =600min =10h) Important note: Do not set supervision time lower than 10 (=200min), if doing so radio supervision have problem
31	Supervision is switch off, that is radio detector will not monitor for failure.

9.11.2 Initial status of contact sensors (NV71)

At power on **EasyAlarm®** initialises the contact status as follow:

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 2 3 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	-------------------	-------	---	-------	---	---

Value	Comment
0	Contacts are initialised as closed => Advantage: The sensors are not report as open during start up => Disadvantage: if the contact is open, an alarm is triggered after the first status report!
1	Contacts are initialised as open (= <i>factory setting</i>) => The contact detector are report as open during start-up. Advantage: If the contact is closed then the contact will be automatically synchronised at first status report => Disadvantage: if someone enters into the zone prior to the first status report NO alarm is triggered!

10. ACCESSORIES

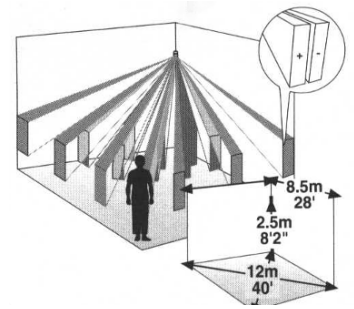
10.1 PIR - Motion detector BBT-PIR-RJ45 (Plug & Protect)

10.1.1 Basis mounting

Choose the mounting location after careful consideration of the area to be protected. The motion detector should be located so that an intruder will cross the infrared beam pattern. If used to verify presence, a regular used room should be detected. Figure shows the different infrared beam patterns at a typical mounting height of 2.5m.

Notes:

- Do not mount detector towards direct sunlight or near to heat sources.
- Do not mount detector behind items like glass or curtains because the infrared-beam cannot penetrate them.
- Keep away pets like cats or dogs from the protected area.
- Do not protect the same area by more than one detector, because they can interfere.



10.1.2 Installation

Connect the cable of the motion detector on the EXT port of the alarm unit. The AC adapter of the alarm unit provides the power supply of the detector.

10.1.3 Activation

Provided the motion detector is plugged in, **EasyAlarm®** detects the motion detector during the switching on procedure.

Important notes:

- By disconnecting the detector during the operation mode, an alarm is triggered: "alarm due to sensor 1, sensor failure!"
- By connecting the detector after the start up procedure of the alarm unit, an alarm is triggered: "alarm due to sensor 1, sensor 1 activated!"

10.1.4 Deactivation

If the motion detector is not plugged in, **EasyAlarm®** automatically deactivates the supervision of the motion detector.

10.1.5 Specification

Supply voltage	9..16 VDC (through AC-adapter)
Dimension	107 x 58 x 39 mm (L x W x D) without swivel
Weight	75 g
Cable length	8 m (RJ45)
Detection type	passive infrared (PIR)
Alarm contact	normally closed

10.1.6 Adjustment

Safety note:

- Before you open cover please check, that the telephone cord is **DISCONNECTED**. Otherwise you can get in contact with the telecommunication voltage!

Remove the front cover by twisting a flat screwdriver in the slot between the cover and the base at the bottom of the motion detector.

10.1.6.1 Pulse count

You can set PULSE jumper at position 1, 2 or 3 corresponding to the desired pulse count before an alarm will be triggered. Default = 2.

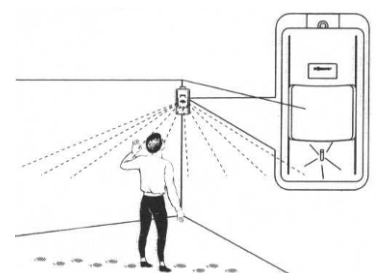
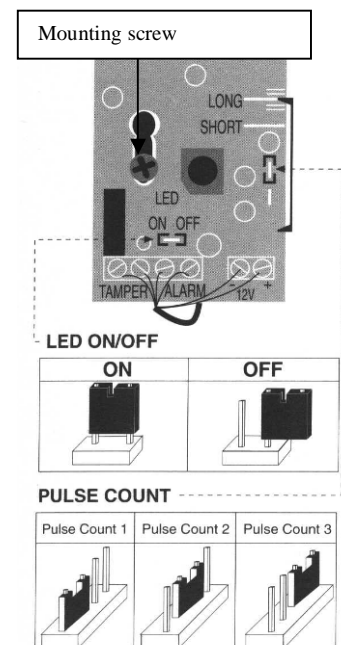
10.1.6.2 WALK-test

To disable LED indication, remove the LED jumper and place it on one pin only. To activate LED indication, place LED jumper over both pins.

10.1.6.2.1 Mounting height

If motion detector is not mounted at 2.5m you can adjust like this:

- Loosen the PC-Board holding screw. Slide the PC-Board so that the plastic pointer on the right side is positioned at the appropriate scale position.
 - For higher than 2.5m => Slide PC-Board up
 - For lower than 2.5m => Slide PC-Board down
- Tighten the PC-Board holding screw
- Mount front cover
- Walk through the entire protected area and observe the LED to ensure full coverage



10.2 EXT-Set (Operation with potential free alarm contacts)

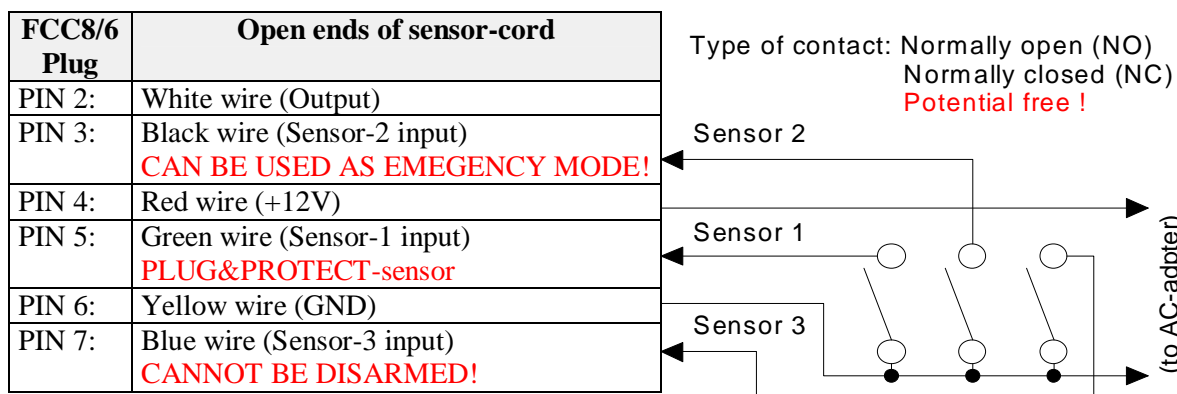
10.2.1 Safety notes

- **Function switch must be shifted to OFF and telephone-cord must be disconnected before any wiring work is done on the AC-adapter or connecting cable.**
- **All contacts of the EXT port are on telephone circuit potential => therefore any applied alarm contact must be potential free (relays or opto-coupler) and must have a isolation of lease 3.75kV according to regulation EN60950.**
- **All contacts have to be protected against any body contact**

10.2.2 Wiring plan

Connect the open ends of the sensor-cord to the potential free alarm contacts as shown below and plug the sensor cord into one of the EXT-ports of the alarm unit.

Connect the open ends of the sensor-cord to the potential free alarm contacts as shown below:



10.2.2.1 Operation with only one alarm contact (Sensor-1)

If you only need one alarm contact you should use sensor-1-input. **EasyAlarm®** will auto-detect the contact-type (⇒ **Plug&Protect-Contact**) and starts monitoring sensor-1 according to the state of the sensor-2-input at the time of power-up (details according to section 10.1):

Connect Sensor-2-input to GND => Sensor-1 is a normally closed contact

Let Sensor-2-input open => Sensor-1 is a normally open contact

Select the appropriate contact to fit the monitoring!

10.2.2.2 Operation with up to three alarm contacts (NO or NC)

Select the appropriate contact to fit the monitoring!

Notes:

- Sensor-1 monitoring can be disarmed (disable) or sensor-1 can be used for presence verification (☞ programming according to section 10.2.3.1)
- Sensor-2 monitoring can be disarmed (disable) or sensor-2 can be used as a emergency contact (☞ programming according to section 10.2.3.2)
- Sensor-3 monitoring CANNOT be disarmed (☞ programming according to section 10.2.3.3)

10.2.3 Configuration of the alarm behaviour

10.2.3.1 Sensor-1 monitoring

10.2.3.1.1 Sensor-1 as alarm contact

EasyAlarm® auto-detects a Plug&Protect-sensor and starts its monitoring if the system is armed. You can define the behaviour for sensor-1 as following:

Example: A normally closed contact shall trigger an un-delayed alarm with a *hands-free-connection* independent from position of the selection switch.

1. Slide *function switch* to PROG

2. Enter sequence *** 9 3 1 7 5 6 # #**

➡ **Current register (bit 7 -> bit 0) will be announced followed by “to modify press *****, to stop press **#**”**

3. If you want to keep current value proceed with step 6. Otherwise start modifying register by pressing *****

4. Enter sequence **0 0 1 0 0 0 1 1**

R-Siren	Entry-Delay	Connect. mode	Sensor on..	Type
0: off	0:off	0: Listening-in	I / II / III	00: inactive
1: on	1:on	1: Hands-free	0 0 0	01: Normally open contact
			0: enabled	10: Plug&Protect (auto-detected at power-on)
			1: disabled	input-2 is open => Normally open monitoring
				input-2 is closed => Normally closed monitoring

Factory default for sensor-1 monitoring

00 0 000 10, => un-delayed alarm in listening-in connection only on all positions I/II/III
=> connector type: auto-type (plug&protect)

5. Press key **#**

➔ *The new register (bit 7 -> bit 0) will be announced*

6. Slide function switch to OFF

10.2.3.1.2 Sensor-1 for presence verification

You can also use sensor-1 to monitor missing activity (i.e. no motion detected within a certain period) => Alarm message: „Emergency call due to sensor-1“. Therefore you have to activate time-out as below.

How to program presence verification time-out

Please refer to section 9.10.

10.2.3.1.3 Sensor-1 as entry-detector (Gong function)

A sensor-1 activity can also be signalled locally (Gong-function) according to the following procedure:

Example: Sensor-1 shall greet an incoming person with the pre-recorded individual message only on position I.

1. Slide function switch to PROG

2. Enter sequence *** 9 3 1 7 3 1 # #**

➔ *Current register (bit 7 -> bit 0) will be announced followed by “to modify press *****, to stop press **#**“*

3. If you want to keep current value proceed with step 6. Otherwise start modifying register by pressing *****

4. Enter sequence **0 0 0 0 1 1 1 0**

Unused
000:

Gong on..	Gong-type
I / II / III	00: Gong
0 1 1	01: --
0: enabled	10: Individual message
1: disabled	11: Beep loud

Factory default for gong-function sensor-1

000 111 00

Note:

- If you do not want to trigger an alarm on position I you have to disable alarm according to section 10.2.3.1.1

5. Press key **#**

➔ *The new register (bit 7 -> bit 0) will be announced*

6. Slide function switch to OFF

10.2.3.2 Sensor-2 monitoring

10.2.3.2.1 Sensor-2 as alarm contact

Alarm function for sensor-2 in armed mode can be selected as following:

Example: Sensor 2 is a normally closed contact that should trigger an un-delayed silent alarm on position I/II

1. Slide function switch to PROG

2. Enter sequence *** 9 3 1 7 5 7 # #**

➔ *Current register (bit 7 -> bit 0) will be announced followed by “to modify press *****, to stop press **#**“*

3. If you want to keep current value proceed with step 6. Otherwise start modifying register by pressing *****

4. Enter sequence **0 0 0 0 0 1 1 1**

R-Siren	Entry-Delay	Connect. mode	Sensor on..	Type
0: off	0:off	0: Listening-in	I / II / III	00: inactive
1: on	1:on	1: Hands-free	0 0 1	01: Normally open contact
			0: enabled	10: Emergency-contact according to section 10.2.3.2.2
			1: disabled	11: Normally closed contact

Factory default for sensor-2 monitoring

00 0 000 00, => inactive

5. Press key **#**

➔ *The new register (bit 7 -> bit 0) will be announced*

6. Slide function switch to OFF

10.2.3.2.2 Sensor-2 as emergency-sensor

If sensor-2 is enabled in section 10.2.3.2 as emergency-contact an emergency-call is triggered if the contact is in alarm position for at least one second. An emergency call **does not depend on the position of the selection switch** and is **also active if the system is disarmed**

10.2.3.2.3 Emergency call

1. Slide *function switch* to PROG

2. Enter sequence *** 9 3 1 7 6 0 # #**

➔ **Current register (bit 7 -> bit 0) will be announced followed by “to modify press * to stop press #”**

3. If you want to keep current value proceed with step 6. Otherwise start modifying register by pressing *****

4. Enter sequence **0 1 1 0 0 0 1 1**

Factory default for emergency-call by sensor-2

0 1 1 0 0 0 1 1: => delayed alarm in hands-free mode. Contact type: NC

R-Siren Entry-Delay Connect. mode Sensor on.. Type

0: off 0:off 0: Listening-in I / II / III 00: inactive

1: on 1: on 1: Hands-free 0 0 0 01: Normally open contact

0: enabled 10: Plug&Protect (auto-detected at power up)
input-2 is open => Normally open monitoring
input-2 is closed => Normally closed monitoring

11: Normally closed contact

5. Press key **#**

➔ **The new register (bit 7 -> bit 0) will be announced**

6. Slide *function switch* to OFF

10.2.3.3 Sensor-3 monitoring

10.2.3.3.1 Sensor-3 as alarm contact

Note: if sensor-3 input is enabled as show below, you cannot disarm at any time!

Example: A normally closed contact shall trigger an un-delayed alarm with a *hands-free-connection* independent from position of the selection switch.

1. Shift *function switch* to PROG

2. Enter sequence *** 9 3 1 7 6 1 # #**

➔ **Current register (bit 7 -> bit 0) will be announced followed by “to modify press * to stop press #”**

3. If you want to keep current value proceed with step 6. Otherwise start modifying register by pressing *****

4. Enter sequence **0 0 1 0 0 0 1 1**

Factory default for sensor-3 monitoring

00 0 1 1 1 0 0, => inactive on all positions I/II/III

R-Siren Entry-Delay Connect. mode Sensor on.. Type

0: off 0:off 0: Listening-in I / II / III 00: inactive

1: on 1: on 1: Hands-free 0 0 0 01: Normally open contact

0: enabled 10: Plug&Protect (auto-detected at power up)
input-3 is open => Normally open monitoring
input-3 is closed => Normally closed monitoring

11: Normally closed contact

5. Press key **#**

➔ **The new register (bit 7 -> bit 0) will be announced**

6. Shift *function switch* to OFF

10.2.4 Test mode for sensor contacts

You can test the wiring as following:

1. Slide *function switch* to PROG

2. Enter *** * * ***

➔ **Any time a monitored sensor contact changes to alarm state you will hear the announcement “<n> activated”. If the contacts changes to idle state you will hear “<n> deactivated.**

3. Slide *function switch* to OFF

Notes:

- <n> = 1/2/3 (depending on sensor)
- Only sensors with contact type set to other value than inactive (00) will be announced => see configuration in section 10.2.3.

10.3 Siren EA-SIR-RJ45

Primary voltage: 230 VAC / 50 Hz
Secondary voltage: 12 VDC / 1.8 VA
Dimension: 120 x 65 x 77 mm (L x W x H)
Weight: 200 g
Length of cable: 3 m (RJ45)
Installation: connect in place of the BBT-DC12S-RJ45 AC-adapter
Functions:

- A) periodical ton of the siren (during *inactive waiting period*)
- B) in case of an alarm in *listening-in connection*, the siren can be activated permanently
- C) the siren can be switched on/off during *phone connection* by entering DTMF 6 / DTMF 4.



10.4 230V-Switch EA-SWI-RJ45

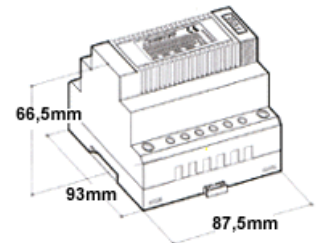
Same as EA-SIR-RJ45-RJ45, but instead of the siren a 230VAC load (f.e. a light) can be switched on/off during connection. Output cable with Euro-jack-connector with maximum load of 2.5A.

Activation of output:

- A) Output is activated automatically, as soon as an alarm criteria is fulfilled (siren, floodlight)
- B) Output is activated automatically, if an alarm remains unacknowledged (siren, floodlight)
- C) Output is activated during *phone connection* by request (siren, floodlight)

10.5 DIN-Adapter interface EA-ACDC-SWI-RJ45

Primary voltage: 230 VAC / 50 Hz
Secondary voltage: 12 VDC / 1.8 VA
Relay output: max. 230 VAC / 2.5 A
Safety label: EN60950, 1992
Dimension: 52.5 x 93 x 68.5 mm (L x W x H)
Weight: 250 g
Connection: Screw terminal
Optocoupler input: 10..230 V (AC or DC) => sensor 1
Cable: 3m (RJ45)
Weight: 500 g
Installation: connect in place of the BBT-DC12S-RJ45 AC-adapter



Activation of output:

- A) Output is activated automatically, as soon as an alarm criteria is fulfilled (siren, floodlight)
- B) Output is activated automatically, if an alarm remains unacknowledged (siren, floodlight)
- C) Output is activated during *phone connection* by request (siren, floodlight)
- D) Operation as a remote-controlled system (remote switching of heater, engines and so on)
- E) many more applications are possible

Remote Switching procedure: activation of output DTMF 6 / deactivation of output DTMF 4

11. TECHNICAL DATA / WARRANTY

Changes to product and performance can be made at any time without announcement.

11.1 Technical data

11.1.1 Alarm unit EasyAlarm® EA-8-WRL

Supply voltage:	9..16 VDC (by AC adapter at EXT/≈ connector) Backup: 9V-battery (typical duration of operation about 50 hours)
Current input:	Supervision mode: 10 mA (typical) / during announcement: 55 mA (max.)
Announcement:	Voice chip with four integrated languages: German, French, English, Italian Other languages combinations on request
Material of housing:	ABS
Dimensions:	200 x 110 x 31mm (L x W x H)
Weight:	320 g without the battery
Telephone cord:	8 m (country specific telephone plug on request)
Calling method:	DTMF (Tone dialling)

11.2 AC-adapter BBT-DC12S-RJ45

Primary voltage:	100 – 240 V / 50 – 60 Hz
Secondary voltage:	12 VDC / 6 VA
Safety label:	EN60950, 1992
Dimension:	70 x 30 x 60 mm (L x W x H)
Weight:	102 g
Cord length:	3 m RJ45

11.3 Info/Switch-Module

Supply voltage:	230 VAC/50 Hz
Current input:	10 mA without relay
Switching power:	max. 230 VAC/2.5 A
Safety label:	EN60950, 1992
Dimensions:	120 x 65 x 42 mm (L x W x H)
Weight:	220 g (+180 g Option SWITCH)
Length of cable:	3 m

11.4 Warranty

Dear customer

Each **EasyAlarm®** is manufactured and tested according to stringent quality rules. If the unlikely case should occur, that due to a manufacturing error the product is malfunctioning, Leitronic AG will guarantee in addition to your sales distributor warranty of repairs without any labour or material costs for 2 years after date of purchase.

Warranty is only granted, if the unit has been used as described in the instruction manual.

Warranty will not be given under following circumstances:

- If there is no invoice or receipt with date of purchase, vendor's name and serial number.
- These documents have been changed or modified.
- If serial number on type label has been changed, cleared, removed or modified in any way.
- If any repair, modification or other adaptation has been carried out by an unauthorized person or company.
- Damage due to tampering with device.
- Damage due to external influence (lightning, water, fire and so on).

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13. OVERVIEW

Sensor functions

Sensor Functions								
	Nova 43	Nova 4x	Key WRL	Nova 50	Nova 30	Nova 90	Nova 71	EA-CON
								
	Arm/Disarm			Emergency	Smoke	Motion	Contact	
Sensor function	9=Telecommand 8=Emergency (not with Key) #1=ON/OFF			7=Panic 8=Emergency #1=ON/OFF	1=Fire	3..6 = 24h / Intern / Entry/Exit / Extern 0=Remote lock (Nova 71 only) #1=ON/OFF		

Sensor function											Siren
1	Fire ➡ Alarm in <i>hands-free connection</i>										🔊
2	Technical detector ➡ Alarm in <i>hands-free connection</i>										🔊
3	24h-alarm ➡ Alarm in <i>listening-in connection</i>										🔊
4	Internal sensor (un-delayed) ➡ Alarm in <i>listening-in connection</i>										🔊
5	Entry/Exit-sensor (delayed) ➡ Alarm in <i>listening-in connection</i>										🔊
6	External sensor (un-delayed) ➡ Alarm in <i>listening-in connection</i>										🔊
7	Panic alarm (un-delayed) ➡ Alarm in <i>listening-in connection</i>										✗
8	Emergency call ➡ Alarm in <i>hands-free connection</i>										🔊
9	Telecommand (Arm / Disarm)										-
0	Remote lock (Arm / Disarm) with supervision										-
#0	Delete a wireless zone										-
#1	Activation/Deactivation of 230VAC-output of the Info/Switch module										-
Zone	Sensor function	Wireless components									Location
		Nova 43	Nova 4x	Key WRL	Nova 50	Nova 90	Nova 30	Nova 71	EA-CON	Glass-break	
0		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Info/Switch-Module indications

Alarm unit status	Signal	Status indication LED
Disarm	1xBeep	green
Error / Warning	Multi-tone => Error announcement through alarm unit!	green flashing
Stay	1xBeep	yellow
Armed	1xBeep	red
Alarm	Siren (Time-out: 2 Minutes)	red flashing
Entry/Exit delay	Beep every second	yellow flashing

Alarm release

..independent from state of arming (armed / disarmed)

Factory set alarm cause	Active by			Entry delay	Alarm connection	Announce the alarm cause	Siren
	I	II	III				
Panic	✓	✓	✓	Instantaneously	<i>Listening-in</i>	"Emergency call activated"	✗
Emergency	✓	✓	✓	Delayed	<i>Hands-free</i>	"Emergency call activated"	🔊
Smoke	✓	✓	✓	Delayed	<i>Hands free</i>	"Alarm due to fire zone n"	🔊
Technical detector	✓	✓	✓	Delayed	<i>Hands free</i>	"Alarm due to technical detector, zone n"	🔊
24h	✓	✓	✓	Instantaneously	<i>Listening-in</i>	"Alarm due to zone n"	🔊

..if system is armed only

Factory set alarm cause	Active by			Entry delay	Alarm connection	Announce the alarm cause	Siren
	I	II	III				
Intern	✗	✓	✓	Instantaneously	<i>Listening-in</i>	"Alarm due to zone n"	🔊
Entry/Exit	✓	✓	✓	Delay	<i>Listening-in</i>		
Extern	✓	✓	✓	Instantaneously	<i>Listening-in</i>		
Noise	✗	✗	✓	Instantaneously	<i>Listening-in</i>	"Alarm due to noise"	✗
Sensor 1	✓	✓	✓	Instantaneously	<i>Listening-in</i>	"Alarm due to sensor 1"	✗
Sensor 2	✗	✗	✗	Instantaneously	<i>Listening-in</i>	"Alarm due to sensor 2"	✗
Power failure	✓	✓	✓	Delay 1 min.	<i>Hands-free</i>	"Alarm due to power failure"	✗
Status check	✓	✓	✓	Delay 1 min.	<i>Hands-free</i>	"Alarm due to detector malfunction, zone n"	✗