



2G & 3G GSM Wireless Beam Alarm e CO RANGE

www.gsm-activate.co.uk



MODEL ECO - BEAM V2



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.

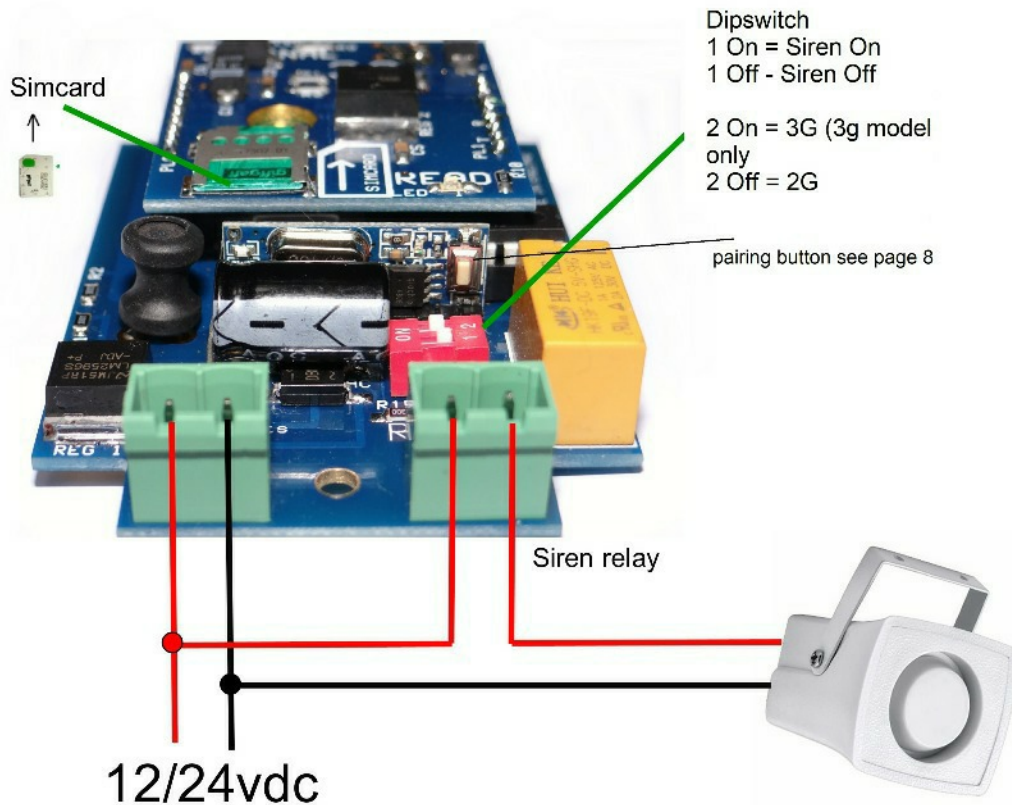
GSM Module Specification

- GSM Frequency: Quadband freq 850/900/1800/1900/ 3G Model 2100 Mhz
- Power Supply Voltage: 9 - 24 volts DC - 1 Amp Min
- Current used in standby mode: 60mA Max
- IP65 Enclosure rating for outside installation
- 2 Amp Relay Output
- Micro 2G or 3G Simcard
- No land line 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 - 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 the place the simcard with the clipped corner facing inwards. Please see picture 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

How to programme contact numbers

After inserting your simcard in to the GSM module turn the unit on and wait until you see the **GREEN** LED is on. This will indicate that you have a mobile signal and the unit is ready for use.

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 or 3) **(EQUALS)** (phone number) **(HASH)**

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

#2=07123456789# Then send this as a text message for contact no: 2

#3=07123456789# Then send this as a text message for contact no: 3

If you wish to cancel a number please follow this example

Example: **(HASH)** (1,2 or 3) **(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=_____#

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"

PLEASE NOTE

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#

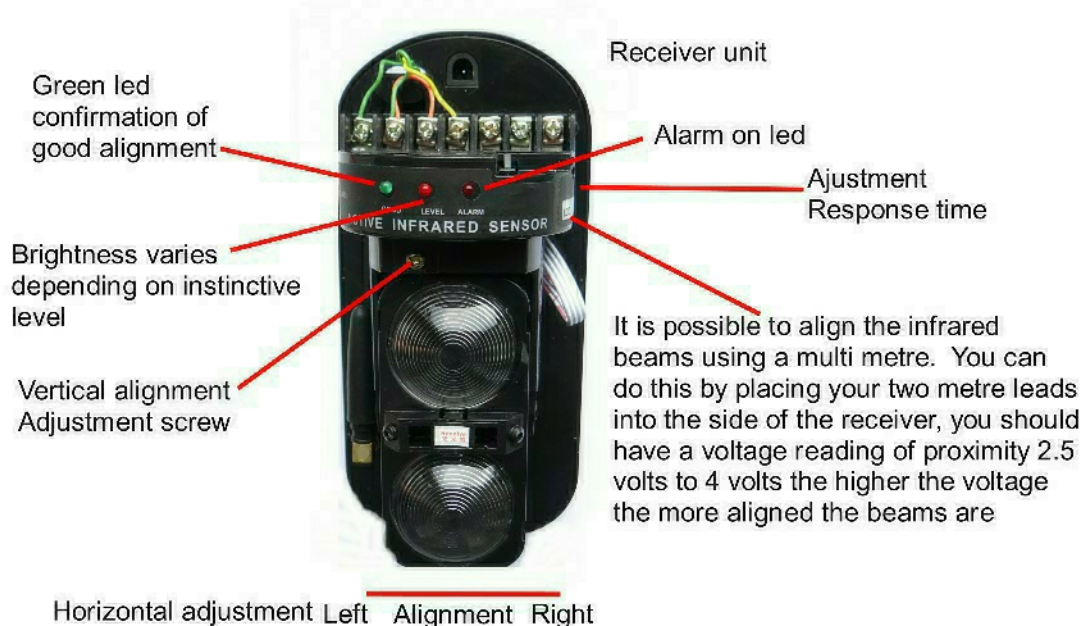
If the call function has been set to ON you will receive a text message and shortly after a phone call.

Installation of the Infrared Beams

PLEASE NOTE

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/3G Beam 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.

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
#Mode=2# Alarm Mode (default)

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

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

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 60 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 Dipswitch 1.

Dipswitch 1 ON = Siren is turned ON

Dipswitch 1 OFF = Siren turned 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

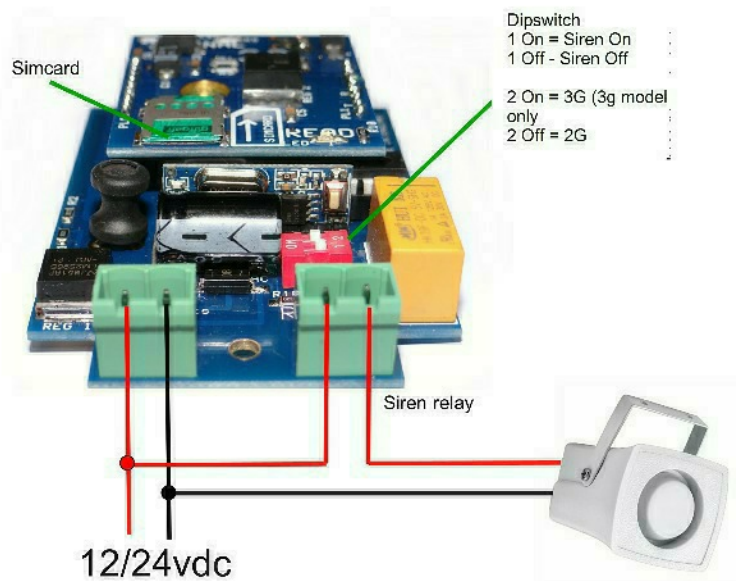
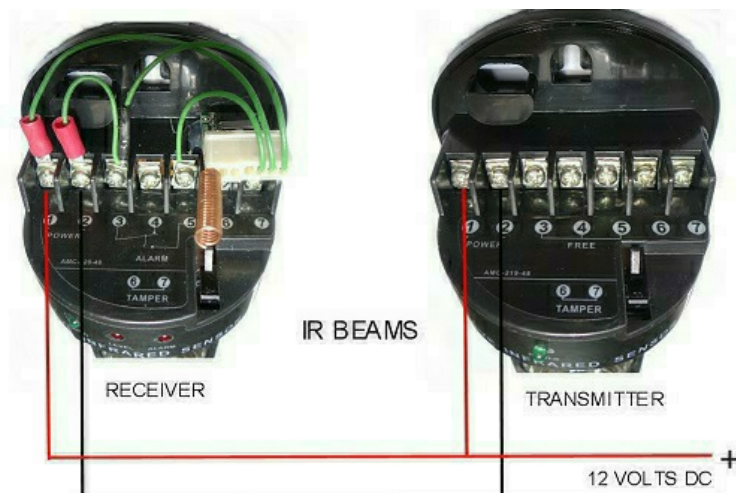
Pairing the Wireless Sensors

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 controls siren ON or OFF
7. Dipswitch 2 controls 2G and 3G

PLEASE NOTE

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
#MESS=MAX19CHARACTER#	Stores a custom message for input	Message Stored
#SIGNAL#	Gives a Signal Strength Test	Score of 1-30
#1=NUMBER#	Saves Contact Number 1	Number Stored
#2=NUMBER#	Saves Contact Number 2	Number Stored
#3=NUMBER#	Saves Contact Number 3	Number Stored
#1=DELETE#	Deletes Contact Number 1	Number Deleted
#2=DELETE#	Deletes Contact Number 2	Number Deleted
#3=DELETE#	Deletes Contact Number 3	Number Deleted
#ALARM=ON#	Sets Alarm to On	Alarm On
#ALARM=OFF#	Sets Alarm to Off	Alarm Off
#MODE=1#	Auto Mode - Alarm Auto Resets After Activation	Mode 1 Activated
#MODE=2#	Alarm Mode - Manually Activate the Alarm (text / keyfob)	Mode 2 Activated (default)
#CALL=ON#	Switches Text & Call Alerts on	Call on
#CALL=OFF#	Text Alerts Only	Call off (default)

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 = Siren ON
OFF = Siren OFF
- Dipswitch 2 - ON = 3G
OFF = 2G

*Note dipswitch 2 is not used on 2G only beam alarms

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.

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