

# AVOLUTION™ 'S series'

(8-16 Zone Controller)

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## Operating Guide

*Proudly Designed and Manufactured in New Zealand (NZS:4301/93)*

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## INTRODUCTION

### ABOUT YOUR ALARM

Thank you for choosing to protect your premises with the **AVOLUTION™** 'S series'. In doing so you have invested in the most advanced and adaptable panel on the market.

Your **AVOLUTION™** 'S series' can operate as two totally independent alarms. These independent 'AREAS' can be controlled from one global keypad or from multiple keypads assigned to specific areas.

The **AVOLUTION™** 'S series' has many incredible program options and additional accessories that can enhance the standard features of the panel offering simple **"Home Automation"** to **"Radio control"** to **"Voice Prompted Command Control"** and **"Access Control"**. Please check with your installer to find out more about these powerful features.

The **AVOLUTION™** 'S series' can communicate with monitoring stations or call you at work, on your mobile phone or your pager to warn of intruders. You can phone your home to check or change the status of any output using the keys on your phone provided the optional Voice or DTMF board is fitted. Arm or disarm the whole house or just one area, all with your own voice confirming your selections.

Imagine turning on the spa before leaving work so it is hot when you get in the door. The central heating has just automatically switched on using the on board timer and you have just opened the roller door and disarmed the garage from your mobile phone so the white goods repairman can work on your washing machine.

The controller will support any of the 16 Zone LED keypads, Icon keypads or the more sophisticated LCD (liquid Crystal Display) keypads to maximum of 8. The controller also has a comprehensive alarm event memory that stores all of the controller activity with the time and date. The event memory is accessible from all keypads but the time & date information can only be displayed via the LCD keypad.

# OPERATING YOUR ALARM

## GENERAL INFORMATION

Your **AVOLUTION™** 'S series' Alarm Controller has been designed with you the user in mind. Clearly named backlit keys mean you don't have to remember complicated key combinations to achieve normal daily operations. As with everything about the **AVOLUTION™** 'S series' even key functions can be fine tuned to your specific needs. Please ask your installer for more details.

## SINGLE BUTTON or CODE ARMING of THE ALARM

Arming can be achieved with the <ARM> button or using your code. Arming the alarm will turn on all detectors in the Area or Areas being Armed. To Arm the alarm press;

<ARM>

*Area A,B or both armed LED's will turn ON or;*

<CODE><ENTER>

*Area A,B or both armed LED's will turn ON or;*

The two different Arming modes detailed above will arm either a single area or both areas depending on what Areas are assigned to the keypad, or code, or both. The installer will advise you on how they have configured your particular alarm.

There is also a special feature that can be set by your installer to allow the pressing of the <ARM> button during the Exit Delay time to Disarm the alarm. This feature is to allow a quick disarm if you have forgotten to do something prior to Arming the alarm. The feature is disabled when the alarm is fully armed following expiry of the exit delay time.

## SELECTIVE AREA ARMING of THE ALARM

If the panel is split into two areas and the user and keypad are both assigned to the two areas it is possible to select which Area or Areas you wish to Arm. To do this your installer will have programmed the panel to require the <ARM> button to be pressed before the code to arm the panel. To selectively Arm the alarm press;

<ARM><CODE><ENTER>

*On an LED keypad zone LED's 1 & 2 will turn ON.*

*(LED1 = Area A & LED 2 = Area B)*

*On an LCD keypad the display will show  
"Area/s to Arm" "A B".*

This indicates that both Areas A & B are selected for arming.

At this point if you press the <ENTER> button, both of the selected Areas will Arm.

If before pressing the <ENTER> button you wish to de-select one of the areas prior to arming you can use buttons 1 or 2 on the keypad. Button 1 relates to Area A and button 2 relates to Area B.

For example, if you press the number 2, Area B will turn off on the LCD keypad with the display showing (A -), or zone indicator 2 will turn off on the LED keypad indicating that only the remaining selection (Area A) will now arm if you press the <ENTER> button. If you don't do anything the panel will proceed to automatically arm both areas in 10 seconds time.

### **DISARMING THE ALARM**

Disarming the alarm will turn off all detectors in the Area or Areas that were Armed. To Disarm the alarm press;

**<CODE><ENTER>**

*Area A,B or both armed LED's will turn OFF.*

Only the Areas assigned to the user code and keypad will disarm. To allow disarming of both areas the keypad and the user code must be assigned to Areas A&B. For example, if the keypad was assigned to both areas but the code was only assigned to Area A, Area A will disarm when the user enters their code. If Area B was also armed it will remain armed.

### **SELECTIVE AREA DISARMING of THE ALARM**

If the panel is split into two areas and the user and keypad are both assigned to the two areas it is possible to select which Area or Areas you wish to Disarm. To do this your installer will have programmed the panel to require the <ARM> button to be pressed before the code to arm the panel. This special Arming option when enabled will also enable the special disarming mode. To selectively Disarm the alarm press;

**<CODE><ENTER>**

*On an LED keypad zone LED's 1 & 2 will turn ON.*

*(LED1 = Area A & LED 2 = Area B)*

*On an LCD keypad the display will show*

*"Area/s to Disarm" "A B".*

This indicates that both Areas A & B are selected for disarming.

At this point if you press the <ENTER> button, both of the selected Areas will disarm.

If before pressing the <ENTER> button you wish to de-select one of the areas prior to disarming you can use buttons 1 or 2 on the keypad. Button 1 relates to Area A and button 2 relates to Area B.

For example, if you press the number 2, Area B will turn off on the LCD keypad with the display showing (A -), or zone indicator 2 will turn off on the LED keypad indicating that only the remaining selection (Area A) will disarm if you press the <ENTER> button.

If you don't do anything the panel will proceed to automatically disarm both areas in 10 seconds time.

### **ARMING IN STAY MODE**

Stay mode allows you to Arm a pre-selected part of the building. Stay mode can be used in a residential application to arm parts of the house that you will not need to go into at night time or in a commercial application to allow monitoring of an unattended shop front. The Stay mode alarm can be in the form of a full alarm or possibly a small buzzer (Chime) to warn of activity in the stay mode coverage area. To arm Stay mode press;

**<STAY>**

*Area A,B or both armed LED's will FLASH or*

**<STAY><CODE><ENTER>**

*Area A,B or both armed LED's will FLASH.*

The panel has two different Stay arming modes and the methods of Arming are detailed above. The installer will advise you on how they have configured your particular alarm. If the second option shown above (<Stay> <Code> <Enter>) is used for arming stay mode and the code and keypad are assigned to both areas the selective arming method described on page 4 will apply.

Once Stay mode has been Armed, the Stay Mode exit delay will apply.

When armed, if a zone is triggered the Stay Mode entry delays will also apply. If, however you press the <ENTER> button following Arming of Stay mode, this will cancel the exit delay so the system is armed immediately and also cancel ALL entry delay times so all zones will become Instant zones. This allows you to select whether you wish the Stay Mode to Arm with or without delays every time you arm this mode.

### **DISARMING STAY MODE**

Disarming Stay Mode will turn off all Stay Mode detectors in the Area or Areas that were Armed. To Disarm Stay Mode press;

**<STAY>**

*Area A,B or both armed LED's will turn OFF or*

**<CODE><ENTER>**

*Area A,B or both armed LED's will turn OFF.*

The single button disarm of stay mode indicated above is a programmable option selectable at individual keypads so you will need to check with your installer how your system has been configured. Disarming using the Stay button can be programmed not to work if the panel is in alarm. If the button is programmed this way, when in alarm you must use your code to disarm. If the panel is programmed for <Stay> <Code> <Enter> for arming stay mode and the code and keypad are assigned to both areas the selective disarming method described on page 5 will apply.

### **BYPASSING ZONES**

The Bypass button allows you to temporarily bypass zones of your choice prior to arming your panel. The bypassed zones will revert back to normal the next time you disarm the panel unless it is a 24 hour zone. A bypassed 24 hour zone will remain bypassed until the bypass is manually removed by reversing the procedure shown below. To bypass a zone (say Zone 1) from the system, follow the instructions below.

**To bypass zone 1, key in the following sequence:**

**<BYPASS>**

Bypass LED will turn ON.

**<01>**

Zone 1 LED will turn ON.

**<ENTER>**

Bypass LED will now FLASH.

While in the Bypass mode it is possible to Bypass more than one zone. The example below details how this is done.

**To bypass zones 1,9 & 16, key in the following sequence:**

**<BYPASS>**

Bypass LED will turn ON.

**<01,09,16>**

Zone LED's 1,9 & 16 will turn ON.

**<ENTER>**

Bypass LED will now FLASH.

**NOTE: To Bypass a zone, the keypad you are using must be assigned to the same area as the zone/s you wish to Bypass. If you are trying to Bypass a zone that is not in the Area assigned to your keypad, the panel will not allow you to bypass that zone.**

If you are using an LCD keypad to bypass zones, the Bypass button works the same as the LED keypad but the display shows the numbers as entered e.g. in the example above as you enter in the digits "01", the display will show "01", then if you enter "09", the display will show "01" & "09" on the display and finally as you enter "16" the display will show all three numbers on the screen. The LCD keypad will show up to 5 two digit numbers then if you need to bypass more zones it will alternate the display with the first 5 selections then the next 5, switching between displays at about a 1 second rate.

The installer can also restrict access to bypass mode by requiring a code to be entered following the bypass button. If this option is turned on you must follow the sequence shown below to enter bypass mode.

**<BYPASS><CODE><ENTER>**




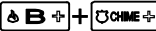
Once you have accessed bypass mode using your code, the method for actually bypassing zones is identical to that shown above.



## MANUAL PANIC, MEDICAL & FIRE ALARMS

There are three special Manual Alarms that may be triggered from the keypads. These are a "PANIC", "FIRE", and "MEDICAL" alarm. When using the LED keypad the Panic alarm can be generated by either the single "Panic" button or by the simultaneous operation of two buttons.

The Fire and Medical alarms are generated by pressing two buttons simultaneously. There are two types of LCD keypad that can be used on the panel. The methods for generating these manual alarms vary depending on the keypad used. The special button combinations and the alarms they generate are shown in the table below;

KEYPAD TYPE	PANIC ALARM	FIRE ALARM	MEDICAL ALARM
LED KEYPADS Portrait & Landscape	<PANIC> <1> & <3>	<4> & <6>	<7> & <9>
Landscape LCD KEYPAD	<CHIME> & <CONTROL>	<A> & <B>	<B> & <CHIME>
Portrait LCD KEYPAD	<PANIC> <1> & <3>	<4> & <6>	<7> & <9>
Landscape ICON KEYPAD		N/A	N/A
Portrait ICON KEYPAD			

## RESETTING ALARMS

In case of an alarm condition, pressing your **<CODE>** then **<ENTER>** will reset the alarm and turn off any audible sirens. If your code does not reset the alarm it means that the alarm occurred in an Area either not assigned to the keypad you are using or your code is not allowed to reset alarms in that area.

**NOTE:** If at any stage you make an error when entering a code all you need to do is press the **<ENTER>** button to reset the keypad and start again.

## LCD KEYPAD QUICKVIEW MODE

The LCD keypad will normally show an unsealed zone by displaying its program-mable zone name on the keypad. If more than one zone is unsealed at any time the LCD keypad will scroll through the zones sequentially showing each zone name individually. This can take some time to display all zones if multiple zones are unsealed. The LCD keypad has a special function, if the **<ENTER>** button is pressed when a zone is unsealed it will provide a two digit numeric display for all unsealed zones.

Up to 5 zones can be displayed at one time eg 01 03 07 11 14. If more than 5 zones are unsealed the keypad will alternate between each bank of up to 5 zones switching at about a 1 second rate. If you do not touch the keypad for 10 seconds after pressing the <ENTER> button the display will automatically return to the normal display mode. Alternatively if you press the <ENTER> button again before the 10 seconds expires the keypad will revert back to normal display mode.

## SPECIAL CONTROL BUTTON FUNCTIONS

The <CONTROL> button on the keypad has a number of uses depending on the options set by your installer.

It can be used to disable Chime-zone alarms or directly control any of the outputs from the keypad.

The operation of the special <CONTROL> button functions (if enabled by the installer) are detailed below;

### DIRECTLY CONTROLLING an OUTPUT

To directly control outputs from the LED or LCD keypads press;

<CONTROL>

(Note: The Control Button must be held for 2 seconds)

OUTPUTS
— — — — —

The control LED will turn on at the LED keypad, the LCD display will show

If an output is currently on its number will be displayed eg if output 4 was On then number 4 would be showing.

Now by pressing any of the buttons from 1-8 the appropriate output number will toggle On or Off each time the button is pressed. If the number is displayed it shows that the output is on (your installer must first allow the outputs to be directly controlled otherwise you cannot turn them On or Off at this point). When finished, press the <ENTER> button to exit the direct output control mode.

## DISABLE CHIME ZONES

Any detector on your **AVOLUTION™** 'S series' can be programmed to trigger an output or the buzzer at your keypad when movement is detected. These are called Chime Zones. Chime zones are normally only active during the disarm state but if programmed by your installer, they can work as Chime zones at all times (armed or disarmed). Your installer can also give you the ability to disable the Chime Zone monitoring via the keypad when it is not required.

To Disable Chime Zone Monitoring at an **LED or Portrait LCD** keypad press and hold;

<CONTROL> followed by <PROGRAM>

The "Aux (0)" LED will turn on indicating the Chime Zones are disabled on the LED keypad or;

the words "CHIME OFF" will appear on the LCD keypad

The Display will timeout after 20 seconds back to the normal display or you can press the <ENTER> button to go back to the normal display.

To re-enable Chime Zone monitoring press and hold;

<CONTROL> followed by <PROGRAM>

The "Aux (0)" LED will turn off indicating the Chime Zones are now active on the LED keypad or;

the words "CHIME ON" will appear briefly on the LCD keypad

The Display will timeout after 20 seconds back to the normal display or you can press the <ENTER> button to go back to the normal display.

To Disable the Chime Zone Monitoring at a Landscape **LCD** keypad press;

<CHIME> (Hold for 2 seconds)

The LCD display will read "CHIME OFF"

The Display will timeout after 20 seconds back to the normal display or you can press the <ENTER> button to go back to the normal display.

To re-enable the Chime Zone Monitoring at a Landscape **LCD** keypad press;

<CHIME> (Hold for 2 seconds)

The LCD display will read "CHIME ON"

The Display will timeout after 20 seconds back to the normal display or you can press the <ENTER> button to go back to the normal display.

# REMOTE COMMAND CONTROL OPERATION

## HOW REMOTE COMMAND CONTROL WORKS

Another powerful feature available from your alarm is Command Control. This feature is a remote control facility which allows valid users to access the panel via a standard touch tone telephone and check or change the Arm/Disarm status of each of the areas, operate each of the eight outputs, turn on an optional Microphone or force a test call to the Central Station.

On entry of a valid 4 digit DTMF code from a remote telephone the panel will respond with an audible prompt to indicate if the function being controlled is on or off.

The audible prompts can be in the form of tones or voice messages. The Command Control feature with tone prompts is standard on all panels (one Long Tone for OFF or three short beeps for ON). If the optional Voice Board is fitted the prompts are pre-recorded voice messages. Please talk to your installer to find out which of the above may be set-up in your panel. To perform any of the Command Control features you must first ring the phone number which the panel is connected to. The panel may be set up to answer after a specific number of rings or it may be set-up to use a fax defeat option. Either way, when you ring the phone number and the panel answers the call, the first thing you will hear over the phone is a burst of modem tones for two seconds. The panel will then pause for a period of 5 seconds and listen for DTMF tones from the remote phone. During the pause you must enter the access code which is associated with the Command menu option you wish to access. *Remember, the code you enter will determine which menu option you access.* If you miss the pause, the panel will repeat the modem tones and then pause again for 5 seconds looking for your access code. This process will be repeated 4 times before hanging up if no valid code is received. When entering codes or other information in Command Control the "#" key acts as a "Clear" button.

When you have entered the required 4 digit access code the panel will reply with the status message associated with the Command Control function you have accessed. For example, if the DTMF code for Arming & Disarming of Area A was "2045", once this code has been received the panel checks the current status of Area A and replies with the appropriate tone or pre-programmed voice message relating to that status e.g. if Area A is Armed then you will either hear 3 short beeps or the Armed voice message. If Disarmed, you will hear either 1 long beep or the Disarmed message. If there is no voice board fitted, you will only hear the tones.

Once the status message has informed you of the actual state, you can use the "\*" key to toggle the option on & off or Arm and Disarm, e.g. in our example above, code "2045" accesses Area "A" arming or disarming.

Assuming the status message we received indicated that Area A was currently armed, if we press the "\*" key, Area "A" will be Disarmed and we would receive a disarm status message. While you are on-line with the panel you can move to other Command Control options by entering the code of the new option you want to control.

Assuming there was a code of "4321" programmed to control outputs. After having used code "2045" to control the Arm/Disarm status of Area A we first press the "#" button to reset all previous entries. Then we can enter the digits "43215" (that is "4321" as the code to control outputs and "5" to select output #5). The current status of output #5 will be given either by the voice message or the appropriate tone and then the status can be changed with the "\*" button on the remote telephone (Note; for output control you must enter in the 4 digit code e.g. 4321 followed by the output number you wish to control, in this case 5).

At any stage, if you enter in an incorrect code you can press the "#" button on the remote telephone to clear all code entries and then start again.

To turn on the optional Microphone (only available if the Voice Board is fitted) you must enter in the appropriate code followed by the "\*" button. To turn the Microphone off you simply press the "\*" button again. To end a Command Control session simply hang up the phone. The panel is monitoring the line at all times and 15 seconds after the last key press it will automatically hang up the line. This 15 second timer is active during the whole command control process so a period of 15 seconds without a key press will cause the panel to hang-up.

### **LOCAL COMMAND CONTROL OF OUTPUTS**

If a DTMF control code is programmed for output control the same code can be used to locally control output/s from the keypad. Entering the 4 digit DTMF code at a keypad will blank the display allowing control of the outputs. On an LED keypad the zone LED's indicate the output status e.g. zone 1 LED indicates output 1 status. Zone LED 1 on shows that output 1 is on. If using an LCD keypad the display will look like the display shown on page 10. By pressing the "1" button at the panel keypad, output 1 can be turned on or off provided it is allowed to be locally controlled. To leave local command control mode simply press the <ENTER> button and the keypad will return to normal operation. This feature works the same way as using the <CONTROL> button (see page 10) only a code is used to access the function instead of using the <CONTROL> button.

## REMOTELY ACKNOWLEDGING AN ALARM

The Alarm panel can be programmed to report alarms directly to the owner via a nominated landline or mobile telephone number.

There are two reporting modes that can be used, Domestic or Voice reporting. Domestic reporting sends an alarm siren tone down the line to indicate that an alarm has occurred.

Voice reporting sends a pre-recorded voice message to indicate that an alarm has occurred. In both cases you will need to acknowledge the alarm correctly to stop further calls from being made.

When an alarm occurs the control panel will dial the first telephone number (followed by up to 7 more if they have been programmed into the system) and send the alarm message to the person listening at the other end.

The alarm message sequence consists of sending either the siren tone (Domestic) or pre-recorded message (Voice) and then waiting for a period of 5 seconds for an alarm acknowledgement. If no acknowledgement was received the panel will repeat the message and wait a further 5 seconds. This pattern is repeated 4 times and if no acknowledgement was received the panel will hang-up and dial the next number (if more than one was programmed).

To acknowledge the alarm you must press the <#> button on your telephone during the 5 second quiet period.

If you missed the first quiet period the message is repeated up to a total of 4 times with a 5 second quiet period after every message.

Alternatively if you require a more secure method of acknowledging an alarm to ensure that the alarm is only kissed off by the correct person you can program a 1-4 digit code in the control panel at location P175E14E (see program summary on page 26). If a code is programmed at this location you must enter in the code followed by the <#> button to acknowledge the alarm event.

To Acknowledge a Domestic or Voice alarm Press;

<#> (on the remote telephone)

Or;

<1-4 Digit Code> then <#> (on the remote telephone)



# PROGRAMMING YOUR ALARM

## GETTING INTO PROGRAM MODE

There are 2 levels of program mode, *CLIENT* mode and *INSTALLER* mode. Normally the installer will give you access to the *CLIENT* mode so you can add, delete, or change the user codes.

In *CLIENT* mode you can program up to 100 individual User Codes that may be 1-6 digits in length. Each of the 100 Users can be assigned NO access, LIMITED access or FULL access to *CLIENT* mode. A User with FULL access can change all access codes, change the panel time & date, change the telephone numbers, change the remote control codes (DTMF), add or remove radio devices, initiate Walk-test mode and access some diagnostic features. All of these things can be explained in detail by your installer.

To get into *CLIENT* mode provided the system is NOT armed press;

<PROGRAM> <CODE> <ENTER>

The Program LED will turn ON (LED keypad) or  
The LCD Keypad will display "CLIENT : USERS"

If you get a single long beep at this point and the above indications do not happen it means your code cannot access Program mode.

## EXITING PROGRAM MODE

To exit out of program mode press;

<PROGRAM> <ENTER> (LED Keypad)

Program LED will turn Off or;

Press and hold <PROGRAM> for 2 seconds (LCD Keypad)

## ADDING OR DELETING A USER CODE

Once in *CLIENT* mode, to program a User code you enter the User code address (Program location 1) then the code address 1-100. For example to program User # 3 with a code "2580", key in the following sequence:

<PROGRAM> <1> <ENTER> <3> <ENTER> <2580> <ENTER>

(e.g. P1E3E2580E)

If there is an existing code already at that address it will be displayed on the keypad. Entering a new code where a code already exists will delete the old code and the new code will be displayed at the keypad.

The panel will give 3 short beeps to indicate correct entry or 1 long tone if not accepted. To delete or clear a user code at an LED keypad, e.g. user code 3, key in the following sequence

<PROGRAM> 1 <ENTER> 3 <ENTER> <BYPASS> <ENTER>

To delete or clear a user code at an LCD keypad, e.g. user code 3, key in the following sequence

<PROGRAM> 1 <ENTER> 3 <ENTER> <CONTROL> & <0> <ENTER>

(Note: on the LED keypad a "0" is indicated by "Aux (0)")

## CHANGING TELEPHONE NUMBERS

Your panel will accept up to 8 phone numbers with a total of 16 digits. It can be programmed to dial all or any of these depending on the event which has occurred.

(The 8 phone numbers are at program addresses P181E 1-8E)

While in CLIENT mode, key in the following sequence:

<PROGRAM> <181> <ENTER> <1> <ENTER>

(the address for telephone number 1)

Any existing number will be displayed at the keypad then press;

<NEW TELEPHONE NUMBER> <ENTER>

The new number will be displayed at the keypad.

At any time you can enter in the address for the telephone number just to view the currently programmed value then press the <PROGRAM> button to move on to another address.

Address P181E1E = PH # 1, P181E2E = PH# 2 to P181E8E = PH# 8.

**Note:** on the LED keypad "0" is indicated by the "Aux (0)" LED.



## PROGRAMMING THE TIME & DATE

The alarm system has an internal clock that may be used to automatically Arm or Disarm the alarm, turn Outputs On or Off or restrict User activity. It is also used to identify when events occurred in memory via the LCD keypad. The clock also has provision for 8 pre-programmed holidays and start/stop times for daylight saving. Daylight saving times can be adjusted in client mode but will normally be set by your installer so the program locations are not covered here.

To change the Time & Date press;

<PROGRAM> <26> <ENTER> <1> <ENTER> <HHMM> <ENTER>

HHMM = 0000 to 2359 (programmed in 24 hour format)

<PROGRAM> <26> <ENTER> <2> <ENTER> <D> <ENTER>

D = Day number 1-7 (1= Sun to 7=Sat)

<PROGRAM> <26> <ENTER> <3> <ENTER> <DDMMYY> <ENTER>

DDMMYY = date/month/year

To view or set daylight saving On

<PROGRAM> <26> <ENTER> <4> <ENTER>

If LED 1 is on daylight saving is currently active

To Program Holidays

<PROGRAM> <170> <ENTER> <1-8> <ENTER> <DDMMYY> <ENTER>

Where 1-8 relates to holidays 1-8 and DDMMYY = date/month/year

## PROGRAMMING THE DTMF REMOTE CONTROL CODES

The alarm system has the ability to allow the owner to call the panel from a remote telephone and Arm/Disarm the system, turn Outputs On/Off, turn on a microphone at the control panel or force a test call to the monitoring company. You can also acknowledge alarms reported on voice or domestic reporting mode with a 4 digit code. If the features are available the owner can program these codes from CLIENT program mode.

To change the DTMF Arm/Disarm codes press;  
<PROGRAM> <63> <ENTER> <1 or 2> <ENTER> <####> <ENTER>  
1=Area A, 2=Area B, #### = 1-4 digit code

To change the DTMF Output Control code press;  
<PROGRAM> <175> <ENTER> <12> <ENTER> <####> <ENTER>  
#### = 1-4 digit code

To change the DTMF Microphone Control code press;  
<PROGRAM> <175> <ENTER> <13> <ENTER> <####> <ENTER>  
#### = 1-4 digit code

To change the DTMF Voice/Domestic Alarm Acknowledge code press;  
<PROGRAM> <175> <ENTER> <14> <ENTER> <####> <ENTER>  
#### = 1-4 digit code

To change the DTMF Force Test Call code press;  
<PROGRAM> <175> <ENTER> <15> <ENTER> <####> <ENTER>  
#### = 1-4 digit code

### PROGRAMMING/DELETING or FINDING RADIO KEY CODES or ACCESS TAGS

The alarm system can have up to 80 radio users programmed. The optional receiver board must be fitted to allow radio users to work. Radio users can be programmed at User locations 21-100. It can alternatively have up to 100 access control tags or cards programmed at user locations 1-100. There must be at least one proximity reader connected to the panel for access tags/cards to work. The owner can add/remove or find radio users or access tags from CLIENT program mode.

To Learn a new Radio User press;  
<PROGRAM> <18> <ENTER> <21-100> <ENTER>  
21-100 is User number 21-100. When in learn mode the keypad will beep at one second intervals for 30 seconds. You must operate the radio key within this period to learn it into the panel.

To Delete an existing Radio User press;  
<PROGRAM> <19> <ENTER> <21-100> <ENTER>  
21-100 is User number 21-100. You must enter the exact Radio User you wish to delete.

To Find an Existing Radio User press;  
<PROGRAM> <20> <ENTER> <0> <ENTER>  
During find mode the keypad will beep at one second intervals for 30 seconds. You must operate the radio key within this period.

If the radio User code is found in memory the User number will be displayed at the keypad.

To Learn a new Access Tag User press;  
<PROGRAM> <21> <ENTER> <1-100> <ENTER>

1-100 is User number 1-100. When in learn mode the keypad will beep at one second intervals for 4 minutes. You must present the access tag to a proximity reader within this period to learn it into the panel.

To Delete an existing Access Tag User press;  
<PROGRAM> <22> <ENTER> <1-100> <ENTER>

1-100 is User number 1-100. You must enter the exact Access Tag User you wish to delete.

To Find an Existing Access Tag User press;  
<PROGRAM> <23> <ENTER> <0> <ENTER>

When find mode has started the keypad will beep at one second intervals for 4 minutes. You must present the access tag to a proximity reader within this period. If the Access Tag/Card code is found in memory the User number will be displayed at the keypad.

### PROGRAMMING/DELETING or FINDING RADIO ZONE CODES

The alarm system can have up to 16 radio detectors (zones) programmed provided a receiver is fitted to the panel. Any of the 16 zones can be wired or wireless zones.

The owner can add/remove or find radio zones from *CLIENT* program mode.

To Learn a new Radio Detector (zone) press;  
<PROGRAM> <164> <ENTER> <1-16> <ENTER>

1-16 is Zone 1-16. When in learn mode the keypad will beep at one second intervals for 30 seconds. You must operate the radio detector within this period to learn it into the panel.

To Delete an existing Radio Zone press;  
<PROGRAM> <165> <ENTER> <1-16> <ENTER>

1-16 is Zone 1-16. You must enter the exact Radio Zone number you wish to delete.

To Find an Existing Radio Zone press;  
<PROGRAM> <166> <ENTER> <0> <ENTER>

During find mode the keypad will beep at one second intervals for 30 seconds. You must operate the radio detector within this period. If the radio detector code is found in memory the Zone number will be displayed at the keypad.

## HIDING USER CODES WHEN IN INSTALLER MODE

If the User is authorised to do so they may prevent the User codes from being displayed when in Installer Mode.

The owner can Hide User Codes from *CLIENT* program mode.

To **Hide User Codes** press;

<PROGRAM> <25> <ENTER> <12> <ENTER> then <1> <ENTER>

If option 1 is turned ON at location P25E12E, the installer cannot view User Codes when in Installer Mode. To allow the installer to view and program codes the user must turn option 1 OFF at this location. Location P25E12E can ONLY be accessed from Client Mode by an authorised user.

[www.msealarms.com.au](http://www.msealarms.com.au)

# USER FUNCTIONS

## STARTING WALKTEST MODE

While in *CLIENT* mode a User with the proper authority can start walk-test mode. This special mode latches the alarm signals from detectors at the keypad initiating the test so that one person can trigger every detector connected to the alarm then return to the keypad to verify operation. On terminating Walk-test mode the test results are put into the memory buffer so they can be viewed at a later time.

To start Walk-test mode while in *CLIENT* mode press;

<PROGRAM> <200> <ENTER> <6> <ENTER>

The keypad buzzer will beep at 1 second intervals

Next trigger every detector connected to the panel then return to the keypad and all of the zones that were triggered will be displayed at the keypad.

To terminate Walk-test mode press;

<ENTER>

The keypad will stop beeping and automatically exit *CLIENT* mode.

## ANSWER AN IN-COMING CALL

From time to time your installer may need to access the alarm from a remote PC to make changes to your programming and for security reasons they may have configured the alarm so that an authorised person on-site is required to make the alarm system answer the in-coming call. This function is available in Idle Mode (the panel is not armed or in program mode).

To answer an In-coming Call press;

<CONTROL> & <9>

(You must hold the “control” button down and press “9” within 2 seconds)

Provided the line connected to the alarm was ringing at the time the panel will now answer the call and allow a remote PC connection.

## FORCE A TEST CALL

If the alarm is monitored by a monitoring company it may be necessary to force a test call to ensure that everything is still functioning correctly. This function is available from the panel keypad or by remote dial-in. If the test call is being forced from the keypad it must be done in Idle Mode (the panel is not armed or in program mode).

To Force a Test Call from the keypad press;  
<CONTROL> & <0>

(You must hold the “control” button down and press “0” within 2 seconds)  
The alarm Panel will now call the monitoring company and send a manual test call (event type 601).

To Force a Test Call from a remote telephone, dial the panel. When the panel answers the call it will send the modem tones. When the tones finish enter in the **Remote Test Code** programmed at location P175E15E (see page 17) then when you hear the voice or tone prompt to say the test has been initiated hang-up the telephone.

# MEMORY DISPLAY MODE

## VIEW MEMORY MODE

The alarm panel has an event memory which stores the most recent events, (up to 255), including all alarm events, all system events such as mains failure etc as well as arming by Area. This event memory is displayed via the standard keypad with the most recent event shown first and subsequent events following in descending order from newest to oldest.

Every time the "MEMORY" button is pressed the panel will advance to the next event. The "MEMORY" light will flash when there is a new event in memory which has not been viewed. To stop the "MEMORY" light flashing, simply press the <MEMORY> button and the events will be flashed back to you with the most recent event shown first.

**Note:** To stop the memory display and exit, press "ENTER". The memory light will also stop flashing when the system is next armed.

## CURRENT SYSTEM ALARMS

The control panel can be used with three different types of keypads.

1. The first is an LCD keypad that displays memory events in text form with full descriptions of the alarm condition as well as time and date information. The LCD keypad needs no explanation when it comes to displaying memory events because they are shown in plain text.

2. The second is an LED keypad that uses LED's to indicate the alarm conditions. The information that follows is based on the standard LED keypad.

When viewing the memory events at the LED keypad, by pressing the <MEMORY> button, the first thing that will be displayed is the Current System Alarms. On the Landscape LED keypad the Current System Alarms are indicated by the Memory/ Mains & Battery LEDs being on plus a zone LED from 1-8 to indicate the system alarm/s that are present. ON the Portrait LED keypad only the memory symbol will be illuminated along with a zone LED from 1-8.

If no Zone LED's are on at this time, it means there are no current system alarms. If a zone LED or LED's are On then this indicates system alarms that have not yet cleared. The zone LED's 1-8 are pre-defined as to what system alarm they will display.

Following the display of current system alarms the panel will then sequence through the 255 historical memory events starting at the most recent event. The second table shows the alarm events that can be displayed in memory mode and what indicators are used to show them.

These system alarm indications are shown in the table below.

The other main difference between the Landscape LED keypad and the Portrait LED keypad is the operation of the MAINS (AC Fail) and BATTERY (Battery Low) LED's.

On the Landscape LED keypad the LED's are always illuminated and they flash when there is a problem, BUT the mains and battery symbols on the Portrait LED keypad are off if everything is OK and flash if there is a problem.

CURRENT SYSTEM ALARMS			
LED #1	Battery Low	LED #5	Radio Pendant Battery Low
LED #2	Mains, 12V Fuse or Output Failure	LED #6	Supervised Detector Failure
LED #3	Telephone Line Failure	LED #7	Sensor watch or Delinquency Alarm
LED #4	Radio Detector Battery Low	LED #8	Dialler Kiss-off Failure

LED KEYPAD HISTORICAL EVENT DISPLAY CHART			
EVENT	DEVICE	INDICATOR	STATUS
ACTIVATION	Zones 1-16	LED's 1-16	On Steady
BYPASS	Zones 1-16	BYPASS LED's 1-16	On Steady On Steady
DETECTOR TAMPER (SHORT CIRCUIT)	Zones 1-8	TROUBLE LED's 1-8	Flashing On Steady
DETECTOR TAMPER (OPEN CIRCUIT)	Zones 9-16	TROUBLE LED's 9-16	Flashing On Steady
CABINET TAMPER	Cabinet Tamper	TROUBLE	Flashing
WRONG CODE ALARM	Code Tamper at Keypad #	TROUBLE LED's 1-8	Flashing On Steady
CROW KEYPAD TAMPER SWITCH ACTIVATED	Keypad Tamper Alarm at Key- pad #	TROUBLE LED's 1-8	On Steady On Steady
LOW BATTERY	Controller Battery	BATTERY	Flashing
MAINS FAILURE	Mains (AC) fail	MAINS	Flashing
FUSE FAILURE (F2 or F3)	Controller on-board fuses	MAINS LED 1	Flashing On Steady
OUTPUT 1 or 2 FAIL	Wires to Output 1 or 2 have been cut	TROUBLE MAINS LED's 1 or 2	On Steady On Steady On Steady
LOW BATTERY-ZONE (Wireless Detector)	Radio Zone Zone 1-16	BATTERY LED's 1-16	Flashing On Steady
LOW BATTERY-PENDANT (Wireless User)	Radio Key User 21-100	BATTERY LINE CONTROL	Flashing Flashing On Steady
SENSORWATCH TIMEOUT	Zone 1-16	LED's 1-16 TROUBLE CONTROL	On Steady Flashing Flashing
SUPERVISED RADIO TIMEOUT	Zone 1-16	LED's 1-16 TROUBLE BYPASS	On Steady Flashing Flashing



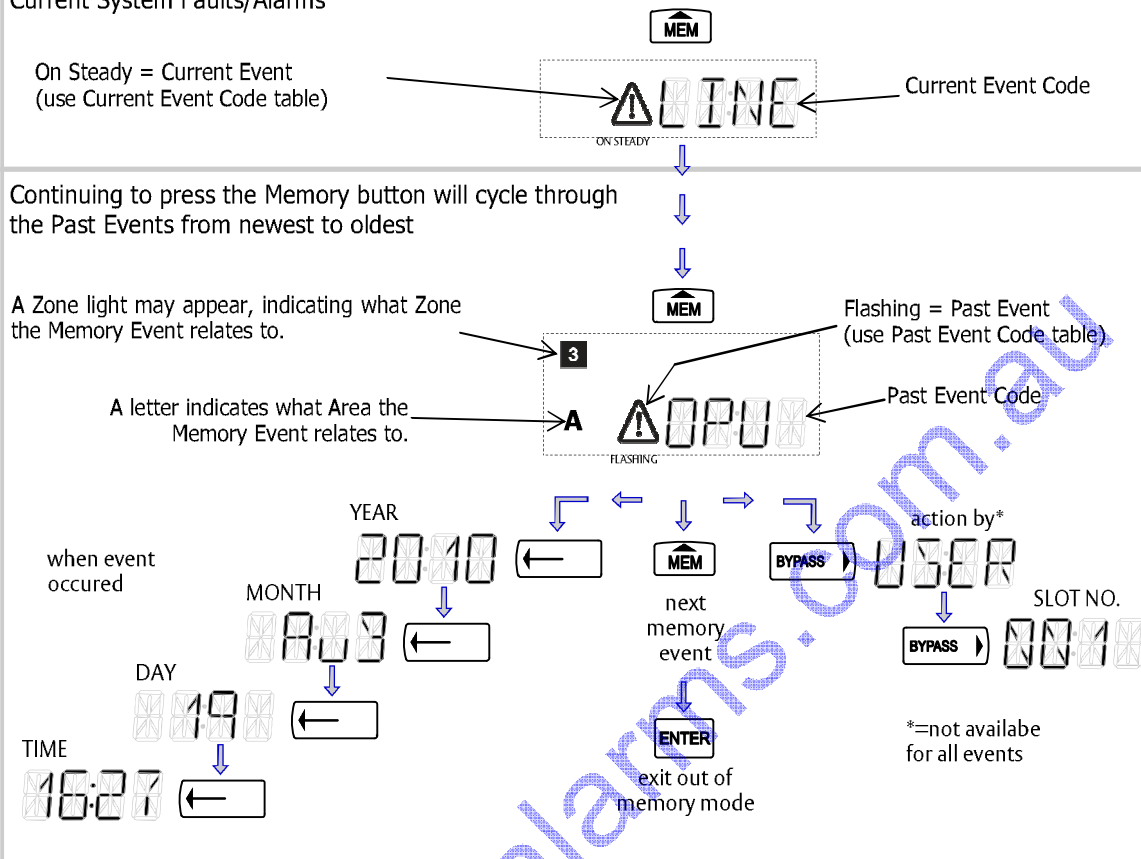
## LED KEYPAD HISTORICAL EVENT DISPLAY CHART-Continued


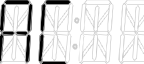
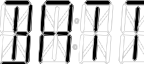
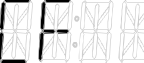



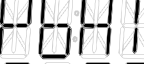




EVENT	DEVICE	INDICATOR	STATUS
RF FAILURE	No RF Activity	TROUBLE AUX (0)	Flashing Flashing
ARM DELINQUENCY ALARM	Areas A or B not armed within "X" days	TROUBLE CONTROL	Flashing Flashing
DURESS ALARM	Duress Alarm (at Keypad #)	TROUBLE LINE LED's 1-8	Flashing Flashing On Steady
KEYPAD PANIC	Panic Alarm at Keypad	LINE LED's 1-8	Flashing Flashing
PENDANT PANIC	Radio Panic Alarm	LINE LED's 9-16	Flashing On Steady
KEYPAD FIRE	Fire Alarm at Keypad	LINE CONTROL LED's 1-8	Flashing Flashing On Steady
KEYPAD MEDICAL	Medical Alarm at Keypad	LINE BYPASS LED's 1-8	Flashing Flashing On Steady
ARMED	Area "A" Armed	"A"	On Steady
ARMED	Area "B" Armed	"B"	On Steady
STAY MODE ON	Area "A" in Stay Mode	"A"	Flashing
STAY MODE ON	Area "B" in Stay Mode	"B"	Flashing
TELEPHONE LINE FAIL	Panel Dialler	LINE	On Steady
EXCESSIVE RE-TRIES	Panel Dialler	LINE LED 1	On Steady On Steady
FAILURE TO GET A KISSOFF	Panel Dialler	LINE LED 2	On Steady On Steady
WALKTEST MODE	Manual Walk-test Mode	MAINS BATTERY LINE LED's 1-16	On Steady On Steady On Steady On Steady

## MEMORY DISPLAY MODE CONT.

### 3. And the third is an Icon keypad.

Pressing the Memory button once will bring up any Current System Faults/Alarms



	= No Current System Faults
	= Mains fail ( <u>A</u> C Power Fail)
	= Battery Low ( <u>B</u> A <u>T</u> tery Low)
	= Dialler Kiss-Off Failure ( <u>C</u> all <u>F</u> ailure)
	= Keypad Missing ( <u>K</u> ey <u>P</u> ad <u>S</u> abotage <u>A</u> larm)
	= Line Fail (Telephone <u>L</u> I <u>N</u> E Fault)
	= 12V fuse or Output Failure ( <u>O</u> ut <u>P</u> ut or <u>F</u> u <u>S</u> e Failure)
	= Pendant Battery Low ( <u>P</u> endant <u>B</u> A <u>T</u> tery Low)
	= RF battery Low (Radio <u>Z</u> one <u>B</u> A <u>T</u> tery Low)
	= Delinquency Alarm (Area <u>D</u> E <u>L</u> in <u>Q</u> uency Alarm)
	= Supervised Detector Failure (Radio <u>Z</u> one <u>S</u> <u>U</u> Pervise Signal Failure)
	= SensorWatch Alarm ( <u>Z</u> one <u>S</u> ensor <u>W</u> atch Alarm)

## PROGRAMMING SUMMARY GUIDE

The program addresses available to the owner in Client Program Mode are listed below.

“P” represents the <PROGRAM> button  
and

“E” represents the <ENTER> button.

P1E 1-100E (User Codes 1-100)  
P18E 21-100E (learn radio user 21-100)  
P19E 21-100E (Delete radio user 21-100)  
P20E 0E (Find a radio user location)  
P21E 1-100E (learn access tag/card user 1-100)  
P22E 1-100E (Delete access tag/card user 1-100)  
P23E 0E (Find a radio user location)

P25E12E (Option “1” on hides the users codes from the Installer)

P26E1E HHMM (Real time clock hour and minutes)  
P26E2E 1-7E (Real time clock day, 1 = Sunday to 7 = Saturday)  
P26E3E DDMMYY (Real time clock Date/Month/Year)  
P26E4E (Daylight saving active. If “1” is On daylight saving is active)  
P27E1E 0-5E (Daylight saving start Sunday)  
P27E2E 0-5E (Daylight saving end Sunday)  
P28E1E 1-12E (Daylight saving start Month)  
P28E2E 1-12E (Daylight saving end Month)  
P29E1E 0-23E (Daylight saving start Hour)  
P29E2E 0-23E (Daylight saving end Hour)

P63E 1-2E####E (Area A (1) or B ( 2) DTMF arm/disarm code, 1-4 digits)

P164E 1-16E (learn radio detector 1-16)  
P165E 1-16E (Delete radio detector 1-16)  
P166E 0E (Find a radio detector location)

P170E 1-8E DDMMYY (Program holiday 1-8, Date/Month/Year)

P175E12E ####E (DTMF output control code)  
P175E13E ####E (DTMF microphone code)  
P175E14E ####E (DTMF voice/domestic acknowledge code)  
P175E15E ####E (DTMF force test call code)

P200E 6E (Start walk-test mode)

P E (Leave Client Program Mode)

## OWNERS DETAILS

NAME: .....

ADDRESS: .....

.....

.....

TELEPHONE NUMBER: .....

INSTALLERS NAME: .....

INSTALLERS CONTACT PH #: .....

ACCESS CODES USER NAMES:

Code 1.....Code 2.....Code 3.....

Code 4.....Code 5.....Code 6.....

Code 7.....Code 8.....Code 9.....

Code 10.....Code 11.....Code 12.....

Code 13.....Code 14.....Code 15.....

Code 16.....Code 17.....Code 18.....

Code 19.....Code 20.....Code 21.....

Code 22.....Code 23.....Code 24.....

Code 25.....Code 26.....Code 27.....

Code 28.....Code 29.....Code 30.....

Code 31.....Code 32.....Code 33.....

Code 34.....Code 35.....Code 36.....

Code 37.....Code 38.....Code 39.....

Code 40.....Code 41.....Code 42.....

Code 43.....Code 44.....Code 45.....

Code 46.....Code 47.....Code 48.....

Code 49.....Code 50.....Code 51.....

Code 52.....Code 53.....Code 54.....

Code 55.....Code 56.....Code 57.....

Code 58.....Code 59.....Code 60.....

Code 61.....Code 62.....Code 63.....

Code 64.....Code 65.....Code 66.....  
Code 67.....Code 68.....Code 69.....  
Code 70.....Code 71.....Code 72.....  
Code 73.....Code 74.....Code 75.....  
Code 76.....Code 77.....Code 78.....  
Code 79.....Code 80.....Code 81.....  
Code 82.....Code 83.....Code 84.....  
Code 85.....Code 86.....Code 87.....  
Code 88.....Code 89.....Code 90.....  
Code 91.....Code 92.....Code 93.....  
Code 94.....Code 95.....Code 96.....  
Code 97.....Code 98.....Code 99.....  
Code 100.....

**PANEL TELEPHONE NUMBERS:**

PH # 1.....PH # 2.....  
PH # 3.....PH # 4.....  
PH # 5.....PH # 6.....  
PH # 7.....PH # 8.....

**ZONE DESCRIPTIONS:**

Zone # 1.....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.....

## Warranty

Security Merchants Pty Ltd. ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for a period of five years.

Except as specifically stated herein, all express or implied warranties whatsoever, statutory or otherwise, including without limitation, any implied warranty of merchantability and fitness for a particular purpose, are expressly excluded. Because Seller does not install or connect the products and because the products may be used in conjunction with products not manufactured by Seller, Seller cannot guarantee the performance of the security system and shall not be responsible for circumstances resulting from the product's inability to operate.

Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any product not meeting the specifications. Returns must include proof of purchase and be within the warranty period. In no event shall the Seller be liable to the buyer or any other person for any loss or damages whether direct or indirect or consequential or incidental, including without limitation, any damages for lost profits, stolen goods, or claims by any other party, caused by defective goods or otherwise arising from the improper, incorrect or otherwise faulty installation or use of the merchandise sold.

Notwithstanding the preceding paragraph, the Seller's maximum liability will be strictly limited to the purchase price of the defective product. Your use of this product signifies your acceptance of this warranty.

## TELECOM NOTIFICATIONS

1. The grant of an AUSTEL Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.
2. This equipment shall not be set to make automatic calls to the 000 Emergency Service.
3. This equipment is set up to carry out test calls at pre-determined times. Such test calls will 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.
4. 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.
5. In the event of any problem with this device, the device should be disconnected (remove telecom lead from wall socket). The user is to then arrange with the supplier of the device to make the necessary repairs.
6. Should the matter be reported to the carrier as a wiring fault, and the fault be proven to be due to this product, a call-out charge will be incurred.
7. This equipment should not be used under any circumstances which may constitute a nuisance to other telecommunications customers.

## INSTALLER NOTES

Panel Software Version:.....

Panel Location:.....

Keypads - Location                      Type (LED / LCD / PROX):

KP 1:.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KP 2:.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KP 3:.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KP 4:.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KP 5:.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KP 6:.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KP 7:.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KP 8:.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Radio Board Fitted:    YES/NO

Voice Board Fitted:        YES/NO

MIC Board Fitted:        YES/NO

*Please contact your alarm installer if you require further information.*