

# ONTECH®

## Ontech GSM 9030



# Welcome

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Thank you for choosing Ontech GSM 9030

We hope that the product will satisfy your needs and that you will find this manual easy to handle and that it guides you in an appropriate way.

If you want to learn more, please visit our web site at [www.ondico.se](http://www.ondico.se), where you can find more information.

Questions can be directed to [support@ondico.se](mailto:support@ondico.se).

SMS text will be shown with gray background and bold text, for example:

**1234#1\*0#**

Also the buttons to be pressed when using a telephone in tone mode (not pulse) is shown in this way.

Text in *italic* indicates a menu in your mobile phone, for example;

*Contacts*

Quotation mark shall never be written in the contacts, it is used in this manual only in order to separate the commands from other text.

This version of the manual is valid for all units with software version 005 or later. To check the version of your unit, please refer to "SMS showing the SIM-card settings" on page 31.

Ondico AB is not responsible for damages that may occur due to incorrect use or if the product does not work as desired.

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# Overview

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Ontech GSM 9030 is a combined remote relay and an alarm caller and is communicating over the GSM network. The cabinet is made for indoor use..

- The unit is powered by plugging it into a main power wall socket..
- Remotely controlled by telephone calls or SMS.
- Alerts and temperature and power fail via SMS
- Relay230V/16A. Has a timer function. Can be programmed to remember position after a power failure.
- Two alarm inputs for corded alarm detectors. Can be set to NO or NC. Can be programmed to activate relay when alarms.
- Internal temperature sensor reports temperature.
- External temperature sensor with high accuracy is optional.
- Alerts if the temperature falls below or rise above alarm temperature.
- Thermostat function, temperature regulates the relay.
- Can control extra relay units (Ontech 9010) via short range radio.

# Content in package

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- Ontech GSM 9030
- Antenna
- This manual
- Connection cable

## Get started

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In order to use the unit you must have a SIM card for a GSM mobile telephone and access to a mobile phone. Cash card can be used.

The installation is made in three simple steps:

1. Programming the SIM card
2. Physical installation
3. Test of the unit and its functions

### ***Necessary programming of the SIM card***

1. Insert the SIM card in a GSM mobile phone
2. Deactivate the PINCODE function. See the user manual of the mobile phone.
3. Delete all old contacts from the SIM card if there are any
4. Choose *Contacts* in the mobile phones menu.
  - a. Create a new entry. Name it "PINCODE"
  - b. In the field for telephone number, enter your personal four digit number. This number is the PINCODE you must enter each time you contact your Ontech GSM 9030.
5. Go to "Optional programming of the SIM card" if you want special functions  
**or**
6. Turn off the mobile phone and remove the SIM-card. Go to to "Installation of the unit" see page 9 **Fel! Bokmärket är inte definierat.**

Make sure that you save all information are on the SIM card and not only in the memory of the GSM telephone. It can be necessary to open the contacts and copy to the SIM card from the memory of the telephone. See the manual of the telephone. Avoid to copy more contacts than necessary to the SIM card. No quotation marks or slashes or similar shall be written, just the text.

## ***Optional programming of the SIM card***

In order to use some of the function you want it can be necessary to program more contacts on the SIM card. See below:

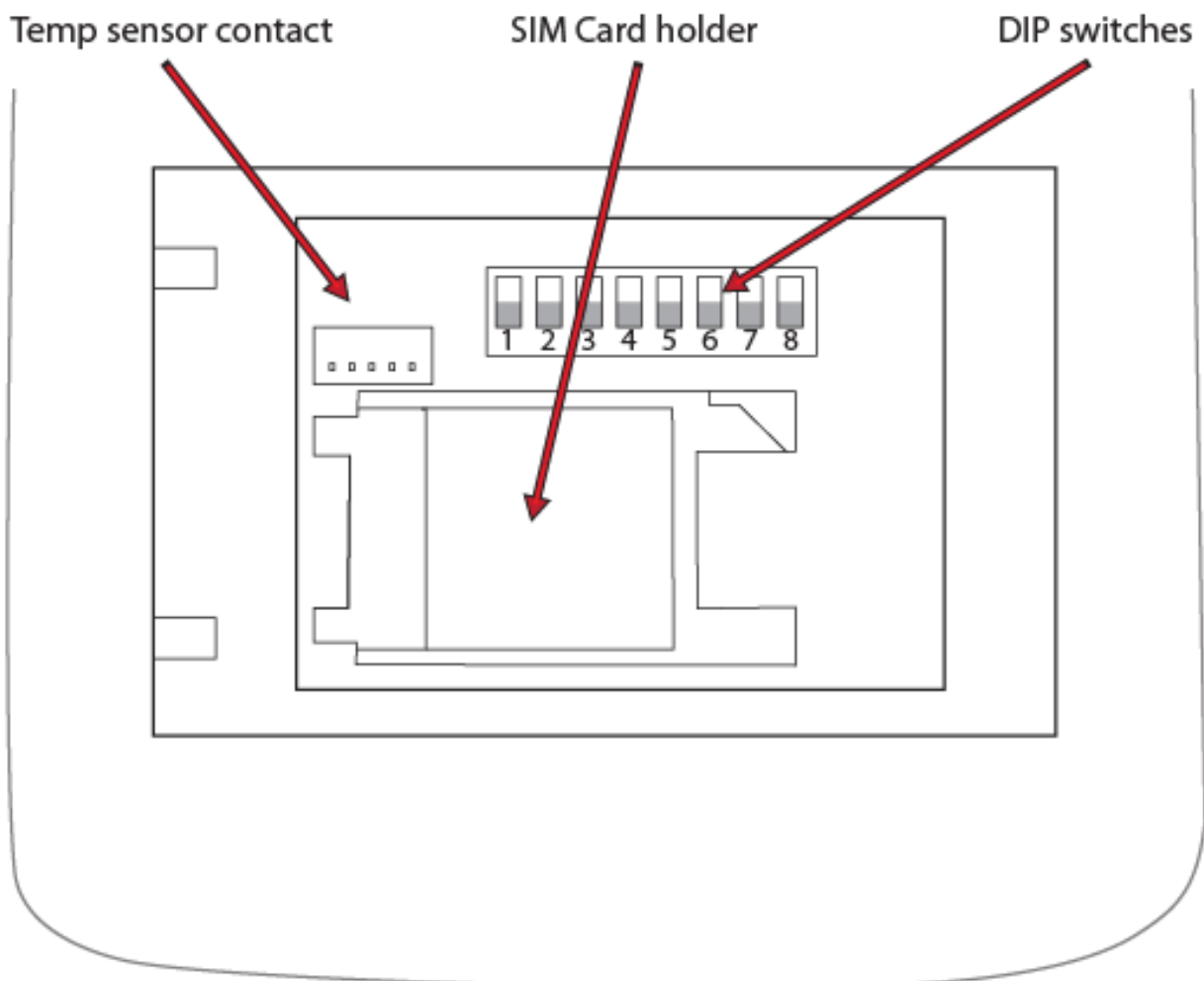
**NB!** To be sure programming is made in a correct way, you can check by requesting an SMS with SIM card settings. See page 25. Do this every time you have changed the SIM card settings.

1. **Create a send list for alarms** (see page 11).
  - 1) Create a new contact. Name it "SMS0" (note that 0 is zero and not the letter O).
  - 2) Enter the mobile phone number for the receiver of the SMS. Save.
  - 3) The following contacts in the send list are named SMS1, SMS2 etc, and the mobile numbers are entered. All numbers from SMS0 to SMS9 can be used, in total 10 different numbers.
  
2. **Set delay for activation of alarm detector (DELAY)** (see page 14).
  - 1) It is possible to set a delayed activation for an alarm detector. This is for giving you time to deactivate the alarm before the unit is sending an alarm.
  - 2) Create a new contact. Name it "DELAYX ". X is the ID of the alarm detector you want to delay (values of 1-8 are permitted).
    - i. Write the numbers of seconds you want to delay in the telephone number field  
Example: You want alarm detector with ID no 6 to be activated with a delay of 45 seconds. In the name field of the contact, write "DELAY6" and in the field for the telephone number write "45".
  
3. **Activate the temperature alarm (TEMP)** (see page 17).
  - 1) Create a new contact and name it "DEGREE".
    - i. Write the alarm temperature in the telephone number field. If the alarm temperature is below zero degrees Celsius, add zero ("0") before the temperature. For example; minus 7 degrees C is written as "07".
  - 2) Create a new contact and name it "TEMP".
    - i. In the telephone number field write "1" if you want an alarm if the temperature drops **below** the alarm temperature given

in "DEGREE" or write "2" if you want the alarm when the temperature rises **above** the alarm temperature.

4. **Set active temperature sensor (EXTTEMP)** (see page 17).
  - 1) If you have an external temp sensor (optional) and you want it to control the temperature alarm and thermostat you have to activate it; Create a new contact and name it EXTTEMP.
    - i. In the telephone number field write "1".
  
5. **Active the function "relay activates at alarms" (ALARMRELAY)** (see page 14)
  - 1) Create a new contact and name it "ALARMRELAY".
    - i. In the telephone number field write "1"

### ***Back side, cover removed***





## ***Installation of the unit***

1. Remove the cover door on the back of the unit . Use a small screwdriver..
2. Install the SIM card (see picture).
  - a. The upper part of the SIM card holder is moved to left until you hear a click.
  - b. Fold up the upper part of the SIM card holder.
  - c. Place the SIM card in the upper part. The cut corner of the SIM card shall be positioned in the upper right corner when the upper part of the card holder is folded back.
  - d. Fold back the upper part.
  - e. Lock the upper part by moving it to the right until you hear a click..
3. If an external temperature sensor shall be used, , connect to Temp sensor contact.
4. Replace the cover door.
5. Insert the unit in a power socket.
  - a. The green lamp starts flashing for about 45 seconds. This indicates that the unit is searching an GSM network.
  - b. Finally the green lamp is lit. The unit is communicating with the GSM network and the unit is ready for use.
  - c. If both the red and the green lamp is flashing, this indicates:
    - i. SIM-card is missing
    - ii. The PIN-code on the SIM-card is not deactivated.

## ***Check the SIM card settings***

It is recommended to control the SIM card setting after installation. See page 25.

Do as follows:

1. Send an SMS to the unit with a request of the SIM card setting. Write ABCD#8\*2# (where ABCD is the PINCODE you have programmed to the SIM card).
2. The unit replies with an SMS with the settings.

## ***Testing the unit***

When you have installed the unit it is recommended to test the function. Call the unit or send SMS to control the relay. Test the alarm inputs if used. Ask for status SMS to check temperature.

# Functions

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## ***Remote relay***

With this function you can call the unit or send an SMS and activate or deactivate the 230V/16A relay.

Insert the unit in the wall power socket you wish. Put the power contact of the device you want to operate in the power socket of the unit.

## **Control the relay manually**

You can activate and deactivate the relay by pushing on the button on the front. When the relay is activated the red lamp is lit.

## **Control the relay with a telephone**

1. Call the unit. Be sure you use tone mode on the telephone.
2. The unit answers with a beep.
3. Press your PINCODE and then #.

Exemple: **1234#**

If the PINCODE is correct the unit replies with a beep. If it is not correct the call is disconnected. Call again and try.

4. **Activate the relay** by pressing the buttons as follows::

**1\*1#**

The unit confirms with a beep. If there are two beeps, try again.

5. **Deactivate the relay** by pressing the buttons as follows:

**0\*1#**

The unit confirms with a beep. If there are two beeps, try again.

6. **Activate the relay with timer function**

The relay can be set to be activated during a preset number of hours (1-99)

Press the buttons as follows:

**1\*1\*T#** (T= the number of hours you want the relay to be active).

The unit confirms with a beep. If there are two beeps, try again.

After you have made one operation you can directly continue with another operation without calling up again. When you have completed all operations, then hang up.

## Control the relay with SMS

1. **Activate the relay**, send an SMS to the unit with the following text:

**ABCD#1\*1#** (where ABCD is your personal PINCODE)

2. **Deactivate the relay**, send an SMS to the unit with the following text:

**ABCD#0\*1#** (where ABCD is your personal PINCODE)

3. **Activate the relay with timer function**

The relay can be set to be activated during a preset number of hours (1-99)

Send an SMS with the following text

**ABCD #1\*1\*T#** (where ABCD is your personal PINCODE, T= the number of hours you want the relay to be active).

### Tip!

Instead of the symbol \* you can use all letters (uppercase or lowercase) on button 7 (p, q, r or s).

Instead of the symbol # you can use all letters (uppercase or lowercase) on button 9 (w, x, y or z).

### Tip!

If you not are sure about the settings of the unit, you can request a SIM card setting SMS, see page 25.

## The position of the relay after a power failure

If there is a power failure and the relay is activated, it will change to deactivated position. When the power returns it will remember the position it had before the power failure. If this is not desired, please set DIP-switch 8 to position ON.

## Alarm

Ontech GSM 9030 can alarm in many different ways. All alarms are sent as SMS to the telephone numbers on the alarm list (see page 7). This SMS is identical to the status-SMS. The unit can be programmed so the relay activates when there is an alarm, see page 14.

### Wired alarm

Two alarm inputs where alarm detectors can be connected. Can be set as *Normally Open (NO)* or *Normally Closed (NC)*.

## **Wireless alarm**

Ondico AB will start to sell different wireless alarm units which communicate with Ontech 9030. Up to 7 different alarm detectors can be connected. The wireless alarm detectors planned are A. Motion detector, B. Magnet switch/Alarm box and C. Emergency Alarm button. Also a remote control to turn on/off the alarm will be offered.

## **Temperature alarm**

The temperature alarm is triggered if the temperature rises above or drops below the preset alarm temperature. See page 17.

## **Battery alarm**

The unit alarms if the backup battery needs to be charged or if it is empty.

## **Wired alarm**

### **Connect an alarm detector**

When an alarm detector is activated it will either close or open an electric circuit. It can be a magnetic switch detector, a level detector, a motion detector or any other kind of sensor..

The jacket on the under side has the following markings:

G	Ground
A	Alarm input A
B	Alarm input B
12	Voltage 12 V

The connection cable has a connector in one end that fits in the jacket

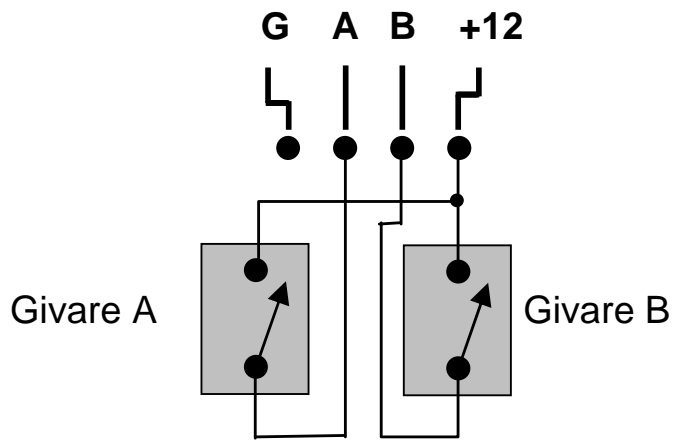
### **Switch from Normally Open to Normally Closed mode**

Locate the DIP-switch, see Fig 1.

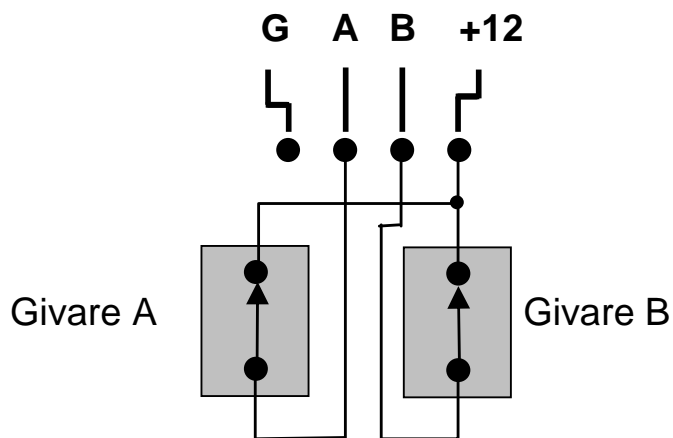
Factory default for switch 1 is OFF. This mean the alarm inputs are set to NO mode. The unit sends an ALARM A if connectors "A" and "+12" are connected and ALARM B if connectors "B" and "+12" are connected.

If DIP switch 1 is set to ON the mode is switched to NC. The unit sends ALARM A if connectors "A" and "+12" are disconnected and ALARM B if connectors "B" and "+12" are disconnected.

## Suggestion for connection of alarm detectors in Normally Open (NO) mode



## Suggestion for connection of alarm detectors in Normally Closed (NC) mode



## Wireless alarm detectors

Ondico AB will market wireless alarm detectors. These can be easily connected to work together with Ontech GSM 9030.

Up to 7 different detectors can be connected. On Ondico website [www.ondico.se](http://www.ondico.se) we will inform more about this!

## Delayed activation of alarm detector

Sometimes it can be desired to delay the activation of an alarm detector. This is for example when you want to go inside the house and deactivate the alarm before it sends alarm messages.

Program the SIM card (see page 7) as follows:

- 1) Create a new contact. Name it "DELAYX ". X is the ID of the alarm detector you want to delay (values of 1-8 are permitted).
  - i. Write the numbers of seconds you want to delay in the telephone number field  
Example: You want alarm detector with ID no 6 to be activated with a delay of 45 seconds. In the name field of the contact, write "DELAY6" and in the field for the telephone number write "45".

## Activation of relay when alarming – Alarmrelay

This function activates the relay when the unit is alarming. This function is useful if you for example have an alarm detector that alarms when water level is too high, the relay is activated and turns on a pump.

- The function is activated by adding a contact on the SIM card and name it "ALARMRELAY". In the telephone number field, write "1" (see page 8).
- The function is deactivated by removing the contact from the SIM card.

## Turn off/on the alarm function

Each time you start up Ontech GSM 9030 the alarm function is turned on 60 seconds after the green lamp has stopped flashing. This delay is because you shall have time enough to move away from the alarm detectors (compare with an ordinary alarm). If you do not want the alarm function to be active, you can deactivate it. If you do not have any alarm detector connected, you do not have to think about this.

### Turn off/on the alarm function with a telephone

1. Call up the unit. Be sure you use tone mode on the telephone.
2. The unit answers with a beep.
3. Press your PINCODE and then #.

Example: **1234#**

If the PINCODE is correct the unit replies with a beep. If it is not correct the call is disconnected. Call again and try.

4. Turn off the alarm function by pressing buttons

**7\*0#**. The unit replies with a beep. Hang up the receiver. If the unit replies with two beeps, try again.

5. Turn on the alarm function by pressing buttons

**7\*1#**. The unit replies with a beep. Hang up the receiver. If the unit replies with two beeps, try again.

### Turn off/on the alarm function with an SMS

1. To turn off the alarm function, send an SMS with the following message:

**ABCD#7\*0#** (where ABCD is your PINCODE)

2. Turn on the alarm function again by sending an SMS with the following message:

**ABCD#7\*1#** (where ABCD is your PINCODE)

### Turn off/on the alarm function with the remote control

Ondico AB will start to sell a remote control. This is used to turn off/on the alarm. More information will be published on our web site [www.ondico.se](http://www.ondico.se).

#### Tip!

If you want to know if the alarm is turned on or off, you can check this by requesting a status SMS from the unit (see page 25). When the alarm is turned on there is an asterisk (\*) before the name **Ontech9030**, It looks like this: **\*Ontech9030**.

## When the unit is alarming

### Alarm list

When an alarm is activated an SMS will be sent to all mobile telephone numbers on the alarm list. How to create this list; see page 7. Up to ten different persons can be alerted.

### Alarm SMS

Alarm SMS and Status SMS looks identical and shall be interpreted as follows:

Example	Explanation
<b>*Ontech9030</b>	Asterisk (*) means alarm function is turned on
<b>Alarm:</b>	
<b>1ab, 3b</b>	Indicates all alarms that have been activated since the last acknowledge. The number indicates the units ID number, Ontech 9030 is always no 1, and the others refer to the extra units ore wireless alarm detectors connected. Note that these inputs not can send an alarm again before the

	alarm has been acknowledged.
<b>Inputs:</b>	
<b>1b</b>	Indicates the alarm input that still is activated. In this example the SMS means that inputs 1a, 1b and 3b has been activated since the last acknowledge and that input 1b is still activated.
<b>Units:</b>	
<b>1*,3,4*</b>	Indicates the units communicating with the Ontech GSM 9030. Unit number 1 is always Ontech GSM 9030. The other numbers refers to the extra relays (Ontech 9010) connected. An asterisk (*) after the number indicates that the relay is turned on. If Ontech GSM 9030 loose contact with one of the extra relays unit its ID number will not be shown in the SMS.
<b>Temp: 24; 24,2</b>	Gives the temperature in degrees C. The first number refers to the internal temperature sensor; the second number refers to external temperature sensor, if connected. If not connected -- will be written instead. If there is an asterisk, for example <b>*24,2</b> before the number this indicates that the unit has sent a temperature triggered by this sensor.
<b>Tstat: 25</b>	Indicates the set temperature for the thermostat function. If thermostat not is activated the message is <b>Tstat: OFF</b> .

## Acknowledge an alarm

When an alarm detector has triggered the alarm it has to be acknowledged, before the unit can send another alarm. Temperature alarms, GPS fence alarm and power fail alarm do not have to be acknowledged.

### Acknowledge an alarm manually

Press the button on the front of the unit at least once. Note that also all alarm from the extra relays (Ontech 9010) will be acknowledged.

### Acknowledge an alarm with a telephone

1. Call up the unit. Be sure you use tone mode on the telephone.
2. The unit answers with a beep.
3. Press your PINCODE and then #.

Example: **1234#**



If the PINCODE is correct the unit replies with a beep. If it is not correct the call is disconnected. Call again and try.

4. Acknowledge the alarm by pressing the buttons **9#**. The unit replies with a beep. Hang up the receiver. If the unit replies with two beeps, try again. Also alarms from extra relays (Ontech 9010) will be acknowledged.

### **Acknowledge an alarm with SMS**

1. Send an SMS to the unit with the following message: **ABCD#9#** (ABCD is your PINCODE). Also alarms from extra relays (Ontech 9010) will be acknowledged.

## ***Temperatur***

### **Temperature sensors**

Ontech GSM 9030 will by default use the internal temperature sensor for controlling and alarming. The accuracy is +/- 3 degrees C. The internal temperature sensor is also affected by the relay. If the relay is activated it will indicate 1-2 degrees higher than normal, due to heat produced by the relay.

If you wish higher accuracy (+/- 1) we recommend you to purchase the external temperature sensor "Ontech Temp Sensor 9020\_002".

### **Installation of external temperature sensor**

The external temperature sensor is connected to the temp sensor contact close to the SIM-card holder. In order to make place for the cable you must remove some material from the cover on the marked place (where material is made thinner).

If you wish to use the external temperature sensor for controlling the thermostat and triggering the temperature alarm you have to program the SIM card for this purpose (see page 8).

Create a new contact and name it EXTTEMP and in the telephone number field write "1". NB. The external temperature sensor is not delivered together with Ontech GSM 9030. It is optional.

### **Temperature alarm**

#### **Default setting**

If the temperature alarm is turned on the unit will send an alarm if the temperature drops below 5 degrees C. The alarm does not have to be acknowledged but the unit will not send another alarm before the temperature has reached at least 6 degrees C.

The temperature alarm is not activated by default.

Activate the temperature alarm as follows:

- 1) Create a new contact and name it "TEMP".  
In the telephone number field write "1" if you want an alarm if the temperature drops **below** 5 degrees C or write "2" if you want the alarm when the temperature rises **above** 5 degrees C.

The unit will send an SMS alarm to all the telephone numbers on the alarm list if the temperature drops below/rises above 5 degrees C.

The function is deactivated by removing TEMP contact from the SIM card.

### **Setting alternative triggering temperature for the temperature alarm**

You can set an alternative temperature of your choice for the temperature alarm.

The alarm does not have to be acknowledged. The unit cannot send another temperature alarm before it has changed more than one degree from set alarm temperature.

- If the alarm is set to alarm when it drops below temperature X it will not send another alarm before it has risen **above** X+1 degrees.
  - If the alarm is set to alarm when it rises above temperature X it will not send another alarm before it has dropped **below** X-1 degrees.
- 1) Create a new contact and name it "DEGREE".
    - i. Write the alarm temperature in the telephone number field. If the alarm temperature is below zero degrees Celsius, add zero ("0") before the temperature. For example; minus 7 degrees C is written as "07".
  - 2) Create a new contact and name it "TEMP".
    - i. In the telephone number field write "1" if you want an alarm if the temperature drops **below** the alarm temperature given in "DEGREE" or write "2" if you want the alarm when the temperature rises **above** the alarm temperature.

The unit will send an SMS alarm to all the telephone numbers on the alarm list if the temperature drops below/rises above the set alarm temperature.

The function is deactivated by removing TEMP contact from the SIM card.

## Thermostat function

If an electrical radiator is connected to the relay the unit can be used as a remote thermostat controller.

By programming the desired temperature the unit will scan the temperature and activate the relay (and thus turn on the radiator) if the temperature drops one degree C below the set temperature. The surrounding air will be warmer and when the temperature rises one degree C above the set temperature it will deactivate the relay (turning off the radiator).

First connect the radiator to the relay.

### Activate the thermostat from a telephone

1. Call up the unit. Be sure you use tone mode on the telephone.
2. The unit answers with a beep.
3. Press your PINCODE and then #.

Example: **1234#**

If the PINCODE is correct the unit replies with a beep. If it is not correct the call is disconnected. Call again and try.

4. Dial **2\*D#** where D=the desired temperature. The unit confirms with a short beep. Hang up. If the unit replies with two beeps, try again.

### Deactivate the thermostat from a telephone

1. Call up the unit. Be sure you use tone mode on the telephone.
2. The unit answers with a beep.
3. Press your PINCODE and then #.

Example: **1234#**

If the PINCODE is correct the unit replies with a beep. If it is not correct the call is disconnected. Call again and try.

4. Dial **2#**. The unit confirms with a short beep. Hang up. If the unit replies with two beeps, try again.

### Activate the thermostat with SMS

1. Activate the thermostat function by sending an SMS with the following content:

**ABCD#2\*D#** where ABCD is your personal PINCODE. D is the desired temperature.

## Deactivate the thermostat with SMS

1. Deactivate the thermostat function by sending an SMS with the following content:

**ABCD#2#** where ABCD is your personal PINCODE.

# ***Power supply***

## **Connecting power supply and charging**

Ontech 9030 can be power supplied in different ways:

1. Connecting to a main power socket
2. With a 12 V accumulator.

The accumulator is connected with the cable to the jacket on the under side pin "12" and "G ". Be careful to get the polarity right, otherwise the unit can be damaged!

If the the accumulator is connected on the same time as the unit is connected to the main power socket, the accumulator will be charged .

The accumulator acts like a backup battery in case of main power failure.

### **WARNING!**

Manganese batteries or other not rechargeable batteries may not be used.

## **Decrease power consumption**

In order to decrease power consumption you can turn off the short range radio if it not is used. The power consumption will then decrease with about 10 mA.

The short range radio is not used if there is no extra relays (Ontech Relay 9010) or wireless alarm detectors.

## ***Low battery***

Ontech GSM 9030 will alarm at low battery when connected to accumulator and NOT to main power socket::

- If the voltage between connector "12" and "G" drops below 12 Volt an SMS will be sent to all telephone numbers on the alarm list with the following content:

**Charge battery!**

- If the voltage between connector "12" and "G" drops below 11 Volt an SMS will be sent to all telephone numbers on the alarm list with the following content:

**Battery empty !**

The low battery alarms do not need to be acknowledged.

**Important!**

If there has been a low battery alarm the unit has to be restarted or the voltage must rise above 12.5 V before it can send a new low battery alarm.

## Short range radio – extra relays

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Ontech GSM 9030 has a 2.4 GHz short range radio. This is used to communicate with extra relays (Ontech Relay 9010) and/or wireless alarm detectors.

If the short range radio not is in use it is recommended to turn it off in order to lower the power consumption. Do this by setting DIP switch number 6 to position ON, see page 21.

In a system with one Ontech GSM 9030 and one or more extra relays or wireless alarm detectors all has individual ID numbers. Up to 8 different unique numbers can be used, 1-8. Ontech GSM has always number 1.

With the DIP switches 2-5 the radio channel for the short range radio is set. In Ontech GSM 9030 as well as in extra relay (Ontech Relay 9010) and the wireless alarm detectors these DIP switches are delivered in position OFF. If another radio channel shall be used, be sure to set the DIP switches 2-5 **exactly the same** in all units in the system.

# Reference

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## *SMS from the unit*

### **Alarm SMS / Status SMS**

The alarm SMS and the status SMS are identical. The alarm SMS is sent to all the telephone numbers on the alarm list.

You can request a status SMS by sending an SMS to the unit with the following content:

**ABCD#8#** where ABCD is your personal PINCODE.

You will immediately receive an SMS as below.

You cannot request status from an ordinary telephone, only with SMS.

Status SMS is only sent to the telephone that requested the status.

<b>Example</b>	<b>Explanation</b>
<b>*Ontech9030</b>	Asterisk (*) means alarm function is turned on
<b>Alarm:</b>	
<b>1ab, 3b</b>	Indicates all alarms that have been activated since the last acknowledge. The number indicates the units ID number, Ontech 9030 is always no 1, and the others refer to the extra units or wireless alarm detectors connected. Note that these inputs not can send an alarm again before the alarm has been acknowledged.
<b>Inputs:</b>	
<b>1b</b>	Indicates the alarm input that still is activated. In this example the SMS means that inputs 1a, 1b and 3b has been activated since the last acknowledge and that input 1b is still activated.
<b>Units:</b>	
<b>1*,3,4*</b>	Indicates the units communicating with the Ontech GSM 9030. Unit number 1 is always Ontech GSM 9030. The other numbers refers to the extra relays (Ontech 9010) connected. An asterisk (*) after the number indicates that the relay is turned on. If Ontech GSM 9030 loose contact with one of the extra relays unit its ID number will not be shown in the SMS.
<b>Temp: 24; 24,2</b>	Gives the temperature in degrees C. The first number refers to the internal temperature sensor; the second number refers to



	external temperature sensor, if connected. If not connected -- will be written instead. If there is an asterisk, for example *24,2 before the number this indicates that the unit has sent a temperature triggered by this sensor.
<b>Tstat: 25</b>	Indicates the set temperature for the thermostat function. If thermostat not is activated the message is <b>Tstat: OFF</b> .

## SMS about power supply

The SMS sent to alert about the power supply are as follows

Content in SMS	Meaning
<b>Charge battery!</b>	Is sent when voltage is dropping below 12 Volt
<b>Battery empty!</b>	Is sent when voltage is dropping below 11 Volt

## SMS showing the SIM card settings

If you want to control the settings of the SIM card you can request an SMS that shows most of the SIM card settings. Send an SMS to the unit with the following content:

**ABCD#8\*2#** where ABCD is your personal PINCODE.

You will immediately receive an SMS as below:

Content	Exlanation
<b>*Ontech 9030</b>	Asterisk (*) means alarm function is turned on
<b>Alarmrelay:</b>	Alarmrelay function; <b>ON</b> or <b>OFF</b>
<b>Tempwatch:</b>	< indicates if the unit alarms when the temperature drops <b>below</b> set temperature. > indicates if the unit alarms when the temperature rises <b>above</b> set temperature.
<b>Temp sens:</b>	Indicates which temperature sensor that controls alarms and thermostat; <b>INT</b> =internal sensor, <b>EXT</b> =den external sensor.
<b>Ver</b>	Shows software version. Useful when contacting support.

# Commands

This description is valid both for telephone button and SMS text.

Command	Explanation
<b>ABCD#</b>	All telephone calls and SMS starts with your personal PINCODE of 4 digits.
<b>#</b>	When writing this symbol you are sending a command to the unit Thus, the symbol ends a command. If you have misspelled, you can use this symbol to restart the command.
<b>*</b>	This symbol is used as a separator inside a command
<b>1*N#</b>	Used to activate a relay. N=the ID of the unit.
<b>0*N#</b>	Used to deactivate a relay. N=the ID of the unit.
<b>1*N*T#</b>	Used to activate a relay with timer function. N=the ID of the unit. And T= the number of hours you want the relay to be active.
<b>2#</b>	Used to turn off the thermostat function
<b>2*D#</b>	Used to turn on the thermostat function (0-29 degrees C)
<b>7*1#</b>	Used to turn on the alarm function.
<b>7*0#</b>	Used to turn off all alarms (valid for all alarms except low battery alarms)
<b>8#</b>	Status SMS request
<b>8*1#</b>	Request for GPS data.
<b>8*2#</b>	Request for SIM card settings
<b>9#</b>	Used to acknowledge alarms

- All SMS must begin with your personal PINCODE.
- It is possible to send multiple commands in the same SMS or telephone call.  
The symbol **#** separates the commands.
- When operating with a telephone call all commands are confirmed with a beep. Two beeps indicate a failure. Try again!
- Instead of the symbol **\*** you can use all letters (uppercase or lowercase) on button 7 (p, q, r or s).
- Instead of the symbol **#** you can use all letters (uppercase or lowercase) on button 9 (w, x, y or z).

## ***Push button***

One push at the button activates or deactivates the relay.

One push is also used to manually acknowledge an alarm.

Push and hold for 5 seconds to turn on/turn off the unit if there is an backup battery connected.

One push turns of thermostat function if activated.

## ***The lamps***

On the front of the cabinet there are two lamps, one red and one green.

### GREEN LAMP

Flashing	Flashes when establishing connection with GSM network during start up.
On (no flashing)	The unit is turned on and has contact with GSM network.

### RED LAMP

On (no flashing)	The relay is activated
Off	The relay is deactivated
Flashing	One alarm has been activated and is not acknowledged.

### RED AND GREEN LAMP

Both are flashing	SIM card is missing or Pincode on SIM card is not deactivated. See page 6.
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## The DIP switch

The unit has 8 DIP switches (see page **Fel! Bokmärket är inte definierat.**). The functions of the switches are as follows:

DIP switch no	Function
1	OFF= Alarm A and B are set to mode Normally Open. ON= Alarm A and B are set to mode Normally Closed.
2	These four switches are used to set the radio channel. If extra relays (Ontech Relay 9010) or wireless alarms are used in a system all units must have the same radio channel settings.
3	
4	
5	
6	OFF=Short range radio turned on. ON= Short range radio turned off.
7	Not in use
8	OFF=The relay will remember position in case of power failure. ON= OFF=The relay will not remember position in case of power failure.

Position OFF on the DIP switches is downwards compared to the text on the switch. All switches are set to OFF as factory default.

# Tip!

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## Cash card

If you are using SIM cash card, be aware that many network operators demands you are sending at least one SMS or make one call every year. Some also demands you refill at least once a year. Check with your operator.

## Multiple commands in the same SMS or call

It is possible to execute multiple commands in the same SMS or call. The sign # separates all the command lines.

If you, for example want to acknowledge an alarm but also want to activate the relay, you press:

**ABCD#9#1\*1#**

All individual commands will be replied with a beep. If there is a fault, the unit replies with two beeps.

## Using other letters for # and \*

Instead of the symbol \* you can use all letters (uppercase or lowercase) on button 7 (p, q, r or s).

Instead of the symbol # you can use all letters (uppercase or lowercase) on button 9 (w, x, y or z).

## Checking SIM card settings

If you not are sure about the settings of the SIM card, you can request an SIM card setting SMS, see page 25.

## Status-SMS

If you not are sure about the settings of the unit, you can ask it for a status-SMS. See page 24.

## To long distance between Ontech GSM 9030 and Extra relays or wireless alarm detectors

A built-in function in all Extra relays and wireless alarm detectors is a radio repeater. This means that each extra unit increases the working range with about 30 meters. If one extra unit is out of range, another extra unit can be connected somewhere between the

extra unit that is far away and Ontech GSM 9030 .The extra unit will link the other two units together.

**Check if the extra unit (Ontech GSM 9030) has contact with the master unit**

One push of the button on the extra unit (Ontech Relay 9010) switches the relay but is also sending information about this to Ontech GSM 9030. This unit acknowledges back that it has received the information. During this process the red lamp on the extra unit will flash. The process shall not take more than 3 seconds, if more, the extraunit probably lost contact with Ontech GSM 9030.

# Trouble shooting

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Symptom	Reason
Both the red and green lamp is flashing on Ontech GSM 9030	<p>The unit cannot read the SIM-card</p> <ul style="list-style-type: none"> <li>• Check that the PINCODE is deactivated. See page 6.</li> <li>• Check that the position of the SIM-card in the unit is correct.</li> <li>• Check the SIM-card in a mobile phone in order to check the SIM-card.</li> </ul>
The green lamp is flashing on Ontech GSM 9030	<p>No connection with the GSM network</p> <ul style="list-style-type: none"> <li>• Check if the area is covered by using the SIM card in a mobile phone..</li> <li>• Check that the antenna is correctly mounted.</li> <li>• Test with another SIM card.</li> </ul>
The unit has no contact with extra units or wireless alarms	<p>Different radio channels</p> <ul style="list-style-type: none"> <li>• Check so all units in a system has the same radio channel. See page 23.</li> </ul>
Ontech GSM 9030 has no contact with an individual extra unit.	<p>Out of radio range</p> <ul style="list-style-type: none"> <li>• Check by moving the extra unit closer to the master unit.</li> <li>• Check that the extra unit has a unique ID. See page 23.</li> <li>• Place one more extra unit in the middle of the distance between the slave unit that lost contact and the master unit.</li> </ul>
The unit do not react on SMS	<p>Wrong mobile number</p> <ul style="list-style-type: none"> <li>• Check that the mobile number is correct</li> </ul> <p>Wrong PINCODE</p> <ul style="list-style-type: none"> <li>• Check that your PINCODE is correct. The easiest way to do this is to call up the unit from an ordinary telephone and enter the PINCODE and then #. If the PINCODE is correct the unit will reply with a beep. If not, the unit will hang up.</li> </ul>

# Technical specifications

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GSM	GSM 900/1800
GSM subscription	All kinds, also cash card
Relay	230V/16A
Serial interface	Special for GPS adapter
Short range radio	Frequency 2,4 GHz Power output 1 mW
Alarm inputs	Activated either by NO or NC mode Maxi +/-50 V, 5 mA
External power supply	9-24 V AC/DC
Power consumption	Nominal <0,5 W Max 4 W
Temperature range	-20°C to +40°C
Certified	Compliance EMC, LVD and R&TTE directive



# Declaration of conformity

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Ondico AB, Datavägen 14A, 436 32 Askim, Sweden, hereby declares that the product Ontech GSM 9030 is in conformity with the provisions of the Radio & Teleterminal directive R&TTE 1999/5/EG.







[www.ondico.se](http://www.ondico.se)

