SIEMENS

Wireless and hardwired intrusion control panel

IC60 - Sintony 60

Installer Manual

Building Technologies

Fire Safety & Security Products

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- **ACCESS CODE to the user mode -default User pin: P147258E**
- **ACCESS CODE to the installer mode - default Installer pin: P258369E**

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About this document
This **Configuration Manual** contains instructions for installation, setup and configuration of IC60 I-C devices.
For information on operation please refer to the **User Manual**.

Safety
Target readers
The instructions in this document are designed **only** for the following target readers:

Target readers	Qualification	Activity	Condition of the equipment
Operational startup personnel	Has appropriate technical training with regard to the tasks and the products, devices or systems to be put in service.	Puts the device or system which is readily assembled and installed on site into service.	New, readily assembled and installed device or modified device.

Work safety information
- Read the general safety instructions before operating the device.
- Follow all warnings and instructions marked on the device.
- Keep this document for reference.
- Always pass this document on together with the device.

1 System overview

1.1 Sintony 60M modular

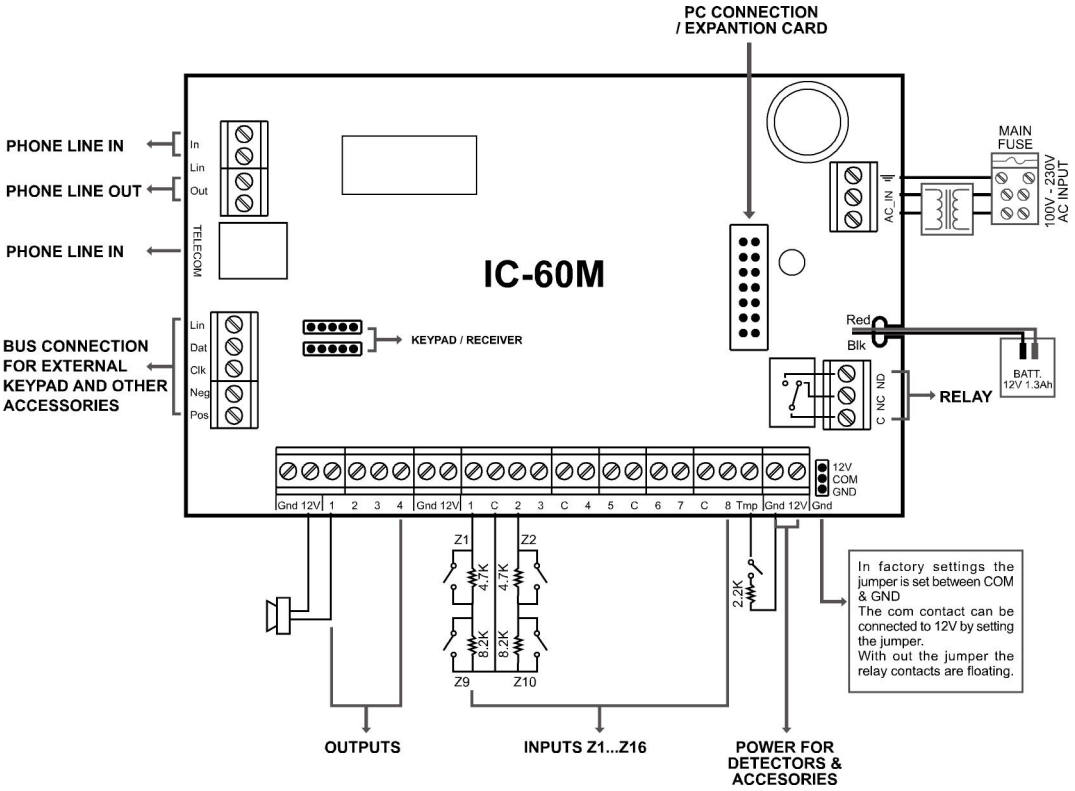


Fig. 1 Connection Diagram

The wiring option shown here with a common Tamper input (Tamp/Gnd) is not allowed in all countries, if the installation has to be done according to legal requirements (e.g. Belgium/INCERT).To integrate the Tamper contact directly into each zone input, see also chapter Zone wiring examples.

Battery Specifications for Model IC-60 M

- Sealed Lead-Acid Rechargeable Battery 12V/1.3Ah up to 12V /7Ah
- Battery Cutoff Level (When AC mains fails): 10.3V ±0.1 V DC.
- Full charge after 48 hours.
- The current limit over charge is 600mA.

Battery Connections

Connect a sealed lead acid rechargeable 12VDC battery to the terminals labeled red and black on the control panel being careful to observe the correct polarity. The maximum recommended battery capacity is 7 amp hours. Battery charge current at these terminals is limited to 600mA maximum. The battery connection is protected against short circuits by a thermal fuse (F1). The panel performs a dynamic load test on the battery every 15 seconds and if it fails the test at any time it will flash the Battery LED.

General Specifications:

- The range of the "12V Out" which is used for feeding sensors is between 10.2 to 14V DC (working on mains or standby battery) .Ripple is up to 0.1V p.p.
- Each Voltage out 12V protected by reset able fuse of 500mA.
- The max total current allowed to draw during Alarm is 1A.
- Self current consumption (IC60M+IKP6) from battery is: 100mA.
- Operating Temperature: 0-50º C
- Max. current consumption from the mains less than 150mA.
- The Panel is equipped with a type A power supply according EN 50131-6

Note:
To meet the EN50131 and the T014(Belgium) to withstand battery life not less of 12 hours please note that the maximum current for accessories in standby mode should be less then 300mA

AC Connections:

Connect the mains wires Phase (~) and Neutral (N) to the Mains Terminal inside the IC60M housing and secure the cable with the provided cable clamp

The AC Input is protected by fuse:
Fuse (TD-Time Delay) T100mA / 250V, 5x20mm Glass.
AC level 100-240 V 50-60 Hz.

Notifications:

- Alarm transmission classification ATS 2
- According EN 50131-1 notification option A applies. This means that an external warning device needs to be connected.
- This panel is designed in accordance with:
  EN 50131-1
  TS 50131-3
  EN 50130-4
  EN 50130-5
  EN 50131-6
  EN 50131-5-3
  EN 50136-1-1
  EN 50136-2-1

The panel is certified by telefication

1.2 Sintony 60 compact

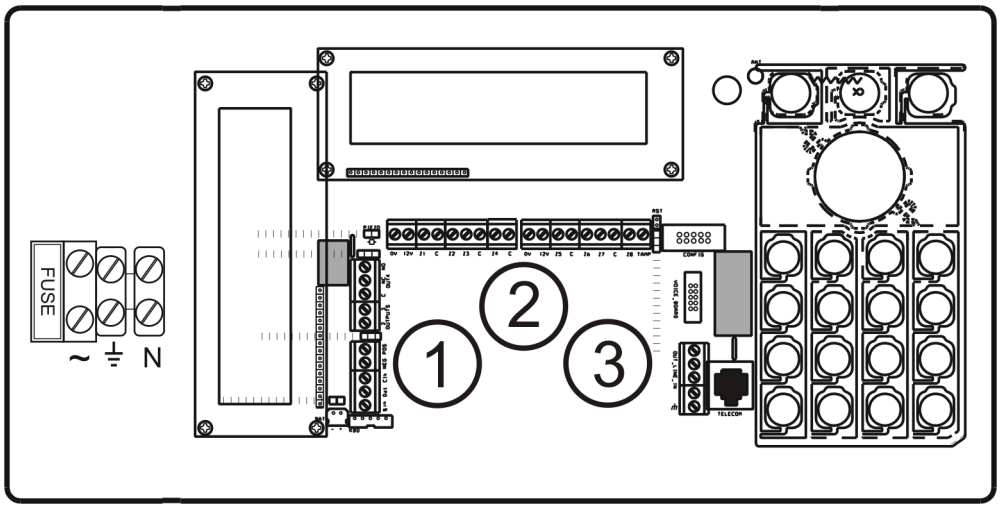


Fig. 2 Connection Diagram IC60 compact overview

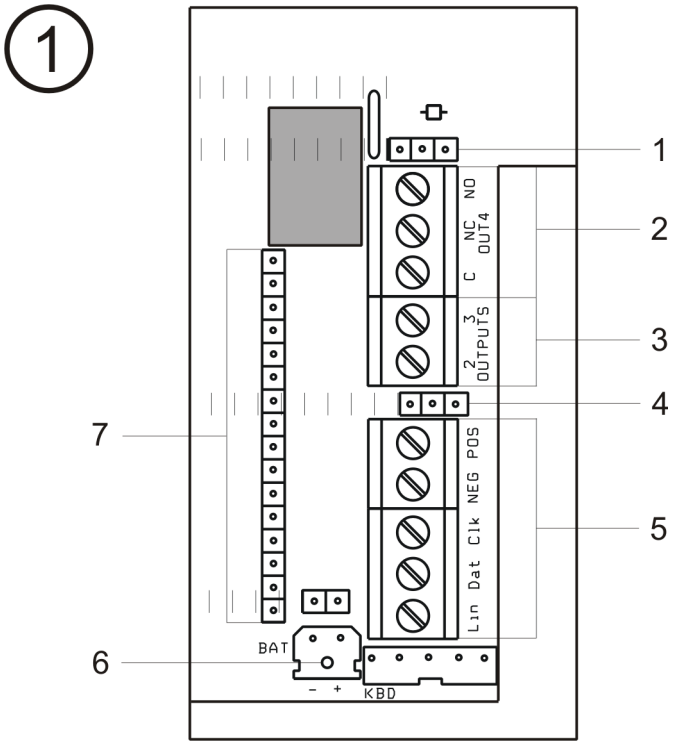


Fig. 3 Connection Diagram IC60 compact 1

1	In factory settings the jumper is set between COM & GND. The com contact can be connected to 12V by setting the jumper. Whit out the jumper the relay contacts are floating.
2	Out 4 Relay
3	Outputs Open Collector
4	Outputs Keypad Selector: Horizontal □■■ Vertical ■■□
5	Bus connection for external Keypads and other accessories.
6	Battery IN
7	LCD pin header for Vertical configuration.

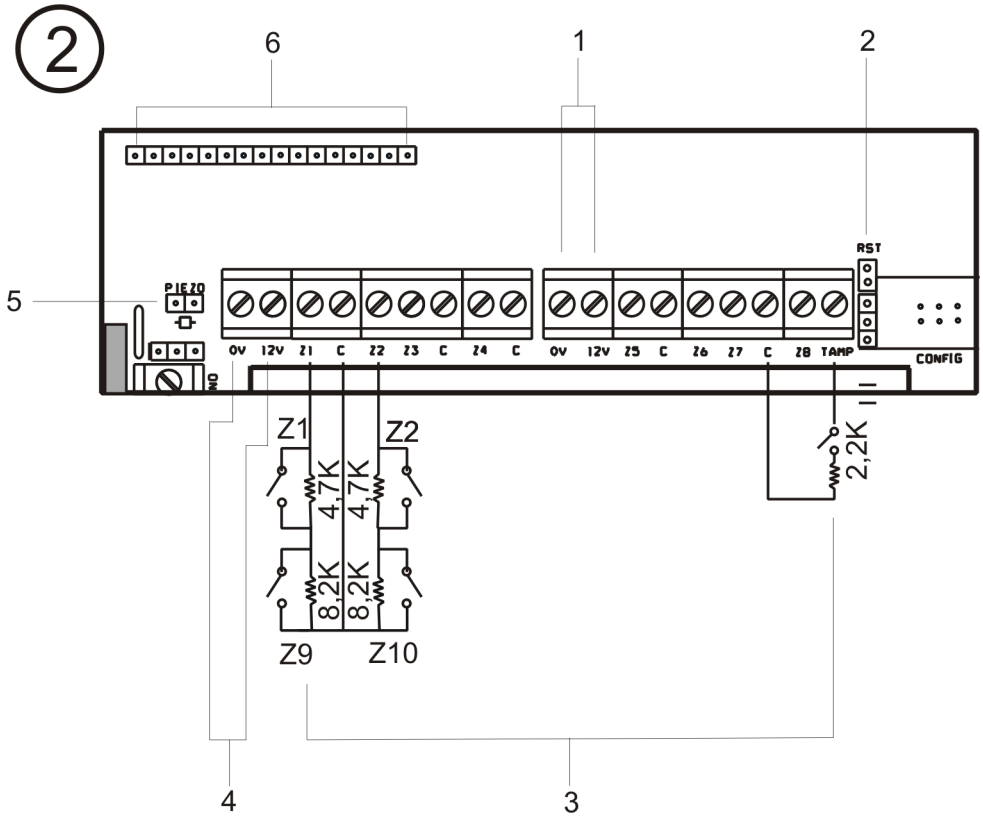


Fig. 4 Connection Diagram IC60 compact 2

1	Power for detectors & accessories
2	Jumper for bypass Tamper in Line □ ■ ■ Bypassed ■ ■ □ Not Bypassed- requires Resistor EOL
3	INPUTS Z1…Z16
4	Power for detectors & accessories
5	Connector for internal siren (could be disconnected during installation)
6	LCD pin header for Horizontal configuration

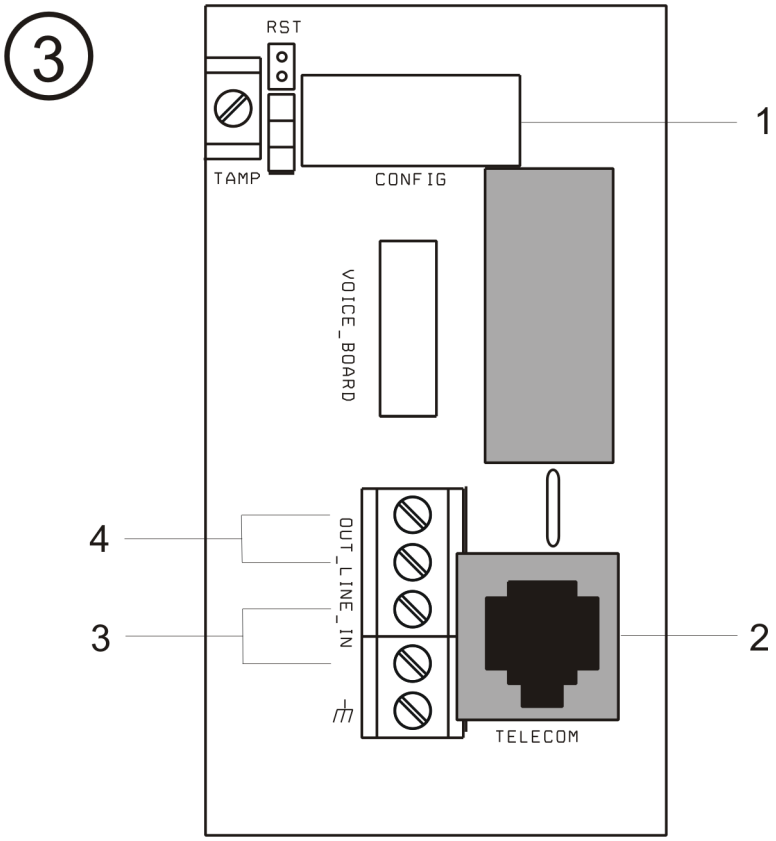


Fig. 5 Connection Diagram IC60 compact 3

1	Programming Port
2	RJ11 Linie-IN
3	Phone Linie IN
4	Phone Line Out

Battery Specifications for Sintony 60 compact

- Ni-MH Rechargeable Battery 12V/1.8Ah.
- Battery Cutoff Level: (When AC mains fail): 10.5±0.1V.
- Full charge after 48 hours.
- The current limit over charge is 260mA.

Battery Connections

Place the Battery in its location, and secure it with the rubber band (see drawing). Connect the Battery plug into its connector (Refer to Fig, 3 Connection Diagram IC60 compact 1)

General Specifications:

- The range of the "12V Out" which is used for feeding sensors is between 10.2 to 14.3V DC (working on mains or standby battery) .Ripple up to 0.1V p.p.
- Each Voltage out 12V protected by reset able fuse of 500mA.
- The max total current allowed to draw during Alarm is 0.8A.
- Self current consumption from battery is : 60mA
- Operating Temperature: 0-50º C
- Max. current consumption from the mains less than 150mA.
- The Panel is equipped with a type A power supply according EN 50131-6
- AC mains input 230V, 50 Hz ± 10%

Note:
To meet the EN50131 and the T014(Belgium) to withstand battery life not less of 12 hours please note that the maximum current for accessories in standby mode should be less then 65mA.

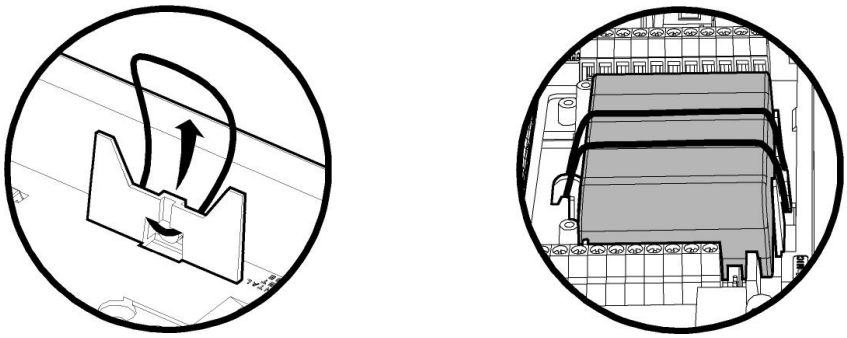


Fig. 6 Placing the rubber band and fixing the Battery

Sintony 60 compact AC Connection

The electronic board is fit into the housing and it's equipped with AC/DC adapter. In countries or installations where the internal build in adapter should not be used, the panel could be fed from an external adaptor 100-240V AC /14.4V DC, 1A. (Special wiring required ask your local country agent).

The Mains' input cable has to be secured with a special cable clamp as per the following drawing:

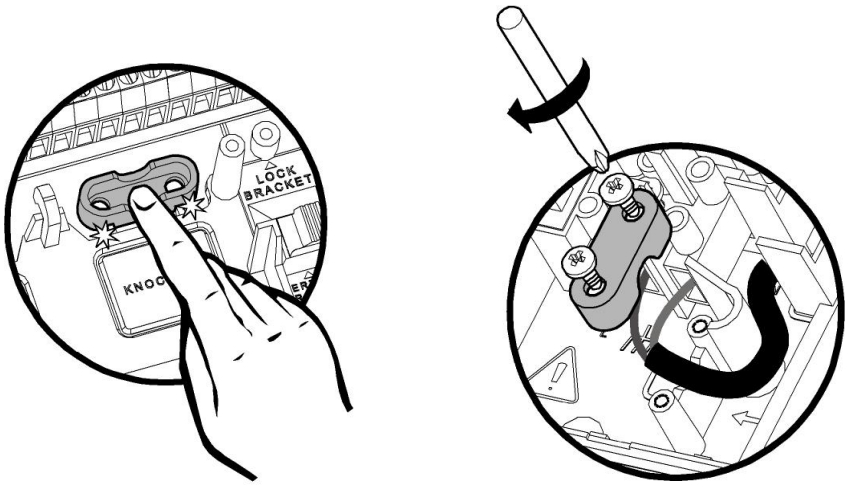


Fig. 7 AC cable fixing Sintony 60 compact

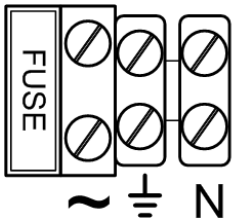


Fig. 8 AC connection port Sintony 60 compact

Notifications:

- This panel is designed in accordance with:
  EN 50131-1
  TS 50131-3
  EN 50130-4
  EN 50130-5
  EN 50131-6
  EN 50131-5-3
  EN 50136-1-1
  EN 50136-2-1

The panel is certified by telefication

1.3 Zone connections

To install hardwired detectors to the Control Panel see the following wiring options. If you want to connect wireless radio detectors to the Control Panel, now wiring is needed. (refer to the programming description- Learn-find and delete radio zone codes -option P164E)

1.3.1 Zone input configurations hardwired

The Sintony 60 has nine separate programmable monitored analogue inputs:
8 x Programmable, multi-state detection inputs
1 x Programmable tamper input (with optional Key-switch functions)
To differentiate between various signals (Alarm, Tamper, Detector address) over the same cable, the Sintony 60 is equipped with a resistance measurement on each input. To monitor the cabling and the installed peripherals continuously (also against sabotage during the control panel is not armed) each Input should contain at least one of the described Resistor, so called EOL – end of line values.
The following different Resistors, which are delivered with the control panel, are used as a standard.

Zone address EOL- end of line Resistors
This resistor value should be built in the detector to monitor the Zone input of this particular detector.
Zones 1-8 (which are also called low zones)
4k7Ω (Yellow, Violet, Red) for Detectors in the zone 1-8

Zones 9-16 (which are also called high zones) are realized with zone doubling, means the Terminal block 1-8 are used but with different resistor value.
8k2Ω (Grey, Red, Red) for Detectors in the zone 9-16 (high zone)

Tamper address EOL- end of line Resistors
This resistor value is used to monitor if somebody tries to manipulate the installations (opening housings, cutting cables etc.). It should be installed in the detector.
2k2Ω (Red, Red, Red) for Tamper

To overtake existing installation with already build in different resistor values, the Sintony 60 could also be programmed to different values (see function P125E, End of line Options)

NOTE: If an Input is programmed as a wireless input, the system will ignore all hardwired connection to this input and look only for the radio signal! (Programming function “zone A option” P122E-option 5

1.3.2 Zone wiring examples

The connection of each device depends on the type of switch which is used in the detectors. We differentiate between:
N/C normally closed, requires serial connection
N/O normally open, requires parallel connection

Option 1: Only one EOL- end of line resistor

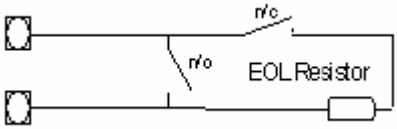


Fig. 9 Type 1-11 - Single EOL no Tamper
The Zone input must be programmed as single resistor value- (Refer to chapter Zone EOL, P125E options 1-11). The tamper contact should be monitored separately with the same connection schema (tamper input)

Option 2: Installation with 1-8 Zones with Tamper monitoring

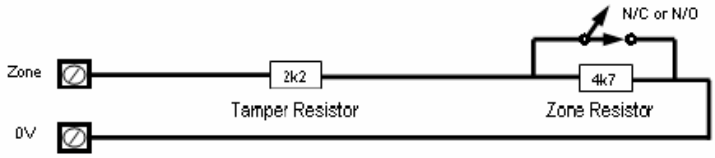


Fig. 10 Type 12 Single Zone with Tamper
The Zone input must be programmed as Zone with tamper- (Refer to chapter Zone EOL, P125E option12).

Option 3: Installation with 1-16 Zones (zone doubling) with Tamper monitoring

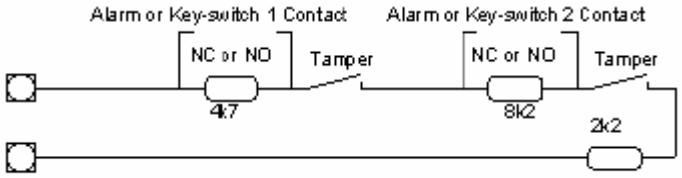


Fig. 11 Type 14 Zone doubling with tamper
The Zone input must be programmed as zone doubling with tamper- (Refer to chapter Zone EOL, P125E option 14). When zone doubling is used (1-16 zones) the system counts automatically the Zone numbers from 9-16. This means Terminal block Z1 and C on the control panel are inputs for Zone 1 and Zone 9. Z2=Z10, Z3= Z11 etc.

Option 4: Installation with 1-16 Zones (zone doubling) without Tamper monitoring

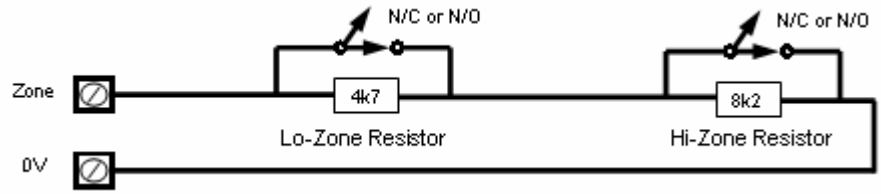


Fig. 12 Type 15 zone doubling without tamper

The Zone input must be programmed as Zone with tamper- (Refer to chapter Zone EOL, P125E option 15). When zone doubling is used (1-16 zones) the system counts automatically the Zone numbers from 9-16. This means Terminal block Z1 and C on the control panel are inputs for Zone 1 and Zone 9.
Z2=Z10, Z3= Z11 etc.

Example of wiring a PIR Detector (N/C) for Alarm & Tamper Monitoring

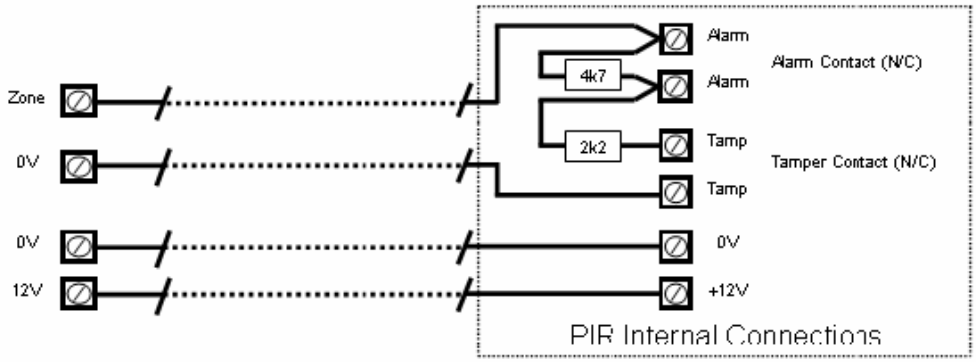


Fig. 13 Wiring a PIR Detector for Alarm and Tamper Monitoring

1.4 Inputs hardwired

Earth Connection

For the Sintony 60 compact connection, the Earth lead of the mains supply has to be connected. In case of the IC60 modular, if using metal box, the mains earth has to be connected to the appropriate terminal on the mains terminal block in the control box cabinet. Also connect a lead from this earth point to the terminal marked with the Earth symbol (next to AC terminals) on the panel PCB.

Line In

These terminals are used to connect the panel to the incoming telephone line. The dialer uses this line for reporting alarm events.

Line Out

These terminals are used to connect telephones and other communication equipment to the incoming phone line via the panel dialer circuit. The telephone line is passed through the controller to ensure that the line is available to the controller when it is required.

Tamper/ Input for Key switch function
A 24 hr tamper circuit is available for monitoring system tampers. This Tamper circuit is programmable as either normally closed loop or 2k2 EOL supervision (the default is usually a closed loop). Any Tamper alarms on this input are mapped to alarm outputs in the same manner as for detection zones 1-16. Using Dual-End-of-Line resistors (Refer to wiring options) the Tamper input can also provide two key-switches. The Low key-switch (4k7 resistor) will be Key-switch 1 while the High key-switch (8k2 resistor) will be Key-switch 2. In addition to the Zone & Tamper inputs.
Outputs hardwired

12 Volt Outputs
There are three 12VDC outputs on the panel PCB. These 12 volt outputs are regulated and Thermal fuse protected against short circuits. The accessory outputs are marked 12V and 0V, while the keypad buss 12V supply is labeled “POS” & “NEG”. The 12V outputs are supplied by thermal fuses. The recommended maximum total load that should be drawn from all of the 12V outputs during an alarm is 800mA.

Outputs 1 & 2
Fully programmable, high current, open drain (high-going-low) type FET outputs capable of switching up to 1A @ 12VDC. These 2 outputs are normally set as switched outputs, providing power for 12V sirens. If required, these outputs can be programmed to be siren outputs designed to drive an 8 ohm 10 watt horn speaker on each output (Refer to P37E option 1). Also if a horn speaker is connected to Output #1 you may select (Refer to P175E 7E program address) as the listen-dialing feature, to listen to the dialing sequence which than could be heard at the speaker.
In IC-60 compact unit the output 1 is assigned to operate the build in internal siren.

Output 3
This is a low current, open drain (high-going-low) type FET outputs capable of switching up to 500mA. Like Outputs 1 & 2 it is fully programmable.

Connecting devices which draw current in excess of 500mA to output 3/can damage the output.

Output 4-Relay Out
Output 4 is a relay output with single pole changeover contacts. If required, the Common (C) contact of the relay is connected by default to GND via JUMPER, the jumper can be selected to 12V or removed.

1.5 System Bus connection-Keypad Port

The terminals marked POS, NE.G., CLOCK, & DATA make up the communications port which the keypads and other intelligent Bus devices use to communicate with the Sintony 60. The terminals are connected to corresponding terminals on the remote devices. The "LIN" terminal is only used by the keypads and utilizes a fifth wire to provide a communicator “listen-dialing” facility (a dialing ton could be heard through the buzzer). This feature is particularly useful when servicing monitoring faults. The 12V power supply (POS,NEG) of the bus is protected by a separate thermal fuse.

1.6 Programming Port

With the separate available programming cable IAQ6-1 and the programming Software “Sylcom 60” IAS6-1 the Sintony 60 could be connected via this port directly to a PC. All system parameters or settings could be easily changed with this program. Furthermore this port could also be used to connect the Memory stick IMM6-10 to up or download the default setting of an Alarm system. This speeds up the process of programming, especially if similar settings have to be used with different Installations.

Note: If the control panel is connected to the telephone line, the same Software could be used to program/ monitor the Control panel trough the telephone line remotely, if the PC is equipped with a telephone modem.

1.7 Extension modules for Sintony 60 control panel

Various extension units could be connected to the Sintony 60 to expand the functionality.

1.7.1 Output module 12V/1A IRO6-04 (Output 5-8)

With this extension PCB the Sintony 60 could be extended with additional 4 Relays to a maximum of 8 Outputs. Each relay could switch a max. power of 12V/1A.
The connection to the Sintony 60 control panel is realized over the system bus. Therefore it is an intelligent member of the Bus and could be programmed over the control panel. It could be installed either directly in the control panel (Sintony 60M- modular only) or external. The terminals are connected to corresponding terminals on the remote devices marked POS, NEG, CLOCK, & DATA

1.7.2 Zone expander module IZE6-04

This Module makes zone doubling and EOL end of line resistor connections very easy. It contains all necessary resistors to expand the control panel and offers clearly marked terminal blocks for 2 line in and 4 lines out. This module can be used instead of the in the delivering included separate resistors and to save installation costs if placed outside the control unit. (less cabling needed) Maximum 4 expander modules could be used per control panel.

1.7.3 Radio receiver IRFW6

The IC60 panel can have wireless capability via the IRFW6 receiver module (Sintony 60 modular optional, Sintony 60 compact already build in).
The receiver will add wireless capability to your system in the form of wireless Alarm sensors and wireless Remote controls. The IRFW6 connects to the system bus port as the keypads and the other intelligent bus participants of the system. The IRFW6 is available in 2 frequencies, 868MHz and 915MHz. Up to 2 IRFW6 can be connected to the panel to increase the coverage range if desired. The red LED fitted to the IRFW6 receiver will flash at 1 second intervals when in "Learn" mode (see P18E & P164E). The LED will also turn on when it is receiving an actual radio transmission (on steady). It could be installed either directly in the control panel (Sintony 60M- modular only) or external. The terminals are connected to corresponding terminals on the remote devices marked POS, NEG, CLOCK, & DATA. In the Sintony 60 compact is the radio receiver normally already integrated (could vary in different countries), but a second receiver IRFW6 can also be connected externally trough the bus to increase the coverage range if desired.

2 Contact less Card reader IAR6-30 for Keypad bus connection

The IAR6-30 contact less reader is used as a proximity access card reader with a full numeric keypad for additional Pin functionality and standard tags or cards which operates in the 125kHz band. Its functionality is identical to a keypad and therefore it is programmed into the system as a standard keypad.
In total maximum 8 keypads/card readers can be connected to a Sintony 60 control panel (Sintony 60 compact has one build in already- e.g. 7 more).
Each reader must have a unique keypad address number from 1-8 assigned so that the various program options can be assigned (refer to option learn card reader P99E).

The proximity readers flash out the assigned keypad address number on the LED whenever the panel is in “Installer Program” Mode. This allows quick identification of the assigned address for each reader.

2.1 Additional arming functions

Depending on program options the Reader IAR6-30 could also be used as an arming/disarming device. If a user code or tag is presented to the reader it could directly Arm/Disarm the alarm system. The reader can be set-up to operate on:

- a proximity tag or card only
- on entering of a valid user code only
- on presentation of the tag/card followed by the user code (PIN).

If the presented tag requires a PIN number to be entered, the LED on the reader will flash for 5 seconds after a valid tag to indicate that the PIN number should now be entered.

2.2 Panic functions

If the two button “PANIC”, “FIRE” or “MEDICAL” functions are programmed to the keypad/reader (see P72E Options 5,6 & 7) these manual alarms can be generated at the reader by pressing “1” & “2” for “PANIC”, “3” & “4” for “FIRE” and “5” & “6” for “MEDICAL” alarms.

2.3 Zone input for door monitoring

There is an optional input to monitor an exterior gate to show if it is currently opened or closed. This input is not EOL monitored and should only be used for non-critical monitoring functions. A zone can be programmed to use this input for its trigger (see P122E Option 4) so that the state of the input can be displayed on a keypad. This allows saving cabling, because the zone is connected directly to the card reader/ bus and does not request separate zone cabling
The inputs are linked to the selected keypad address programmed into the reader. For example if the reader being used was programmed as keypad # 1, then the input can be assigned to zone 1 or 9 (at location P122E), if the keypad address was # 2, the input can then be assigned to zone 2 or 15, etc.

2.4 Output for electrical door lock control

There is also an output available on this reader that follows the same addressing functionality as described in the zone input function. It can be used to activate an electric lock as shown in the connection drawing. This helps to save cabling.

The reader output can only control the electrical lock! The Sintony 60 is not able to supply power for an external lock. An additional external power supply is recommended depending on the type of door lock which is used.

2.5 Indication of status/address trough LED's

If requested the LED on the reader can be linked to an output so that special functions may be displayed at the reader if desired (e.g. system armed, see P98E).

2.6 Proximity Readers Connections

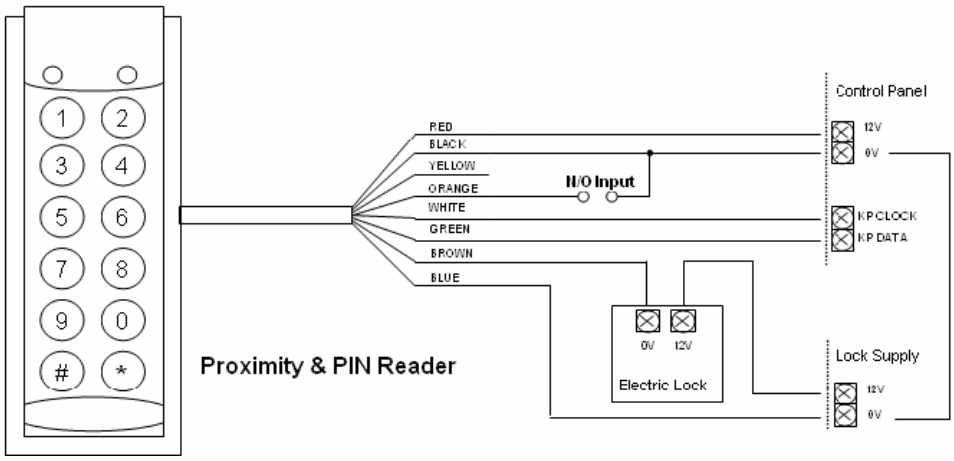


Fig. 14 Connection for Proximity and PIN Reader

3 LCD Keypad

To operate the Control Panel Sintony 60 you need a Keypad which allows you to program and manipulate the systems and show all information on a big LCD Display in clear text. This Keypad is already included in the Sintony 60 compact version, where it works in the Sintony 60 modular as a separate stand alone unit with Bus connections.

3.1 Technical data

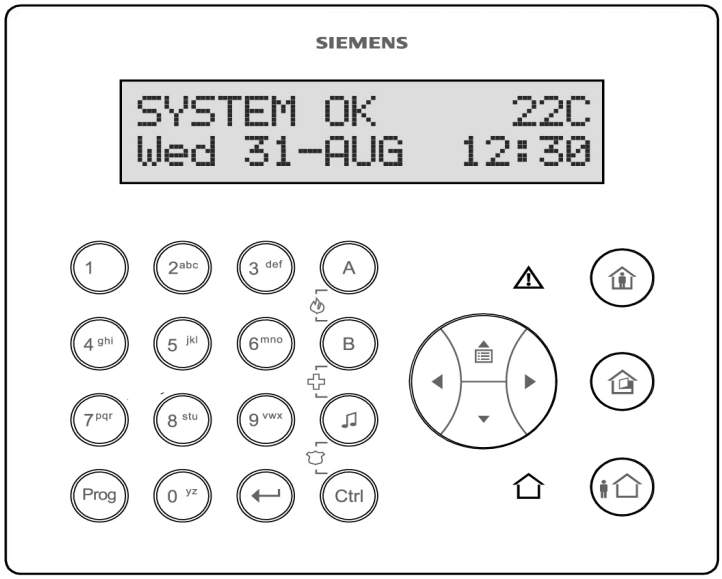


Fig. 15 LCD Keypad

Current consumption of the LCD Keypad type IKP6
Normal state: it depend on the volume of the Backlight LED/ Display
Min.: 35mA, Typical: 60mA, Max.:90mA
Battery state: While the AC fail the software (default setting) turn off the backlight LED's and Display so in this mode the current consumption is 35mA.
Maximum 8 Keypads/Card readers can be connected to one Control Panel Sintony 60.

3.2 Installing and addressing a LCD Keypad to the system

For detailed installation instructions please refer to the installation leaflet which is delivered with the LCD Keypad.

3.2.1 LCD Keypad Installation

Bus connection
The connection to the Sintony 60 control panel is realized over the system bus. It is an intelligent member of the Bus with a unique Bus address (refer to Keypad Set up). It could be installed external to the Sintony 60 Control Panel (modular and compact version). The terminals are connected with a 4 wirer cable to the corresponding terminals on the Control Panel marked POS, NEG, CLOCK, & DATA.

The 5th bus wire- "Listen dialing" function
The 5th wire is an optional "Listen-dialing" connection. It is connected from the "LIN" terminal of the keypad to the "Lin" terminal of the panel keypad port. With the Listen-in wire connected the user is able to hear the call progress during dialing at the keypad (only if the program options at address P175E 6E are turned on).

Maximum cable length
The maximum recommended cable using standard 0.2mm security cable is 50m. Cable runs exceeding this distance may require 0.5mm cable. Always use good quality cable. Some installations may require CAT5 data cable to ensure data integrity in noisy sites.

Keypad Tamper Switch
The LCD keypad has a tamper switch at the back side. Make sure that when the Keypad is installed the Tamper contact is closed by the pressure of the wall. If the switch needs some adjustment, the tamper contact could be fitted with an additional distance screw to ensure proper contact to the wall and therefore a good protection of the housing against manipulation.

Activation- programming - addressing
A LCD Keypad has to be learned to the system. To start after installations with the first steps please refer to the chapter Programming a Keypad to the system – addressing. This contains:

- Change language
- Address the keypad to the system bus
- Copy text files into the new Keypad

3.3 Programming a LCD Keypad- Local program Mode

The Keypad can be programmed locally via the Keypad buttons or by a PC with the separate available programming cable IAQ6-1 and the programming Software "Sylcom 60" IAS6-1 trough the programming interface port on the back side of the Keypad. (It could also be programmed remotely trough the programming port of the control panel unit if connected to the bus).
In the local program Mode object related names like Zones, Users, Outputs etc. can be programmed. System settings have to be programmed in the "Installer program mode" (refer to chapter Accessing Installer program Mode).

3.3.1 Accessing Local program Mode

- To enter Local program Mode on a LCD Keypad Press “CTRL” followed by “ARM”
- Hold for 2 seconds.
  The display will now show “Local Mode kb #” where the # equals the keypad address.

You must press the “Control” button first and the “Arm” button must be pressed within 2 seconds of pressing the Control button. If you make a mistake press the “Enter” button then repeat the process.

There are two ways to program the keypad in “Local program Mode”.

- You can use the menu function to navigate through all of the program options.
- You can enter in the program location directly from the list below.

The menus are described on the following pages.

3.3.2 Local Program mode Menu tree

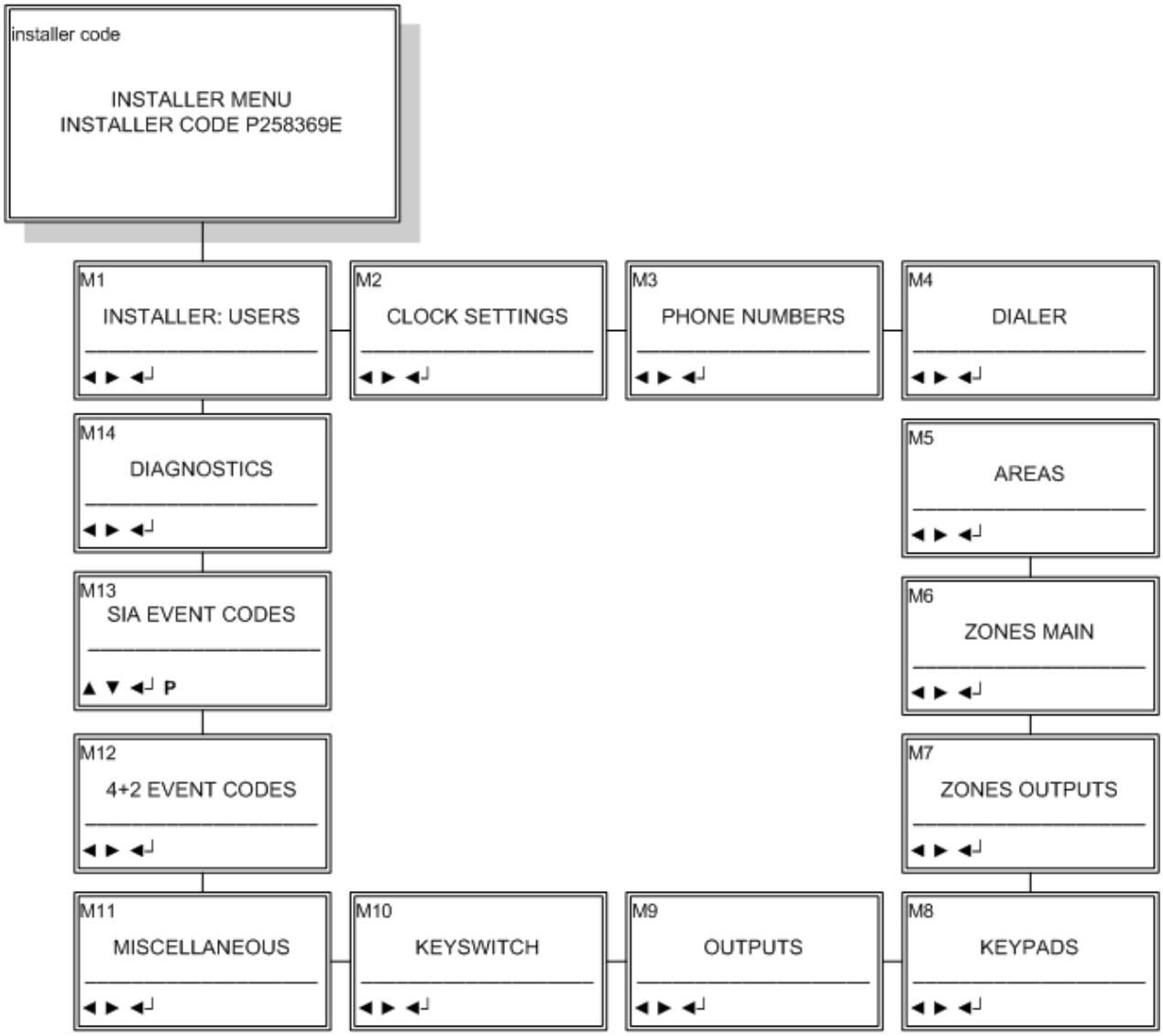


Fig. 16 LCD - Local Edit - Menu Headings

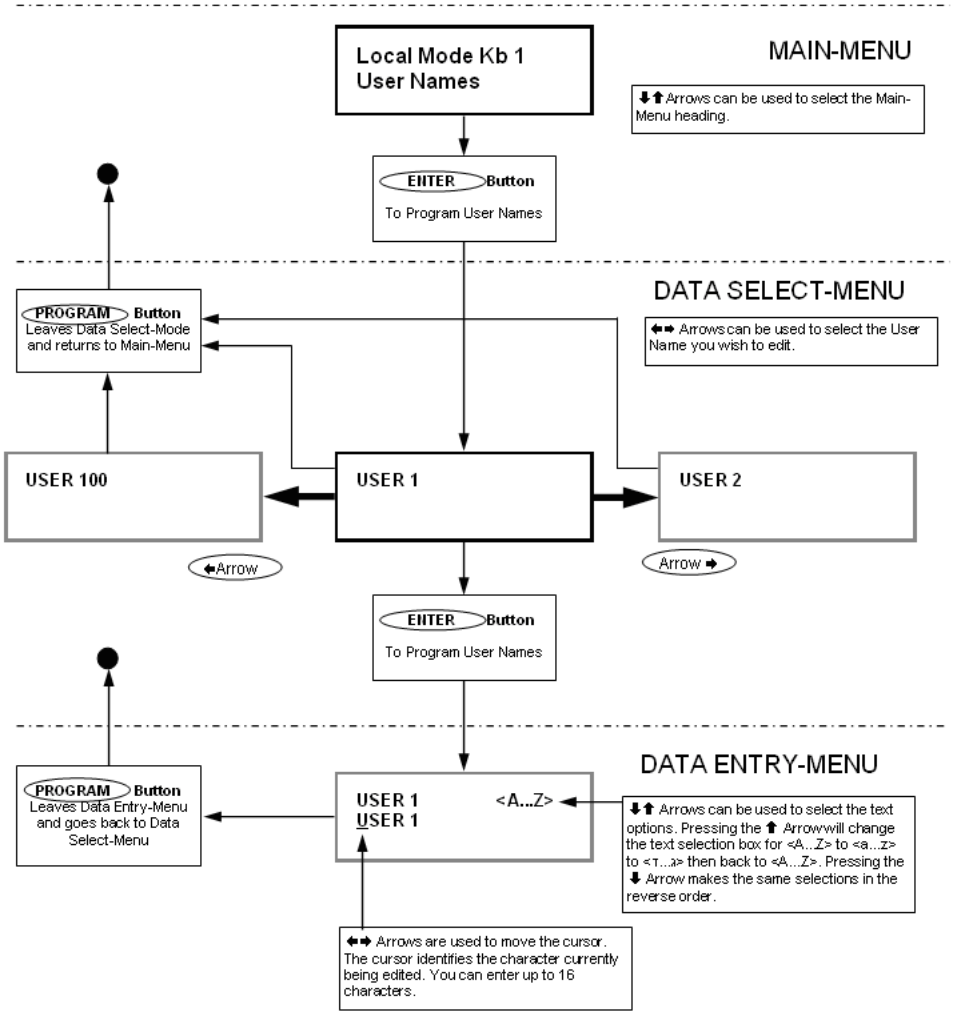


Fig. 17 Menu Tree

When you are at the desired main menu heading, press <ENTER> to access the data program location.

3.3.3 Local program Mode Direct Program Addresses

To access directly to the address via the Keypad buttons, without scrolling trough all the menu points you can use a shortcut by adding they following addresses directly.

Sequence	Action
[PROG]-[1]-[ENTER] to;	ZONE#1 TEXT (maximum 16 characters)
[PROG]-[16]-[ENTER]	ZONE#16 TEXT
[PROG]-[800]-[ENTER]	UPDATE EDITABLE TEXT TO ALL LCD KEYPADS
[PROG]-[801]-[ENTER]	RETURN ALL EDITABLE TEXT TO DEFAULT
[PROG]-[995]-[ENTER]	PANEL TYPE
[PROG]-[996]-[ENTER]	SET KEYPAD ADDRESS NUMBER FROM 1-8
[PROG]-[997]-[ENTER]	KEYPAD LANGUAGE
[PROG]-[998]-[ENTER]	AREA IDENTIFYING CHARACTER (assigning numbers or letters to Areas)
[PROG]-[999]-[ENTER]	PANEL NAME DISPLAY (maximum 16 characters)
PROG]-[1001]-[ENTER]	PROGRAM USER “1” NAME
PROG]-[1100]-[ENTER]	PROGRAM USER “100” NAME
[PROG]-[2001]-[ENTER]	AREA “A” IDENTIFYING NAME (maximum 16 character Area name)
[PROG]-[2002]-[ENTER]	AREA “B” IDENTIFYING NAME (maximum 16 character Area name)
PROG]-[3001]-[ENTER]to;	PROGRAM OUTPUT “1” NAME
PROG]-[3008]-[ENTER]	PROGRAM OUTPUT “8” NAME

Fig. 18 Shortcut programming codes Local program mode

3.3.4 Exiting Local Edit Program Mode

Press and hold the <PROG> button for 2 seconds and the LCD keypad will leave Local program mode and return to normal Mode or; Press the <PROGRAM> button repeatedly until the display reads “Exit Programming”, then press the <ENTER> button to exit program mode.

3.4 Programming a Keypad to the system –addressing

All following programming steps in this chapter are requesting the “local program mode” as described before.

3.4.1 Language change of LCD Display

Before starting to program the System it will be very useful to change the display language to the language that you prefer. The system is able to operate in 12 different languages and is delivered in the standard version with the setting in English.
Available Languages are:
English, Spanish, French, Italian, German, Portuguese, Polish, Norwegian, Dutch, Turkish, Belgium, Czech

When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position “Language” or go directly by pressing {PROG}-[997]-[ENTER], the display will look like this:

Language English (ENG)

Scroll with the buttons <up>/ <down> to the language you prefer.
When you are happy with the changes Press “ENTER” to save.

NOTE: if you change to a language menu that you do not understand it could be difficult to find back to the right address to change back to your preferred language. We recommend to get out of the programming mode (pressing <Prog> for more than 2 seconds). And start the above described shortcut function again 1. Local program Mode <Ctrl>+<ARM> for 2 sec.; 2. <PROG>997<Enter>; 3. scroll up/down

3.4.2 LCD Keypad Address Assignment

A total of 8 devices (keypads or proximity readers) can be connected to the control panel. Each keypad must be addressed individually to avoid BUS conflicts when multiple users are operating different keypads simultaneously. By default, each keypad comes addressed as KP # 1.
When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position “Keypad Number” or go directly by pressing {PROG}-[996]-[ENTER], the display will look like this:

Keypad Number 1

- Select an unused address, e.g. “2” then press <ENTER> to save.
- To exit “Local Program Mode” press and hold the <PRG> Button for two seconds.

If you do not assign a unique address to every keypad and reader connected to the keypad buss, a conflict will exist that will cause erratic operation. Each reader or keypad MUST have a different address.

3.4.3 Copying Text to another LCD Keypad

The individual programmed wording, as described in the chapter changing names, is stored locally at one Keypad. This allows operating more than one Keypad within one system, where each can name functions differently. This could make sense if more than one user is sharing a system. Each keypad could also be operated in a different language within one system (12 different languages available -refer to chapter change language).

If more than one LCD keypad is connected to the control panel, and the existing edited text from one LCD keypad should appear on all other LCD keypads, than the text could be easily copied. This function is particular helpful if already installed systems are expanded.

- When you enter in [PROG]-[800]-[ENTER], all of the customizable text at the keypad will be transferred to all other LCD keypads connected to the control panel.
- There is also an alternative method to transfer the text. Pressing the “CHIME” button for 2 seconds while in “Local Edit Mode” will perform the transfer. The text in your keypad will be transferred to all other LCD keypads connected to the panel.

3.5 Changing names – personalization of the system

To make the Sintony 60 an individual system that fits exactly to the environment of the user, we recommend changing the general names to Object-related, easy to identify wordings.
e.g. instead of showing only “Alarm in Zone 1” at the display the LCD text could be individualized to “Alarm Kitchen”, or “Keypad Office” or instead of showing “User24”- personalized names like “Grandmother”, or “Thomas”. This normally helps the user to operate the system much easier.

To change any names the system must be in the local programming mode. Press the “Control” button first and the “Arm” button must be pressed within 2 seconds of pressing the Control button. If you make a mistake press the “Enter” button then repeat the process.

3.5.1 How to use the alphanumeric Keypad buttons

- When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position where you wish to change the name e.g.” Zone Names” the display will look like this:

Local Mode Kb 1 Zone Names

- By pressing the <ENTER> button the display will show the 1 Zone which you can now select by using the <left>/ <right> buttons to the Zone that should be renamed e.g. Zone 1-16.

- If the right Zone is indicated press <ENTER> again and the display will show:

Zone 1 <A.Z> Zone 1

The Cursor will be underneath the first letter to be edited (in this case the “Z”).The letters <A.Z> indicate that the letters selected by the numeric buttons (0-9) will be in capitals.

- By pressing the “MEM up” button once, the display will change to <a.z> indicating that the letters selected by the numeric buttons (0-9) will be lower case.
- You can cycle back to another selection by pressing the "down” button.

Once you have selected the desired font you can now proceed to change the text. The following table shows the English characters that can be selected by each numeric button. (standard telephone keypad)
The lower case options are shown in ( )

▼Button #	1st Press	2nd Press	3rd Press	4th Press
1	* (‘)	# (<)	= (>)	1
2	A (a)	B (b)	C (c)	2
3	D (d)	E (e)	F (f)	3
4	G (g)	H (h)	I (i)	4
5	J (j)	K (k)	L (l)	5
6	M (m)	N (n)	O (o)	6
7	P (p)	Q (q)	R (r)	7
8	S (s)	T (t)	U (u)	8
9	V (v)	W (w)	X (x)	9
0	Blank	Y (y)	Z (z)	0

There are four different selections per button.

- By pressing the button once, a character will appear in the display (see “1st press” column below). Pressing the same button again will cause the display to change to the next character in the sequence (see “2nd press” column).
- After you have pressed the same button four times the next press (5th) will cause the display to wrap back to the beginning.
- Once you have selected the first character, Press the “right arrow” button to move the cursor one position to the right.
- Now select the second character and move the cursor to the right repeating the process until all of the text is completed (Remember that there are a maximum of 16 characters per program address).
- If you make a mistake use the “left arrow” button to move the cursor towards the left and make any corrections.

When you are happy with the text Press <ENTER> to save the changes. You can program the text for all following identifications in the same way.

3.5.2 Changing the Keypad Name

When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position “Panel Name” or go directly by pressing {PROG}-[999]-[ENTER], the display will look like this:

Name <A.Z> Siemens

You may enter any name you wish up to 16 characters in length (using the same method as described in changing names).
When you are happy with the changes Press “ENTER” to save.

3.5.3 Changing the User Names

When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position “User Name” or go directly by pressing {PROG}-[1001]-[ENTER], the display will look like this:

User 1 <A.Z> User 1

You may enter now the person’s name you wish up to 16 characters in length (using the same method as described in changing names).
When viewing events in “Memory” mode, the User name will appear to identify who the user was that Armed/Disarmed the system.
When you are happy with the changes Press “ENTER” to save.

3.5.4 Changing the Zone Names

When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position “Zone Name” or go directly by pressing {PROG}-[1]-[ENTER], the display will look like this:

Zone 1 <A.Z>
Zone 1

You may enter any name you wish up to 16 characters in length (using the same method as described in changing names).
When you are happy with the changes Press “ENTER” to save.

3.5.5 Changing the Keypad Area Name

When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position “Area Name” or go directly by pressing {PROG}-[2001]-[ENTER], the display will look like this:

Area 1 <A.Z>
Area A

You may enter any name you wish up to 16 characters in length (using the same method as described in changing names). If you program in a name for the area, this name will appear when displaying events in memory display mode.
When you are happy with the changes Press “ENTER” to save.

3.5.6 Changing the Output Names

When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position “Area Name” or go directly by pressing {PROG}-[3001]-[ENTER], the display will look like this:

Out 1 <A.Z>
Output 1

You may enter any name for that output you wish up to 16 characters in length (using the same method as described in changing names). When viewing events in “Memory” mode, the output name will appear to identify what function the output is controlling. (e.g. Garage door, lights garden etc.)
When you are happy with the changes Press “ENTER” to save.

3.5.7 Changing the Area Single Character Identifier

When in “Local Program Mode”, you scroll with the buttons <up>/ <down> to the position “Area Id” or go directly by pressing {PROG}-[998]-[ENTER], the display will look like this:

Area ID <A.Z> ABCDEFGHIJKLMNOP

You may edit the single character Area identifier at this address starting at Area “A” (first left-hand position). The keypad allows for up to 16 areas but the actual number of areas supported on this panel is two. The first character (in this case the ”A”) is the identifier used to show the status of the first Area when armed. The second position (in this case the “B”) is the identifier used to show the status of the second Area. If you preferred to have the first area shown as Area “1” and not “A” then you can change it here using the same method as used previously. With the cursor underneath the letter “A”, Press the “1” button four times until the character in the first slot shows “1”.
When you are happy with the changes Press “ENTER” to save.

3.5.8 Resetting Individual Text to Default or Last Saved Setting

While in “Local Edit Mode” there are two special functions that can be performed at any of the “Local Edit” Program locations. They are “Return to Default Text” or “Return to Previously Saved Text”.
For Example, to Return the Zone 1 text back to Defaults;

- If during the programming of Zone 1 text [PROG]-[1]-[ENTER] you wished to return back to the default text, simply Press and hold the “B” button for 2 seconds, and the text will return to the default settings.
- If you wished to return to the last saved version of the text simply Press and hold the “A” button for 2 seconds and the last saved text for zone one will appear.

If the last saved version of text for Zone 1 was in fact the default setting, then pressing “Control” then “1” or “A” will return the default text anyway.

3.5.9 Resetting All Text to Default

While in “Local Edit Mode” it is possible to restore all of the customizable text fields to the factory default settings.
When you enter in [PROG]-[801]-[ENTER] display will prompt you to press [801]-[ENTER] again. Once you have pressed “801 enter”, all customizable text (e.g. zone names, user names, output names, etc) will be returned to the default text.

3.6 Operating a LCD Keypad

3.6.1 LCD Keypad View Memory Mode

When displaying Memory Events in “Memory Mode” the Display will show the events using plain text messages with the time & date that the event occurred. This makes the fault diagnosis much easier. All events can be displayed (including when the system was disarmed and by whom). To access “Memory Mode”, press the “MEMORY up” button.
There are two parts to the Memory Display Mode:

3.6.2 Current system alarms

If there are any current “SYSTEM” alarms, they will be displayed first under the heading of “Check System”. When the <MEM up> button is pressed, the current system alarms will be displayed in plain text to describe the actual problem. If there is more than one current problem the keypad will display event alarm sequentially with the heading of “CURRENT ALARMS” on the top line and the alarm on the bottom line. Each time the “MEMORY up” button is pressed, the next alarm will be displayed. If there are no system problems with the panel the display will show “NO FAULTS”. When all current system alarms have been displayed the keypad will then start to show the historical memory events.

3.6.3 Historical memory event

Following the “Current System Alarms” the panel will display the historical memory events. The panel stores the most recent events, (up to 255), including all alarm events, all system events such as mains failure etc as well as arm/disarm by User & Area. The memory events are displayed via the LCD keypad with the most recent event shown first and subsequent events following in descending order from newest to oldest.
During the “Historical Memory Event” display mode the LCD display will show the type of event on the top line e.g. “Area A armed by User 1” and the actual time and date that the event occurred on the bottom line.
To view events simply press the “MEMORY up” button. The keypad will beep and the display is advanced to the next event every time the “MEMORY up” button is pressed.
If you wish to go back and look at an earlier event you can use the “down” or “STAY down” buttons to go back to an earlier event. Each time the Down arrow is pressed the memory will go back one event.
To cancel the memory displays just press “ENTER”.
If the “ENTER” button is not pressed, the keypad will automatically exit memory display mode after approximately 20 seconds.
When there is a new event in memory the words “SYSTEM CHECK” will be shown on the LCD display
The “SYSTEM CHECK” display will be reset- change to “SYSTEM OK” once the event has been viewed.

3.6.4 LCD quick view mode

If any zones are unsealed when disarmed the LCD keypad will scroll through each unsealed zone displaying the 16 character name for each zone. If a number of zones are unsealed simultaneously it can take sometime for the display to show all of the unsealed zones.
By pressing the <ENTER> button when zones are unsealed the keypad will enter the “Quick-view” mode. When in “Quick-view” mode, each unsealed zone is displayed as a single two digit number e.g. “01 05 10”. Up to 5 unsealed zones maybe displayed at one time. If more than 5 zones are unsealed at the time the display will scroll to the next bank of 5 zones so the user can see quickly which zones are unsealed. To exit “Quick-view” mode you simply press the <ENTER> button again or the keypad will time out automatically in approximately 30 seconds.

3.6.5 Arming or disarming two areas at a keypad

If the panel is configured for two Areas “A&B”, and the option “ARM” button required before code is turned on (P45E Option 1), there are a number of possible arming options.

- If a user code is only assigned to one area and they press <ARM> <CODE> <ENTER> at the keypad, only the Area assigned to their code will Arm.
- If a user code is assigned to both areas but the keypad being used is only assigned to one area, pressing <ARM> <CODE> <ENTER> will only arm the area assigned to the keypad.
- If a user code is assigned to both areas and the keypad being used is also assigned to both areas, pressing <ARM> <CODE> <ENTER> will put the keypad into a “Ready to Arm” state. On the LCD keypad the display will show “Area/s to Arm” “A B”.
- If you press the <ENTER> button now, both areas A&B will arm. If before pressing the enter button you wish to deselect one of the Areas e.g. if you only want to arm area B press the number “1” and Area “A” will disappear on the LCD keypad display, indicating that only area B will arm when the enter button is pressed.

On disarming, after entering <CODE> <ENTER> the display on the LCD keypad will show “Area/s to Disarm” “A B”. You can press the <ENTER> button at this point to disarm both areas, select which area you wish to disarm by using the numbers 1 & 2 on the keypad, or if you don’t do anything the panel will proceed with disarming both areas after 10 seconds time has elapsed.

3.6.6 Toggle Chime Mode on-off

On the LCD Keypad there is a “CHIME” button. Pressing and holding that button for two seconds will toggle Chime Mode from On-Off or Off-On.

3.6.7 Send manual test call

If the panel is configured for Contact ID reporting and test calls are programmed to report, you can force a manual test call by pressing and holding <CONTROL> followed within 2 seconds by <0>. This will cause a manual test call to be sent to the monitoring company. You can also dial into the panel from a remote site and using the telephone cause a manual test call remotely. See P175E 15E and P176E 11E for details.

3.6.8 Manual answer an incoming call

If the panel is not configured to answer in-coming calls, the user can force it to answer the call by pressing and holding <CONTROL> followed within 2 seconds by <9>. This will make the panel answer the call immediately. For this function to work the phone line must be ringing at the time and there must have been at least two rings before pressing the buttons.

3.7 System settings of the LCD Keypad

The Keypad offers various parameters to be easy adjusted. These functions are also described in the user manual and can be operated all the time without a code. In the standard configuration the Backlights and the buzzer are always on. Only if a mains failure occurs the backlight will be turned off to save power of the backup battery.

NOTE: All lights on the Keypad and the buzzer can be turned off locally with these functions on each Keypad differently. If a malfunction regarding back light or no buzzer tone is reported by a customer, check these options first.

3.7.1 LCD backlight adjustment

Increasing the LCD backlight:

- By holding down the <CTRL> button and repeatedly pressing the <LEFT> arrow button the LCD backlight level can be increased to the maximum.

Reducing the LCD backlight:

- By holding down the <CTRL> button and repeatedly pressing the <RIGHT> arrow button the LCD backlight level can be decreased to the minimum which is until function “light off”.

3.7.2 Keypad button backlight adjustment

Increasing the keypad button backlight

- By holding down the <CTRL> button and repeatedly pressing the <UP> arrow button the keypad LED backlight level can be increased to the maximum.

Decreasing the keypad button backlight

- By holding down the <CTRL> button and repeatedly pressing the <DOWN> arrow button the keypad LED backlight level can be decreased to the minimum, which is until function “light off”.

3.7.3 Volume adjustment of the keypad buzzer

➔ Hold down the <CTRL> button.

➔ By repeatedly pressing the 'A' button the volume of the buzzer tone can be increased.

By repeatedly pressing the 'B' button the volume of the buzzer tone can be decreased, which is until function “sound off”.

4 How to program the Alarm System

To program the Control Panel the System can be programmed in 4 different ways locally or remotely trough a telephone line connection.

4.1 Programming the system by PC

With the separate available programming cable IAQ6-1 and the programming Software “Sylcom 60” IAS6-1 the system could be programmed very comfortably trough the programming interface port on the control panel PCB (to access this port the panel must be opened).Or it could also be programmed remotely trough the programming port of the control panel unit if connected to the bus).
For more details refer to the separate available Software description.

4.2 Programming the system remotely

If the control panel is connected to a telephone line, it could be programmed also remotely with a PC.
There are certain security levels build in, to assure that only authorized user will get access to the control panel. It could also be programmed that the owner of the system has to authorize the remote access by entering a code.
For example will the panel never allow direct access from external callers trough the telephone line, but will call back only to the number which is programmed as authorized user locally in the control panel. This function is normally used by Central monitoring stations. The connection is done trough a telephone modem and a PC. (refer to programming the system by PC)

4.3 Programming the system be Memory stick

The system could also be programmed very quick with the separate available Memory stick IMM6-10. Connected to the programming port (to access this port the panel must be opened) it is possible to easily upload or download one system default setting to an Alarm system (refer to Menu Diagnostics- write/read from EEPROM P200E 7E/8E). This speeds up the process of programming, especially if similar settings have to be used with different Installations. Before using the Memory stick the panel must be in program mode (refer to chapter accessing program mode).
The Stick could be used to copy existing programming to other Installations. To program such a Memory stick always a control panel is needed, it could not be programmed out of a PC.

4.4 Programming the system trough a Keypad

The System can be programmed trough the Clear text menu by using the curser and enter buttons or by directly entering the programming address. (All these codes are indicated and described next to each programming function in this manual).
For both Methods it is necessary to change to the Installer program mode first.

4.4.1 Access to Installer program mode

To get into installer program mode the system must be disarmed.

- Press <PROG>
- Enter Master code (default is 258369)
- <ENTER>

When you enter the Installer program mode the LCD Keypad display automatically “INSTALLER:USER”. Now using the curser and enter buttons to cycle through all of the available menus. The menus are accessed in a particular order based on the most frequently used program locations. All of the Main and the Sub-Menus are shown on the following pages.

NOTE: If there is a single long beep at this point and the program LED does not turn on, this means that you can not access the PROGRAM MODE with your code

NOTE: If the code to the Installer program mode was changed and it is not available any more, the system needs to be connected to a PC (refer to PC connection). With the Programming SW Sylcom 60 the data could be read out of the installed system and the Installer code will be visible.

4.4.2 Exiting Installer program mode

Press and hold the <PROG> button for 2 seconds and the LCD keypad will leave Installer program mode and return to normal Mode or; Press the <PROGRAM> button repeatedly until the display reads “Exit Programming”, then press the <ENTER> button to exit the Installer program mode.

4.4.3 Keypad Code programming

A very quick method to program a System is to use direct programming codes/addresses. Each programming function is described with such a code.
e.g. User can change all codes:
P5E 1-100E 2E
This means when in Installer program mode:

- Press <Prog>
- Press <5>
- Press <Enter> (this is the button marked with a enter arrow)

Select now the user number you want to have (1-100) e.g. 25

- Press <2><5>
- Press <Enter>

Now select the functionality to the user 25 by pressing the option number e.g.2

- Press <2>
- Press <Enter>

Now you have programmed the user 25 to option 2 “can change all codes”
To left the programming press <Prog> again.

4.4.4 Keypad Menu Programming

The LCD Keypad enables “Manual Free” programming of the SINTONY 60 panel. Easy to follow plain text Menus will be displayed on the keypad to enable selection of the desired programming options.

Enter	<ENTER> key selects the Menu you wish to work in or the option in a Sub-Menu you wish to use.
Program	<PROGRAM> key will step you back to the previous Menu level
▲▼	<Up> or <Down> arrow keys will allow you to cycle through the Menu options (Main & Sub Menus).
▲▼	<Left> or <Right> arrow keys can be used when in the Data Entry-Menus to cycle through the options (e.g. if in “USERS” Data Entry-Menu, the options would be Users 1-100, if in “ZONES” the options would Zones 1-16, etc)

4.4.5 Selecting the Main-Menu Headings

- To access a desired program location you first navigate to the desired Main-Menu by using the “Up” or “Down” arrow keys on the keypad.
- Each press of “Up” or “Down” arrow keys will advance the display to the next Menu heading.

The Main-Menu headings are shown on the top line of the LCD display.
To access the Sub-Menu options from a Main-Menu press the <ENTER> button.

4.4.6 Selecting the Sub-Menu Headings

- Having pressed the <ENTER> button at the selected Main-Menu heading the keypad will now show Sub-Menus for that heading.
- The Main-Menu heading will remain on the top line of the LCD display and the Sub-Menus will appear on the bottom line.
- Each press of “Up” or “Down” arrow keys will advance the Sub-Menus displayed on the bottom line either up or down by one location.
- To access the Data Entry-Menu options from the Sub-Menu press the <ENTER> button.

4.4.7 Selecting the Data Entry-Menu Headings

- Having pressed the <ENTER> button at the desired Sub-Menu heading, the keypad will now be in the Data Entry-Mode.
- At this point you can use the “Up” or “Down” arrow keys to cycle through the other Sub-Menu options for this menu to program all of the options for this menu (e.g. user, zone, output etc.)or;
- You can use the “Left” or “Right” arrow keys to cycle through all of the menu points. This allows you to program the entire menu from 1-xxx.

4.4.8 Showing numeric programmable options in clear text

If you are at a location that has 8 programmable options, e.g. P4E where the User Arm/Disarm options can be set, by pressing and holding the <CONTROL> button then within 2 seconds pressing the <ENTER> button you can access the sub- text that describes what each option can do. To exit the sub-text display press <ENTER>.

4.4.9 Stepping Back Through the Menus

If you are in a Menu location, e.g. the “USER” Data Entry field, and you wish to step back one stage to the previous Sub-Menu, you need to press the <PROGRAM> button.
Each time the <PROGRAM> button is pressed the display will step back to the previous stage (remembering where you were before) until you get back to the Main-Menu.

4.4.10 Flowchart for Button function on the Keypad

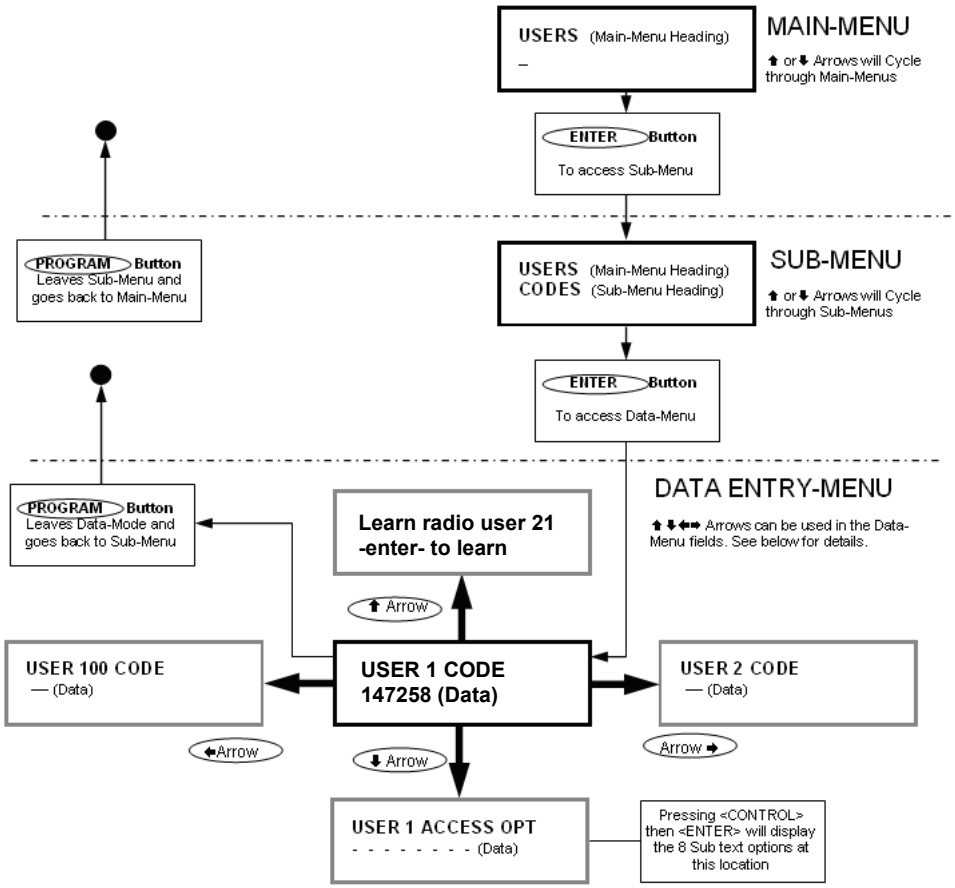


Fig. 19 Flowchart with Menu-steps using Arrow, Enter and Program Button

5 Programming codes

To use the following described programming codes the System has to be in Installer program mode.
How to read the programming codes is described in chapter Keypad code programming- How to program with a LCD Keypad.
How to read the programming codes is described in chapter Keypad code programming- How to program with a LCD Keypad.

6 DEFAULT ACCES CODES

To use the following described programming codes the System has to be in Installer program mode.
How to read the programming codes is described in chapter Keypad code programming- How to program with a LCD Keypad.

6.1 ACCESS CODE to the user mode -default User pin

P147258E

6.2 ACCESS CODE to the installer mode - default Installer pin

P258369E

7 Programming users

7.1 User codes

P1E 1-100E
The user codes are located in address P1E 1-100E
NOTE: Only users 21-100 can be Radio Users

7.1.1 Adding or changing a User Code

Up to 100 codes can be programmed into the panel. By default, Code 1 has Master Code permissions and must be used to enter Client program mode. Codes 1-100 may be varied in length from 1 to 6 digits (unless option 8 at P25E11E is on then the codes must be between 4-6 digits long).
To program a User Code you must first be in client or installer program mode.

- Select the address P1E followed by the User Number you wish to program. e.g. 1-100E (If there is already a code programmed at this address, it will be displayed back to you)
- Now enter the code e.g. P1E2E 2580 E
- Press the <ENTER> key.
  ➔ 3 beeps - program light on solid or flashing

In this example we have programmed Code 2 to be 2580.

- Now enter the code e.g. P1E5E 9876 E
  ➔ 3 beeps - program light on solid or flashing

In this example we have programmed code 5 to be 9876

7.1.2 Removing a User Code

To remove a User Code you must first be in client or installer program mode.

- Select the address P1E followed by the User Number you wish to program. e.g. 1-100E (If there is already a code programmed at this address, it will be displayed back to you)

To remove or delete a code simply press and hold the <CONTROL> button then within 2 seconds press the <0> button. Followed by <Enter>

To replace a code simply enter the new code in the same address as the old code. This will overwrite the previous code but maintain the user permissions as mapped to that user number.

Or directly when you know the user to be deleted here for example user code 3:

- press P1E3E <CONTROL> then <0>
  ➔ 3 beeps
  ➔ User Code # 3 Erased

7.2 User code Type

USER CODE TYPE - P2E 1-100E 0-8E

NOTE: only Users 21-100 can be Radio Users

Option	Description
0	Keypad Code User {PIN} - All 100 Users can be 1-6 digit code Users if required. Codes can be used to Arm/Disarm all or part of the alarm or they can be used to operate outputs for access control purposes. Users can be assigned to keypads and so can outputs so that a User assigned to multiple outputs (which can in turn be linked to doors) can operate only the door assigned to the keypad they are using.
1	Radio User - Users 21-100 can be Radio keys (Pendant) if required. Radio keys can be used to Arm/Disarm all or part of the alarm or they can operate outputs directly. Unlike user codes, a radio key cannot be assigned to a keypad so if a radio key is assigned to more than one output and the radio key is operated, all of the outputs assigned to the radio key will turn on.
2	Access Tag/Card User - Users 1-100 can be Access Tags or Cards if required. Access Tag or Card operation requires that the optional Proximity Reader is connected to the panel. The Proximity Readers can be assigned to any one of the 8 possible keypad addresses. Access tag or Card Users can be used to Arm/Disarm all or part of the alarm or they can be used to operate outputs for access control purposes. Access Tags or Cards can be assigned to a keypad address and so can outputs so that an Access User assigned to multiple outputs (which can in turn be linked to doors) can operate only the door assigned to the keypad address they are using
3	Both Code and Access Tag/Card User {Tag + PIN} - Up to 100 code Users and up 100 tag or card Users can be stored in the panel. If the Proximity Reader with the full keypad is installed on the panel, it is possible to arm/disarm the alarm or gain access through a door by presenting the tag/card at the reader then entering in the user code {PIN Number}. It MUST be in that order e.g. Tag then PIN. This option provides a more secure means of arming or disarming the alarm, or gaining access through a door, because it requires both the access tag/card plus the PIN number.
4	Either Code or Access Tag/Card User {Tag or PIN} - Up to 100 code Users and up 100 tag or card Users can be stored in the panel. If the Proximity Reader with the full keypad is installed on the panel, it is possible to arm/disarm the alarm or gain access through a door by entering in the user code at the reader or presenting the tag/card at the reader. This option gives two methods of controlling the alarm.

7.3 User access options

USER ACCESS OPTIONS - P4E User 1-100E 1-8E

Option	Description
1	User can Arm Area - If a User has option 1 on, they can Arm all Areas assigned at location P3E.
2	User can Arm Stay Area - If a User has option 2 on, they can Arm Stay Mode for all Areas assigned at location P3E.
3	User can Disarm Area - If a User has option 3 on, they can Disarm all Areas assigned at location P3E.
4	User can Disarm Stay Area - If a User has option 4 on, they can Disarm Stay Mode for all Areas assigned at location P3E.
5	User is a Security Guard User - If a User has option 5 on, they can Arm all Areas assigned at location P3E, but they may only Disarm if the panel is currently Armed and in the alarm state.
6	User will Arm Latchkey Mode - If this option is on, the User will Arm the alarm in Latchkey Mode. Latchkey Mode can also be armed by using the <ARM>, <STAY>, <A> or <B>, (see P75E, P77E, P79E & P81E option 6) or the key-switch (see P112E option 6). If a User with this option on Disarms the alarm no Disarm report will be sent via the dialer. If Latchkey Mode is Armed and a user with this option off Disarms the alarm a disarm report will be sent to alert parents when their children have returned home. Reporting of Latchkey Disarm is enabled at location (P189E option 1). If a Voice report is desired the message is assigned at P176E10E. Normally you would select a telephone number/s set for domestic or voice reporting to report the Latchkey disarm signal.
7	User can set Call Divert Mode on Arm/Disarm - If a User has option 7 on, they can initiate the Call Divert Number/s to be dialed on Arm/Disarm. This allows automatic call diversion when the alarm is Armed and taking the diversion off when Disarmed. Call divert must also be programmed (P192-194E).
8	User can view event Memory-If a User has option 8 on he as access in the Memory section to all stored events.(P4E8E)

7.4 User code privileges

USER CODE PRIVILEGES - P5E 1-100E 1-8E

Option	Description
1	User can Change Their Code - If a User has option 1 on, they can access Client Program Mode and change their code number.
2	User can Change All Codes - If a User has option 2 on, they can access Client Program Mode and change All User code numbers.
3	User can Allow access to Installer Mode/Edit All Codes - If a User has option 3 on, they can access Client program Mode. From there an Installer with the correct Installer Code can access Installer Program Mode. The User with this option can also edit all User Codes and associated parameters.
4	User can Change Telephone Numbers - If a User has option 4 on, they can access Client Program Mode and change the telephone and call divert numbers.
5	User can Change Clock Settings - If a User has option 5 on, they can access Client Program Mode and change the Time & date settings as well as daylight saving start and finish times.
6	User can Change DTMF Codes - If a User has option 6 on, they can access Client Program Mode and change the DTMF Codes. A DTMF Code can be used to remotely Arm/Disarm an Area, turn Output/s On/Off or Acknowledge a Voice/Domestic alarm.
7	User can Learn New Radio Devices - If a User has option 7 on, they can access Client Program Mode and Learn a new Radio Key or Wireless Zone Device. They can also remove radio devices or find what location number a device is stored at.
8	User can Force a Download to the Call-back Number - If a User has option 8 on, they can access Client Program Mode and force a PC connection to a pre-defined call-back number. They can either enter in P200E12E or if using an LCD keypad go to the “Diagnostics” Menu and select “Start Callback”.

7.5 Radio user type

RADIO USER TYPE - P7E 21-100E 1E
(NOTE: only Users 21-100 can be Radio Users)

Option	Description
0	not in use
1	SiWay Type - If a SiWay Radio Pendant is being used (IRCW6) set the type to 1. When the pendant detects a battery low it will send a signal to the panel.
21	not in use

7.6 Radio user privileges

RADIO USER PRIVILEGES - P8E 21-100E 1-5E
(NOTE: only Users 21-100 can be Radio Users)

Option	Description
1	Pendant can Disarm at All Times - If a Radio Pendant has option 1 on, they can Disarm the alarm at any time. If this option is off, the pendant cannot disarm if the panel is in alarm state.
2	Pendant will cause an Immediate Panic Alarm - If a Radio Pendant has option 2 on, a Panic Alarm will be generated immediately the button is pressed.
3	Pendant will cause a Delayed Panic Alarm - If a Radio Pendant has option 3 on, a Panic Alarm will be generated if the button is pressed for longer than 1.5 seconds. If the button is released before the time expires, no Panic Alarm will be generated.
4	Pendant only works during entry Delay-A Radio Pendant can only disarm the area during the entry delay time, this means, it is strictly required to activate the entry root, before the user can disarm the area.
5	User is a Duress Code User-This option for a Radio Pendant if it should be used as a dedicated Duress code. All user options will be executed, but an additional pendant panic alarm will be generated.
6	Spare
7	Spare
8	Spare

7.7 User time zone assignments

Time Zone assigned to a User - P9E 1-100E1-8E
There are up to 8 Time Zones that can be programmed into the panel. A Time Zone consists of a Start and Stop time plus the Days of the Week that the Time Zone is active. By selecting Options 1-8 (function turned on) to a particular User, that user will only operate if the Time Zone assigned is active.

Option	Description
1	User Controlled by Time Zone # 1
2	User Controlled by Time Zone # 2
3	User Controlled by Time Zone # 3
4	User Controlled by Time Zone # 4
5	User Controlled by Time Zone # 5
6	User Controlled by Time Zone # 6
7	User Controlled by Time Zone # 7
8	User Controlled by Time Zone # 8

For example, if Time Zone #1 had a start time of 0800 and a stop time of 1700 and active days of 2-6 (Monday-Friday), a User with Time Zone 1 assigned can only be used between the hours of 08:00-17:00 from Monday to Friday. Outside these hours the User Code will not operate.

More than one Time Zone can be assigned to a User. Using the above example for TZ#1 and now assuming Time Zone #2 is set to 09:00-12:00 on day 7 (Saturday), by assigning both TZ1 & 2 to a User will now mean their code is active during weekdays from 0800-1700 plus they are also able to use their code on Saturdays between the hours of 09:00-12:00.
If the time-zone has just been programmed and should currently be active you will have to wait until the next minute expires before the panel will update the time-zone status. You can see if the time-zone is active at location P200E4E.

7.8 User to keypad assignment (User devices)

A keypad will be assigned to a User P10E1-100E1-8E

Option	Description
1	User will work at Keypad # 1
2	User will work at Keypad # 2
3	User will work at Keypad # 3
4	User will work at Keypad # 4
5	User will work at Keypad # 5
6	User will work at Keypad # 6
7	User will work at Keypad # 7
8	User will work at Keypad # 8

Any user can be assigned to only operate at certain Keypads. This option controls whether a code or access tag User can Arm/Disarm from certain keypads. This option does not restrict users from operating outputs from a particular keypad (this is done at locations P82E & P83E).

7.9 Radio pendant panic beeps to keypad

P11E 21-100E 1-8E(NOTE: only Users 21-100 can be Radio Users)

Option	Description
1	A Pendant Panic Alarm will Beep at Keypad #1
2	A Pendant Panic Alarm will Beep at Keypad #2
3	A Pendant Panic Alarm will Beep at Keypad #3
4	A Pendant Panic Alarm will Beep at Keypad #4
5	A Pendant Panic Alarm will Beep at Keypad #5
6	A Pendant Panic Alarm will Beep at Keypad #6
7	A Pendant Panic Alarm will Beep at Keypad #7
8	A Pendant Panic Alarm will Beep at Keypad #8

If a Radio Pendant is programmed to create a Panic Alarm (see P8E), when the Panic Alarm is activated it can be silent or it can sound the keypad buzzer. Each keypad can be silent during a Pendant Panic Alarm (option turned off) or can give an audible indication of the Alarm (option turned on).

7.10 User to output mask

User to Output Mask - P12E 1-100E1-8E

Option	Description
1	User is Mapped to Output # 1
2	User is Mapped to Output # 2
3	User is Mapped to Output # 3
4	User is Mapped to Output # 4
5	User is Mapped to Output # 5
6	User is Mapped to Output # 6
7	User is Mapped to Output # 7
8	User is Mapped to Output # 8

Any user can be allowed to only operate certain Outputs. This Function is mainly used for access control purposes. If an Output is being used to open a door but a User does not have access through that door, by not allowing the User to operate that Output access through the door can be denied.

7.11 User can turn an output on

User Can Turn an Output On - P13E 1-100E 1-8E

Option	Description
1	User can turn ON Output # 1
2	User can turn ON Output # 2
3	User can turn ON Output # 3
4	User can turn ON Output # 4
5	User can turn ON Output # 5
6	User can turn ON Output # 6
7	User can turn ON Output # 7
8	User can turn ON Output # 8

Any user can be allowed to turn an Output ON. This Function can be used to control external devices via the panel keypad with a User assigned to that Output. Once an Output is turned ON by a User, the Output can turn OFF again automatically if a reset time is assigned to the Output, or it can be turned off by the same user or by a different user with the next program location.

7.12 User can turn an output off

User Can Turn an Output OFF - P14E 1-100E 1-8E

Option	Description
1	User can turn OFF Output # 1
2	User can turn OFF Output # 2
3	User can turn OFF Output # 3
4	User can turn OFF Output # 4
5	User can turn OFF Output # 5
6	User can turn OFF Output # 6
7	User can turn OFF Output # 7
8	User can turn OFF Output # 8

Any user can be allowed to turn an Output OFF. This Function can be used to control external devices via the panel keypad with a User assigned to that Output. Once an Output is turned OFF by a User, the Output can be turned on by the same user or by a different user with the previous program location.

7.13 Radio pendant panic alarm to output

RADIO PENDANT PANIC ALARM to OUTPUT - P15E 21-100E 1-8E
(NOTE: only Users 21-100 can be Radio Users)

Option	Description
1	A Pendant Panic Alarm will Operate Output # 1
2	A Pendant Panic Alarm will Operate Output # 2
3	A Pendant Panic Alarm will Operate Output # 3
4	A Pendant Panic Alarm will Operate Output # 4
5	A Pendant Panic Alarm will Operate Output # 5
6	A Pendant Panic Alarm will Operate Output # 6
7	A Pendant Panic Alarm will Operate Output # 7
8	A Pendant Panic Alarm will Operate Output # 8

If a Radio Pendant is programmed to create a Panic Alarm (see P8E), when the Panic Alarm is activated it can be silent or it can turn on an Output. This option would normally be used to turn on any internal and/or external audible alarms connected to Outputs during a Pendant Panic Alarm.

8 Learn, find and delete remote controls and tags

8.1 Learn a Remote control/ radio pendant - P18E 21-100E

(NOTE: only Users 21-100 can be Radio Pendants)
A Radio Pendant must be enrolled into the panel before it can be used.
To learn a Radio Pendant you must first have a compatible receiver connected to the panel keypad buss. With the receiver connected and the panel in program mode, entering P18E then the pendant number you wish to enroll, e.g. 21E for pendant 21, the keypad will start to beep to indicate that learn mode has been started and the LED on the receiver will flash. Now operate the pendant you wish to learn into User slot 21. Once the transmitted code has been received by the panel and saved as pendant 21, the keypad will stop beeping and the LED on the receiver will stop flashing.
When learning a new radio code the panel checks all possible locations (including radio zones) before saving the new code to ensure that the code has not already been loaded into another slot. If the code already exists, the keypad will indicate which slot the code is already installed at. A number from 1-16 indicates a zone slot and a number from 21-100 indicates a user slot.

8.2 Delete a Remote control/radio pendant - P19E 21-100E

(NOTE: only Users 21-100 can be Radio Pendants)
If you wish to delete a single Radio Pendant, pressing P19E then the User number while in Program Mode will delete the stored code against that User, e.g. P19E 21E will remove the code stored for User 21.

8.3 Find a Remote control/radio pendant location - P20E E

(NOTE: only Users 21-100 can be Radio Pendants)
If you have a Radio Pendant loaded into the panel but are unsure which location (User #), pressing P20E while in Installer program Mode will start “Find” Mode. The keypad will start to beep to indicate that “Find” mode has been started and the LED on the Receiver will flash. Now press the Radio Pendant button that you wish to find. If the Radio Pendant is in memory the keypad will display the number (1-16 indicates a zone, and 21-100 indicates a user). The keypad will stop beeping and the LED on the Receiver will stop flashing.

8.4 Learn a access tag/card code to the system - P21E 1-100E

An Access Tag/Card must be enrolled into the panel before it can be used. The panel can have up to 100 proximity tags (key-ring style card), or proximity cards loaded into the system. The tags or cards are stored separately to the User Codes but they follow the options of Users 1-100 programmed at locations P2E, P3E, P4E, P9E, P10E, P12E, P13E & P14E. For example if user 11 is assigned to area A (P3E Option 1), and can arm/disarm the alarm (P4E Options 1 & 3), then access Tag/Card number 11 will arm/disarm area A also.

To learn an Access Tag/Card you must first have a compatible proximity reader connected to the panel keypad bus. With the reader connected and the panel in program mode, entering P21E then the Access tag/card number you wish to enroll, e.g. 11E for Tag/Card number 11, the keypad will start to beep to indicate that learn mode has been started. Now present the Access Tag/card to the reader. Once the Tag/Card number has been received by the panel and saved, the keypad will stop beeping to indicate learn mode has stopped.

When learning a new access Tag/Card the panel checks all possible locations before saving the new code to ensure that the code has not already been loaded. If the tag or card already exists, the panel will not terminate learn mode but instead it will continue looking for a new tag or card to be presented. This allows a new tag or card to be learnt while existing tags or cards may be in use on the system.

After learning the tag or card, before it will work you MUST select the appropriate option at location P2E (options 2, 3 or 4 must be selected for the tag to work).

8.5 Delete an Access tag/card code - P22E 1-100E

If you wish to delete a single Access Tag or Card, pressing P22E then the User number while in Program Mode will delete the stored code against that User, e.g. P22E 11E will remove the tag or Card stored for User 11.

8.6 Find an Access tag/Card location - P23E 0E

If you have an Access Tag or Card loaded into the panel but are unsure which location (User #), pressing P22E will start “Find” Mode. The keypad will start to beep to indicate that “Find” mode has been started. Now present the Access Tag or Card you wish to find to a proximity reader connected to the panel. If the Tag or Card is in memory the keypad will display the number where the Tag or Card is stored (a number from 1-100). The keypad will stop beeping once the memory location has been found.

9 Miscellaneous panel and timing settings

9.1 Installer code

INSTALLER CODE - P25E 1E
This code is used to enter full Installer Program mode. The default installer code is 258369. This code can only be changed while in Installer Program Mode. To enter your new installer code press P25E1E. The existing code will displayed at the keypad on the bottom line of the LCD display. To change the code simply enter the digits of the new code and it will replace the old one. The Installer Code must be between 4-6 digits in length.

9.2 Duress digit

DURESS DIGIT - P25E 2E 0-9E(Value can be 1-9, 0 = Duress Disabled)
The duress digit can be a number from 1-9 (a value of “0” means the duress function is disabled).
To create a duress alarm the duress digit must be entered before a valid user code (e.g. If the code is “147258” and the duress number is programmed as “4”, then entering a code of <4147258> <ENTER> would create a duress alarm).

9.3 Dial report delay

DIAL REPORT DELAY - P25E 3E 0-255E(0-255 Seconds)
If this address is set to 0, there will be no report delay. If it is set to any value other than 0 then a delay equal to the programmed value will stop the panel from reporting an alarm until this delay time expires.

9.4 Radio zone supervised timer

RADIO ZONE SUPERVISED TIMER - P25E 4E 0-9999E(Value 0-9999 Minutes)
If a radio detector is capable of sending regular supervisory signals to the panel and the zone type is set for “Supervised Signal Active”, this timer sets how long a period has to elapse with no received transmissions before a supervisory failure alarm is generated. The detectors of the Sintony 60 system (Siway transmission protocol) sending a supervision signal randomly between 5-7 Minutes.

NOTE: It is not recommended to use a very short period- (minimum=1 signal cycle ~ 8 minutes) because it could lead to a high rate of false alarms.

9.5 Two trigger timer

TWO TRIGGER TIMER - P25E 5E 0-255E(0-255 Seconds)
If a zone is set to two trigger, the zone has to cause an alarm twice within the two trigger time period to cause an alarm. If multiple zones are set to two trigger, an alarm will be generated it two zones trigger once each within the two trigger time period. If a two trigger zone goes into alarm but remains in alarm for longer than the two trigger time period (e.g. detector failure or cable cut) an alarm will be generated.

9.6 Mains fail reporting delay

MAINS FAIL REPORTING DELAY - P25E 6E 0-9999E(0-9999 Seconds)
If a Mains Failure occurs this timer delays the reporting of Mains Failure to a Monitoring Station. If the mains power returns before the timer expires, then no report is sent. If Mains Failure is assigned to an output, this delay must expire before the output will turn on.

9.7 receiver fail delay-timer

RECEIVER FAIL DELAY - P25E 7E 0-9999E(0-9999 Seconds)
If supervised radio detectors are used, the receiver will be seeing regular transmissions. Because of this, the panel can monitor receiver activity to check that the receiver is still working. If the panel does not receive any signals within this time period a receiver failure alarm will be generated. If set to 0, the receiver monitoring will be turned off.

9.8 Upload-Download site code number

UPLOAD/DOWNLOAD SITE CODE NUMBER - P25E 8E 0-9;B-FE(8 characters)
The upload/download site code number must be entered if the panel is set for auto-answer as this provides a security access level to the panel. The number can be up to 8 characters in length. Valid characters for this number are 0-9,B-F. Details of how to program the characters B-F.

LCD KEYPAD BUTTON	LCD KEYPAD CID & 4+2 INDICATIONS	LCD KEYPADTELE PHONE INDICATIONS	CID & 4+2 SPECIAL CHARACTER S	TELEPHONE NUMBER SPECIAL FUNCTION
CONTROL & 0	-	DELETE #	DELETE #	DELETE #
CONTROL & 2	B	#	“B”	“#”
CONTROL & 3	C	*	“C”	“*”
CONTROL & 4	D	-	“D”	“2.5 sec Pause”
CONTROL & 5	E	w	“E”	“Wait for 2nd Dial-tone”
CONTROL & 6	F	=	“F”	“5 sec Pause”

Fig. 20 How to enter code numbers

9.9 Temporary output disable

TEMPORARY OUTPUT DISABLE - P25E 9E 1-8E(Select output # 1-8)
This address allows a technician to select any output/s to be temporarily disabled for one alarm or armed cycle, e.g. by selecting Outputs 1-8 at this location then leaving program mode, outputs 1-4 will not turn on following any alarms. The technician is now free to arm the system to test all monitoring signals without having any internal and/or external alarms activating. When the alarm is reset or disarmed all outputs will now work normally again.

10 Miscellaneous installer and panel options

10.1 Miscellaneous panel options

MISCELLANEOUS PANEL OPTIONS - P25E 10E1-8E

Option	Description
1	Panel Tamper is 2k2 EOL - The Tamper input (Tmp) on the control panel requires either a short circuit or a 2k2 End-of-Line resistor. If option 1 is on the panel must see a 2k2 resistor (EOL) across the Tmp & 0V terminals to ensure the tamper is sealed. If this option is turned off then a simple short circuit is all that is required to seal the panel tamper.
2	Direct access to program mode for the Installer Code - If this option is on, the Installer Code can gain access to Installer Program Mode directly. If the option is turned off, the installer can only gain access to Installer Program Mode via Client Program Mode. This option allows the owner to control program mode access by the installer. The User must have option 3 at location P5E turned on for them to allow installer access.
3	Disable Mains Fail Test - If the panel must be run off a DC supply or the Mains supply can fail regularly, this option disables the mains voltage monitoring to prevent mains fail alarms from occurring.(e.g. If used on a boat or camper by battery)
4	Listen-in to O/P # 1 Low Volume - If Listen-In to Output 1 is turned on (P175E8E), the level of sound from the speaker can be controlled with this option. If this option is Off the sound level during listen-in to O/P 1 is high volume, turning this option On makes the sound level low volume. For listen-in to Output 1 to work the device connected to O/P 1 must be an 8Ω speaker and the output must be modulated (P35E1E Option 1 on). Failure to do this could result in damage to the speaker & output.
5	Receiver Fail Lockout - If the receiver fail delay (P25E7E) is set to a value other than 0 and the panel sees no activity from the receiver for the set period of time, a receiver fail alarm will be generated. If this option is turned on, the panel cannot be armed until the cause of the receiver failure has been resolved.
6	Send Output information to Keypad Buss - There is an optional 4 x relay output expander board that can be connected to the keypad buss if required. For this output expander to work option 6 must be turned on for the data to be sent on the keypad buss to the expander.
7	Cannot Arm if System battery is Low - If the panel battery is low, normally you can arm the panel leaving the battery to charge over a period of time. If this option is turned on, the panel cannot be armed until the battery is either fully charged again, or it has been replaced (if faulty).
8	Installer Lockout - Normally if the panel is powered up with the panel tamper open (e.g. system tamper alarm active) and in the Disarm state, then the panel will go into installer program mode when the <PROGRAM> then <ENTER> buttons are pressed. If this option is on, the panel will not allow access to program mode on power-up and the only valid method of accessing program mode is via the installer code.

10.2 Miscellaneous installer options

INSTALLER OPTIONS - P25E 11E 1-8E

Option	Description
1	Entry to Installer Mode Resets Confirmed Alarms - If this option is turned on and a Confirmed alarm has occurred, the alarm cannot be re-armed until the Installer has reset the alarm. The Installer must access Installer Program Mode via Client Mode to reset the system. The zones that caused the alarm will latch on (even when disarmed) until reset by the installer to indicate that lockout is in effect.
2	Entry to Installer Mode Resets Tamper Alarms - If this option is turned on and a Tamper alarm has occurred (system or zone tampers), the alarm cannot be re-armed until the Installer has reset the alarm. The Installer must access Installer Program Mode via Client Mode to reset the system. The Trouble indication will latch on (even if the tamper alarm has been cleared) until reset by the installer to indicate that lockout is in effect.
3	Entry to Installer Mode Resets Tamper Alarms - If this option is turned on and a Tamper alarm has occurred (system or zone tampers), the alarm cannot be re-armed until the Installer has reset the alarm. The Installer must access Installer Program Mode via Client Mode to reset the system. The Trouble indication will latch on (even if the tamper alarm has been cleared) until reset by the installer to indicate that lockout is in effect.
4	Entry to Installer Mode Resets Tamper Alarms - If this option is turned on and a Tamper alarm has occurred (system or zone tampers), the alarm cannot be re-armed until the Installer has reset the alarm. The Installer must access Installer Program Mode via Client Mode to reset the system. The Trouble indication will latch on (even if the tamper alarm has been cleared) until reset by the installer to indicate that lockout is in effect.
5	Spare
6	Spare
7	Spare
8	User Codes Must be 4-6 Digits - If this option is turned on, all User Codes must be between 4-6 digits long. If it is turned off, the User Codes can be 1-6 digits long

10.3 Miscellaneous user options

INSTALLER OPTIONS - P25E 13E 1-5E

Option	Description
1	Code required to view Memory - If this option is turned on, access to the event memory will only be allowed by using an authorized code. The user must have the permission (user rights) to view the memory and press <MEMORY> <CODE #> <ENTER> to have access to the event memory.
2	Cancel Handover Zone function in stay mode - If this option is turned on, any zone defined as a handover zone will act as a normal delayed zone during stay mode (the handover feature will be ignored). The zone will still have the normal handover feature only in full arm condition.
3	Output control from keypad is disabled when armed - This option denies the operation to an output access control by an user while the area is armed.
4	Keypad Codes are disabled during entry delay - Using this option no codes will operate during the entry delay. This forces the user to disarm before entering the premises.
5	No Keypad indications while armed - If this option is turned on and all areas assigned to keypads, are armed, the keypad display will be blank during the arming condition. If any keypad is assigned to both areas, both areas must be armed before the display will go blank on arming.
6	Spare
7	Spare
8	Spare

10.4 Hide user codes-User options

USER OPTIONS - P25E 12E
(NOTE: This Option can ONLY be accessed from Client Mode)
Hide User Codes from Installer Option 1- This option is only accessible from Client Program Mode. It is designed to allow the User (owner) of the alarm to hide their User Codes from the Installer if desired. If this option is turned On, codes can only be changed or viewed in Client program mode. Users MUST have option 2 at location P5E assigned before they can hide the user codes.

11 Time and Date setting

The alarm system has an internal clock that may be used to automatically arm or disarm the alarm or turn outputs on or off. It is also used to identify when events have occurred in the memory via the LCD keypad. Therefore the Sintony 60 is equipped with a RTC-Real time clock which is powered up separately by a battery on the PCB. Ensure this is set correctly at the time of installation so that the all of the functions using the time have will work correctly.

11.1 How to set time and date

TIME HOUR/MINUTE
P26E 1E (Value 0-2359)

WEEK DAY 1-7
P26E 2E (Value 1-7) [where 1 = Sunday, 2 = Monday, 3 = Tuesday, etc]

DATE DAY/MONTH/YEAR
P26E 3E (Value DDMMYY) (for example 020906 = 2nd September, 2006)
The Real Time Clock controls the Time-zones, the timing of automatic test calls and is used to Time & Date stamp the events in the Event Buffer. The clock is programmed in 24 hour format (e.g. 00:00-23:59).

11.2 Daylight saving (winter/ summer time), DLS settings

If Daylight Saving (DLS), change from winter to summer time, is used, the actual start and stop details can be entered here and the clock will automatically adjust for daylight saving.

DAYLIGHT SAVING STATUS-ACTIVE
This function activates the automatic change in the time.
P26E 4E 1E

NOTE: If you are in Daylight Saving Time when the alarm system is installed you MUST turn on option 1 at location P26E4E so that the panel knows that Daylight Saving Time is currently active. Failure to do this will not allow the clock to automatically adjust to the correct time when Daylight Saving Time (winter-Summer time) ends

DAYLIGHT SAVING START SUNDAY
On which Sunday in the month the daylight saving should start. Per default this is set to the 1 Sunday in the Month.
P27E 1E (Value 0-5, 0= DLS Disabled)

DAYLIGHT SAVING END SUNDAY
On which Sunday in the month the daylight saving should end. Per default this is set to the 3 Sunday in the Month.
P27E 2E (Value 0-5, 0= DLS Disabled)

DAYLIGHT SAVING START MONTH
On which Month in the Year the daylight saving should start. Per default this is set to the 10 Month in the Year.
P28E 1E (Value 1-12)

DAYLIGHT SAVING END MONTH
On which Month in the Year the daylight saving should stop. Per default this is set to the 3 Month in the Year.
P28E 2E (Value 1-12)

DAYLIGHT SAVING START HOUR
On which hour on the Sunday the daylight saving should start. Per default this is set to 2, which equals to 2 o clock in the morning.
P29E 1E (Value 0-23)

DAYLIGHT SAVING END HOUR
On which hour on the Sunday the daylight saving should stop. Per default this is set to 2, which equals to 2 o clock in the morning.
P29E 2E (Value 0-23)

12 Outputs

12.1 Output options

NOTE: With all output programming options we refer to outputs 1-8. Only outputs 1-4 are available as standard, with outputs 5-8 requiring the connection of the optional Output module 12V/1A IRO6-04 unit that connects to the keypad buss (the output module provides 4 change-over relay contacts).

OUTPUT OPTIONS "A" – P34E 1-8E 1-8E

Option	Description
1	Invert Output – This option is used to invert the normal state of the output. The panel uses open collector transistor switches and the default state of all outputs is off (open). When in alarm the transistor is turned on and the output goes low (0V). The invert option reverses this function.
2	Flash Output – When the output is turned on this option causes the output to flash at a rate set by the pulse timer (P39E). One use is to flash a lamp during an alarm. DO NOT turn this option on if the Output is to be manually controlled by a user or the "Control" button.
3	Single Pulse to Output – This option produces a single pulse at the output when an alarm occurs (the pulse time is the value programmed at the output pulse timer P39E).
4	Lockout Output – This option is used to limit the output to one operation per arming period.
5	DTMF Remote Control of Output – If the panel is set-up so a User can dial in from a remote telephone to perform "DTMF Code Control" (P175E12E) of the Outputs, this option selects which Outputs are able to be controlled by the remote user.
6	Keypad User can Operate Output – If a DTMF Output control code is programmed into the panel (P175E12E), the same code can be entered at the panel keypad to allow local control of the Outputs selected at this address.
7	<Control> button can Operate Output – The <Control> button on the keypad can also be used to turn outputs on or off. For that to happen this option must be turned on for the output/s concerned. To turn an output on locally at the keypad the operator simply presses the <Control> button for 2 seconds and the word "OUTPUTS" will appear on the LCD keypad to indicate that the Control mode is active. If any controllable outputs are currently on they will be indicated at the keypad. The operator can now press a button relating to the output/s they wish to control e.g. pressing the "1" button will turn output 1 on or off, The "2" button for output 2 etc. When finished the operator then presses the <ENTER> button to cancel the Control mode and return to normal
8	Pulsed Chime Mode Alarm – Chime Zones programmed to this output will turn the output on for the duration of the Chime to Output time period (P41E). If this option is on the output will pulse at the pulse timer rate (P39E) for the duration of the chime zone to output timer (P41E).

OUTPUT OPTIONS "B" – P35E 1-8E 1-8E

Option	Description
1	Mains Fail to Output – This option is used to assign a Mains Fail alarm to an Output.
2	Fuse Failure to Output – This option is used to assign a Fuse Failure alarm to an Output. The on-board fuses are thermally activated. If excessive current is drawn from a fuse it will disconnect the power until the problem is resolved. There are two thermal fuses protecting the various 12v DC outputs.
3	Battery Low to Output – This option is used to assign a Battery Low alarm to an Output.
4	Telephone Line Failure to Output – This option is used to assign a Telephone Line Failure alarm to an Output.
5	Supervisory Radio failure to Output – This option is used to assign a Radio Detector Supervisory Fail alarm to an Output.
6	Sensor-Watch Alarm to Output – This option is used to assign a Sensor-Watch alarm to an Output. A Sensor-Watch alarm occurs when a detector has not operated within a set period of time.
7	System Tamper to Output – This option is used to assign a panel tamper alarm to an Output.
8	Receiver Fail to Output – If the receiver fail timer expires (see P25E7E) this option will assign the alarm to an Output.

OUTPUT OPTIONS "C" – P36E 1-8E 1-3E

Option	Description
1	Walk-test Pulse to Output – When the panel is in Walk-test Mode, this option assigns a pulse to the Output every time a zone is triggered. The pulse is linked to the Output Pulse time (P39E).
2	Pulse Output every 5 seconds when Disarmed – This option will cause the Output to pulse every 5 seconds when the panel is disarmed. The pulse time is linked to the Output Pulse time (P39E).
3	Pulse Output on Kiss-off Following Arming – This option will cause the Output to pulse for 2 seconds when the panel is armed and the message has been kissed off by the monitoring company. The pulse time is linked to the Output Pulse time (P39E) which is defaulted to 2 seconds.
4	Pulse Output on Kiss-off After a zone alarm –This option will cause the Output to pulse for 2 seconds when the panel is armed and the message has been kissed off by the monitoring company. The pulse time is linked to the Output Pulse time (P39E).

OUTPUT OPTIONS "D" – P37E 1-8E 1-8E

Option	Description
1	Siren Driver to Output – This option is used to assign a Modulated Siren tone to an Output. The option only applies to Outputs 1 and 2. For the modulated siren tone to work correctly, an 8Ω speaker must be connected to the output concerned. Outputs 1 and 2 have different sounds so that a user can tell which output is operating.
2	Output Reset Time is in Minutes – The Output reset time (P40E) is normally in seconds. This means that the Output timing can be set from 1-9999 seconds (approximately 2.8 hours). If a longer time period is required, by turning this option on the reset time is calculated in minutes (e.g. 1-9999 minutes allowing up to 166.65 hours).
3	Output "Silenced" for 10 seconds on key-press – When the alarm is Armed and activated it can be difficult sometimes to turn the alarm off because you are unable to hear the beeps as you enter you code at the keypad. If this option is turned on the selected output/s will silence (turn off) for 10 seconds on the first button press at any keypad. This should allow easy Disarming of the alarm by a valid User. If the alarm is not turned off within the 10 seconds, the outputs will turn on again. This function will only work once during an Armed cycle and the panel must be Disarmed before it will work again.
4	Spare
5	Spare
6	Spare
7	Spare
8	Output Monitored – This option is used to allow Monitoring of the Output status (e.g. wire to siren has been cut). The option only applies to Outputs 1 and 2.

12.2 Output on delay, pulse, reset and chime times

OUTPUT ON DELAY TIME – P38E 1-8E 0-9999E
(0-9999 Seconds, 0 = no delay)
The "On" delay allows the operation of the Output to be delayed by the time programmed at this location. If set to "0" there will be no on delay and the Output will operate the instant it is turned on.

OUTPUT PULSE TIME – P39E 1-8E 0-255E
(0-255 1/10th Seconds, e.g. 20 = 2 sec.)
The Pulse time affects the time the output turns on when the pulse timer is used on the Output. The pulse time is in 1/10th second increments so that very quick timing can be achieved. Functions like radio key Arm/Disarm Chirps to an Output or a flashing output (P34E option 2) all use the pulse timer. If access tags are assigned with the chirp function (P46E4E) and the LED on an access reader is set to follow an output with the chirps assigned (P98E) then this timer must be set to a minimum value of 10 for the reader LED to display the chirps.

OUTPUT RESET TIME – P40E 1-8E 0-9999E
(0-9999 Seconds, 0 = latched output)
The Reset time affects the time the output turns on when an alarm is active. The default range is 0-9999 seconds but if option 2 at location P37E is on the range is 0-9999 minutes.

CHIME MODE TIME – P41E 1-8E 0-255E
(0-255 1/10th Seconds, e.g. 20 = 2 sec.)
The Chime Mode time affects the time the output turns on when a Chime Zone is activated. The Chime time is in 1/10th second increments so that very quick timing can be achieved.

12.3 Output voice board remote control start message

Start of "DTMF Output Control" Status Messages – P42E 1-8E 0-99E (0-99)
If a Voice Board is connected to the panel it is possible to dial the panel from a remote telephone and turn outputs On or Off using a 4 digit code with voice prompts provided by the Voice Board to identify what function you are controlling. Refer to the separate Voice Board programming manual for more details.

12.4 Un-map an output

UN-MAP OUTPUTS – P43E 1-8E
If you are using an Output for a special purpose and do not need the standard defaults assigned to that output you can remove all defaults at this location. For example if you are using output number 4 to open a door via a Remote control and you don't want any alarms to be assigned to the output press P43E4E and ALL defaults will be removed. This removes all options assigned to the output and makes the reset time "0" for latched operation

12.5 Assigning a time zone to an output

Assign a Time-Zone to Outputs – P44E 1-8E 1-8E(O/P#) Value = Time-zone 1-8
Any of the 8 Time-zones can be assigned to outputs 1-8. If a time-zone is assigned to an output it will turn the output on when the T/Z starts and turn the output off when the T/Z ends. You should un-map the output at P43E first before assigning the T/Z to ensure that only the T/Z will control the state of the output.

13 Areas

13.1 Area arm and special function options

AREA OPTIONS "A" – P45E 1-2E 1-8E(1 = Area A, 2 = Area B)

Option	Description
1	<ARM> button Required Before Code to Arm – This option determines if the <ARM> button must be pressed before a code is entered to Arm an Area. If a User has access to both Areas and this option is turned on, the special keypad arming or disarming functions as described at chapter operating a Keypad, will apply.
2	<STAY> button Required Before Code to Arm Stay Mode – This option determines if the <STAY> button must be pressed before a code is entered to Arm Stay Mode. If a User has access to both Areas and this option is turned on, the special keypad arming functions as described at chapter operating a Keypad, will apply.
3	<CODE> Required to Arm – If this option is turned on, the <ARM> button is disabled and the panel requires a code to Arm.
4	<CODE> Required to Bypass – If this option is turned on, the <BYPASS> button cannot access Bypass Mode directly. To enter Bypass mode the User must press <BYPASS> <CODE> <ENTER> before they can bypass zones.
5	Spare
6	Report Arm Signal at the end of the Exit Delay – If this option is on the panel will report the Arm signal to a monitoring station when the exit delay expires. If it is off, the panel will report the arm signal immediately the system has been armed.
7	Can Arm only if All Zones Sealed (Ready) – If this option is on it stops the panel from arming an area with an unsealed zone (Not Ready). If off, the panel can be armed if the Ready LED is not on.
8	Can Arm Stay Mode only if All Zones Sealed (Ready) – If this option is on it stops the panel from arming stay mode if an area has an unsealed zone (Not Ready). If off, the panel can be arm stay mode if the Ready LED is not on.

AREA OPTIONS "B" – P46E 1-2E 1-8E(1 = Area A, 2 = Area B)

Option	Description
1	Use Near and Verified Alarm reporting for All zones in this Area – To reduce the possibility of false alarms the panel can require two alarms on different zones within a 45 minute period before a full alarm will be sent. If this option is turned on it applies to all zones assigned to that area. An alarm on a single zone will send a Near Alarm report to the monitoring station. If no further alarms occur within 45 minutes the near alarm timer is reset and a restore is sent for the zone that activated. If the zone that activated is still in alarm when the 45 minute timer expires, a zone bypass for that zone will be sent and the zone will remain bypassed until the area is disarmed. Any new alarms after the timer has expired will send another Near Alarm report. If a second alarm on a different zone occurs within 45 minutes of the Near alarm, an Intrusion Verified alarm report will be sent. This format only applies to Contact ID and Pager reporting. Turning this option on will stop zone alarms from being reported in Domestic & Voice formats as there are no messages for near and confirmed alarms. You must turn this option off if using Domestic or Voice formats
2	Area will Arm at the end of Time-Zone – The panel is capable of automatically arming on a Time-Zone. If this option is turned on and a Time-Zone is selected at P68E, the Area will automatically arm when the Time-Zone ends. If the panel cannot arm because it is not "Ready", a fail to arm report will be sent.
3	Area will Disarm at the end of Time-Zone – The panel is capable of automatically disarming on a Time-Zone. If this option is turned on and a Time-Zone is selected at P68E, the Area will automatically disarm when the Time-Zone starts.
4	Assign Chirps to Access Tags – If the panel is being Armed or Disarmed by an Access Tag/Card from a proximity reader it is possible to link the pendant chirps programming (P50E-P53E) to Arming or Disarming via the Access Tag or Card. If this option is On the chirps will apply to Access Tag/Cards. If the chirps are required to be displayed at the reader LED, the minimum pulse timer for the output (P39E) must be a value of 10.
5	Spare
6	Spare
7	Spare
8	Spare

13.2 Area arm-stay pulse and chirps to output

AREA ARM INDICATION to OUTPUT – P47E 1-2E 1-8E(1 = Area A, 2 = Area B)
For monitoring purposes an Arm indication can be assigned to an Output. Each Area can have a separate arm indication assigned to a different output if required
Option 1 = Output 1, Option 2 = Output 2 etc.

AREA STAY INDICATION to OUTPUT – P48E 1-2E 1-8E(1 = Area A, 2 = Area B)
For monitoring purposes a Stay Arm indication can be assigned to an Output. Each Area can have a separate indication assigned to a different output if required.
Option 1 = Output 1, Option 2 = Output 2 etc.

AREA DISARM INDICATION to OUTPUT-P49E 1-2E 1-8E(1 = Area A, 2 = Area B)
For monitoring purposes a Disarm indication can be assigned to an Output. Each Area can have a separate disarm indication assigned to a different output if required.
Option 1 = Output 1, Option 2 = Output 2 etc.

PENDANT ARM CHIRP to OUTPUT – P50E 1-2E 1-8E (1 = Area A, 2 = Area B)
When Arming the alarm using a Radio Key it is necessary to have some form of Arm indication. This can be done by pulsing an Output once when the area is armed (one chirp). The Chirp is linked to the pulse time (P39E) for the output concerned. If Output 1 or 2 are used for the chirp and a horn speaker is connected to the output (see P37E1 or 2E option 1), the siren on the output will give a single tone for the chirp instead of the swept tone used for alarms. Also Arming via an Access Tag/Card can generate the Chirp if option 4 is On at P47E.
Option 1 = Output 1, Option 2 = Output 2 etc.

ARMED EXIT BEEPS to OUTPUT – P65E 1-2E 1-8E
(1 = Area A, 2 = Area B)
Sometimes it can be useful to extend the exit beeps, which occur at a keypad, to be present on an audible device on the exit path. This option allows the exit beeps during arming to be assigned to any of the 8 outputs. The Pulse time (P39E) sets the length of each beep. Option 1 = Output 1, Option 2 = Output 2 etc.

PENDANT STAY Mode Arm Chirp to Output – P51E 1-2E 1-8E (1 = Area A, 2 = Area B)
When Arming Stay Mode using a Radio Key it is necessary to have some form of Arm indication. This can be done by pulsing an Output once when the area is armed (one chirp). The Chirp is linked to the pulse time (P39E) for the output concerned. If Output 1 or 2 are used for the chirp and a horn speaker is connected to the output (see P37E1 or 2E option 1), the siren on the output will give a single tone for the chirp instead of the swept tone used for alarms. Also Stay Arming via an Access Tag/Card can generate the Chirp if option 4 is On at P47E.
Option 1 = Output 1, Option 2 = Output 2 etc.

STAY MODE ARM EXIT BEEPS to OUTPUT – P66E 1-2E 1-8E
(1 = Area A, 2 = Area B)
Sometimes it can be useful to extend the exit beeps, which occur at a keypad, to be present on an audible device on the exit path. This option allows the exit beeps during the arming of stay mode to be assigned to any of the 8 outputs. The Pulse time (P39E) sets the length of each beep.
Option 1 = Output 1, Option 2 = Output 2 etc.

PENDANT DISARM CHIRP to OUTPUT – P52E 1-2E 1-8E (1 = Area A, 2 = Area B)
When Disarming the alarm using a Radio Key it is necessary to have some form of Disarm indication. This can be done by pulsing an Output twice when the area is disarmed (two chirps). The Chirps are linked to the pulse time (P39E) for the output concerned. If Output 1 or 2 are used for the chirp and a horn speaker is connected to the output (see P37E1 or 2E option 1), the siren on the output will give a single tone for the chirp instead of the swept tone used for alarms. Also Disarming via an Access Tag/Card can generate the Chirp if option 4 is On at P47E.
Option 1 = Output 1, Option 2 = Output 2 etc.

PENDANT STAY MODE DISARM CHIRP to OUTPUT – P53E 1-2E 1-8E (1 = Area A, 2 = Area B)
When Disarming Stay Mode using a Radio Key it is necessary to have some form of Disarm indication. This can be done by pulsing an Output twice when the Stay Mode is disarmed (two chirps). The Chirps are linked to the pulse time (P39E) for the output concerned. If Output 1 or 2 are used for the chirp and a horn speaker is connected to the output (see P37E1 or 2E option 1), the siren on the output will give a single tone for the chirp instead of the swept tone used for alarms. Also Stay Mode Disarming via an Access Tag/Card can generate the Chirp if option 4 is On at P47E. Option 1 = Output 1, Option 2 = Output 2 etc.

ARM PULSE to OUTPUT – P54E 1-2E 1-8E(1 = Area A, 2 = Area B)
Sometimes it is necessary to have a single pulse to indicate an Arm state. This could be used to start a video recorder or similar device. Each time an Area is armed, a single pulse will be applied to the output. The Pulse time (P39E) sets the length of the pulse. Option 1 = Output 1, Option 2 = Output 2 etc.

STAY MODE ARM PULSE to OUTPUT – P55E 1-2E 1-8E(1 = Area A, 2 = Area B)
Sometimes it is necessary to have a single pulse to indicate that Stay Mode is Armed. This could be used to start a video recorder or similar device. Each time an Area Stay Mode is armed, a single pulse will be applied to the output. The Pulse time (P39E) sets the length of the pulse .
Option 1 = Output 1, Option 2 = Output 2 etc.

DISARM PULSE to OUTPUT – P56E 1-2E 1-8E(1 = Area A, 2 = Area B)
Sometimes it is necessary to have a single pulse to indicate a Disarm state. This could be used to stop a video recorder or similar device. Each time an Area is disarmed, a single pulse will be applied to the output. The Pulse time (P39E) sets the length of the pulse. Option 1 = Output 1, Option 2 = Output 2 etc.

STAY MODE DISARM PULSE to OUTPUT – P57E 1-2E 1-8E(1 = Area A, 2 = Area B)
Sometimes it is necessary to have a single pulse to indicate a Disarm of Stay Mode. This could be used to stop a video recorder or similar device. Each time an Area Stay Mode is disarmed, a single pulse will be applied to the output. The Pulse time (P39E) sets the length of the pulse. Option 1 = Output 1, Option 2 = Output 2 etc.

13.3 Area arm-stay Beeps Keypad

Armed Exit Delay Beeps to Keypad- P58E 1-2E 1-8E(1 = Area A, 2 = Area B)
When an Area is Armed it is useful to have the exit delay beeps occurring at the keypad to warn the User to exit the premises without delay. If the option is on at this address, that keypad will beep out the exit delay. The exit beeps occur at one second intervals until the last 5 seconds at which time they change to ½ second intervals to act as a warning that the delay is about to expire.
Option 1 = Keypad 1 Option 2 = Keypad 2 etc.

Stay Mode Exit Delay Beeps to Keypad – P59E 1-2E (1 = Area A, 2 = Area B)
When an Area is Armed in Stay Mode it is useful to have the exit delay beeps occurring at the keypad to warn the User to exit the premises without delay. If the option is on at this address, that keypad will beep out the exit delay. This option may be turned off for Stay Mode to make the keypad silent when arming at night time. The exit beeps occur at one second intervals until the last 5 seconds at which time they change to ½ second intervals to act as a warning that the delay is about to expire. When arming Stay Mode the exit and entry delays can be cancelled by pressing the <ENTER> button following arming of Stay Mode. The next time Stay Mode is armed, if the <ENTER> button is not pressed, all programmed exit and entry delays will apply.
Option 1 = Keypad 1 Option 2 = Keypad 2 etc.

13.4 Exit delay time settings/ Area

Armed Exit Delay Time-P60E 1-2E 0-255E(1=Area A, 2 = Area B) (Value 0-255 Sec.)
Each Area can have its own exit delay time. The delay can be programmed from 1-255 seconds in one second increments. If the exit delay is set to “0” the panel will be instantly armed.

Stay Mode Exit Delay Time-P61E 1-2E 0-255E(1=Area A, 2=Area B) (Value 0-255 Sec.)
Each Stay Mode Area can have their own exit delay time. The delay can be programmed from 1-255 seconds in one second increments. If the exit delay is set to “0” the panel will be instantly armed.

13.5 Monitoring account code number

MONITORING ACCOUNT CODE NUMBER – P62E 1-2E 0000-FFFFE
(1 = Area A, 2 = Area B) (Value 0000-FFFF)
When the dialer is reporting to a monitoring station there must be a unique account code programmed to identify the panel. There is an account code for each area. The account code is 4 digits. Each digit can be a number from 0-9 as well as the special characters B,C,D,E & F. The chart below shows how the special characters are entered.

LCD KEYPAD BUTTON	LCD KEYPAD CID & 4+2 INDICATIONS	LCD KEYPADTELE PHONE INDICATIONS	CID & 4+2 SPECIAL CHARACTER S	TELEPHONE NUMBER SPECIAL FUNCTION
CONTROL & 0	-	DELETE #	DELETE #	DELETE #
CONTROL & 2	B	#	“B”	“#”
CONTROL & 3	C	*	“C”	“*”
CONTROL & 4	D	-	“D”	“2.5 sec Pause”
CONTROL & 5	E	w	“E”	“Wait for 2nd Dial-tone”
CONTROL & 6	F	=	“F”	“5 sec Pause”

Fig. 21 How to enter code numbers

13.6 Remote arm-disarm DTMF code and start voice message

DTMF REMOTE CODE NUMBER – P63E 1-2E 0-9999E
(1 = Area A, 2 = Area B) (Value 1-4 digit code 0-9999)
The panel can be configured to allow remote Arm/Disarm of each Area via a remote telephone. The codes programmed at this address are the DTMF code that must be used when performing this function. When dialing the panel and it has answered the call, after waiting for the panel modem tones to stop you can enter in the 4 digit DTMF code and the current status will be given of the Area associated with the code entered. After that, if you press the “*” button on the telephone the status of the area will toggle e.g. if it was previously armed it will change to disarmed or vice versa. When finished you simply hang-up and 15 seconds later the panel will release the line.

START OF “DTMF ARM/DISARM” STATUS MESSAGES – P64E 1-2E 0-99E
(1 = Area A, 2 = Area B) (0-99)
If a Voice Board is connected to the panel it is possible to dial the panel from a remote telephone and Arm or Disarm each Area using a 4 digit code with voice prompts provided by the Voice Board to identify what Area you are controlling. Refer to the separate available Voice Board programming manual for more details.

13.7 Area delinquency delay-Arming activation indication

AREA DELINQUENCY DELAY – P67E 1-2E 0-99E
(1 = Area A, 2 = Area B) (Value 0-99 Days)
Each Area can have their own Delinquency time. The delinquency time monitors the arm/disarms of each Area. If an Area has not been armed within the set number of days a delinquency report will be sent. Each time an Area is armed the delinquency timer is reset. A value of “0” disables the delinquency monitoring.
NOTE: If the default value of “0” is changed at this location (e.g. a value of 10 is entered meaning 10 days), the next time the area is armed a delinquency restore message will be sent via the dialer (Event type 454) as a test that the function is operating.

13.8 Automatic arm-disarm time zone

AUTOMATIC ARM/DISARM TIMEZONE – P68E 1-2E 1-8E
(1 = Area A, 2 = Area B) (Value 1-8)
If Option 2 or 3 are turned on location P46E then the Area can be automatically armed or disarmed by a time-zone/s. You can assign more than one time-zone to each Area. If assigning multiple time-zones you should insure that they do not overlap as this could cause confusion. A Time-zone would typically be 0830-1700 Monday-Friday. An area will turn on when the Time-zone ends (e.g. 1700) and turn off when a Time-zone starts (e.g. 0830)
Option 1 = Time-Zone 1 Option 2 = Time-Zone 2 etc.

14 Keypads

14.1 Keypad area assignment

KEYPAD AREA ASSIGNMENT – P71E 1-8E 1-2E

Option 1 Area “A” – This option assigns Area A to keypads. If a keypad is assigned to only Area A it can only Arm or Disarm that area.

Option 2 Area “B” – This option assigns Area B to keypads. If a keypad is assigned to only Area B it can only Arm or Disarm that area.

NOTE: There are more options to choose but the System supports only 2 Areas (1-2)

14.2 Keypad button individual operations, (beeps and LED control)

KEYPAD BUTTON OPTIONS – P72E 1-8E 1-8E

Option	Description
1	<CHIME> - This option enables the <CHIME> button on the LCD keypads. Chime alarms to the keypad buzzer and outputs are disabled when “Chime” is off. If a zone is programmed as a Chime Zone, it can beep the buzzer on a keypad and/or turn on an output as well to give a local “CHIME” indication. A typical use of “Chime” Mode is as a door minder in a shop. Sometimes it may be desirable to disable Chime mode without the need to reprogram the panel. This can be achieved by allowing Chime Mode to be disabled with the <CHIME> button. If you press the <CHIME> button on a LCD keypad for 2 seconds (and this option is turned on for that keypad) the display will show “Chime Mode OFF”. This means that the buzzer will now not sound at the keypad concerned and any Chime Mode Outputs will not activate. Performing the process again will toggle chime mode back to the on state again.
2	<BYPASS> button Enabled – This option enables the <BYPASS> button (by keypad number) on any keypads connected to the pane
3	<PANIC> button Enabled – This option enables the <PANIC> button (by keypad number) on the Keypad connected to the panel
4	Delayed Operation of <PANIC> button – This option assigns a 2 second delay before the <PANIC> button will cause an alarm. The button must be held down for longer than 2 seconds to create a panic alarm.
5	<1> & <3> Panic Alarm Enabled – This option enables a Panic Alarm to be created when buttons <1> & <3> are pressed simultaneously on the reader or keypad. It also enables the <CHIME> & <CONTROL> Panic Alarm when both buttons are pressing simultaneously on the LCD keypad.
/6	<4> & <6> Fire Alarm Enabled – This option enables a Fire Alarm to be created when buttons <4> & <6> are pressed simultaneously on the reader or keypad. It also enables the <A> & <B> Fire Alarm when both buttons are pressing simultaneously on the LCD keypad.
7	<7> & <9> Medical Alarm Enabled – This option enables a Medical Alarm to be created when buttons <7> & <9> are pressed simultaneously on the reader or keypad. It also enables the <B> & <CHIME> Medical Alarm when both buttons are pressing simultaneously on the LCD keypad.
8	Spare -

14.3 Keypad <Arm> Button options

KEYPAD <ARM> BUTTON AREA ASSIGNMENT – P74E 1-8E 1-2E

Option	Description
1	Area “A” – This option assigns the keypad <ARM> button to Area A. If a keypad <ARM> button is assigned to only Area A it can only Arm or Disarm that area.
2	Area “B” – This option assigns the keypad <ARM> button to Area B. If a keypad <ARM> button is assigned to only Area B it can only Arm or Disarm that area.

KEYPAD <ARM> BUTTON AREA OPTIONS – P75E 1-8E 1-8E

Option	Description
1	<ARM> button can Arm – This option enables single button Arming using the <ARM> button. For single button operation to work options 1 & 3 must be off at location P45E
2	<ARM> button can Arm Stay Mode – This option enables single button Arming of Stay Mode using the <ARM> button. For single button operation to work options 1 & 3 must be off at location P45E. (NOTE: Following arming of Stay Mode, if the <ENTER> button is pressed, all entry & exit delays will be reset to zero for that armed period).
3	<ARM> button can Disarm at All Times – This option enables single button Disarming using the <ARM> button. For single button disarm operation to work options 1 & 3 must be off at location P45E
4	<ARM> button can Disarm Stay Mode at All Times – This option enables single button Disarming of Stay Mode using the <ARM> button. For single button disarm operation to work options 1 & 3 must be off at location P45E
5	<ARM> button can Reset Alarms – If this option is On, Pressing the <ARM> button (provided Option 3 is also On) will reset an alarm condition without having to enter a user code.
6	<ARM> button can Arm Latchkey Mode – This option enables single button Arming of the alarm in Latchkey report mode using the <ARM> button. For single button disarm operation to work options 1 & 3 must be off at location P45E. When Latchkey Mode is set on Arming, any code without the Latchkey option (P4E Option 6) used to Disarm the Alarm will cause a Disarm report to be sent via the dialer.
7	<ARM> button can Disarm During Exit Delay – This option allows single button Disarming using the <ARM> button provided the Armed Mode exit delay is active. If the exit delay has expired the <ARM> button cannot be used to disarm the alarm. For single button disarm operation to work options 1 & 3 must be off at location P45E
8	<ARM> button can Disarm Stay Mode During Exit Delay – This option allows single button Disarming of Stay Mode using the <ARM> button provided the Stay Mode exit delay is active. If the Stay Mode exit delay has expired the <ARM> button cannot be used to disarm Stay Mode. For single button disarm operation to work options 1 & 3 must be off at location P45E

14.4 Keypad <Stay> Button options

KEYPAD <STAY> BUTTON AREA ASSIGNMENT – P76E 1-8E 1-2E

Option	Description
1	Area “A” – This option assigns the keypad <STAY> button to Area A. If a keypad <STAY> button is assigned to only Area A it can only Arm or Disarm that area.
2	Area “B” – This option assigns the keypad <STAY> button to Area B. If a keypad <STAY> button is assigned to only Area B it can only Arm or Disarm that area.

KEYPAD <STAY> BUTTON AREA OPTIONS – P77E 1-8E 1-8E

Option	Description
1	<STAY> button can Arm – This option enables single button Arming using the <STAY> button. For single button operation to work options 2 & 3 must be off at location P45E.
2	<STAY> button can Arm Stay Mode – This option enables single button Arming of Stay Mode using the <STAY> button. For single button operation to work options 2 & 3 must be off at location P45E. (NOTE: Following arming of Stay Mode, if the <ENTER> button is pressed, all entry & exit delays will be reset to zero for that armed period).
3	<STAY> button can Disarm at All Times – This option enables single button Disarming using the <STAY> button. For single button disarm operation to work options 2 & 3 must be off at location P45E
4	<STAY> button can Disarm Stay Mode at All Times – This option enables single button Disarming of Stay Mode using the <STAY> button. For single button disarm operation to work options 2 & 3 must be off at location P45E
5	<STAY> button can Reset Alarms – If this option is On, Pressing the <STAY> button (provided Option 4 is also On) will reset an alarm condition without having to enter a user code.
6	<STAY> button can Arm Latchkey Mode – This option enables single button Arming of the alarm in Latchkey report mode using the <STAY> button. For single button disarm operation to work options 2 & 3 must be off at location P45E. When Latchkey Mode is set on Arming, any code without the Latchkey option (P4E Option 6) used to Disarm the Alarm will cause a Disarm report to be sent via the dialer.
7	<STAY> button can Disarm During Exit Delay – This option allows single button Disarming using the <STAY> button provided the Armed Mode exit delay is active. If the exit delay has expired the <STAY> button cannot be used to disarm the alarm. For single button disarm operation to work options 2 & 3 must be off at location P45E
8	<STAY> button can Disarm Stay Mode During Exit Delay – This option allows single button Disarming of Stay Mode using the <STAY> button provided the Stay Mode exit delay is active. If the Stay Mode exit delay has expired the <STAY> button cannot be used to disarm Stay Mode. For single button disarm operation to work options 2 & 3 must be off at location P45E

14.5 Keypad <A> Button options

KEYPAD <A> BUTTON AREA ASSIGNMENT – P78E 1-8E 1-2E

Option	Description
1	Area “A” – This option assigns the keypad <A> button to Area A. If a keypad <A> button is assigned to only Area A it can only Arm or Disarm that area
2	Area “B” – This option assigns the keypad <A> button to Area B. If a keypad <A> button is assigned to only Area B it can only Arm or Disarm that area.

KEYPAD <A> BUTTON AREA OPTIONS – P79E 1-8E 1-8E

Option	Description
1	<A> button can Arm – This option enables single button Arming using the <A> button. For single button operation to work options 2 & 3 must be off at location P46E.
2	<A> button can Arm Stay Mode – This option enables single button Arming of Stay Mode using the <A> button. For single button operation to work options 2 & 3 must be off at location P46E NOTE: Following arming of Stay Mode, if the <ENTER> button is pressed, all entry & exit delays will be reset to zero for that armed period).
3	<A> button can Disarm at All Times – This option enables single button Disarming using the <A> button. For single button disarm operation to work options 2 & 3 must be off at location P46E
4	<A> button can Disarm Stay Mode at All Times – This option enables single button Disarming of Stay Mode using the <A> button. For single button disarm operation to work options 2 & 3 must be off at location P46E
5	<A> button can Reset Alarms – If this option is On, Pressing the <A> button (provided Option 3 is also On) will reset an alarm condition without having to enter a user code.
6	<A> button can Arm Latchkey Mode – This option enables single button Arming of the alarm in Latchkey report mode using the <A> button. For single button Arm operation to work options 2 & 3 must be off at location P45E. When Latchkey Mode is set on Arming, any code without the Latchkey option (P4E Option 6) used to Disarm the Alarm will cause a Disarm report to be sent via the dialer.
7	<A> button can Disarm During Exit Delay – This option allows single button Disarming using the <A> button provided the Armed Mode exit delay is active. If the exit delay has expired the <A> button cannot be used to disarm the alarm. For single button disarm operation to work options 2 & 3 must be off at location P46E
8	<A> button can Disarm Stay Mode During Exit Delay – This option allows single button Disarming of Stay Mode using the <A> button provided the Stay Mode exit delay is active. If the Stay Mode exit delay has expired the <A> button cannot be used to disarm Stay Mode. For single button disarm operation to work options 2 & 3 must be off at location P46E

14.6 Keypad <B> Button options

KEYPAD <B> BUTTON AREA ASSIGNMENT – P80E 1-8E 1-2E

Option	Description
1	Area “A” – This option assigns the keypad <B> button to Area A. If a keypad <B> button is assigned to only Area A it can only Arm or Disarm that area.
2	Area “B” – This option assigns the keypad <B> button to Area B. If a keypad <B> button is assigned to only Area B it can only Arm or Disarm that area.

KEYPAD <B> BUTTON AREA OPTIONS – P81E 1-8E 1-8E

Option	Description
1	<B> button can Arm – This option enables single button Arming using the <B> button. For single button operation to work options 2 & 3 must be off at location P46E
2	<B> button can Arm Stay Mode – This option enables single button Arming of Stay Mode using the <B> button. For single button operation to work options 2 & 3 must be off at location P46E. (NOTE: Following arming of Stay Mode, if the <ENTER> button is pressed, all entry & exit delays will be reset to zero for that armed period).
3	<B> button can Disarm at All Times – This option enables single button Disarming using the <B> button. For single button disarm operation to work options 2 & 3 must be off at location P46E
4	<B> button can Disarm Stay Mode at All Times – This option enables single button Disarming of Stay Mode using the <B> button. For single button disarm operation to work options 2 & 3 must be off at location P46E
5	<B> button can Reset Alarms – If this option is On, Pressing the <B> button (provided Option 3 is also On) will reset an alarm condition without having to enter a user code.
6	<B> button can Arm Latchkey Mode – This option enables single button Arming of the alarm in Latchkey report mode using the <B> button. For single button Arm operation to work options 2 & 3 must be off at location P45E. When Latchkey Mode is set on Arming, any code without the Latchkey option (P4E Option 6) used to Disarm the Alarm will cause a Disarm report to be sent via the dialer.
7	<B> button can Disarm During Exit Delay – This option allows single button Disarming using the <B> button provided the Armed Mode exit delay is active. If the exit delay has expired the <B> button cannot be used to disarm the alarm. For single button disarm operation to work options 2 & 3 must be off at location P46E
8	<B> button can Disarm Stay Mode During Exit Delay – This option allows single button Disarming of Stay Mode using the <B> button provided the Stay Mode exit delay is active. If the Stay Mode exit delay has expired the <B> button cannot be used to disarm Stay Mode. For single button disarm operation to work options 2 & 3 must be off at location P46

14.7 Keypad to output mask

KEYPAD to OUTPUT MASK – P82E 1-8E 1-8E
A Keypad can be assigned to an Output or multiple Outputs. If a Keypad is not assigned to an Output a User cannot turn that Output On or Off from the Keypad. This feature is useful when using the access control features of the panel, e.g. a User may be allowed to operate more than one Output with their code but they will be limited to just the Output assigned to the Keypad they are using.
Option 1 = Output 1, Option 2 = Output 2 etc.

14.8 Control button to output mask

<CONTROL> BUTTON to OUTPUT MASK – P83E 1-8E 1-8E
The <CONTROL> button at a Keypad can be assigned to an Output or multiple Outputs. If the <CONTROL> button is not assigned to an Output a User cannot access Local Control Mode (by pressing the <CONTROL> button) and turn that Output On or Off from the Keypad. This feature is useful if Outputs are being used to control devices such as lights, etc and you wish to be able to turn them On or Off from a keypad. By limiting the access to Outputs via the <CONTROL> button you can avoid conflict with alarm outputs (e.g. the User can be denied access to outputs that are being used for alarm functions).
Option 1 = Output 1, Option 2 = Output 2 etc.

14.9 Keyboard panic, fire and medical alarms to outputs and KP Buzzer

NOTE: The following options for Panic, Fire and Medical Alarms can also be programmed to a Card reader with Keypad buttons- (0-9). Therefore there are always two options mentioned in the description.(e.g. <1> & <3> or <CONTROL> & <CHIME>)

KEYPAD PANIC ALARM to OUTPUT – P84E 1-8E 1-8E
(includes <1> & <3> or <CONTROL> & <CHIME>)
A Keypad generated Panic Alarm (either pressing button, <1> & <3> or <CONTROL> & <CHIME> together) can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output.
Option 1 = Output 1, Option 2 = Output 2 etc.

KEYPAD FIRE ALARM to OUTPUT – P85E 1-8E 1-8E
(includes <A> & <B> or <4> & <6>)
A Keypad generated Fire Alarm (either pressing the <A> & <B> or <4> & <6> together) can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output.
Option 1 = Output 1, Option 2 = Output 2 etc.

KEYPAD MEDICAL ALARM to OUTPUT – P86E 1-8E +-8E
(includes <B> & <CHIME> or <7> & <9>)
A Keypad generated Medical Alarm (either pressing the <B> & <CHIME> or <7> & <9> together) can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output.
Option 1 = Output 1, Option 2 = Output 2 etc.

MANUAL PANIC ALARM BEEPS TO KEYPAD – P90E 1-8E 1-8E
When a keypad generated Panic Alarm is generated, the alarm can be silent or it can operate the buzzer in the keypad.
Option 1 = Output 1, Option 2 = Output 2 etc.

MANUAL FIRE ALARM BEEPS TO KEYPAD – P91E 1-8E 1-8E
When a keypad generated Fire Alarm is generated, the alarm can be silent or it can operate the buzzer in the keypad.
Option 1 = Output 1, Option 2 = Output 2 etc.

MANUAL MEDICAL ALARM BEEPS TO KEYPAD – P92E 1-8E 1-8E
When a keypad generated Medical Alarm is generated, the alarm can be silent or it can operate the buzzer in the keypad.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

14.10 Keypad wrong code and manipulation alarms to outputs

KEYPAD DURESS ALARM to OUTPUT – P87E 1-8E 1-8E
A Keypad generated Duress Alarm (see P25E2E) can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output. A Duress alarm is created when the alarm is Disarmed with the Duress digit preceding a valid User Code.
Option 1 = Output 1, Option 2 = Output 2 etc.

KEYPAD TAMPER SWITCH ALARM to OUTPUT – P88E 1-8E 1-8E
If the keypad has a Tamper Switch fitted and this switch is activated, the Tamper Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output. This function is useful when the Keypad is installed in a not supervised outside public area.
Option 1 = Output 1, Option 2 = Output 2 etc.

KEYPAD WRONG CODE ALARM to OUTPUT – P89E 1-8E 1-8E
If someone is attempting disarm the alarm by trying various code combinations and they enter in 4 wrong codes the panel will go into a “Wrong Code” tamper alarm. The Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output. A correct code entry will reset the tamper alarm.
Option 1 = Output 1, Option 2 = Output 2 etc.

Wrong Code or Keypad Tamper Switch Alarm Beeps to Keypad – P93E 1-8E 1-8E

If someone enters in an incorrect code more than 4 times or a Keypad Tamper Switch Alarm is generated, the alarm can be silent or it can operate the buzzer in the keypad. The selected keypad, e.g. P93E1E for keypad number 1 is the one at which the alarm has occurred and the options 1-8 are the keypads that will beep in alarm.

Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

14.11 Keypad chime timer

CHIME ALARM KEYPAD BEEP TIME – P94E 1-8E 0-255E

(Value = 0-255 1/10th Second)

When a Chime Zone is activated it can operate an Output and/or beep the keypad buzzer. There is a separate Chime timer for each of the 8 keypads. If the value is made “0” for a keypad the Chime Zone will not beep the keypad buzzer. The Keypad Chime Timer can be set to a value from 1-255. The units are in 1/10th second increments. This means that a value of 10 will beep the keypad buzzer for 1 second.

14.12 Learn a Card Reader to the system, addressing an LED

LEARN CARD READER KEYPAD ADDRESS NUMBER – P99E 1-8E

(Value = Keypad Address 1-8)

When a Proximity reader is connected to the panel it must have a unique keypad address number assigned so that any program options can be assigned to that specific reader. To program the keypad address you must first connect the reader to the panel via the keypad buss. Then from installer program mode, enter in P99E followed by the keypad address you wish to assign to the reader (e.g. P99E4E will assign keypad address 4). To assign this keypad address to a selected reader you have to present a tag or card 5 times within 10 seconds to learn the keypad address number. The tag or card does not have to be enrolled at the panel to set the keypad address. When the address has been learnt by the reader it sends an acknowledgement back to the panel which will stop the learn mode. To assign a different address to another reader you must go through the same process again only this time entering in a different keypad address number (e.g. P99E5E for keypad address 5). Repeat the process until all readers have been assigned a unique keypad address. Now any keypad specific options can be assigned to the readers (e.g. assign areas/outputs or users to the reader).

If you do not assign a unique address to every keypad and reader connected to the keypad buss, a conflict will exist that will cause erratic operation. Each reader or keypad MUST have a different address.

The proximity and arming readers flash out the assigned keypad address number on their LED whenever the panel is in “Installer Program” Mode. This allows quick identification of the assigned address for each reader.

PROXIMITY READER LED to OUTPUT MAPPING – P98E 1-8E

If a proximity reader is connected to the control panel it may be desirable to have the LED provide some form of indication such as Arm/Disarm state, etc. By using this location it is possible to link the LED at a reader number to follow the programming of an output. The LED can be used to indicate Arm/Disarm state, Stay Mode Arm/disarm, output On/Off, etc. If chirps have been assigned to access tags/cards (P46E4E) and the output the reader LED is set to follow has the chirps assigned (P50E-P53E), then the output must have a minimum pulse time (P39E) of 10 for it to work correctly.

Option 1 = Reader LED follows Output 1, Option 2 = Reader LED follows Output 2 etc.

15 Key-switches

15.1 Key-switch wiring

The Panel can also be equipped with maximum 2 Keys-witches to be used to operate the System by a Key (some countries requires such Key-switches).

The two Key-Switch inputs are available on the panel tamper. Normally the panel tamper is a single 2k2 EOL resistor, however if the tamper input is wired as per the type 14 option, the 4k7 resistor becomes Key-switch number 1 and the 8k2 resistor becomes Key-switch number 2 (the 2k2 still acts as the tamper resistor). If the tamper input is shorted out or cut the panel will still go into system tamper alarm but provided the 2k2 resistor is maintained then shorting or opening the 4k7 or 8k2 resistors will operate the key-switch functions.

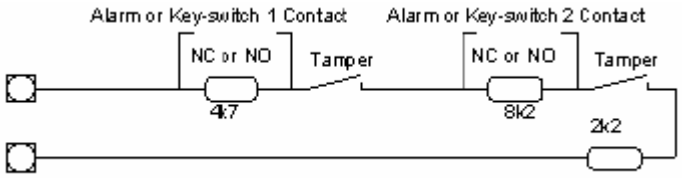


Fig. 22 Type 14 Zone doubling with tamper

15.2 Key-switch area assignment

KEY-SWITCH AREA ASSIGNMENT – P111E 1-2E
(1 = Key-switch # 1, 2 = Key-switch # 2)

Option	Description
1	Area “A” – This option assigns the key-switch to Area A. If a key-switch is assigned to only Area A it can only Arm or Disarm that area.
2	Area “B” – This option assigns the key-switch to Area B. If a key-switch is assigned to only Area B it can only Arm or Disarm that area.

NOTE: There are more options to choose but the System supports only 2 Areas (1-2)

15.3 Key-switch arm-disarm options

KEY-SWITCH ACCESS & OPERATIONAL OPTIONS – P112E 1-2E 1-8E
(1 = Key-switch # 1, 2 = Key-switch # 2)

Option	Description
1	Key-Switch can Arm – This option enables Arming of the assigned Area via the Key-switch.
2	Key-Switch can Arm Stay Mode – This option enables Stay Mode Arming of the assigned Area via the Key-switch.
3	Key-Switch can Disarm – This option enables Disarming of the assigned Area via the Key-switch.
4	Key-Switch can Disarm Stay Mode – This option enables Stay Mode Disarming of the assigned Area via the Key-switch.
5	Key-Switch has Security Guard Options – If the key-switch has option 5 on, they can Arm all Areas assigned, but they may only Disarm if the panel is currently Armed and in the alarm state.
6	Key-Switch will Arm Latchkey Mode – If the panel is armed by a key-switch with this option on, then the panel will be armed in Latchkey mode. This means that when the alarm is disarmed by a key-switch with this option off, or a code with option 6 at P4E off, then a disarm report will be sent. The option is designed to alert the alarm owner when children have returned home and disarmed the alarm.
7	Key-Switch is NO (Normally Open) – The key-switch can be a NO (Normally Open) or a NC (Normally Closed) key-switch. The normal, or rest state, of the key-switch can be programmed at this location. If the key-switch contacts usually rest in the open state and close when the key-switch is operated you should turn on option 7.
8	Key-Switch is Momentary – The operation of the key-switch can be momentary or latching. If option 8 is on, the key-switch operation is assumed to be momentary. This means that each time the key-switch is operated then released the area will toggle its current state (I.e. if armed it will become disarmed or vice versa). If this option is turned off it is assumed that the key-switch is a latching type. This means that when the key-switch is operated and the key removed the contacts remain in the same state. When a latching key-switch is used, turning on the switch will arm the area and turning it off will disarm the area.

16 Zones

16.1 Zone area assignment

ZONE AREA ASSIGNMENT – P121E 1-16E 1-2E

Option	Description
1	Area “A” – This option assigns the Zone to Area A. If a Zone is assigned only to Area A it will activate if Area A is armed. If the zone is in both area A & B then it will activate only when both areas are armed.
2	Area “B” – This option assigns the Zone to Area B. If a Zone is assigned only to Area B it will activate if Area B is armed. If the zone is in both area A & B then it will activate only when both areas are armed.

The output day mode timer is how long an output will turn on following a day zone unsealing. The Day Mode Timer is in 1/10th Sec intervals e.g. 20=2 Seconds

NOTE: There are more options to choose but the System supports only 2 Areas (1-2)

16.2 Zone type options- basic information

ZONE OPTIONS A – P122E 1-16E 1-8E

Option	Description
1	Zone is Active – If this option is on the zone is turned on. If it is turned off the zone will not be monitored by the panel. The panel can provide up to 16 zones but is configured by default as an 8 zone panel with this option turned off for zones 9-16.
2	Zone is N/O – This option only applies if the zone input is set to type 14 (zone doubling) at location P125E. When configured as type 14 there are three resistors wired in series on the input, a 2k2 tamper resistor, a 4k7 low zone resistor and an 8k2 high zone resistor. At this point, the zone can be set as having a N/C (Normally closed) alarm contact where the EOL resistor is shorted out in the sealed state or it can be set as a N/O (Normally open) alarm contact where the EOL resistor is in circuit in the sealed state. If this option is turned on it assumes that the alarm contact is N/O.
3	Spare
4	Keypad Zone – If this option is on the Zone will follow the Input at the corresponding Proximity Reader. If the Proximity Reader is set to Keypad # 1 the input will be either zone 1 or zone 9, e.g. if P122E1E (zone #1) had option 4 on then the input at reader one will operate zone 1. If P122E9E (zone #9) had option 4 on then the input at reader one will operate zone 9. Proximity reader 1 can operate zones 1 or 9 through to proximity reader 8 can operate zones 8 or 16.

Option	Description
5	Zone is a Radio Zone – If this option is on the panel does not scan the hardwired zone input terminal but instead is looking for a radio zone signal. The correct radio type should be set at location P127E to ensure that the radio zone works correctly.
6	one is a Stay Mode Zone – If this option is on the zone will be active when Stay Mode is armed. This feature is normally used for arming just part of the alarm at night time.
7	Zone can be Manually Bypassed – If this option is on the zone can be Manually Bypassed at the keypad using the <BYPASS> button. A zone must be Bypassed while in the disarmed state. A bypassed zone will also bypass any tampers associated with that zone. Once the area with the bypassed zone has been armed then disarmed, the manual bypass is removed and the zone must be manually bypassed again before arming if required. If a zone is configured as a 24 Hour zone (P123E Options 3,4 & 5), they can also Manually Bypassed but in this case the Bypass must be manually removed to re-instate the zone
8	Zone can be Auto-Bypassed – If this option is on the zone will be Auto-Bypassed if unsealed at the expiry of the exit delay. If a zone is unsealed at the time of arming and remains unsealed when the exit delay expires and this option is on for that zone it will be automatically bypassed by the panel. If the zone seals after that time it will be re-instated automatically and can then cause an alarm. On disarming of the alarm any auto-Bypasses are removed

ZONE OPTIONS B – P123E 1-16E 1-8E

Option	Description
1	one is a Handover Zone – A Handover Zone is one that its entry delay will apply provided a Non-Handover entry zone is triggered first. If no other entry delay zones are triggered before the handover zone the entry delay on that zone does not apply and the alarm will become instant (no entry delay).
2	Zone is a Two Trigger Zone – If this option is on the zone will have to trigger twice within the two trigger time (P25E5E) before it will cause an alarm. If the zone does not trigger a second time before the two trigger time expires, the count is reset and it will take another two triggers to cause an alarm on this zone. If more than one zone is set-up as a two trigger zone, then a single trigger from two separate zones within the two trigger time can also cause an alarm. If the zone becomes faulty and stays in alarm once triggered it will also cause an alarm provided it remains in alarm for longer than the two trigger time.
3	Zone is a 24 Hour Zone – If this option is on the zone will be constantly monitored regardless of the arm/disarm state of the panel. If the 24 Hour zone also has an entry delay programmed (P144E), this delay will apply. If the 24 Hour zone activates but then resets before the entry delay expires no alarm will be generated. This feature can be useful for monitoring plant type alarms such as freezer alarms. Once the alarm has been generated it must be cleared by entry of a valid User code.

Option	Description
4	Zone is a 24 Hour Auto-reset Zone – If this option is on the zone will be constantly monitored regardless of the arm/disarm state of the panel. If the 24 Hour zone also has an entry delay programmed (P144E), this delay will apply. If the 24 Hour zone activates but then resets before the entry delay expires no alarm will be generated. Once an alarm has been generated with a 24 Hour Auto-reset zone, the alarm will be removed automatically once the input reseals.
5	Zone is a 24 Hour Fire Zone – If this option is on the zone will be constantly monitored regardless of the arm/disarm state of the panel. If the 24 Hour Fire zone also has an entry delay programmed (P144E), this delay will apply. If the 24 Hour Fire zone activates but then resets before the entry delay expires no alarm will be generated. Once the alarm has been generated it must be cleared by entry of a valid User code. The 24 Hour Fire Zone will also cause an alarm output to pulse the alarm to differentiate a fire alarm from a burglar alarm (e.g. a fire alarm will switch the output on and off at the pulse timer rate whereas a burglar alarm on the same output will sound continuously).
6	Zone is a One-Shot Zone – If a zone is set as a One-Shot zone it can only trigger the alarm once per armed cycle. If it is not a One-Shot zone it can trigger the alarm multiple times during the armed state. If a value other than “0” is programmed at location P146E the programmed Re-trigger time must expire before the zone can alarm again.
7	Zone is a Chime Zone – If this option is on, the zone will operate Chime mode when disarmed. When the alarm is armed the Chime Mode is disabled for this zone. A Chime zone can sound the keypad buzzer or operate an output to indicate that the zone is unsealed. It is normally used to monitor areas during the daytime.
8	Zone is a Permanent Chime Zone – If this option is on, the zone will operate Chime mode when armed or disarmed. When the alarm is armed the zone will continue to only be a Chime Mode Zone and will not cause a burglar alarm. A Chime zone can sound the keypad buzzer or operate an output to indicate that the zone is unsealed.

16.3 Special Zone type options

ZONE OPTIONS C – P124E 1-16E 1-8E

Option	Description
1	Can Arm if Zone is not Ready – If this option is turned on, plus Options 7 or 8 or on at P45E (cannot Arm if zones not sealed/Ready), this zone can be unsealed and the panel can still be armed. This option allows the panel to still be armed if a low security zone is unsealed yet still stopping arming if a high security zone is unsealed
2	Will Send Multiple Reports to Dialer – If this option is turned on, a zone will send an alarm report to the monitoring station every time it is activated. If the option is turned off, the zone can only send one alarm report per armed cycle
3	Zone is Monitored for Inactivity – If this option is on the zone will be checked to see that it operates during the disarmed state. If it is not operated within the time set at P163E a “Sensor-watch” alarm will be generated. This feature is designed to detect a faulty zone that is not operating normally or one that has had it’s detection area blocked. If a detector has this option turned on and it doesn’t operate when disarmed, the timer at location P163E will start to count down. The timer is stopped when the area assigned to the zone is armed and resumes with the saved value when disarmed again. The timer is reset back to the original value every time the zone operates while disarmed.
4	Zone is a Soak Test Zone – If a zone is suspected of being faulty and is causing false alarms, you can turn it into a Soak Test Zone and it will still be monitored for alarms when armed but it will not cause the sirens to sound or report to the dialer. The Soak Test zone will still be logged in the event memory however so it is possible to check the activity of the zone, via the memory, and after a suitable period of no alarms it can be re-instated as part of the alarm by removing the Soak Test option.
5	Zone will report to Area B Account Code – If a zone is in Areas A & B and it goes into alarm, it will default to reporting on the Area A Account Code (see P62E). By turning this option on when a zone is in both areas it will report to Area B account Code
6	Zone will Not Report 24 Hour Alarms via Dialer – If this option is turned on and the zone is set as a 24 Hour type, when an alarm is generated, the alarm will not be transmitted to the monitoring station via the dialer.
7	Pulse Output on Kiss off after Alarm – This option activates the output function “pulse output on kiss off after a zone alarm“ for a defined pulse time.
8	Exit Terminator – Using this option will stop the area exit delay time by closing this input and arm the area immediately with 3 seconds delay.

16.4 Different End of Line (EOL) Resistor value options

There are 8 hardwired zone inputs on the panel. Each of these inputs can have different EOL (End-of-Line) configurations if desired. As standard is supplied:
2K2 for Tamper
4k7 for Detectors Zone 1-8 (low zone)
8k2 for Detectors Zone 9-16 (high zone)
Therefore programming Zones as type 14 is recommended –**P125E 1-8E 14E**

If requested by the installation (e.g. already existing mounted detectors with other EOL resistor values), the control panel Sintony 60 supports in addition different single resistor values (wiring Types 1-11), can provide 8 zones with tamper (wiring Types 12,13), zone doubling to allow for up to 16 zones plus tamper (wiring Type 14), or zone doubling without tamper (wiring Type 15). (Refer to chapter wiring examples).

Zone EOL (End-Of-Line) Options – P125E 1-8E 1-15E

Zone EOL Type P125E	Input Resistor	Comments	Wiring options
1	1k (Brown, Black, Red)	Single EOL	Type 1-11
2	1k5 (Brown, Green, Red)	Single EOL	Type 1-11
3	2k2 (Red, Red, Red)	Single EOL	Type 1-11
4	3k3 (Orange, Orange, Red)	Single EOL	Type 1-11
5	3k9 (Orange, White, Red)	Single EOL	Type 1-11
6	4k7 (Yellow, Violet, Red)	Single EOL	Type 1-11
7	5k6 (Green, Blue, Red)	Single EOL	Type 1-11
8	6k8 (Blue, Grey, Red)	Single EOL	Type 1-11
9	10k (Brown, Black, Orange)	Single EOL	Type 1-11
10	12k (Brown, Red, Orange)	Single EOL	Type 1-11
11	22k (Red, Red, Orange)	Single EOL	Type 1-11
12	2k2 Tamper, 4k7 Zone	Zone & Tamper	Type 12-13
13	3k3 Tamper, 6k8 Zone	Zone & Tamper	Type 12-13
14	2k2 Tamper, 4k7 Low Zone, 8k2 High Zone	Zone Doubling, with Tamper	Type 14
15	4k7 Low Zone, 8k2 High Zone	Zone Doubling, no tamper	Type 15

NOTE: To program the zone there are only 1-8 options, because there are only 6 hard wired inputs on the control panel. To program the zones 9-16 this have to be done trough Zone doubling (Options 14 or 15) again on the zone inputs 1-8. (e.g. if the panel should be used with 16 single identifying zones, all EOL options (1-8) must be programmed as Zone doubling type 14 or 15)

16.5 Vibration sensor zone type- zone response time

If a zone is used for connecting a hardwired vibration Sensor, it could be necessary to adjust the reaction time of the panel to the output signal of the vibration sensor.

ZONE RESPONSE TIME – P126E 1-8E 1-16E
There are 8 hardwired zone inputs on the panel. The response time (how quickly the input responds to an input trigger) can be varied for each zone. The first 8 settings are very fast response times normally used when vibration sensors are connected to a zone input. Response Settings 1-8 (vibration) can only be applied to zones 1-8 and the zone EOL setting must be set to Tamper 2k2.(only the zone options 125E 1-8E -3 or 12 or 14E- refer to chapter different EOL value).

NOTE: If zone doubling is turned on, both zones on an input will have the same response time (e.g. zones 1 & 9 would have the same time).

The response settings 9-26 start at about 200 ms for setting 9 (standard default setting) through to 1.05 sec for setting 26.
If no exact timing is needed options 1-8 could be used as well.

Response Setting	Reaction Time	Response Setting	Reaction Time
1	Highest Vibration setting	17	600 ms
2-7	Middle Vibration setting	18	650 ms
8	Lowest Vibration setting	19	700 ms
9	200 ms	20	750 ms
10	250 ms	21	800 ms
11	300 ms	22	850 ms
12	350 ms	23	900 ms
13	400 ms	24	950 ms
14	450 ms	25	1000 ms
15	500 ms	26	1050 ms
16	550 ms		

16.6 Supervising setting of wireless detector type

The wireless detectors of this systems working on a transmission protocol which is called “Siway”. This is a 24bit coded transmission signal which gives every detector a unique number and transmits the special functions such as battery low signals, tamper alarms, reed switch open/close signals and supervision signals.
This information are sent by every detector randomly between 5-7 minutes.

To monitor if all detectors are still available in the system, the Control panel is using the supervision signal of the detector. If this option is turned on the supervise timer is constantly being reset while valid supervisory signals are being received from the detector. If no supervise signals are received from the PIR within the supervise timer value a supervised alarm is generated. How to set the supervision timer refer to chapter Radio zone supervised timer (P25E4E 0-9999E).

RADIO ZONE DETECTOR TYPE – P127E 1-16E 3-4E

Type	Description	Grade of Security
3	SiWay with checksum –supervised -. Selecting this option also starts the supervise timer (P25E4E).	High-recommended
4	SiWay with checksum not-supervised – The automatic supervisory signal sent by the detector is ignored in this mode by the control panel.	Low

NOTE: To activate this function and connect a wireless detector, the Zone must be programmed as a Radio zone (refer to options zone type options basic information- P122E-1-16E 5E)

NOTE: Also the supervision timer must be set (P25E4E). It is not recommended to use a very short period- (minimum=1 signal cycle ~ 8 minutes) because it could lead to a high rate of false alarms.

16.7 Zone alarms to output mapping

ARMED ZONE ALARMS to OUTPUT – P128E 1-16E 1-8E
If an Area is Armed and a zone assigned to that Area activates, the zone can trigger selected Outputs for local alarm signaling. This location assigns Zones to Outputs for alarms that occur when in the Full Armed State.
Option 1 = Output 1, Option 2 = Output 2 etc.

STAY MODE ZONE ALARMS to OUTPUT – P129E 1-16E 1-8E
If an Area has Stay Mode Armed and a zone assigned to that Area activates, the zone can trigger selected Outputs for local alarm signaling. This location assigns Zones to Outputs for alarms that occur when Stay Mode is Armed.
Option 1 = Output 1, Option 2 = Output 2 etc.

24 HOUR ZONE ALARMS to OUTPUT – P130E 1-16E 1-8E
If a zone is programmed as a 24 Hour type and it activates, the zone can trigger selected Outputs for local alarm signaling. If the zone is a standard 24 hour type (P123E3E) the output will turn for the full reset time, if it is an Auto-reset type (P123E4E) the output will either turn off when the reset time expires or if the input clears and if it is a Fire type (P123E5E) the output will pulse at a rate equal to the pulse time for that output.
Option 1 = Output 1, Option 2 = Output 2 etc.

CHIME ZONE ALARMS to OUTPUT – P131E 1-16E 1-8E
If a zone is programmed as a Chime zone (P123E7E) and it activates, the zone can trigger selected Outputs for local alarm signaling. The output will operate for the Chime to Output time at location P41E. The zone must clear before the output can be activated again.
Option 1 = Output 1, Option 2 = Output 2 etc.

ZONE TAMPER ALARMS to OUTPUT – P132E 1-16E 1-8E
If a hardwired zone is programmed to allow tamper monitoring (P125E types 12,13 & 14), or the zone is a radio detector with tamper, the zone tamper can trigger selected Outputs for local alarm signaling.
Option 1 = Output 1, Option 2 = Output 2 etc.

NEAR ALARM ZONE to Output- P167E 1-16E1-8E
If the option near alarm zone or confirmed alarm zone is activated (this could be done only for a total Area –refer to chapter Area arm and special function- option B- P46E 1-2E 1E) This location assigns Zones to Outputs for alarms that occur when near alarm zone function is activated.(pre alarm information that could be used)
Option 1 = Output 1, Option 2 = Output 2 etc.

CONFIRM ALARM ZONE to Output- P168E 1-16E 1-8
If the option near alarm zone or confirmed alarm zone is activated (this could be done only for a total Area –refer to chapter Area arm and special function- option B- P46E 1-2E 1E) This location assigns Zones to Outputs for alarms that occur when confirmed alarm zone function is activated.(second alarm has occurred-confirmed alarm happened)
Option 1 = Output 1, Option 2 = Output 2 etc.

16.8 Zone alarms to keyboard buzzer mapping

ARMED ZONE ALARM BEEPS TO KEYPAD – P134E 1-16E 1-8E
If an Area is Armed and a zone assigned to that Area activates, the zone can sound the buzzer at selected keypads for local alarm signaling. This location assigns zone alarm beep to a keypad for alarms that occur when in the Full Armed State.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

STAY MODE ZONE ALARM BEEPS TO KEYPAD – P135E 1-16E 1-8E
If an Area is Stay Mode Armed and a zone assigned to that Area activates, the zone can sound the buzzer at selected keypads for local alarm signaling. This location assigns zone alarm beep to a keypad for alarms that occur when in Stay Mode is Armed.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

24 HOUR ZONE ALARM BEEPS TO KEYPAD – P136E 1-16E 1-8E
If a zone is programmed as a 24 Hour type and it activates, the zone can sound the buzzer at selected keypads for local alarm signaling. If the zone is a standard 24 hour type (P123E3E) or Fire type (P1235E) the keypad buzzer will sound until reset by a User but if it is an Auto-reset type (P123E4E) the keypad buzzer will reset when the input clears.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

CHIME ZONE ALARM BEEPS TO KEYPAD – P137E 1-16E 1-8E
If a zone is programmed as a Chime zone and it activates, the zone can sound the buzzer at selected keypads for local alarm signaling. The duration of the Chime beep is programmed at location P94E. The Chime function can also be locally disabled at each keypad individually if not required.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

ZONE TAMPER ALARM BEEPS TO KEYPAD – P139E 1-16E 1-8E
If a hardwired zone is programmed to allow tamper monitoring (P125E types 12, 13 & 14), or the zone is a radio detector with tamper, the zone tamper can beep the keypad buzzer at individual keypads.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

RADIO SUPERVISE FAIL BEEPS TO KEYPAD – P140E 1-16E 1-8E
If a zone is programmed as a radio zone and that type is actively monitoring the supervision signal, a supervise signal failure from the detector alarm can sound the buzzer at selected Keypads for local alarm signaling.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

ZONE INACTIVITY ALARM BEEPS TO KEYPAD – P141E 1-16E 1-8E
If the zone is programmed for inactivity monitoring (P124E3E) and it is not operated within the time set at P163E a “Sensor-watch” alarm will be generated. A “Sensor-watch” failure from the detector can sound the buzzer at selected Keypads for local alarm signaling.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

ARMED ZONE ENTRY DELAY BEEPS TO KEYPAD – P142E 1-16E 1-8E
If the alarm is Armed and a delay zone triggers the entry delay it can also beep the keypad buzzer to warn that the entry delay is counting down and the alarm should be turned off.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

STAY MODE ENTRY DELAY BEEPS TO KEYPAD – P143E 1-16E 1-8E
If Stay Mode is Armed and a Stay Mode delay zone triggers the entry delay it can also beep the keypad buzzer to warn that the entry delay is counting down and the alarm should be turned off.
Option 1 = Keypad 1, Option 2 = Keypad 2 etc.

16.9 Entry delay time – retrigger time –Zone timing settings

ARMED ZONE ENTRY DELAY TIME – P144E 1-16E 0-9999E
(Value 0-9999 Seconds)
Each Zone has it’s own Entry Delay time when in the Full Armed State. The delay can be programmed from 0-9999 seconds in one second increments. If the entry delay is set to “0” the zone will be an instant zone.

STAY MODE ZONE ENTRY DELAY TIME – P145E 1-16E 0-9999E
(Value 0-9999 Seconds)
Each Zone has it’s own Entry Delay time when in Stay Mode. The delay can be programmed from 0-9999 seconds in one second increments. If the entry delay is set to “0” the zone will be an instant zone.

ZONE RE-TRIGGER TIME – P146E 1-16E 0-255E
(Value 0-255 Minutes)
Each Zone has it’s own alarm Re-trigger Time. The delay can be programmed from 0-255 minutes. Once a zone has activated it cannot be activated again until the Re-trigger Time has expired.

16.10 Armed and stay mode entry delay times to output mapping

ARMED ENTRY DELAY to OUTPUT – P161E 1-16E 1-8E
If the alarm is Armed and a delay zone triggers the entry delay it can also beep an Output to warn that the entry delay is counting down and the alarm should be turned off.
Option 1 = Output 1, Option 2 = Output 2 etc.

STAY MODE ENTRY DELAY to OUTPUT – P162E 1-16E 1-8E
If Stay Mode is Armed and a delay zone triggers the entry delay it can also beep an Output to warn that the entry delay is counting down and the alarm should be turned off.
Option 1 = Output 1, Option 2 = Output 2 etc.

16.11 Zone movement/activity control – watch timer

This option sends a reporting signal to the connected Alarm station if a Zone has not detected any movement/ activity while disarmed for a certain period. Normally this option is used to monitor older people by the use of motion detectors and helps the Alarm center to control if the user is still moving around/ is active.

NOTE: The wireless motion detectors have a inhibit time (2min.) and do not transmit a signal all the time when motion is detected. Refer to the Detector description of the used detector.

SENSOR_WATCH TIME – P163E 1-16E 0-9999E
(Value 0-9999 Minutes)
If the zone is programmed as a “Sensor-Watch” zone (P124E3E) and it is not operated within the time set at this location a “Sensor-watch” alarm will be generated. If a detector has this option turned on and it doesn’t operate when disarmed, this timer will start to count down for the zone/s concerned. The timer is stopped when the area assigned to the zone/s is armed and resumes with the saved value when disarmed again. The timer is reset back to the original value every time the zone operates while disarmed.

16.12 Learn a wireless detector/code to the system – P164E 1-16E

LEARN RADIO ZONE CODES – P164E 1-16E
A RADIO Zone must be enrolled into the panel before it can be used. To learn a Radio Zone you must first have a compatible receiver connected to the panel keypad buss. With the receiver connected and the panel in program mode, entering P164E then the zone number you wish to enroll, e.g. 5E for zone 5, the keypad will start to beep to indicate that learn mode has been started and the LED on the receiver will flash. Now operate the detector you wish to learn into Zone 5 slot. Once the transmitted code has been received by the panel and saved, the keypad will stop beeping and the LED on the receiver will stop flashing.
When learning a new radio zone the panel checks all possible locations (including pendants) before saving the new code to ensure that the code has not already been loaded into another slot. If the code already exists, the keypad will indicate which slot the code is already installed at. A number from 1-16 indicates a zone slot and a number from 21-100 indicates a user slot.

16.13 Delete a wireless detector/code of the system – P165E 1-16E E

DELETE a RADIO ZONE CODE – P165E 1-16E E
If you wish to delete a single Radio Zone, pressing P165E then the Zone number that you wish to delete. The Panel will ask you as confirmation –enter to start, to delete the selected code. E.g. P165E 5E E will remove the code stored for Zone 5.

16.14 Find a wireless detector/code in the system – P166E 1-16E E

FIND a RADIO ZONE LOCATION – P166E 0E
If you have a Radio Detector loaded into the panel but are unsure which location (User #), pressing P166E while in Installer program Mode will start “Find” Mode. By pressing enter the keypad will start to beep to indicate that “Find” mode has been started and the LED on the Receiver will flash. Now operate the Radio Detector you wish to find. If the Radio Detector is in memory the keypad will display the number (1-16 indicates a zone, and 21-100 indicates a user). The keypad will stop beeping and the LED on the Receiver will stop flashing

17 Time Zones

17.1 Holidays

HOLIDAYS – P170E 1-8E (DDMMYY)
It is possible to pre-program up to 8 holidays. Holidays can override the time-zone function on the programmed day. For example, if an output was automatically controlled by a time-zone, the pre-programmed holidays can stop the output from turning on or off on a holiday. A holiday consists of a single day programmed by Date/Month/Year (DDMMYY). The holiday begins at the start of the day (00:00:00) and finishes immediately before midnight (23:59:59) on the programmed date. Holidays can be programmed in any order (although for simplicity it is recommended that they are programmed in chronological order) and the panel automatically removes them once the day ends. If you wish to manually remove a programmed holiday you must program in 000000 at the holiday location. If the holiday date you are attempting to enter is older than the current date the panel will not save the data e.g. if the current date was 111204 (11th of December 2004) and you tried to enter in 101204 (10th of December 2004) the panel will not save the programmed holiday as the day has already elapsed.

17.2 Time zone days

The Time-zone days are the days that the time-zone will be active. You can select any combination of the days, e.g. days 2,3,4,5,6 for Monday to Friday or 1&7 for Saturday & Sunday, etc. For easier programming there is also the invert function which selects all times outside those selected. There are 8 Time-zones that can be programmed.

TIMEZONE DAYS – P171E 1-8E

Option	Description
1	**Sunday**
2	**Monday**
3	**Tuesday**
4	**Wednesday**
5	**Thursday**
6	**Friday**
7	**Saturday**
8	**Invert**

17.3 Time zone start and stop times

TIMEZONE START TIME – P172E 1-8E 0000-2359E(HHMM)
The Time-zone start time is when the time-zone begins. It would normally be set to the beginning of the day, e.g. if you were automatically arming and disarming an area with a time-zone and you wanted it to disarm when the time-zone started you would set the start time to about 0830. The start time is programmed in 24 hour format (e.g. 0000-2359).
If you are setting up the time-zone during the active period (e.g. if the time-zone goes from 0830-1700 and the current time is 1200) you will have to wait until the next minute expires before the panel will update the time-zone status. You can see if the time-zone is active at location P200E4E.

TIMEZONE END TIME – P173E 1-8E 0000-2359E(HHMM)
The Time-zone end time is when the time-zone finishes. It would normally be set to the end of the day, e.g. if you were automatically arming and disarming an area with a time-zone and you wanted it to arm when the time-zone ended you would set the end time to about 1700. The Time-zone end is active at the end of the programmed minute e.g. if the time-zone end time was set to 1700, the actual time that the time-zone operates will be at 17:01. The end time is programmed in 24 hour format (e.g. 0000-2359)

TIMEZONE OPTIONS – P174E 1E
1 = Ignore Holidays
If option 1 is turned on for a Time-zone, that time-zone will not be disabled when a holiday occurs. Normally when a holiday occurs all Time-zones will be disabled but if this option is turned on the Time-zone will not be affected when a holiday is active.

18 Dialer

18.1 Dialer options

DIALER OPTIONS – P175E 1E1-8E

Option	Description
1	Dialer is Enabled – If this option is turned off the dialer will be disabled. The option must be on to allow the dialer to make calls.
2	Fax Defeat – The panel can automatically answer an in-coming call in two ways. The first is to set the auto-answer ring count to a convenient number (P175E4E) and let the phone ring until this number is reached at which time the panel will answer the call. The second method is to use fax defeat which entails calling the panel and letting it ring no more than 4 times, hanging up, then ringing back within 45 seconds. The panel will now answer the call on the first ring.
3	Disable Telephone line Monitoring – If the panel is connected to a poor telephone line and the line failure alarm is appearing regularly, by turning this option on the panel will not do the line test.
4	Pulse Dial – If this option is Off the panel will dial in DTMF format, if On then the panel will dial using Pulse Dialing format
5	Reverse Pulse Dial – If this option is On, and option 4 is On, then the panel will dial using Reverse Pulse Dialing format (e.g. the number 9 = 1 pulse). If this option is Off and Option 4 is On, the panel will dial in normal Pulse format (e.g. the number 9 = 9 pulses).
6	Long DTMF Dialing Digits – If this option is Off, the panel will dial using normal dialing (75ms on & 75ma off). If it is On, the panel will dial using the long tones (100ms on & 100ms off).
7	Auto-detect Modem – If this option is on the panel will answer an in-coming call with the V21 acknowledge tone. If the modem does not respond within 5 seconds the panel will then generate the acknowledge tones for BELL103 format. It will repeat this cycle twice and then hang-up if no communication with a modem is established
8	Force V21 Mode – The dial up panel to PC link can be established using either Bell 103 or V21. If the auto-detect function at option 7 does not result in the best format for your modem then you can force the panel to only communicate in one format. If the LED is off the format is BELL103, LED on means V21.

DIALER OPTIONS 2 – P175E 2E1-8E

Option	Description
1	Step to next Number – If more than one telephone number is programmed, this option will force the dialer to step through each number after a call. If this option is off the dialer will make all calls to the first number before moving on to the next number.
2	Upload/download uses Call-back Number – A Telephone number can be programmed as a Call-back number. If this option is turned on, and a PC contacts the panel a direct connection cannot be made with the PC. The panel will hang-up the call and dial the PC back on the Call-back number.
3	Upload/download only if Disarmed – If this option is turned on, and a PC attempts to contact the panel while the alarm is Armed a direct connection cannot be made as the panel will not answer the call. If the panel is Disarmed a connection can be established.
4	Send Test Calls Only if Armed – If this option is On the panel will only send a daily test call if it is Armed. This option assumes that the normal arm/disarm signals sent on a daily basis can serve as a test and that the connection only needs to be verified daily if the panel is left in the armed state for periods longer than 24 hours.
5	Test Time period is in days- If this option is activated the timing which is programmed at P175E 5E 0-255E for the time interval for the next test call can be changed from hours to days. E.g. instead of 24 hours this than means 24 days- for the test call period. This option is not recommended. For safety reasons a test call should be done at least every 24 hours.
6	Hold line open following Domestic/Voice report for DTMF control – If this option is On the dialer will keep the telephone line open after being kissed-off following a Domestic or Voice alarm call so that the person at the phone can then use their DTMF codes to arm/disarm the system or turn on the optional microphone if required.
7	First to Open Last to Close Reporting – If this option is on and the alarm is split into two Areas, then the “Arm” report to the monitoring station will only be sent when both areas are armed and it will be a single report on Area A account code (last to close). On Disarming of the alarm the disarm report will be sent when either Area is disarmed (first to open). Only one disarm report will be sent using the Area A account code. If zones in both areas are bypassed, the bypass report for all zones will only be sent when both areas are armed (last to close) but the Bypass restore reports will be sent only when the Area associated with the zone is disarmed. In this way if an area remains armed and it’s associated bypassed zone/s are still bypassed the monitoring station knows that the bypasses have not been removed yet
8	Spare

18.2 Auto answer ring count

AUTO-ANSWER RING COUNT – P175E 3E 0-99E(Value 0-99)
If the dialer is set to answer an in-coming call for remote control or upload/download the number of rings before answering the call can be set at this location.

18.3 Test call options

TIME to the FIRST DIALER TEST CALL – P175E 4E 0000-2359E (Value 0000-2359)
If the dialer is set to send Automatic Test Calls, the start time for the first call is set at this location. This allows the test call to be linked to a quite period where the line would not normally be used (e.g. 2300)

TEST CALL TIME PERIOD – P175E 5E 0-255E (Value 0-255 Hours)
When reporting in Contact ID format the panel can send regular test calls to the monitoring company to check the integrity of the panel and the line. The regularity of the test calls is set at this location. It would normally be set to a value of 24 so that a test call is sent one a day. The start time for the first test should also be set at location P175E5E. Check also the option P175E 2E 5E test call time period change from hours to days.

18.4 Listen Dialing function trough Keypad and Output

KEYPAD LISTEN- Dialing IN OPTIONS – P175E 6E 1-8E
The panel provides the facilities to use the buzzer in the keypad as a speaker to listen to the call being made by the dialer. To use this feature a 5th wire must be connected between the panel and a keypad using the listen-in terminals. The options above allow many combinations of the listen-in to be used or it can be disabled by selecting no options.

Option	Description
1	Listen-in Enabled when dialing only and in Disarmed State
2	Listen-in Enabled when dialing only and in Armed State
3	Listen-in Enabled when dialing only and in Monitor Mode
4	Listen-in Enabled through the entire call only in Disarmed state
5	Listen-in Enabled through the entire call only in Armed State
6	Listen-in Enabled through the entire call only in Monitor Mode
7	Listen-in Enabled when the panel answers a call
8	Listen-in on at All Times

OUTPUT # 1 LISTEN-Dialing IN OPTIONS – P175E 7E 1-8E
The panel provides the facilities to use a speaker connected to Output # 1 to listen to the call being made by the dialer. For this to happen the device connected to output # 1 must be an 8Ω horn speaker. The options above allow many combinations of the listen-in to be used or it can be disabled by selecting no options.

Option	Description
1	Listen-in Enabled when dialing only and in Disarmed State
2	Listen-in Enabled when dialing only and in Armed State
3	Listen-in Enabled when dialing only and in Monitor Mode
4	Listen-in Enabled through the entire call only in Disarmed state
5	Listen-in Enabled through the entire call only in Armed State
6	Listen-in Enabled through the entire call only in Monitor Mode
7	Listen-in Enabled when the panel answers a call
8	Listen-in on at All Times

18.5 Dialing pre-fix numbers

DIALLING PRE-FIX NUMBER – P175E 8E (Value 1-16 digits)
The panel can be programmed with a Pre-fix telephone number. The Pre-fix number can be up 16 digits long. The Pre-fix number can be dialed before any of the 8 Telephone numbers if required (P183E Option 7). This option could be used if there are bad telephone lines or special country codes etc. requested.

LCD KEYPAD BUTTON	LCD KEYPADTELEPHONE INDICATIONS	TELEPHONE NUMBER SPECIAL FUNCTION
CONTROL & 0	DELETE #	DELETE #
CONTROL & 2	#	"#"
CONTROL & 3	*	"*"
CONTROL & 4	-	"2.5 sec Pause"
CONTROL & 5	w	"Wait for 2nd Dial-tone"
CONTROL & 6	=	"5 sec Pause"

Fig. 23 How to enter prefix numbers

18.6 Remote control by external phone trough DTMF dialing tones

OUTPUT DTMF CONTROL CODE NUMBER – P175E 12E 0-9999E
(Value 1-4 digit code 0-9999)
The panel can be configured to allow remote operation of the Outputs via a remote telephone. The code programmed at this address is the DTMF code that must be used when performing this function. When dialing the panel and it has answered the call, after waiting for the panel modem tones to stop you can enter in the 4 digit DTMF code plus the Output number you wish to control, e.g. <1> for Output # 1, and the current status will be given of the Output associated with the code entered. After that, if you press the "*" button on the telephone the status of the output will toggle e.g. if it was previously On it will change to Off or vice versa. When finished you simply hang-up and 15 seconds later the panel will release the line.

DIALER ACKNOWLEDGE DTMF CODE NUMBER – P175E 14E 0-9999E
(Value 1-4 digit code 0-9999)
If the panel is set to report in Domestic or Voice reporting formats, you can simply kiss-off (acknowledge) the alarm by pressing the <#> button on the remote telephone. Alternatively if you require a more secure kiss-off method to ensure that the alarm is only kissed off by the correct person you can program a 1-4 digit code at this location. If a code is programmed at this location you must enter in the code followed by the <#> button to kiss-off the alarm event.

18.7 Forced test call code options

FORCE TEST CALL DTMF CODE NUMBER – P175E 15E 0-9999E
(Value 1-4 digit code 0-9999)
If a user wishes to remotely force a test call from the panel to a monitoring company using the Contact ID test message, you can dial the panel and when it answers enter the code programmed at this location on the telephone.
If a voice board is fitted you can assign a voice message (see P176E11E below) to indicate that the function was started. If no voice board is fitted but there is a DTMF IC fitted to the panel you will get 3 short beeps after the code is entered to indicate the function was started. Once you hang-up the phone the panel will then make a call to the monitoring company and send a manual test call message. If no code is programmed at this location (e.g. “0”) the function will be disabled. The code can be a 1-4 digit number as required.
It is also possible to force a locally generated test call from the panel keypad by pressing and holding the <CONTROL> button then <0> within two seconds of pressing control. This will force a test call to the monitoring company.

NOTE: If using this remote test code and any of the other remote DTMF codes at locations (P63E, P175E12E, P175E13E & P175E14E) you should make this code a 4 digit code to ensure the panel knows what function is being operated. If no other DTMF remote functions are being used this code can be a single digit.

19 Telephone numbers

19.1 Programming telephone numbers

TELEPHONE NUMBERS – P181E 1-8E
(Value 1-16 digit numbers)
The Telephone Numbers can be up to 16 digits long. They can also include some special functions or characters as per the chart below.

LCD KEYPAD BUTTON	LCD KEYPAD CID & 4+2 INDICATIONS	LCD KEYPAD TELEPHONE INDICATIONS	CID & 4+2 SPECIAL CHARACTERS	TELEPHONE NUMBER SPECIAL FUNCTION
CONTROL & 0	-	DELETE #	DELETE #	DELETE #
CONTROL & 2	B	#	“B”	“#”
CONTROL & 3	C	*	“C”	“*”
CONTROL & 4	D	-	“D”	“2.5 sec Pause”
CONTROL & 5	E	w	“E”	“Wait for 2nd Dial-tone”
CONTROL & 6	F	=	“F”	“5 sec Pause”

Fig. 24 How to enter code numbers

19.2 Reporting formats

TELEPHONE NUMBER REPORT FORMATS – P182E 1E1-10E

Option	Description
1	Contact ID – If this option is set for the telephone number, the panel will send a Contact ID message to a Monitoring Station.
2	Domestic Dial – If this option is set for the telephone number, the panel is expecting to dial a residential telephone number when an alarm occurs. The message sent consists of a siren tone over the phone to alert the person called that an alarm is in progress. The alarm can be cancelled by the person called by pressing the “#” button on a touch tone phone during the quiet period. If there is a code programmed at location P175E14E the alarm must be kissed off by entering in the code then “#”. If the alarm is cancelled by a valid user code the dialer will stop any further calls. If Option 1 at P46E is turned on (use near and confirmed alarm reporting) the panel will not send an alarm in this format.
3	Pager – Report alarm events using “Pager” format. This format utilizes Telecom’s 026 pager network or other public subscriber networks, etc, to send numeric messages to a compatible pager. The panel sends a 12 digit numeric number to the pager consisting of the account code (P62E) the 3 digit CID event code for the alarm event and a 3 digit zone number to identify the zone in alarm.
4	Voice Dialer – If the optional voice board is fitted to the panel then selecting this option for the telephone number will allow preset voice messages to be sent via the telephone following an alarm. The kiss off method to acknowledge the alarm message is the same as the Domestic Format. If Option 1 at P46E is turned on (use near and confirmed alarm reporting) the panel will not send an alarm in this format.

Option	Description
5	4 + 2 (10 pps) – This option transmits a 4 digit account code followed by a 2 digit event code to a central monitoring station. The handshake tone from the monitoring station must be 1400 Hz and the transmit tone from the panel will be at 1900Hz at 10 pulses per second.
6	4 + 2 (10 pps) – This option transmits a 4 digit account code followed by a 2 digit event code to a central monitoring station. The handshake tone from the monitoring station must be 2300 Hz and the transmit tone from the panel will be at 1800Hz at 10 pulses per second.
7	4 + 2 (20 pps) – This option transmits a 4 digit account code followed by a 2 digit event code to a central monitoring station. The handshake tone from the monitoring station must be 1400 Hz and the transmit tone from the panel will be at 1900Hz at 20 pulses per second.
8	4 + 2 (20 pps) – This option transmits a 4 digit account code followed by a 2 digit event code to a central monitoring station. The handshake tone from the monitoring station must be 2300 Hz and the transmit tone from the panel will be at 1800Hz at 20 pulses per second
9	4 + 2 (DTMF) – This option transmits a 4 digit account code followed by a 2 digit event code plus a checksum using DTMF signals to a central monitoring station. The handshake tone from the monitoring station must be 1400 Hz /2300 Hz.
10	SIA Format III- This option transmit a 2 digit account code followed by handshake signals from the monitoring stations. The detailed description can be found in the enclosed transmission table in chapter SIA codes reporting format. (SIA code is a Digital communication Standard for Alarm System communications defined by ANSI)
11	SIA Format III-Slow- if a receiver station does not notify the SIA protocol as in option 10, it could be helpful to overcome communication problem by using this option. The transmitting format is identical but will be sent slower.

19.3 Telephone number report options

TELEPHONE NUMBER REPORT OPTIONS - P183E 1-8E1-8E

Option	Description
1	Stop if Kissed Off - If this option is turned on for the telephone number, the dialer will stop sending the alarm if the signal is kissed off and will not proceed with any other telephone numbers for that event. If not kissed off the dialer will start dialing any other programmed numbers. If the event is not kissed off from any of the telephone numbers and the maximum re-tries limit is reached then the event is marked as unsent and will be added to the next event that causes the dialer to report. If this option is off, the dialer will send the event for the maximum re-tries count or until kissed off but it will then proceed to report the same event to any other telephone numbers programmed.
2	Monitor Call Progress - Monitor call progress means that the dialer monitors the status of the dialing tones to determine whether the call is valid or not. If the call is not valid, e.g. engaged, the panel will know and hang up the call and try again.

Option	Description
3	Blind Dial - When the dialer makes a call it looks for dial tone before making the call. If no dial tone is detected the panel hangs up and attempts another call. The panel will do this 3 times and if dial tone is still not detected it will make the call anyway. If blind dial is on, the panel skips the dial tone detection and dials 4 seconds after looping the line (used where non standard or low level dial tone exists).
4	Use Group Numbers for Contact ID Reporting - When sending an alarm using Contact ID, the panel can send separate account codes to report the two areas or, use one account code (P62E1E Area A) and use the group number to identify the two areas. Turning this option on sends one account with group numbers.
5	Spare
6	Auto Kiss-off for Voice/Domestic reporting - If Voice or Domestic Report Format is used and this option is turned On, the alarm will be reported and it can be kissed off by entering the kiss-off code (P175E14E) at the telephone but if not kissed off the event is automatically removed from the dialer buffer once the maximum dial re-tries has been reached for the telephone number. A new event must then be created before the dialer will dial again.
7	Use the Dial Pre-fix Number - If the Telephone number does not provide sufficient digits for dialing purposes it is possible to program a dial pre-fix number (P175E8E). The pre-fix can be dialed before the telephone number. Turning this option on dials the pre-fix first followed by the telephone number.
8	Used as the Call-back Number - Any of the 8 telephone numbers can be designated as the Call-back number. A Call-back number is normally used to allow the panel to dial a preset number and connect to a modem for upload/download purposes.

19.4 Maximum dial re-tries per telephone number

MAXIMUM DIAL RE-TRIES per TELEPHONE NUMBER - P184E 1-8E0-99E
(Value 0-99)
The maximum dial re-tries is the number of times that the panel will dial a telephone number in an attempt to get kissed-off.

19.5 Dial progress options

DIALER REPORTING OPTIONS "A" - P186E 1-8E 1-8E

Option	Description
1	Report Mains Fail – If this option is on the panel will report a Mains fail after the report delay time (P25E6E) has expired.
2	Report Battery Low – If this option is on the panel will report a Battery Low.
3	Report Radio Battery Low – If this option is on the panel will report a Battery Low from any radio zones that have the battery status monitored.
4	Report Line Fail – If this option is on the panel will report a Telephone Line fail. The panel will send the line fail and the line restore at the same time.
5	Report System Tamper – If this option is on the panel will report a Tamper Alarm on the panel tamper input.
6	Report Keypad Tamper – If this option is on the panel will report a Tamper Alarm from a keypad fitted with a tamper switch or a wrong code alarm from a keypad.
7	Report Zone Tamper – If this option is on the panel will report a Zone Tamper Alarm.
8	Report Radio Tamper – If this option is on the panel will report a Radio Tamper Alarm.

DIALER REPORTING OPTIONS "B" - P187E 1-8E 1-8E

Option	Description
1	Report Supervised Radio Alarm - If this option is on the panel will report a Supervised radio Alarm (see P25E4E).
2	Report Supervised Radio Alarm - If this option is on the panel will report a Supervised radio Alarm (see P25E4E).
3	Report Zone Inactivity Alarm - If this option is on the panel will report a Zone Inactivity (Sensor-watch) Alarm (see P163E).
4	Report Manual Panic Alarm - If this option is on the panel will report a Keypad generated Panic Alarm.
5	Report Manual Fire Alarm - If this option is on the panel will report a Keypad generated Fire Alarm.
6	Report Manual Medical Alarm - If this option is on the panel will report a Keypad generated Medical Alarm.
7	Report Radio Pendant Panic Alarm - If this option is on the panel will report a Panic Alarm generated by a radio key (pendant).
8	Report Zone Bypasses - If this option is on the panel will report a Manual or Auto Bypass on a zone.

DIALER REPORTING OPTIONS “C” - P188E 1-8E 1-8E

Option	Description
1	Report Arm/Disarm - If this option is on then all Arm/Disarm signals will be reported to a Monitoring Station if Contact ID or 4 + 2 is set as the reporting format.
2	Report Stay Mode Arm/Disarm - If this option is on then all Stay Mode Arm/Disarm signals will be reported to a Monitoring Station if Contact ID or 4 + 2 is set as the reporting format.
3	Send Disarm only after an Alarm - If this option is on, the panel will not normally send an Arm/Disarm signal to the monitoring company, however, if a zone alarm occurs then the panel will send a Disarm following the disarming of the panel to show it has been turned off y a valid user.
4	Send Stay Mode Disarm only after an Alarm - If this option is on, the panel will not normally send a Stay Mode Arm/Disarm signal to the monitoring company, however, if a zone alarm occurs then the panel will send a Stay Mode Disarm following the disarming of the panel to show it has been turned off by a valid user.
5	Report Stay Mode Zone Alarms - If this option is on, the panel will report zone alarms in Stay Mode.
6	Report Access to Program Mode - If this option is on the panel will report a Contact ID code to indicate that either Client or Installer program Modes have been accessed.
7	Report 24 Hour Alarms for Domestic/Voice Formats - When the panel is set to send alarms via domestic or voice mode, No alarms will normally be sent for 24 hour zones. If 24 hour alarms are required to be reported in Domestic/Voice mode then this option must be turned on.
8	Report Zone Restores - If this option is on the panel will report all zone restores in Contact ID or 4 + 2 formats. If this option is turned off the panel will only report the alarms.

DIALER REPORTING OPTIONS "D" - P189E 1-8E 1-8E

Option	Description
1	Report Latchkey Disarm - If the panel is armed in Latchkey Report Mode by using a Code, Key-switch, <ARM>, <STAY>, <A> or <B> buttons, any code or key-switch without the Latchkey option (P4E or P122E Option 6 off) used to Disarm the Alarm will cause a Disarm report to be sent via the dialer. Normally the report format for the telephone number would be set to Domestic or Voice reporting.
2	Report Delinquency Alarm - If the panel has been configured for Delinquency monitoring (P67E) and an area has not been armed for the time set at P67E, a Delinquency Alarm will be sent to the Monitoring Station if Contact ID or 4 + 2 is set as the reporting format.
3	Send Test Calls - If Contact ID or 4 + 2 formats are used for reporting alarm, the panel can also send Automatic test calls. If this option is turned on the test calls will be sent but if test calls are not required they can be disabled by turning this option off.
4	Report Fuse Failure - The panel has two on-board thermal fuses designed to protect the 12v DC outputs from short circuits. If this option is on and either of these fuses are open, a report will be sent to the monitoring station if Contact ID is set as the reporting format.
5	Report Output 1 or 2 Fail - The panel has two high current Outputs (O/P 1 & 2). These Outputs are normally used to drive sirens or strobes for local alarm warning. If option 8 at location P37E is on for either O/P 1 or 2 the Output status will be monitored (e.g. wire to siren has been cut). If this option is on and a fault is detected on the output, a report will be sent to the monitoring station if Contact ID is set as the reporting format.
6	Time Change Reporting –If this option is turned on all changes in the RTC – real time clock setting will be reported.
7	Missing Keypad reporting- If this option is turned on and a Keypad is disconnected it will be reported immediately.
8	RF interference (Jamming) detection- If the System detects a RF signal which is not according to the transmission standard of EN 50131 a jamming signal (frequency blocking) will be reported.

19.6 Call divert numbers and options (not in all countries activated)

DIVERT NUMBER - P194E 1-2E & telephone number E

(1 = Divert ON Number, 2 = Divert OFF number) (Value 1-16 digits)

The call divert numbers are programmed at this location. They are the numbers that must be dialed to turn the divert On or Off. Option 1 turns call divert ON and Option 2 turns the call divert OFF.

CALL DIVERT TRIGGER EVENTS - P192E 1-2E 1-8E
(1 = Area A Trigger Events, 2 = Area B Trigger Events)

Option	Description
1	Divert Arm - If this option is on then the Call-Divert On number (P194E1E) will be dialed when the system is Armed. The User Code must have call divert assigned at P4E option 7 for it to happen. If a User Code does not have option 7 on at P4E the call divert number will not be dialed (used for cleaner codes and others who should not be able to remove the call divert function).
2	Divert on Disarm - If this option is on then the Call-Divert Off number (P194E2E) will be dialed when the system is Disarmed. The User Code must have call divert assigned at P4E option 7 for it to happen. If a User Code does not have option 7 on at P4E the call divert number will not be dialed (used for cleaner codes and others who should not be able to remove the call divert function).
3	Divert on Stay Mode Arm - If this option is on then the Call-Divert On number (P194E1E) will be dialed when the system is Armed in Stay Mode. The User Code Must have call divert assigned at P4E option 7 for it to happen. If a User Code does not have option 7 on at P4E the call divert number will not be dialed (used for cleaner codes and others who should not be able to remove the call divert function).
4	Divert on Stay Mode Disarm - If this option is on then the Call-Divert Off number (P194E2E) will be when the system is Stay Mode Disarmed. The User Code must have call divert assigned at P4E option 7 for it to happen. If a User Code does not have option 7 on at P4E the call divert number will not be dialed (used for cleaner codes and others who should not be able to remove the call divert function).
5	Divert on Key-switch Arm/Disarm - If this option is on then the Call-Divert On and Off numbers (P194E1E & 2E) will be dialed when the system is Armed or Disarmed with the key-switch.
6	Divert on Time-zone Arm/Disarm - If this option is on then the Call-Divert On and Off numbers (P194E1E & 2E) will be dialed when the system is Armed or Disarmed by a Time-zone.
7	Divert on DTMF or PC Arm/Disarm - If this option is on then the Call-Divert On and Off numbers (P194E1E & 2E) will be dialed when the system is Armed or Disarmed by a Remote DTMF code or by a PC connection.
8	Divert on single button <ARM> or <STAY> - If this option is on then the Call-Divert On number (P194E1E) will be dialed when the system is Armed with the <ARM> or <STAY> buttons. This option must be selected if the Call Divert function is required and single button arming is being used.

DIVERT NUMBER DIAL OPTIONS - P193E 1-2E 3;7E
(1 = Divert ON Number, 2 = Divert OFF number)

Option	Description
1	Spare
2	Spare
3	Blind dial - When the dialer makes a divert call it looks for dial tone before making the call. If no dial tone is detected the panel hangs up and attempts another call. The panel will do this 3 times and if dial tone is still not detected it will make the call anyway. If blind dial is on, the panel skips the dial tone detection and dials 4 seconds after looping the line (used where non standard or low level dial tone exists).
4	Spare
5	Spare
6	Spare
7	Use the Dial Pre-fix Number - If the Divert number does not provide sufficient digits for dialing purposes it is possible to program a dial pre-fix number (P175E8E). The pre-fix can be dialed before the divert number. Turning this option on dials the pre-fix first followed by the divert number.
8	Spare

20 4 plus 2 Program options

20.1 Using the 4 plus 2 codes

When using the 4+2 Reporting Format the two digit report code can be changed if desired at the locations below. Also the two digit codes can include the numbers 0-9 as well the special characters B,C,D,E & F. The chart below shows how to program the special 4+2 characters.

Using the 4+2 Codes

Description	Location	User No: Value
Armed by User 4+2 Code	P16E 1-100E	00-FF
Disarmed by User 4+2 Code	P17E 1-100E	00-FF
Zone Alarm 4+2 Code	P147E 1-16E	00-FF
Zone Alarm Restore 4+2 Code	P148E 1-16E	00-FF
Zone Near Alarm 4+2 Code	P149E 1-16E	00-FF
Zone Near Alarm Restore 4+2 Code	P150E 1-16E	00-FF
Zone Verified Alarm 4+2 Code	P151E 1-16E	00-FF
Zone Verified Alarm Restore 4+2 Code	P152E 1-16E	00-FF
Zone Bypass 4+2 Code	P155E 1-16E	00-FF
Zone Bypass Restore 4+2 Code	P156E 1-16E	00-FF

20.2 Mains-Battery-Tamper-Duress and arming 4 plus 2 codes

Description	Location	User No: Value
Mains Fail 4+2 Code	P195E 1E	00-FF
Mains Fail Restore 4+2 Code	P195E 2E	00-FF
Battery Low 4+2 Code	P195E 3E	00-FF
Battery Low Restore 4+2 Code	P195E 4E	00-FF
System Tamper 4+2 Code	P195E 5E	00-FF
System Tamper Restore 4+2 Code	P195E 6E	00-FF
DTMF or PC Arm 4+2 Code	P195E 7E	00-FF
DTMF or PC Disarm 4+2 Code	P195E 8E	00-FF
Duress Alarm 4+2 Code	P195E 9E	00-FF
Automatic Test Call 4+2 Code	P195E 10E	00-FF
Armed By <Arm> Button 4+2 Code	P195E 11E	00-FF
Stay Mode Arm 4+2 Code	P195E 12E	00-FF
Disarmed By <Arm>or <Stay> Button 4+2 Code	P195E 13E	00-FF
Armed by Key-Switch 4+2 Code	P195E 14E	00-FF
Disarmed by Key-Switch 4+2 Code	P195E 15E	00-FF
Fail to Arm by Time-Zone 4+2 Code	P195E 16E	00-FF
Panic Alarm 4+2 Code	P195E 17E	00-FF
Panic” Alarm Restore 4+2 Code	P195E 18E	00-FF
Fire Alarm 4+2 Code	P195E 19E	00-FF
Fire Alarm Restore 4+2 Code	P195E 20E	00-FF
Medical Alarm 4+2 Code	P195E 21E	00-FF
Medical Alarm Restore 4+2 Code	P195E 22E	00-FF

21 SIA Codes reporting format SIA III

Most of the SIA Event Codes are fixed within the panel but some locations such as zones at P196E (1-16E) and Panic/Fire/Medical at P197E (1-3E) can have a user defined report code from the table below. To activate this transmission format refer to chapter Telephone numbers report format (P182E1E10E).

21.1 SIA reporting codes- standard default setting

To following codes are the defaults SIA reporting codes.

Event Type	SIA Alarm Code	SIA Restore Code
Armed, 24 hour & Near Zone Alarms (programmable P196E)	BA	BH
Zone Verified Alarm Activated	BV	BH
Zone Bypassed	BB	BU
Zone Tamper Activated	BT	BJ
Sensor-Watch Fail	NA	NS
Radio Zone Supervise Fail	BZ	BR
Pendant or Radio Zone Low Battery	XT	XR
Keypad or Pendant Panic Alarm (programmable P197E1E)	PA	PH
Keypad Fire Alarm (programmable P197E2E)	FA	FH
Medical Alarm (programmable P197E3E)	MA	MH
Duress Alarm	HA	HH
Panel or Keypad Tamper Switch Activated	TA	TR
Panel Battery Low	YT	YR
Panel AC Fail	AT	AR
Output Tamper Alarm (O/P 1 & 2 only)	YA	YH
12V Output Failure	YP	YQ
Phone Line Fail	LT	LR
Automatic Test Message	RP	
Manual Test Call	RX	
Area Delinquency Alarm	CD	CT
Excessive Code Attempts Alarm	JA	
Armed by User, Pendant, ARM button, DTMF or PC	CL	OP
Area Armed by Key-Switch	CS	OS
Area Armed by Time Zone	CA	OA
Stay Mode Armed by User, Pendant, KS, STAY Button	CG	OG
Fail to Arm by Time-Zone	CI	
Program Mode Entry/Exit	LB	LX
Checksum Fail (Corrupt EEPROM Data)	YF	

Fig. 25 Report codes alarm events used with SIA protocol transmission

21.2 Individual SIA reporting codes

You can also choose and set for every input zone and alarm event a individual programming to the related type of report code.

ZONE A1 SIA code P196E1-16E 1-14E
Each Input zone can be mapped to a special type of reporting. E.g. if zone 5 would be equipped with a smoke detector instead of being used as a standard burglary zone for intrusion the zone reporting should be changed to P196E 5E 4E. This would change the reporting according to the enclosed table.

MISCELLANEOUS SIA codes P197E 1-3E 1-14E
The general SIA reporting for the control Panel of the 3 functions Panic, Fire Medical can also be changed in the programming for individual settings according to the enclosed table.

Event Description	Type Program Number	Alarm	Restore	Bypass	Un-Bypass	Trouble	Trouble Restore	Near Alarm	Verified Alarm
Burglary	**1**	BA	BH	BB	BU	BT	BJ	BA	BV
Un-typed Alarm	**2**	UA	UH	UB	UU	UT	UJ	-	-
Hold-up	**3**	HA	HH	HB	HU	HT	HJ	-	-
Fire	**4**	FA	FH	FB	FU	FT	FJ	FA	FM
Medical	**5**	MA	MH	MB	MU	MT	MJ	-	-
Panic	**6**	PA	PH	PB	PU	PT	PJ	-	-
Emergency	**7**	QA	QH	QB	QU	QT	QJ	-	-
Gas	**8**	GA	GH	GB	GU	GT	GJ	-	-
Sprinkler	**9**	SA	SH	SB	SU	ST	SJ	-	-
Water	**10**	WA	WH	WB	WU	WT	WJ	-	-
Heat	**11**	KA	KH	KB	KU	KT	KJ	-	-
Freeze	**12**	ZA	ZH	ZB	ZU	ZT	ZJ	-	-
Equipment	**13**	IA	IR	-	-	-	-	-	-
Equip. Tamper	**14**	TA	TH	TB	TU	TT	TJ	-	-

Fig. 26 Chart for the individual programmable SIA code events

22 Contact ID Code Summary

Normally the Contact ID signal identification codes which are used by a monitoring Station are used from the standard list. The system is programmed by default with the equivalent standard formats (3 digit numbers). Nevertheless if the control panel should report different formats it is described here how to change it.

22.1 Change Zone Contact Identification (CID) report codes

ZONE ALARM CONTACT ID REPORT CODE - P157E 1-16E XXXE
(3 digit event code)
Normally a zone alarm would default to reporting a standard “Burglar Alarm” code of “130” when the zone activates. If the zone is not being used as a burglar alarm and you need to identify the correct type of alarm event you can change the event code at this location (e.g. if zone 5 was a fire sensor you could program a value of “110” at P157E5E).

ZONE NEAR ALARM CONTACT ID REPORT CODE - P158E 1-16E XXXE
(3 digit event code)
If the Near & Confirmed zone alarm reporting option was active the default report code for a “Near Alarm” is “138” when the zone activates for the first time. There should be no reason to change this code but if some special application was to be used it can be changed at this location.

ZONE CONFIRMED ALARM CONTACT ID REPORT CODE - P159E 1-16E XXXE
(3 digit event code)
If the Near & Confirmed zone alarm reporting option was active the default report code for a “Confirmed Alarm” is “139” when a second zone activates within 60 minutes of the near alarm. There should be no reason to change this code but if some special application was to be used it can be changed at this location.

22.2 Change Keypad panic, fire and medical alarms CID report code

“PANIC” ALARM CONTACT ID REPORT CODE - P175E 9E XXXE
(3 digit event code)
Normally a keypad initiated Panic alarm would default to reporting a standard “Panic Alarm” code of “120”. If the panic alarm is being used for some other purpose and you need to identify the correct type of alarm event you can change the event code at this location.

“FIRE” ALARM CONTACT ID REPORT CODE - P175E 10E XXXE
(3 digit event code)
Normally a keypad initiated Fire alarm would default to reporting a standard “Fire Alarm” code of “110”. If the fire alarm is being used for some other purpose and you need to identify the correct type of alarm event you can change the event code at this location.

“MEDICAL” ALARM CONTACT ID REPORT CODE - P175E 11E XXXE
(3 digit event code)
Normally a keypad initiated Medical alarm would default to reporting a standard “Medical Alarm” code of “100”. If the medical alarm is being used for some other purpose and you need to identify the correct type of alarm event you can change the event code at this location.

22.3 Contact ID Code Summary

In addition to the programmable Contact ID Event Code assignments defined at P157E, P158E, P159E, P175E (10E-11E), there are a number of fixed event codes. The programmable and fixed event codes are all listed in the table below. Associated with the fixed and programmable event codes, there are a number of extension codes that are also listed below. The list of extension codes is for your reference only and can not be changed in programming.

Event Type	Event Code	Extension	Comment
System Tamper	137	000	Panel & Sat Tamper etc
Zone Alarm (wired or wireless)	130	001 to 016	Alarm on Zone 1-16
Zone Tamper - Low (short circuit)	383	001 to 008	Zone Input 1-8 short circuit
Zone Tamper - High (open circuit)	383	009 to 016	Zone Input 1-8 open circuit
Zone Tamper - Radio Zone	383	001 to 016	Radio Zone 1-16
Zone Near Alarm	138	001 to 016	Zone Input 1-16
Zone Confirmed Alarm	139	001 to 016	Zone Input 1-16
Radio PIR / Reed Switch Battery Low	384	001 to 016	Radio Zone 1-16
Radio PIR Supervised Alarm	381	001 to 016	Supervised Radio Zone 1-16
Sensor-watch Alarm	391	001 to 016	Zone 1-16
Zone Excludes	570	001 to 016	Exclude Zone 1-16
Keypad Panic (or 1&3)	120	001 to 008	Panic at keypad #1-8
Radio-Key Panic	120	021 to 100	Panic by Radio User # 21-100
Keypad Fire (4&6)	110	001 to 008	Fire Alarm at keypad #1-8
Keypad Medical (7&9)	100	001 to 008	Medical Alarm at keypad #1-8
Keypad Tamper Switch Alarm	137	101 to 108	Keypad 1-8 Tamper Switch Activated
Wrong Code Alarm	461	001 to 008	4 Incorrect code entries at KP # 1-8
Arm/Disarm by "ARM key (Quick Arm)	408	000	Arm/Disarm by single button
Arm/Disarm by user code	401	001 to 100	Arm/Disarm by User #1-100
Arm/Disarm by Radio-key	400	021 to 100	Arm/Disarm by Radio User #21-100
Arm/Disarm by Key-switch	409	000	Key-switch # 1 Arm/Disarm
	409	001	Key-switch # 2 Arm/Disarm
Arm/Disarm by DTMF or Up/Download	407	000	Remote Arm/Disarm
Arm/Disarm by Time-Zone	403	000	Time-Zone Arm/Disarm
Latchkey Disarm	642	001 to 100	Latchkey User Disarm
Fail to Arm on Time-Zone	455	000	Auto Arm fail
Delinquency Alarm	454	000	System not Armed within # days
Stay Mode Arm/Disarm (part set)	441	000	Arm by “Stay” Button
Stay Mode Arm/Disarm (part set)	441	001 to 100	Stay Mode Arm by User # 1-100
Stay Mode Arm/Disarm by Key-switch	442	000	Stay Mode Arm by Key-switch # 1
Stay Mode Arm/Disarm by Key-switch	442	001	Stay Mode Arm by Key-switch # 2
System Battery Low	302	000	Control Panel Battery low
Mains Fail	301	000	Mains (AC) fail
Fuse Fail	312	000	Fuse 1 or 2 Fail
Radio-key Battery Low	384	021 to 100	Radio-key User #21-100 low battery
Radio-PIR / Reed Switch Battery Low	384	001 to 016	Radio Zone 1-16
Automatic TEST Calls	602	000	24 hour test
Manual TEST Calls	601	000	User generated Test Call
Phone Line Failure	351	000	Reported when line is restored
Duress Alarm	121	001 to 008	Duress at Keypad #1-8
Program Modes Accessed	628	001 to 008	Program Mode entered at KP # 1-8
Output 1 or 2 Tamper	323	001 or 002	O/P 1 or 2 wires cut.

23 Diagnostic and default options

This mode is used mainly after installation to check all the functionalities.

NOTE. In this mode the panel only displays the valid programmed settings. It is not possible to change any programming in this mode and is therefore used for controlling functions only.

NOTE. The diagnostic mode is only access able trough the local Keypads of a control panel and not via the programming software “Sylcom 60”.

23.1 Display software version -keypad numbers and keypad areas

PANEL SOFTWARE VERSION NUMBER - P200E 1E
This location will display the software version of the panel.

KEYPAD ADDRESS NUMBER - P200E 2E
This location will display the keypad number of the keypad currently in program mode.

AREAS ASSIGNED to the KEYPAD - P200E 3E
This location will display the Areas assigned to the keypad currently in program mode.

23.2 Display active zones and battery voltage

DISPLAY TIME-ZONES CURRENTLY ACTIVE - P200E 4E
This location will display which of the 8 Time-zones are currently on.

DISPLAY BATTERY VOLTAGE - P200E 5E
This location will display the system battery voltage measured by the panel.

23.3 Walk test mode- transmission test - installation help

This function is used to support installation. It can help to verify that all detectors are working correctly within the system and no alarm is transmitted at this test function.

WALK-TEST MODE - P200E 6E (enter to start) E
This address is used to start walk-test mode while in installer or client program mode. By pressing P200E6E at the keypad, the keypad buzzer will beep at short intervals to indicate walk-test mode is active.

By walking past all of the detectors connected to the system and activating them, the associated zone will latch up at the keypad to allow verification that all zones are working properly. Every time when a Signal is triggered the display will indicate the Zone number of the detected device and the keypad buzzer will give a short double beep as confirmation while walk-test mode is active (If a siren is connected to an Output and that output has option 1 turned on at location P36E the siren will give this confirmation as well).

Leaving the Walk test mode- Displaying results
By pressing the <Program> or <Enter> button, walk-test mode will be terminated and the panel will leave program mode. The results of the walk-test will be saved in the memory event buffer and can be viewed by accessing memory display mode to verify which detectors were triggered during walk-test mode. If Output 1 or 2 are used for the Audible walk-test indication and a horn speaker is connected to the output (see P37E1 or 2E option 1), the siren on the output will give a single tone for the chirp instead of the swept tone used for alarms.

Transmission test
Some detectors have the functionality of a transmission test (refer to the datasheet of the detector). With this function it could be checked if all Test signals, transmitted by the detectors are received at the control panel. This indicates the quality of the range and position of the detectors to the control panel. If not all signals are received by the control panel you might use a second receiver IRFW6-10 or change the position of the detector.

NOTE: During “Walk test” mode the control panel receiver attenuate the incoming Signal by about 6 dB which is a requirement of the EN50131. The meaning behind is, due to the fact that there may be changes in the passive environment after installation it should be possible to receive a much lower RF signal to ensure if the signal is getting disturbed the control panel will still be reached. This might lead to a different wireless distance range where the detector is working good or bad according to normal mode or walk test mode.

23.4 Read or write to the Memory Stick (EEPROM)

WRITE to EEPROM - P200E 7E
This location is used to copy the panel program configuration to an external Memory Stick (IMM6-10) which can be plugged into the programming port on the control panel. The write protect switch on the Memory stick must be ON for the data to be transferred.

READ from EEPROM - P200E 8E
This location is used to return the panel program configuration from an external Memory Stick which can be plugged into the programming port on the control panel.

23.5 Restore defaults

DEFAULT CODES & TELEPHONE NUMBER - P200E 9E
This location is used to return the panels User and Installer Codes plus the Telephone Numbers & Account Codes to the default settings.

DEFAULT ALL PROGRAMMING TO FACTORY SETTINGS - P200E 10E
This location is used to return the panels User and Installer Codes plus the Telephone Numbers & Account Codes to the default settings.

23.6 Clear memory buffer

CLEAR ALARM MEMORY BUFFER - P200E 11E
This location is used to clear all of the EVENTS stored on memory. The system alarms can not be cleared from memory.

23.7 Start a call-back call

INITIATE A CALL to the CALL-BACK NUMBER - P200E 12E
This location is used to force a call to the call-back number.

24 User privileges chart

This graphic shows in an overview which rights (P1-P200E) are related to different level of user privileges (Option 1-8). E.g. if a user code will get the privilege of learning a new remote control to the system, as mentioned in Options 7- learn new radio devices, this will allow him also to program P18-23E and P164-P166 and P200.

NOTE: It is recommended to give to users only the minimum needed programming rights/ privileges. Programming of this system by a not trained installer could lead to male functions and false alarms!

Program Location	P5E Options:								
	Option 8: Can force download								
	Option 7: Learn new radio devices								X
	Option 6: Change DTMF command							X	
	Option 5: Change clock						X		X
	Option 4: Change phone numbers					X			
	Option 3: Full access				X		X		X
	Option 2: Change others codes			X					
	Option 1: Change own code	1	2	3	4	5	6	7	8
P1E	User codes	X	X	X					
P2E	User type			X					
P3E	User areas			X					
P4E	User access			X					
P5E	User privileges			X					
P7E	User pendant type			X					
P8E	User radio privileges			X					
P9E	User time zones			X					
P18E	Learn radio user							X	
P19E	Delete radio user							X	
P20E	Find radio user							X	
P21E	Learn radio user							X	
P22E	Delete radio user							X	
P23E	Find radio user							X	
P25E12E	User options (hide user codes to installer)		X						
P26E (all)	Time/Date and Daylight Savings					X			
P170E	Change Holidays					X			
P63E	Area A & B Command Code						X		
P164E	Learn radio zone							X	
P165E	Delete radio zone							X	
P166E	Find radio zone							X	
P175E3E	Auto-answer rings				X				
P175E4E	Time to first test call				X				
P175E5E	Test call period				X				
P175E8E	Dial prefix				X				
P175E12E	Output DTMF command control code						X		
P175E13E	Microphone DTMF command control code						X		
P175E14E	Voice/Domestic DTMF acknowledge code						X		
P175E15E	Remote test initiate DTMF code						X		
P181E	Telephone numbers				X				
P194E	Divert telephone numbers				X				
P200E1E	Display panel version #		X	X					
P200E2E	Display keypad address		X	X					
P200E3E	Areas assigned to this keypad		X	X					
P200E4E	Display active time zones		X	X					
P200E5E	Display battery voltage		X	X					
P200E6E	Enter walk test mode							X	
P200E12E	Initiate call back			X					X

25 Telecom Interface connection

All devices connected to a public telephone line have to follow Telecom Standard rules.
The dialer facility on this controller has been designed to provide optimum flexibility in the way in which alarm events are reported. This flexibility includes options for reporting to a central monitoring station using Contact ID, 4+2 and SIA format, a Domestic reporting option using alternating siren tones, a format for reporting alarms to an alpha numeric pager and a powerful Speech Dialer.
In accordance with the statutory requirements of the Tele-permit standards we must bring the following points to your attention.

Problems with the telephone line
In the event of any problem with the control panel, the by-pass switch should be operated for arming. The user is not allowed to do repair of the telephone line by himself and needs to arrange with the installer of the device to make the necessary repairs. Should the matter be reported to Telecom company as a wiring fault, and the fault be proven to be due to the alarm panel, a call out charge will be incurred.

Power up the System before connecting the telephone line
Should the control panel require relocation the Telecom connection must be disconnected before the power is disconnected. Similarly when reconnecting the dialer, it is necessary to power up the panel before connecting the dialer to the Telecom Network.

The connection should be made with a connector
Connection to the Telecom network should be made in accordance with local Standards. This connection is to be readily accessible to allow disconnection in the event of a fault.

110/230Volt influence- wiring attention

The telephone line must not enter the cabinet through the same cable entry hole as any 110/230 volt mains cables. A separate cable entry must be used for 110/230 volt cabling.

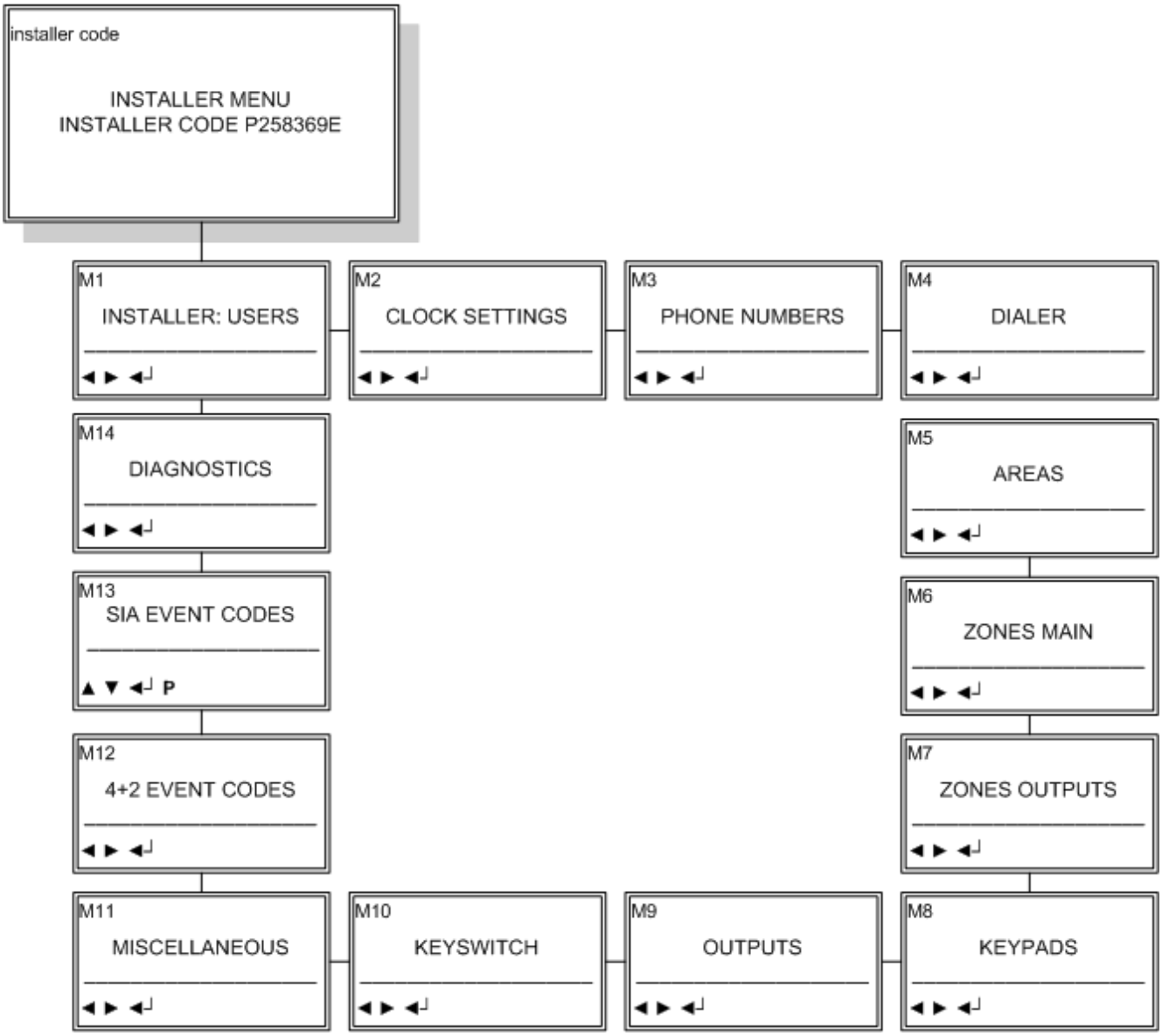
When using one of the knock-outs around the side of the cabinet for supply entry, a suitable bushing must be used where the supply cables pass through a knock-out.
The transmit level from this device is set at a fixed level and because of this there may be circumstances where this device does not give its optimum performance, when telephone wires are installed to close together with a power line. Before reporting such occurrences as faults, please check the line with a standard Tele-permitted telephone, and do not report a fault unless the telephone performance is impaired.

CAUTION	Check local governmental rules for connection to the local Police- Medical or Fire Emergency Service directly. In some countries it may not be allowed to connect automatic dialing equipment directly to such services.

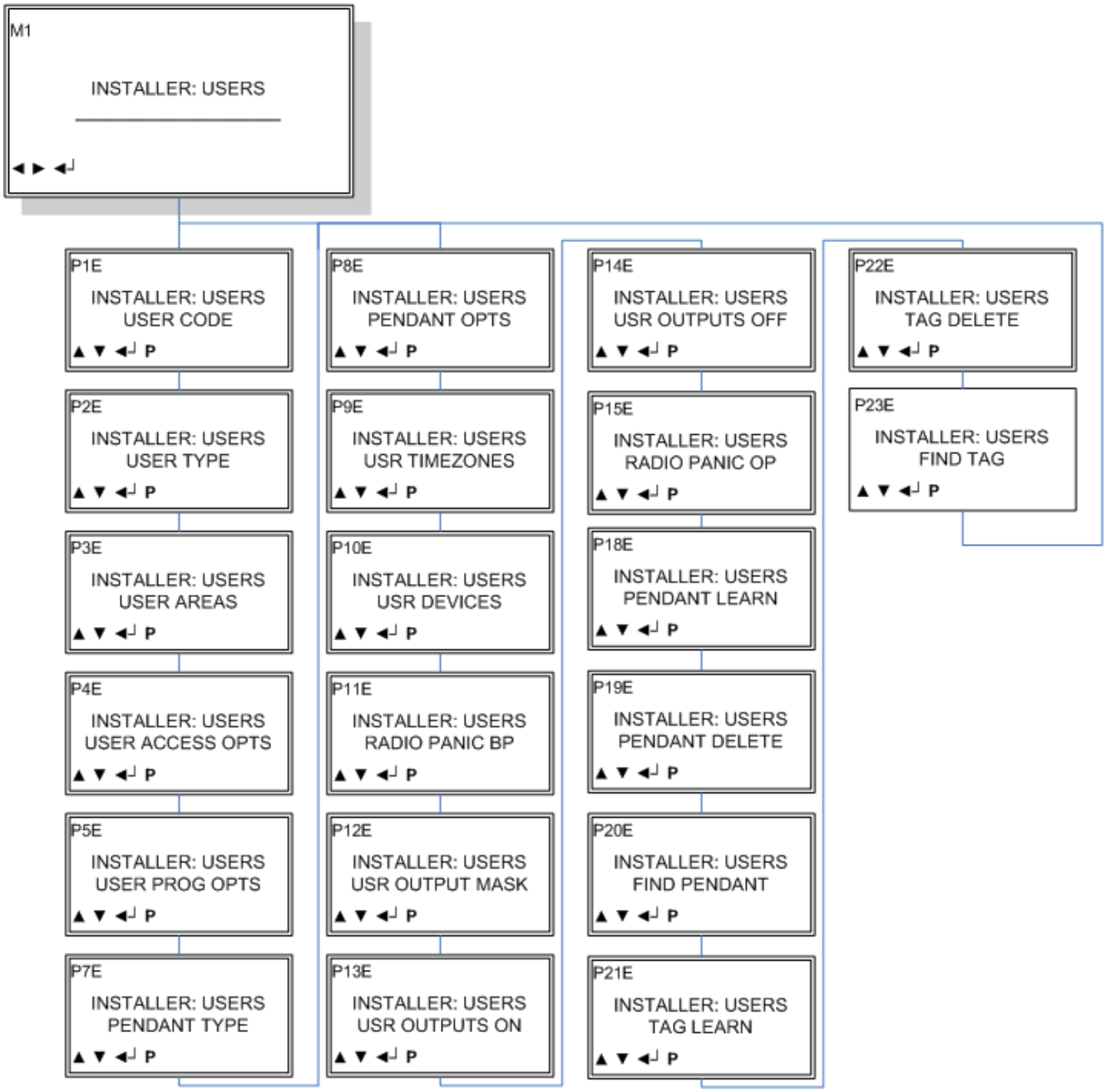
26 Flow chart of programming menus

For all Programming menus are separate programming flow charts available. For more detail refer to the separate available Programming Flow chart.
As example here shown the main menu: Installer: User

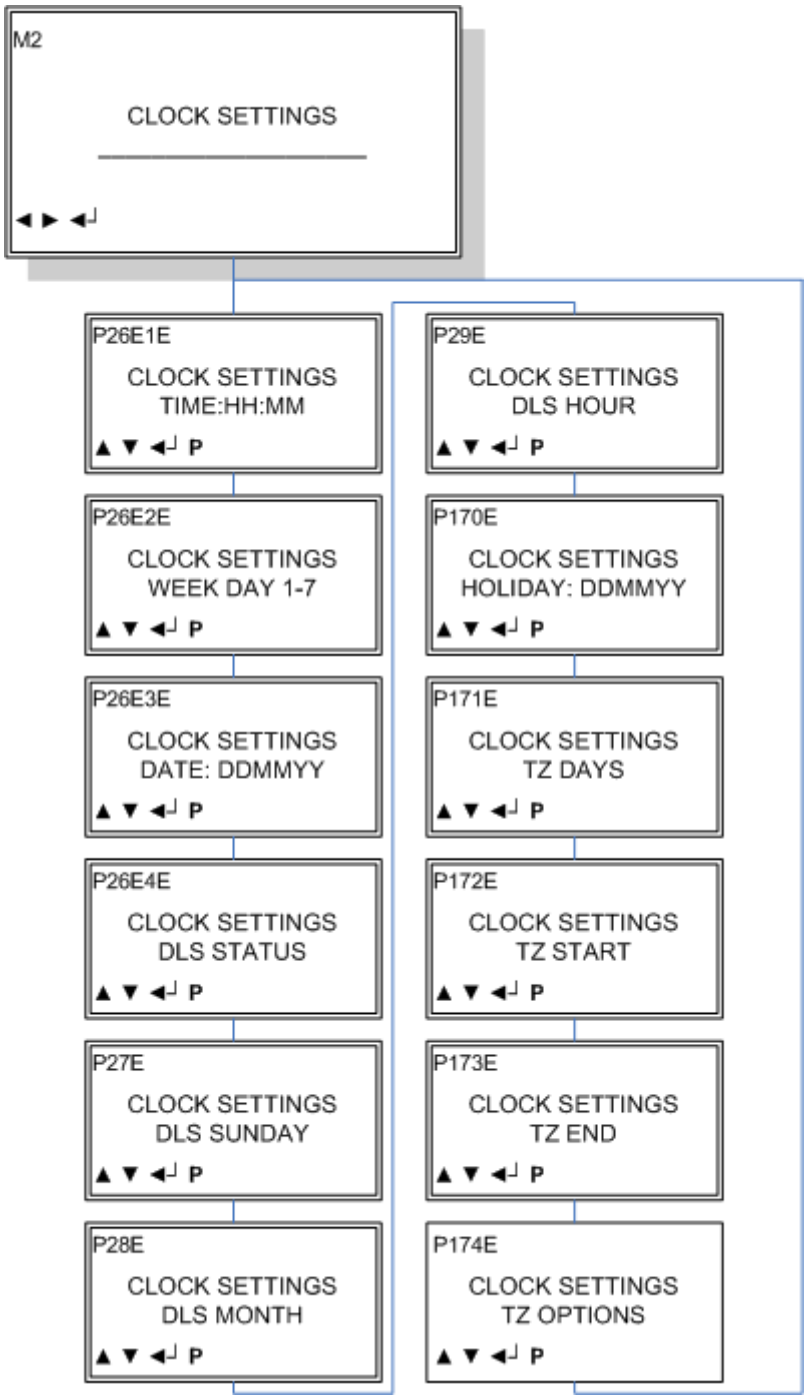
26.1 Installer Menu



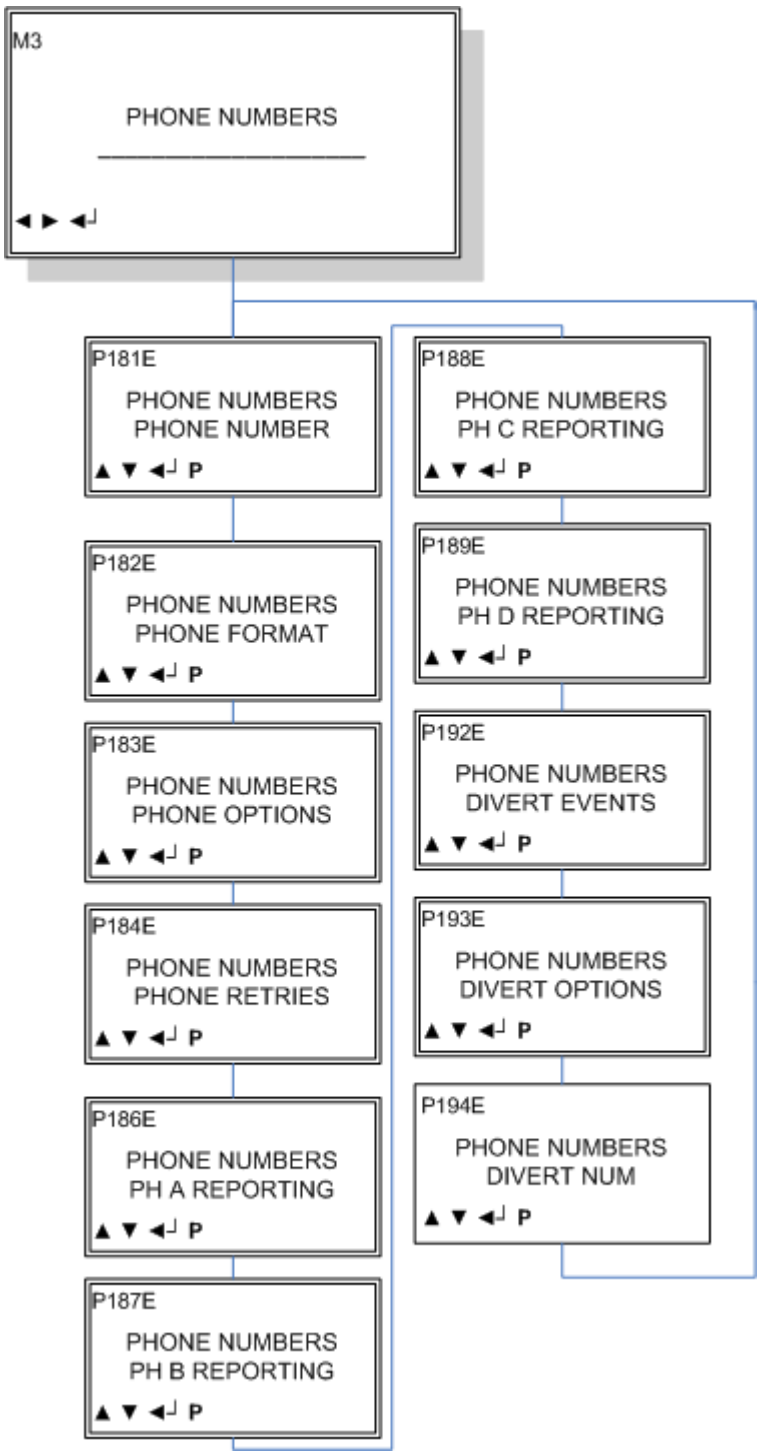
26.2 Installer: Users



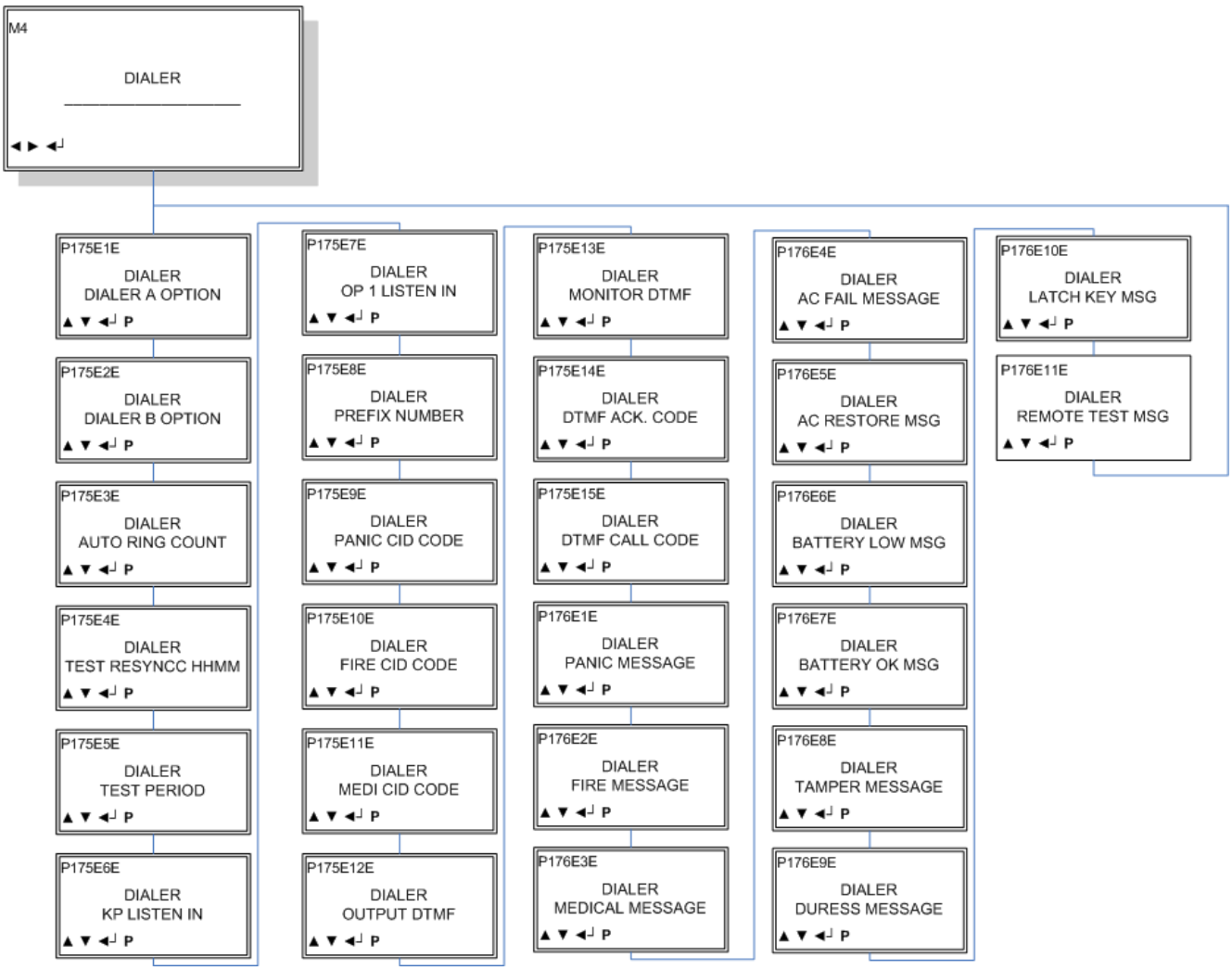
26.3 Clock Settings



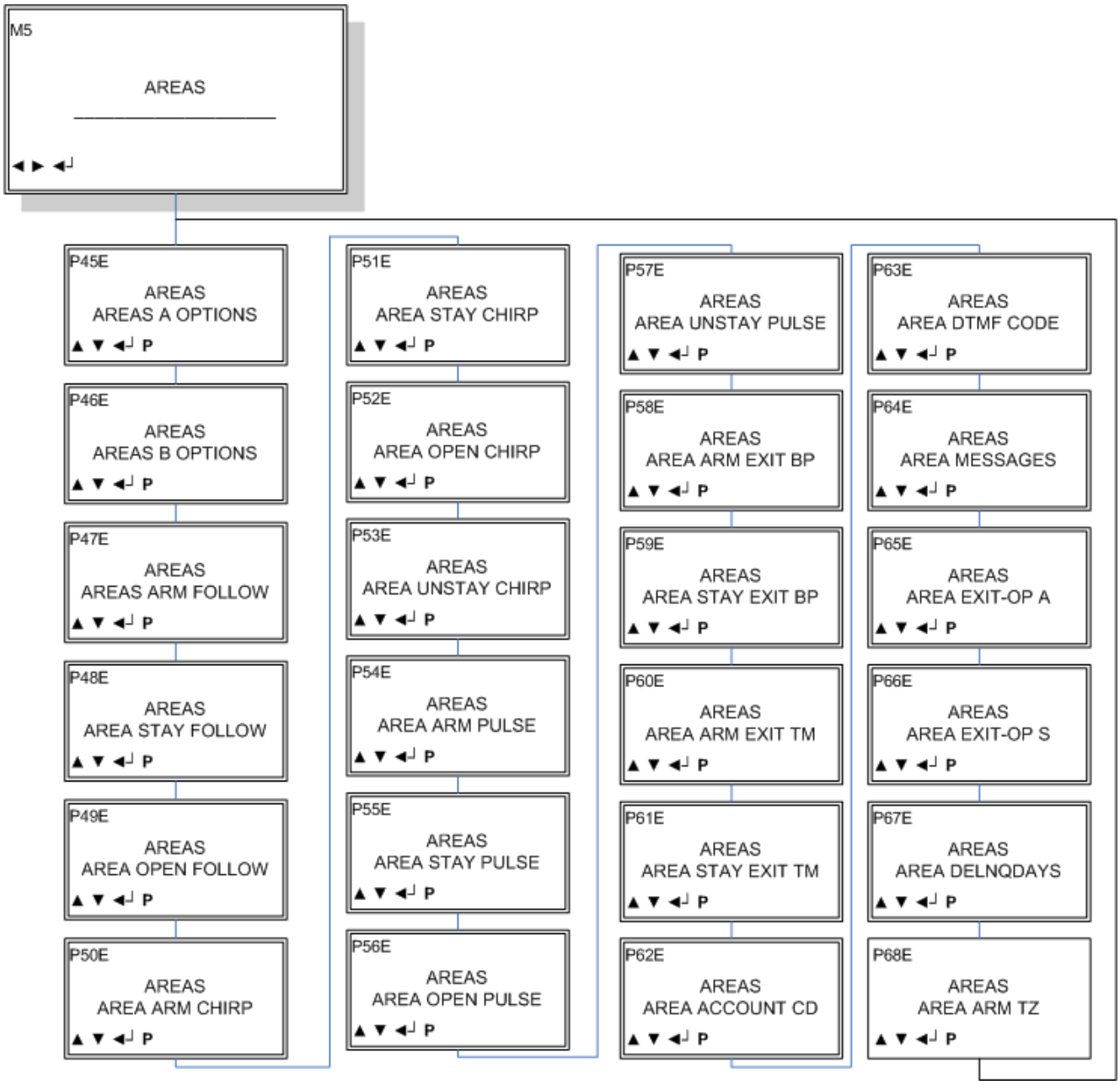
26.4 Phone Numbers



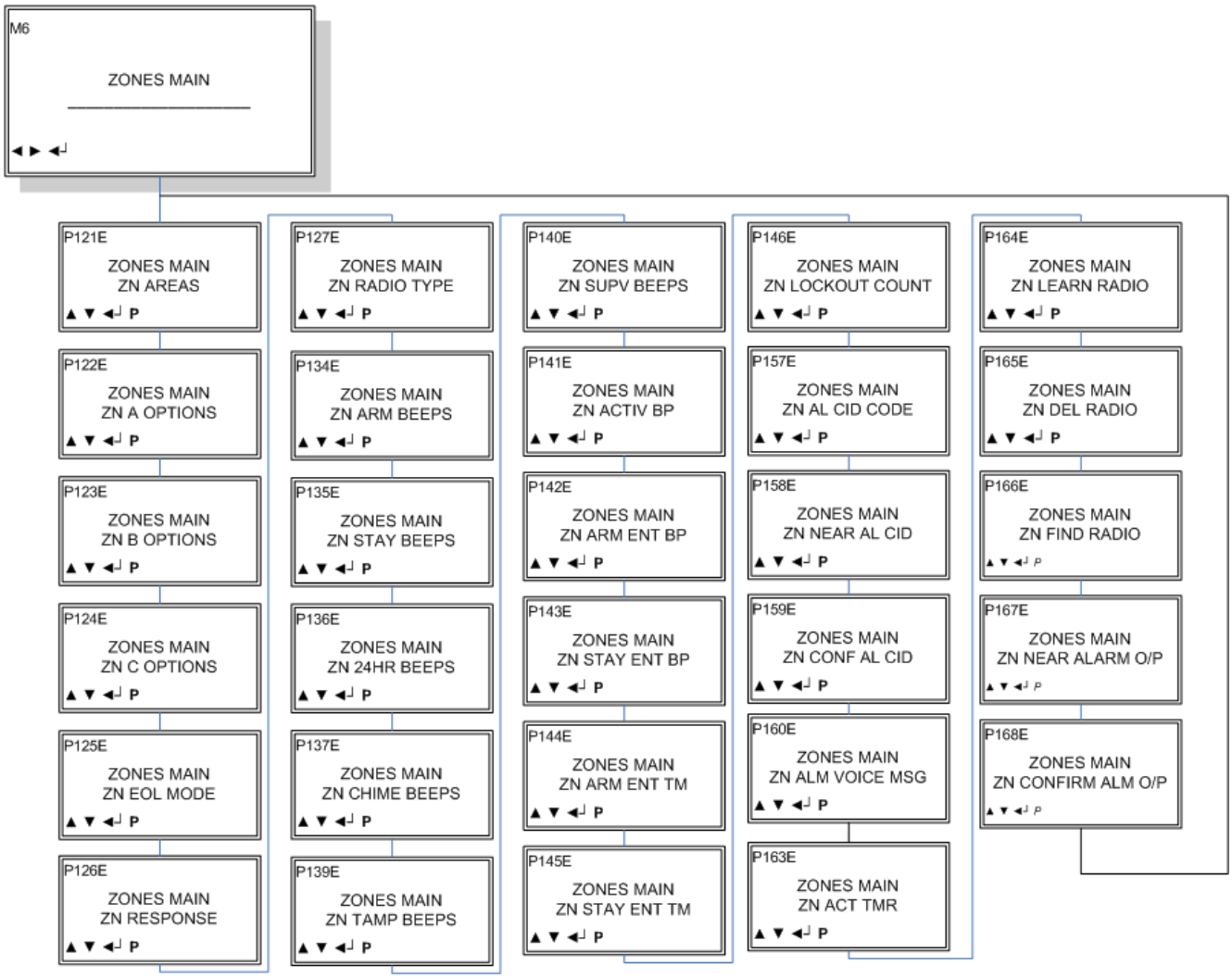
26.5 Dialer


M4
DIALER
P175E1E
DIALER
DIALER A OPTION
P175E2E
DIALER
DIALER B OPTION
P175E3E
DIALER
AUTO RING COUNT
P175E4E
DIALER
TEST RESYNCC HHMM
P175E5E
DIALER
TEST PERIOD
P175E6E
DIALER
KP LISTEN IN
P175E7E
DIALER
OP 1 LISTEN IN
P175E8E
DIALER
PREFIX NUMBER
P175E9E
DIALER
PANIC CID CODE
P175E10E
DIALER
FIRE CID CODE
P175E11E
DIALER
MEDI CID CODE
P175E12E
DIALER
OUTPUT DTMF
P175E13E
DIALER
MONITOR DTMF
P175E14E
DIALER
DTMF ACK. CODE
P175E15E
DIALER
DTMF CALL CODE
P176E1E
DIALER
PANIC MESSAGE
P176E2E
DIALER
FIRE MESSAGE
P176E3E
DIALER
MEDICAL MESSAGE
P176E4E
DIALER
AC FAIL MESSAGE
P176E5E
DIALER
AC RESTORE MSG
P176E6E
DIALER
BATTERY LOW MSG
P176E7E
DIALER
BATTERY OK MSG
P176E8E
DIALER
TAMPER MESSAGE
P176E9E
DIALER
DURESS MESSAGE
P176E10E
DIALER
LATCH KEY MSG
P176E11E
DIALER
REMOTE TEST MSG

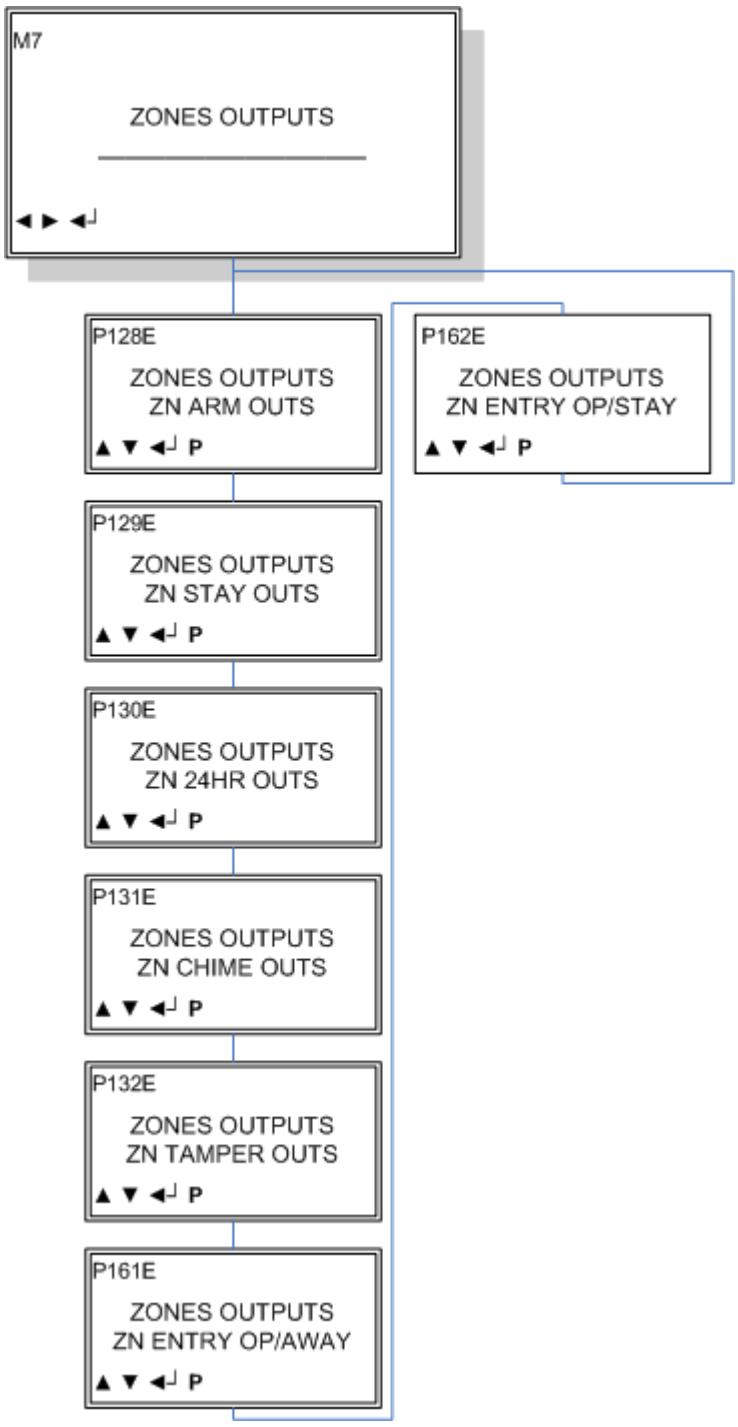
26.6 Areas


M5
AREAS
P45E
AREAS
AREAS A OPTIONS
P46E
AREAS
AREAS B OPTIONS
P47E
AREAS
AREAS ARM FOLLOW
P48E
AREAS
AREA STAY FOLLOW
P49E
AREAS
AREA OPEN FOLLOW
P50E
AREAS
AREA ARM CHIRP
P51E
AREAS
AREA STAY CHIRP
P52E
AREAS
AREA OPEN CHIRP
P53E
AREAS
AREA UNSTAY CHIRP
P54E
AREAS
AREA ARM PULSE
P55E
AREAS
AREA STAY PULSE
P56E
AREAS
AREA OPEN PULSE
P57E
AREAS
AREA UNSTAY PULSE
P58E
AREAS
AREA ARM EXIT BP
P59E
AREAS
AREA STAY EXIT BP
P60E
AREAS
AREA ARM EXIT TM
P61E
AREAS
AREA STAY EXIT TM
P62E
AREAS
AREA ACCOUNT CD
P63E
AREAS
AREA DTMF CODE
P64E
AREAS
AREA MESSAGES
P65E
AREAS
AREA EXIT-OP A
P66E
AREAS
AREA EXIT-OP S
P67E
AREAS
AREA DELNQDAYS
P68E
AREAS
AREA ARM TZ

26.7 Zones Main



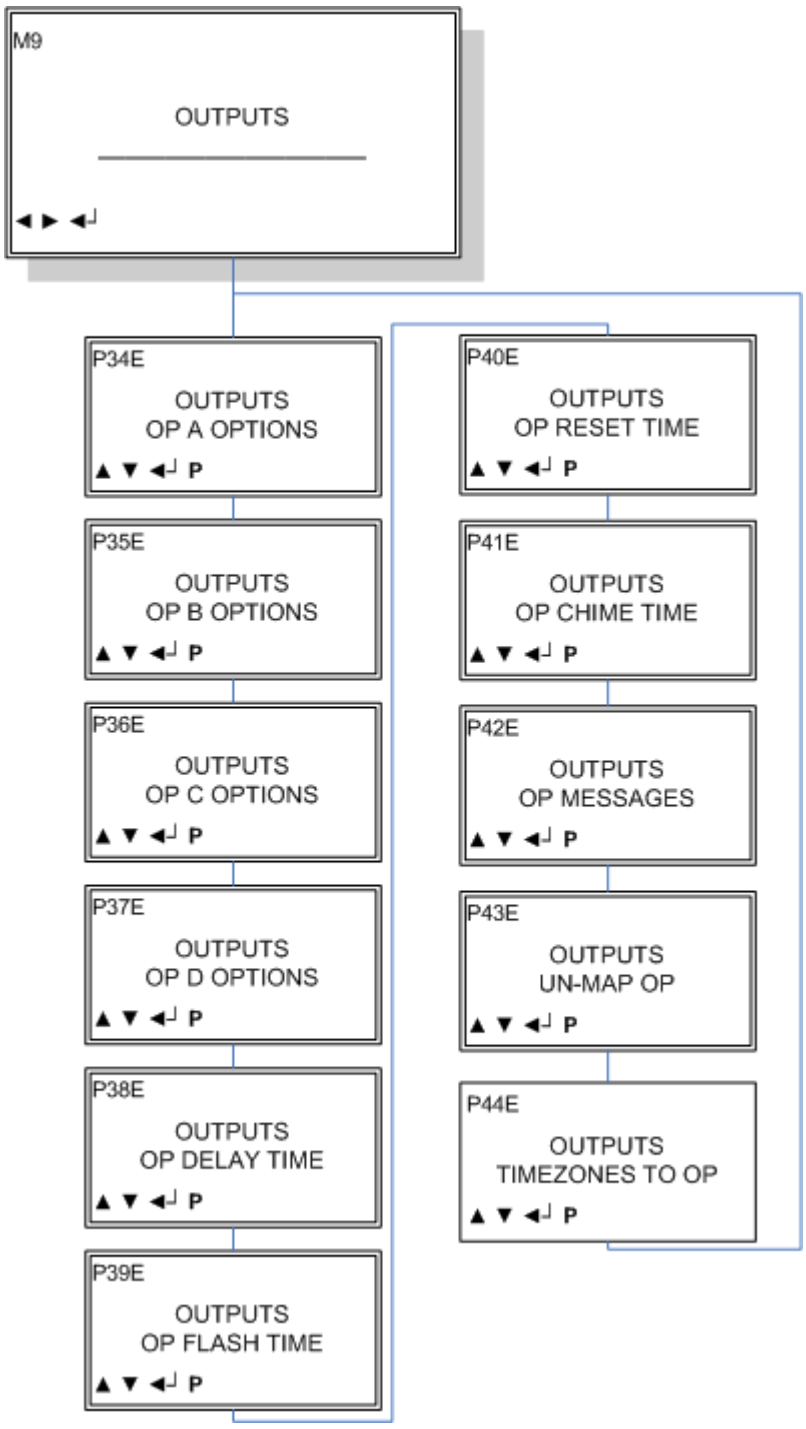
26.8 Zones Outputs



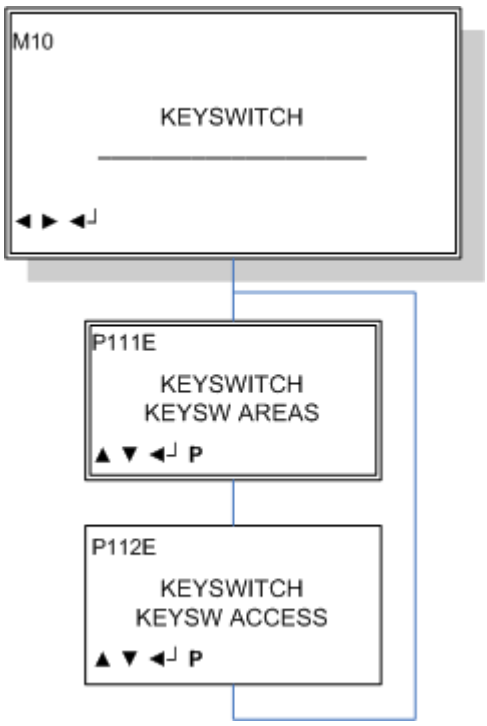
26.9 Keypads


M8
KEYPADS
P71E
KEYPADS
KP AREAS
P72E
KEYPADS
KP OPTIONS
P73E
KEYPADS
KP BEEPS
P74E
KEYPADS
KP ARM AREAS
P75E
KEYPADS
KP ARM ACCESS
P76E
KEYPADS
KP STAY AREAS
P77E
KEYPADS
KP STAY ACCESS
P78E
KEYPADS
KP A KEY AREAS
P79E
KEYPADS
KP A KEY OPTNS
P80E
KEYPADS
KP B KEY AREAS
P81E
KEYPADS
KP B KEY OPTNS
P82E
KEYPADS
KP USR OP MSK
P83E
KEYPADS
KP CONTRL MSK
P84E
KEYPADS
KP PANIC OUTS
P85E
KEYPADS
KP FIRE OUTS
P86E
KEYPADS
KP MEDI OUTS
P87E
KEYPADS
KP DURESS OUTS
P88E
KEYPADS
KP TAMP OUTS
P89E
KEYPADS
KP ERROR OUTS
P90E
KEYPADS
KP PANIC BP
P91E
KEYPADS
KP FIRE BP
P92E
KEYPADS
KP MEDI BP
P93E
KEYPADS
KP TAMP BP
P94E
KEYPADS
KP CHIME TMR
P98E
KEYPADS
PROX LED FOLLOWS
P99E
KEYPADS
READER LEARN

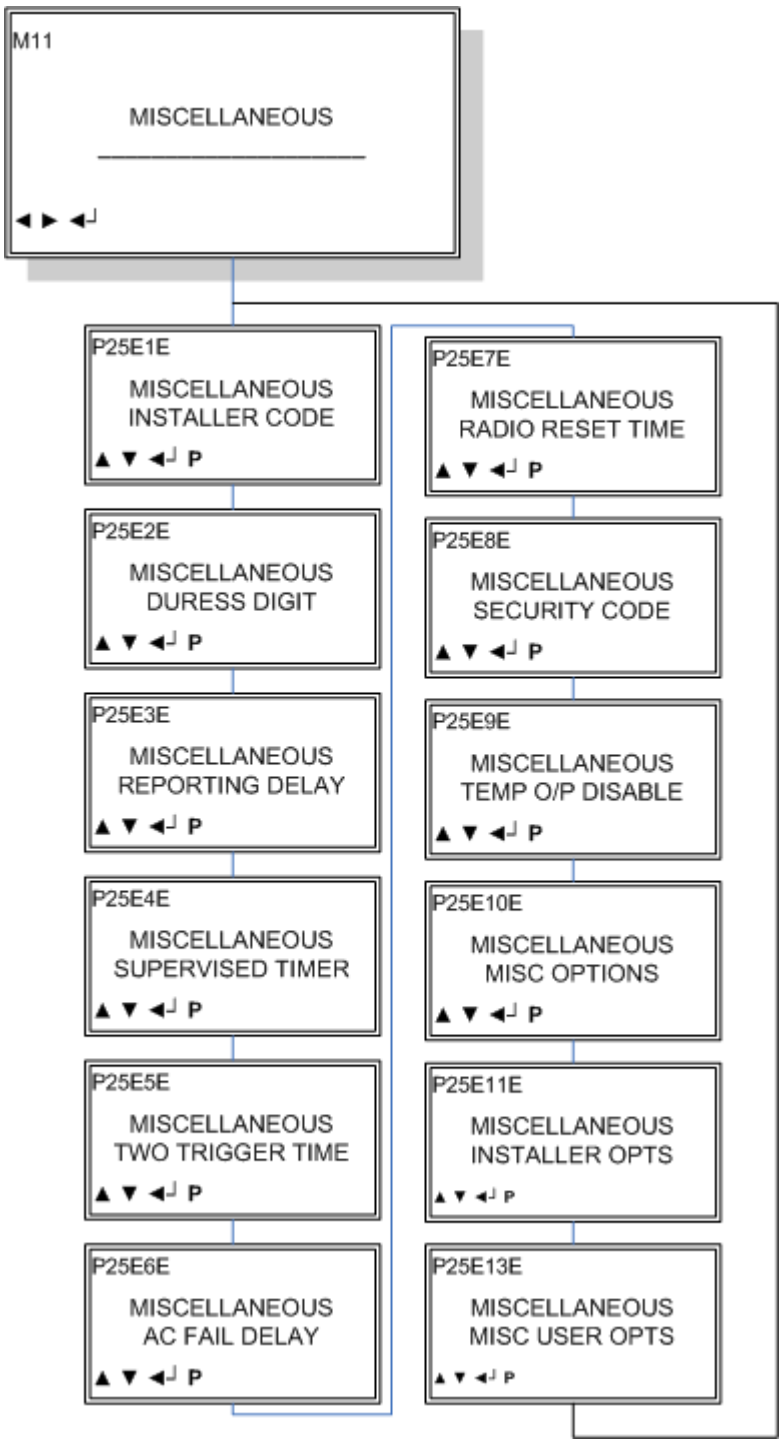
26.10 Outputs



26.11 Keyswitch

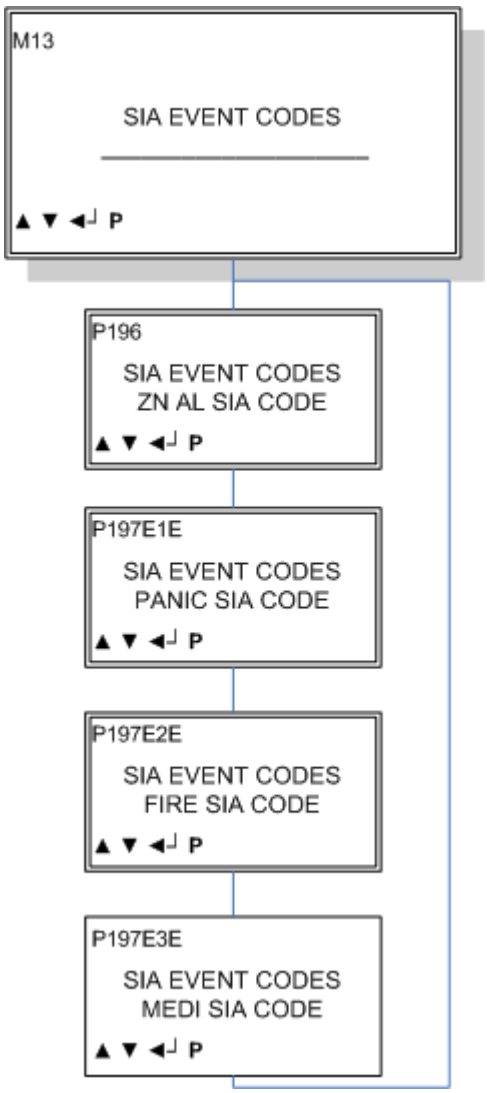


26.12 Miscellaneous

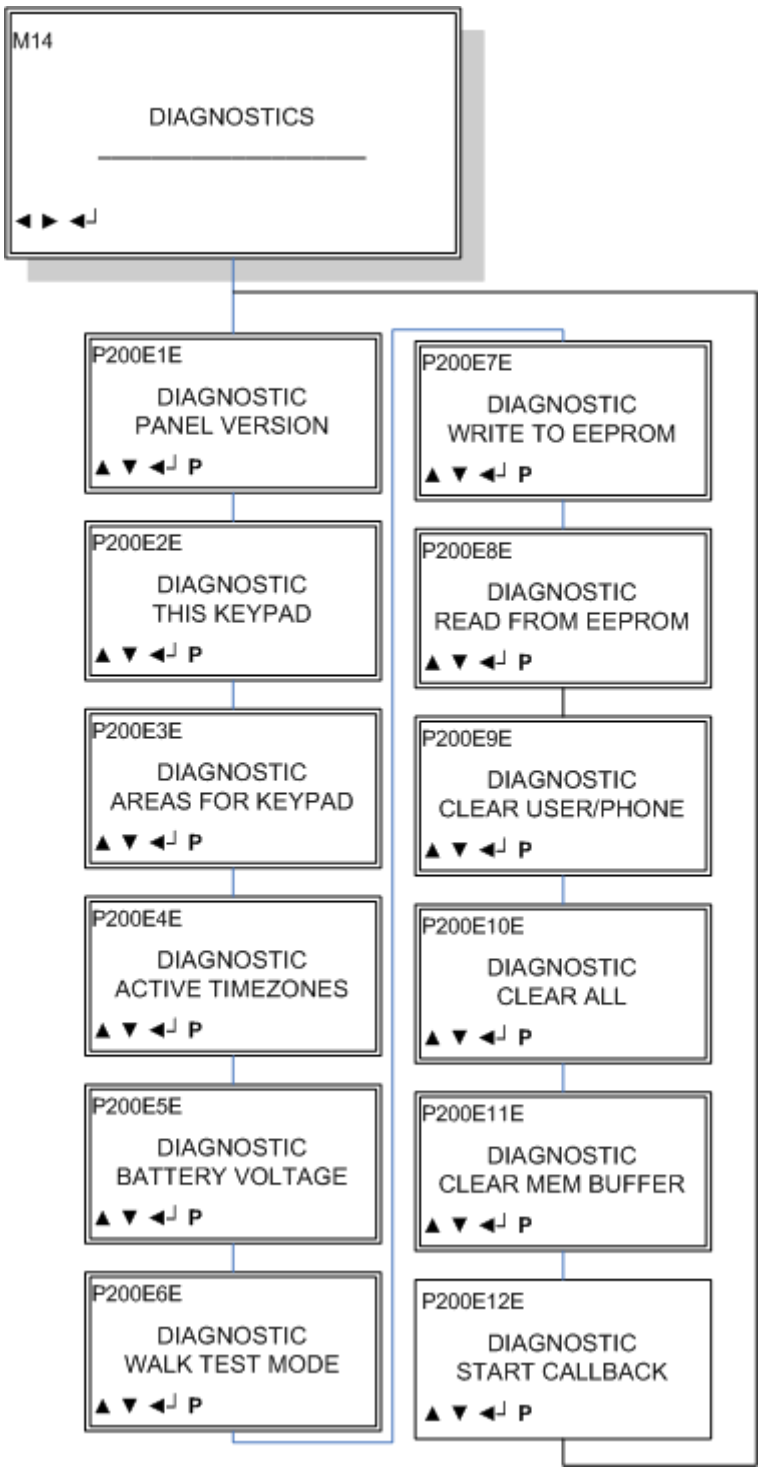


26.13 4+2 Event Codes

26.14 Sia Event Codes



26.15 Diagnostics



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