

# ***EasyLoader***

## **AV-3008 GSM**

## **AV-3008 DVR**

**(for LED keypads)**

**Integrated Alarm Control panel &  
Communicator 4 or 8 zones**

**SMS Enabled**

***Appendix for GSM Alarm Panels***

**Version 1.10**  
***Edition I***

This product is subject to continuous  
enhancements and therefore specifications may  
be changed or altered without prior notice



**Item:** 4785E\_GSM (A4BKE)  
**Rev01:** 03-Mar-2015



## **AV-3008 GSM Appendix**

### 1. Introduction

Use this appendix used with the AV-3008 GSM alarm panels, for installation manual refer to the AV-3008 LED express or full manual, this manual covering also the AV-3008/3044DVR. All models are supporting alarm sensors and sirens.

The AV-3008 GSM version is compatible with LED keypads types AV-701 and AV-702. The AV-3008 GSM is supplied with an interfacing board that is plugged into the serial RS-232 plug and connected to the GSM modem.

In GSM mode the remote DTMF is not active. The SMS text per zone is not programmable (to be added later).

#### **Main features:**

- Transmits SMS (short text message) via the GSM network
- Dials to regular numbers via GSM (after dial the unit disconnects, no sound or alarm tune is generated, show the number dialed from to receiver)
- Dials to PSTN numbers with alarm sound when the phone picked up
- Reports to central station via PSTN line (not via GSM)
- Do not supports remote DTMF commands
- Do not support voice module like SVM-42
- Compatible with 2nd, 3rd generation SIM card
- Integrates high end four bands GSM modem (GL-6100, Gismo M95)
- Periodical test signal in few modes
- Send SMS with zone number, events description (low battery, AC fail, etc)

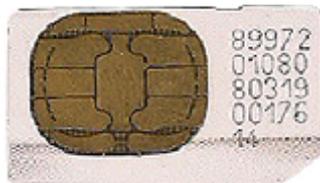
### 2. Hardware

The AV-3008GSM is based on the AV-3008 (with LED keypad) and supplied with additional hardware to provide full GSM alarm panel. The GSM module is supplied with GSM RF antenna with to support the radio side.

To identify the GSM module; Printed board with antenna plug located at the left-upper side in the main control panel case.

The AV-3008GSM has integrated GSM module that is interfaced to the main panel processor via small board (GISM95 or GL6100) that plugged to the panel's serial plug. Do not try to remove or change the interfacing cable or board.

**SIM card parameters:** Generation 2 or 3 (not micro type), SMS enabled, without voice message service, without charges limits (not must), caller ID is enabled and unlocked, Pin Code disabled. See sample picture below



### 3. News for version 1.08-1.10

In version 1.08 periodical signal tests is added, see address 003. The panel dials via PSTN (land line).

In AV-3008 GSM if phone numbers programmed the system dials them via PSTN, when caller answer a siren sound is generated.

Version 1.10 is supporting Av-Gad Gismo modem (PCB in left side).

Periodic test at address 003:

00 = No test signal

01 = Not valid in GSM (test to central station GSM mode)

02 = Send SMS for test, works in GSM mode only

03 = Send test signal by SMS and to central station (to CS via PSTN)

### 4. Handling the GSM module

With all power down insert the SIM card into the SIM slot (fig. 1).

A. The GSM power wires are connected (by factory) to the 12V power terminals +V and -V in the alarm panel. Keep the wires polarity.

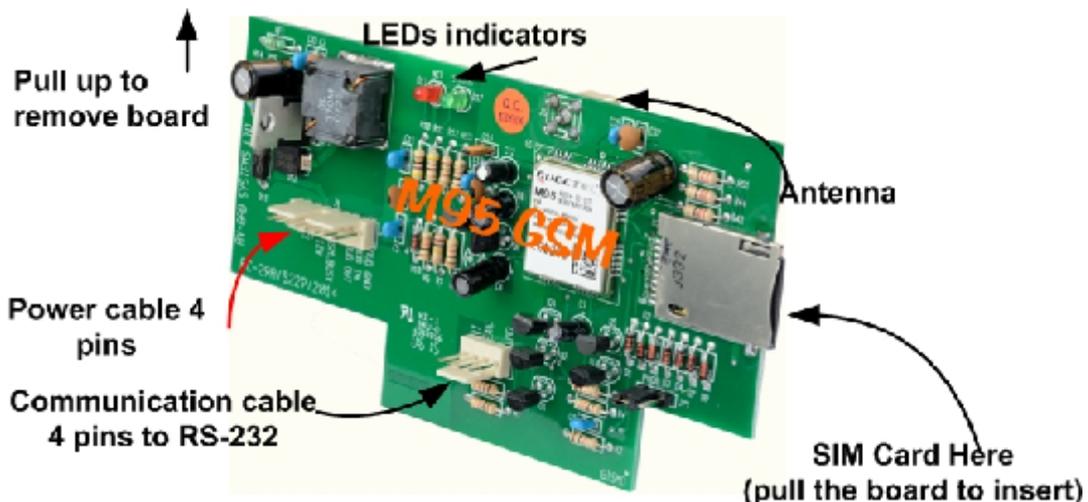


Figure 1: GSM Gismo 95 module description (model year 2015)

B. The antenna cable is rolled inside alarm panel, before powering up un-roll the antenna cable; attach the antenna in the top-left side on the box.

C. Before powering up check that antenna, power and data cables are plugged to the GSM. Locate the antenna in good reception point; verify the antenna wire is not coiled.

Verify that your SIM card is 2<sup>nd</sup> or 3<sup>rd</sup> generation type, with SMS enabled, unlocked, open to all activities. Ask the SIM card for the SMS center number.

Power up with AC only (w/o battery for first time). Wait 60-180 sec's for GSM registration.

Check that the unit functions. Connect the battery if status Ok.

### 5. LEDs Keypad indications for SMS via GSM

SMS by GSM in progress	SMS is sent the <b>Shunt</b> LED blinks fast for 3 seconds
SMS by GSM succeed	<b>Armed, Shunt</b> and <b>Fire</b> LEDs light ON steady for 4 seconds status LED (Green) blinks fast for seconds
SMS by GSM fail	<b>Armed</b> and <b>Fire</b> LEDs light ON steady for 4 seconds

The Gismo board LEDs:

<b>GSM LED status</b>	<b>Description</b>	<b>Note</b>
Green LED for power Steady On	Power is ON	Must be On
Red LED Slow blinking every 2 seconds	GSM is registered and connected to the network	Wait 1-2 minutes for SIM registration to network
Red LED Fast blinking every 0.5 second	Wrong command received	Power off, wait than power on

### 6. Programming address that controls the GSM

Notice: In GSM mode address 008 is not in use

- Program the SMS center number.

This number varies according to the GSM provider. Call up the provider or check your mobile phone for SMS center number.

Program this number in the address 008.

- To enable SMS sending program address 076 function 5

- Supports four **Dial** telephone numbers, each 16 digits, address 013 to 016. Important! Upon call the user do not hear any sound, just see that the system called.

- Supports four **SMS** telephone numbers, each 16 digits, address 009 to 012

- In phone numbers for GSM SMS/DIAL only digits 0-9 are used

Commands 200 in programming mode table

<b>Location</b>	<b>Function</b>
200 and 00	Display control panel type & software version
200 and 04	Erase (reset) the events history
200 and 05	Restore all codes to factory default
200 and 10 (SMS)	Displays current setting LInE or Cell (SMS Mode)
200 and 11 (SMS)	Sets to PSTN line (displays LInE) (PSTN SMS)
200 and 12 (SMS)	Sets to mode GSM (displays CELL) (GSM mode)
200 and 20	Display current SMS language. En for English
200 and 21	Set English as the SMS language
200 and 22	Set Hebrew as the SMS language
200 and 30	Activate ON output (until disabled)
200 and 31	Deactivate ON output
200 and 32	Activate A1 output (until disabled)
200 and 33	Deactivate A1 output
200 and 44	Set panel to four (4) zones Mode
200 and 48	Set panel to eight (8) zones Mode
200 and 50 (Dial)	Displays current settings LInE or CELL to dial on alarm
200 and 51	Set PSTN line for dialing (when answer siren sound is heard)
200 and 52	Set GSM line for dialing (when answer no siren sound)
200 and 69	Restore program to default
200 and 70	Not valid for LED keypad
200 and 71	Nor valid for LED keypad
200 and 72	Download zone description & logo only
200 and 77	Set panel to PC Communicate Mode
200 and 78	Arm panel from programming mode

Hold down key 8, enter 1994, P is displayed indicating you are in PROGRAM mode. In programming mode enter 200, than the required function as detailed below. Commands 200 and 10, 11, 12 are applicable with AV-3008 GSM.

To set PSTN LINE (land phone line), enter into programming mode as follows, Hold down key 8, than enter 1994, P is displayed (details in panel manual), than us the commands as shown in the Commands 200 in programming mode table:

200 + 10 displays current system setting; Line or Cell (Cell = GSM cellular)  
 200 + 11 sets PSTN LINE (displays Line by keypad display)  
 200 + 12 sets GSM (displays CELL by keypad display)

SMS via GSM Restrictions: Only English SMS even if for LINE Hebrew has been set. Via PSTN LINE can send English or other languages (Hebrew) SMS.

When set to use GSM adapter dialing to Central Station is disabled.  
 For LINE SMS, address 008 (Service Center number) must be programmed.  
 For GSM SMS address 008 is not relevant.

Test SMS (6+5), Dial (6+7) and report last alarms (6+4) are valid for both PSTN LINE and GSM usage.

#### 7. AV-3008 GSM texts

The system send fixed (not possible to edit) texts.

For alarm caused by Zone 1, the texts message (SMS) is Zone 1 alarm, same for others zones.

Sending all systems failures like: AC fail, low battery, etc.

Special version with factory texts models AV-3044/3008 DVR GSM texts:

Zone 1: Hard disk fault

Zone 2: DVR Ventilator / Temp fail

Zone 3: TCP/IP communication fail

Zone 4: Recording stop

Zone 5: PTZ control fail

Zone 6: High temp alert

Zone 7: DVR faulty 1

Zone 7: DVR faulty 2

## 8. Trouble shooting in GSM mode

<b>Problem</b>	<b>Solution</b>
<b>The GSM is not sending SMS after programmed</b>	<ul style="list-style-type: none"><li>- Check the SIM card you used with unit. Try to send SMS with the same SIM from your mobile phone.</li><li>- Try to replace the antenna</li><li>- Check the local GSM signal level</li><li>- Program SMS center phone number in the address 008</li></ul>
<b>The GSM is used to work fine, after a while not responding and not sending SMS</b>	<ul style="list-style-type: none"><li>- The SIM in the unit provider has poor radio coverage in the region. Change the antenna location or try other provider (with better GSM coverage) SIM card.</li><li>- Other option is to use high gain GSM antenna.</li><li>- Check that the SIM card has funds to support SMS sending</li><li>- The GSM modem received thunder hit and requires software and hardware reset, or been damaged. Requires factory repair</li></ul>
<b>I replaced the SIM in the GSM and notice unstable unit</b>	<p>New SIM in most cases must be activated by the SIM provider and load with some money (For sending SMS) in order to work properly.</p> <p>Call the SIM provider or check the SIM in your working mobile phone if can call and send SMS</p>