

Solution-16 Operators Manual

ISSUE 1.50



Solution-16

Operators Manual

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DOCUMENT ISSUE 1.50 Printed 26 April 2001

This documentation is provided to suit the Solution-16/Solution-16 Safecom Control Panel (CC880/LP880/SC8016).

Firmware Revision 1.10 - 2.06Hardware Revision A - K Alarm Link required = 2.72 or higher

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Introduction

Congratulations on selecting the *Solution-16* control panel to protect you and your property. So that you can obtain the most from your unit, we suggest that you take the time to read through this manual and familiarise yourself with the numerous outstanding operating features of this system. You will notice that in all aspects of planning, engineering, styling, operation, convenience and adaptability, we have sought to anticipate your every possible requirement.

Programming simplicity and speed have been some of the major considerations and we believe that our objectives in this area have been more than satisfied.

This manual will explain all aspects of operating the control panel. All system parameters and options are detailed; however, suitability is left up to the individual. Every system can be tailored to meet all requirements quickly and easily.

Notice To All Owners

It is recommended that you test the sirens, strobe and zones at weekly intervals. Refer to Testing on page 25 for further information.

Codepad Indicators



Figure 1: CP5 Eight Zone LED Codepad

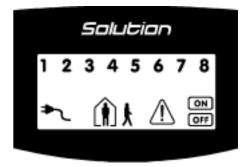


Figure 2: CP5 Eight Zone LCD Codepad

The codepad is the communications interface between you and your alarm system. The codepad allows you to issue commands and offers both visual and audible indications that guide you through the general operation.

The codepad incorporates numerous indicators. There are zone indicators that are used to show the condition of each zone and four others for general status. The following pages outline a list of situations and the relevant indicators that will be seen.

Zone Indicators

123....

The zone indicators (1-8) are used to display the status of the zones. The following table lists the various circumstances that the indicators will display (ie. Zone Sealed / Zone Unsealed).

Zone Indicator	Definition
On	Zone Is Unsealed
Off	Zone Is Sealed
Flashing Fast (0.25 Sec On/0.25 Sec Off)	Zone Is In Alarm Condition
Flashing Slow (1 Sec On/1 Sec Off)	Zone Is Manually Isolated Or Selected To Be Isolated

Table 1: Zone Indicator



AWAY Indicator

The AWAY indicator is used to display that the system is armed in AWAY Mode. The AWAY indicator will also flash in unison with the STAY indicator when programming various options throughout the operator's manual.

Refer to page 10 for information on the different methods of arming the system in AWAY Mode.

AWAY Indicator	Definition
On	System Is Armed In AWAY Mode
Off	System Is Not Armed In AWAY Mode

Table 2: AWAY Indicator



STAY Indicator

The STAY indicator is used to display that the system is armed in STAY Mode 1 or STAY Mode 2. The STAY indicator will also flash in unison with the AWAY indicator when programming various options throughout the operator's manual.

Refer to page 11 for information on the different methods of arming in STAY Mode 1. For information and the method of arming in STAY Mode 2, refer to page 12.

STAY Indicator	Definition	
On	System Is Armed In STAY Mode 1 Or STAY Mode 2	
Off	System Is Not Armed In STAY Mode 1 Or STAY Mode 2	
Flashing Twice A Second	Zone Isolating Mode Or Setting STAY Mode 2 Zones	
Flashing Once Every 3 Seconds	Day Alarm Status – Day Alarm Turned On	

Table 3: STAY Indicator

System Disarmed

This indicator will display with the OFF indicator when the system has been disarmed.

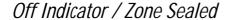


MAINS Indicator

The MAINS indicator is used to display that the systems AC mains supply is normal or has failed.

MAINS Indicator	Definition
On	AC Mains Power Normal
Flashing	AC Mains Supply Has Failed

Table 4: MAINS Indicator





The OFF indicator will display when the system is in the disarmed state and will flash when a zone becomes unsealed during the disarmed state. The indicator will stop flashing when all zones are sealed.





The ON indicator will display when the system is armed in AWAY Mode and will flash when an alarm occurs. The indicator will reset once a valid user code has been entered.

FAULT Indicator



The FAULT indicator is used to display that the system has detected a system fault. Refer to Fault Analysis Mode on page 16 for additional information on system faults.

Every time a new system fault has been detected (eg. FAULT indicator flashing), the codepad will begin to beep once every minute. Pressing the # button once will cancel the once a minute beep and acknowledge the fault (eg. FAULT indicator on steady).

FAULT Indicator	Definition	
On	There Is A System Fault That Needs To Be Rectified	
Off	The System Is Normal, There Are No Faults	
Flashing	There Is A System Fault That Needs To Be Acknowledged	

Table 5: FAULT Indicator

Audible Indications

In general, the audible indicators given out by the codepad buzzer are as follows:

Audible Indicator	Definition	
Once Short Beep	A Button Has Been Pressed On The Codepad, Or, End Of Exit Time When Armed In STAY Mode 1 Or STAY Mode 2	
Two Short Beeps	The System Has Accepted Your Code	
Three Short Beeps	The Requested Function Has Been Executed	
One Long Beep	Indicates the End Of Exit Time When Armed In AWAY Mode, Or The Requested Operation Has Been Denied Or Aborted	
One Beep Every Second	Walk Test Mode Is Currently Active Or Warning Before Automatic Arming Takes Place	
One Short Beep Every Minute	There Is A System Fault Waiting To Be Acknowledged	

Table 6: Audible Indicators

Arming The System

There are several different ways to arm the system depending on whether you are leaving the premises and require all active zones to be in a ready state for an intruder, or, if you are remaining in the premises and only require part of the system to be in a ready state for an intruder.

If a zone is not sealed at the end of exit time, the zone will be automatically isolated and will be constantly displayed on the codepad. The zone will again become an active part of the system when the zone has restored (ie. If a window is left open after exit time has expired, the window will not be an active part of the system until the window has closed. Opening the window after exit time has expired will cause an alarm condition).

The different methods for arming the system include:

> AWAY Mode

Arms the entire system. Refer to Arming In AWAY Mode on page 10.

> STAY Mode 1

Arms all zones except those programmed to be automatically isolated by the installer. Refer to Arming In STAY Mode 1 on page 11.

> STAY Mode 2

Arms all zones except those programmed to be automatically isolated by the Master Code holder. Refer to Arming In STAY Mode 2 on page 12.

Forced Arming

The feature of arming the system when a zone is not sealed is known as forced arming. If the system does not arm and a long beep is heard, forced arming is not permitted. If this is the case, you must ensure that all zones are sealed or manually isolated before you can arm the system. Refer to Isolating Zones on page 15 for more information.

Arming In AWAY Mode

When you leave your premises and require all zones to be in a ready state to detect intrusion, you would arm the system in AWAY Mode.

There are two different methods for arming the system in AWAY Mode. Method one is standard and will always operate. Method two is optional and may be disabled by your installer if you do not wish to use single button arming.

Method One

How To Arm The System In AWAY Mode

Enter your user code followed by the # button (eg. 2580#).
 Two beeps will be heard and the AWAY indicator will display. Exit time will now commence counting.

Method Two

How To Arm The System In AWAY Mode

Press and hold the # button until two beeps are heard.
 The AWAY indicator will display and exit time will commence counting.

Arming In STAY Mode 1

STAY Mode 1 is only used when the perimeter and unused areas of the premises need to be armed to detect any would be intruder from entering the premises and at the same time, allowing you to move freely within an area that has been automatically isolated. Only your security company can program zones to be automatically isolated in STAY Mode 1.

There are two different methods for arming the system in STAY Mode 1. Method one is standard and will always operate. Method two is optional and may be disabled by your installer if you do not wish to use single button arming.

Entry Guard Timer For STAY Mode

When arming the system in STAY Mode 1, an optional entry timer called Entry Guard Timer For STAY Mode may be used to delay the sirens if a zone that has not been automatically isolated has triggered into alarm condition. Entry Guard Timer For STAY Mode is the delay time used for all zones except 24-hour zones when the system is armed in STAY Mode 1 or STAY Mode 2.

If the Entry Guard Timer For STAY Mode has been programmed and a zone that has not been automatically isolated has triggered, the codepad will beep twice a second until the Entry Guard Timer For STAY Mode has expired or the system has been disarmed. If the alarm condition has not been reset by entering your user code followed by the # button (eg. 2580#) before the Entry Guard Time For STAY Mode expires, the sirens will activate into alarm. Only your installer can program this feature.

Method One

How To Arm The System In STAY Mode 1

Enter your user code followed by the * button (eg. 2580*).
 Two beeps will be heard and the STAY indicator will display. Exit time will now commence counting.

Any zones that have been programmed to be automatically isolated in STAY Mode 1 will flash until exit time expires. At the end of exit time, all zones selected to be automatically isolated will extinguish and the codepad will give one short beep.

Method Two

How To Arm The System In STAY Mode 1

1. Press and hold the * button until two beeps are heard.

The STAY indicator will display and exit time will now commence counting.

Any zones that have been programmed to be automatically isolated in STAY Mode 1 will flash until exit time expires. At the end of exit time, the zone indicators will extinguish and the codepad will give one short beep.

Arming In STAY Mode 2

STAY Mode 2 is only used when the perimeter and unused areas of the premises need to be armed to detect any would be intruder from entering the premises and at the same time, allowing you to move freely within an area that has been automatically isolated. Any Master Code holder can program programming zones to be automatically isolated in STAY Mode 2.

Entry Guard Timer For STAY Mode

When arming the system in STAY Mode 2, an optional entry timer called Entry Guard Timer For STAY Mode may be used to delay the sirens if a zone that has not been automatically isolated has triggered into alarm condition. Entry Guard Timer For STAY Mode is the delay time used for all zones except 24-hour zones when the system is armed in STAY Mode 1 or STAY Mode 2.

If the Entry Guard Timer For STAY Mode has been programmed and a zone that has not been automatically isolated has triggered, the codepad will beep twice a second until the Entry Guard Timer For STAY Mode has expired or the system has been disarmed. If the alarm condition has not been reset by entering your user code followed by the # button (eg. 2580#) before the Entry Guard Time For STAY Mode expires, the sirens will activate into alarm. Only your installer can program this option.

How To Arm The System In STAY Mode 2

1. Press and hold the 0 button until two beeps are heard.

The STAY indicator will display and exit time will now commence counting.

Any zones that have been programmed to be automatically isolated in STAY Mode 2 will flash until exit time expires. At the end of exit time, all zones selected to be automatically isolated will extinguish and the codepad will give one short beep.

Programming STAY Mode 2 Zones

Programming zones to be automatically isolated in STAY Mode 2 can only be carried out if you have a Master Code.

How To Program STAY Mode 2 Zones

- 1. Enter your Master Code followed by 8 and the # button (eg. 2580 + 8 + #). Three beeps will be heard and the STAY indicator will begin to flash.
- 2. Enter the zone number that you wish to have automatically isolated followed by the * button (eg. 1* = Zone 1 / 2* = Zone 2 etc).

You will notice that the zone you have selected to be automatically isolated in STAY Mode 2 will now flash. If you have made a mistake, enter the same zone number followed by the # button to clear the incorrect zone.

To select additional zones to be automatically isolated in STAY Mode 2, repeat Step 2 as many times as required.

3. Press the # button when you have selected all zones to be automatically isolated in STAY Mode 2 to exit this mode. Two beeps will be heard and the STAY and AWAY indicators will extinguish.

Disarming The System

When you enter the premises after the system has been armed in AWAY Mode, or if you have armed the system in STAY Mode 1 or STAY Mode 2, you will need to disarm the system to disable detection devices that will activate an alarm.

If there has been an alarm condition prior to disarming the system, a flashing zone indicator will be displayed, indicating a previous alarm on that zone.

How To Disarm The System

1. Enter your user code followed by the # button (eg. 2580#). Two beeps will be heard.

Adding User Codes

Only the Master Code holder can add or change other system user codes including two Auxiliary Codes and the Master Code itself. The Master Code is factory default as User 1, however, multiple user codes can be assigned to be a Master Code. Up to 32 user codes may be programmed to operate the system. User Code 33 and User Code 34 are Auxiliary Codes only.

How To Add A User Code

- 1. Enter your Master Code followed by 1 and the # button (eg. 2580 + 1 + #). Three beeps will be heard and the STAY and AWAY indicators will begin to flash.
- 2. Enter the user code number (1 34) that you wish to add or change followed by the # button (eg. 2# = User 2 / 33# = Auxiliary Code 1 etc). Two beeps will be heard and the user number that you just selected will now display on the codepad indicators.
- 3. Enter the digits required for the new code followed by the # button (eg. If you wish the user code to be 5768, you would enter 5768# each user code can be up to 7 digits in length). Two beeps will be heard and the STAY and AWAY indicators will extinguish.

If you wish to add or change any further user codes, repeat this procedure as many times as required.

Deleting User Codes

Only the Master Code holder can delete other system user codes and Auxiliary Code 1 and 2.

How To Add A User Code

- 1. Enter your Master Code followed by 1 and the # button (eg. 2580 + 1 + #). Three beeps will be heard and the STAY and AWAY indicators will begin to flash.
- 2. Enter the user code number (1 34) that you wish to delete followed by the # button (eg. 2# = User 2 / 33# = Auxiliary Code 1 etc). Two beeps will be heard and the user number that you just selected will now display on the codepad indicators.
- 3. Press the * button to delete the user code that you have selected.

 Two beeps will be heard and the STAY and AWAY indicators will extinguish. If you wish to delete any further user codes, repeat this procedure as many times as required.

Codepad Duress Alarm

A codepad duress alarm is used as a silent hold-up alarm. This will only occur when the number 9 is added to the end of any valid user code that us being used to disarm the system (eg. 2580 + 9#). A duress alarm is only useful if your system is reporting back to a monitoring station or pocket pager as domestic reporting (ie. mobile phone etc) can't decipher which type of alarm had occurred.

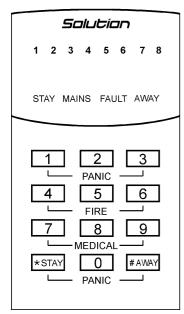


Figure 3: CP5 LED Codepad Showing Audible Alarm Buttons

Codepad Panic Alarm

An audible alarm will be activated when both the 1 and 3 buttons or both the * and # buttons are pressed simultaneously. Contact your installer if you wish to disable the ability to activate the codepad panic alarm or if you wish to have the codepad panic alarm to be silent.

Note

Software Version 1.10 - 1.36 will sound a panic alarm when you press both the 4 and 6 buttons or the 7 and 9 buttons simultaneously.

Codepad Fire Alarm

(**Version 1.37 + Only**) A distinct fire sound is emitted via the horn speaker when both the 4 and 6 buttons on the codepad are pressed simultaneously. Contact your installer if you wish to disable the ability to activate the codepad fire alarm or if you wish to have the codepad fire alarm to be silent.

Codepad Medical Alarm

(Version 1.37 + Only) An audible alarm will be activated when both the 7 and 9 buttons on the codepad are pressed simultaneously. Contact your installer if you wish to disable the ability to activate the codepad medical alarm or if you wish to have codepad medical alarm to be silent.

Codepad Tamper (Access Denied)

Codepad tamper restricts the number of times an invalid user code can be used in an attempt to operate the system. When the number of incorrect code attempts equals the number programmed by your installer, the system will activate an alarm condition and if reporting back to a security monitoring station, the system will send an access denied report.

If you wish the codepads to shutdown and lockout for a period of time (0 - 150 seconds), ask your installer to program this.

Isolating Zones

Isolating zones allow you to manually disable one or more zones before arming the system. Once a zone has been isolated, access is allowed into that zone during the armed state without activating an alarm.

An example when you may require to isolate a zone before arming the system could be when a PIR detector may be false alarming or that you may need to leave a pet inside a particular zone whilst you are away.

Isolating zones is performed by one of two methods. Method two is optional and only allows those user codes programmed by your installer to have access to isolate zones.

Standard Isolating

Standard isolating allows all operators to be able to isolate zones without the need to know a valid user code.

How To Isolate A Zone

- 1. Press the * button twice to enter the isolating mode.

 Three beeps will be heard and the STAY indicator will flash.
- 2. Enter the zone number (1 16) that you wish to select to isolate followed by the * button. (eg. 1* = Zone 1, 16* = Zone 16 etc).

As you select each zone to be isolated, you will notice that the corresponding zone indicator will begin to flash. If you selected an incorrect zone to be isolated, enter the incorrect zone number again followed by the * button.

Repeat Step 2 if more than one zone is required to be isolated until all zone that are required to be isolated have been selected.

3. Press the # button after you have selected all zones to be isolated.

Two beeps will be heard and the system will return to the disarmed state.

Code To Isolate

The method will restrict only those user codes that have the priority level 'Code To Isolate' set to be able to isolate zones. Therefore, if any user code has this priority level set, the method of standard isolating will not function. Your security company can only program the priority level for each user code.

How To Isolate A Zone

- 1. Press the * button followed by your user code and the * button again to enter the isolating mode (eg. *2580*). Three beeps will be heard and the STAY indicator will flash.
- 2. Enter the zone number (1 16) that you wish to select to isolate followed by the * button. (eg. 1* = Zone 1, 16* = Zone 16 etc).

As you select each zone to be isolated, you will notice that the corresponding zone indicator will begin to flash. If you selected an incorrect zone to be isolated, enter the incorrect zone number again followed by the * button.

Repeat Step 2 if more than one zone is required to be isolated until all zones that are required to be isolated have been selected.

3. Press the # button after you have selected all zones to be isolated.

Two beeps will be heard and the system will return to the disarmed state.

Fault Analysis Mode

If a system fault should occur, the FAULT or MAINS indicator will flash and the codepad will beep once ever minute.

If the AC mains supply has failed, the MAINS indicator will flash until the AC mains supply has restored. Pressing the # button once will acknowledge the fault and stop the codepad from beeping once every minute.

How To Determine The Type Of System Fault

To determine which system fault has occurred, enter fault analysis mode by following the steps outlined below.

Press and hold button 5 until two beeps are heard.
 The FAULT indicator will remain steady and the STAY and AWAY indicators will flash in unison with each other.

A zone indicator will display to indicate the type of fault that has occurred (eg. Zone 1 = Battery Fail). Refer to Table 7: Fault Indicators on page 17 for the list of different faults that may occur.

2. To exit and return to the disarmed state, press the # button. The FAULT indicator will remain displayed and the codepad will cease its once a minute beep.

Zone Indicator	Description
1	Battery Fail
2	Date & Time
3	Sensor Watch
4	Horn Speaker Fail
5	Telephone Line Fail
6	E2 Fault
7	Zone 16 In Alarm (Partitioned Systems Only)
8	Communication Fail

Table 7: Fault Indicators

Fault Descriptions

Low Battery

A low battery fault will register when the system detects a low capacity back-up battery. The system automatically performs a battery test every 4 hours and also every time you arm the system.

Date and Time

The date and time fault will register every time the system has been powered down. This type of fault will not cause the FAULT indicator to display on the codepad unless your installer has programmed the automatic arming time. Refer to page 18 to program the date and time.

Sensor Watch

A sensor watch fault will register because one or more detection devices has failed to detect any movement during the disarmed state for the time period programmed by your installer. The fault will clear once the zone in question has detected movement and reset.

Whilst you are in fault analysis mode, press and hold button 5 until two beeps are heard will display which zone reported the sensor watch fault.

Horn Speaker Fail

This fault will register when the system detects that the horn speaker has been disconnected. This fault will clear once the horn speaker has been reconnected. Your installer will need to program the system for this feature to operate.

Telephone Line Fail

A telephone line fault will register when the system detects that the telephone line has been disconnected from the control panel. Your installer will need to program the system for this feature to operate.

E2 Fault

An E2 fault will register when the system detects an internal checksum error. Contact your installer as soon as this fault is displayed.

Zone 16 In Alarm - Partitioned Systems Only

This fault will register when Zone 16 has registered an alarm condition. The AUX indicator will display if a 'Master Partitioned' codepad is used if the system has been partitioned. You may need to contact your installer regarding this fault.

Communication Fail

A communication fail will register when the control panel failed to communicate with the receiving party (eg. monitoring company, mobile phone or pocket pager etc). The communication fault will clear once the control panel has successfully reported to the receiving party.

Note

This fault condition will register when a communication via safecom equipment as failed (Version 2.00 +).

To determine if the system failed to communicate via the telephone line or the communication via safecom, press and hold button 8. Zone 1 will display if the system failed to communicate via the telephone line and Zone 2 will display if the system failed to communicate via safecom.

Date and Time

Programming the date and time is only required when you need functions such as automatic test reports automatic arming and history events to operate correctly.

How To Program The Date and Time

- 1. Enter your Master Code followed by 6 and the # button (eg. 2580 + 6 + #). Three beeps will be heard and the STAY and AWAY indicators will begin to flash.
- 2. Enter the day, month, year, hour and minute using the (DD, MM, YY, HH, MM) format (ie. DD = Day of the month, MM = Month of the year, YY = Current year, HH = Hour of the day, MM = Minute of the day).

Please note that when programming the hour of the day, you will need to use 24:00 hour format (00:00-23:59).

3. Press the # button to exit and return to the disarmed state.

Two beeps will be heard and the STAY and AWAY indicators will extinguish. If a long beeps is heard, an error was made when entering the date and time.

Turning Output Devices On/Off

This feature is only applicable if your security company has programmed an output that can operate external devices (ie. toggle on/off via the codepad). The output programmed by your security company could control a pool pump or outside lighting etc. Up to five different outputs can be programmed.

How To Turn An Output On or Off

- 1. Enter your Master Code followed by 5 and the # button (eg. 2580 + 5 + #). Three beeps will be heard and the STAY and AWAY indicators will begin to flash.
- 2. Enter the output number (1-5) that you wish to turn on or off.
- 3. Press the # button to turn the output device on or press the * button to turn the output device off. Three beeps will be heard if the output device is turned on and two beeps will be heard if the output device is turned off.

Repeat Step 2 and Step 3 if more than one output devices are required to be turned on or off.

4. Press the # button to exit this function.

Two beeps will be heard and the STAY and AWAY indicators will extinguish.

Output Device 1	 _	
Output Device 2		
Output Device 3		
Output Device 4		
(Auto) Output Device 5	 Time	AM / PM
		1

Have the security company detail the devices that can be turned on and off via the codepad above. Output device 5 can be programmed to automatically turn on at the same time every day and can be overridden via the codepad.

Reset Latching Outputs

This feature is only applicable if your installer has programmed an output to latch (remain on) until you acknowledge the event that occurred.

How To Reset Latching Outputs

1. Press and hold button 7 until two beeps are heard. The output will now reset.

Testing

There are various functions that allow you to test that your system is operating correctly.

Horn Speaker Test

1. Press and hold button 1 until two beeps are heard. The horn speaker will sound for two seconds.

Bell Test

1. Press and hold button 2 until two beeps are heard. The bell output will operate for two seconds.

Strobe Test

- 1. Press and hold button 3 until three beeps are heard. The strobe will now flash.
- 2. Press and hold button 3 until two beeps are heard. The strobe will now stop flashing.

Walk Test Mode

Walk test mode allows you to test detection devices to ensure that they are operating correctly. Every time you test a zone, the codepad will sound one long beep and the horn speaker will sound one short beep to indicate that the zone has been activated when testing.

- 1. Enter your Master Code followed by 4 and the # button (eg. 2580 + 4 + #). Three beeps will be heard and the STAY and AWAY indicators will begin to flash. The codepad will beep once every second while the system is in walk test mode.
- 2. Activate (ie. fault and restore) all zones required to be tested.
- 3. When you have finished testing all zones required, press the # button to exit this mode. Two beeps will be heard and the STAY and AWAY indicators will extinguish. The system has now returned to the disarmed state.

Test Report

This feature is only applicable if your system is reporting via the telephone. Press and hold button 9 until two beeps are heard. The system will send a test report.

Event Memory

This function allows you to replay back the last forty events that occurred to the system. The event memory history will replay all alarms and arming/disarming of the system in AWAY Mode, STAY Mode 1 and STAY Mode 2. However, the system cannot differentiate between arming the system in STAY Mode 1 or STAY Mode 2.

How To Enter Event Memory

1. Enter your Master Code followed by 3 and the # button (eg. 2580 + 3 + #). Three beeps will be heard. The last forty events will display one at a time via the codepad indicators starting from the most recent event. A beep will be heard as each event is displayed.

Day Alarm

Day alarm allows a combination of zones to be monitored during the disarmed state by beeping the codepad buzzer. Only your installer can program zones 1-4 to operate for day alarm.

Example

An example set-up of a day alarm could be the front door of a shop that has a pressure mat or electronic beam that customers activate as they enter to and from the shop. As the customers walk onto the pressure mat or break the electronic beam, the codepad buzzer will beep.

How To Turn Day Alarm ON and OFF (Software Version 1.10 Only)

1. Enter your Master Code followed by 7 and the # button (eg. 2580 + 7 + #). Three beeps will be heard when you turn day alarm on. Two beeps will be heard when you turn day alarm off.

How To Turn Day Alarm ON (Version 1.20+)

1. Press and hold button 4 until three beeps are heard.

Day alarm will now be turned on. All zones programmed for day alarm operation will cause the codepad buzzer to beep during the disarmed state when activated.

How To Turn Day Alarm Off (Version 1.20+)

Press and hold button 4 until two beeps are heard.
 Day alarm will now be turned off.

Note

If your security company programs an output to latch on when a day alarm zone has become faulted (unsealed), pressing the # key once will reset the output.

Codepad ID and Buzzer Tone Change

If you press and hold down button 8, the tone of the codepad buzzer will change. There are fifty different tones to choose from between 1500~Hz-5000~Hz. If multiple codepads have been installed, each codepad can have a different tone.

If the system has been partitioned into multiple areas, the codepad will display the area that it has been assigned to before the tone of the buzzer starts to change.

Zone Indicator	Area Assigned
None	Not Assigned
1	Area 1
2	Area 2
3	Area 3
4	Area 4
7	Master Partitioned Keypad

Table 8: Codepad ID and Buzzer Tone Change

Partitioning

Your control panel can be partitioned or split into four individual areas. Each areas can be operated from one 'Master Partitioned' codepad, or from separate 'Area Addressable' codepads.

Master Partitioned Codepad Indicators

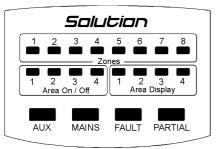


Figure 4: Master Partitioned Codepad

The indicators on a 'Master Partitioned' codepad are configured into four groups (ie. Zone Indicators, Area On/Off Display, Area Display and Status Indicators). Refer to Figure 5: Master Partitioned Codepad. The following is a description of what the indicators mean.

Zone Indicators

Zone indicators 1-8 show the status of each zone. These zones belong to the area that has the 'AREA DISPLAY' indicator displayed (ie. If an indicator is displayed, that zone is unsealed and if the indicator is not displayed, that zone is sealed).

Area ON/OFF Indicators

The group of four 'AREA ON/OFF' indicators display the status of each area (ie. If an indicator is displayed, that area is armed and if the indicator is not displayed, that area is disarmed).

Area Display Indicators

The group of four 'AREA DISPLAY' indicators show which area that the zones displayed belong to. All functions entered at the keypad will only affect the area that the keypad displays in the 'AREA DISPLAY'. Press the # key to toggle between each area.

Status Indicators

A group of four indicators display the following:

AUX Indicator

The AUX indicator displays when the control panel is using the telephone line communicating to the receiving party.

MAINS Indicator

The MAINS indicator displays the status of the AC mains power (ie. If the indicator is illuminated, the AC mains power supply is normal. If the indicator is flashing, the AC mains power supply has been disconnected or has failed).

FAULT Indicator

The FAULT indicator displays the status of the fault register (ie. If the FAULT indicator is flashing, the system has detected a fault that has not yet been acknowledged. If the FAULT indicator is illuminated, the fault has been acknowledged. If the FAULT indicator is not illuminated, the system has no faults).

PARTIAL Indicator

The PARTIAL indicator only displays when an area has been armed in STAY Mode 1 (ie. If the PARIAL indicator is displayed, an area has been armed in STAY Mode 1. If the PARTIAL indicator is not displayed, no areas have been armed in STAY Mode 1).

Operation Of Codepads In Partitioning

Area Addressable Codepad Operations

If you have a system that has been partitioned with 'Area Addressable' eight zone codepads, the operating procedure is exactly the same as described as a non-partitioned system except that all operations are only relative to the area that the codepad has been assigned to.

Master Partitioned Codepad Operations

If you have a system that has been partitioned with a 'Master Partitioned' codepad installed, the operating procedure is exactly the same as described as a non-partitioned system, except that all operations are only relative to the area that is displayed by the 'AREA DISPLAY' indicator.

Example

If the 'AREA DISPLAY' displays number 2, all operations performed will only operate Area 2. To operate Area 1, you will need to press the # key until the 'AREA DISPLAY' displays number 1. Pressing the # button again will toggle you back to Area 2 display.

Arm/Disarm All Areas At The Same Time

If the system has been partitioned into multiple areas, a user can arm or disarm all areas that they are assigned to at the same time. Your security company will need to program this feature before it will work.

How To Arm/Disarm All Areas At The Same Time

1. Enter you code followed by 0 and the # key (eg. 2580 + 0 + #).

Note

V2.03+

If you attempt to turn all areas on and one or more zones are unsealed (faulted) in any of the areas, the system will not allow you to turn all areas on if forced arming is disabled. You will need to restore all unsealed (faulted) zones before the system will allow you to turn all areas on at the same time.

Remote Arming Via Telephone

This feature allows you to arm your system from any remote location via the telephone. For obvious security reasons, the system cannot be disarmed using this method. To make use of this feature, you will require a touch-tone telephone and a phone controller. Your security company needs to program this feature to operate.

How To Remotely Arm Your System Via The Telephone

- 1. Call the telephone number that your control panel is connected to.
- 2. When the control panel answers the incoming call, a short jingle will be heard. Hold the phone controller to the mouthpiece of the telephone and press the side button of the phone controller for 3 seconds to arm the system.

Alternatively, if your security company has installed an optional DTMF command module, you can press the # key on a touch-tone telephone keypad to remotely arm the system.

If you hear modem tones when the control panel answers the incoming call, this means that the system has been programmed for remote programming functions by your installer. Simply wait for a pause between the tones before pressing the * button.

Two beeps will be heard to indicate that the system has been armed in AWAY Mode.

3. Hang up the telephone and the system will remain armed.

Note

If your installer has programmed answering machine bypass, you will need to call the control panel twice to make a connection with the system (eg. Call the telephone number that your control panel is connected to and let the call ring no more than 4 rings and then hang up the telephone. Wait a minimum of 8 seconds before you call the control panel back again).

Operating The System Via A Touch-Tone Telephone

If the system has been installed with an optional DTMF command module, the system can be operated via a touch-tone telephone. Once a communication link has been established between a touch-tone telephone and your alarm system, you can operate the system via the telephone as if you where operating the system at a codepad.

How To Establish A Communication Link

- 1. Dial the telephone number that the system is connected to. When the system answers your call, you will hear a short jingle.
- **2.** Press the 0 key on your telephone. If the system registered the tone generated by pressing the 0 key, you will hear a second jingle. You have now established a link.

If your system has been partitioned, press the key that corresponds to the area that you want to establish a connection to (eg. Press 1 for Area 1/2 for Area 2/3 for Area 3 and press 4 for Area 4).

3. You can now operate the system as if you were at the codepad.

Note

Once you establish a link with a system that has been partitioned, you cannot toggle between areas by pressing the # key (refer to Area Display Indicators on page 22). You will be required to establish separate connections for each area that you want to operate.

How To Terminate A Communication Link

1. Press the # key on the telephone twice to terminate link. You will hear tones of decreasing pitch to indicate termination of the link.

Alternatively, you may just hang up the telephone and the system will disconnect from the telephone network after a period of 60 seconds.

Domestic Dialling

Domestic dialling can be used to call your mobile phone or a relative/friend in the event that your control panel has activated an alarm. Up to three different telephone numbers may be programmed for the control panel to call when alarm occurs. Only your installer can program the system to report in the domestic format, however, the Master Code holder may change the telephone numbers at any time.

Acknowledging Domestic Calls

When an alarm condition occurs, the system will call the first telephone number that has been programmed. When you answer an incoming call, you will hear the system emitting a siren tone followed by a pause and repeat continually for two minutes (eg. siren tone – pause – siren tone – pause).

If you do not acknowledge the call from the control panel during a pause between siren tones, the control panel will simply hang up after two minutes has expired and call the next telephone number.

Pressing the * button for 1-3 seconds during the pause will acknowledge the call and no further calls will be made for that event. If the call has been successfully acknowledged, a tone of decreasing pitch will be heard.

Digit Required	Number To Program	Digit Required	Number To Program
0	0	8	8
1	1	9	9
2	2		
3	3	*	*1
4	4	#	*2
5	5	4 Second Pause	*3
6	6	Break	*4
7	7		

Table 9: Domestic Dialling Telephone Digits

Programming Domestic Telephone Numbers

If your system has been set-up for domestic dialling, this function allows any Master Code holder to program telephone numbers that the control panel will call in the event of an alarm.

How To Program Telephone Numbers

1. Enter your Master Code followed by 2 and the # button (eg. 2580 + 2 + #). Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

If there are telephone numbers already programmed, they will be displayed one digit at a time via the codepad indicators.

If there are no telephone numbers programmed, a further two beeps will be heard after entering this mode. These two beeps are normally heard after the last digit of the last telephone number has been displayed.

- 2. Enter all digits for the first telephone number (eg. 96721717). You will notice that as each digit is entered, the corresponding codepad indicators will display.
- 3. If there is more than one telephone number to be programmed, press *4. This will insert a break between the first telephone number and the second telephone number. If there is only one telephone number to be programmed, press the # button to exit this function.
- 4. Enter all the digits of the second telephone number (eg. 96721055). You will notice that as each digit is entered, the corresponding codepad indicators will display.
- 5. After the last digit of the second telephone number has been programmed, press the # button to exit this function unless a third telephone number is required. If there is a third telephone number to be programmed, press the *4 button to insert a break between the second telephone number and the third telephone number.

Disable Domestic Dialling

If at any time you wish to cancel domestic dialling (eg. You are moving house and do not wish the system to continue calling your mobile phone etc), you may enter the following sequence.

- 1. Enter you Master Code followed by 2 and the # button (eg. 2580 + 2 + #). Two beeps will be heard and the STAY and AWAY indicators will begin to flash.
- 2. Press the * button followed by 4 and the # button (eg. *4#). The STAY and AWAY indicators will now extinguish.

Domestic Voice Message Reporting

The system can be configured by your security company to report to your mobile phone when an alarm occurs and playback a pre-recorded message detailing instructions.

The pre-recorded message can be changed as many times as necessary (up to a maximum of 16 seconds in length). You will need to discuss the recording of your message with your security company. To change or program new telephone numbers, refer to Programming Domestic Telephone Numbers on page 27.

Acknowledging Domestic Voice Message Reporting

When an alarm has registered at the control panel, the control panel will commence dialling the first telephone number. The recorded voice message will commence playback as soon as the control panel dials the first telephone number and will repeat itself continuously for 90 seconds.

When you answer the incoming call from the control panel, wait for the recorded message to end. A series of short tones will follow the recorded message followed by a 20 second pause before the control panel will hang up and dial the next telephone number.

During the 20 second pause, press the * button on your touch-tone telephone, alternatively, you may use an optional Phone Controller (tone generator) if you do not have a touch-tone telephone.

Note

If an optional DTMF Command Module has been installed by your security company, you can acknowledge the call during the message playback by pressing the # key. Therefore, you no longer need to wait for the pre-recorded message to end.

Basic Pager Reporting

This feature is only applicable if your system is reporting to a pocket pager. Basic pager reporting requires some interpretation of the numbers that appear of the display. However, it is possible to differentiate between 1000 different systems when a number of control panels are reporting to the one pocket pager.

Basic Pager Display Information

Subscriber ID Number

This is the identification number of the control panel and can only be programmed by your installer.

Zone Status

The zone status display shows you the status of each zone (1 - 8). The following table describes what each number means when displayed on the zone status display.

Number Displayed	Zone Description
0	Zone Normal This indicates that the corresponding zone is in the sealed state.
1	Alarm This indicates that the corresponding zone is unsealed and in alarm condition.
2	Zone Bypassed This indicates that a system operator has manually isolated the corresponding zone. Refer to Isolating Zones on page 15 for information on how to manually isolate a zone(s) prior to arming the system.
3	Zone Trouble This indicates that a zone was left unsealed after the end of exit time.

Table 10: Zone Status Display Descriptions

System Status

The system status information is divided up into 4 digits. The first digit of the system status display indicates whether the system is armed or disarmed (8=Disarmed / 9 = Armed).

The second digit on the system status display indicates which codepad alarm was triggered by the operator (0 = No Codepad Alarm / 1 = Codepad Panic or Duress Alarm / 2 = Codepad Fire Alarm / 3 = Codepad Medical Alarm).

The third digit on the system status display indicates when the AC mains supply has failed (0 = AC Supply is normal / 1 = AC Supply has failed).

The fourth digit on the system status display indicates when a system fault has occurred at the control panel ($0 = System\ Normal - There$ is no faults / $1 = System\ Fault - There$ is a fault registered by the control panel).

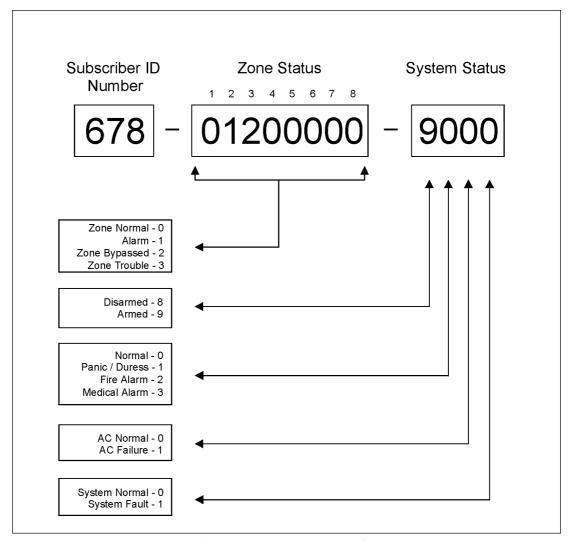


Figure 6: Basic Pager Display

The example above shows that the transmission has come from the control panel that has an ID number of 678 and that zone 2 is in alarm. The example also displays that zone 3 has been manually isolated and the system is armed.

PET Pager/SMS Reporting

The system can be configured by your security company to report to your mobile phone via SMS messaging or a pocket pager when an alarm and/or any system event occurs. When using either of these two reporting formats, easy to understand text messages will be received so that the appropriate action can be taken.

The following table list all the events that can be reported in SMS messaging and PET pager formats.

Event At Control Panel	PET/SMS Message
AC Fail	AC Fail
AC Restore	AC restore
Area Has Been Armed	Close Area #, User #
Area Has Been Disarmed	Open Area #, User #
Burglary Zone Has Triggered	Alarm Zone #
Burglary Zone Has Restored	Restore Zone #
Burglary Zone Triggered, Area #	Alarm Zone #, Area #
Burglary Zone Restored, Area #	Restore Zone #, Area #
Access Denied – Codepad Tamper	Codepad Tamper
Data Programming Change	Data Change
System Is Armed	Close User #
System Is Disarmed	Open User #
Codepad Duress	Duress, Open User #
Low Battery	Low Battery
Low Battery Restore	Battery Restore
Codepad Panic Alarm	Panic
Codepad Fire Alarm (V1.37+)	Fire
Codepad Medical Alarm (V1.37+)	Medical
Test Report	Test
Zone Automatically Isolated When Armed	Bypass Zone #
Disarming When Zone Has Been Isolated	Bypass Restore Zone #
Zone Unsealed At End Of Exit Time	Trouble Zone #
Zone Has Restored After Exit Time	Trouble Restore #
24 Hour Zone Triggered	24 Hour Alarm #
24 Hour Zone Restored	24 Hour Restore #
24 Hour Fire Zone Triggered	Fire Zone #
24 Hour Fire Zone Restored	Fire Restore #

Table 11: PET Pager/SMS Messages

The # symbol represents the zone or area number in the transmission.

The following example shows how a single transmission will be received on the PET pager or mobile phone using SMS messaging. A similar message to the one below will be seen when the control panel is armed by User 1.

1111	CLOSE USER	01
Subscriber ID Number	System Armed	User #1

The Subscriber ID number is a unique 4 digit number identifying which alarm system has made the call. Only your security company can program the Subscriber ID number (Factory Default = 0000).

Glossary Of Terms

Term	Description
Alarm Condition	Is when your alarm system is armed and one of the detection devices have been violated. A 24-hour zone (eg. smoke detector) can activate an alarm condition when your system is armed or disarmed.
Answering Machine Bypass	Answering machine bypass has been incorporated so that it is possible to make a connection with the system for remote arming operations when there is an answering machine or facsimile machine on the same telephone line.
Area Codepad	Used only when the system has been partitioned into two separate areas. All operations at the area codepad will not affect the other area.
Armed	When the system is in a ready state to accept alarms.
Automatic Arming	This feature allows the system to automatically arm at the same time every day in AWAY Mode or STAY Mode 1.
Automatic Disarming	This feature allows the system to automatically disarm at the same time every day.
AWAY Mode	This is the mode used to arm your system when you leave your premises.
Codepad	The codepad allows you to perform all functions such as arming/disarming and carrying out functions such as adding and deleting system user codes.
Day Alarm	This feature allows a combination of zones to be monitored while the system is disarmed.
Detectors	Are devices connected to your alarm system used to detect intrusion and cause an alarm condition. Some forms of detection devices include, PIR (Passive Infrared), Smoke detectors, photoelectric beams, reed switches and vibration sensors.
Disarmed	Is when your system is in a state that will not accept burglary alarms. Only zones programmed for 24-hour operation can sound an alarm when the system is disarmed (eg. Smoke Detectors etc).
Dynamic Battery Testing	Is a feature that is used to monitor and test the condition of your back-up battery.
Entry Time / Entry Delay	Is the time allowed after entering your premises via a zone programmed for delay (eg. Front Door) so that you can disarm the system.
Exit Time	Exit Time is the time allowed after arming the system to exit the premises without causing an alarm.
External Equipment	Is any device connected to your system such as detectors, codepads and sirens etc.
Forced Arming	Is a situation where your alarm system is permitted to be armed when one or more zones are un-sealed or faulted.
Handover Delay	When your system is armed and a zone programmed for delay has been violated, the delay zone will handover the remaining delay time to a zone programmed as handover. The handover zone will not activate an alarm until the remaining delay time has expired. A handover zone will act as an instant zone if violated before the delay zone is violated.

Term	Description
Hand Held Remote Control	Can be used to remotely operate your system via hand held transmitters (Also known as RF keyfobs).
Isolating	Allows you to manually disable (isolate) one or more zones before arming the system.
Master Code	Is a numerical code used for arming and disarming the system as well as allowing access to functions such as adding and deleting user codes etc.
Master Partitioned Codepad	This codepad can only be used if your system has been partitioned (CC488 Only). The codepad allows you to view and operate both areas from the same codepad.
Monitoring Station	Is a secure location where a digital receiver monitors numerous alarm systems and deciphers their alarm transmission reports. The operator can then advise the appropriate authorities to take immediate action.
Panic Alarm	This type of alarm indicates to the monitoring station that there is an emergency situation at your premises.
Phone Controller	The phone controller can be used to turn your system on in AWAY mode via the telephone by generating a tone.
Sealed	Refers to zone status. If a zone is sealed, the detection device is not violated and the zone indicator will not be displayed on the codepad.
Sensor Watch	Sensor watch gives the control panel the ability to recognise that detection devices may have stopped working or that the view to a PIR detector has been blocked, thus unable to detect any movement over the duration of the time programmed by your installer.
Silent Alarm	Your installer may program zones for silent operation. This means that when the zone programmed for silent operation has been violated during the armed period, your alarm system will communicate with the monitoring station without sounding the sirens.
STAY Mode 1	Is a condition that automatically isolates zones when your system is armed in STAY Mode 1. Only your installer can program zones to be isolated automatically in STAY Mode 1.
STAY Mode 2	Is a condition that automatically isolates zone when your system is armed in STAY Mode 2. Only the Master Code holder can program zones to be isolated automatically in STAY Mode 2.
Telco Arm Sequence	Telco arming is a feature that automatically calls the telephone exchange and diverts your telephone number to another telephone when the system is armed in AWAY Mode (In Australia, this feature is called "Call Forward").
Telco Disarm Sequence	Telco disarming automatically calls the telephone exchange and un-diverts your telephone number.
Unsealed	Refers to zone status. A zone is unsealed when a zone has been violated. The corresponding zone indicator will display on the codepad.

Term	Description
User Code	A user code is the personal identification number that the operator uses to arm and disarm the system.
Zones	A monitored input used to trigger an alarm condition when violated.
24-Hour Zones	A monitored input programmed to trigger an alarm condition when violated when the system is armed or disarmed 24-hours a day.

Warranty Statement

Electronics Design and Manufacturing Pty Limited warrants this product to be free from defects in material and workmanship for a period of three years from the date of manufacture as indicated by the date stamp and / or serial number on the product.

Defective units returned by the purchaser at their own expense during this period will be repaired or replaced at the option of the manufacturer. The repair or replacement will be free of charge provided that the defects were not incurred during shipping or handling, or the damage was not due to causes beyond the control of Electronics Design and Manufacturing Pty Limited, such as lightning, excessive voltage, mechanical shock, or damage arising out of abuse, alteration, or improper application of the equipment.

Year 2000 Compliance

This notice is to confirm that all Solution-16 control panels are not susceptible to, or can be corrupted by the "Year 2000 Millennium Bug".

To date, all Solution products that incorporate time keeping functions employ a rotating 100-year calendar. This means that Solution products do not use the century in any time keeping algorithms, only the year within the century.

Specifications

Temperature Range: 0 – 45 Degrees Celsius

Humidity: 10% - 95%

Power Source: TF008 Plug Pack – 240 Volt / 18 Volt AC @ 1.3 Amp

Stand-By Current: 65 mA
Current Draw In Alarm Condition: 115 mA
Current Draw In Alarm Condition With Codepad: 105 mA

Back-Up Battery: 7Ah / 12 Volt DC Rechargeable Sealed Lead Acid Battery

Dimensions (Case): 306 mm x 262 mm x 84 mm (Packed In Carton)

Weight: 2.5 Kg
Supplier Code: N771

New Zealand Telepermit: PTC 211/95/263

Malaysia Approval Number: Pending

Advice To Users

The Austel permit that has been issued for this product is subject to the following conditions:

• The Solution-16 control panel may only be powered by an EDM TF008 plug pack (Approval Number Q92128).

New Zealand Telepermit Notes

- The grant of a telepermit for a device in no way indicates Telecom acceptance of responsibility for the correct operation of that device under all operating conditions.
- This equipment shall not be used in any manner that could constitute a nuisance to other telecom customers.
- Immediately disconnect this equipment should it become physically damaged and arrange for its disposal or repair.
- The transmit level from this device is set at a fixed level and because of this, there may be circumstances where the performance is less than optimal. Before reporting such occurrences as faults, please check the line with a standard telepermitted telephone and do not report a fault if the telephone performance is satisfactory.
- This device is equipped with pulse dialling while the Telecom standard is DTMF tone
 dialling. There is no guarantee that Telecom lines will always continue to support
 pulse dialling.
 - Use of dialling, when this equipment is connected to the same line as other equipment, may give rise to bell tinkle or noise and also cause a false answer condition. Should such problems occur, the user should NOT contact the Telecom Faults Service.
- This equipment is set up to carry out test calls at pre-determined times. Such test calls with interrupt any other calls that may be set up on the line at the same time. The timing set for such test calls should be discussed with the installer.
 - The timing set for test calls from this equipment may be subject to drift. If this proves to be inconvenient and your calls are interrupted, then the problem of timing should be discussed with the equipment installer. The matter should NOT be reported as a fault to Telecom Faults Service.
- This equipment shall not be set up to make automatic calls to the Telecom 111 Emergency Service.
 - This equipment should not be used under any circumstances that may constitute a nuisance to other Telecom customers.
- In the event of any problem with this device, the systems battery, AC mains supply and telephone line should be disconnected. The user is to then arrange with the supplier of the device to make the necessary repairs.
 - Should the matter be reported to Telecom as a wiring fault and the fault be proven to be due to this product, a call-out charge will be incurred.

Solution-	16 Operators	Manual

Installation Notes	
Installation Company	
Technicians Name	
Technicians Telephone Number	
Installation Date	
Warranty Expires	
Panel Software Version	
Service Notes	

Zone Descriptions

This allows you to describe each zone and tick which zones have been programmed to be automatically isolated in STAY Mode 1 or have been programmed for day alarm operation.

	Isolated In STAY Mode 1	Day Alari
Zone 1	 . Ivioue i	
Zone 2		
Zone 3		
Zone 4	 . 🗆	
Zone 5	 . 🗆	
Zone 6		
Zone 7		
Zone 8		
Zone 9		
Zone 10		
Zone 11		
Zone 12		
Zone 13		
Zone 14		
Zone 15		
Zone 16	 . \square	

User Code Names

	Master	Master
	<i>Code</i>	Code
Default = 2580 <i>User #1</i>	Y User #17	
User #2	User #18	
User #3	User #19	
User #4	User #20	
User #5	User #21	
User #6	User #22	
User #7	User #23	
User #8	User #24	
User #9	User #25	
User #10	User #26	
User #11	User #27	
User #12	User #28	
User #13	User #29	
User #14	User #30	
User #15	User #31	
User #16	User #32	
Auxiliary #1 (User #33)	Auxiliary #2 (User #34)	

Entry	/	Exit	Times
-------	---	------	--------------

Entry Time 1		Exit Time			
Entry Time 2		Entry Guard Time			
Entry Time 3					
Entry Time 4					
Arming Options					
Single Button Arming (AWAY/STAY)	NO	Forced Arming	YES	NO	
Single Button Disarming (STAY Mode) YES	NO	Remote Arming Via Telephone	YES	NO	
Automatic Arm In AWAY Mode YES	NO	Automatic Arm In STAY Mode	YES	NO	
		Automatic Arming Warning Time			Minutes
		Automatic Arming Time			AM/PM
		Automatic Disarming Time			AM/PM
Output Descriptions					
Output 1		Output 8			
Output 2		Output 9			
Output 3		Output 10			
Output 4		Output 11			
Output 5		Output 12			
Output 6		Output 13			
Output 7		Output 14			

Isolating Method	Standard Isolating	YES	NO	Code To Isolate YES NO	
Communication Options					
	Back To Base Reporting	YES	NO	Panel Account Number	ı
	Domestic Reporting	YES	NO	Domestic Reporting – No Of Beeps	ı
	Basic Pager Reporting	YES	NO	PET Pager/SMS Reporting YES NO	
	Remote Arming Allowed	YES	NO	DTMF Command Module Fitted YES No	
Other System Information	on				
	Siren Run T	ime	Mir	nutes	
	Sensor Watch T	ime	Day	VS	
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