

# 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).

## General

- The **PhoneGuard** family consist of several different models. Not every chapter might be relevant for your **PhoneGuard**. The **blue box** indicates for which model the chapter is relevant.
- **zzzz** is the PIN Code for the **PhoneGuard**, when supplied it is set to 0000, refer to page 7 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
- Only messages beginning with '**AT:P**' are deleted by the SIM card. The readable status of all others will not be changed!
- Unknown commands beginning with '**AT:P**' 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.

## 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:

- a) The simplest option is to send the SMS configuration commands from the mobile to the mobile itself where the **PhoneGuard** is plugged,
- b) Send the SMS configuration commands from another mobile phone to the mobile phone plus **PhoneGuard**,
- c) 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 7.

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 <b>all models</b>		Page
SMS number, Registering <b>AT:PNAn=</b> <b>“+99xxxxyyy“,zzzz</b>	<b>n</b> : 1, 2 or 3 storage place; <b>+99</b> : int. country code <b>xxx</b> : network or area code; <b>yyy</b> : your phone no. <b>zzzz</b> : PIN	6
Telephone number, Registering <b>AT:PNBn=</b> <b>“+99xxxxyyy“,zzzz</b>	<b>n</b> : 1, 2 or 3 storage place; <b>+99</b> : int. country code <b>xxx</b> : network or area code; <b>yyy</b> : your phone no. <b>zzzz</b> : PIN	6
Call, Repeat <b>AT:PSW=w,zzzz</b>	<b>w</b> : 0-9; number of repeat calls <b>zzzz</b> : PIN	7
PIN Number, Changing <b>AT:PPD=zzzz,mmm</b>	<b>zzzz</b> : PIN <b>mmm</b> : Master PIN	7
Service Centre Address <b>AT:PSMSC=“xxxx“,zzzz</b>	<b>xxxx</b> : Service Centre phone number; <b>zzzz</b> : PIN	8
Listen Function, Activate <b>AT:PSPY=1,zzzz</b>	<b>zzzz</b> : PIN	8
Keep Alive Function <b>AT:PALIVE=t,zzzz</b>	<b>t</b> : between 1 and 999. <b>t = 0</b> is de-activated; <b>zzzz</b> : PIN	16
Serial Number <b>AT:PSNR</b>		16
Reset <b>AT:PRESET,zzzz</b>	<b>zzzz</b> : PIN	16

Protection Zone Functions (PZF) <b>models -2, -8</b>		Page
PZF Recording, Starting <b>AT:PZSTART,zzzz</b>	<b>zzzz</b> : PIN	9
PZF Recording, Stopping <b>AT:PZSTOP,zzzz</b>	<b>zzzz</b> : PIN	9
PZF Recording, Continuing <b>AT:PZCONT,zzzz</b>	<b>zzzz</b> : PIN	9

<b>Protection Zone Functions (PZF) models -2, -8</b>		Page
Activate / De activation PZF <b>AT:PZONE=s,zzzz</b>	<b>s = 1 activate</b> <b>s = 0 de-activate; zzzz: PIN</b>	10
PZT Alarm Text <b>AT:PZTXT="ttt",zzzz</b>	<b>ttt: SMS Text max. 128 character within inverted commas;</b> <b>zzzz: PIN</b>	10
Radio Cell Identity <b>AT:POS,zzzz</b>	<b>zzzz: PIN</b>	11
Protection Zone List <b>AT:PZGET,zzzz</b>	<b>zzzz: PIN</b>	11
Change Protection Zone List <b>AT:PZSET=a,b,c,d,...;zzzz</b>	<b>a,b,c,d: cell codes, max. 24 cell codes in one SMS, 5 digits</b> <b>with preceding zeros. zzzz: PIN</b>	11
Delete cell codes <b>AT:PZCLR=a,b,c,d,...;zzzz</b>	<b>a,b,c,d: cell codes, max. 24 cell codes in one SMS, 5 digits</b> <b>with preceding zeros. zzzz: PIN</b>	11

<b>Vibration Alarm Function (VAF) model -2</b>		Page
activating / de-activating <b>AT:PSAL=s,zzzz</b>	<b>s = 1 activate</b> <b>s = 0 de-activate zzzz: PIN</b>	12
VAF Alarm Text <b>AT:PSTXT="ttt",zzzz</b>	<b>ttt: SMS Text max. 128 characters within inverted commas;</b> <b>zzzz: PIN</b>	12
VAF Alarm Delay <b>AT:PSDEL=a,b,zzzz</b>	<b>a: Lapsed time before alarm; 1-99 sec.</b> <b>b: time delay before alarm is send; 1-99 sec. zzzz: PIN</b>	12

<b>Contact Alarm Function (CAF) model -4, -6, -10, -22</b>		Page
activating / de-activating <b>AT:PWATCH=s,zzzz</b>	<b>s = 1 activate</b> <b>s = 0 de-activate; zzzz: PIN</b>	13
Alarm Text "contact open" <b>AT:POPTXT="ttt",zzzz</b>	<b>ttt: SMS Text max. 128 characters within inverted commas;</b> <b>zzzz: PIN</b>	13
Alarm Text "contact close" <b>AT:PCLTXT="ttt",zzzz</b>	<b>ttt: SMS Text max. 128 characters within inverted commas;</b> <b>zzzz: PIN</b>	13
CAF Alarm Configurations <b>AT:PDETECT=s,r,zzzz</b>	<b>s: 1 = "contact closed"; 2 = "contact opened"; 3 = "contact</b> <b>opened" AND "contact closed"</b> <b>r: delay time between 10 and 120 sec. for sending SMS if</b> <b>events is occurred; zzzz: PIN</b>	14

<b>Motion Alarm Function (MAF) model -12, -14, -16, -18</b>		Page
activating / de-activating <b>AT:PWATCH=s,zzzz</b>	<b>s = 1 activate; s = 0 de-activate; zzzz: PIN</b>	14
MAF Alarm Text <b>AT:POPTXT="ttt",zzzz</b>	<b>ttt: SMS Text max. 128 characters within inverted commas;</b> <b>zzzz: PIN</b>	15
MAF Alarm Configurations <b>AT:PDETECT=s,r,zzzz</b>	<b>s: 2; r: delay time between 10 and 120 sec. for sending SMS if</b> <b>events is occurred; zzzz: PIN</b>	15

## 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**:

**AT:PNA1**="+99xxxxxyyyyyy",zzzz for the 1<sup>st</sup> telephone number, to which an SMS will be sent,  
**AT:PNA2**="+99xxxxxyyyyyy",zzzz for the 2<sup>nd</sup> telephone number, to which an SMS will be sent,  
**AT:PNA3**="+99xxxxxyyyyyy",zzzz for the 3<sup>rd</sup> 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: AT:PNA1="+991721234567",zzzz*

- +99 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**.

**AT:PNB1**="+99xxxxxyyyyyy",zzzz for the 1<sup>st</sup> telephone number,  
**AT:PNB2**="+99xxxxxyyyyyy",zzzz for the 2<sup>nd</sup> telephone number,  
**AT:PNB3**="+99xxxxxyyyyyy",zzzz for the 3<sup>rd</sup> 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 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: AT:PNB1="+991721234567",zzzz*

- +99 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**:

**AT:PSW=w,zzzz** Replacing “w” with a figure between 0 and 9 specifies the number of repeat calls

*Example: AT:PSW=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**:

**AT:PPD=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: AT:PPD=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!**

## Setting Service Centre Address

**all models**

When sending SMS a Service Centre Address number (SMSC) is necessary so that the mobile phone knows the address number of the centre address because SMS are never sent directly from phone to phone. The **PhoneGuard** always uses the Service Centre Address number (SMSC) stored in the mobile phone. Usually this number is already pre-registered in your SIM Card. If no SMSC number is available in the mobile phone, the **PhoneGuard** cannot send an SMS. Alternatively, if no SMSC number is available in the mobile phone, you can store an SMSC number of your choice in the **PhoneGuard** itself. (Sometimes the provider has different prices for sending in their own network or to other networks. Contact your network provider for more information). The SMSC number must be registered manually to the **PhoneGuard**. To update the SMSC send the following SMS to the mobile phone plus **PhoneGuard**:

**AT:PSMSC="xxxx",zzzz**

xxxx is the SMSC number defined by your network provider.

*Example: AT:PSMSC="+991722270333",0000*



If you do not know your SMSC number contact your network provider's web page (see FAQ → SMS). There you will find the right number. You can visit our [web page](#) and see the download area. In addition, you find more information here:

<http://nokia007.virtualave.net/smscenter.htm>

<http://www.gsm-products.com>

## 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 are 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**:

**AT:PSPY=1,zzzz**

The **PhoneGuard** confirms the command with the SMS: **PhoneGuard: Listening 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.



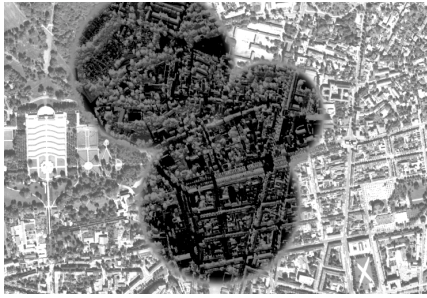
If you want to use this function, then a call transfer to another number must not be programmed on your mobile! See page 6.



## 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**:




**AT:PZSTART,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**:

**AT:PZSTOP,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 <b>PhoneGuard</b> afterwards to continue recording.
	A protection zone may comprise a maximum of 128 radio cells. If the protection zone list is full, the <b>PhoneGuard</b> will send the following SMS: <b>PhoneGuard: Protection zone list full!</b> Recording must then be stopped using the command <b>AT:PZSTOP,zzzz</b>
	An alarm message may be sent, <ul style="list-style-type: none"><li>• 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</li><li>• if the network provider installs new radio cells</li><li>• if the network provider changes the radio cell coding</li></ul>

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**:

**AT:PZCONT,zzzz**

Thereafter, you walk to the locations you want to include. The protection zone expand function is stopped with the command **AT:PZSTOP,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**:

**AT:PZONE=1,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 **AT:PZONE=1,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**:

**AT:PZONE=0,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**:

**AT:PZTXT="ttt",zzzz** replace ttt with your own text for example, Warning! John has left the area!

*Example: AT:PZTXT="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**:

**AT:POS,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**:

**AT:PZGET,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**:

**AT:PZSET=aaaaa,bbbb,cccc,dddd,...;zzzz**

- **aaaaa,bbbb,cccc,dddd** are the cell codes in the protection zone list. Max. 24 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**:

**AT:PZCLR=aaaaa,bbbb,cccc,dddd,...;zzzz**

- **aaaaa,bbbb,cccc,dddd** are the cell codes in the protection zone list. Max. 24 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**:

**AT:PSAL=1,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**:

**AT:PSAL=0,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**:

**AT:PSTXT="ttt",zzzz** Replace ttt with your own text.

*Example: AT:PSTXT="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**:

**AT:PSDEL=a,b,zzzz** replacing a and b with a figure between 1 and 99.

*Example: AT:PSDEL=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**:

**AT:PWATCH=1,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**:

**AT:PWATCH=0,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**:

**AT:POPTXT=“ttt“,zzzz** replacing ttt with your own text for example, Unauthorised opening of house/apartment door

*Example: AT:POPTXT=“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**:

**AT:PCLTXT=“ttt“,zzzz** replacing **ttt** with your own text for example, power break-down sector 5

*Example: AT:PCLTXT=“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**:

**AT:PDETECT=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: AT:PDETECT=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**:

**AT:PWATCH=1,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**:

**AT:PWATCH=0,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**:

**AT:POPTXT="ttt",zzzz** replacing **ttt** with your own text for example, Movement in the entrance

**Example: AT:POPTXT="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**:

**AT:PDETECT=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: AT:PDETECT=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.

## 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**:

**AT:PALIVE=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**:

**AT:PSNR**

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**:

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

If you do not find your country, visit our web page and see the download 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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