



2G & 4G GSM

Wireless Beam Alarm

e CO RANGE



MODEL 4G ECO - BEAM V2

Page 1



Product Information

Our 2G/3G GSM Wireless Beam Alarm is a standalone alarm system suitable for indoor and outside use.

It will alert you using GSM technology by sending a text message and/or a phone call to your mobile phone or landline when the invisible infrared beams have been broken.

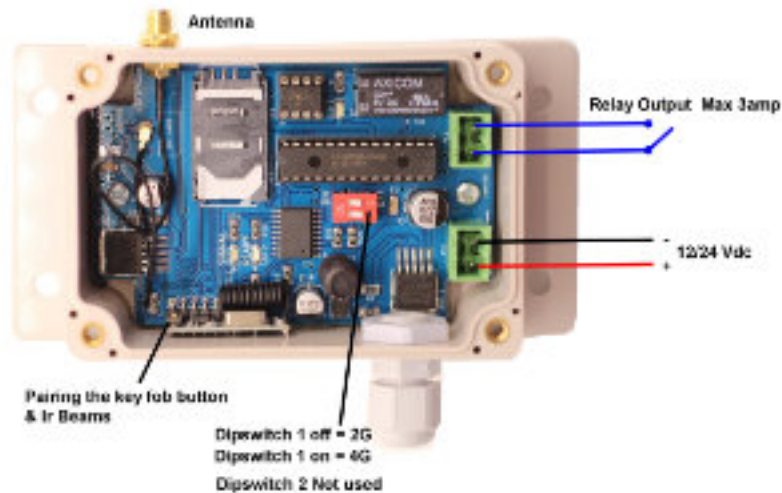
The unit is also enclosed in an IP65 rated box which means it is perfectly weathered for outside installation and has also passed testing in high heats and below freezing temperatures.

- 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 to PIR - 25 feet

Beam Specification

- Alert Distance: 100 metre outdoors, 300 metre inside
- Power Consumption: 65mA Max
- Detection Mode: 2 beams blocked simultaneously
- Optical Source: Infrared Digital Pulse Beam

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 you place the unit in a suitable position you can text the unit to see how much signal strength the detector is receiving by sending the text command

#SIGNAL#

The detector will perform a test on the signal strength.

You will receive a text telling you a signal strength score of between 0 up to 30. We strongly recommend that you place the unit where you can receive a signal strength of at least 10. Anything with a score of less than 10 will make the unit will be unreliable

SIM Active Function

Our GSM Auto Dialler 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

You will now need to send a text message with the contact numbers, (maximum 3 contact numbers).

NOTE - To avoid confusion we have colour coded the (**HASH**) and the (**EQUALS**) Symbols. Additionally, where we have put a 'phone number' in the manual this will need to be your own contact number.

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

#1=07123456789# Then send this as a text message for contact no: 1

#2=07234567891# Then send this as a text message for contact no: 2

#3=07345679913# Then send this as a text message for contact no: 3

#4=07234561234# Then send this as a text message for contact no: 4

#5=07345612345# Then send this as a text message for contact no:5

If you wish to cancel a number please follow this example

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

#1=DELETE# Send this as a text to the simcard number in your unit.

PLEASE NOTE

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

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

#1= _____ #

#2= _____ #

#3= _____ #

#4= _____ #

#5= _____ #

How to program the SMS text message

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

To change the message send the text command as follows

#MESS=YOUR MESSAGE#

The detector will reply with the text message - "MESSAGE STORED"

IMPORTANT - PLEASE READ

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

Telephone Call Alerts

The Wireless Beam Alarm can be programmed to send you a call after each text alarm has been sent.

You will receive approximately three ring tones. The unit will then hang up. This is to avoid any call charges being incurred. To set the alerts to ON please send the text message

#CALL=ON#

The unit will reply back with "CALL ON"

To disarm the alerts please send the text message

#CALL=OFF#

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

Installation of the Infrared Beams

IMPORTANT - PLEASE READ

The transmitter and receiver will work from a distance of 100 metres outside and 300 metres inside. Additionally, the receiver beam should be within 20 metres of the GSM detector.

1. Find a suitable location for the transmitter and receiver and ensure the sensors are 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 turn ON the power.
6. There are two adjustments, left and right, and up and down. The photo below should give you the indication of how to do this.



7. The voltage adjustment is only available on the receiver unit.
8. Correct alignment is indicated by a **GREEN** LED turning on. Once this has been seen you can carry out a walk test.

By interrupting the infrared beam the **RED** alarm light on the receiver should come on for approximately 4 seconds.

If this is the case then the unit is now working properly.

How to use the 2G/4Beam Alarm

Once you have positioned the beams, installed the simcard and programmed the numbers the system is ready to use.

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

Alarm mode: You have to arm the alarm manually each time when required via a text message command or via the keyfob provided A=ON B= OFF

Auto mode: 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 alarm mode, to get an alarm notification when the beam is triggered, you will need to arm the alarm first via text message or key fob

Arm Via Text Message -Mode 2 Only

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 the siren will beep twice

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

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.

Auto Mode -Mode 1 Only

Auto Mode, the alarm is always "active". After the alarm has triggered it will automatically reset to active after 20 seconds

However the Keyfob still works in this mode

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

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

IMPORTANT - PLEASE READ

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 the power is restored.

How to use the Relay Output

The relay has been programmed to trigger the siren for 20 seconds in the event of an alarm activation. Once the text message and call has been received you can stop the siren sounding by pressing B on the key fob.

If you do not require the siren to sound in the event of an alarm activation but require it so that you hear the key fob activation you can turn the siren off by using the text command as follows

#AUTO=ON# turns the automatic relay on

#AUTO=Off# turns the automatic relay off

If you require the ability for the relay to be independently activated like older versions of this alarm, please contact us on 01798 861346

Factory Reset

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

#RESET# The GREEN ready LED will flash eight times.

WARNING - This will reset all your parameters. Please only send a reset command when Necessary as it will clear all of your programmed numbers.

Typical Application of this Product

- Security alarm system applications
- Supervision and monitoring alarm systems
- Automatic monitoring system
- Vending machines security protection
- Pumping stations; tanks, oil or water levels
- Buildings and real estate
- Weather stations
- River monitoring and flood control
- Fridges/Fish Tanks
- Farming equipment and security

Dipswitch Settings

Dipswitch 1 -	ON = 4G OFF = 2G
Dipswitch 2 -	Not Used

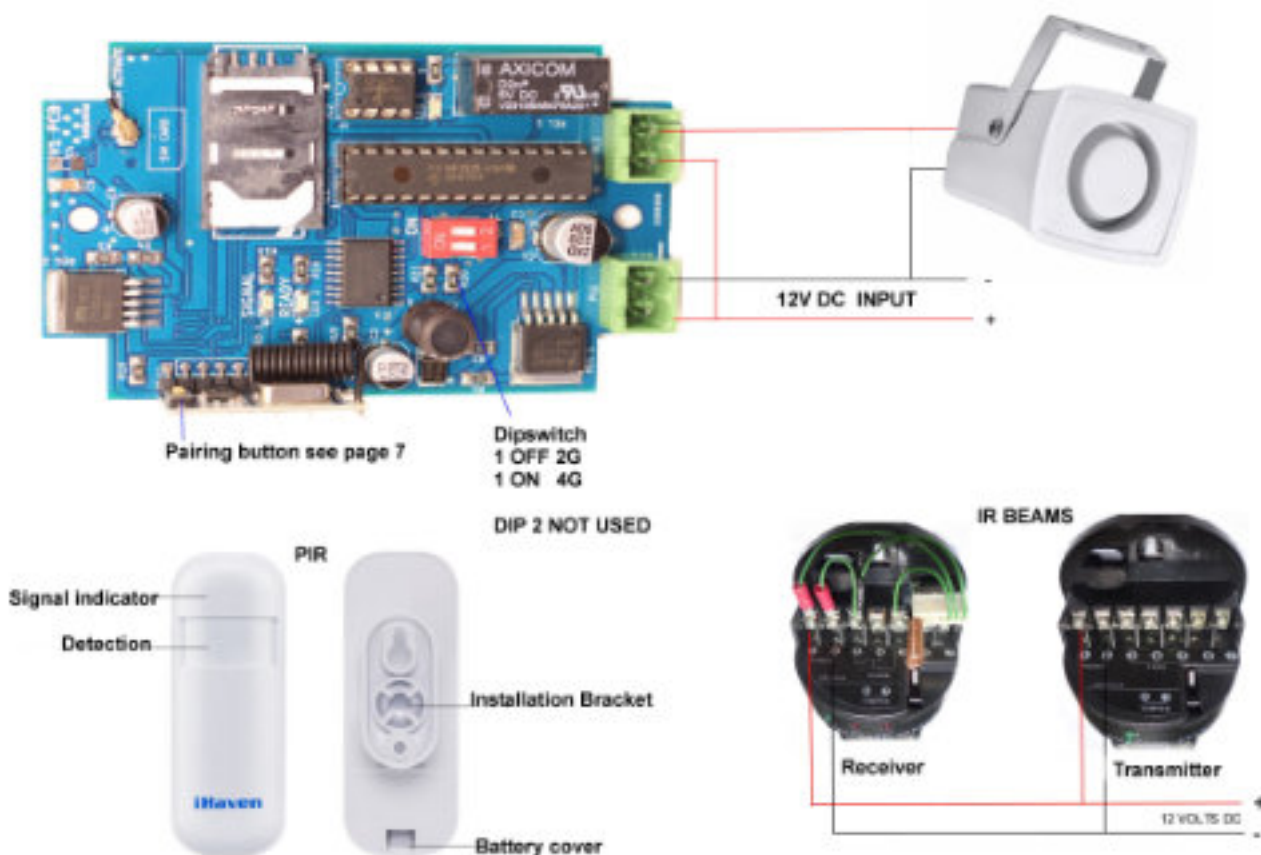
Pairing the Wireless Sensors

To connect the wireless sensors you will need to go through a process so that the devices are matched to the receiver on the GSM module.

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

IMPORTANT - PLEASE READ

The transmitter and receiver will work from a distance of 100 metres outside and 300 metres inside. Additionally, the receiver beam should be within 20 metres of the GSM detector.



Quick Reference

Send Text	Operation	Acknowledgment
#AUTO=ON#	Turns Auto Function On (Relay 2)	Auto On
#AUTO=OFF#	Turns Auto Function Off (Relay 2)	Auto Off
#MESS=MESSAGE#	Stores Custom Message for Input 1	Message 1 Stored
#MODE1#	Sets Mode as Auto Mode (Input 4)	Mode 1 On
#MODE2#	Sets Mode as Alarm Mode (Input 4)	Mode 2 On
#ALARM=ON#	Sets Alarm to On (Input 4)	Alarm On
#ALARM=OFF#	Sets Alarm to Off (Input 4)	Alarm Off
#CALL=ON#	Switches Text and Call Alerts On	Call On
#CALL=OFF#	Text Alerts Only (Default)	Call Off
#PH1=NUMBER#	Stores Number to Position 1	Number Stored
#PH2=NUMBER#	Stores Number to Position 2	Number Stored
#PH3=NUMBER#	Stores Number to Position 3	Number Stored
#PH4=NUMBER#	Stores Number to Position 4	Number Stored
#PH5=NUMBER#	Stores Number to Position 5	Number Stored
#PH1=DELETE#	Deletes Number in Position 1	Number Deleted
#PH2=DELETE#	Deletes Number in Position 1	Number Deleted
#PH3=DELETE#	Deletes Number in Position 1	Number Deleted
#PH4=DELETE#	Deletes Number in Position 1	Number Deleted
#PH5=DELETE#	Deletes Number in Position 1	Number Deleted
#RESET#	Rest to Factory Settings	Factory Reset
#SIGNAL#	Gives a Signal Strength Test	Score (1 - 30)

Factory Reset

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

#RESET#

Please Note - doing this will reset ALL of your parameters. Only send a reset command when necessary.

The **GREEN** ready LED will flash eight times.

Dipswitch Settings

Dipswitch 1 = ON = 4G
 OFF = 2G

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 aim to get back to you within 24 hours Monday- Friday.