

PhoneGuard

Operating Instructions



CE

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Safety Instructions

Your **PhoneGuard** has been designed and manufactured with great care and should be handled equally so. Following the instructions below will help you to prevent your warranty term ceasing prematurely, and ensure that you are pleased with your product for many years. Please observe the following instructions when using the **PhoneGuard**:

- Observe all safety instructions given by the mobile phone manufacturer.
- Make sure the **PhoneGuard** is fully inserted into the mobile phone handset until it clicks.
- Do not subject your mobile phone handset and **PhoneGuard** to any mechanical stress.
- Keep the **PhoneGuard** out of children's reach.
- Store the **PhoneGuard** in a dry place. Humidity, fluids or any other moisture contains minerals, which can lead to corrosion of the electronic circuits.
- Do not use or store the **PhoneGuard** in dusty or dirty environments.
- Do not store the **PhoneGuard** in hot environments. High temperatures may reduce the service life of electronic equipment/instruments, deform certain synthetic materials or cause them to melt.
- Do not store the **PhoneGuard** in cold environments. When the **PhoneGuard** heats up (to its normal operating temperature), humidity may develop inside which can damage the electronic circuit boards.
- Do not try to open the **PhoneGuard**. If handled improperly, the unit can be damaged.
- Do not drop the **PhoneGuard**, or subject it to impacts or severe shocks. If handled roughly in this way, the circuit boards inside may become damaged.

- Do not apply caustic chemicals, solvents or aggressive detergents to the product. For cleaning, use a soft and dry cloth.
- Do not apply paint to your **PhoneGuard**. Paint may lead to short circuits in the electronic components.
- Do not connect any contacts with electric potential to the stripped cable end, use zero potential contacts only. (Only model 108 006, 108 010, 108 022)
- Ensure that the DC resistance of your sensor is max. 10 Ohm for “closed contact” and min. 10 MOhm for “open contact” (Only model 108 006, 108 010, 108 022).
- Ensure that the voltage drop across the output switch shouldn't exceed 45V, the current flow shouldn't be more than 1A and the power dissipation limit of 1W must be considered also at the same time.

General

- **zzzz** is the PIN Code for the **PhoneGuard**, when supplied it is de-activated, refer to page 9 to change it.
- **+99** is used in this manual for the international country code, which is always necessary to go first before the desired telephone number. For the country code of your country refer to the Appendix
- The complete communication between the user and the **PhoneGuard** goes over SMS. We recommend storing frequently used commands in your mobile phone. How to do this please refer to the user manual of your mobile phone
- Commands can be typed in small or capital letters. **PhoneGuard** does not make difference between small or capital letters what make easier entering the commands
- Unknown commands are acknowledged by the **PhoneGuard** with the error message: **PhoneGuard: Unknown command!**
- If you are using this manual in an electronic version, you can click on the page numbers in the table of contents and in the text or on several links in the document to move fast to the desired text.

Quick Start (Siemens)



PhoneGuard will delete all your SMS Messages on your SIM card. Save all important messages before you start.

1. Switch your mobile phone on. Delete all SMS. Attach the PhoneGuard to the mobile phone. After a few seconds a message "PhoneGuard is activated" appears on the display.

2. Send the text message

Set Alarm on

from that mobile phone that should be called in case of an alert, to the mobile phone to which you attached the PhoneGuard. Wait until the **PhoneGuard** has send a confirming text message: **PhoneGuard: Alarm function activated in 30 seconds.** To generate a call in case of an alert the sensor / contact at the attached PhoneGuard has to be activated / closed.

3. To de-activate the alarm, send the following text message to the mobile phone with connected PhoneGuard:

Set Alarm off

You will get back a confirming text message.

To protect your privacy, you may choose to have every command authorized with a Pin number. For more information please refer the detailed operating instructions!

Cable: black = GND, brown=input, red=output

Quick Start (Nokia)

all models



PhoneGuard will delete all your SMS Messages on your SIM card. Save all important messages before you start.

1. Switch off your mobile phone and attach the **PhoneGuard** to the mobile phone and then switch it on again.

2. To activate the alarm send the text message

SET ALARM ON

from that mobile phone that should be called in case of an alert, to the mobile phone to which you attached the PhoneGuard. Wait until the **PhoneGuard** has send a confirming text message:

PhoneGuard: *Alarm function activated in 30 seconds*

3. To de-activate the alarm, send the following text message to the mobile phone with connected **PhoneGuard**:

SET ALARM OFF

You will get back a confirming text message: **PhoneGuard:** *Alarm function de-activated*

To protect your privacy, you may choose to have every command authorized with a Pin number. For more information please refer to Changing PIN Number [all models](#)

- If the **PhoneGuard** does not read a particular message, the following procedure is followed:
 - Remove the **PhoneGuard** from the mobile phone
 - Switch off the mobile
 - Check if the connection contacts are clean. If untidy, clean them up with a little alcohol
 - Switch on the mobile and connect the **PhoneGuard**

Cable: black = GND, brown=input, red=output

Getting started

all models

Your mobile phone must be switched on and properly registered in the radio network so that the **PhoneGuard** can operate. Even with the **PhoneGuard** plugged in, you can use your mobile phone for telephone calls or sending text messages.

The **PhoneGuard** is operative as soon as it is connected to the mobile phone interface. In the case of GPRS compatible mobiles, de-activate this function and set the data transfer rate to 19.200 bps. Please refer to the mobile phone operating instructions for information on how to proceed.

Otherwise, the **PhoneGuard** requires no specific settings required to be made on the mobile phone.

Now communicate to the **PhoneGuard** which functions you wish to use. This is done exclusively via SMS using one of the following three procedures:

- The simplest option is to send the SMS configuration commands from the mobile to the mobile itself where the **PhoneGuard** is plugged,
- Send the SMS configuration commands from another mobile phone to the mobile phone plus **PhoneGuard**,
- Send the SMS configuration commands from the Internet, for example, to the mobile phone with the **PhoneGuard**.

We recommend proceeding according to a) or b), as the **PhoneGuard** is then able to return, an error message if a mistake is made when entering the command.

Make sure that for ALL SMS commands sent to the **PhoneGuard** you use your **PhoneGuard** PIN so nobody else but you has access to the settings.

The factory-set **PhoneGuard** PIN number is always 0000. Change this first following the description on page 9.

The **PhoneGuard** reads and deletes only those messages from your mobile's SIM card, which are addressed to it. All other messages remain stored. Make sure your SIM card's memory is not already full; as otherwise, your mobile cannot receive any further messages.

If you view the messages on your mobile, which were addressed to the **PhoneGuard**, it will not be able to read them anymore. Delete the messages and re-send SMS commands, ensuring that the **PhoneGuard** is plugged in.

Switch off all ring tones and the vibrator if you wish the **PhoneGuard** to be silent.

Command Summary

all models

In this chapter, all commands for the **PhoneGuard** Family are listed. You can use this as a short reference guide and of course, if you are familiar with programming electronic devices you can skip reading the following chapters.

General Functions all models		Page
SMS number, Registering SET SMSn +99xxxxyyy,zzzz	n: 1, 2 or 3 storage place; +99: int. country code xxx: network or area code; yyy: your phone no. zzzz: PIN	8
Telephone number, Registering SET PHONEn +99xxxxyyy,zzzz	n: 1, 2 or 3 storage place; +99: int. country code xxx: network or area code; yyy: your phone no. zzzz: PIN	8
Call, Repeat SET REDIALLING w,zzzz	w: 0-9; number of repeat calls zzzz: PIN	9
PIN Number, Changing SET PIN zzzz,mmm	zzzz: PIN mmm: Master PIN	9
Listen Function, Activate SET LISTEN ON zzzz	zzzz: PIN	10
Keep Alive Function SET ALIVE t,zzzz	t: between 1 and 999. t = 0 is de-activated; zzzz: PIN	18
Serial Number GET SERIAL NUMBER		19
Reset SET RESET zzzz	zzzz: PIN	19

Protection Zone Functions (PZF) models -2, -8		Page
PZF Recording, Starting SET ZONE START zzzz	zzzz: PIN	10
PZF Recording, Stopping SET ZONE STOP zzzz	zzzz: PIN	10
PZF Recording, Continuing SET ZONE CONT zzzz	zzzz: PIN	10
Activate / De activation PZF SET ZONE ON / OFF zzzz	zzzz: PIN	11
PZT Alarm Text SET ZONE TEXT <ttt>,zzzz	ttt: SMS Text max. 128 character within inverted commas; zzzz: PIN	12
Radio Cell Identity GET BTS zzzz	zzzz: PIN	12
Protection Zone List GET ZONE LIST zzzz	zzzz: PIN	12
Change Protection Zone List SET ZONE LIST a,b,c,d,...;zzzz	a,b,c,d: cell codes, max. 23 cell codes in one SMS, 5 digits with preceding zeros. zzzz: PIN	13
Delete cell codes SET ZONE CLEAR a,b,c,d,...;zzzz	a,b,c,d: cell codes, max. 24 cell codes in one SMS, 5 digits with preceding zeros. zzzz: PIN	13

Vibration Alarm Function (VAF) model -2		Page
activating / de-activating SET ALARM ON / OFF zzzz	zzzz: PIN	14
VAF Alarm Text SET VIB TEXT <ttt>,zzzz	ttt: SMS Text max. 128 characters within inverted commas; zzzz: PIN	14
VAF Alarm Delay SET VIB DELAY a,b,zzzz	a: Lapsed time before alarm; 1-99 sec. b: time delay before alarm is send; 1-99 sec. zzzz: PIN	14

Contact Alarm Function (CAF) model -4, -6, -10, -22		Page
activating / de-activating SET ALARM ON / OFF zzzz	zzzz: PIN	15
Alarm Text "contact open" SET OPEN TEXT <ttt>,zzzz	ttt: SMS Text max. 128 characters within inverted commas; zzzz: PIN	15
Alarm Text "contact close" SET CLOSE TEXT <ttt>,zzzz	ttt: SMS Text max. 128 characters within inverted commas; zzzz: PIN	15
CAF Alarm Configurations SET DETECT s,r,zzzz	s: 1 = "contact closed"; 2 = "contact opened"; 3 = "contact opened" AND "contact closed" r: delay time between 10 and 120 sec. for sending SMS if events is occurred; zzzz: PIN	16

Motion Alarm Function (MAF) model -12, -14, -16, -18		Page
activating / de-activating SET ALARM ON / OFF zzzz	zzzz : PIN	17
MAF Alarm Text SET CLOSE TEXT <ttt>,zzzz	ttt : SMS Text max. 128 characters within inverted commas; zzzz : PIN	17
MAF Alarm Configurations SET DETECT s,r,zzzz	s: 2 ; r: delay time between 10 and 120 sec. for sending SMS if events is occurred; zzzz : PIN	17

Registering Telephone Numbers

all models

In order that the **PhoneGuard** can inform you in case of an event or an emergency, it is required to register telephone numbers through which you can be reached.

You can be informed through two methods:

- via SMS to a mobile phone (or landline number),
- via a normal call to a mobile phone or a landline number.

In both cases, you can register up to three telephone numbers into your **PhoneGuard**. Additionally you can enter up to three SMS numbers into your **PhoneGuard**. Always start with the number through which you can best be reached.

Registering SMS Numbers

To be informed via SMS, send the following messages, which communicate your personal telephone numbers to your **PhoneGuard**:

SET SMS1="+99xxxxxyyyyyy",zzzz for the 1st telephone number, to which an SMS will be sent,
SET SMS2="+99xxxxxyyyyyy",zzzz for the 2nd telephone number, to which an SMS will be sent,
SET SMS3="+99xxxxxyyyyyy",zzzz for the 3rd telephone number, to which an SMS will be sent.

If you want to store less than three telephone numbers, just ignore the rest of the SMS commands.

If you want to replace a telephone number, just send a new one.

If you want to delete a telephone number, send a 0 instead of the telephone number.

Example: SET SMS1="+491721234567",zzzz

- **+49** is the international country code for Germany,
- **xxx**: 172, for example, is the code of your mobile phone network or the area code of your local telephone network WITHOUT the preceding 0.
- **yyyyyyy**: 1234567, for example, is the mobile phone number or your telephone number.
- **zzzz** is the **PhoneGuard** PIN
- In case of registering a wrong telephone number, typing a character than a figure for example, the PhoneGuard will respond with an error message: **PhoneGuard: Syntax error in address number**



When using a landline telephone number as the number through which you will receive messages from the **PhoneGuard**, ensure beforehand that your telephone is able to receive SMS or that your mobile phone network provider offers an SMS to Speech Service, which allows you to send an SMS to ordinary telephones. The SMS will then be read out to you.

Depending on the cause for the alarm, you will receive a standard text stored in the **PhoneGuard**.

Registering Telephone Numbers

To be informed by a telephone call, send the following messages, which communicate your personal telephone numbers to your **PhoneGuard**.

SET PHONE1="+99xxxxxyyyyyy",zzzz for the 1st telephone number,
SET PHONE2="+99xxxxxyyyyyy",zzzz for the 2nd telephone number,
SET PHONE3="+99xxxxxyyyyyy",zzzz for the 3rd telephone number.

As the **PhoneGuard** cannot reproduce a spoken text, you will hear an alternating high and low pitched tone in the case of an alarm.

If you want to store less than three telephone numbers, just ignore the rest of the PHONE commands.

If you want to replace a telephone number, just send a new one.

If you want to delete a telephone number, send a 0 instead of the telephone number.

Example: SET PHONE1="+491721234567",zzzz

- +49 is the international country code for Germany,
- xxx: 172, for example, is the code of your mobile phone network or area code of your local telephone network WITHOUT the preceding 0.
- yyyyyyy: 1234567, for example, is the mobile phone number or your telephone number.
- zzzz is the **PhoneGuard** PIN.
- In case of registering a wrong telephone number, typing a character than a figure for example, the PhoneGuard will respond with an error message: **PhoneGuard: Syntax error in address number**



We recommend also activating the call function (SMS and call), as an SMS may be delayed as it travels through the network until reaching your mobile phone.

Repeat Call

If a telephone number is busy or nobody is answering the phone, it is possible to call this number several times. To define the repeat call send the following SMS to your mobile phone plus **PhoneGuard**:

SET REDAILLING w,zzzz Replacing "w" with a figure between 0 and 9 specifies the number of repeat calls

Example: SET REDAILLING 1,zzzz

When supplied to the customer, the repeat call number is set to 0.

Changing PIN Number

all models

First, change the PIN number of your **PhoneGuard** to ensure that nobody else except you has access to it! The factory-set PIN number is 0000 when supplied. To change the PIN number, send the following SMS to your mobile phone plus **PhoneGuard**:

SET PIN zzzz,mmmmmm

zzzz: 1234, for example, is the PIN number you selected.

mmmmmm: 800A8C, for example, is the factory set Master PIN which you receive along with your **PhoneGuard**

Example: SET PIN 1234,800A8C

- Letters in a PIN must always be written in capitals.
- If a wrong PIN has been transferred, an error message is sent by the **PhoneGuard**: **PhoneGuard: PIN wrong!**

- If the PIN has not been transferred, an error message is sent by the **PhoneGuard**:
PhoneGuard: PIN missing!

Listen Function

all models

This function enables you to hear voices in the area surrounding the mobile phone plus **PhoneGuard**, i.e. you can listen in to a room thereby safeguarding it. You must activate this function first via SMS, and then you can call the mobile phone. This feature allows you to listen in to a situation while it is however not possible to manually accept a call. Such features are emergency functions perhaps capable of saving lives or which help to protect your property. Therefore, you as a user is obliged to observe the laws applicable in the country the **PhoneGuard** is utilised and to rule out any misuse resulting, for example, from the careless use of your **PhoneGuard** PIN.

Activating Listen Function

To activate the listen function, send the following SMS to your mobile phone plus **PhoneGuard**:

SET LISTEN ON zzzz

The **PhoneGuard** confirms the command with the SMS: **PhoneGuard: Listen function is activated**

After activating the listen function the ring tone of your mobile phone plus **PhoneGuard** will be switched off and the **PhoneGuard** will automatically accept the following call to your mobile if it is made within 15 minutes for the models 108 002 and 108 008 and for all other 30 minutes.



If you want to use this function, then a call transfer to another number must not be programmed on your mobile! See page 8.

Protection Zone Function

models -2, -8

You should use this function if you want to be alerted as soon as a person or a mobile object leaves a zone pre-defined by yourself. This zone comprises the radio coverage areas of all those places that



you choose to be included in the protection zone and in whose immediate proximity the radio cells of your mobile phone network are located. Depending on the coverage range of the individual mobile phone cells, the protection zone radius comprising school or home, for example, may vary between less than 100 metres in villages or towns and up to several kilometres in the country. As with a tape recorder, you can “record” the protection zone by walking to all those places that you wish to include in the protection zone. As you walk along, the **PhoneGuard** will make up a list of all radio cells that the mobile phone was logged into during “recording”. When the protection zone function is activated, the **PhoneGuard** checks whether it is able to identify the cell in which it is at that particular moment and will alert you if it cannot do so.

Starting, Continuing and Stopping Protection Zone Recording

To start recording the protection zone send the following SMS to your mobile phone plus **PhoneGuard**:




SET ZONE START zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Definition of protection zone started**

Now you walk to all places, which you wish to include in the protection zone. After returning to the starting point, you must stop recording. Send the following SMS to your mobile phone plus **PhoneGuard**:

SET ZONE STOP zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Definition of protection zone stopped**

	Exactly which radio cells the mobile phone logs into depends on many technical aspects and environmental influences. To avoid false alarms we recommend recording the protection zone over a prolonged period. If, for example, you intend to record the route your child takes to school every day, then continue recording for a whole week whenever your child walks to school. If your mobile phone has to be re-charged in the meantime, just plug in your PhoneGuard afterwards to continue recording.
	A protection zone may comprise a maximum of 128 radio cells. If the protection zone list is full, the PhoneGuard will send the following SMS: PhoneGuard: Protection zone list full! Recording must then be stopped using the command SET ZONE STOP zzzz
	An alarm message may be sent, <ul style="list-style-type: none">• if a radio cell of your mobile phone network provider is no longer operative and the mobile phone logs into a cell which has not been listed during recording• if the network provider installs new radio cells• if the network provider changes the radio cell coding

If you have already recorded a protection zone, then this one will be replaced if you use the Start command. If you do not want this to happen, use the Continue command. To expand the protection zone by one or two more locations without deleting the protection zone recorded so far, send the following SMS to the mobile phone plus **PhoneGuard**:

SET ZONE CONT zzzz

Thereafter, you walk to the locations you want to include. The protection zone expand function is stopped with the command **SET ZONE STOP zzzz**.

Activating and De-activating Protection Zone Function

To activate the protection zone monitoring function, send the following SMS to your mobile phone plus **PhoneGuard**:

SET ZONE ON zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Protection zone monitoring started**

Now the **PhoneGuard** will check whether the radio cell into which the mobile phone is logged is contained in its list. If not, you will be informed via SMS or telephone call.



If you want to use the protection zone function again after an alarm message, then you must re-activate it with the command **SE ZONE ON zzzz** or remove the **PhoneGuard** from the mobile phone and plug it in again.

To de-activate the protection zone monitoring function send the following SMS to the mobile phone plus **PhoneGuard**:

SET ZONE OFF zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard:** *Protection zone monitoring stopped*

The pre-defined protection zone remains stored and can be re-activated at any time.

Entering Protection Zone Alarm Text

You can determine the text that is sent via SMS in the case of an alarm. To change the standard text, send the following SMS to the mobile phone plus **PhoneGuard**:

SET ZONE TEXT <ttt>,zzzz replace ttt with your own text for example, Warning! John has left the area!

Example: SET ZONE TEXT <Warning! John has left the area!>,zzzz



The text must start and end with inverted commas but they should not be included within the text! They will not be sent when the text is transmitted in the case of an alarm. Max. 128 characters are available for the text message. When supplied the text is as follows: **PhoneGuard:** *Protection zone was left!*

Inquiring about Current Radio Cell Identity

If you wish to purposefully influence the contents of the protection zone list, or use the cell identity for another purpose, you can find out about the coding of the radio cell the mobile phone plus **PhoneGuard** is in at that point. Send the following SMS to the mobile phone plus **PhoneGuard**:

GET BTS zzzz

The **PhoneGuard** will answer with messages in the form of: **PhoneGuard:** *cell ID LAC:aaaaa CI:bbbb*

aaaaa is the location area code and **bbbb** is the cell identity coding used in the protection zone list

Inquiring about Protection Zone List

You can access the radio cell coding contained in the protection zone list. To do this, send the following SMS to the mobile phone plus **PhoneGuard**:

GET ZONE LIST zzzz

Depending on the quantity of radio cells stored, the **PhoneGuard** will answer by sending up to 6 messages in the form of: **PhoneGuard:** *Cell list n:aaaaa,bbbb,cccc,dddd,...*

- **n** gives the current number of messages containing the coding of the radio cells in the protection zone list.
- **aaaaa,bbbb** etc. are codes of radio cells in the protection zone list.

Changing Protection Zone List

You can change the protection zone list to suit your requirements by adding or deleting a few or more cell identities. To add radio cell codes to the protection zone list send the following SMS to the mobile phone plus **PhoneGuard**:

SET ZONE LIST aaaaa,bbbb,cccc,dddd,...;zzzz

- aaaaa,bbbb,cccc,dddd are the cell codes in the protection zone list. Max. 23 cell codes can be transferred in one SMS. These must always have five digits. If required, complete the code with preceding zeros. It is absolutely important to respect the semicolon at the end of the list (before the PIN **zzzz**).

To delete cell codes from the list send the following SMS to the mobile phone plus **PhoneGuard**:

SET ZONE CLEAR aaaaa,bbbb,cccc,dddd,...;zzzz

- aaaaa,bbbb,cccc,dddd are the cell codes in the protection zone list. Max. 23 cell codes can be transferred in one SMS. They must always have five digits. If required, complete the code with preceding zeros. It is absolutely important to include the semicolon at the end of the list (before the PIN **zzzz**).

Vibration Alarm Function / Theft Protection

model -2

The theft protection function operates with a vibration sensor integrated into the **PhoneGuard**. All you have to do is to connect the **PhoneGuard** to your mobile phone and hide both in the boot of your car, for example, or under the seats. Then, you will have a certain time (see below) to leave your car before the sensor is activated and the alarm is set. Make sure your mobile phone plus **PhoneGuard** is not left somewhere in the vehicle where it is easily visible, as, if the mobile phone is switched off or the **PhoneGuard** removed, no information can be transferred to you. As soon as you get into your vehicle again, unplug your **PhoneGuard** or switch off your mobile phone. You have a limited time to do this.

Activating and De-activating Vibration Alarm Function

To activate the theft protection function send the following SMS to the mobile phone plus **PhoneGuard**:

SET ALARM ON zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Motion monitoring started**

To de-activate the theft protection function send the following SMS to the mobile phone plus **PhoneGuard**:

SET ALARM OFF zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Motion monitoring ceased**



It is sufficient to activate this function once, as long as your **PhoneGuard** is always plugged in or taken out in time.

Entering Vibration Alarm Text

You can determine the text which is sent via SMS in the case of an alarm caused by vibration. To change the standard text send the following SMS to the mobile phone plus **PhoneGuard**:

SET VIB TEXT <ttt>,zzzz Replace ttt with your own text.

Example: SET VIB TEXT <Alarm, Vehicle No. 123 is in motion>,zzzz



The text must start and end with inverted commas but they should not be included within the text! They will not be sent when the text is transmitted in the case of an alarm. Max. 128 characters are available for the text message. Factory set the text is as follows: **PhoneGuard: Motion alarm triggered!**

Setting Vibration Alarm Delay

The vibration sensor of the **PhoneGuard** is very sensitive and, therefore, the potential for false alarms is very high. For this reason you can determine yourself when an alarm is to be triggered. Because of the potential risk of frequent alarms, minimal vibration will not trigger the alarm. According to the standard configuration, the vibrations must persist for at least 10 seconds. To change the alarm delay, send the following SMS to the mobile phone plus **PhoneGuard**:

SET VIB DELAY a,b,zzzz replacing a and b with a figure between 1 and 99.

Example: SET VIB DELAY 5,60,0000

- “a” defines the time in seconds during which the vehicle is exposed to vibrations until the **PhoneGuard** identifies this as an alarm situation.
- “b” defines the time delay in seconds which elapses before the alarm message is sent. If you get into your own vehicle, you have 65 seconds to remove the **PhoneGuard** from your mobile phone in the shown example.

The factory-set time delay “a” is 10 seconds and the time delay “b” is 20 seconds.

Contact Alarm Function

models -4, -6, -10, -22

The Contact Alarm Function operates with external contacts (bare cable end models) or with magnetic contacts. The **PhoneGuard** checks the state of the contact and depending on the **PhoneGuard** model, compares it with a certain alarm condition. Different alarm conditions are pre-defined in factory. (See below). The **PhoneGuard** type, which comes with magnetic contact, will for example respond to the opening of a contact (opening of a door). The **PhoneGuard** with stripped cable connection, however, will respond to the closing of the contact. If both switching modes are required, the **PhoneGuard** can trigger an alarm on both opening AND closing of the contact.

In the case of an alarm, the alarm text is sent via SMS to the entered SMS numbers first, telephone calls are made thereafter.

Activating and De-activating Contact Alarm Function

To activate the contact alarm function send the following SMS to the mobile phone plus **PhoneGuard**:

SET ALARM ON zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Alarm function activated**

To de-activate the contact alarm function send the following SMS to your mobile phone plus **PhoneGuard**:

SET ALARM OFF zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Alarm function de-activated**

Entering Contact Alarm Text

You can determine the text which is sent via SMS in the case of an alarm. A distinction is made between “contact opened” and “contact closed”. To change the standard text for “contact opened” send the following SMS to the mobile phone plus **PhoneGuard**:

SET OPEN TEXT <ttt>,zzzz replacing **ttt** with your own text for example, Unauthorised opening of house/apartment door

Example: SET OPEN TEXT <Unauthorised opening of house/apartment door>,zzzz



The text must start and end with inverted commas but they should not be included within the text! They will not be sent when the text is transmitted in the case of an alarm. Max. 128 characters are available for the text message. When supplied the text is as follows:
PhoneGuard: *Contact was opened!*

To change the standard text for “contact closed” send the following SMS to the mobile phone plus **PhoneGuard**:

SET CLOSE TEXT <ttt>,zzzz replacing **ttt** with your own text for example, power break-down sector 5

Example: SET CLOSE TEXT <Power break-down sector 5>,0000



The text must start and end with inverted commas but they should not be included within the text! They will not be sent when the text is transmitted in the case of an alarm. Max. 128 characters are available for the text message. When supplied the text is as follows:
PhoneGuard: *Contact was closed!*

Setting Contact Alarm Configurations

You can determine whether you want to be informed upon the opening of the contacts, the closing of the contacts, or in both cases. It is also possible to configure the time interval after which the **PhoneGuard** will then repeat its alarm message. Send the following SMS to the mobile phone plus **PhoneGuard**:

SET DETECT s,r,zzzz

- **s** defines the alarm configuration; **1** for “contact closed”; **2** for “contact opened” and **3** for “contact opened” AND “contact closed”
- **r** defines the time in seconds after which the alarm message is repeated or a telephone call is made if the contact is repeatedly in the defined state. The length of the time interval can be set anywhere between 10 and 120 seconds.

Example: SET DETECT 1,90,zzzz

An alarm SMS will be sending if the contact closed after a delay time of 90 seconds.

- The factory-set configuration of the **PhoneGuard** with stripped cable connection is “contact closed” (s=1). The time delay **r** is 60 seconds when supplied.
- The factory-set configuration of the **PhoneGuard** with magnetic contact is “contact opened” (s=2). The time delay **r** is 60 seconds when supplied.

Motion Alarm Function

models -12, -14, -16, -18

The Motion Alarm Function operates with the smallest available Passive Infrared Motion (PIR) sensor. This sensor detects changes in infrared radiation, which occurs when there is movement by a person, or an object, which is different in temperature from the surroundings. The **PhoneGuard** checks the movement in the specified detection range (standard: horizontal 100° and vertical 82°; spot: horizontal 38° and vertical 22°). In the case of a detected movement, the alarm text is sent via SMS to the entered SMS numbers first, telephone calls are made thereafter.

Activating and De-activating Motion Alarm Function

To activate the motion alarm function send the following SMS to the mobile phone plus **PhoneGuard**:

SET ALARM ON zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Alarm function activated**

To de-activate the motion alarm function send the following SMS to your mobile phone plus **PhoneGuard**:

ASET ALARM OFF zzzz

The **PhoneGuard** confirms with the following SMS: **PhoneGuard: Alarm function de-activated**

Entering Motion Alarm Text

You can determine the text, which is sent via SMS in the case of an alarm. To change the standard text, send the following SMS to the mobile phone plus **PhoneGuard**:

SET OPEN TEXT <ttt>,zzzz replacing **ttt** with your own text for example, Movement in the entrance

Example: SET OPEN TEXT <Movements in the entrance>,zzzz



The text must start and end with inverted commas but they should not be included within the text! They will not be sent when the text is transmitted in the case of an alarm. Max. 128 characters are available for the text message. When supplied the text is as follows:
PhoneGuard: Motion alarm triggered!

Setting Motion Alarm Configurations

You can determine whether you want to be informed upon movement in the detection area or no movement in the detection area. It is also possible to configure the time interval after which the **PhoneGuard** will then repeat its alarm message. Send the following SMS to the mobile phone plus **PhoneGuard**:

SET DETECT s,r,zzzz

- **s** defines the alarm configuration; **2** for “movement”
- **r** defines the time in seconds after which the alarm message is repeated or a telephone call is made if the contact is repeatedly in the defined state. The length of the time interval can be set anywhere between 10 and 120 seconds.

Example: SET DETECT 2,90,zzzz

An alarm SMS will be sending if movement is detected after a delay time of 90 seconds.

- The factory-set configuration of the **PhoneGuard** is (**s=2**). The time delay **r** is 60 seconds when supplied.

Output switch Function

models -24, -26, -28, -36, -38

With the integrated output you can switch external devices like lamps, sirens, and heaters. To switch an output permanently on send the following SMS to the mobile phone plus **PhoneGuard**:

SET SWITCH ON zzzz

To switch an output permanently off send the following SMS to the mobile phone plus **PhoneGuard**:

SET SWITCH OFF zzzz

In both cases the **PhoneGuard** confirms with the following SMS: **PhoneGuard: Switch was toggled**

For certain applications it is necessary that the switch close or open just for a short time – pulse function. To switch an output on for a pulse send the following SMS to the mobile phone plus **PhoneGuard**:

SET SWITCH ON FOR t,zzzz

- t defines the pulse duration in seconds. After this interval the switch goes back in the previous state. The length of the time interval can be set anywhere between 0 and 120 seconds.

To switch an output off for a pulse send the following SMS to the mobile phone plus **PhoneGuard**:

SET SWITCH OFF FOR t,zzzz

In both cases the **PhoneGuard** confirms also with the following SMS: **PhoneGuard: Switch was toggled**



The output port of the **PhoneGuard** is a so-called open-collector output. The term open-collector typically refers to a transistor output where the collector (output) of the transistor is not connected to a positive voltage. Since a transistor used in outputs is a saturated switch, the collector needs to be connected to a positive (external) voltage to complete the transistor circuit. IF you are not familiar with this technique contact us for further support!

Keep Alive Function

all models

This function enables you to receive text messages at regular intervals that confirm that the **PhoneGuard** is still operational. To set this function sends the following SMS to your mobile phone plus **PhoneGuard**:

SET ALIVE t,zzzz the values for **t** between 1 and 999. **t** set to 0 will de-activate the function

- **t** determines the frequency in hours with which the **PhoneGuard** informs you via SMS that it is operational. At the same time it sends information on the battery capacity **PhoneGuard**:
Keep alive message; Battery capacity: 80%

Inquiring about Serial Number

all models

To inquire about the serial number of the **PhoneGuard** send the following SMS to the mobile phone plus **PhoneGuard**:

GET SERIAL NUMBER

The **PhoneGuard** will answer via SMS, in the form of: **PhoneGuard** serial number:
0001/01/01

Reverting to Default Settings

all models

To re-set all parameters to the default settings send the following SMS to the mobile phone plus **PhoneGuard**:

SET RESET zzzz

All user-defined parameters are re-set to defaults – this also applies to the User PIN! The protection zone list as well as user-definable alarm texts will be deleted. 0000 is the factory-set **PhoneGuard** PIN when supplied.

Mobile Phone Location

all models

Network provider offers various options for mobile phone location. Refer to your local network provider for more information.

Mobile Phone Operating Period / Power Supplies

all models

The **PhoneGuard** takes the energy needed for its functions from your mobile phone, automatically adapting to one of two possible modes.

- **PhoneGuard** with external power supply
- **PhoneGuard** without external power supply

PhoneGuard with external power supply

Depending on your **PhoneGuard** variant, it may be equipped with an additional connection for a mobile phone charger. An external energy source is always useful when you wish your **PhoneGuard**'s operating period to be longer than the normal standby period of your mobile phone.

When powered from an external energy source, the **PhoneGuard** is always in "Power On" mode and therefore responds immediately to incoming SMS configuration commands.

The **PhoneGuard** will inform you via SMS in the event of a breakdown in the external power supply and will automatically change to the energy saving mode (variant with external power supply only).

PhoneGuard without external power supply

The **PhoneGuard** is designed to use very little energy from your mobile phone's battery. The **PhoneGuard** takes the energy needed for its functions from your mobile phone. It is designed to use very little energy from your mobile phone's battery. Nevertheless, your mobile phone stand-by period will be reduced, which means that your mobile phone will need charging more frequently! It is not so much the **PhoneGuard** that is to blame, but rather the energy requirement of the mobile itself, when operated with external components such as the **PhoneGuard**. With no external power supply the **PhoneGuard** operates in the "energy saving" mode. It can change from this to the "Power On" mode for about 15 minutes for models 108 002 and 108 008 and 30 minutes for all other models if the following conditions apply:

- after the **PhoneGuard** has been plugged into the mobile phone
- after a configuration command has been received via SMS
- after an alarm condition has appeared
- in the event of a power break-down (applies to variants with external charger only)

To what extent the mobile phone stand-by period is reduced depends on the manufacturer and the model, it is less affected on modern mobiles. The **PhoneGuard**, however, checks the status of your mobile phone battery capacity. When the battery capacity falls to 20%, a warning message is sent in the form of **PhoneGuard**: Battery warning; charge battery! Thereafter, the **PhoneGuard** will adopt a battery protection mode. This means that the **PhoneGuard** remains inactive up until it is plugged back into the mobile phone.

Approximately (15) 30 minutes after the last configuration command was sent to the **PhoneGuard** it switches to the energy saving mode. An alarm event activates it instantaneously. Otherwise, the **PhoneGuard** is automatically activated once per minute to check whether an SMS has been sent.



In connection with a Siemens mobile phone of the 45 series, the PhoneGuard is always active. These phones do not support energy save mode.

Appendix

International Country Codes

Country	Dial code	Country	Dial code	Country	Dial code
Algeria	+213	Guinea-Bissau	+245	Namibia	+264
Angola	+244	Guinea (PRP)	+224	Nauru	+674
Australia	+61	Hong Kong	+852	Niger	+227
Bahrain	+973	India	+91	Nigeria	+234
Belize	+501	Indonesia	+62	Oman	+968
Benin	+229	Iran	+98	Pakistan	+92
Bhutan	+975	Iraq	+964	Rwanda	+250
Botswana	+267	Israel	+972	Saudi Arabia	+966
Brunei	+673	Japan	+81	Senegal	+221
Burkina Faso	+226	Jordan	+962	Seychelles Islands	+248
Burundi	+257	Kenya	+254	Sierra Leone	+232
Cambodia	+855	Kiribati	+686	Singapore	+65
Cameroon	+237	Korea (North)	+85	Solomon Islands	+677
Central African Rep.	+236	Korea (South)	+82	Somalia	+252
Chad	+235	Kuwait	+965	South Africa	+27
China (PRC)	+86	Laos	+856	Sudan	+249
Comoros	+269	Lebanon	+961	Swaziland	+268
Congo	+242	Liberia	+231	Syria	+963
Congo (former Zaire)	+243	Libya	+218	Taiwan	+886
Djibouti	+253	Macao	+853	Tanzania	+255
Egypt	+20	Madagascar	+261	Thailand	+66
Equatorial Guinea	+240	Malawi	+265	Togo	+228
Eritrea	+291	Malaysia	+60	Tunisia	+216
Ethiopia	+251	Maldives	+960	Uganda	+256
French Guiana	+594	Mali Republic	+223	United Arab Emirates	+971
Gabon	+241	Mauritania	+222	Yemen	+967
Gambia	+220	Mauritius	+230	Zambia	+260
Germany	+49	Morocco	+212	Zanzibar	+255
Ghana	+233	Mozambique	+258	Zimbabwe	+263

If you do not find your country, visit our web page and see the down load area. In addition, you find information here:

<http://www.the-acr.com/codes/cntrycd.htm>

<http://kropla.com/dialcode.htm>

TERMS OF WARRANTY

This warranty applies to the end-purchaser of the Product (“Customer”). It shall neither exclude nor limit any mandatory statutory rights of the Customer or any of the Customer’s rights against the seller/dealer of the Product.

The warranty period is six (6) months from the date on which the first Consumer purchased the Product. In case of a subsequent purchase or other change of owner/user, such warranty period shall continue for the remaining part of the six (6) month period and otherwise remain unaffected. During the warranty period, **IS Intelligent Systems** or its authorised service company will repair or replace, at **IS Intelligent Systems** sole discretion, a defective Product. **IS Intelligent Systems** will return the repaired Product or another Product to the Customer in good working condition. All parts or other equipment for which replacements have been provided shall become the property of **IS Intelligent Systems**. A repaired or replaced Product will not be given a prolonged or renewed warranty period. This warranty will not cover painted housings or other similar personalised parts. This warranty does not apply to deteriorations due to normal wear and tear. This warranty shall further not apply if:

- The defect was caused by the fact that the Product has been subjected to: use in contradiction with the owner’s/user manual, rough handling, exposure to moisture or dampness, extreme thermal or environmental conditions, or rapid changes in such conditions, corrosion, oxidation, unauthorised modifications or connections, unauthorised opening or repair, repair by use of unauthorised spare parts, misuse, improper installation, accidents, forces of nature, spillage of food or liquid, influence from chemical products or other acts beyond the reasonable control of **IS Intelligent Systems** unless the defect was caused directly by defects in materials, design or workmanship;
- **IS Intelligent Systems** or its authorised service company was not notified by the Customer of the defect within thirty (30) days after the appearance of the defect within the warranty period;
- the Product was not returned to **IS Intelligent Systems** or its authorised service company within thirty (30) days after the appearance of the defect within the warranty period;
- the Product serial number has been removed, erased, defaced, altered or is illegible;
- the defect was caused by a defective function of the cellular network or the mobile phone;
- the defect was caused because the Product was not employed for its intended use;
- the software of the Product requires upgrading as a result of modified network parameters, mobile phone firmware, parameter for the usage of locating services.

To claim this warranty the Customer shall present either a legible and non-modified original warranty card which clearly indicates the name and address of the seller/dealer, the date and place of purchase, the product type and the serial number, or alternatively submit a legible and non-modified original purchase receipt which contains the same information, if such purchase receipt is presented to the seller/dealer of the Product. This warranty is the Customer’s sole and exclusive remedy against **IS Intelligent Systems** and **IS Intelligent Systems** sole and exclusive liability against the Customer for defects or malfunctions of the Product. This warranty replaces all other warranties and liabilities, whether oral, written, (non-mandatory) statutory, contractual, in tort or otherwise. **IS Intelligent Systems** is in no event liable for any incidental, consequential or indirect damage, costs or expenses. Neither is **IS Intelligent Systems** in any event liable for any direct damage, costs or expenses, if the Customer is a legal person. Any change or amendment to this warranty requires **IS Intelligent Systems** prior written consent

Warranty Certificate

PLEASE USE BLOCK LETTERS TO FILL IN THE FORM:

Customer's name: _____

Customer's address: _____

Customer's telephone number: _____

Date of purchase (Day/Month/Year): _____

Model: _____

Product serial number (look into manual or ask for via SMS): _____

Place of purchase: _____

Dealer's Name: _____

Dealer's Address: _____

Telephone Number: _____

Stamp & Signature

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