



GSM Alarm 2G & 4G
PIR Sensor
 $e \infty$ Range



Product Information

Our 2G/4G GSM Alarm is a standalone alarm system suitable for indoors or outdoors usage. It will alert you using GSM technology by sending a text message and/or phone call when the PIR sensor, Wireless Beam or Door Contact are triggered to your mobile phone or landline.

The unit is also enclosed in an IP65 rated box meaning it is perfectly weathered for outside installation and has passed testing in high temperatures and below freezing conditions.

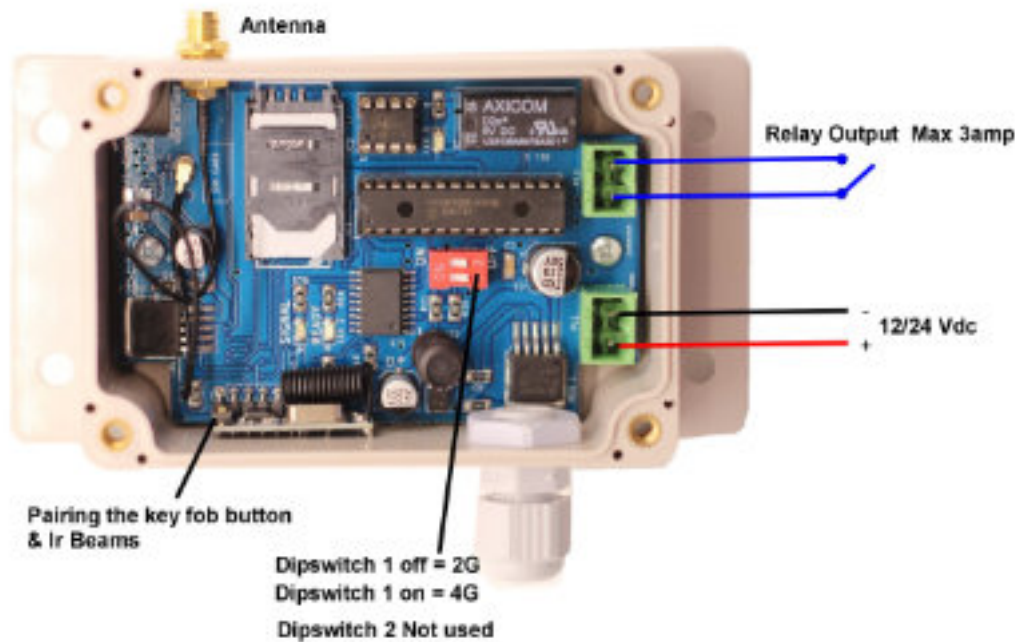
GSM Alarm Specification

- GSM Frequency: Quad band freq 850/900/1800/1900
- 4G Bands : B1 -B5, B7 - B8, B12 - B14, B18 - B20, B25 , B26, B28 , B66, B71
- Power Supply Voltage: 9 - 24 volts DC - 1 Amp Min
- Current used in standby mode: 60mA Max
- IP65 Rated Enclosure for outside installation
- 2 Amp Relay Output
- Full Size 2G or 4G Simcard
- No landline required
- Dimensions - L100 x W68 x H50mm
- Dimensions PCB Only - L95 x W67mm
- Sim Active Function
- Operating Temperature: -10...+40°C
- Programmed by Text/SMS Message
- Text to test signal strength
- Wireless Range from GSM to PIR - 20 Metres (see page 6)

PIR Specification

- Alert Distance: 8 - 12 metres
- Detection Range is horizontal 110°, vertical 30°.
- PIR size 105 x 40 x 25mm
- Battery Life: 6 - 9 Months

Instructions



IMPORTANT- PLEASE READ

Please make sure you disconnect the power when you fit the simcard. Then slide the simcard into the holder making sure that the clipped corner of the simcard lines up with the clipped corner of the simcard holder as seen in the image above.

Signal Strength

To help make sure that you have placed the unit in a suitable position you can text the unit to see how much signal strength the detector is receiving. Simply text the unit

#SIGNAL#

The detector will perform a test on the signal strength.

You will receive a text message telling you the signal strength score between 0 up to 30. We strongly recommend that you place the unit where you can receive a signal strength of at least 10.

You will find that a signal strength score of less than 10 the unit will be unreliable.

SIM Active Function

Our GSM Alarm comes with a SIM Active function meaning that it will send a message every six weeks to a preprogrammed number we at GSM Activate own to prevent the SIM card being shut down due to inactivity.

How to Programme Mobile Numbers

After inserting your simcard into the GSM Alarm turn the unit on and wait until you see the **GREEN** LED Flash, then the BLUE LED will flash, it will flash slowly if you are on 2G and fast if you are on 4G, if BLUE LED is solid it means it hasn't got a signal. When the Green LED comes back on and stays on the unit is ready to be programmed

PLEASE NOTE - To avoid confusion we have colour coded the hash (#) and the equals (=) symbols. Furthermore, where there is a mobile number this should be yours or the number in which you wish to be contacted.

You will now need to send the text with the contact number (maximum 3 contact numbers)

Example: (HASH) (1,2,3,4 or 5) (EQUALS) (phone number) (HASH)

#1=07123456789# Then send this as a text to the unit for contact no: 1

#2=07123456790# Then send this as a text to the unit for contact no: 2

#3=07756846942# Then send this as a text to the unit for contact no: 3

#4=07856846942# Then send this as a text to the unit for contact no: 4

#5=01902765658# Then send this as a text to the unit for contact no: 4
If you wish to cancel a number follow this example

Example: (HASH) (1,2,3,4 or 5) (EQUALS) (DELETE) (HASH)

#1=DELETE#

Then send this as a text to the simcard number of your unit.

IMPORTANT - PLEASE READ

Please only send one text message at a time and wait for the GSM detector to send you back the text acknowledgement '*NUMBER STORED*' before you try to add the next number.

Below is a notepad to help you remember the numbers that you have saved to your unit in the event you need to change, modify or delete them in the future.

#1= _____ #

#2= _____ #

#3= _____ #

#4= _____ #

#5= _____ #

How to programme the text/SMS message

You can now change the alarm message from “*input detected*” to one of your choice.

To change the alarm message to one of your choice please send the text command as follows.

#MESS=YOUR MESSAGE#

The detector will reply with the text message “*number stored*”

IMPORTANT - PLEASE READ

You can only use a maximum of 19 characters including spaces for your customised Message.

Telephone Call Alerts

The GSM Alarm can be programmed to send you a telephone call notification after the text alarm has been sent.

You will receive approximately three ring tones.

The unit will then hang up automatically. This is to prevent call charges being incurred.

To set the call alerts to ON please send the text message as follows.

#CALL=ON#

The unit will reply back with the text message “call on”

To disarm call alerts please send the text message as follows

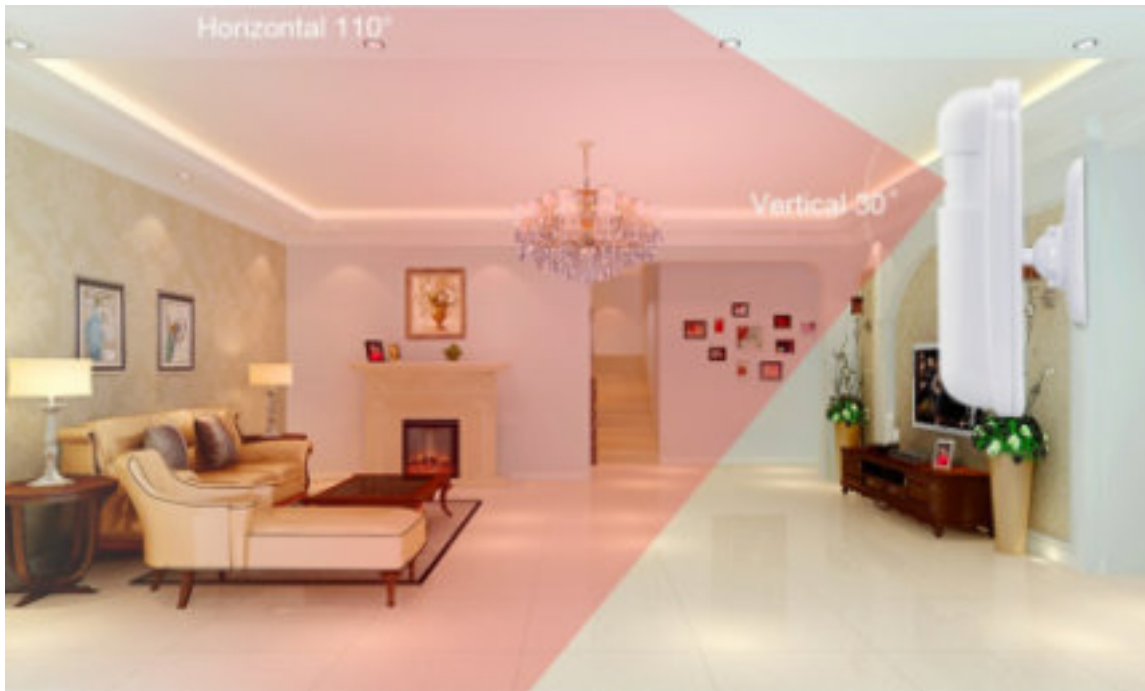
#CALL=OFF#

If the call function has been set to ON you will receive a text message then shortly after a phone call.

Installation of the PIR Sensor

IMPORTANT - PLEASE READ

The PIR sensor should be installed at a height of 1.8 - 2.2 metres from the ground and its range is horizontal 110° and vertical 30° . Additionally, the PIR sensor should be within 20 metres of the GSM Detector Module (see fig 1)



1. Find a suitable location for the PIR Sensor and ensure that the sensor is mounted on a stable structure.
2. When installing the receiver, take care to position the receiver out of direct sunlight as this will reduce the sensitivity.
3. Ensure the sensors line of sight is free from false alarm sources such as bushes, trees, etc. Pay attention to these as they may change seasonally.
4. It is important to have the correct power supply to operate this device successfully. You will need a 12 volt 2 Amp supply or 12 volt battery. You can purchase both of these from our website www.gsm-activate.co.uk
5. Now you have the transmitter and receiver fitted to the location, you can carry out alignment. You will now need to power the unit ON.
6. Alignment of the infrared beams. There are two adjustments, left and right and up and down.

How to use the 2G/4G GSM Alarm

Once you have positioned the PIR, Beam or Door Contact, installed the simcard and programmed the numbers, the system is ready to use.

The GSM Alarm has two modes, alarm mode and auto mode.

Alarm mode / Mode2: You have to arm the alarm manually each time when required via a text message command or via the keyfob provided.

Auto mode / Mode1: The alarm is always armed. You should choose which mode is more suitable to your application.

These modes are selected by sending the following text messages

#Mode=1# Auto Mode (default)
#Mode=2# Alarm Mode

The default setting is auto mode, the alarm always auto arms after a trigger

Arm Via Text Message

To set the alarm to ON you will need to send the text message

#ALARM=ON# This will activate the alarm

#ALARM=OFF# This will deactivate the alarm

It is important to remember that once the alarm has been triggered you will need to reset the alarm by sending the text command #ALARM=ON# to reactivate the alarm or activate it using the key fob.

Arm Via Key Fob

The key fob works best when used with the siren provided as you will get the audible alert whenever you arm or disarm the alarm.

Press button A on the key fob Arms the alarm and siren will beep twice

Press button B on the key fob Disarms the alarm and the siren will beep twice

IMPORTANT - PLEASE READ

Again it is important to remember that when the alarm has been triggered you will need to reset the alarm using either the text command (above) or by using the key fob.

In auto mode, the key fob and text message are disabled, the alarm is always "Active". After the alarm is triggered it will automatically reset to active after 20 seconds.

In the event of a power loss the unit will remember if it was armed when power is restored.

How to use the Relay Output

The relay has been programmed to trigger the siren for 15 seconds in the event of an alarm activation.

By texting the unit you can turn the relay ON or OFF to activate the siren independently. Below are examples on how to this.

#REL=ON# This will turn ON relay output for 15 seconds

#REL=OFF# This will turn OFF relay output for 15 seconds

Automatic Relay Activation From Input

The Relay can be set to automatically pulse for 20 seconds when an input has been triggered. Please be aware of any conflicts this may cause if you are already using relay 2 as an independently activated relay. To turn this function on, please send the text command:

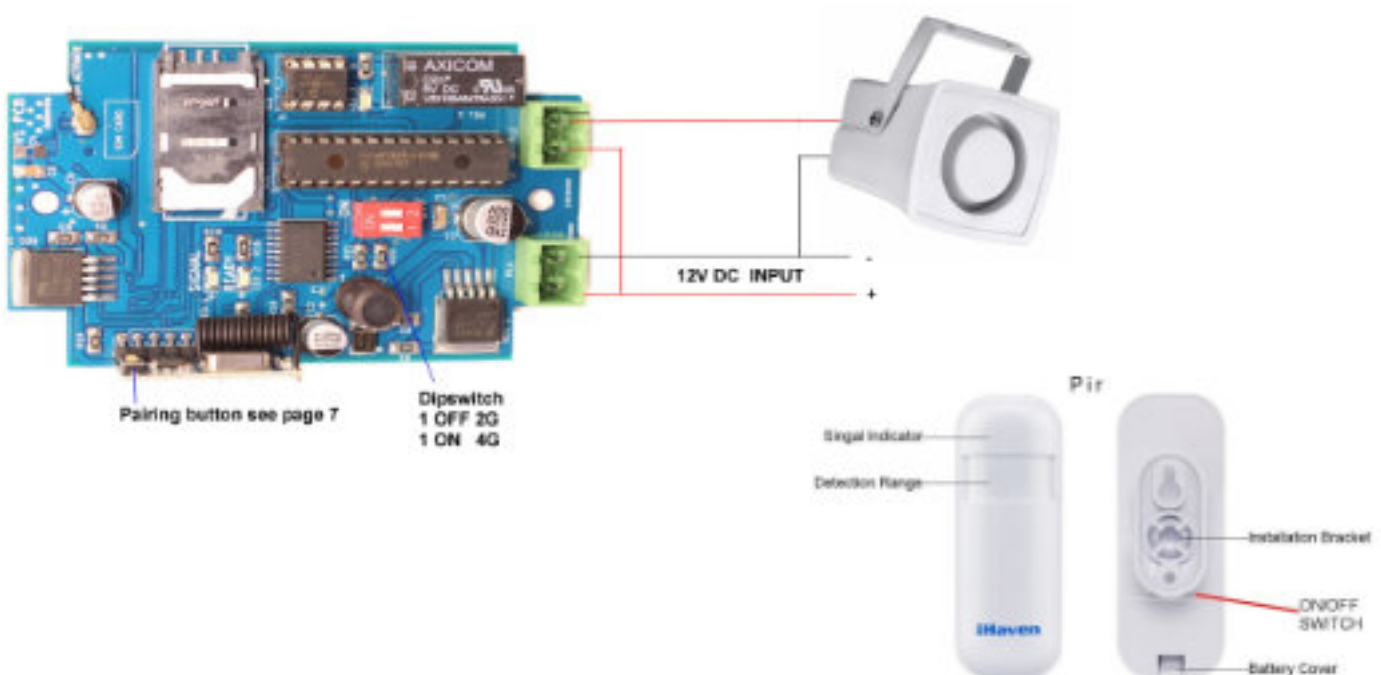
#AUTO=ON# This will turn the auto function on for relay on

#AUTO=OFF# This will turn the auto function OFF for the relay (default setting is off)

Pairing the Sensor and GSM Alarm

To connect the wireless sensors you will need to match to the receiver on the GSM module.

1. Switch ON the GSM module.
2. Switch on the Sensor and allow them to warm up for 15 seconds.
3. Hold down the pairing button on the RF Module for 3 seconds (refer to page 1)
4. Trigger the Sensor by placing your hand enough to block both of the beams.
5. The RF module has a **RED** LED which will flash when pairing is complete.
6. Dipswitch 1 controls siren 2G or 4G
7. Dipswitch 2 not used



Quick Reference

Send Text	Operation	Acknowledgment
#AUTO=ON#	Turns Auto Function On	Auto On
#AUTO=OFF#	Turns Auto Function Off	Auto Off
#MESS=MESSAGE#	Stores Custom Message for Alarm	Message Stored
#MODE=1#	Sets Mode as Auto Mode	Mode 1 On
#MODE=2#	Sets Mode as Alarm Mode	Mode 2 On
#ALARM=ON#	Sets Alarm to On	Alarm On
#ALARM=OFF#	Sets Alarm to Off	Alarm Off
#REL=ON#	Turns Relay On for 15 seconds	Relay On
#REL=OFF#	Turns Relay Off for 15 seconds	Relay Off
#CALL=ON#	Switches Text and Call Alerts On	Call On
#CALL=OFF#	Text Alerts Only (Default)	Call Off
#1=NUMBER#	Stores Number to Position 1	Number Stored
#2=NUMBER#	Stores Number to Position 2	Number Stored
#3=NUMBER#	Stores Number to Position 3	Number Stored
#4=NUMBER#	Stores Number to Position 4	Number Stored
#5=NUMBER#	Stores Number to Position 5	Number Stored
#1=DELETE#	Deletes Number in Position 1	Number Deleted
#2=DELETE#	Deletes Number in Position 2	Number Deleted
#3=DELETE#	Deletes Number in Position 3	Number Deleted
#4=DELETE#	Deletes Number in Position 4	Number Deleted
#5=DELETE#	Deletes Number in Position 5	Number Deleted
#RESET#	Rest to Factory Settings	Factory Reset
#SIGNAL#	Gives a Signal Strength Test	Score (1 - 30)

Factory Reset

To reset the unit back to factory settings you will need to send the text message

#RESET#

WARNING

By doing this the unit will reset all of your parameters. Only send the reset command when necessary

The **GREEN** LED will flash 8 times to indicate that reset is complete.

Dipswitch Settings

Dipswitch 1 - ON = 4G

OFF = 2G

Dipswitch 2 - Not Used

For more technical support please browse the FAQ's on our website

www.gsm-activate.co.uk

Alternatively email our technical support team at technical@gsm-activate.co.uk and we will do our best to get back to you within 24 hours Monday to Friday.