

# GSM control device SAFIRE 1287B USAGE AND INSTALLATION 1/3

**General:** SAFIRE 1287B GSM control device can be used for controlling safire-heaters with a mobile phone.

The control device sends, upon request, a report, which includes the battery voltage, the temperature measured by the thermostat and the status of the heater control.

The device sends a battery voltage alert if the voltage drops below 12 V, and a temperature alert if the temperature drops below the set alert threshold.

**Subscription:** The device works in the GSM network. You should choose a subscription with a low subscription fee, including an advertising SMS prohibition. You may also want to consider using different balance and other restrictions in case the SIM card falls in the wrong hands.

**Installation:** The installation is affected by the signal strength of the operator. If the reception is weak, the antenna may have to be placed at a location with a stronger signal. The reception can be measured by using a mobile phone. There are no other restrictions on the placement of the device, except for the cable length. The device is connected to the connector located on the circuit board of the heater. It can be found by opening the control panel (black screws in the lower front corner). Pull the cable out of the control panel the same way the other cables exit the panel. Attach the cable so that it does not touch the hot parts of the heater.

**Notice! Install 1287B at first, after that the main power from battery!**

## Mounting the controller

The casing of the device has to be opened for installation. Remove the locking screw of the cover at the top. Figure 1 There are holes in the bottom of the casing for mounting screws. Figure 2. Ensure that the connection cable plug is connected all the way to the connector on the circuit board.

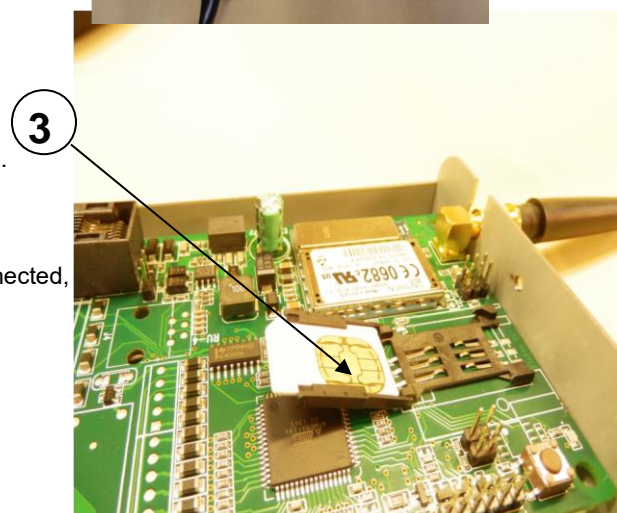
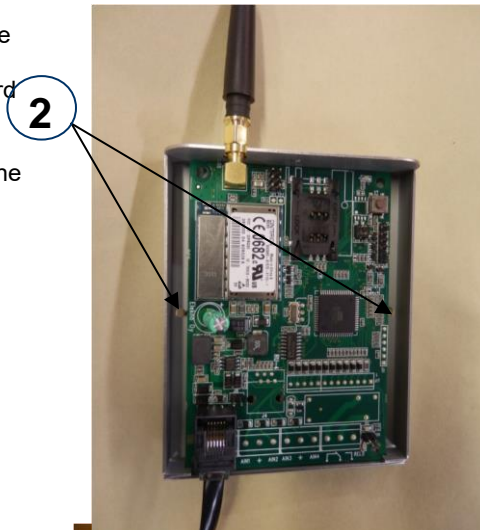
**1287B connection before main power!**

**SIM-card:** The PIN code must be disabled before the SIM card is installed: Insert the SIM card in a mobile phone. Navigate to: Settings - Security - Enable/disable PIN code. The card is inserted in the card reader, figure 3.

The SIM card holder lock is opened by pulling it downwards, and locked by pressing it upwards. When the SIM card is installed and the power is connected, (heater in AUTO position) the red indicator in the right corner starts flashing in approx. 1 s intervals, until the device has connected to the base station. After this the flashing interval is approx. 3 seconds. The indicator is also visible from the window on the casing after the cover has been replaced.

The green indicator in the lower right corner starts blinking in approx. 1.5 second intervals after the start-up phase. The red indicator in the lower corner blinks when data are transferred between the heater and the modem.

Replace the cover after checking the functionality, and ensure that the cover is properly placed so that the pins in the lower corners lock the lower part of the cover as you tighten the screw (figure1).



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## Control functions:

All functions are enabled when the heater is in AUTO position. All other functions, except for startup and shutdown, are enabled when the heater's switch is in ON position.

## Language selection:

Send text message **#KS** in order to select Finnish (suomi).

Send text message **#KR** in order to select Swedish (svenska).

Send text message **#KE** in order to select English.

## Commands:

Commands are sent by using text messages. They are not case-sensitive, however, do not use spaces. Several commands can be sent in a single message. The order of the commands is up to you, but **startup or shutdown commands must be first in command queues.**

- The heater is started with the message #nnn (0-999 hours).  
Example: **The message #15 starts the heater for 15 hours.**
- The message **#0** shuts down a remotely started heater.
- The message **#R** returns a report text message (battery voltage, temperature, heater status and remaining heating time. The fuel quantity is also shown if a Genius control board is used.)  
**Please note!** If a startup command is combined with a report command, the report is sent after the heater's ignition process is completed (e.g. #12R).
- The message #Tnn is used for setting a new temperature to the thermostat. The value must be between 10 and 30.  
Example: **#T22** sets the thermostat expected value at 22 °C. This can be used for increasing or decreasing the set basic temperature.  
The setting is removed when the temperature is adjusted from the heater.
- The message #Pnumber is used for setting a phone number, which is used for sending reports and alerts. A plus sign must be entered before the number if it is international format. Example: **#P+35840123456**  
**#P0** Disabled setting, then all of alarms will go to last phone number.
- The message #H or h(+ or -) nn is used for setting the temperature alert threshold.  
Example: **#-0,5** sets the temperature alert at -0.5°C. The alert can be disabled by setting the alert threshold at -50 °C. Report
- The message #Dnn (eg **#D22** = 22 degrees) sets the heater to thermostat control (continuous), in which case the device is in normal thermostat control (10 - 30 degrees), but when the object temperature rises 2 degrees above the setting, the device switches off and when the temperature drops 2 degrees below that. setting, restarts automatically. To exit the mode, switch on the device for timing, eg with message **#10** (= 10 hours), switch off **#0** or switch **OFF**.
- The message #Cnn (eg **#C58** = 58%) sets the heater to direct power control, bypassing the thermostat. Permissible values 0 - 100%, (eg the 3800A effect fan starts at 92%).
- Message **#B0** turns off the auxiliary fan (2000B and 3200B), **#B1** turns on, operation is only possible when the unit is running.
- The message **#INFO** sends information on fuel consumption and operating time, with the message **#RESET** the counter can be reset.
- Message **#A0** turns off the acknowledgment messages sent by the remote starter (START, TURN OFF, OK), the report and alarms come on normally, message **#A1** turns on the messages.

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## Power saving mode:

If you want to economize power consumption (November-January), you can enable power saving mode with message **#V1**, then the modem will be open 15 minutes per every hour.

Text message **#V0** disable power saving and modem is open all the time. **(Note! When using the Genius control panel, the power saving mode is disabled from the control panel and power saving mode might cause connection problems)**

**Notifications:** The device sends messages and alerts to the number that received the last command and to the main number. When the device is switched off, the old numbers are “forgotten” at the switch and when the device is set to “AUTO” mode again, e.g. battery voltage alarm to the number in memory location 1.

If there is an error in the message, it will become a message to the sending number stating the location of the error (eg ERROR IN: 2), unless # is missing from the beginning of the message, then nothing will happen.

**Alerts:** The device sends an alarm if the battery system voltage drops below **12.00V** If the heater switches off in the fault mode when it is switched on by the phone, the device sends a fault message containing the fault code to identify the fault.

**In the event of a fault, the heater cannot be restarted with a gsm message until the cause of the fault has been rectified and the heater has been reset to GSM control mode**

**(exception fire detection fault, fault code 3, restart possible).**

## Manufacturer's declaration:

Nelcomp Oy assures that the Safire 1287B GSM control device complies with the essential requirements and other conditions of directive 1999/5/EC.



Safire Remote Control App, Android / Apple

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