# SPG 1084
## Multi functional TCIP/GPRS Security control panel

The security control panel takes convetional security sensors like PIR motion detector, magnetic contacts, glassbreak detectors and it communicates via SIA IP DC9 protocol either in 128 bit encrypted or not encrypted format. The SPG 1084 comes with 8 onboard zones and 1 form C relay output and 3open collector output.
SPG 1084 controls ethernet and GPRS channels and capable of sending e-mail and SMS messages.
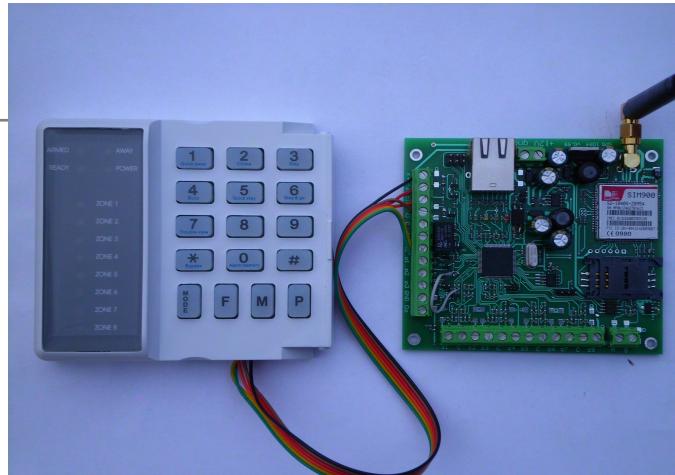
Features:

- SIA IP DC9 protocol (SIA TCP/UDP/Encrypted, Closed socket)
- 24 hour connection with the server (min.test signal interval is10 sec)
- DHCP / Fix IP
- Two server reporting as backup, DYN DNS server
- Web user and installer interface for programming or control
- Remote access through Ethernet network.
- Firmware upgrade
- 8 programmable zone inputs/ 4 outputs
- 8 zone LED keypad for armig/disarming
- Dallas iButton and keyswitch for arming and disarming
- E-mail and SMS sending
- SMS commanding
- Microphone and loudspeaker output
- RS485 for further option
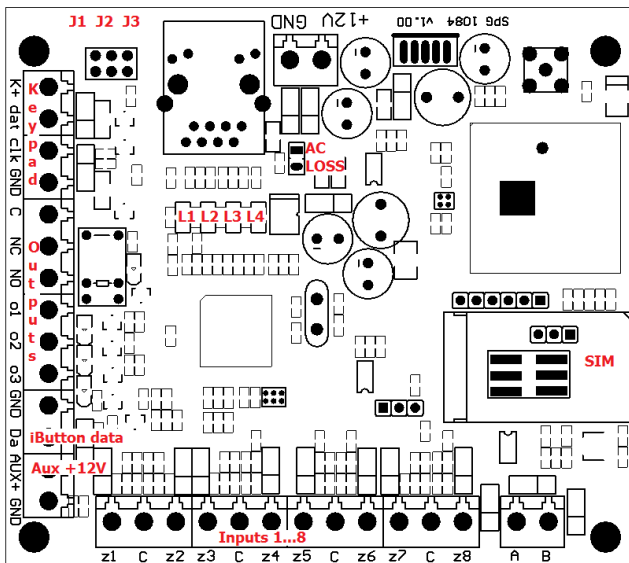
1.0.   Hardware description

1.1.   Main parts:

1 Fixing holes
2 Wire terminals
3 Jumpers
4 L1,L2, L3, L4 Control LEDs
5 SIM-holder
6 Ethernet socket

Fixing Holes:
There are 4 pcs of fixing holes.

Wire terminals:
GND   Ground
+IN   12 VDC   power
Outputs, inputs, iButton reader and keypad outputs

Jumpers:

Factory reset jumpers will re set the following parameters:

- Administrator password: admin
- IP address : 192.168.254.253
- Netmask: 255.255.255.0
- Gateway: 0.0.0.0
- HTTPd port: 8080

Reset:
1   Remove power
2   Connect pins with the providided shortcut jumper
3   Apply power
4   Remove jumper

J1 Factory reset on Network properties

J2   Automatic firmware download thorugh web browser
J3   Factory reset

For firmware upgrade you may leave the J2 jumper on, its not necessary to remove it.

Control LEDs:

L1 GSM STATUS
    double flash – GSM is powered
    SIM/ or other fault- 0.5s On /0.5s Off
    If LED does not light – GSM is not ready (for example no GSM signal)
    Module is on the GSM network but it can send only
SMS – blink in every   4second
    Normal status- Blink in 1s
    SMS sending- blinks in 0,1 s
    SMS receiving – long light
    GPRS connected- double flash
L2 Communication fault
L3 GSM signal quality
    Max 8 blinks where 8 is the best.
L4 ACpower with the Sky Laboratories Power supply only

SIM Card Holder:

Inserting or changing SIM cards is only allowed if the module is disconnected from the power.

Ethernet connector:
A standard RJ45 connector is to be used to connect to the local network. Connect it only when the module is not powered, this way the module will get IP address by the DHCP server. If there is no IP address service available, the module will use the factory default address.
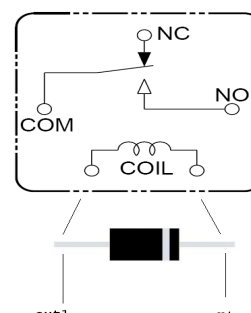(192.168.254.253**)**

1.2.   Other connectors:

Inputs:
The inputs of SPG 1084 on board can be programmed and activated by NO, NC and 2K2 EOL.
If 2K2 EOL is used than either short or open circuit will trigger an alarm.

Outputs:
All output is open collector output. Output is limited to 150 mA. If you need to draw more current plese use relay and a diode as circuit protection as shown here:

2.0. Specification:

Power supply: 12-16 VDC
Stand by current consumption: 80 mA
Max. standby current consumption: 150 mA
Size LxWxH: 85 x100x20mm
Screw terminal sizes: Ø2,5 mm
Ethernet connector   Standard RJ45
Communication: 128 bit encrypted
Factory setting:
Network mode: Static IP
Factory IP-address: 192.168.254.253
Port :   8080
User name :   Admin
Password :   Admin

If you are powering the external devices from the panels +12 V auxiliary terminal, you may not exceed 500 mA current consumption !

3.0. Status web browser

The web page of the panel could be found on the IP address as previously set.

Administrator password:
The entry name and password could be changed here.
Max 15 character could be used.
Factory default: Admin, Password: Admin

Warning:
In case of forgetting the password only reset jumper will reset the factory setting.

3.1. „Status" page:

PANEL STATUS

General information

Hardware version	1.00
Firmware version	SPG-1084 / 1.04 _test_Mar 25 2013
Web site version	SPG-1084 / 1.04
Serial number	9EB30000
Firmware CRC	wrong
Bootloader CRC	Ok
GSM	Ready
GSM Signal Quality	31 (- 53dBm)

Queue status

Alarm queue records	0
SMS queue records	0
E-mail queue records	0

Panel Status Information:

- **Hardware Version**
  Hardware revision nr.

- **Firmware Version**
  The current firmware serial nr running in the module.

- **Web site version**
Version of the web page you see now

- **Serial Number**
  Manufacturing serial number of the module it is the MAC address of the panel

- **Firmware CRC**
  After every re-start SPG 1084 controls the consistency of the program memory. It should display "OK"

- **Bootloader CRC**
  After every re-start SPG 1084 controls the consistency of the bootloader memory. It should display "OK"

- **GSM Status:**
  Displays the status of the panel connected to the GSM network.
- **GSM Signal quality:**
  Displays the status GSM signal quality- Value 31 is the highest possible value.

Panel Status:
- **Alarm queue:**
  Unsent events on the IP network
- **SMS queue:**
  Unsent text messages on the GSM network
- **Email queue:**
  Unsent e-mails.

System

Active process	none
ETH link test remain [sec]	30
GPRS link test remain[sec]	60
ETH Errors	0x00
GPRS errors	0x00
SMS Sending Enabled	0x01
SMS Ban	0x00
SMS Sent (last 1 hr)	0x00

- **Active process**
This is a factory de-bug information. This shows the actual communication or process the SPG 1000 currently maintains.

- **Ethernet link test remain**
 Remaining time to the next ethernet test time. Refreshez by F5 or page reload.
- **GPRS test remain**
 Remaining time to the next GPRS test time. Refreshez by F5 or page reload
- **ETH errors**

Factory debug information.
- **GPRS errors**
 Factory debug information.
- **SMS sending enabled**
 Factory debug information.

- **SMS ban**
 Factory debug information.
- **SMS sent 1 hr**
 Factory debug information. The number of SMS messages sent in the last hour.

Alarm panel status

ALARM PANEL STATUS

Armed / Disarmed

| Armed/Disarmed: | **Armed** |

| Arm | Disarm |

Zones

z1	z2	z3	z4	z5	z6	z7	z8	AC loss
○	○	○	○	○	○	○	○	●

Outputs

OUT1	off	ON	OFF
OUT2	off	ON	OFF
OUT3	off	ON	OFF
OUT4	off	ON	OFF

The user information and control graphical interface to the panel. It shows on-line current status of the zones and outputs, and if allowed the user can change status of the alarm and outputs as well.

Programming:

3.2.
After enter the panel by its pre-set User and Password, you may change factory default settings.

SPG CONFIGURATION

Network settings

MAC address	00:04:A3:2B:06:4E
Mode	Static IP ▼
IP address	192.168.1.132
Netmask	255.255.255.0
Gateway	192.168.1.1
Primary DNS	192.168.1.1
Secondary DNS	8.8.8.8
HTTPd port	8080
Network test interval	60
Time server Host/IP *	
System time (GMT/UTC)	2013.03.26. 11:05:39 from SNTP

*SNTP v3. If blank, using "pool.ntp.org"

- **MAC address**
 MAC address can not ba changed.Its always fix.
- **Mode:**
  Network connection mode could be changed here
    - Static IP address
    - Dinamic Address.
Factory Default Static

> **Remark:**
> If you use dynamic IP, its still advised to use one fix IP in case if DHCP service would be not available. In this case the module will change to Fix IP address.

- **IP address:**
  This is the several IP. This aress is used for remote programming or remote controlling.
Factory Default 192.168.254.253

- **Netmask:**
  It is for to be able to distinguish between IP address and identification parts for IP packet receivers.
Factory Default: Empty

- **Gateway:**
  This is a device which is in connection with more TCP/IP network. It is for routing and forwarding different IP packets between these networks. For example a router address within the network is designated to gateway.
Factory Default : Empty

- **Nameserver (primary):**
  This is a name server the server of the service provider. Write the provider server address into this field. (A router could be also a name server)
Factory Default: Empty

- **Nameserver (secondary):**
  This is a name server the server of the service provider. Write the provider server address into this field. (A router could be also a name server)
Factory Default: Empty

Warning:
Secondary name server should be accessible server since if the panel is connected by GPRS, it can not use the router on the same network as name server

- **HTTPd port:**
  The config website port nr
  Factory Default 8080

- **Network Test signal interval:**
  The panel sends test signals to the servers in this given time periods.
Factory Default 120

- **Time server/Host**

The panel synchronize its internal clock to an available public time server on the internet.
Factory default is „pool.ntp.org"

Supervisory connection:

You may set the communication routes of the panel. SPG is able to send alarm signal in a multiply sequential paths, IP communication could be to two different server.

Supervisory connections

Server Host Name/IP	84.225.74.102
Server port	61000
Server #2 Host Name/IP	84.225.74.102
Server #2 port	61000
Protocol	TCP
Encrypt	AES-128 encrypt
AES key	0102030405060708090A0B0C0D0E0F02
Account ID	1084
DC-09 Prefix	

E-mail settings

E-mail sending enabled	Disabled
From address	
SMTP server	
SMTP port	0
Perform authentication	Disabled
Username	
Password	

- **Server Host Name/IP:**
  The server location of the central monitoring station. You may fill IP address or HOST name.
  Factory Default 0:0:0:0

- **Server Port number:**
  The port number of the central monitoring server.
  Factory Default 0

- **#2 Server Host Name/IP:**
  Secondary server location of the central monitoring station. You may fill IP address or HOST name.
  Factory Default 0:0:0:0

- **#2 Server Port number:**
  Secondary port number of the central monitoring server.T
  Factory Default 0

- **Protocol:**
  The required protocols could be selected here with the central monitoring server.

  – SIA IP TC2700 (TCP, not enrypted, Close-socket)

  – SIA IP UD2700 (UDP, not enrypted, Close-socket)
  – SIA IP encrypted TC2700 (TCP, enrypted, Close- soc.)
  – SIA IP encrypted UD2700 (UDP, enrypted, Close-soc.)

- **AES key:**
  The encryption key should be added here which is given by the central monitoring station..
  Factory Default: Empty

  Account ID:
  SIA account id
  Factory Default: Empty

- **Prefix:**
  This is provided by the central monitoring station.
  Factory Default: Empty

  Time Zone:
  The module has a built in clock syncronization. Select the time zone where the panel is installed. A modul connects the „Timeserver" periodically to adjust timing. Important ! Syncronization could only be done if ethernet connection is available, and DNS server is set properly.
  Factory Default GMT+00:00

  Email:
  The module can send e-mail messages to pre-set addresses. Here you can adjust globally the e-mail reporting. Specific settings should be done at the expansion board programming section.

- **Email:**
  Enabling or disabling any e-mail communication.
  Factory Default: Disabled

- **From:**
  The address of the module e.mail address.
  Factory Default Empty

- **SMTP Server:**
  The mail server smpt name (provided by Internet service providers.
  Factory Default Empty

- **SMTP Port:**
  Provided by Internet service provider.
  Factory Default Empty

- **Authentication:**

  If your Internet provider requires authentication you should set this accordingly.

  Factory Default: Disabled

- **Username:**
  Username is necessary to access mail server
  .Factory Default Empty

- **Password:**
  Password is necessary to access the mail server.
  Factory Default Empty

GPRS settings:
Wireless GSM communication settings could be made here.

- **Access point name (APN):**
  Provided by the GSM provider
  Factory Default: Empty

- **Username:**
  Provided by the GSM provider
  Factory Default: Empty

- **Password:**
  Provided by the GSM provider
  Factory Default: Empty

- **Nameserver (primary):**
  Provided by the GSM provider. Many provider does not require any setting.
  Factory Default: Empty

- **Nameserver (secondary):**
  Provided by the GSM provider. Many provider does not require any setting.
  Factory Default: Empty

- **Network test signal interval:**
  Test signal interval only for GPRS transmission. From 60 sec.
  Factory Default 0

- **Balance optimization:**
  The panel could optimize the data traffic for time or for data volume, depending on your GSM subsciption plan. Time based optimization will result that panel will spend the least amount of time on the GPRS network and will disconnect as soon as reporting is done. Data based optimization means that panel will remain connected to the GPRS network, assuming that more reporting will be done . Data optimisation will mean 10-30 minute disconnection from the GPRS network if there is no reporting needs.

Factory Default : None

SMS:
SMS global settings could be adjusted in this section.

- **SMS sending:**
  Enabling SMS sending globally.

-
Factory Default Disabled

- **Provider source addres:**
  The GSM provider source address should be entered here , from where information is expected and should be forwarded to an other number (For example the balance information for pre-paid GSM services)
  Factory Default: Empty

- **Forward to:**
  The incoming SMS is forwarded to a pre-set number . Use international form for numbers.
  Factory Default: Empty

- **Forward unknown SMS:**
  Enables or disables forwarding SMS from an unknown number.
  Factory Default : Empty

- **Sending limit:**
  Maximum nr of SMS. The counter will reset in every hour. Zero value will result unlimited nr of SMS.
  Factory Default 0

- **SMS text prefix:**
  This will identify the panel if you expect more panels to send sms to the same number.

Dynamic DNS:
SPG is enabled for Dynamic DNS communication even if it is installed on a non-fix IP address. Generate a DNS on a service provider . In this case both Internet and GPRS connection the module could be remotely accessed.

- **Enable:**
Enables the dinamic IP refresh.
Factory Default: Disable

- **DynDns hostname:**
  Name you created on DNS server provider.
Factory Default: Empty

Dynamic DNS

Use dynamic DNS	Disabled
dynDNS Server	dyndns.org
dynDNS hostname	
Username	
Password	
Last known IP	48.146.39.71

Communication rules

Com path	Ethernet or GPRS
*No dialtone if no CSR available on ETH or GPRS	Disabled

*This setting has no effect in "SMS Only" mode.

Remote users

USER#1

SMS address	+362
E-mail address	
Access level	Administrator
Login name	
Web Password	

USER#2

- **Username:**
  Accessing the DNS service
Factory Default: Empty

- **Password:**
  Accessung the DNS service
Factory Default : Empty

- **Last known IP:**
  Displays the last known IP address of the SPG

Communication Rules:
Communication rules of the panel are to be set here.
SPG1000 can handle independent communication paths.
Sequence of IP reporting:
2 times Ethernet Nr 1 Server address
2 times Ethernet Nr 2 server address
GPRS 1 server , GPRS 2 server , in case of successfull communication SPG 1084 will forward all messages at GPRS channel for 3 minutes. New event will trigger the repeat of this whole sequence. After unsuccessful communication will result 3 minutes of brake.
If there is only GPRS set as primary and only communication than in case of unsuccessfull event communication will be suspended for 15 minutes.

The panel will send SMS containing the Ademco Contact ID information from the internal inputs if neither Ethernet or GPRS communication path is unavailable.

- **GPRS:**
  Setting the primary reporting route of the SPG is GPRS. We suggest to use this only if Ethernet is not available. More reporting routes you have the secure the operation. SPGs web programming page is available through Ethernet connecton only. If you use GPRS only communication only local programming is available for you.

- **SMS only:**
  tIf you chose this option the SPG 1084 will not send any alarm reports to central station. Only user format SMS messages . User format sms message content is to be set at Alarm Function section of the programming.

Factory Default :Ethernet or Gprs

Users

Default programming mode (Aministrator) entry to the panel is Admin, Admin (user, password) . This rule applies only if none of the user login name and password is filled out.
If you want to change on the default Administrator password you must use the User nr 1 section for the new password. You may not change Adminstrator access level on User nr 1. If you need User level access to be programmed you can do that in User Nr 2,3 section.

- **SMS address:**
  The telephone nr of the user where SMS could be sent- Always use internation format ! e.g +36201111111
  Factory Default: Empty
- **Email address:**
  The e-mail address of the user where e-mail could be sent-
  Factory Default : Empty
- **Access level:**
  Access level of the user
Factory Default: None
- **Login Name:**
  Login name for the SPG 1084 web page.
Factory Default Empty
- **Password:**
  Login password of the SPG 1084 web page.
Factory Default Empty

EXTENSION BOARD

General

SMS Control	Enabled
Reply on SMS Command	Enabled
Arm/Disarm by Web	Enabled
Notify User on Arm/Disarm	Disabled
Chime on Keypad Buzzer	Normal
Entry Delay [sec] *	15
Exit Delay [sec] *	15
AC Loss Delay [sec]	30

*Maximum value [255] allowed.

SMS Control:
Enable: Remote Arming/Disarming, status request and output trigger is allowed by SMS
Factory Default: Disabled

- **Reply on SMS command:**
Enable: It will enable SPG1084 to send reply SMS to command SMS received before.
  - Disable: SPG will not send any reply SMS
Factory Default: Disabled

- **Arm/Disarm by web:**
Enable: It will enable SPG1084 to be armed and disarmed on the STATUS page web buttons
Factory Default: Disabled

- **Notify user on arm/disarm:**
Enable: It will enable SPG1084 to send SMS to users of control panel armed/disarmed status
  - Disable: SPG will not send SMS about arm status
Factory Default: Disabled

- **Chime on keypad buzzer:**
Enable: It will enable SPG1084 to beep on entry exit zone violation
Factory Default: Disabled

- **Entry delay time:**
Valid values: 0-255 sec
Factory Default: 0 sec

- **Exit delay time:**
Valid values: 0-255 sec
Factory Default: 0 sec

- **AC Loss time**
Detection of AC loss of AC loss input (separate pins)
Valid values: 0-255 sec
Factory Default: 0 sec

Inputs
The panel has 8 zones with dual end of line resistors. Each zone type could be configured here.

- **Zone :**
The number of inputs. Z1...Z8

Inputs

#	Type	Zone termination	report disable	e-mail report	SMS report	name
Z1	Delayed	NC				me1
Z2	Disabled / Normal / 24h alarm	NC				me2
Z3	Delayed	NO				me3
Z4	Follower / Stay / 24h fire	NO				me4
Z5	24h trouble / Technical	NO				me5
Z6	Key switch / Arm	NO				me6
Z7	Disarm / Arm/Disarm	NO				me7
Z8	Tamper / Tamper	NC				me8
ZA	Disabled					me9

- **Zone Types:**

  − **Disabled:**
  If disabled is selected, no need to install EOL resistors.

  -Normal:
  Immediate zone meaning if the system is Armed, violate this zone type will activate an alarm immediately.

  − **24Hour:**
  24 hour zone will activate an alarm , regardless if the system is armed or disarmed.

  − **Delayed**:
  The system will not alarm during exit and entry delay times if delayed zones are violated for the duration of entry or exit time. All other violation will result alarm.

  -Technical:
  Similar operation of 24 hour zone, but it will not trigger a Fire or Alarm message. Its to be used if any sort of contact information is to be transmitted regardless if armed or disarmed status. EG, temperature sensor, pump or other device activation e.t.c.

  - Follower:
  A „Follower" zone will act as an „Normal" zone if it has been triggered by itself. If a handover zone has triggered after a „Delay" zone, the remaning delay time will handower from the delay zone to the handower zone.

  - **Stay:**
  Same as Normal type zone, but in Stay arming it will be bypassed automatically in Stay mode arming. If during exit time the Delayed zone is violated than this zone will be handled as Normal zone type. If Delayed zone is not violated during exit time that this zone will be shunted when exit time cycle is expired.

  − **24h Fire:**

Similar operation of 24 hour zone, but it will trigger a Fire Alarm message.

− **24h Fire trouble:** Similar operation of 24 hour zone, but it will trigger a Fire Alarm Trouble message.
Factory default: all disabled

- **Keyswitch zone:**

This zone option is to handle keyswitch to arm the panel and disarm the panel. If the circuit is closed the panel is disarmed, if open its armed.

Arm … Disarm … Arm/Disarm zone:

This zone option is to handle any pulse device like push button. A pulse will change status.

● **Report disabled:**
Sending message to central monitoring station
  ● disabled: ☑
  ● enabled: ☐
Factory setting: all enabled

● **E-mai Report:**
Sending E-mail message from that particular zone.
  ● disabled: ☐
  ● enabled: ☑
Factory setting: all disabled

● **SMS Report:**
Sending SMS message from that particular zone
  ● disabled: ☐
  ● enabled: ☑
Factory setting: all disabled

● **Name:**
You may type here any text in English standard characters, it will be transmitted in E-mail and SMS.
Factory setting: all empty

● **ZA:**
This is the panel AC loss detection tamper pin. No other zonetype can be programmed to this zone input.

Dallas Ibutton / Keypad arming / disarming registration

The SPG 1084 can handle up to 8 different dallas ibuttons (type 1990), and 8 different keypad code up to 4 digit code Each iButton authority level could be set

Keypad codes / Dallas keys

#	Type	Keypad code	Dallas ID (hex)	name
#1	Arm-Disarm	1234	470AFB140000	user1
#2	Arm-Disarm	4321	88E0FB140000	user2
#3	Disabled	2580		user3
#4	Disabled			user4
#5	Disabled			user5
#6	Disabled			user6
#7	Disabled			user7
#8	Disabled			user8

Learn iButton Keys

(only if disarmed)

Dallas ID
This is the hex code of the dallas iButton arming device you may read on the button.

Name
You can enter any name here. This field will be transmitted in SMS and Emails if programmed.

If an unregistered iButton is used, the panel will send an access denied report to the central station via the SPG 1084.

The Learn iButton key is to learn teach the i Button to the SPG 1084. The serial nr of the iButton will be put into the next available free space.

Outputs:

Outputs

#	Name	Type	Bistable/Mono	Timer	Zone number
out1	t1	Bell	Bistable	130	Z1
out2	t2	Disarmed	Monostable	140	Z1
out3	t3	Entry/Exit	Monostable	150	Z1
out4	t4	Disabled	Monostable	1234	Z1

● **Output:**
There are 4 outputs freely programmable by functions. Nr 1 is a form C relay output.

● **Name:**
You may enter any description to this zone.

Factory default: Empty

- **Type:**
  Output types could be selected here,

  – **Disabled:**
  This output is disabled. It can not be activated from anywhere.

  – **Armed:**
  Will follow the Armed status of the SPG 1084

  – **Disarmed:**
  Will follow the Disarmed status of the SPG 1084

  – **Alarm:**
  Will follow the Alarm status of the SPG 1084

  – **24h Alarm**
  Will follow any 24h Alarm zone status.

  – **Technical**
  Will follow any Technical zone status

  – **Tamper** :
  Will follow any Tamper status of the SPG84

  – **Entry/Exit:**
  Will follow the exit entry time status of the SPG .

  – **Communication Fail:**
  Will be activated if there is a communication failure between the SPG 1084 and the central station

  – **Zone Follower:**
  Will follow status of any zone selected

  – **Server control:**
  If SPG 1084 receives a SMS command either from SMS or directly form SPG 1084 programming web.

  – **AC Loss:**
  Will be activated if AC loss input is activated.

  – **AC LOSS TIME OUT:**
  Will be acivated if AC LOSS timeout is expired, and still no AC power.

  – **LOW Battery:**
  This information is from SPG 1084 only. If DC power drops under DC 11,8 V it will be activated.

Factory Default : All disabled

- **Mode:**
  Setting the timing of the output
  - **Monostable:**
  Will follow the event with the timing as event occures.

  - **Bistable:**

Two state output. The output will be activated by the event, and will stay in that as timing is set.

Factory default: Monostable

- **Timer:**
  Timer for Bistabil output mode.
  Valid entry: 1-65535sec

Factory default: all 0

- **Zone num.:**
  Only for „Zone follower" output types. It will follow the input zone selected.

Factory default: „Zone 1"

SMS remote controlling

If you would like to use these function you need to enable at „Configure" page „SMS Reply mode"

Warning:
Only standard English characters could be used.

SMS control:

If the phone nr of the sender of the SMS message to the SPG 84 is registered at USERs you may control SPG 84 with the following commands :

- **SMS format:**

  OUTX=Y
  Where "O" = output , "X" Number of the output 1...4,
      "Y" is the required status of the output 0= Out 1=In

  Example: OUT1=1   Turning on Output nr 1

  ARM
  SPG 1084 will be armed by this command   module will reply with "ARMED !" answer

  DISARM
  SPG 1084 will be disarmed by this command   module will reply with a "DISARMED" answer

  STAT
  Requesting status of SPG 1084

Warning:
If SMS messages is stored in your phone and the phone is lost you will risk to let someone to remote control your system.

Keypad functions

The keypad is wired to the SPG 1084 as follows:
```
keypad      SPG 1084
+ 12V    -     K+
GND     -     GND
DAT     -     DAT
CLK     -      CLK
```

Fire, Medical, Panic buttons
By pressing the F, M P buttons will activate a central station communication.

To add or change user codes and iButtons use the following commands

1<master code><user position><new code>#
    Example : *11234*25555#
   This will set the second user keypad code 5555.

Delete a user code:
1<master code><user position>#

You can not delete a MASTER CODE

Dallas iButton learning:
3<master code><user position>#

Present your new iButton after pressing the # key.

Dallas iButton delete:
2<master code><user position>#

New iButton will Arm-Disarm by default, but it can be changed on the website.

Suggested Application guide for wiring and programming for Dallas iButton reader indicators

Setting the outputs the following way iButton reader will indicate status of the SPG 1084 module:
System Ready : Green
System Armed: Red
Exit/Entry time: Orange

#	Name	Type	Bistable/Mono	Timer	Zone number
out1	Ready	Disarmed	Bistable	65535	Z1
out2	System Armed	Armed	Bistable	65535	Z1
out3	E/E Delay	Entry/Exit	Bistable	65535	Z1
out4	System Alarm	Alarm	Monostable	300	Z1


```
iButton wires    : Out 1     - Connected to Out 3
                   Out 2     - iButton  Brown
                   Out 3     - iButton  Green
                   12V       - iButton Yellow
                   iB        - iButton  White
                   GND       - iButton  Gray
```

Contact ID codes used :

1400	Disarm (Open)
1401	Open by User by user
3400	Close
3401	Close by user
1454	Failed to close
130	Burglary
133	24 Hour (Safe)
134	Entry/Exit
132	Follower zone alarm
150	24 Hour Non-Burglary
110	Fire
200	Fire fault
1409	Keyswitch - open
3409	Keyswitch - close
137	Tamper
301	AC loss
1115	Keypad-F / Pull Station
1100	Keypad-M / Medical
1101	Keypad-P / Personal
302	low bat
358	ETH fail
359	GPRS fail
333	Extension Board fail
305	System Reset