



SED- 61 GSM SYSTEM

INSTALLATION & USER MANUAL

WARNING

THIS SECURITY DEVICE MUST BE INSTALLED
BY A QUALIFIED & AUTHORIZED PERSON.
PLEASE READ THIS MANUAL FULLY BEFORE
INSTALLING THIS PRODUCT.

WWW.SECENG.COM.AU

Sydney, Australia

Sec.Eng
systems



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GSM

PRODUCTS

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Warranty and Liability

WARNING

- 1/ The SED-61 is only to be installed by an authorised service person.
- 2/ The supplied 16Vac Plug pack must only be connected to a 240VAC outlet socket with a protective earth connection.
- 3/ Ensure that the antenna is covered in 20mm conduit in exposed places.
- 4/ Ensure that the unit is mounted in a safe, secure & upright position.

The above points should be taken seriously. Failing to abide by the above points, may result in the product not performing as designed.

PRODUCT WARRANTY

This product is covered by a 12 month, **back to base warranty** from date of purchase, and proof of purchase should be supplied. The warranty does not cover damage that has resulted in the improper installation or improper use of this product. The warranty does not cover lightning damage, product misuse, electrical surges or acts of God.

LIMITATION OF LIABILITY

Sec-Eng Systems' products are intended to reduce the risk of loss and damage to property in which the goods are installed to the extent which is practical. Sec-Eng Systems does not accept any liability for the loss or damage to property or persons in relation to goods supplied. This disclaimer is only limited to the warranty of the goods supplied and the intended use.

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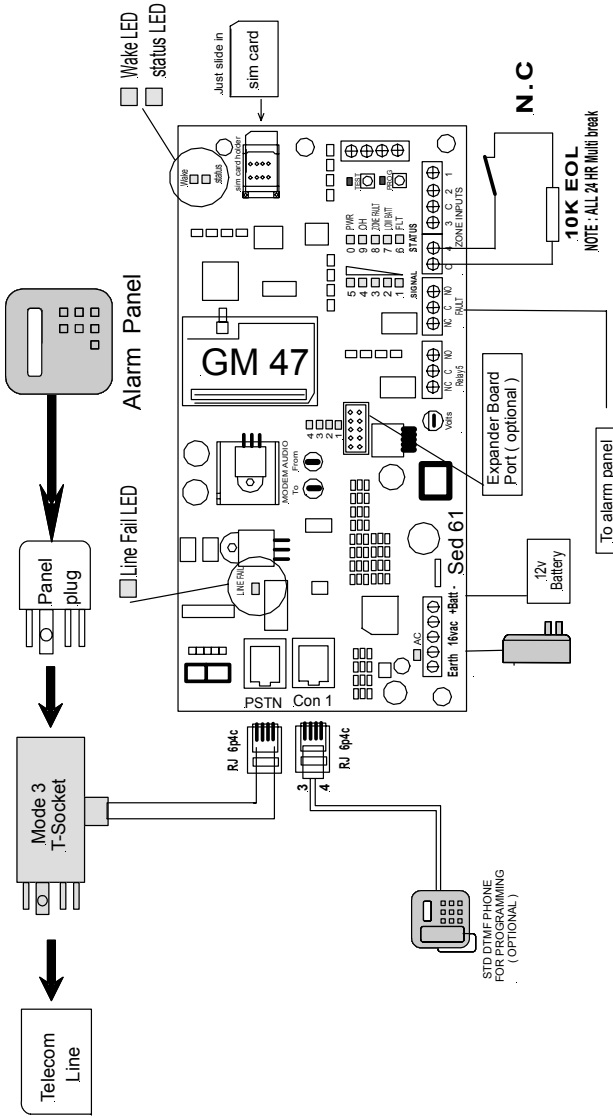
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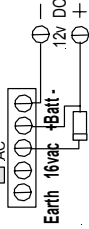
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SED-61 INSTALLATION DIAGRAM



OPERATING SED-61 FROM 12v DC ONLY

- 1/ Place 1.0 Amp diode between one side of AC Terminal & + of battery
- 2/ Run 12v DC now into battery terminal (AC light should be on)



FAULT RELAY TRIGGERS ON THE FOLLOWING EVENTS :

- * AC Power fail after 1 hr
- * Low battery @10.7v
- * Telecom line no voltage / no current @ 30sec
- * Gsm signal or registration loss after 8 min

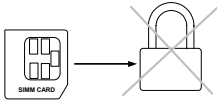
RELAY 5 & OPTIONAL RELAY BOARD ARE TRIGGERED VIA SMS

- * See installation guide 2.6 for further instructions

MODEL : SED-61 GSM SYSTEM BY SEC-ENG SYSTEMS AUSTRALIA

1 Checking SIM card for Operation

Place the SIM card into any Standard GSM Phone.



If the phone requests you to enter a PIN number then the SIM card is **PIN LOCKED**

NOTE: The SIM card PIN request must be disabled before it can be used in the SED-61

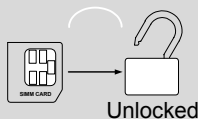


Warning: Ensure you have the correct PIN number. Entering the wrong PIN will PUC lock the SIM which will then need to be returned to the vendor for reprogramming.

Disabling the PIN on the SIM card

To disable the PIN go to the phone security menu and select **PIN OFF**

Once done re-test by turning the phone OFF then ON. The pin code should not be requested.



2 Ensure that the SIM Card does work and that a call can be conducted from the Mobile Phone.

3 Test for signal strength (min 3 bars) at the SED-61 antenna location with the mobile phone.

4 Install the SIM card in the SED-61 as shown in the Installation Overview Diagram 1.1

Terminal Connections

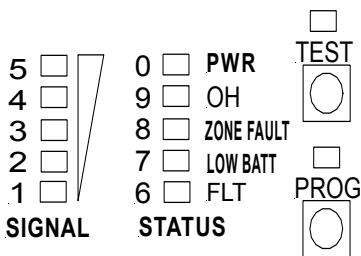
| Terminal | Description |
|---|---|
| Power | |
| Earth | Connect to mains earth via Plug Pack Note: remove solder tinning on earth wire, if provided, before connecting. |
| 16vac | AC input 16v AC Plug Pack (As supplied with unit only) |
| 16vac | AC input 16v AC Plug Pack (As supplied with unit only) |
| BATT + | 12v DC battery input Positive |
| BATT - | 12v DC battery input Negative |
| RELAY 5 (Programmable) | |
| NC | normally closed contact |
| C | common contact |
| NO | normally open contact |
| FAULT RELAY | |
| NC | normally closed contact |
| C | Common contact |
| NO | normally open contact |
| Warning: GSM fault relay is at TNV-3 and is rated 0.5 A at 125 vac | |
| ZONE INPUTS (24hr multibreak) | |
| C | Common for Zone Inputs (negative float) |
| 4 | 10k end of line resistor required to common |
| 3 | 10k end of line resistor required to common |
| C | Common for Zone Inputs (negative float) |
| 2 | 10k end of line resistor required to common |
| 1 | 10k end of line resistor required to common |
| PSTN | To Mode 3 T-Socket (to panel and phone line) |
| CON 1 | Used for programming via telephone handset and for audio across GSM |
| RS 485 | Optional RS485 com port |

On board LED Indications

| LED | Normal Operation | In Programming mode |
|----------------|-----------------------------|-----------------------|
| 1 | Signal level Low | Indicates the digit 1 |
| 2 | Signal level Min | Indicates the digit 2 |
| 3 | Signal level Med | Indicates the digit 3 |
| 4 | Signal level Good | Indicates the digit 4 |
| 5 | Signal level Best | Indicates the digit 5 |
| 6 FLT | Fault GSM | Indicates the digit 6 |
| 7 BAT | Low batt | Indicates the digit 7 |
| 8 ZFLT | Zone unsealed | Indicates the digit 8 |
| 9 OH | GSM Transmitting | Indicates the digit 9 |
| 0 PWR | Power On | Indicates the digit 0 |
| 13 Fault Relay | Fault Relay off | |
| 14 Line Flt | Telephone line not detected | |
| 15 AC | AC OK | |

Fault LED Guide on Power up

If **LED 6 (FLT)** is flashing refer to the LED's as shown below for the fault indication.



- LED1 ON=Not Applicable
- LED2 ON=Not Applicable
- LED3 ON=GSM signal or registration fault
- LED4 ON=Not Applicable
- LED5 ON=No SIM card or locked SIM
- LED6 ON=GSM fault
- LED8 ON=Zone 1 - 4 unsealed

Operating Modes

1

BASIC GSM BACK UP SYSTEM

Connect the phone lines to the T-socket and wire the GSM fault relay back into a 24hr zone on the customers alarm panel.

2

INTELLIGENT GSM BACK UP SYSTEM

(WE RECOMMENDED THAT THE INTELLIGENT MODE BE USED IN MOST CASES)

Connect the phone lines to the T-socket and wire the GSM fault relay back into a 24hr zone on the customers alarm panel. Power up the SED-61 and program Functions 1, 2 & 3.

For programming details see **Section 2 of this manual**

3

GSM FULL TIME (IF NO PHONE LINE AVAILABLE OR FITTED)

Program Function 07 for GSM Full Time (option = 0) and connect the fault relay and customers alarm panel to the t-socket.

Programming

There are two available methods to program the SED-61:-

Manual Mode (Section 2.1)

Plug a standard telephone butt into the SED-61 Port marked "Con 1" and program as per **Section 2.1**

or

SMS Mode (Section 2.2)

Send a formatted text messages via SMS from any mobile phone and program as per **Section 2.2**

Ensure the unit is powered up and working with no faults. Plug any standard telephone handset (set to tone dialling) into the connector marked "Con 1" on the SED-61. Lift the handset and make sure you can hear a digital dial tone.

To enter program mode

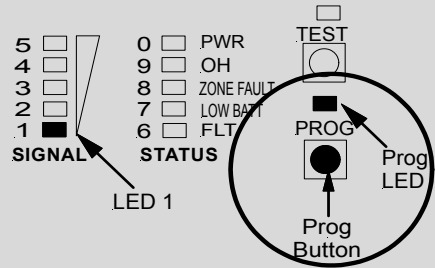
Press and hold the **Prog Button**. When the **Prog LED** illuminates followed by **LED 1**, release the program button. **You are now in Program mode.**

Programming Example

Key into the phone the following:

***019999#**

This now has programmed the dialler account code 9999 into function 01



To read function 01 back, key ***01#** into the phone. LED 9 will flash 4 times indicating that 9999 is programmed in as the account code.

To exit program mode

Press and hold the **Prog Button** until LED 1 goes off, then release the program button. The PROG LED should be off and the other LEDs will return to normal.

To program the SED-61 using SMS from any mobile phone, simply write a text message in the format of ***Function No" "Option No" #** and send it to the SIM card mobile phone number in the SED-61.

Attention : If the Master Code (function 19) has been enabled, you must first send *19 ???? # (the ???? = Master Code) This will allow SMS Programming Mode access for 5 minutes.

Example to program Function 01 client code = 9999 using SMS

Send the text message ***019999 #** to the SED-61.

Note: All SMS functions must start with a * (**star**) and end with a # (**hash**) do not use any spaces in between. This is the same as if you were programming the SED-61 using manual mode programming.

| Function Number | Function Description | Default |
|--------------------------------------|--|---------|
| Communications setup | | |
| 01 | Client code | 0000 |
| 02 | Primary Receiver | nil |
| 03 | Secondary Receiver | nil |
| System Timers | | |
| 04 | GSM on-board dialer test time | 24hrs |
| 05 | GSM signal fail relay trigger time | 8min |
| 06 | PSTN alarm delay | 30sec |
| GSM Communication modes | | |
| 07 | GSM Back Up / GSM FT / GSM FT PSTN Backup | 1 |
| 08 | PABX mode | 0 |
| 09 | Zones 1-4 lock out control | 0 |
| Ademco system reporting codes | | |
| 10 | Ademco event codes of on-board GSM dialer | 0 |
| 11 | Software Version (Read only) | n/a |
| SMS set up and control | | |
| 12 | Mobile phone 1 for SMS alarms | nil |
| 13 | Mobile phone 2 for SMS alarms | nil |
| 14 | Mobile phone 3 for SMS alarms | nil |
| 15 | Report options for SMS messages (general) | 0 |
| 16 | Report options for SMS messages (for zones 1-4) | 0 |
| On-board zones set-up | | |
| 17 | Configuration of zone types | 0 |
| 18 | Confirmation of arming/disarming zones via SMS | 0 |
| PIN Code Setup | | |
| 19 | Master Code | nil |
| Fault Relay setup | | |
| 24 | Functions & setting of Fault Relay Control (relay 0) | 0 |
| I/O Expander | | |
| 25 | Enable I/O expander card | 0 |

Function 01 - client code

2.4

This sets the account code that the SED-61 will use when using its' on-board dialler to report to the Monitoring Company.

Options:
Any 4 digit number

Example : *019999#

Function 02 - Primary receiver number

This sets the primary phone number that the SED-61 will dial when using its' on-board dialler to report to the Monitoring Company.

Options:
Any phone number Up to 18 digits

Note: Make sure the phone number can be dialled from a mobile phone

Example : *021234567#

Function 03 - Secondary receiver number

This sets the secondary phone number that the SED-61 will dial when using its' on-board dialler to report to the Monitoring Company if unable to make a valid connection using the primary receiver number.

Options:
Any phone number Up to 18 digits

Example : *031234567#

Function 04 - GSM internal dialer test time

Default = 24 (Daily)

Change the time window between the SED-61 test call reports (sector 253). The time is in Hour intervals.

0 = No test call reports
24 = Test Call every DAY
168 = Test call once a week

Options:
From 0 to 168 Hours

To force a test call press and hold test button for 7 sec this will set & send a test call at the time. (see Section 2.8)

Example : *0424#
(set's a test call every 24 hours)

Function 05 - GSM Fail Relay trigger time

Default = 8 minutes

This sets the time between the SED-61 detecting that the GSM signal is not present and when the fault relay activates. This is important for times when the GSM signal can occasionally drop out for short periods but it is not necessary to send an alarm as it restores within a few minutes.

Options:
From 1 to 8 minutes

Example : *055#
(waits 5 minutes before the Fault relay activates)

Function 06 - PSTN Alarm delay

Default = 1 (30 seconds)

This sets the time between the SED-61 detecting that the PSTN line voltage is low or not present and when a PSTN trouble / fail alarm is reported. This is important in areas where the PSTN line voltage can drop due to loading but the line is functional and restores normally.

Options:
0 = 50 seconds
1 = 30 seconds

Example : *060#
(50 secs before PSTN Fault activation)

Function 07 - GSM Operation

Default = 1

Sets the SED-61 operates as a backup or other modes

GSM BU = GSM operates as a back up unit

GSM FT = GSM operates full time

GSM FT / PSTN BU = GSM is used full time but will switch to PSTN line if the GSM fails

Options:

0 = GSM FT

1 = GSM BU

2 = GSM FT / PSTN BU

Example : *071#

(sets to GSM back up mode)

Function 08 - PABX mode

Default = 0

If the Alarm Panel PSTN line is connected through a PABX then the receiver phone number will have an outside line number as a prefix (usually 0). In PABX mode the SED-61 will ignore this first digit when it dials out on the GSM network as it is not required.

Options:

0 = Dial all numbers

1 = Ignore the 1st Digit

Example : *080#

Function 09 - Zone 1 – 4 lock out control

Default = 0

This function provides a lockout feature on the 4 SED-61 zone inputs. Enable this to block reporting of rapid multiple activations on a zone input.

Options:

0 = No Lockout

1 = enter in seconds (1-30)

Example : *090#

Function 10 - Ademco event codes

Default = 0

Sets the starting number for the SED-61 onboard dialer reporting codes. In most cases reporting codes 250 and above are OK to use as the alarm panel does not need this many codes but in larger systems where code 250 is in use, the report codes for the SED-61 can be changed to 450 and above. Also Option 2 forces the SED-61 to report standard event codes for power fail, low batt, PSTN Fail and GSM Test. Refer to Section 3.0 for at list of report codes and event codes.

Options:

0 = Starting at 250

1 = Starting at 450

2 = Standard Event Codes

Example : *100#

Function 11 - Software Version

Displays the software version of the SED-61 program code. The LEDs display the version number.

No Options

(Read-back only)

Example : *11#

Function 12 - Mobile phone 1

The SED-61 can report events via SMS to 3 mobile phones **Note:** we only recommend this option for non-critical alarms or for secondary monitoring purposes due to the nature of the SMS delivery service. Enter the number of the first mobile phone to report to. If left empty Mobile Phone Reporting is disabled.

Options:

Any phone number
Up to 18 digits

Example : *120406991992#

Function 13 - Mobile phone 2

Enter the number of the second mobile phone for the SED-61 to report events to. Leave this option blank if no second mobile is needed.

Options:

Any phone number
Up to 18 digits

Example : *130406991993#

Function 14 - Mobile phone 3

Enter the number of the third mobile phone for the SED-61 to report events to. Leave this option blank if no third mobile is needed.

Options:

Any phone number
Up to 18 digits

Example : *140406991994#

Function 15 - SMS System reporting

Default = 0

This function determines what SMS System Messages are sent by the SED-61. SMS System messages are AC Fail, Low Batt, GSM Test and Fail to Communicate.

Options:

0 = Disable SMS Messages
1 = Enable Option 1
2 = Enable Option 2

| |
|--|
| <p>Option 1 = Sends All System Messages to Mobiles Option 2 = Send all system Messages except GSM Test</p> |
|--|

Example : *150#

Function 16 - SMS Zone reporting

Default = 0

Enable this function if you would like an SMS message sent to the mobile phone number,1,2,3 if Zones 1- 4 are activated. See Section 2.9 for changing the text of the SMS message.

Options:

0 = Disabled
1 = Enabled

Example : *160#

Function 17 - Zone Input configuration

Default = 0

Sets the operation of the 4 Zone Inputs on the SED-61

- Option 0 = Zones 1 – 4 are 24 hr inputs
 Option 1 = Zones 1 - 4 armed / disarmed via sms
 Option 2 = Zones 1 - 3 are 24 hr but zone 4 is an
 control type and switches pstn over to
 GSM

Options:

- 0 = Option 0
 1 = Option 1
 2 = Option 2

Example : *171#**Function 18 - SMS Zone Arming Confirmation**

Default = 0

Enables confirmation SMS Message of arm / disarm of Zones 1- 4 (Function 17 = 1) See Section 2.9 for more details

Options:

- 0 = Disabled
 1 = Enabled

Example : *181#

(SMS Confirmation Enabled)

Function 19 - Master Code

Default = Nil

If you want to restrict access to the SED-61 programming, enter a 4 digit PIN number here. Entering a Master Code will mean that you will need to know this number before you can program the SED-61 (by either Manual Mode or SMS Programming Mode)

Options:

Any 4 digit number

To enter programming mode after a Master Code has been set you must enter the master code first (*19code#) which will allow you into programming mode for 5 minutes.

Example : *191234#

(Sets Master Code to 1234)

Function 24 - Fault Relay

Default = 0

Sets the operation of the Fault Relay

Option 0 = relay operates in normal mode
 Option 1 = Inverts relay to operate in fail safe mode
 Option 2 = Disables relay as fault relay and relay is controlled via SMS as relay 0.
 (see Section 2.9 for SMS output control)

Options:

- 0 = Option 0
 1 = Option 1
 2 = Option 2

Example : *242#

(Relay controlled by SMS)

Function 25 - I/O Expander Board

Default = 0

Enables the I/O expander board option. Only enable this if an I/O expander board has been plugged into the SED-61.

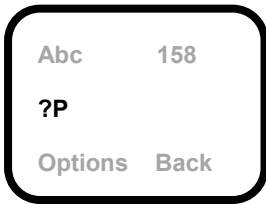
Options:

- 0 = Disabled
 1 = Enabled

Example : *251#

(I/O Expander Board Enabled)

From any GSM mobile phone, send an SMS text message as shown below to the SED-61 phone number and it will send back an SMS message with the requested report information.



Available SED-61 SMS reports

?P = Request SED-61 program setup

?S = Request SED-61 current status

?H = Request History - Displays the last 20 events

?T = Force test call to control room

?P

Send a ?P to request the current program function settings. See Section 2.3 for the list of function numbers and options.

NOTE: If a Master Code has been set in the SED-61, you will not get a response for this command (nor any other command except ?S). See Function 19 for information on the Master Code setup.

?S

Send a ?S to request the current status of the SED-61. The current status's for the AC Power, PSTN, Battery and GSM Signal Strength will be shown.

?H

Send a ?H to request a list of the last 20 events that have occurred on the SED-61. The first event listed is the oldest .

LEGEND

DT = GSM Dialer test

LB = Low battery

PF = AC Power fail

SF = GSM signal fail

LF = PSTN line fail

i1 = input 1

i2 = input 2

i3 = input 3

i4 = input 4

DF = Dialer fail

PB= program via button

PS= program via sms

iD=inputs disarmed

iA=inputs armed

?T

When a ?T is sent to the SED-61, it will force a test call to the control room and reset the Test Call timer to start from this time.

The following SMS commands control additional features of the SED-61.

Zone Arm and Disarm feature

The SED-61 Zone Inputs can be armed or disarmed by sending the following SMS Text Message. This command will arm/disarm all Zone Inputs.

Important: It is advisable to also program functions 16,17 & 18 to Option 1, and program the mobile number(s) into function 12, and 13 & 14 if necessary.

Arm / Disarm Commands

?ON = Arms all zones (must be in capitals)

?OFF = Disarms all zones (must be in capitals)

Note: SMS commands must be as shown. (MUST BE IN CAPITALS)

Zone Inputs Individual Text Labels

The SED-61 Zone Inputs can be programmed with individual text labels for SMS reporting.

Text Message Format

In<Input><Text Description>

Parameter Description:

<Input> = Zone Input Number

<Text Description> = Max 10 Characters (including spaces)

Example:

In1front door will program Zone 1 with "front door" (MAX 10 CHAR)

Relay Control

To control the SED-61 Output Relays, send an SMS message as follows:

Text Message Format

Out<Relay>on {Timer[m.h]}

Out<Relay>off {Timer[m.h]}

Parameter Description:

<Relay> = Relay Number

{Timer} = Optional timer value in Hours [h] minutes [m] and seconds

Example (for Relay 5)

Out5on = Turns Relay 5 on (indefinitely)

Out5off = Turns Relay 5 off (indefinitely)

Out5on30 = Turns Relay 5 on for 30 seconds (if relay is off)

Out5off2h = Turns Relay 5 off for 2 Hours (if relay is on)

Note: Relays 1 - 4 are via an expander board, which must be enabled in programming (see function 25). Relay 5 is onboard as standard and Relay 0 can be enabled if the fault relay is not required (see function 24).

The SED-61 on-board dialler will send Ademco 140 contact ID codes followed by the point number eg 250 This should be treated the same as a sector 250 as for any standard alarm panel. eg Tecom Challenger

| GSM Dialler Ademco Codes | | | |
|--|-----------------------|-----------------|-----------------------|
| Alarm event | Function 10 = 0 | Function 10 = 1 | Function 10 = 2 |
| SED-61 AC power fail after 1 hr | 140 Sector 250 | 140 Sector 450 | 301 Sector 250 |
| SED- 61 low battery < 10.7v | 140 Sector 251 | 140 Sector 451 | 302 Sector 251 |
| SED-61 Telecom line fail | 140 Sector 252 | 140 Sector 452 | 351 Sector 252 |
| SED-61 GSM test | 140 Sector 253 | 140 Sector 453 | 602 Sector 253 |
| SED-61 Zone Input 1 | 140 Sector 254 | 140 Sector 454 | 140 Sector 254 |
| SED-61 Zone Input 2 | 140 Sector 255 | 140 Sector 455 | 140 Sector 255 |
| SED-61 Zone Input 3 | 140 Sector 256 | 140 Sector 456 | 140 Sector 256 |
| SED-61 Zone Input 4 | 140 Sector 257 | 140 Sector 457 | 140 Sector 257 |
| SED-61 Zone Input 5 (expander) | 140 Sector 258 | 140 Sector 458 | 140 Sector 258 |
| SED-61 Zone Input 6 (expander) | 140 Sector 259 | 140 Sector 459 | 140 Sector 259 |
| SED-61 Zone Input 7 (expander) | 140 Sector 260 | 140 Sector 460 | 140 Sector 260 |
| SED-61 Zone Input 8 (expander) | 140 Sector 261 | 140 Sector 461 | 140 Sector 261 |
| | DEFAULT | | |
| Note: restores are also sent for each code | | | |

Please perform the following tests after completing the installation of the SED-61.

Testing the SED-61 Basic GSM Backup

1/ With the SED-61 powered up and working (Status LED flashing and at least 2 bars of signal strength) , disconnect the incoming telecom line from the T-socket

2/ The SED-61 will detect a line fault after a short period (Line Fail LED will illuminate) and then, after the PSTN fail detect time (function 06), the fault relay will activate (unless function 24 is not at the default). Also, if the SED-61 is in intelligent mode, a PSTN line fail will be reported to the Alarm monitoring company by the SED-61.

3/ Now trigger an alarm on the customers alarm panel. As the alarm panel dials out, it will communicate over the GSM network through the SED-61. On the SED-61 the OH light (LED 9) will come on solid, indicating that the alarm panel is communicating over the GSM network.

4/ Once the Alarm Panel has successfully reported the alarm, it will hang up. Check with the Monitoring Company that they received the correct alarm report. If the alarm panel does not communicate successfully, check Section 3.2 to diagnose the problem.

5/ Once testing is complete, plug the telephone line back in to the T-socket. The line fail LED should go out and after about 1 minute the fault relay will de-activate

Testing the SED-61 Intelligent GSM Backup

1/ Make sure Functions 1, 2 & 3 on the SED-61 are programmed and that the SED-61 is working (Status LED flashing and at least 2 bars of signal strength).

2/ Activate then re-seal Zone 1 on the SED-61. The OH light (LED9) will flash while the SED- 61's internal dialler is dialling. The SED-61 will report a Sector 254 to the monitoring company (this should take less than 10 seconds).

3/ Disconnect the incoming telecom line from the T-socket. The line fail LED will illuminate and, after about 20 seconds, the OH light (LED 9) will start flashing as the SED-61 reports a Sector 252 to the monitoring Company. Once the OH light stops flashing the fault relay will activate.

4/ Now plug the phone line back into the T-socket and the SED-61 will send a PSTN restore thru.

5/ Check with the Monitoring Company that they received the correct alarm reports (zone 1 set/restore and PSTN set/restore). If the alarm panel does not communicate successfully check Section 3.2 to diagnose the problem.

Before calling for support please look if your problem is listed below.

1. The Fault light is on or flashing

Remove the power from the SED-61 then remove the SIM card and put it in a working GSM phone. Turn the GSM phone on. If the phone asks for a PIN number, the SIM card is PIN code locked. Go to phone set up / security settings and turn off the PIN request. Power the phone off then On again. It should not ask for a PIN. Put the phone next to the SED-61 antenna location and make sure you have at least 2 bars of signal on the GSM phone. Making sure the power is still off on the SED-61, re-insert the SIM card and power it up. When the SED-61 finds signal, the status light will begin to flash and the signal meter will show signal.

2. I cannot program the SED-61

With the SED-61 powered up, put a standard phone or phone Butt into "Con 1" on the SED-61 board. Press and hold the "Program Button" until LED1 lights up, remove your finger immediately from the button. The "Prog LED" should stay illuminated. First, do a LED Test by pressing the * (Star key) on the phone, LEDs 1,3,5 & 6 should light. Now Press the # (hash key), the LEDs 2,4,7 & 9 should light. If no LEDs light up, check that the phone you are using is set to Tone (DTMF) dialling and **not** pulse (Decadic). If the LEDs do light up, do a read back of function 01 by keying on the phone *01#. The LEDs should illuminate in order of the client code. If the unit has not been programmed before, the client code should be 0000. If no LEDs illuminate then the SED-61 may have a Master Code (Function 19). You can now try defaulting the SED-61 (but make sure you know all the program settings before doing this, as you will need to re-program the SED-61 from scratch!) Default the unit by being in program mode and entering *996060# To check if it defaulted OK, do a read back of function 01 again. LED 0 should flash 4 times indicating an account code of 0000.

3. I do not receive a response via SMS

Check that you have the correct mobile number for the SIM card in the SED-61. If it is correct then the SED-61 may have a MASTER CODE (Function 19) set. If you know the Master Code, try sending the following SMS *19????# (**where ???? = Master Code**). If it is correct the SED-61 will send back an SMS with "PIN OK" If you see this message then you have 5 minutes to send the SED-61 SMS commands. If you still do not get a response then a technician will probably need to visit the site.

4. The SED-61 on-board dialler is not communicating

Check to see if Functions 01, 02 & 03 are programmed correctly. When you trigger a Zone Input on the SED-61, does the OH light flash. If OH (LED 9) is flashing this is indicating that the on-board dialler is working. If the OH LED is not flashing check that the zones are armed. Put a phone into Con 1 and when the OH LED is flashing, pick up the handset and listen in for comms to the control room. If you hear comms check with the control room that they are monitoring the correct Contact id codes.

5. I Programmed the SED-61 OK but the Alarm Panel will not communicate with the Control Room via GSM

To test the GSM communications, plug a standard phone or phone Butt into "Con 1" and pickup the handset (off-hook the Butt) , You should hear dial tone, this is generated by the SED-61. If you do not hear a dial tone then make sure:

- 1/ The SED-61 is powered up
- 2/ You are definitely plugged into "Con 1"
- 3/ The phone you are using is good. If you do hear dial tone, make a call to the control room using the same number that is programmed into the Alarm Panel / SED-61. If you cannot get through try calling your mobile phone.

If your mobile phone rings then the SED-61 is good so check that the control room number is correct. If when you called the control room number you heard the Ademco BEEP BEEP, then the control room number and the SED-61 are good and the problem is usually in the way the Alarm Panel dialer communicates.

Firstly, check that the Alarm Panel and the SED-61 are using their respective separate power plug packs. A single plug pack should not be used to power both units, make sure the SED-61 is powered by the plug pack provided by Sec-Eng Systems. Next, with the phone still plugged into "Con 1", unplug the PSTN line and activate an input on the Alarm Panel. Listen in on the call while the Alarm Panel communicates to the Control Room by picking up the handset when the OH (LED 9) is illuminated.

If you can hear the panel get through but the control room won't kiss off (you will hear the Panel retry 2 more times while still dialled in) then it is probably necessary to adjustment the Gain Control on the SED-61. To adjust the gain, locate the pots marked "to" and "from" in the middle of the SED-61 board. Turn the "to" pot to fully clockwise and trigger an alarm on the alarm panel. If it is still not communicating then turn the "to" pot fully anti-clockwise and test again. If it is still not communicating then try the same procedure on the "from" pot.

6. The Alarm Panel is working on GSM but the control room are not receiving the Alarms

Put a telephone or phone butt into "Con 1" and and listen to the Alarm Call by picking up the handset when the OH (LED 9) is On. Do you hear a Kiss off signal after the panel has sent through the Alarm information? If you do but the control room says that they didn't receive the alarm then the number may be re routed. Ask the control room for a non-1300 or another 1300 number to try.

Technical Support

3.3

CONTACT SEC-ENG SYSTEMS FOR TECHNICAL SUPPORT

Phone 02-9524 9952

Mon – Fri 8.30am to 6.00pm EST

WWW.SECENG.COM.AU

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