GSM Alarm System

Installation and Users’ guide

General Information:

1. One-zone alarm system, suitable for office, home, boat and caravan.

2. Alarm system uses a GSM communicator, no distance limits to receiving alarms or dial out to control the alarm system.

3. System can support GSM / CDMA cell phones.

4. Stores and dials 5 phone numbers (no longer than 16 character each). If an alarm occurs, numbers will be dialed in order starting with last number stored. You can set it to dial a monitoring center (if in agreement with such entities), police and owners.

5. Using remote controllers you can arm, disarm or set off the panic alarm from a long distance.

6. You can control the system by using a telephone anytime, wherever you are. For security reasons a PIN code must be used for access.

7. Supports all kinds of additional wireless sensors, such as PIR detectors, door (gap) sensors, gas sensors, smoke sensors; panic buttons and infrared balusters.

8. Supports wired sensors available (NC contacts)

9. Supports any combination of wired/wireless sensors, as you need.

10. No need for fixed telephone line everywhere a GSM Network is present.

11. For weak GSM signal area an external antenna can be used.

12. Three open collector outputs are available to be used according to customer demands.

13. One onboard relay available for customer application.

14. Easily installed and operated following the instructions from the manual.
Installation guide:

Basic Kit contains:
- Alarm System (control unit) – 1 pc.
- Wireless PIR Detector – 1 pc.
- Wireless Door (gap) Sensor – 1 pc.
- Remote Controller – 2 pc.
- Antenna – 1pc.
- Mini Wired Siren 110dB / 0.3m – 1 pc.
- Power Supply with back-up – 1pc.

1. Inserting SIM card into Control Panel.
   Press yellow point gently with a pencil tip. SIM tray will open. Insert SIM and close.
   **Attention!** Metal contacts of the SIM must be down. Check inserted correctly in the unit.
   **Before inserting SIM in control panel,** using a regular mobile phone, follow these steps:
   - Set PIN code request to “off”.
   - Delete all stored numbers on SIM
   - Store only numbers for alarming (up to 5 numbers). Numbers must be stored in order of calling. First stored will be first called, second stored will be second called and so on.

2. Connect the antenna.
   **Attention!** Be careful, do not over-tighten or under tighten the nut.

3. Connect the siren to alarm system: connect red wire to ground (public) port and black wire to siren port.
4. **How to distinguish 8 LEDs on the main panel?**
   - **OUT 1, OUT 2 and OUT 3**: show the status of output 1, 2 and 3. They can be used to control three lights or other home appliances.
   - **RELAY**: The fourth LED. This shows relay status. There is an on-board relay inside. The Relay LED will be on when the relay’s two ports are closed.
   - **ALARM**: The fifth LED shows the working status of siren. If siren is triggered, the “Alarm” LED will be on.
   - **MONITOR**: When it is on, it means the system is in the status of listening-in.
   - **STATUS**: Shows the signal status. At first, it is red, which shows that the system is searching for GSM network and will turn green when it finds GSM network. At this moment, the GSM alarm system is ready to work.
   - **POWER**: Power status LED. It will be on when the system is switched on. If you use only kit sensors, system is ready to be power on. Sensors and remote controls delivered in kit are already coded (registered) in the system by factory. Plug in DC 12V power supply in alarm system.

5. **Explanation for 10 Ports on Rear Green Board:**

   ![Diagram](image_url)

   - **The first port**—GND: Ground line.
   - **The second port**—siren, audio output, big wireless siren.
   - **The third and fourth ports**—inner relay input. It is normally opened. It will stay closed for three minutes when alarming;
   - **O1, O2 and O3**—output control
   - **I1, I2 and I3**—inputs for wired detectors.
   - **Attention!** Power supply delivered in the kit is an UPS! 12V is present at the plug even if the power supply unit is not plugged in AC socket.

6. **Operating the system**
   - **Using of remote controller:**
     1. Arming button – press it to arm system. Siren will give a short ring,
     2. Disarm button – press it to disarm system. Siren will give two short rings.
     3. Panic button – press it and siren will start to ring continuously, alarming the others.
7. Using a Telephone or Cell Phone to make GSM Alarm System Arm / Disarm:

Call the alarm system. After one ring the unit will answer and a beep will be heard. You have to input a PIN and # for security purposes. Default PIN is 1234. At first login, please dial 1234#. **NOTICE! This PIN code is for alarm system NOT for SIM card.**

System responds with a beep (digital voices are available for some areas) now you can send several commands and change some settings.

**Commands of the system:**

a. 1#   - set output 1(open collector) on  
b. 1*   - set output 1 off  
c. 2#   - set output 2(open collector) on  
d. 2*   - set output 2 off  
e. 3#   - set output 3(open collector) on  
f. 3*   - set output 3 off  
g. 4#   - set output 4(onboard relay) on  
h. 4*   - set output 4 off  
i. 5#   - set Text message (SMS) on (default)  
j. 5*   - set Text message off  
k. 6#   - set with voice  
l. 6*   - set voice off  
m. 7#   - set alarm siren to work (default)  
n. 7*   - set siren all time off (silent alarm)  
o. 8#abcd# - set new PIN. E.g.: 8#8686# --set new PIN code at 8686.

**Note:** It is wise to change PIN code at first login in alarm system.

p. 9*   - stops the siren and opens internal microphone of alarm system, for audio monitoring of the spot.  
q. 9#   - stops monitoring/listening-in and opens the siren  
r. 0#   - arms the system  
s. 0*   - disarms the system

8. Advanced Instructions

1. Resetting the system.

**NOTICE!** Resetting the system, all coded information and messages will be lost. The System will be loaded with the basic factory settings. The passwords will revert back to the original default - 1234. You must code / register all wireless sensors again after reset.
Reset procedure:
- System must be disarmed
- Press reset button and keep it pressed down.
- Plug off 12V supply from alarm system
- Plug on 12V supply at alarm system, alarm LED will have a brief flash
- Release reset button and wait system LED to go green.

System is now reset and back to factory settings. (The passwords is 1234)

2. Coding wireless sensors. (Registering wireless sensors with control unit) and Procedure to add a new sensor (remote controller/wireless door sensor, wireless PIR detectors) in the system:
- Plug off 12V supply from alarm system
- Plug on 12V supply at alarm system, STATUS light will be red for 20 seconds. During this time code sensors (press any button on remote controller, activate motion sensor on PIR, move the two parts of door gap sensors to activate). They will be recognized and coded into the system. After 20 seconds when the Status light turns green the system is ready. Test all sensors and repeat procedure for any sensor, if necessary. The maximum number of wireless sensors that can be coded by system is 10. But you can register countless wireless sensors by changing sensors’ ID.

3. Connecting Wired Sensors
Three inputs are available to connect wired sensors. Inputs are independent, but are not coded as different zones. When sent SMS, it will show Wired Activated Sensors must be NC (normally closed) type. You can connect more than 1 sensor at one input, connecting their alarm contacts serial. Can be used any number of wired sensors, as long as total resistance is under 220 ohms.

4. Connecting Switched Output Devices
Three open collector outputs and one internal relay controlled by telephone are available. Internal onboard relay is activated when an alarm occurs and can be deactivated / reactivated thru telephone commands. It can be used, as example, to command an external lamp. Open collector outputs can be used directly, if your
equipment allows this, or can operate a relay. Do connect an antiparallel diode with relay coil. These outputs can be operated only by telephone commands.

**Standard Components and Optional Available Components**

**Basic Kit contains:**
- Alarm system (central unit) – 1 pc.
- Wireless PIR detector – 1 pc.
- Wireless door (gap) sensor – 1 pc.
- Remote controller – 2 pcs.
- Antenna – 1pc.
- Mini wired siren 110dB/0.3m – 1 pc.
- Power supply with back-up – 1pc.
- Users’ Manual- 1pc

**The following sensors can be optional:**
Additional wireless products, optional sensors/detectors are packed separately. They include:
- Remote Controls, PIR Detectors, Door / Window, gap sensors, LPG Gas Detectors, Panic Buttons, Smoke Detectors

**Technical Parameters**

**GSM Alarm Module**
Operating voltage: DC6V
Average power: AC/DC exchanger 2A.
Wireless receiving distance: ≥ 100m
Operating Frequency: 315 or 433.92 MHZ, GSM 900-1800MHZ. 850MHZ is optional.
Operating voltage: DC12V, AC 220/110V
Wireless receiving distance: ≥100m-250m
Outer Alarm Siren
Volume: 110 dB
Working Condition: Temperature –10 ℃+ 40 ℃
Humidity ≤ 90% rh

Wireless Gap Detector (Door / Window Contact)
Power Supply: DC12V (inner 12V battery)
Static Current: ≤20 mA
Transmission Current: ≤15mA
Transmission Frequency: 315/433MHZ±0.5MHZ
Transmission Distance: No obstacle 80m
Internal Distance: 15 mm
Working Condition: Temperature –10 ℃+ 40 ℃
Humidity ≤ 90% rh

Wireless P.IR Detector
Power Supply: DC9V (inner 9V battery)
Static Current: ≤100 mA
Transmission Current: ≤20mA
Transmission Frequency: 315/433MHZ±0.5MHZ
Transmission Distance: No obstacle 80m
Detective Speed: 0.3 - 3m/s
Detective Distance: 5 - 12m
Detective Range: Horizontal 110° Vertical 60°
Working Condition: Temperature –10 ℃+ 40 ℃
Humidity ≤ 90% rh

Remote Control
Power Supply: DC12V (inner DC12V battery)
Transmission Current: ≤15mA
Transmission Frequency: 315/433MHZ±0.5MHZ
Transmission Distance: No obstacle 80m