User instructions
EasyAlarm CONTROL®

Interface-Modul

Potential free relay switch:
10..230V AC or DC
AC-switch:
max. 2A / 230V

Alarm

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1 INTRODUCTION

EasyAlarm® is an easy to use and reliable auto-dialler including announcement unit that can be used in many ways. The most important functions are listed below. Please read the instruction manual carefully before you start installation. Especially pay attention to the safety notes.

EasyAlarm is a reliable monitor

Cause of alarm	Notes
Noise*	Sensitivity I / II / III (LOW / MED / HIGH)
Keystroke	Check call / emergency call
Wired sensor input 1*+ Same as signal input IN in EasyAlarm CONTROL	Potential separated sensor contact (NO/NC configurable) => possibility to trigger an alarm, if an expected repeated action fails
Wired sensor input 2*+	Potential separated sensor contact (NO/NC configurable)
Wired sensor input 3*	Potential separated sensor contact (NO/NC configurable)
Technical states / condition	• Failure of main supply • Battery condition

*Alarm delay selectable
+ individual announcement or a single stroke bell can be activated

EasyAlarm calls automatically

Destination	Notes	
Telephone / mobile phone	Connection states	▪ Listing in: changeover to hands free on demand ▪ Alarm with hands free connection
Pager	Numeric alarm message	
Alarm centre	With protocol Point ID/Contact ID	

Alarms up to nine pre programmed phone numbers

EasyAlarm indicates

Indication	Notes
Individual announcement	Up to 12 seconds duration, at the beginning of connection
Cause of alarm	Cause of alarm (periodical announcement) State of sensor
Technical state / condition	Battery condition

EasyAlarm puts you in contact

Mode of contact	Notes
Listening in	During connection you can listen into the monitored room
Speaking	You can talk to a person any time by changing to hands free mode

EasyAlarm provides security

Security steps	Notes
Alarm acknowledgement	Without acknowledgement you can program up to nine alarm repetitions
Alarm forwarding	Without acknowledgement an alarm will be forwarded to next programmed number
Check call	Remote access with PIN code (4 to 7 digits) at any time

EasyAlarm is a telecontrol system

Actions / Reactions	Notes
Activation / deactivation of sensors	Wired alarm-sensors can be activated or deactivated at any time during connection mode
Automatic activation of output	By triggering of an alarm an output (i.e. siren) can be switched on automatically, or during connection mode using tone-dialling command
Remote activation of output	In connection mode (tone-dialling command) the output can be switched to drive for example a heater or air-condition unit
Remote programming: alarm number and alarm-sequence	Alarm number and alarm-sequence can be changed during connection mode, using tone-dialling commands

2 SAFETY INSTRUCTIONS

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:	Engeloostrasse 16 CH-5621 Zufikon, Switzerland

declares that the product

Product Name:	EasyAlarm
Model Number:	EA-8-EXT

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
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/EWG
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

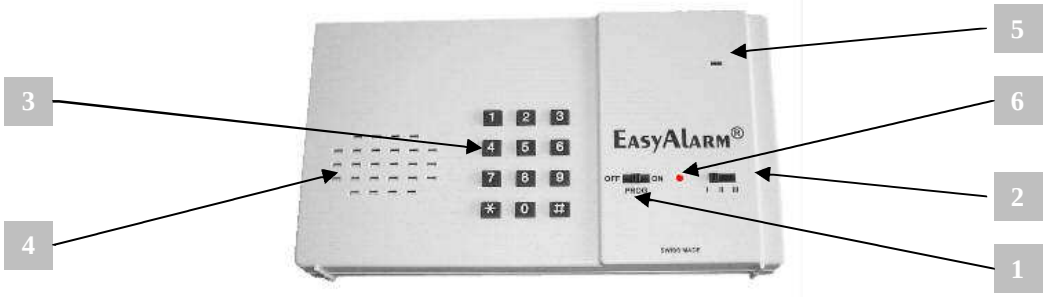
2.3 Power supply

A transformer according to the safety regulation EN60950 provides power supply. 9V battery is used as a back up in case of power failure. It is located on the rear side oft the device.

2.4 Safety notes

- Do not bring the device into contact with a liquid (water).
- Do not open the device (exception: opening of battery compartment).
- 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.
- **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!**
- **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	Entering of calling numbers, calling number sequence, PIN-Code and further parameters
ON	Device is in *supervision mode*

2 Selection switch

EasyAlarm® monitors depending on the position of the selection switch

Position	Monitoring functions (*Function switch* on position ON)
I	Wired sensor-1 enabled. Acoustical monitoring disabled!
II	Wired sensor-1 enabled. Acoustical monitoring disabled!
III	Wired sensor-1 enabled. Acoustical monitoring enabled with highest sensitivity => Alarm is triggered if noise level is exceeded two or three times within a short period

Note: Monitoring functions can be modified individually according to section 4.3*ff*!

3 Keypad

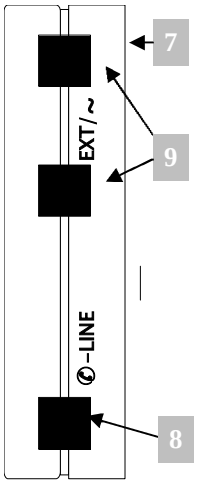
When *function switch* is on position PROG, you can enter the calling numbers or do further programming. If *function switch* is on position ON pressing any key will start a *test call*.
Keys are marked with **1 2 3 4 5 6 7 8 9 * 0 #** in the following sections.

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* and for recording of *individual message*.



6 LED

Status of LED	Operation mode
Green	*Waiting period*
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	*Phone connection*

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.

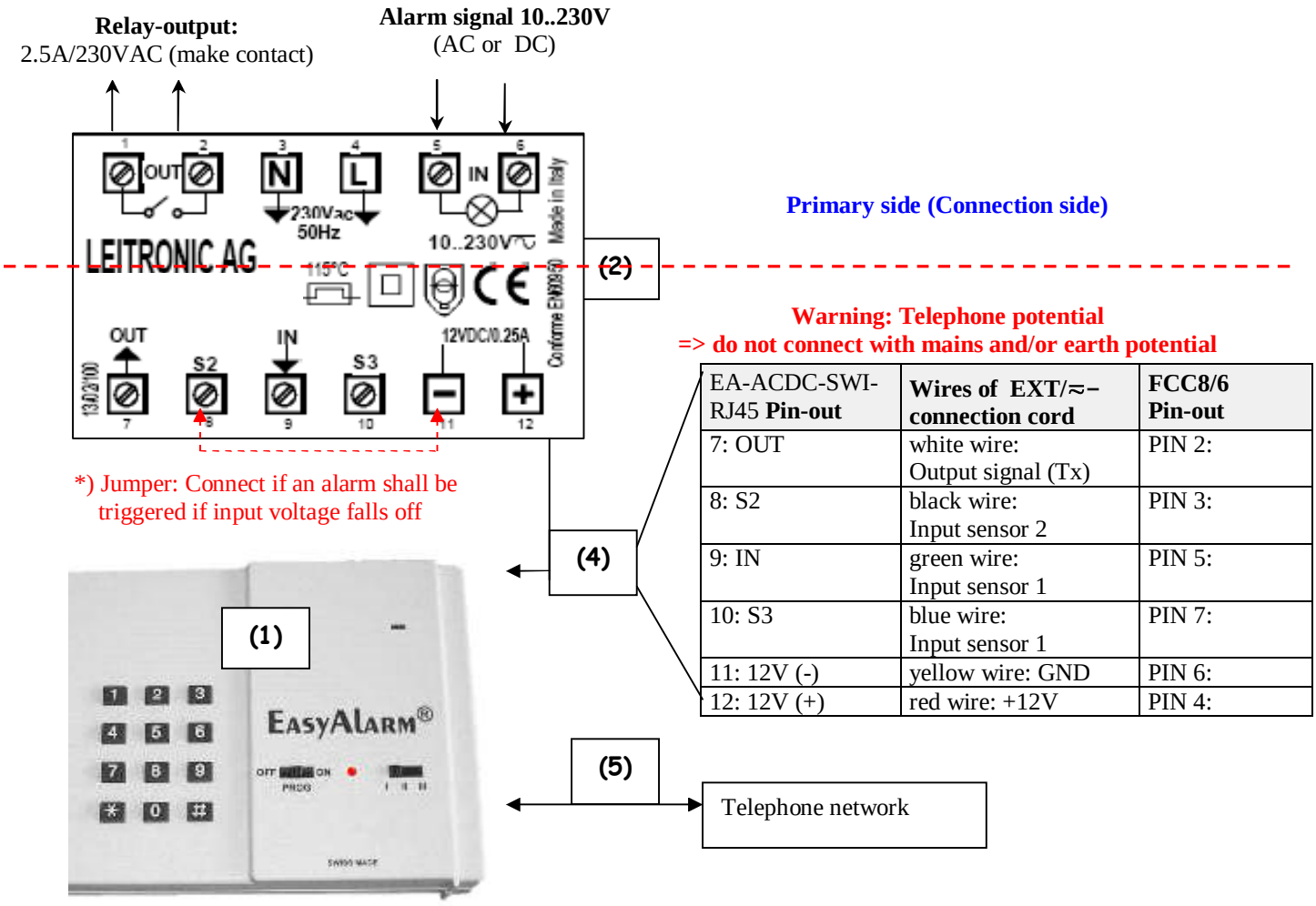
9 External ports (EXT/≈) for accessories (as motion sensor) and power supply.

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.**
- **All the electrical connections have to be potential free. Observe the regulation according to EN60950.**
- **All contacts have to be protected against any body contact**
- **In case of mains power loss the relay output remains open!**

4.2 Installation



EA-ACDC-SWI-RJ45 **Pin-out**	**Wires of EXT/≈– connection cord**	**FCC8/6 Pin-out**
7: OUT	white wire: Output signal (Tx)	PIN 2:
8: S2	black wire: Input sensor 2	PIN 3:
9: IN	green wire: Input sensor 1	PIN 5:
10: S3	blue wire: Input sensor 1	PIN 7:
11: 12V (-)	yellow wire: GND	PIN 6:
12: 12V (+)	red wire: +12V	PIN 4:

1. Slide *function switch* to OFF
2. Insert 9V battery into compartment on rear side of alarm unit (1)
   - ***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. Mount DIN-Interface EA-ACDC-SWI-RJ45 (2) and alarm unit (1)
4. Plug cord (4) into EXT-port of alarm unit (1)
5. Connect alarm signal between PIN5 and PIN6 of DIN-Interface EA-ACDC-SWI-RJ45 (2)
6. Connect output between PIN1 and PIN2 of DIN-Interface EA-ACDC-SWI-RJ45 (2)
7. Connect 230VAC-wires between PIN 3 and PIN4 of DIN-Interface EA-ACDC-SWI-RJ45 (2)
8. Power up 230VAC mains supply

Telephone connection

9. Plug enclosed telephone-cord (3) 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

10. Slide *function switch* to PROG
11. Enter ***** ***** **<n>** (selected calling number: Standard **n** = 1..9)
    - ➥ ***Corresponding calling number will be announced, followed by message "to modify press star"***
12. Press ***** and enter calling number
13. Slide *function switch* to OFF

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

14. Slide *function switch* to PROG
15. Enter ***** ***** **#**
    ➥ ***Current individual message will be announced followed by "to modify press * , to stop press # "***
16. 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
17. Press ***** and start speaking
18. Press **#** to finish recording, max. duration is 12 seconds
    ➥ ***New individual message will be announced. You can repeat steps 16 to 18 until text is fine!***
19. Slide *function switch* to OFF

Program PIN-code ☞ Details according to section 5.4

20. Slide *function switch* to PROG
21. Press key **#**
    ➥ ***You can prevent the alarm unit from unintended re-programming by pressing* *..**
22. Enter PIN-code (4 to 7 digits)
23. Press key **#**
24. Re-enter PIN-code for confirmation
25. Press key **#**
    ➥ ***New PIN-code will be announced***
26. Slide *function switch* to OFF

Alarm unit is now ready for operation ☞ Details according to section 6

27. Slide selection switch to the requested position (I/II/III)

4.3 Configure alarm functions

4.3.1 Sensor-1 monitor (IN)

EasyAlarm® triggers an un-delayed alarm with *listening-in connection* if a voltage is applied between PIN5 and PIN6 (IN). If you want to trigger an alarm if the input signal falls off, you have to set a jumper between PIN8 and PIN 10 of the Interface. You can configure the sensor-1 alarm as following:

Example: Sensor-1 alarm shall be triggered on all positions (I/II/III) un-delayed with *hands-free connection* if a IN-voltage is applied.

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** **0** **1**

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)

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 => alarm if IN-signal is applied**
			0: enabled	10: Plug&Protect (S2 to GND=>NC, S2 open =>NO)
			1: disabled	11: Normally closed contact => alarm if IN-signal falls of

5. Press key **#**
   ➥ ***The new register (bit 7 -> bit 0) will be announced***
6. Slide *function switch* to OFF

4.3.2 Sensor-2 monitoring

4.3.2.1 Sensor-2 as alarm contact

Sensor-2-input (S2) is not monitored by default. It is used to auto-configure sensor-1-input.

S2 is open	**=> Sensor-1-input is a closing contact (Alarm, if IN-Signal is applied)**
S2 connected to GND	**=> Sensor-1-input is a opening contact (Alarm, if IN-Signal falls off)**

Sensor-2 input can be used as a second alarm line. Doing so the sensor-1-type must be programmed with 01 or 10 (N0 or NC) but not 10 (auto-configuration).
The alarm-contact must be connected between PIN8 (S2) and PIN10 (GND) of the DIN-Interface EA-ACDC-SWI-RJ45 (2). Alarm function for sensor-2 in armed mode can be selected as following:

Warning:
- **All the electrical connections have to be potential free. Observe the regulation according to EN60950.**

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

1. Shift *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**

Factory default for sensor-2 monitoring
00 0 000 00, => inactive

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 4.3.2.2
			1: disabled	**11: Normally closed contact**

5. Press key **#**
   ➥ ***The new register (bit 7 -> bit 0) will be announced***
6. Shift *function switch* to OFF

4.3.2.2 Sensor-2 as emergency-sensor

If sensor-2 is enabled in section 4.3.2.1 as emergency-contact an emergency-call is triggered if the contact is in alarm position for an 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

1. Shift *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 1 000 11: => 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)
				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. Shift *function switch* to OFF

4.3.3 Sensor-3 monitoring

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 0 111 00, => 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)
			1: disabled	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

4.3.4 Acoustical monitoring

The acoustical monitoring is enabled if *selection switch* is on position III. In case the alarm conditions is fulfilled a

listening-in connection is established without any delay If you want to change this factory default you can proceed as following:

Example: Acoustical monitoring enabled on II and III starting a hands-free connection without delay.

1. Shift *function switch* to PROG
2. Enter sequence ***** **9** **3** **1** **7** **5** **9** **#** **#**
   ➥ ***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** **1** **0** **0** **0** **1**

Factory default for acoustical monitoring
00 0 110 01, => un-delayed alarm in listening-in connection only on position III, inactive if disarmed

R-Siren	Entry-Delay	Connect. mode	Sensor on..	Type
0: off	**0:off**	0: Listening-in	I / II / III	00: Monitoring independent from arm/disarm state
1: on	1:on	**1: Hands-free**	**1 0 0**	**01: Monitoring only in armed state**
			0: enabled	
			1: disabled	

5. Press key **#**
   ➥ ***The new register (bit 7 -> bit 0) will be announced***
6. Shift *function switch* to OFF

The sensitivity of the acoustical monitoring depends on selected position of the selection switch:

Position	**Alarm conditions (*Function switch* auf ON)**
I	Low sensitivity (LOW) => Alarm will be triggered if the noise level exceeds several times within a long period (approx. 8 activations)
II	Medium sensitivity (MED)
III	Highest sensitivity (HIGH) => Alarm will be triggered if the noise level exceeds a few times within a short period (approx. 3 activations)

4.4 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 other than inactive (00) will be announced => see configuration in section 4.3.

4.5 Configure output

There are many different ways using the output signal. To get the right result, you must carefully read the coming sections.

4.5.1 Default value

4.5.1.1 Siren (Cyclic signalling of entry/exit-delay)

You can adjust **EasyAlarm®** so that an external Siren (accessory) signals the entry/exit-delay with a cyclic beep. Additionally the external siren can be activated in case of an silent alarm during the *listening-in connection*. Instead of an external siren you can attach a external switch (accessory) to signal with a light.

Important notes:

- **This activation can be in conflict with other switching functions (i.e. telecontrolling of a heating etc.) and must therefore be switched off if necessary.**
- **This programming has priority in relation to programmings in section 4.5.2 and 9.9!**

OFF ON PROG	* 9 7 1 3 0 7 # #	Value	*	**Value**	#	OFF ON PROG

Value	Comment
0	Not activated *(=factory setting)*
1	Cyclic activation during entry/exit-delay
2	▪ Cyclic activation during entry/exit-delay ▪ Permanent activation in case of an silent alarm during the *listening-in connection*

4.5.2 Individual adjustment (Examples)

The default values of the hardware-output activation according to section 4.5.1 have a higher priority than activations listed below and must be deactivated if there in case of a conflict.
If your application is not listed below you can activate the hardware-output according to the states of operation (=> section **9.9**). If you have any problem please call Info-Line +41 (0)56 648 40 40.

4.5.2.1 Type of hardware-output activation

4.5.2.1.1 Permanent remote-switch

The output state in case of power-on is according to the state of last before power. During any connection the output-state can be activate with DTMF 6 or deactivate with DTMF 4 and the output states remains until the next change .

Register 5 4: Value=255 Register 5 5: Value=255

4.5.2.1.2 Activated in case of alarm

As soon as alarm is detected the hardware output is activated. During a possible entry-delay (depending on the cause of alarm) and during the telephone connection the output remains activate. The output can be switched of manually during the connection by pressing DTMF 4 or is automatically switch off when the connection has been terminated.

Register 5 4: Value=3 Register 5 5: Value=244

4.5.2.1.3 Temporarily switching on/off during the telephone connection

During any telephone connection the output can be temporarily switched on DTMF 6 or off DTMF 4. After the connection the output is switched of automatically.

Register 5 4: Value=3 Register 5 5: Value=250

4.5.2.1.4 Activation in case an alarm remains unacknowledged

During the telephone connection the output can be temporarily switched on DTMF 6 or off DTMF 4. If no party of the calling sequence acknowledges the alarm the output is activated for two minutes.

Register 5 4: Value=131 Register 5 5: Value=252

4.5.2.2 How to program the output-registers

OFF ON PROG	* 9 7 1 3 <Register> # #		*	Value	#	OFF ON PROG

5 PROGRAMMING

Important note:

- **All the programmed parameters remain stored even without battery.**
- **You can prevent your system from unintended re-programming according to section 5.4.1. If you use this protection feature message „programming deactivated, PIN“ will be announced when the *function switch* is on position PROG.**
- **Three beep: Mains power loss AND battery low at the same time!**

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:

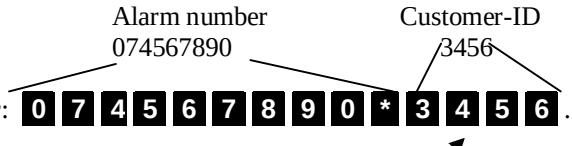
- Every keystroke will be acknowledged by a beep
- Key **#** programmes a dialling delay of 5 seconds, provided it is entered between two digits, e.g. a delay is essential in a private exchange (first digit + **#** + calling number).
- If your private exchange needs a flash pulse to start an internal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



Example for programming the calling number: **0** **7** **4** **5** **6** **7** **8** **9** **0** ***** **3** **4** **5** **6** .

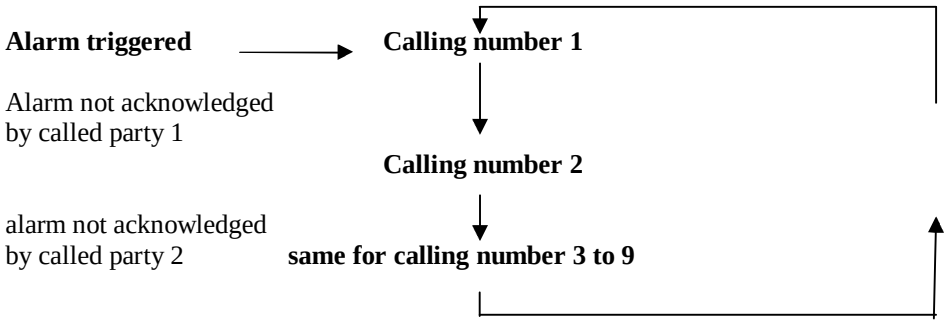
Note:

- 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
301	Alarm due to power failure	900
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
120	Alarm due to emergency button	902

5.2 Designation of the calling number sequence

5.2.1 Standard sequence



The alarm is acknowledged by pressing DTMF 0 (☞ section 6.7.5).
The alarm is passed to next party immediately by pressing DTMF 8 or after *connection time-out*.

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 * , to stop press # "***
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 number1 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 according to section 9.1 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

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 to 4 according to desired user language (i.e. 1=DE/2=FR/3=GB/4=IT)
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

6 OPERATION

6.1 Self check at power on

After power on the alarm unit checks battery, mains power 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 guarantied.

6.1.1 Detection of wired sensor

EasyAlarm® detects the connected motion sensor automatically during the switching on procedure (factory setting). This sensor is activated for presence verification

Important notes:

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

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"**

6.3 Inactive waiting period

6.3.1 After power on or changing position of selection switch (exit delay)

EasyAlarm® remains inactive for 20 seconds (LED is on continuously), to leave time to quit your room/house without triggering an alarm. An emergency call by pressing the emergency button is still possible.

Note:

- The entry/exit period can be adjusted according to section 9.3.
- If there are unacknowledged alarms, their quantity and the reason of the last alarm will be announced.
- If presence verification is activated, following announcement is made: "Presence verification activated".

Key	Action
5	*Announcement of the monitored functions* (*inactive waiting period* will be restarted)
7	Bypass *waiting period* and change to inactive supervision mode ➥ Attention: by switching from activated to inactivated supervision mode, an announcement of the supervision modes is made and the waiting period starts again.
9	Bypass *waiting period* and change to active supervision mode ➥ Attention: by switching from inactivated to activated supervision mode, an announcement of the supervision mode is made and the waiting period starts again.
others	*Test-call* will be made to the first calling number

6.3.1.1 Announcement of the supervision functions

The supervision functions can be activated or deactivated individually on each position of the selection switch

EasyAlarm® deactivated ➥ **announcement: "Supervision I/II/III deactivated"**
EasyAlarm® activated ➥ **announcement: "Supervision I/II/III"**

followed by the supervision mode of the ***activated*** type of monitoring:

acoustical monitoring ➥ **announcement: "due to noise"**
sensor-1 monitoring ➥ **announcement: "due to sensor 1"**
sensor-2 monitoring ➥ **announcement: "due to sensor 2"**
sensor-3 monitoring ➥ **announcement: "due to sensor 3" .. "activated"**

6.3.2 ..after an successful alarm

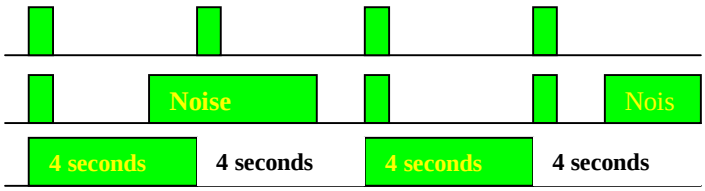
EasyAlarm® remains inactive for two minutes (LED is on continuously) to avoid too many alarms due to sensor contacts. An emergency call is still possible during this period. **Any key-press** results in a test call to the first calling number.

6.4 Supervision mode

LED: acoustical monitoring inactive

LED: acoustical monitoring activated

LED: inactive mode



6.5 Alarm

6.5.1 .. independent of alarm unit state (armed or disarmed)

„Default value“ [1] Cause of alarm	active on I	II	III	Entry-Delay	Connection mode	Announcement
Emergency (Sensor-2) [2]	✘	✘	✘	Delayed	*Hands-free connection*	„Emergency call activated“
Sensor-3 [3]	✘	✘	✘	Un-delayed	*Listening-in connection*	„Alarm due to sensor 3“

1.) Default values without en without consideration of user specific programming in accordance to section 4.3

2.) Emergency call activation according to section 4.3.2.2: An emergency call will be triggered, if the button has been activated for one second. After a pre alarm period of 20 seconds **EasyAlarm®** starts dialling calling number(s) and a *hands-free connection* is established. During the pre warning period the alarm can be cancelled by pressing the emergency button respectively by pressing key **0**.

3.) Sensor-3 activation according to 4.3.3.

6.5.2 .. only if alarm unit is armed

„Default value“ [1] Cause of alarm	active on I	II	III	Entry-Delay	Connection mode	Announcement
Sensor 1 [4]	✔	✔	✔	Un-delayed	*Listening-in connection*	„Alarm due to sensor 1“
Presence verification [5]	✘	✘	✘	10 Minutes/30 Seconds	*Hands-free connection*	„Alarm due to presence verification“
Sensor 2 [6]	✘	✘	✘	Un-delayed	*Listening-in connection*	„Alarm due to sensor 2“
Noise (Babyphone) [7]	✘	✘	✔	Un-delayed	*Listening-in connection*	„Alarm due to noise“
Mains power loss	✔	✔	✔	1 Minute	*Hands-free connection*	„Alarm due to power failure “

4.) Sensor-1 activation according to 4.3.1.

5.) Sensor-1 can be used to verify if a person is present, i.e. an alarm will be triggered if no motion is detected within 24h. 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*

6.) Sensor-2 activation according to 4.3.2.1.

7.) Noise monitoring according to 4.3.4: To avoid false alarm while acoustical monitoring, close windows and try to eliminate sources of noise.

8.) **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). During a pre warning period of 1 minute the following message is announced „Alarm due to power failure“. After this period **EasyAlarm®** dials the programmed number and a *hands-free connection* is established. If **EasyAlarm®** does not detect mains power during start up the monitoring remains inactive => „Power failure“ is announced ! As soon as mains power is detected, **EasyAlarm®** starts to supervise mains power

6.5.2.1 alarm release renewed

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

Note:

- After an alarms through to sensor-1/2/3 a renewed alerting comes off only if to the alarm contact returned to the state of rest.

6.6 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**.

➥ **Announcement: „Alarm acknowledged“**

Notes:

- The entry/exit 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.

6.6.1 Siren activation during pre warning period

If you use a siren which is activated as described in section 4.5.1.1, the pre alarm period is signalled by a periodical tone.

6.7 Phone connection

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

6.7.1 Time-out

There is a timer running in the *phone connection* mode. *Phone connection* is kept up for two minutes in case of *alarm call*, and ten minutes in case of *test call*. Ten seconds before disconnection, the called person hears the announcement "abort". He/she can restart timer using DTMF 3 at any time.

6.7.2 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 DMTF 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.

6.7.3 Listening-in connection

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

DTMF	=> Every valid command will be signalled
0	Terminate *phone connection* and acknowledge alarm
1	Switching to hands-free mode and restart *connection time-out*
2	Repeat announcements (*Individual message* / Cause of alarm)
3	Restart *connection time-out* (2 minutes)
4	Deactivate output (i.e. switching **off** alarm siren)
5	Announcement of current supervision mode as well as condition of the output
6	Activate output (i.e. switching **on** the alarm siren)
7	Change to *inactive supervision mode* (I, II, III) => monitoring for noise, sensor-1, sensor-2, mains failure and presence verification inactive. Emergency call and sensor-3 alarm are still possible.
8	Terminate *phone connection* without acknowledgment
9	Change to *active supervision mode* (I, II, III) => All monitoring functions re-activated
* * 0	Announcement of calling number sequence
* * ***n***	Announcement of calling number ***n*** (**n** = 1..9)
Following *tone-dialling command* can be used for remote programming, provided the programming is not blocked (☞ section 10.6)	
* * #	Trigger an alarm for test reasons ➨ Cause of alarm announcement "alarm due to programming"
* * ***n*** * followed by the new calling number	announcement and change of calling number ***n***
* * # #	Record individual message => according to section 5.3.1.

6.7.3.1 Use of siren during listening in connection

The activation of a siren can be done either manually during a *listening-in connection* using DTMF 6 or 4 or automatically in accordance to the reason of the alarm (☞ programming section 4.5.1.1).

6.7.4 Hands-free connection

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

Important note:

- ***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 .**

6.7.4.1 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.

6.7.5 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 is 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.**

6.8 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 (☞ programming 9.2). Factory setting: two alarm repetitions.

6.9 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** .. **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 ten 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.
- The volume of *hands-free connection* can be adjusted as described in section 6.7.4.1

6.10 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 coincidently by an unknown caller. Direct dialling in as well as other number of ringing cycles can be selected (☞ section 0)
- 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 (to alert/inform the supervised person), **EasyAlarm®** can be programmed according section 9.7.3.

6.11 Answering an incoming call

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

6.11.1 ..by pressing the emergency button

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

6.11.2 ..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 6.7.3 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 *selection switch*
Alarm due to presence verification	Triggered emergency call due to loss of presence
Alarm acknowledged	Disconnection
Battery error	Battery is low => battery test after power on
Calling number ***n***	Calling number ***n (=1..9)***
Calling number error	First calling number in the calling number sequence is not programmed
Calling number sequence	Calling number sequence
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	The output is activated after power on.
PIN	Request to enter PIN-Codes by locked programme
Power failure	Mains power missing => Mains power is tested after switching on the unit
Presence verification activated	Motion sensor is set to presence verification
Programming deactivated: PIN	Request to enter PIN-Code to unlock programming
Supervision (I/II/III) <due to noise/sensor ***n***> activated	Announcement of the monitored alarm functions at current position of the *selection switch* (I/II/III) triggered by pressing key **5** during the *inactive waiting period*(☞ section 6.3.1.1)
Supervision (I/II/III) activated	Announcement in active supervision mode at current position of the *selection switch* (I/II/III)
Supervision (I/II/III) deactivated	Announcement in active supervision mode at current position of the *selection switch* (I/II/III)
to modify press * , to stop press #	Recording of *individual message*
Unacknowledged alarms: ***n***	Quantity of unacknowledged alarms

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	*Phone connection* will be terminated
Alarm due to noise	Alarm triggered by noise activity (Note: according to *selection switch* position I,II,III the alarm can be delayed)
Alarm due to presence verification	Triggered emergency call due to loss of presence
Alarm due to programming	A test call was initiated due to remote programming (☞ section 9.8.2)
Alarm due to sensor ***n*** ▪ sensor ***n*** activated ▪ sensor failure	Reason of alarm: alarm contact ***n***. ▪ sensor ***n*** is in alarm mode ▪ disconnection of sensor during operation
Battery error	Battery is low => battery test before *phone connection* is established
Emergency call activated	Emergency call, initiated by emergency button
Emergency call due to sensor	Emergency call triggered due to loss of presence verification
Output <activated / deactivated>	Confirmation of < DTMF 6 / DTMF 4 > (☞ section 6.7.3)
PIN	Request to enter PIN-Code after dialling in (remote access)
PIN error, abort	Wrong PIN-code => *Phone connection* terminated
Power failure	Mains power loss => Mains power is tested every time before *phone connection* is established

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 ***n*** activated	Announcement if sensor ***n*** is still in alarm mode
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 *selection switch* (I/II/III)
Supervision (I/II/III) activated	Confirmation of DTMF 9: Switch to *active supervision mode* an announce monitoring functions at current position of the *selection switch* (I/II/III)
Supervision (I/II/III) deactivated	Confirmation of DTMF 7: Switch to *inactive supervision mode* an announce monitoring functions at current position of the *selection switch* (I/II/III)
Unacknowledged alarms: ***n***	Quantity of unacknowledged alarms

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
- Wired sensors
- Acoustical monitoring

7.4 Battery check / replacement

If the announcement „Battery error“ is initiated after switching on **EasyAlarm®**, 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

7.5 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, see section 11.3.

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: ▪ Unit is not connected with the telephone network ▪ Telephone network failure ▪ Another telephone working on the same phone line is occupying the line already ⇨ Plug in telephone cord ⇨ Check the telephone cord ⇨ Start *test-call* with different telephone
No dial tones are audible during *test call* => no tones are audible during the dialling procedure	
Test call does not call first calling number in the calling number sequence: Announcement „calling number error“	▪ Calling number (**n=2..9)** is not programmed => Calling number 1 was dialled instead
Test call does not establish *phone connection:* Announcement „calling number **n**“ => dial tone audible	▪ 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	▪ The dialling function is programmed for the two step modus (☞ section 9.7.2)
Remote access using dialling-in not possible => disconnection after entering of PIN-code	Wrong PIN-code entered => call again
EasyAlarm® does not react on *tone-dialling commands*	Current telephone does not support *tone-dialling commands* or has not been configured => for example pulse dialling

8.2 Acoustical monitoring

Symptom	Cause and /or remedy
noise is not triggering an alarm	▪ Factory setting supports monitoring of acoustics only on pos. III of selection switch. (☞ programming can be altered, see section 4.3.4) ▪ 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 *waiting time* of 20 seconds (☞ section 6.3) => LED is lit constantly during the *waiting time*! ▪ 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 6.4)

8.3 Sensor-1-contact

Symptom	Cause and /or remedy
Sensor-1 does not trigger an alarm	▪ *Inactive waiting period* 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 *selection switch* (I/II/III) (☞ section 4.3.1Motion detection is programmed to **verify presence**, an alarm is only triggered if **no motion** is detected over a programmed time. ▪ Test mode => check section 4.4
„Alarm due to sensor 1“ is announced, but the motion detector has been temporarily deactivated	▪ The power supply of the unit has been cut off for a short period ▪ The *function switch* has been switched to PROG or OFF after temporarily deactivation.

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 (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 ON PROG	**Keep 3 and # pressed simultaneously**	OFF ON PROG	Release keys	Prog. 2	OFF ON PROG

9.2 Alarm repetition

An alarm is triggered, as soon as the alarm criteria 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 ON PROG	* 9 7 1 3 5 3 # #	Value	*	**Value**	#	OFF 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! (factory setting: Value=2)

9.3 Entry / Exit period

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

OFF ON PROG	* 9 7 1 3 4 8 # #	Value	*	**Value**	#	OFF ON PROG

Value	Comment
0..255	Time in seconds *(factory setting=20)*

9.4 Mains power loss timeout

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

OFF ON PROG	* 9 7 1 3 6 3 # #	Value	*	**Value**	#	OFF ON PROG

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

9.5 Signalling

9.5.1 .. through alarm unit

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

OFF ON PROG	* 9 7 1 3 0 5 # #	Value	*	**Value**	#	OFF 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 .. 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 ON PROG	* 9 7 1 3 2 0 # #	Value	*	**Value**	#	OFF ON PROG

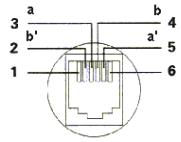
Value	Comment
0	No repetitions => one announcement a the beginning of the connection
1..254	Cycle of repetition in steps of seconds *(factory setting=8)* i.e: ***Value*** = 30 => announcement every 30 seconds
255	Special case: *Individual message* announced just once (**WITHOUT** cause of alarm)

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 ON PROG	* 9 7 1 3 2 4 # #	Value	*	**Value**	#	OFF ON PROG

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



9.6.1 Wiring with cord with end-sleeves

✆-LINE	End-sleeves of telephone cord
PIN 2: OUT	Black => to downstream modem/phone b'
PIN 3: IN	Red <= from PSTN (Terminal a)
PIN 4: IN	Green <= from PSTN (Terminal b)
PIN 5:OUT	Gelb => to downstream modem/phone a'

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 (Remote-access)

9.7.1 Program ringing cycles

The number of ringing cycles until **EasyAlarm®** answers the call is defined in register **4** **7**:

OFF ON PROG	* 9 7 1 3 4 7 # #	Value	*	**Value**	#	OFF 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 is defined in register **7** **0** that can be read out or modified as follows:

OFF ON PROG	* 9 7 1 3 7 0 # #	Value	*	**Value**	#	OFF ON PROG

Value	Comment
0	**EasyAlarm®** answers call directly after the programmed ringing cycles *(=factory setting)*
1	**EasyAlarm®** answers call after a two-step dialling -in sequence

9.7.3 Connection mode after dialling-in

Phone connection mode after dialling-in is defined in register **7** **1** that can be read out or modified as follows:

OFF ON PROG	* 9 7 1 3 0 5 # #	Value	*	**Value**	#	OFF ON PROG

Value	Comment
0	**EasyAlarm®** does not signal a successful dialling in and switches in *listening-in connection* (*=factory setting)*
1	**EasyAlarm®** establishes hands-free connection announced by three 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 ON PROG	* 9 7 1 3 7 2 # #	Value	*	**Value**	#	OFF ON PROG

Value	Comment
0	**EasyAlarm®** is not responding by activation of the emergency button or any key of the alarm unit
1	The call can be received by pressing the emergency button or any key of the 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 is defined in register **7** **6** that can be read out or modified as follows:

OFF ON PROG	* 9 7 1 3 7 6 # #	Value	*	**Value**	#	OFF 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:*

1. 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 #.*
2. Enter DTMF * and add 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
1..9	Calling number <n> (max. 24 digits)	Section 5.1

9.9 Activation of the hardware-output according to the state of operation

The hardware-output can be selected for each operation states (ON/OFF/UNCHANGED) as listed below.

The default values of the hardware-output activation according to section 4.5.1 have a higher priority than activations listed below and must be deactivated if there in case of a conflict.

9.9.1 Operation states

POWER-ON	After the alarm-unit has been switched on
EXIT-DELAY	During *inactive waiting period* after power-on, during exit-delay or after an alarm
SUPERVISION	During supervision mode
ENTRY-DELAY	Waiting period after a alarm condition is detected before the first telephone number of the calling sequence is dialled.
LISTENING-IN CONNECTION	During listening-in connection (silent alarm)
HANDS-FREE-CONNECTION	During hands-free-connection
DIALLING-IN	If an incoming call is detected

9.9.2 Overview of output-register

Register	Default	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
54	00000010	EXIT-DELAY		DIALLING-IN		POWER_ON		Activation in general **see 9.9.3**	
		X	**Y**	**X**	**Y**	**X**	**Y**		
55	11111111	HANDS-FREE		LISTENING-IN		ENTRY-DELAY		SUPERVISION	
		X	**Y**	**X**	**Y**	**X**	**Y**	**X**	**Y**

9.9.3 Activation mode in general

Bit 0: Enable output activation according to state of operation

Bit 1: Enable remote activation/deactivation with *tone-dialling-commands* (DTMF 4 = OFF, DTMF 6 = ON)

9.9.4 Activation mode for each state of operation

X	Y	Comment
0	0	Output is OFF during this state of operation
0	1	Output is ON during this state of operation
1	0	Reserved for special cases: ▪ EXIT-DELAY: After an unacknowledged alarm the output is activated, i.e. to switch on a siren
1	1	Output does not change to prior state (Status Quo)

9.9.5 How to program output registers

1. Shift *function switch* to PROG
2. Enter ***** **9** **3** **1** **7** <register> **#** **#** (5 4 or 5 5)
   ➥ ***Current register value will be announced (Bit 7 to Bit 0) followed by "to modify press *, to stop press #"***
3. If you want to keep current value proceed with step 4. Otherwise modify register with ***** New value <***n***> **#**
   ➥ ***The new register value (Bit 7 to Bit 0) will be announced***
4. Shift *function switch* to OFF

9.9.6 Example A (Permanent remote-switch)

During connection the hardware-output can be activated (DTMF 6) or deactivated (DTMF 4) and remain in this condition until the next change => all Bit = 1

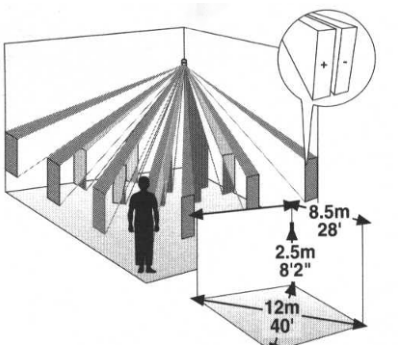
Register	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
54	EXIT-DELAY		DIALLING-IN		POWER_ON		Activation in general	
	1	***1***	***1***	***1***	***1***	***1***	***1***	***1***
55	HANDS-FREE		LISTENING-IN		ENTRY-DELAY		SUPERVISION	
	1	***1***	***1***	***1***	***1***	***1***	***1***	***1***

1. Shift *function switch* to PROG
2. Enter ***** **9** **3** **1** **7** 5 4 **#** **#**
   ➥ ***Current register value will be announced (Bit 7 to Bit 0) followed by "to modify press *, to stop press #"***
3. Enter ***** **1** **1** **1** **1** **1** **1** **1** **1** **#**
   ➥ ***The new register value (Bit 7 to Bit 0) will be announced***
4. Shift *function switch* to OFF
5. Repeat step 1 to .4 with Register 5 5 .

10 ACCESSORIES

Further accessories can be found on our homepage on www.easyalarm.ch.

10.1 Motion / Presence detector-PIR-RJ45 (Plug&Protect)



10.1.1 Preliminary considerations

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 then one detector, because they can interfere.

10.1.2 Installation

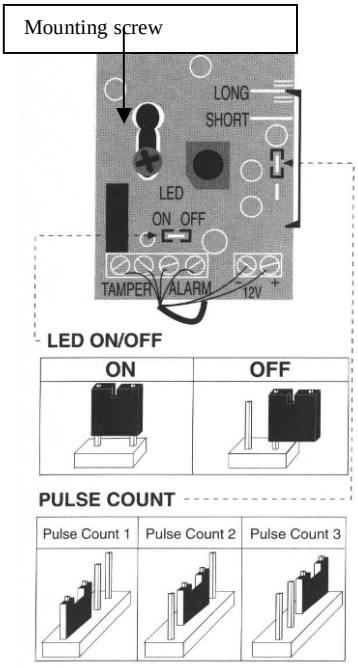
Connect the cable of the motion detector on the EXT port of the alarm unit. The AC adapter of the alarm unit provides the power supply of the detector

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 motion detector during the operation mode, an alarm is triggered followed by the announcement: "alarm due to sensor 1, sensor failure!"***
- ***By connecting the motion detector after the start up procedure of the alarm unit, an alarm is triggered followed by the announcement: "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 39mm (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 DISONNECTED. 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.

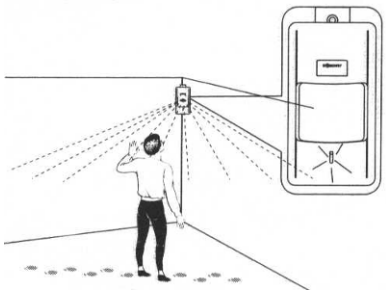
10.1.6.2 WALK-test

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:

1. 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
2. Tighten the PC-Board holding screw
3. Mount front cover
4. Walk through the entire protected area and observe the LED to ensure full coverage



11 SPECIFICATIONS / WARRANTY

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

11.1 Specifications

11.1.1 Alarm unit EasyAlarm® EA-8-EXT

Supply voltage:	9..16 VDC (by AC adapter at EXT/≈ connector) Backup: 9V-battery (typical duration of operation about 70 hours)
Current input:	Supervision mode: 7mA (typical) / during announcement: 55mA (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 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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12 INDEX

13 OVERVIEW

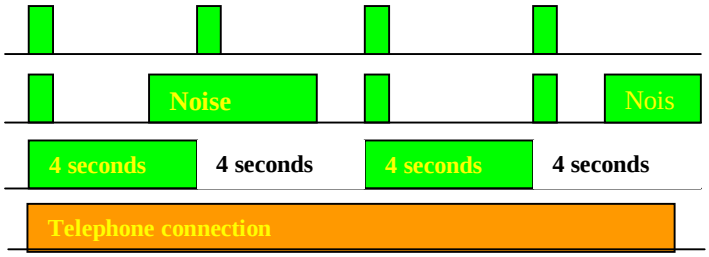
Indicator (LED)

Supervision mode without acoustical monitoring

Supervision mode with acoustical monitoring

Supervision mode inactive

During phone connection



Alarm independent of alarm unit state (armed or disarmed)

„Default value“ [1] Cause of alarm	active on I	II	III	Entry-Delay	Connection mode	Announcement
Emergency (Sensor-2) [2]	✘	✘	✘	Delayed	*Hands-free connection*	„Emergency call activated“
Sensor-3 [3]	✘	✘	✘	Un-delayed	*Listening-in connection*	„Alarm due to sensor 3“

1.) Default values without en without consideration of user specific programming in accordance to section 4.3

2.) Emergency call activation according to section 4.3.2.2: An emergency call will be triggered, if the button has been activated for one second. After a pre alarm period of 20 seconds **EasyAlarm®** starts dialling calling number(s) and a *hands-free connection* is established. During the pre warning period the alarm can be cancelled by pressing the emergency button respectively by pressing key [0].

3.) Sensor-3 activation according to 4.3.3.

Alarms only if alarm unit is armed

„Default value“ [1] Cause of alarm	active on I	II	III	Entry-Delay	Connection mode	Announcement
Sensor 1 [4]	✔	✔	✔	Un-delayed	*Listening-in connection*	„Alarm due to sensor 1“
Presence verification [5]	✘	✘	✘	10 Minutes/30 Seconds	*Hands-free connection*	“Alarm due to presence verification”
Sensor 2 [6]	✘	✘	✘	Un-delayed	*Listening-in connection*	„Alarm due to sensor 2“
Noise (Babyphone) [7]	✘	✘	✔	Un-delayed	*Listening-in connection*	„Alarm due to noise“
Mains power loss	✔	✔	✔	1 Minute	*Hands-free connection*	„Alarm due to power failure “

4.) Sensor-1 activation according to 4.3.1.

5.) Sensor-1 can be used to verify if a person is present, i.e. an alarm will be triggered if no motion is detected within 24h. 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*

6.) Sensor-2 activation according to 4.3.2.1.

7.) Noise monitoring according to 4.3.4: To avoid false alarm while acoustical monitoring, close windows and try to eliminate sources of noise.

8.) **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). During a pre warning period of 1 minute the following message is announced „Alarm due to power failure“. After this period **EasyAlarm®** dials the programmed number and a *hands-free connection* is established. If **EasyAlarm®** does not detect mains power during start up the monitoring remains inactive => „Power failure“ is announced ! As soon as mains power is detected, **EasyAlarm®** starts to supervise mains power

Alarm release renewed

After an alarm **EasyAlarm®** remains inactive during a waiting period of two minutes. Only if at expiration of this waiting period an alarm event occurs again, a new alarm is released. After an alarms through to sensor-1/2/3 a renewed alerting comes off only if to the alarm contact returned to the state of rest.

Tone-dialling commands

DTMF	=> Every valid command will be signalled
0	Terminate *phone connection* and acknowledge alarm
1	Switching to hands-free mode and restart *connection time-out*
2	Repeat announcements (*Individual message* / Cause of alarm)
3	Restart *connection time-out* (2 minutes)
4	Deactivate output (i.e. switching **off** alarm siren)
5	Announcement of current supervision mode as well as condition of the output
6	Activate output (i.e. switching **on** the alarm siren)
7	Change to *inactive supervision mode* (I, II, III) => monitoring for noise, sensor-1, sensor-2, mains failure and presence verification inactive. Emergency call and sensor-3 alarm are still possible.
8	Terminate *phone connection* without acknowledgment
9	Change to *active supervision mode* (I, II, III) => All monitoring functions re-activated