emotion of sauna.

EOS

GSM - Modul

GB **Installation and operating manual**

English

Table of Contents

The GSM module can only be used in combination with the sauna control units

- Emotec DC 9000
- Emotec DC 9000 DB/DL/DLF
- Emotec HCS 9003
- Emotec HCS 9003 DB/DL/DLF
- EmoTouch II PB/AF/GF

and installed with the right shut-off rocker switch for the corresponding heater.

Scope of delivery:

- GSM module (1)

- Antenna (2)

- Wall suspension strap (3)

- Control line (4)

- Electronic board (5)
  with mounting dome (6)

- Power supply (7)

The GSM module

Control lamps (LEDs)

Antenna connection

Connection jack only for factory service

Socket for connection to sauna control unit

SIM card holder

Connection jack for ext. electricity supply (power supply)
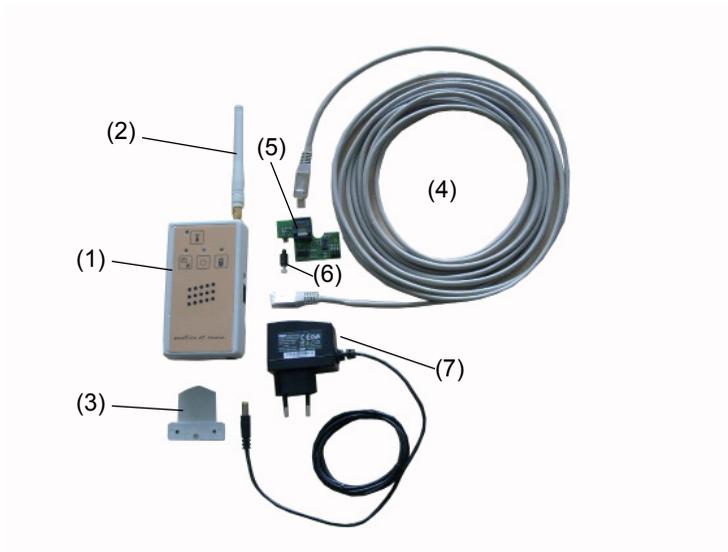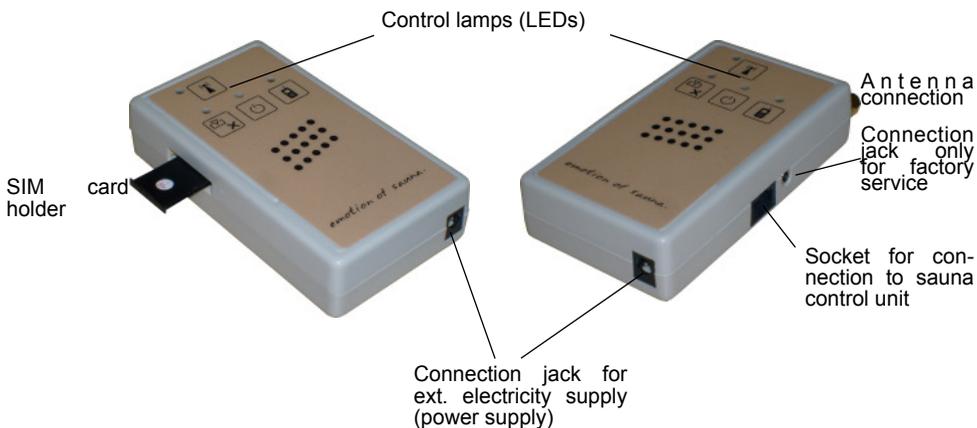
Assembly

The assembly location of the GSM module should be selected so that

- Reception is always guaranteed.

- The control line to the sauna control (5 m) is sufficient.

For wall mounting, the wall suspension strap must be fixed to the wall with two screws (3 x 20).

The GSM module is then pushed into the wall suspension strap from above.
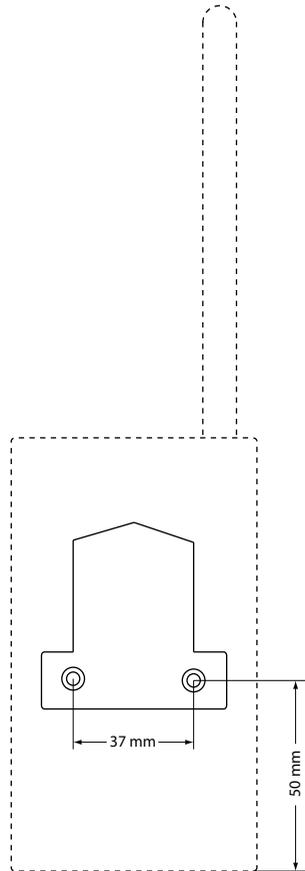
Electrical connections

Disconnect the sauna control unit from the mains first of all.

Then open the housing of the sauna control as described in the operating instructions.

Plug the mounting dome into the provided opening in the right, bottom part of the main board.
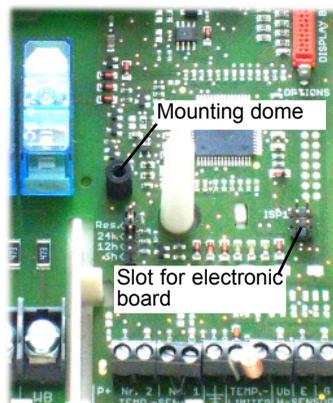
Plug the electronic board with the connection socket into the slot provided.

The board is additionally fixed to the mounting dome with the plastic screw.

Plastic screw   Electronic board

Insert one end of the control line through a free insertion opening on the right side of the bottom part of the control unit and plug the plug into the connection socket on the electronic board.

Control line with plug

Screw the antenna onto the GSM module.

Plug the 2nd plug on the control line to the GSM module socket.

After you have reattached the top part of the control unit and switched the mains back on, plug the power supply of the GSM module into a 230 V socket and the connection plug into the socket on the underside of the GSM module.

The GSM module is now ready for use.

Mobile communications operation

SIM card (telephone number)

In order for the GSM module to be operated by mobile communications, it needs its own telephone number i.e. a SIM card as used in all mobile phones. You can purchase this from a range of different mobile communications providers.

You can used cards from any provider and use both low-cost prepaid cards or contract cards.

ℹ️ *A sufficient network signal from the selected provider must be guaranteed at the place of use of the GSM module.*

Before use of the SIM card in the GSM module, this must be set in a mobile phone. If you are not familiar with the setting options for a mobile phone, please read the operating instructions for your mobile phone or ask someone to set the SIM card as follows:

1. The PIN number request must be switched off or, if this is not possible, set to PIN code "0000" (4 x zero).

2. All call diverts must be switched off, otherwise incoming calls are transferred (e.g. to an answering machine/mobile box) before the GSM module is activated. Call transfers may also be charged!

3. The **hide number function (CLIR) on the SIM card must be switched off.**
   This is important so that you can see when your GSM module calls you (refer to text command "cb"). (The hide number function is usually deactivated as standard.)

In order to check the right setting of the SIM card, switch the mobile phone OFF and ON again and check as follows:

1. The mobile phone is ready to use without requesting a PIN code, or accepts PIN "0000".

2. Call the mobile phone with a different telephone. Do not accept the call and do not reject it. Check whether the mobile phone rings and that the call is not transferred e.g. to an answering machine. After a period of time, you will hear a message such as "the person you are calling is not available...".

3. Call a different mobile phone from the mobile phone (with the new SIM card) and check whether the number is shown on the display.

The SIM card can now be inserted in the GSM module as shown in the illustration.

Slanted corner
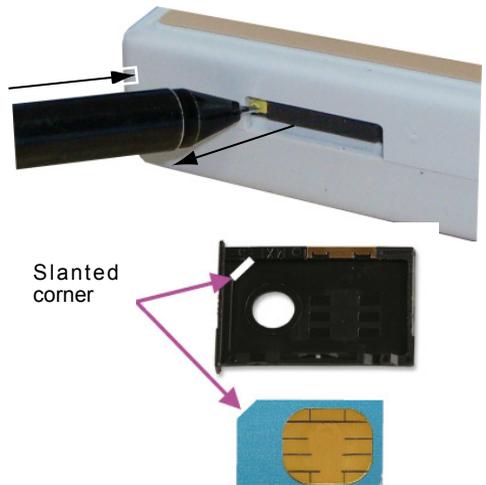
The GSM module can now be operated and configured using the (GSM) mobile communications network. This following chapters dsecribe this in detail.

Control lamps (LEDs)

In the following sub-sections, the operating statuses of the four control LEDs

are described in which the GSM module is found in normal operation. Other

LED operating statuses, such as authorizing the telephone number or learning local

remote control, will be dealt with in the respective chapters.

GSM net-work LED (green)
Error and status LED (red)
ON/OFF LED (blue)
Call and signal LED (yellow)

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Call and signal LED (yellow)

This LED shows the reception and transmission activities of the GSM module.

If the yellow LED illuminates permanently, the GSM module is receiving a telephone call and counting the incoming rings.

Each incoming ring is signalized by the flashing yellow LED. This signalization corresponds exactly with the set number of rings for switching on of off using the text command "rings".

If the LED just flickers once, an unauthorized call is either incoming and immediately refused by the GSM module or a text message is being received.

If the yellow LED flashes for approx. 30 seconds (twice per second), the GSM module calls back the user who previously operated the GSM module by telephone call (refer to text command - automatic call back "cb").

If the yellow LED flashes for around 10 seconds (twice per second), the GSM module is sending a text message.

GSM network LED (green)

This LED shows whether the GSM model in the GSM module is ready to use and booked into a GSM network.

When the green LED permanently illuminates, the modem is ready for use but not (yet) booked into the GSM network.

If the LED lights up permanently for a longer period, there is either no GSM signal at the module position (dead zone) or the antenna is loose, missing or defective.

If the green LED flashes at second intervals, the GSM module is ready to send and receive. This should be the case 25 to 30 seconds after switching the unit on.

Error and status LED (red)

If this LED illuminates, the GSM module is not (yet) ready to receive.

For example, this is case during the initialization phase of the GSM module, or when the GSM module books back into the GSM network after expiry of the time interval (refer to "rlt" text command).

Continuous flashing at second intervals points to a defective GSM modem.

If the LED blinks twice per second, the SIM card compartment is not closed correctly.

If the LED flashes around five times per second, the SIM card PIN has not been accepted. In this case, insert the SIM card in a usual mobile telephone and make sure that the PIN number is set to "0000" or the PIN request is switched off.

If the LED illuminates for around 15 seconds, the goes out for around 1 second and illuminates again for another 15 seconds, there is either no SIM card available or it is defective.

If the LED briefly flickers, it signalizes that a text message has been received but the password is not correct.

ON/OFF LED (blue)

This LED shows the operating status of the sauna - switch on/off.

The password

You need the password to be able to operated the GSM module.

The factory password is <12345>

Change password "pw"

The password is changed with this command. This password must be sent once at the beginning of each command text. The password must contain at least 1, and a maximum of 10 characters. Blanks and line breaks are not authorized in the password.

Entry: <Old password><SPC>pw
                <SPC><new password>

(SPC = blank)

Example 1:

12345 pw Jack5

Example 2:

12345 pw Jack5 r

In both examples, the old password "12345" is replaced with the new password "Jack5". In example 2, an additional response text is requested.

ℹ️ *The password is not checked for typing errors by requesting it twice!   T h e r e - fore make sure that you have entered it correctly and note it down.*

⚠️ *Every person who knows the password can influence the functionality of your GSM module and block your access by changing the password.*

Make careful considerations about who to reveal the password to.

Authorize phone number/specify alarm target "add"

With this command, a telephone number for operation of the GMS module can be authorized and, if necessary, prioritised to a target number for the alarm text i.e. it is included in the authorization list and provided with an alarm priority if required. If the telephone number is entered without an identifiable country code i.e. without a + character or two zeros at the beginning, the GSM module automatically sets its country code to the entered telephone number using the "cc" command.

If the telephone number to be authorized is additionally to be made a target number for alarm texts, the alarm priority (11 to 14) can be given as an optional second parameter. If this parameter is not given, the alarm priority will automatically allocate these numbers.

Entry: <Password><SPC>add<SPC> <Telephone number>

Caution: each priority can only be allocated once. If the entered priority is already available, downward recursion is created with this process. If another number already has the same priority, it is reduced by one.

This process is repeated until

1. Either no other number with the respective priority is available

2. Or recursion meets the number with priority 1, then reduces it to zero and it is no longer a target number for the text alarm.

⚠️ If authorization is not carried out, anyone who knows the number of the GSM module can switch the sauna on.

Authorized telephone numbers (on/off) "aut"

With this command, the authorization of incoming calls is switched on or off. If the authorization is switched off, any called can operate the sauna or request a status text by hanging up prematurely.

When the authorization is switched on, only authorized callers can operate the GSM module i.e. users whose calling number is entered in the authorization list.

Entry: <Password><SPC>aut<SPC><n>

n= 0: switch off authorization
(factory setting)

n = 1: switch on authorization

Example:

12345 aut 0

The authorization is switched off in the example.

⚠️ With "aut 0", you set up the GSM module so that every called is authorized to operate it. This means that your sauna can be switched on or off if someone calls the GSM module telephone number by accident!

⚠️ After each entry of a new telephone number, the GSM module is automatically set so that only authorized users are allowed to call.

Authorize own number/specify as alarm target "addme"

With this command, the telephone number of the mobile phone which sends this command text to the GSM module is authorized. This command is the same as the "add" command and additional entry of your own telephone number. Due to the fact that the GSM module knows the number of the text sender, this command saves you entering your own number and therefore prevents entry errors. Please also read the description of the "add" commands.

As an optional parameter, the alarm priority for alarm texts (0 to 15) can also be set. If this parameter is not set, the GSM module takes on priority zero whereby your own telephone number is not a target number for alarm priorities.

Entry: `<Password><SPC>addme <SPC><Priority>`

Example 1:

12345 addme 15

Example 2:

12345 addme

In the first example, the sender's telephone number is authorized for operation of the GSM module and given the highest alarm priority.

In the second example, the telephone number of the sender is authorized for operation of the GSM module but not set as a target number for the alarm text.

Delete telephone numbers "del"

A telephone number is removed from the authorization list with this command.

Make sure that the telephone number with the country code (0049 for Germany) is entered.

Entry: `<Password><SPC>del <SPC> <Telephone number to be deleted>`

Example:

12345 del 004961510815

Delete telephone number - own "delme"

The telephone number of the text sender is removed from the authorization list with this command.

Entry: `<Password><SPC>delme`

Example:

12345 delme

Delete telephone numbers - all all"

⚠️ *With this command, all telephone numbers are irretrievably deleted from the authorization list.*

Entry: `<Password><SPC>delall`

Example:

12345 delall

Check authorization "is"

With this command, a text can be requested from the GSM module which provides information about whether a telephone number is authorized; therefore whether it is in the authorization list or not.

Entry: <Password><SPC>is<SPC>
           <Telephone number to be
           checked>

Example:

12345 is +492208150

In this example, the GSM module is asked whether the telephone number in the example is authorized or not. If the telephone number is authorized, the GSM module sends a text message back in the following format:

< 25>

Authorized:

+492208150

+++Yes!+++

Priority 0

If the telephone number is not authorized, the GSM module sends the following text

back:

< 25>

Authorized:

+492208150

--- NO! ---

If it is your own telephone number, instead of the number of the text, "your number"

is shown in the response text. However the "me" command is better suited

in this case. If the entry was incorrect, the GSM module sends the standard response back like with the "r" command.

Check own authorization "me"

With this command, a text can be requested from a GSM module which provides information about whether your own telephone number is authorized. This means that the command is the same as the command "is" with details of your own number. Due to the fact that the GSM module knows the number of the text sender, this command saves you entering your own number and therefore prevents entry errors.

Entry: <Password><SPC>me

Example:

12345 me

If your own telephone number is in the GSM module authorization list, the GSM module sends back the following text message:

< 26>

Authorized:

your number

+++Yes!+++

Priority 0

If your own telephone number is not in the authorization list, a text message would look like this:

< 26>

Authorized:

your number

--- No!

Switch on/off per call

Your sauna unit can be switched on and off with a call. No charges apply to the call. You can tell whether your sauna unit is switched on or off by listening to the number of rings before the call is rejected by the GSM module (approx. 4 rings = on, approx. 8 rings = off). The caller's telephone number has to the authorized (refer to "authorize telephone number"). Otherwise the telephone call is immediately rejected.

⚠️ *In order to control your sauna by telephone call, your hide phone number function (frequently referred to as CLIR "Calling Line Identification Restriction") must be deactivated otherwise the call is immediately rejected. The telephone is set correctly if the telephone number of the caller is displayed when calling a different telephone.*

Alarm functions

Prerequisites for an alarm

In order for the GSM module to be used as sauna monitoring and one or more participants informed in the case of an alarm with an alarm text, the following prerequisites have to be fulfilled; these are not set when the unit is delivered.

1. In the case of an alarm text, the GSM module must be aware of at least one target telephone number to which an alarm text should be sent in case of an alarm. The target numbers can be stored using the text commands "add", "addme", "pri" or "prime".

2. If, in case of an alarm, more than one participant should receive an alarm text (a maximum of 15 numbers in an alarm chain are possible), the GSM module must also be given an alarm waiting period i.e. the time interval in minutes between the transmission of two alarm texts or the time the recipient of an alarm text has to reset the alarm before another alarm text is sent to the next recipient in the alarm chain. The alarm waiting period in minutes can then be stored using the "awt" text command in the GSM module.

Set "awt" alarm message time

This command can be used to set the alarm waiting period in minutes.

This is the time interval between sending the alarm text to the target numbers when more than one telephone number with different alarm priorities are stored in the GSM module. Refer to the text commands "add", "addme", "pri" and "prime".

The maximum value is 65535 minutes; that is approximately 45 days and 12 hours. The zero value adopts a special position and is the factory setting. With the zero value, only the telephone number with the highest alarm priority receives an alarm text, other numbers with a low alarm priority are not considered. The alarm message time is to be understood as the time which the alarm recipient has to confirm the alarm with the text command "res", before the alarm text is passed onto the next number with the next alarm priority.

Entry: <Password><SPC>awt<SPC>
           <Time in minutes>

Example:

12345 awt 60

In this example, the alarm waiting period is set to one hour.

Alarm sequence

An alarm can

- Alarm 1: triggered by the digital alarm input (e.g. sauna protection circuit).

- Alarm 2: triggered by a corresponding local wireless smoke detector.   T h e wireless smoke detector can only be set in the factory.

An alarm text can either be a stored text on the GSM module SIM card or the status text (factory setting). The "sim" command can be set to determine which of the two should be sent.

The status text looks like this:

Preset:

The alarm is automatically active when switched on.

After each alarm report, the alarm has to be reset by calling and quickly hanging up (after 1 x ring) or by text message.

The alarm text is sent to the mobile phone which the unit has switched on (factory setting).

Alarm text 1

<5>

Forced shut-down protection circuit - refer to error code in display.

Or with a connected smoke detector

 Alarm text 2:

<9>

Alarm smok detector

Alarm SMS: priority of target telephone numbers

In order for the GSM module to be able to send an alarm text in case of an alarm, it must have at least 1 and a maximum of 15 telephone numbers to which a text message can be sent. These telephone numbers are part of the authorization list in which all telephone numbers are entered that are allowed to operate the GSM module. In order for an alarm text to be sent in case of an alarm, at least one telephone number from the authorization list must be provided with an alarm priority with a minimum value of 1 and the maximum value of 15. This means that a maximum of 15 telephone numbers can be made target numbers for the alarm text, whereby the telephone number with the highest alarm priority is the first to be sent an alarm text in case of an alarm.If more than one telephone number with an alarm priority larger than zero is found in the authorization list and an alarm waiting period is specified using the "awt" text command, the GSM module works through the alarm priorities in ascending order in case of an alarm. This means that the alarm text is sent to each of these numbers at the alarm intervals if the alarm is not reset with the "res" text command beforehand.

Specify alarm priorities

Telephone numbers stored in the authorization list can be subsequently given an alarm priority, or they can be subsequently changed. This takes place with both text commands "pri" and "prime".

As an alternative to this, new telephone numbers can also be given an alarm priority directly upon approving them. In this case, the priority is specified with the text command "add" as an option behind the telephone number, or as an optional parameter with the "addme" text command.

An alarm priority (1 to 15) may only be allocated once, with the exception of the alarm priority zero. What would happen if an alarm priority were to be programmed using one of the corresponding commands already allocated in the GSM module?

Downwards recursion takes place in this case, which means that the alarm priority of the existing telephone numbers is reduced by one. If the decreased alarm priority is already available, this is also reduced by one.

This process is repeated until

1. Either no other number with the respective priority is available anymore

2. Or recursion meets the number with priority 1, which is then reduced to zero and it is no longer a target number for the text alarm.

The following example should show this:

Priority	Telephone number
8	Number I
4	Number II
3	Number III
1	Number IV

The table shows a possible configuration of alarm priorities for four telephone numbers on the authorization list. In the cae of an alarm, number I with the highest priority (8 in this case), would receive the alarm text first after expiry of the alarm waiting period, the number with alarm priority 4 would be next, then the number with priority 3 and finally the number with priority 1.

Let's assume that we now want to allocate another telephone, let's call it "number V", to the existing alarm priority 4. This would lead to the following redistribution of the alarm priorities

Priority	Telephone number
4	Number V
8	Number I
3	Number II
2	Number III
1	Number IV

In this case, the priorities of the grey numbers would be reduced by one. Number 1 has not been affected by the recursion because the alarm priority was higher than 4. Number IV was also not affected by recursion either because alarm priority 2 was not yet occupied.

If we now repeat the process and provide another number (VI) with alarm priority 4, the following redistribution takes place:

Priority	Telephone number
4	Number VI
3	Number V
8	Number I
2	Number II
1	Number III

The telephone numbers V, II, III and IV were affected by the recursion in this case. The telephone number IV was reduced from 1 to zero and is therefore no longer a target number for the alarm text; it is therefore only authorized to operated the GSM module like the remaining numbers in the authorization list.

Distribution of the alarm priorities can be requested using the "p" text command.

In the *factory setting*, the alarm priorities are automatically allocated.

Text commands

In the following chapters, you will find out how the settings in the GSM module are simply changed by text and are called up.

Information is sent to the GSM module using a "text command".

If required, the GSM module automatically sends a "response text"

or upon request.

This provides information about the current status or the current settings. A response text can also be used to check whether the instructions of a text command has been successfully carried out.

ℹ *With text commands, you can control, monitor and change the settings of your GSM module from anywhere in the world.*

A text can be sent from any mobile phone.

The password, and not the telephone number, serves as authorization.

Please note that charges will apply for each text.

⚠ *In the case of control by text, it should be ensured that a text message does not immediately reach the GSM module in rare cases (refer to "text security information").*

Text format

Any text you send to the GSM module must have the following format:

<**Password**><Blank>**text command no. 1**<Blank>**text command no. 2**etc.

- This password must be at the beginning of each command text. A blank (SPC) or line-feed (LF) must be behind the password. If it flickers briefly due to incorrect entry of a password, the orange error and status LED and the command text is ignored by the GSM module.

- The first text command is immediately after the password in the next line or after a blank.

- Several instructions must be separated from each other with a blank (SPC) or a new line feed (LF) (new line). Both capital letters and small letters are allowed.

- Up to 8 commands can be sent simultaneously per text.

- Details inside square brackets "[ ]" are options and can be omitted.

- Details inside pointed brackets "< >" are obligatory.

ℹ️ *In order to minimise possible entry errors and accelerate the issue of a text message, you can store the password and frequently used instructions as pre-set texts in your mobile telephone.*

⚠️ *In the examples, the password set in the factory "12345" is used. Remember to change this password (refer to "pw" text) otherwise anyone who knows the GSM telephone number can operate it by text!*

Replace "12345" with your set, valid password!

ℹ️ *The following, very detailed description of the text commands is especially for first-time users.*

Response text

Users can request nine different text responses from the GM module:

1. "r" reports whether the text commands have been successfully carried out or not.

2. "c" reports the current basic settings.

3. "ac" reports the current alarm settings.

4. "s" reports the current status.

5. "is" reports whether a telephone number is authorized or not and (if authorized) which alarm priority it has.

6. "me" reports whether the user's own telephone number is authorized or not and (if authorized) which alarm priority it has.

7. "p" lists a maximum of three telephone numbers with an alarm priority and, if available, provides information on whether there are further telephone numbers with a different alarm priority than zero along the three displayed ones.

8. "test": text messages stored on the SIM card can be called up here.

9. "ussd": additional GSM services can be called up which can be selected with the access numbers *1nn#. Examples might be the request of the remaining credit of the prepaid SIM card in the GSM module or topping it up.

Before these listed commands, a target telephone number can also be given as an option. In this case, the text responses to the following commands are sent to the given telephone number. If a target telephone number is not specified, the response text is sent back to the text sender.

⚠️ *A maximum of 4 text responses per text can be requested.*

Only the first request is carried out when several texts are requested and others are dealt with as errors.

Request text response "r"

With this instruction, a response text is requested for a command text from which you can tell whether the instructions have been carried out or not. The remaining storage capacity for authorized telephone numbers is also displayed in % as well as the set country code (refer to the text or PC command "c" for the country code) and the GSM-Relog-Time (refer to text or PC command "rlt").

Entry: | <Password><SPC>[<target number><SPC>] r[<spc><maximum of 7 other commands>]

Example:

12345 cb 1 thme 60 r

A response text contains the letters "e" for "error" and "s" for "success" and is read from left to right.

The text in the example contains three commands: "cb", "time" and "r".

Due to the fact that the "time" command has been entered incorrectly ("thme"), this text was confirmed as follows: "sees". This shows you that the first command ("cb") has been successfully performed, the second command could not be carried out correctly because the GSM module does not recognise the term "thme" and the corresponding parameter (60 seconds) is interpreted as an unknown command whereby the response is set to a second "e". The third command "r" (the request for a response) was successful; shown here with the final "s".

Request status text "s"

With this command, a status text is requested which is also sent in case of an alarm when the standard text (refer to text or PC command "sim" for factory settings) is set as an alarm text. This command allows the request of a status tect with any (including unauthorized) telephones, even if the function "request status by call" is deactivated and/or an alarm has not been triggered.

Entry: | <Password><SPC>[<target number><SPC>]s

Example 1:

12345 s

Example 2:

12345 +4961510815 s

In the second example, a target telephone number is given before the "s" command and, in this case, the status text is not sent back to the sender, but to the given telephone number.

Switch to "on" by text

As an alternative (free) to a call, the sauna can also be switched on with a text (charge applicable). This means that it is possible that a telephone without a number in the authorization list can operate the GSM module if the password is known.

Entry: `<Password><SPC>on`

Example:

12345 on

Switch-off by text

As an alternative (free) to a call, the sauna can also be switched off with a text (charge applicable). This means that it is possible that a telephone without a number in the authorization list can operate the GSM module if the password is known.

Entry: `<Password><SPC>off`

Example:

12345 off

Switch ON/OFF by call (on/off) "gsm"

With this command, the option of operating the GSM module by telephone call is authorized or blocked.

ℹ️ *In the factory setting, the GSM module can be operated by telephone call.*

Entry: `<Password><SPC>gsm<SPC><n>`

n = 0: block operation by call   , n = 1: permit operation by call.

Example:

12345 gsm 0

In this example, switching the unit on or off by telephone call is blocked.

Reset power failure counter "rpc"

The power failure counter is reset to zero with this command.

Entry: `<Password><SPC>rpc`

Example:

12345 rpc

Reset text counter "rsmsc"

With this command, the text counter is reset to zero. The current counter level is added to with each text successfully sent by the GSM module. With each text generated by the GSM module, the current counter status is displayed in pointed brackets "< >" at the beginning of the text.

Entry: `<Password><SPC>rsmsc`

Example:

12345 rsmsc

Request current basic settings as a text "c"

With this command, a response text is requested from the GSM module which displays the current configuration.

Entry: `<Password><SPC>[<Target number><SPC>]c`

Example:

12345 c

Example response:

< 5>

rings: 4, 8

cb: 1

text: yes

gsm: yes

aut: yes

irc: yes

"**rings**" shows the unit is switched on after 4 incoming ring tones and switched off after 8 ring tones. *Caution: in Germany, the ring tones you can hear do not synchronize with the ring tones received by the GM module.* In this example, the caller would hear around 3 ring tones for switching on and 5 to 6 ring tones for switching off.

"**cb**" shows that the automatic callback is switched on

"**sms**" shows that the status text is sent back to the caller when the call is hung up early.

"**gsm**" show that your sauna unit can be switched on and off with a call.

"**aut**" shows that the telephone number check is switched on and therefore only authorized participants can operate the GSM module by calling.

"**lrc**" shows that the GSM module can be controlled using a local remote control as long as it is equipped with a corresponding receiver and a remote control has been set up.

Switch alarm on or off by call "aevc"

With this command, an alarm input can be authorized to switch the unit on (engaged) or off by calling and hanging up early.

Entry: <Password>aevc<SPC><n> <SPC><m>

n = number of the alarm channel (1,2,3 or 4)

m = 1: alarm can be switched on and off by hanging up early.

m = 0: alarm is not influenced by a call.

Example 1:

12345 aevc 2 1

In this example, the alarm 2 is made to switch on and off by hanging up early.

Example 2:

12345 aevc 3 0

In this example, alarm 3 can no longer be influenced with a call and by hanging up early.

Specify alarm recipient priority "pri"

With this command, an authorized telephone number in the GSM module can be given an alarm priority or can be changed in order to make it into a target number for the alarm text. A maximum of 15 priorities are possible. The standard value is zero, whereby the number does not have a priority.

Caution: each priority can only be allocated once. If the entered priority is already available, downward recursion is created with this process. If another number already has the same priority, it is reduced by one.

This process is repeated until

1. Either no other number with the respective priority is available anymore

2. Or recursion meets the number with priority 1, which is then reduced to zero and it is no longer a target number for the text alarm.

Entry: <Password><SPC>pri<Telephone number><SPC><Priority (0 to 15)>

Example:

12345 pri +492208150 10

In this example, the prerequisite is that the telephone number shown is already in the GSM module authorization list. The priority is set to 10.

Should no further numbers be available in the GSM module with a higher priority, the displayed telephone number is the number to which the first alarm text is sent in case of an alarm.

Specify own telephone number for alarm receipt "prime"

With this command, you own telephone number (assuming it is already authorized in the GSM module) is given an alarm priority to make it a target number for the alarm text. This command has the same effect as the "pri" command and entry of your own telephone number. Due to the fact that the GSM module knows the number of the text sender, this command saves you entering your own number and therefore prevents entry errors.

Please also read the description of the "pri" command.

Entry: <Password><SPC>prime <SPC><Priority (0 to15)>

Example:

12345 prime 0

In this example, the priority of your own telephone number is set to zero so that no more alarm text is sent to this telephone number, if this had a previous priority different to zero.

Specify type of alarm text "asim"

This command can be used to determined whether, in the case of an alarm, a generated alarm status text from the GSM module is sent to the recipients or a text stored on the GSM module SIM card.

Entry: `<Password><SPC>asim<SPC><n>`

n = 0: alarm text is the alarm status-SM from GSM module

n = 1: alarm text is a preset text on the SIM card

Example:

12345 asim 1

In this example, the alarm text is sent to the produced tect on the GSM module SIM card.

Enter "text" for alarm text

With this command, a text with up to 140 characters as a prepared alarm text can be stored or changed on the SIM card in the GSM module. The maximum text length is limited to 140 characters. As an alternative to this function, the alarm texts can also be entered with the mobile telephone as a text draft in which the SIM card usually allocated to the GSM module is temporarily inserted. In this case, the text can also have the full text length of 160 characters. If a text is programmed using the GSM module, German umlauts (Ä, ä, Ö, ö, Ü, ü) and ß must be avoided. The text must be between two speech marks.

Entry: `<Password><SPC>text<SPC> <Alarm number 1 to 2> <SPC>"<Alarm text (maximum 140 characters)>"`

Example:

12345 text 1 "sauna switched on"

In this example, the text "sauna switched on" (without the speech marks) is stored as a message for alarm number 2 on the GSM module SIM card.

If less than 2 alarm texts are stored on the SIM card by the GSM module, a standard text is automatically saved on the SIM card for the other alarms:

"SIM-Text 01" etc.

ℹ️ *The alarm texts stored on the SIM card can only be sent in case of an alarm if "sim" is set to 1 (yes) using the text or PC command. Otherwise the status text is sent in case of an alarm.*

⚠️ *Caution - only one text command can be reduced per command text!*

Any other possible text commands are dealt with as errors. The "text" command may not be together with the "ussd" command in a command text, otherwise the second command is analyzed as an error.

Display alarm text "test"

Saved text alarm texts can be requested with this function.

Entry: `<Password><SPC>[<Target number><SPC>]test<SPC> <Alarm number 1 to 2>`

Example:

12345 test 1

The text for alarm number 1 is requested in this example. The response may look like this after the "text" example: sauna switched on.

Extra mobile communications services

Request/top up SIM credit "ussd"

This command stands for the English ab-breviation of "**U**nstructured **S**upplementary **S**ervice **D**ata (USSD)". The access codes have the format "*1nn#", whereby "*" and "#" stand for the asterix or rhombus key on the mobile phone "1nn" for three decimal keys beginning with 1.

For example, using USSD services, you can gain access to pre-configured services specific to the user of the respective <u>mobile communications network</u>.

For example, the remaining credit on a pre-paid SIM card can be requested or topped up with new credit.

The following examples deal with the Xtra-Card from T-Mobile. The access codes may vary with other network operators because they are no standardized. Please read the respective operating instructions for the SIM card.

Due to the fact that it is difficult to enter the asterix (*) and rhombus (#) characters on some mobile phones, the exclamation mark (!) and be entered as an alternative to the asterix (*) and, instead of the rhombus (#), the question mark (?) can be entered.

Entry: <Password><SPC>[Target num ber<SPC>]ussd   <SPC> *<Accessnumber[*<Extra number (e.g. top up code)>]>#

or:

       <Password><SPC>[Target num ber<SPC>]   ussd   <SPC> *<Access   number   [*<Extra numbers (e.g. top up code)>]>?

Example:

12345 ussd *100#

or

12345 ussd !100?

In this example, the remaining credit on a T-Mobile Xtra-Card is requested.

The text response could look like this in the example:

< 19>

USSD:

Current Xtra

credit: 12.29

EUR. Xtra texts

Option S: 5Ct. to a T-Mobile network.

Please note that the costs for the response text are not considered in the sum shown.

⚠ *Caution - only one USSD com-mand per command text can be sent! Any other USSD commands are dealt with as errors. The "text" command may not be together with the "ussd" command in a com-mand text, otherwise the second command is analyzed as an error.*

Country code "cc"

This command allows the entry of a country code which is always required when a telephone number is entered without a country code. Even in cases in which the mobile network does not automatically transmit the country code with the telephone number, the plus sign and the selected country code with "cc" is automatically supplemented by the GSM module.

The country code (without zeros at beginning) can have a maximum of 4 digits and at least one (e.g. USA). The zeros entered before the country code remain ignored.

Entry: <Password><SPC>cc<SPC><n>

  n = country code

Example:

12345 cc 44

In the example, the country code for England/GB (0044/+44) is indicated.

Guarantee

The guarantee is taken over according to the legal regulations at present.

Manufacturer's warrenty

- The period of warrenty starts from the date of purchase and lasts up to 2 years for commercial use and 3 years for private use.

- Always include the completed warranty certificate when returning equipment.

- The warrenty expires for appliances which have been modified without manufacturer's explicit agreement.

- Damages caused by incorrect operation or handling through non-authorized persons are not covered under the terms of warranty.

- In the event of a claim, please indicate the serial number as well as the article code number and type name with expressive description of the fault.

- This warrenty covers damaged parts but no defects due to   wear and tear.

In case of complaint please return the equipment in its original packaging or other suitable packaging (caution: danger of transport damage) to our service department.

Always include the completed warranty certificate when returning equipment.

Possible shipping costs arising from the transport to and from point of repair cannot be borne by us.

Outside of Germany please contact your specialist dealer in case of warranty claims. Direct warranty processing with our service department is in this case not possible.

Equipment start-up date:

Stamp and signature of the authorized electrician:

Please keep this address in a safe place together with the installation guide.

To help us answer your questions quickly and competently, please provide data printed on the ID plate, to include system type, article no. and serial no., in all inquiries.

Service Address:

EOS-WERKE GÜNTHER GmbH

Adolf-Weiß-Straße 43

35759 Driedorf-Mademühlen, Germany

Fon: +49 (0)2775 82-0

Fax: +49 (0)2775 82-431

servicecenter@eos-werke.de

www.eos-werke.de

Handling procedures for return shipments (RMA) - Details for all returns !

Dear customer

we hope that you will rejoice in the ordered articles. Just in case that you are not entirely contented as an exeption, please follow the procedures specified below.This enabling us to ensure a quick and smooth handling of the return shipment.

Please absolutely respect for all returns!

- Please add the available **RMA-voucher** always **completely filled out** together with an **invoice copy** to the return shipment! Do not stick it on the goods or on the packaging. **We do not accept the return shipment without these papers.**

- Not prepaid parcels **will be refused** and returned to Sender! Please always ask for the **RMA-No**. for the cheapest return.

- **Please pay attention that** the goods have to be sent back **without visible marks of use** in the **original scope of delivery and in original packing.**

- We recommend to use an **additional solid and break-proof covering box** which should be padded out with styrofoam, paper or similar. Transport damages as a result of faulty packing are for the sender's account.

**Form of complaint:**

1) Transport damage

- Please check the content of your parcel immediately and advise the forwarding company of a claim (parcel service/ freight forwarder)

- Do not use damaged goods!

- Ask the forwarder **for a written acknowledgement of the damages.**

- **Report the claim promptly by phone to your dealer.** He will discuss with you how to act in this case.

- If the transport box has been damaged, please use an additional covering box. Do not forget to add the **acknowledgement of the damage of the forwarding company !**

2) Faulty goods

- The implied warrenty period is 2 years.Please contact your dealer in case of **faulty or wrong articles or missing accessories.** He will discuss with you the individual case and try for immediate and customer-friendly solution.

- For **economic returns** within Germany you will get an **RMA-number from the manufacturer.**

- All returns have to be in the **original packing of the goods with corresponding accessories.** Please repack the goods to avoid damages. In case of wrong delivery, please do not use this article !

3) Problems of installation and functioning

- Please **read the manual carefully first of all** and pay attention to the indicated assembly or installing instructions.

- **Your dealer should be the first contact person** because he knows his products best and also knows possible problems.

- **In case of function problems with an article,** please check at first whether there is an obvious material defect. The quality system in our factory reduces malfunctions of new appliances to almost zero.

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Brief instructions

SIM-Card

PIN-Code must be deactivated or must be 0000

Saunasteuerung
Control unit

emotion of sauna.

Power
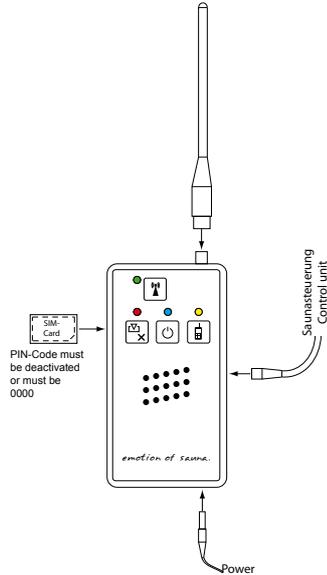
Create new password
Pre-set password 12345

Text message entry*

<Old password><SPC>pw <SPC><new password>

Example:

12345␣pw␣Jack5

(SPC = blank)

Authorize phone number
Text message entry*

<Password><SPC>add<SPC> <Telephone number>

Example:

12345␣add␣+49211123456

Authorize own phone number
Text message entry*

<Password><SPC>addme

Example:

12345␣addme

## Delete phone number
Text message entry*

<Password><SPC>del<SPC> <Telephone number to be deleted>

Example:

12345␣del␣+49211123456

*Charges may apply for this text.

Switch on/off per call

On**
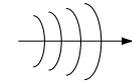
Approx. 4 calls

Off**
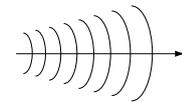
Approx. 8 calls

**Hide phone number function must be deactivated