SIEMENS

Wireless and hardwired intrusion control panel

IC60 - Sintony 60

Installer Manual

Version 9.07

Building Technologies

Fire Safety & Security Products

The product must be installed, maintained and serviced by qualified service personnel. Installation of telecom connections shouldn't be done by user.

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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 Terminology

Display text	Other term
Arm	Set
Dialer	Communicator
Dual trigger	Double knock
Handover	Entry Route
Installer	Engineer
Open	Unset
Pendant	Remote Control
Stay	Part-Set
Unstay	Unset Part-Set

2 New features and changes as of version 9.07

2.1 New features

All the features that are new as of version 9 07 are listed below.

- P25E 3E: Dial Report delay
  refer to chapter 13.3: Dial report delay
- P25E 13E Option 6: Allow monitored Keypad Bus Output Board
  refer to chapter 14.3: Miscellaneous user options
- P25E 13E Option 8: Limited Events & Dialer to 3 of any one type
  refer to chapter 14.3: Miscellaneous user options
- P36E Option 5: Output disabled when P25E 3E timer is running
  refer to chapter 16.1: Output options
- P37E Option 4: Disable outputs during two way voice mode
  refer to chapter 16.1: Output options
- P46E Option 7: Cannot Arm if Zone unsealed at end of Exit Delay
  refer to chapter 17.1: Area arm and special function options
- P122E Option 3: Not on Exit Delay Time
  refer to chapter 20.2: Zone type options- basic information
- P175E 2E Option 8: Allow the panel to auto-answer after 1 ring if set up to do fill duplex two way voice
  refer to chapter 22.1: Dialer options
- P183E Option 5: Allow for direct on-line two way voice following reporting of an alarm event
  refer to chapter 23.3: Telephone number report options
- P200E Option 13: Installer code
  refer to chapter 27.7: Installer code
- P200E Option 14: RSSI
  refer to chapter 27.8: Radio Signal Strength Indication

2.2 Changes

Walk test now exits back to program mode if you will press on ↵ for exit.

On previous version when you pressed on ↵ to terminate walk test the panel was get out from program mode. Now when you press ↵ to terminate walk test the panel stay on program mode.

When Learning Radio device not found now shows `Not Found!` instead of non-descriptive `Done` (for zone and pendant).

When entering to learning mode and no device was found, the panel will present the message `Not Found!` (Instead of the message `Done` on the previous version).

Learning Radio device (zone and pendant) now shows `Code in-use!` on second line if device already known, learn process will continues.

When attempting to learn an already learned device, the panel will present the message `Code in- use!` and will continue with the learning process (valid for wireless detectors and pendant).

Keypad goes to power-save after 10 seconds, extinguishing all led backlights and indicators except 'Trouble' (linked to option P73E option 7.)

To keep on power save the keypad backlights will turn off if no operation was made after 10 second.
If you have more then 1 keypad, only the keypad that you work with will turn on his backlights.
This function was linked to address P73E option 7 (if on the backlights turn off after 10 second).
The trouble LED will always operate in all keypads in case of system trouble.

Trying to arm from Keypad with open zone and arm refuses, keypad will show broken zones as-if the enter key was pressed.

If you have an open zone while you arm the panel, the keypad will present the open zone number (e.g. 02 for zone 2). If you press on ↵ twice the name of the zone will also be presented.

Showing broken zone list will show zones by name-text after numeric list by pressing enter key again.

In normal mode – standby the display shows `System OK` even with an open zone. If ↵ is pressed, it indicates all open zones by number 01 03 08 etc.
By pressing enter again each zone will be shown by his name (text).
When arming the system it's indicate open zones with numbers and pressing on enter will show zone name text for all zones (press ↵ for moved from one zone to another).

"Test message sent" will not longer be send if the dialer is not Activated (P175E 1E 1 = off).

If you disable the dialer activation on P175E 1E option 1 (off), the message "Test message sent" will no longer be shown on memory log.

Extended initial listen from 2 minutes (1.5+30s warn) to 3 minutes (2.5+30s warn).

After establish 2 way voice conversation, a vocal sound will start after 2.5 minutes (instead of 1.5 minutes on previous version) if no manual kiss off was entered.

Disabled beep patterns to keypad if voice monitor is on. If 2 way voice is on the keypad beeps will stop.

In case of 2 way voice conversation after alarm, all external sounds like keypad beeps and siren (needed to be programmed in advance) will stops. Once the 2 way voice is off only the siren (outputs) will start again.

Installer cannot longer enter to P200E 13E (installer mode).

P200E 13E was letting installer mode enter installer code again to bypass any alarm that request from the installer to enter first through user code (requirement for user) - now ignores if installer enters code.

3 Programming to EN 50131

Necessary programming to EN 50131 installations

The control panel Sintony 60 offers a lot of different features. If the installation must be according to EN 50131 some of the features and options for users must be restricted.
To be according EN 50131 requirements the following functions / features must be programmed as described:

Mute siren

refer to chapter 6.4: Mute siren

This option must be programmed to mute all acoustic devices automatically during listen-in with the full duplex two way voice board.

According EN 50131-3 if an alarm occurred during Exit Delay the dialer should reported only after 30sec.

And the Siren shouldn't activate until the Exit delay is expired.

P25E 3E:
Dial Report delay (0-255 Seconds)

refer to chapter 13.3: Dial report delay

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 instant zone alarm via the dialer until this delay time expires (both during the exit delay time if option 3 is on at P122E for a zone or when an instant zone is triggered when fully armed). While the timer is active certain outputs can be disabled at location P36E option 5. Once the timer has expired it will not start again, the panel must be disarmed then armed to reset the timer.

According EN 50131-3 if an alarm occurred during Exit Delay the dialer should reported only after 30sec.

P25E 13E Option 6:
Allow Monitored KP Bus Output Board

refer to chapter 14.3: Miscellaneous user options

Option 6:
Monitored Keypad Bus Output Board: this option performs a similar function to option 6 at location P25E 10E in that if it is turned on the output status messages are sent to the keypad bus. The difference with this option is when turned on the panel is expecting the OUTPUTX4 board connected to the keypad bus to acknowledge the messages. If the OUTPUTX4 does not acknowledge the output status messages the panel will show an output board failure. This option should only be turned on if an OUTPUTX4 board with the latest software is connected to the keypad bus.

According EN 50131-3 all units connected to the Control Panel should be monitored.

P25E 13E Option 8:
Limit Events & Dialer to 3 of any one type

refer to chapter 14.3: Miscellaneous user options

Option 8**:**
Limit Events & Dialer to 3 of any one Type: if this option is turned on the panel will not record any more than 3 events in memory for any event type during a single arm or disarm cycle, e.g. if the AC failed 4 times while armed or disarmed the panel will only record the AC fail 3 times in memory and will only report the AC fail 3 times to the dialer. As soon as the arm state has changed any count are reset back to zero again. If this option is off there is no limit on the recording and reporting of events.

According EN 50131-3 the events of the same type should be limited to 3.

P36E Option 5:
Output Disabled when P25E3E timer is running

refer to chapter 16.1: Output options

Option 5:
Output Disabled when P25E 3E timer is running: this option will cause the output to be disabled when the dialer reporting delay is active. It is designed to keep external audible alarms silent when the dial delay is active (allowing internal alarms to warn that the alarm will be reported to monitoring if not unset) but if the alarm hasn’t been reset before the timer expires the external alarm will sound.

According EN 50131-3 if an alarm occurred during Exit Delay the dialer should reported only after 30sec.
And the Siren shouldn't activate until the Exit delay is expired.

P37E Option 4:
Disable outputs during two way voice mode

refer to chapter 16.1: Output options

Option 4**:**
Turn Output OFF during Two Way Voice Mode: if the panel has a full duplex two way voice board fitted and the settings at P175E 2E option 8 and P183E option 5 are set to allow full duplex mode, any outputs with this option turned on will be disabled while two way voice is operational. This is to ensure that local sirens do not interfere with the two way voice audio signal.

According EN 50131-3 if an alarm occurred during Exit Delay the dialer should reported only after 30sec.
And the Siren shouldn't activate until the Exit delay is expired.

P46E Option 7:
Cannot Arm if Zone unsealed at end of Exit Delay

refer to chapter 17.1: Area arm and special function options

Option 7:
Cannot Arm if Zone unsealed at end of Exit Delay: if this option is turned on and a zone becomes unsealed as the exit delay expires the panel will fail to arm and report this via the dialer. The unsealed zone must be corrected and the system re-armed again.

According EN 50131-3 the system shouldn't Arm if one of the zones is open at the end of Exit Delay.

P122E Option 3:
Not an Exit Delay Zone

refer to chapter 20.2: Zone type options- basic information

Option 3:
Not an Exit Delay Zone: if this option is turned on the zone will not have any exit delay and will cause an instant alarm if triggered during the exit delay time. Also you MUST ensure that if this option is turned on for a zone, that same zone should not have any entry delay (P144E) programmed. If the zone does have an entry delay the zone can activate during the exit time thereby starting an entry delay on the same zone which means the user might not be aware of the pending alarm and leave the premises. If the zone has no entry delay and the zone is triggered during the exit time the alarm will then be instant alerting the user that they deviated off the exit route.

According EN 50131-3 the user must have an option to define the zones in the exit route.

P200E Option 13:
Installer code

refer to chapter 27.7: Installer code

Installer Code: if option 2 in P25E 10E (Installer Direct Access) is off, the only way for installer to access is through client mode. The installer must enter first to client mode and go to P200E 13E and enter the code there. The code will not be presented on the LCD (confidential), he will be blanked out.

According EN 50131-3 the system shouldn't present the Installer code while typing it through the client mode.

4 System overview

4.1 Sintony 60M modular

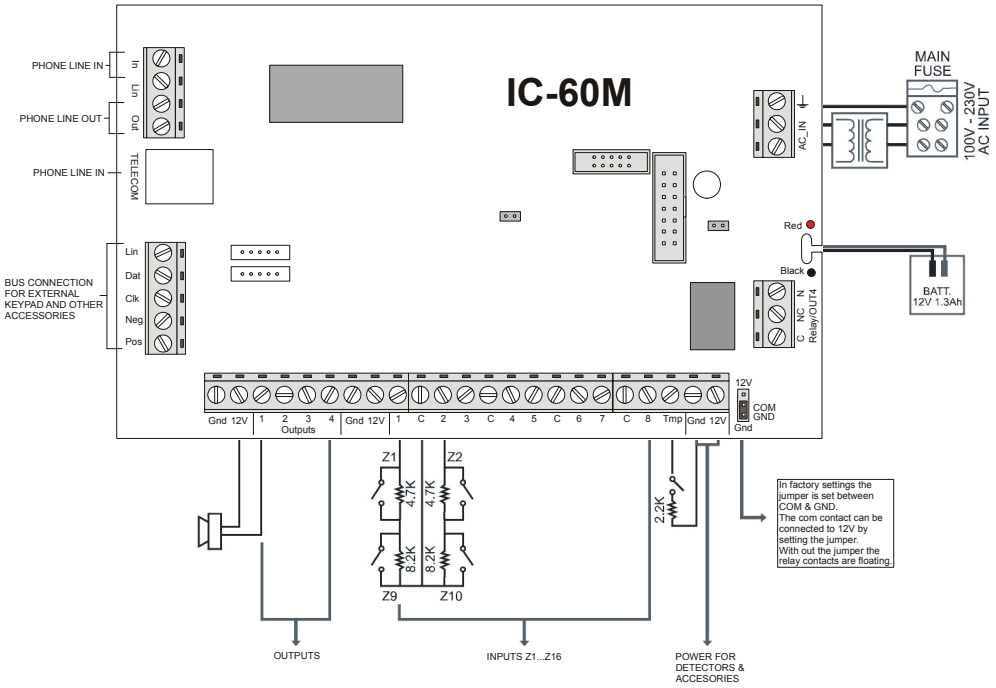


Fig. 1 Connection Diagram

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 4.3.2: Zone wiring examples.

Battery Specifications for Model IC60 M

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

Battery Connections

Connect a sealed lead acid rechargeable 12 V DC 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 600 mA 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 12 V uut which is used for feeding sensors is between 10.2 to 14 V DC (working on mains or standby battery).Ripple is up to 0.1 V p.p.
- Each voltage out 12 V protected by reset able fuse of 500 mA.
- The max total current allowed to draw during alarm is 1 A.
- Self current consumption (IC60M+IKP6) from battery is: 100 mA.
- Operating temperature: 0-50º C
- Max. current consumption from the mains less than 150 mA.
- The panel is equipped with a type A power supply according EN 50131-6

To meet the EN 50131 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 300 mA

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) T250 mA/250 V, 5x20 mm Glass.

AC level 230 V, 50 Hz ±10%.

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

4.2 Sintony 60 compact

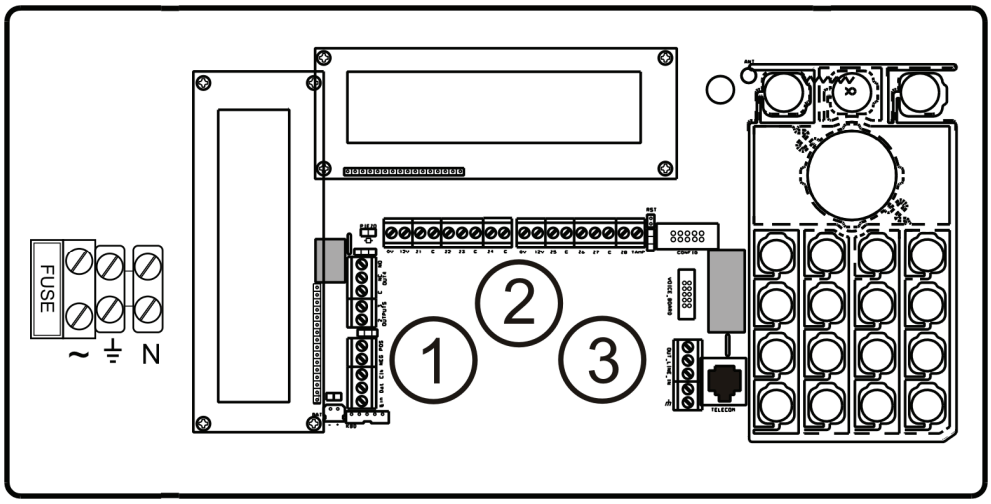


Fig. 2 Connection Diagram IC60 compact overview

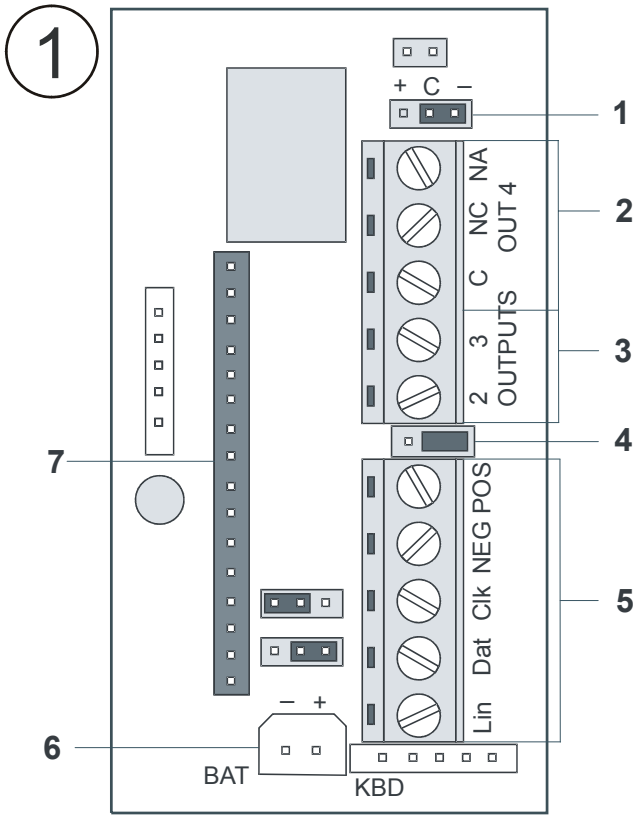


Fig. 3 Connection Diagram IC60 compact 1

1	Normally closed/normally open. In factory settings the jumper is set between COM & GND □■■ (0V). The com contact can be connected to 12V by setting the jumper ■■□ (+12V connected). Without the jumper the relay contacts are floating (potential free).
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.

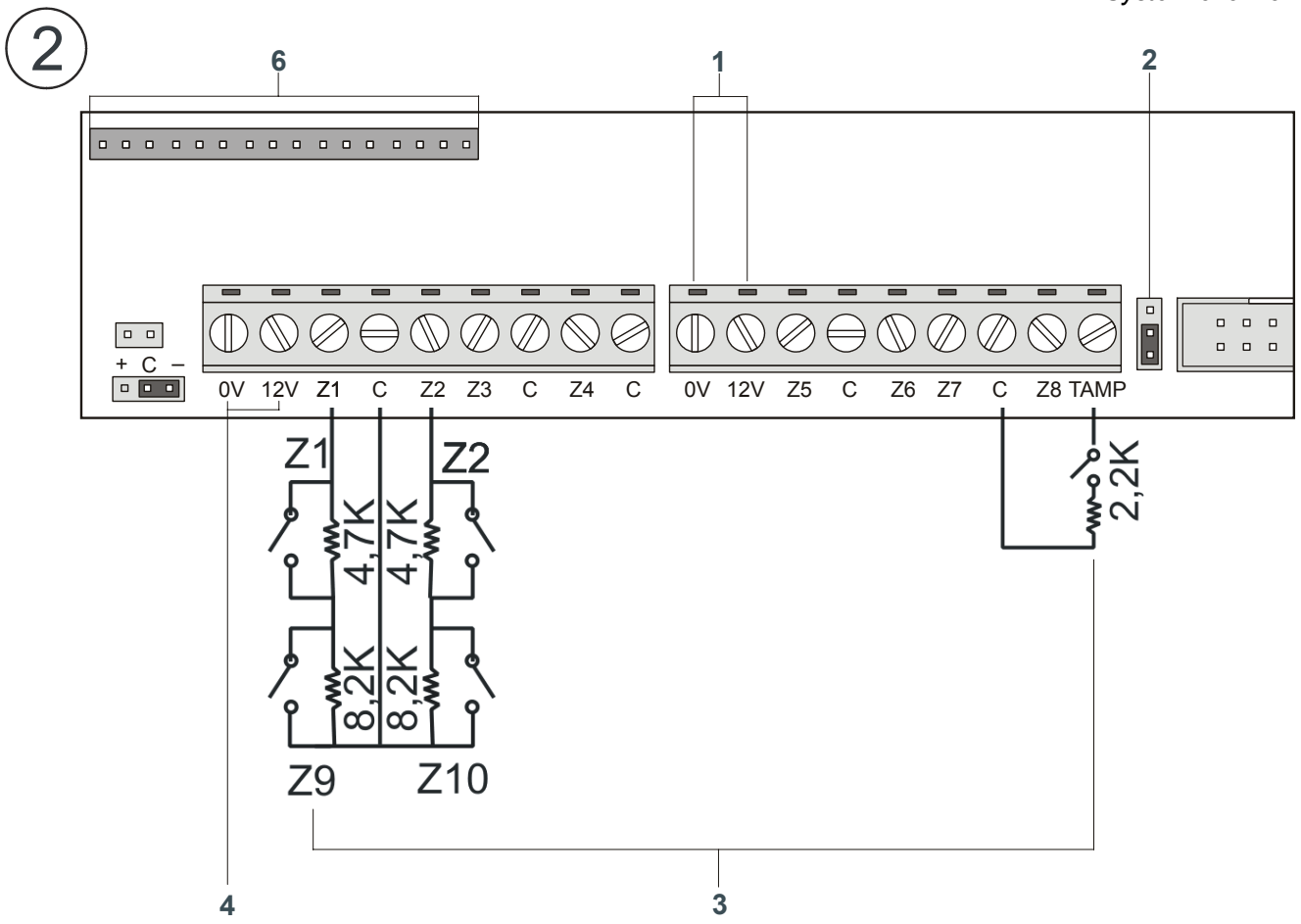


Fig. 4 Connection Diagram IC60 compact 2

1	Power for detectors & accessories
2	Jumper for bypass the tamper of the control panel in Line. Tamper of keypad, GSM etc. will still be reported. □ ■ ■ EOL is bypassed Front and back tamper is working. ■ ■ □ All tampers in control panel are bypassed- requires no resistor EOL and front and back tamper of housing is bypassed (only for installation!) new from V9.07 on. □ □ □ No jumper connected front and back tamper is working. EOL resitors are requested in the installation of the zone (new from version 9.07 on).
3	INPUTS Z1…Z16
4	Power for detectors & accessories
5	Connector for internal siren (could be disconnected during installation) > 100dB
6	LCD pin header for Horizontal configuration

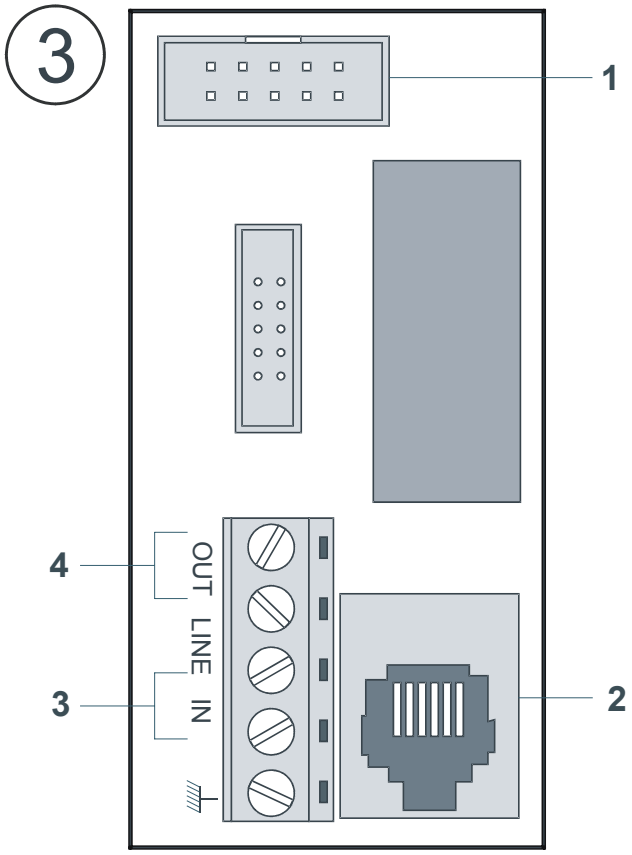
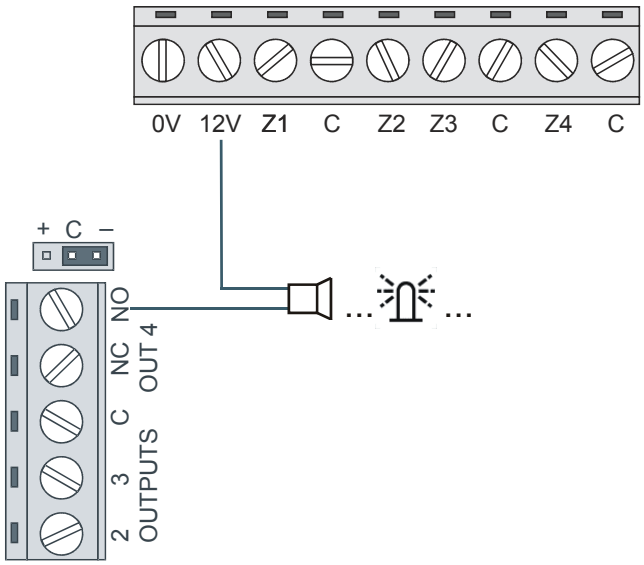


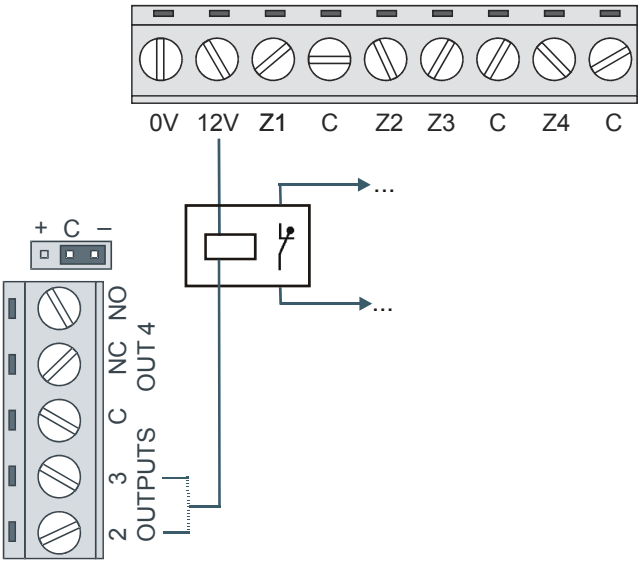
Fig. 5 Connection Diagram IC60 compact 3

1	Programming Port
2	RJ11-Line IN
3	Phone Line IN
4	Phone Line OUT

Example: Connecting a siren, flash light…



Example: Interface connection to open collector



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 260 mA.

Battery Connections

Place the battery in its location, and secure it with the rubber band (refer to Fig. 6).

Connect the battery plug into its connector (refer to Fig. 3).

General Specifications:

- The range of the 12 V Out which is used for feeding sensors is between 10.2 to 14.3 V DC (working on mains or standby battery) .Ripple up to 0.1V p.p.
- Each voltage out 12 V protected by reset able fuse of 500 mA.
- The max total current allowed to draw during Alarm is 0.8 A.
- Self current consumption from battery is : 60 mA
- Operating temperature: 0-50º C
- Max. current consumption from the mains less than 150 mA.
- The panel is equipped with a type A power supply according EN 50131-6
- AC mains input 100 V AC – 240 V AC, 50/60 Hz
- The build in sounder has a value of > 100dB
- The main fuse AC = T250 mA, 250 V glass

To meet the EN 50131 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 65 mA.

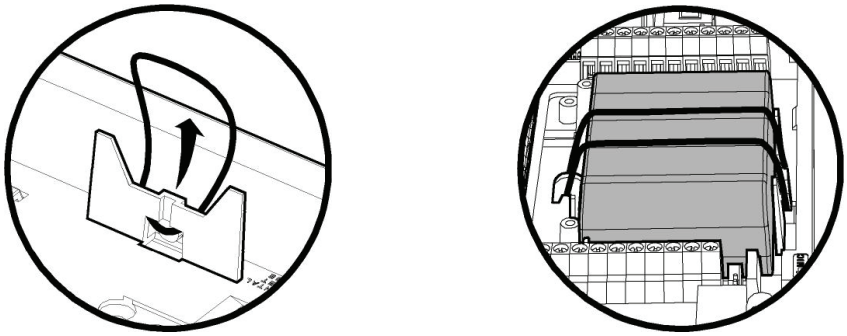


Fig. 6 Placing the rubber band and fixing the Battery

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 (100-240 V AC/14.4 V DC, 1 A).

(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:

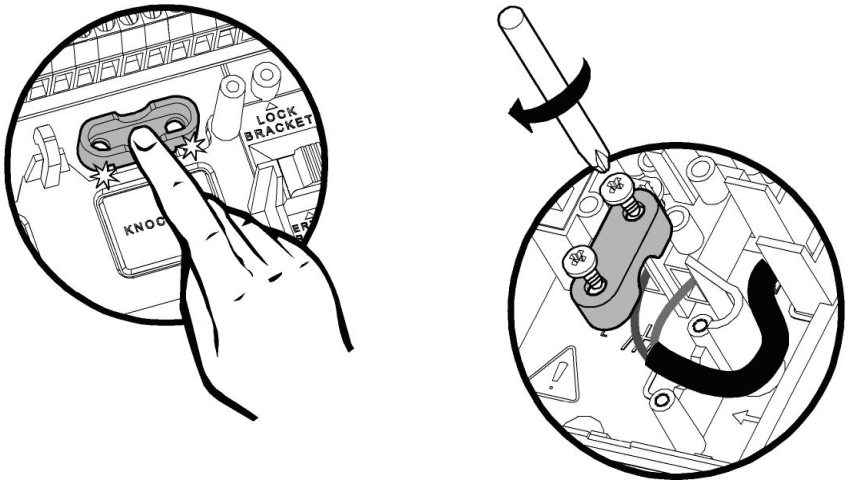


Fig. 7 AC cable fixing Sintony 60 compact

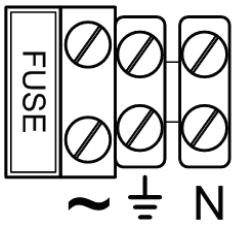


Fig. 8 AC connection port Sintony 60 compact

The main fuse AC = T250 mA 250 V glass

If the unit is not connected to ground, malfunction may occur, especially when the voice board is connected.

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

4.3 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 (see chapter 20.12, 20.13, 20.14: Learn, Delete and Find a wireless detector / code in the system; P164, 165, 166E).

4.3.1 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 chapter 20.4: Different End of Line (EOL) Resistor value options; P125E).

If an iInput is programmed as a wireless input, the system will ignore all hardwired connection to this input and look only for the radio signal! (see chapter 20.2: Zone type options- basic information; Zone A Options, option 5; P122E)

4.3.2 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

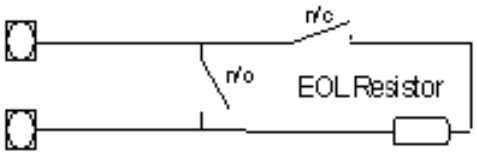


Fig. 9 Type 1-11 - Single EOL no Tamper

The zone input must be programmed as single resistor value (see chapter 20.4: Different End of Line (EOL) Resistor value options; options 1-11; P125E). The tamper contact should be monitored separately with the same connection schema (tamper input).

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

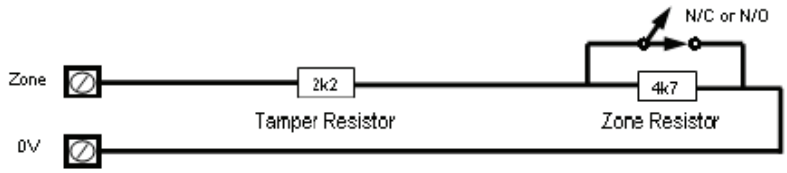


Fig. 10 Type 12 Single Zone with Tamper

The Zone input must be programmed as zone with tamper (see chapter 20.4: Different End of Line (EOL) Resistor value options; option 12; P125E).

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

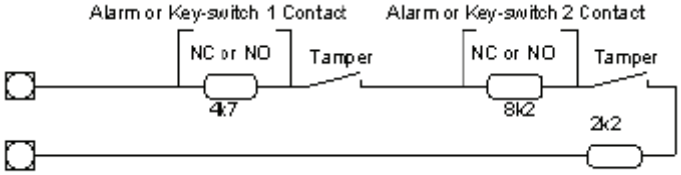


Fig. 11 Type 14 Zone doubling with tamper

The zone input must be programmed as zone doubling with tamper (see chapter 20.4: Different End of Line (EOL) Resistor value options; option 14; P125E). 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

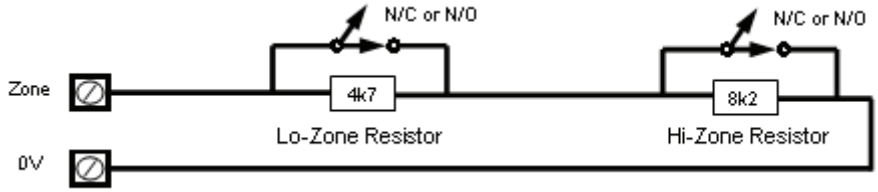


Fig. 12 Type 15 zone doubling without tamper

The zone input must be programmed as zone with tamper (see chapter 20.4: Different End of Line (EOL) Resistor value options; option 15; P125E). 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

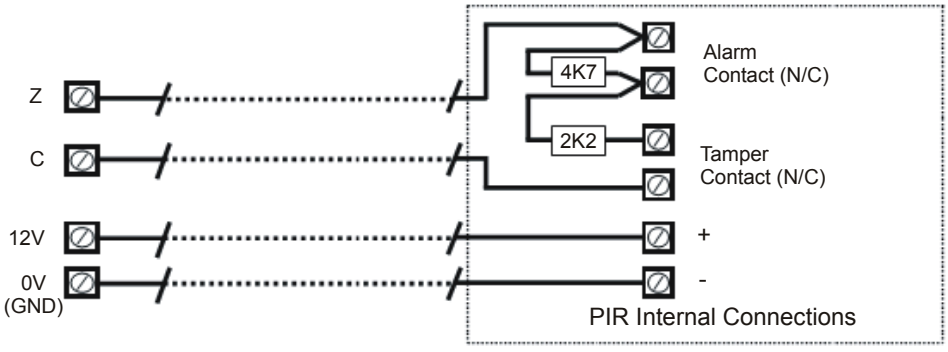


Fig. 13 Wiring a PIR Detector for Alarm and Tamper Monitoring

4.4 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.

Zone tamper jumper setting must be active (refer to. Fig. 4 Connection Diagram IC60 compact 2)

4.5 Outputs hardwired

12 Volt Outputs

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

Outputs 1 & 2

Fully programmable, high current, open drain (high-going-low) type FET outputs capable of switching up to 1 A @ 12 V DC. These 2 outputs are normally set as switched outputs, providing power for 12 V 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 chapter 16.1: Output options; Output D options, option 1; P37E). Also if a horn speaker is connected to output #1 you may select (refer to chapter 22.4: Listen dialing function through keypad and output; Output 1 Listen In; P175E 7E) as the listen-dialing feature, to listen to the dialing sequence which than could be heard at the speaker.

In IC60 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 500 mA. Like outputs 1 & 2 it is fully programmable.

Connecting devices which draw current in excess of 500 mA 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 12 V or removed.

4.6 System Bus connection - keypad port

The terminals marked POS, NEG, 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 12 V power supply (POS, NEG) of the bus is protected by a separate thermal fuse.

4.7 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.

If the control panel is connected to the telephone line, the same software could be used to program/ monitor the control panel through the telephone line remotely, if the PC is equipped with a telephone modem.

5 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 125 kHz 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).

Under the following limitations:

Bus connections- max. length*		
Up to 25 meter, 22AWG, wire diameter 0.6mm	7 Keypads IKP6-03 or Reader IAR6-30	8 Keypads IKP6-03 or Reader IAR6-30
Up to 100 meter, 20AWG, wire diameter 0.8mm	4 Keypads IKP6-03 or Reader IAR6-30	4 Keypads IKP6-03 or Reader IAR6-30

Each reader must have a unique keypad address number from 1-8 assigned so that the various program options can be assigned (see chapter 18.13: Learn a card reader to the system, addressing an LED; Reader Learn ;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.

5.1 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.

5.2 Panic functions

If the two button <Panic> (), <Fire> () or <Medical> () functions are programmed to the keypad/reader (see chapter 18.2: Keypad button individual operations (beeps and LED control); Keypad Options; options 5, 6 & 7; P72E) 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.

5.3 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 chapter 20.2: Zone type options- basic information; Zone A Options, option 4; P122E) 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 (see chapter 20.2: Zone type options- basic information; Zone A Options, option 4; P122E), if the keypad address was # 2, the input can then be assigned to zone 2 or 15, etc.

5.4 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.

5.5 Indication of status/address through LEDs

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. chapter 18.13: Learn a card reader to the system, addressing an LED; Proximity LED Follows Output; P98E).

5.6 Proximity readers connections

Bus connections- max. length*		
Up to 25 meter, 22AWG, wire diameter 0.6mm	7 Keypads IKP6-03 or Reader IAR6-30	8 Keypads IKP6-03 or Reader IAR6-30
Up to 100 meter, 20AWG, wire diameter 0.8mm	4 Keypads IKP6-03 or Reader IAR6-30	4 Keypads IKP6-03 or Reader IAR6-30

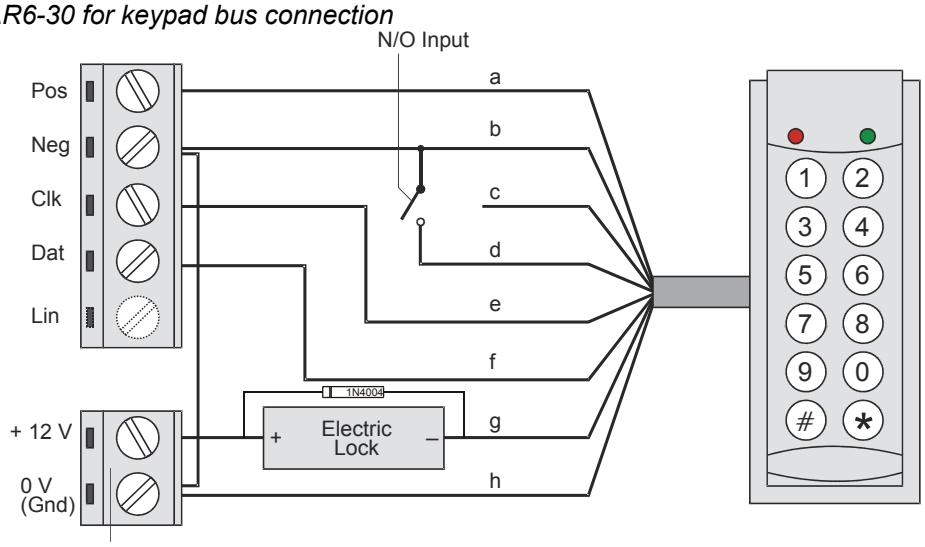


Fig. 14 Connection for Proximity and PIN Reader

When a card reader is connected to the system it must be restarted to address the reader. Is a keypad already connected as address 1 the reader does not work correctly if addressed with the same address.

6 Voice board IAV6-90

The voice board can only be integrated within the IC60 compact panel.

6.1 Product description

The voice board enables you to record multiple voice messages and then link them to events so that a caller can get an audio status on different parts of the system over the telephone. You can also call the control panel. Using the correct code combinations you can to listen to any sound originating within protected premises, thereby determining if an intruder is actually on the site or not. When the microphone is activated, the sirens are muted in order to keep the background noise as low as possible. This is a full duplex bi-directional voice channel enabling you to talk to the intruder when the intruder is within a few meters of the control panel. The intruder or visitor can then use the internal microphone to answer questions you ask over the internal speaker.

Speech messages can be allocated to different alarm types and be used to give status reports for command control.

Command control then enables you to arm or disarm the alarm system or to turn specific outputs on or off using voice commands via a remote telephone call (password protected).

- If the unit is not connected to ground, malfunction may occur (background noise, etc.).
- The quality of the voice messages depends on the quality of the telephone line.

Features

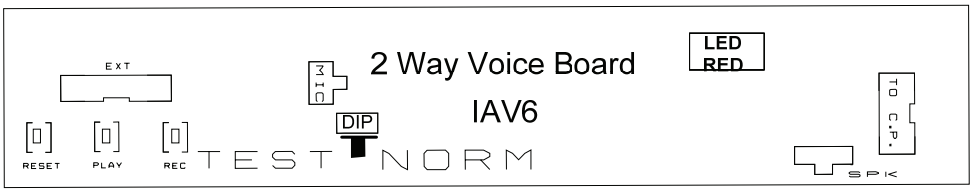
- Voice message recording
- Total recording time: 90 seconds
- Message length should be min. 2 seconds
- Indication: Red LED will be lit while messages are being record and played.
- Message repeats during reporting: 4 times
- Microphone control code: 1-4 digits >> *
- Acknowledge voice alarm code: 1-4 digits >> #

6.2 Programming the voice messages

You can switch between two modes using the slide switch:

- **Normal** (default setting): internal speaker deactivated
- **Test**: internal speaker activated

When you leave the room, set the voice board to Normal mode.



6.2.1 Pre-configuration

There are two types of messages: Command control messages and alarm messages. Command Control messages are used to give voice status information when a user dials in to arm/disarm the system or to control outputs, zones and additional events (using DTMF codes).

Alarm messages are assigned to alarm events and allow voice alarm.

Before programming the Command Control messages it is recommended to record the messages and put them in a list.

For example:

Message No. Order of recording	Voice Message
1	Output 4 on
2	Output 4 off
3	Output on
4	Output off
5	Area A armed
6	Area A disarmed
7	Area B armed
8	Area B disarmed
9	Zone 1 alarm
10	Zone 2 alarm
11	Zone 3 alarm
12	Mains failure
13	Mains restored
14	Battery low
15	Battery restored
…	
37	Tamper

Command control messages for output control on/off and area arm/disarm will need two voice messages to be assigned. (One for ON confirmation and one for OFF confirmation.) These messages need to be in direct sequence.

Use Table 1 below to assign each event address to the appropriate voice message in accordance with the list you have made.

Each event can be assigned a message number from 0-99. When set to "0" the message will be disabled.

Address	Description	Message Type	Value (message no.)
P42E 1-8E	Outputs	Command control	0
P64E 1-2E	Areas A&B	Command control	0
P160E 1-16E	Zone alarm	Alarm	0
P176E 1E	Keypad or radio panic alarm	Alarm	0
P176E 2E	Fire alarm	Alarm	0
P176E 3E	Medical alarm	Alarm	0
P176E 4E	Mains failure	Alarm	0
P176E 5E	Mains restored	Alarm	0
P176E 6E	Battery low	Alarm	0
P176E 7E	Battery restored	Alarm	0
P176E 8E	Tamper	Alarm	0
P176E 9E	Duress alarm	Alarm	0
P176E 10E	Latchkey disarm	Alarm	0
P176E 11E	Manual test initiated	Command control	0

Tab. 1 List of message addresses

For Output command control and area command control assign the first message number, e.g. P42E 1E 1 assigns messages 1 and 2 to output 1 (confirming ON and OFF respectively).

6.2.2 Recording messages

Before programming your voice messages:

Make a list of the messages to be sent for the individual alarm types and assign each of them a message number. These messages should then be recorded in the same order in which they are written down.

Once you have installed the Voice Board you can record your personalized speech messages on the module:

1. Set the slide switch to NORM.
2. Press the Reset button in order to set the alarm message counter to zero.
3. Press and hold the Record button while recording the message.
   ➔ The Record LED on the 2-way voice board lights up.

The individual messages must be at least 2 seconds long but no longer than 30 seconds.

4. Speak clearly into the microphone (from a distance of 10 - 20 cm).
5. When you have finished recording your message, release the Record button to stop the recording.
   ➔ The record LED on the 2-way voice board goes out.
6. Press the Record button again to record another message immediately after the previous message.
7. Continue making recordings until you have recorded all the messages.

6.2.3 Playing messages

1. Press the Reset button on the Voice Board to go to the beginning of the messages.
2. Set the slide switch to Test before listening to the recorded messages.
3. Press the Play button once to start playing the first message.
4. At the end of the recorded message playback will be stopped.
5. To listen to the next recorded message press the Play button again.
6. Repeat this operation until all the relevant recorded messages have been reviewed.
7. Press the Reset button to reset the voice board to the beginning of the messages.
8. Set the slide switch back to NORM mode.

6.2.4 Re-recording messages

1. Press the Reset button on the Voice Board to go to the beginning of the messages.
2. Re-record your message as described in chapter 6.2.1: Pre-configuration.

6.3 Operating instructions

The IAV6-90 is available in 2 versions. Both versions can be configured remotely and allow the configuration of a phone number the system will call in the event of an alarm.

Version 9.07 additionally allows a Central Monitoring Station (CMS) to verify an alarm by listening in after the alarm has been reported by the Control Panel.

The IAV6-90 Voice Board enables the following functionality of the Control Panel:

- Reporting using voice messages
- Alarm verification
- Remote configuration of the system
- Remote listen-in/talk-in

The two basic applications of Sintony 60 for reporting alarms are

- Reporting to a user phone
- Reporting to a CMS

The voice board supports both scenarios. It offers two modes of operation in both scenarios, which differ mainly in the way the listen-in voice call is established:

- Holding the line open
- Auto answering

6.3.1 Alarm reporting to a user phone

6.3.1.1 Holding the line open following Domestic/Speech reporting for DTMF control

Dialer B option
P175E 2E

(Option 6 set ON)

The messages received must always be confirmed by a user by pressing #. Otherwise there may be delays in the transmission of further alarm messages.

The dialer is set to call Domestic (Alarm tones only) or Speech (recorded message).
After an event has occurred, the Control Panel's dialer calls the user (regular telephone number) to report the event by sending a voice message or alarm tones over the phone. If a kiss-off is sent (dialer acknowledge DTMF code set by the user by parameter P175E 14E; if no kiss-off is programmed, the default DTMF is #), the dialer will keep the telephone line open.
The user at the phone can then talk to the person at the site and listen in to the site by using DTMF commands to turn the microphone on and off. If no kiss-off is sent to the Control Panel by the user after having answered the call, the dialer will repeat the call to the telephone several times (set by parameter P184E 1-8E).

Once the microphone is turned ON, the panel will keep the conversation for 1 minute. To extend the call for a longer time, the user must press the * button before the first minute has passed. The panel will close the microphone but not the call. If the * button is pressed once more, the panel will open the microphone again for 1 minute.
This action can be repeated several times.

6.3.1.2 Auto answering

Auto Ring Count
P175E 3E

(Value 0-99)

A user can call the Control Panel from any telephone. After a preset number of rings (pre-programmed by parameter P175E 3E) the Control Panel will hold the line and a series of tones will be sent over the line (tone and quiet time, tone and quiet time, etc. like answering of a fax machine). The user can enter into listen-in mode by entering the same DTMF code which activates the microphone (see above) during the quiet time between the incoming tones.

6.3.2 Alarm reporting to the Central Monitoring Station (CMS)

Only available in version 9.07 or higher.

This mode allows a person at the CMS to verify an alarm by listening in after the alarm has been reported by the Control Panel. With this feature there are 2 modes of operation:

6.3.2.1 Direct on-line for CID or SIA

Telephone number 5 reporting options
P183E 1-8E 5E

In order to activate this mode, option 5 at P183E must be ON.

If this option is turned ON and a full duplex two-way voice board is fitted, the panel will send a command to the CMS in CID or SIA format to tell the operator at the CMS to stay on-line so he can listen in or talk to the site (full-duplex two-way communication).

The Control Panel will hold the line after reporting to the CMS by CID or SIA.

This function should not be used with the function “speech protocol”.

6.3.2.2 Call-back

In order to activate this mode, option 5 at P183E must be OFF and option 8 at P175E 2E must be ON.

Dialer B options
P175E 2E 8

After reporting the event to the CMS the Control Panel rings off.
When this option is turned on, the Control Panel will ring off after reporting to the CMS. The operator at CMS can then call the Control Panel during a period 10 minutes. The panel will answer the incoming call on the first ring.
If the DTMF code defined by parameter P175E 14E (as described above) is not entered within 30 seconds, the panel will ring off. The panel will still answer any new calls on the first ring within the 10 minutes after the original alarm was transmitted. As soon as the panel receives the correct DTMF acknowledge code the auto-answer feature (answering on the 1st ring) will be reset.

After the Control Panel has answered an incoming call, a short beep will sound at intervals of 5 seconds for a period of 30 seconds. If nothing happens and the 30 seconds timer expires, the panel will ring off. If however the DTMF code programmed by parameter P175E 14E is entered before the 30 seconds timer has expired (for example if a code "1234" was programmed by parameter P175E 14E, then the operator must enter 1-2-3-4-# at their telephone), the call will be extended. The short beeps will stop and the two-way voice channel will remain open for 3 minutes (if no code has been programmed at P175E 14E, the call can be extended by pressing the # button). After 2 minutes and 30 seconds the short beeps will start again. The operator must repeat the above process to keep the panel on-line for a further 3 minutes, otherwise the panel will ring off when the 3 minutes are over.

If the operator wishes to terminate the two-way voice connection, he should enter 0-0-0-# on his telephone which will tell the panel to ring off.

6.3.3 Additional commands available for Voice Board

6.3.3.1 Output DTMF

Output DTMF
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.

6.3.3.2 Listen-in control code

Monitor DTMF
P175E 13E

The panel can be configured to allow remote listen-in via an on-site microphone. The Voice Board must be fitted for the microphone feature to be available. The code programmed by parameter P175E 13E is the DTMF code to be used when turning the microphone on or off. When dialing the panel and after it has answered the call, the user must wait for the panel modem tones to stop. Then he can enter the max. 4-digit DTMF code and press the <*> button on the telephone. This will turn the microphone on. Pressing the <*> button again will turn the microphone off. When you have finished, just ring off and 15 seconds later the panel will release the line.

6.3.3.3 Dialer acknowledge DTMF code number

DTMF Acknowledge Code
P175E 14E

If the panel is set to report in Domestic (Alarm tones only) or Speech (recorded message) reporting formats, the user can simply kiss-off (acknowledge) the alarm by pressing the <#> button on the remote telephone.

Alternatively if the user requires a more secure kiss-off method to ensure that the alarm is only kissed off by the correct person the user can program a 1-4 digit code at P175E 14E location. After a code is programmed at that location, the user must enter the code followed by the <#> button to kiss-off the alarm event. The same code is also used in conjunction with the two-way voice functions.

6.3.3.4 Force test call DTMF code number

DTMF call code
P175E 15E

If a user wishes to remotely force a test call from the panel to a CMS using the Contact ID test message, the user can dial the Control Panel from a remote telephone and when it answers enter the code programmed by parameter P175E 15E on the telephone.
If a voice board is fitted the user can assign a voice message (see chapter 22.8: Manual test call initiated voice message number; P176E 11E) to indicate that the function has started. If no voice board is fitted the user will hear 3 short beeps after the code has been entered to indicate that the function has started. Once the user hangs up, the panel will make a call to the CMS and send a manual test call message. If no code is programmed at P175E 15E location (i.e. 0) the function will be disabled. The code can be 1 to 4 digits long as required.

It is also possible to force a locally generated test call from the Control Panel keypad by pressing and holding the Ctrl button and then pressing the 0 button together with the Ctrl. This will force a test call to the CMS.

6.3.4 DTMF code table

The following DTMF codes are used for sending responses and operating commands.

Command	Default	Description
P175E 12E	2	Sets the DTMF code for use by the CMS to operate the OUTPUT (1-4 digits).
P175E 13E	1	Sets the DTMF code for turning the microphone ON/OFF.
P175E 14E	#	Dialer acknowledge DTMF code
P175E 15E	99	Forces a test call for testing the DTMF response codes (AREA A/B).
P63E 1-2E		Sets the DTMF code for ARM and DISARM.

Tab. 2 List of DTMF codes

6.4 Mute siren / O/P disable for 2 way voice

Valid as of version 9.07:

Output D options
P37E 4E 4E

This option must be programmed to mute all acoustic devices automatically during listen-in with the full duplex two way voice board.

According EN 50131-3 if an alarm occurred during Exit Delay the dialer should reported only after 30sec.

Only output 1 and the keypad buzzers are automatically muted. If an external siren is connected to another output this will not work.

6.5 Domestic kiss-off / Auto kiss-off

Domestic Kissoff
P183E 6E

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 (P175E 14E) 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.

We recommend using this function if a customer does not want to acknowledge alarm messages manually.
Please note: the dialler stops after the first alarm message.

7 Extension modules for Sintony 60 control panel

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

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.

Max. 2 boards can be connected (max. 8 outputs total).

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.

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 chapter 12.1: Learn a remote control / radio pendant; Pendant learn; P18E & 20.12: Learn a wireless detector / code to the system; Zone Learn Radio; 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 through the bus to increase the coverage range if desired.

8 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.

8.1 Technical data

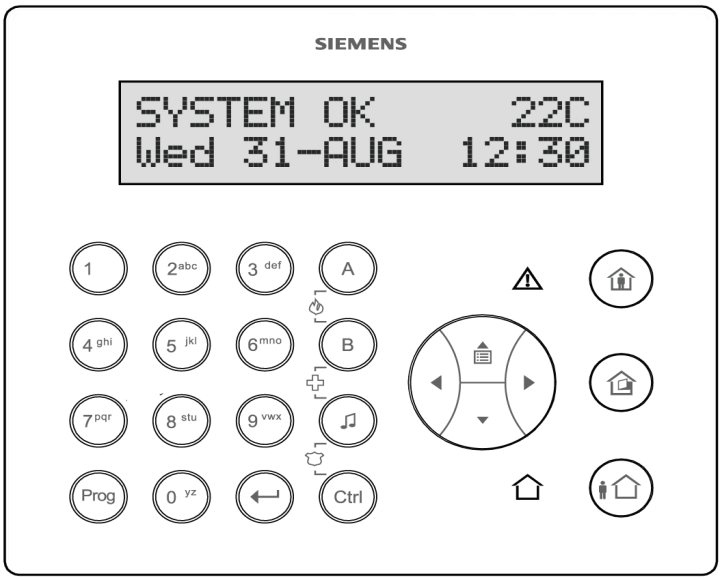


Fig. 15 LCD Keypad

Current consumption of the LCD Keypad type IKP6

- Normal state: it depend on the volume of the Backlight LED/ Display
- Min.: 35 mA, Typical: 60 mA, Max.: 90 mA
- Battery state: While the AC fail the software (default setting) turnoff the backlight LED's and Display so in this mode the current consumption is 35 mA.

Maximum 8 Keypads/Card readers can be connected to one Control Panel Sintony 60.

Bus connections- max. length*		
Up to 25 meter, 22AWG, wire diameter 0.6 mm	7 Keypads IKP6-03 or Reader IAR6-30	8 Keypads IKP6-03 or Reader IAR6-30
Up to 100 meter, 20AWG, wire diameter 0.8 mm	4 Keypads IKP6-03 or Reader IAR6-30	4 Keypads IKP6-03 or Reader IAR6-30

8.2 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.

8.2.1 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 wire 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 0.6mm security cable is 25m. Cable runs exceeding this distance may require 0.8mm 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 8.4: 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

8.3 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 through the programming interface port on the back side of the Keypad. (It could also be programmed remotely through 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 (see chapter 9.4.1: Access to installer program mode).

8.3.1 Accessing local program mode

- To enter Local program Mode on a LCD Keypad press Ctrl followed by ⌂.Hold for 2 seconds.

➔ The display will now show `Local Mode kb #` where the # equals the keypad address.

You must press the Ctrl button first and the ⌂ button must be pressed within 2 seconds of pressing the Control button. If you make a mistake press the ⏎ 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.

8.3.2 Local program mode menu tree

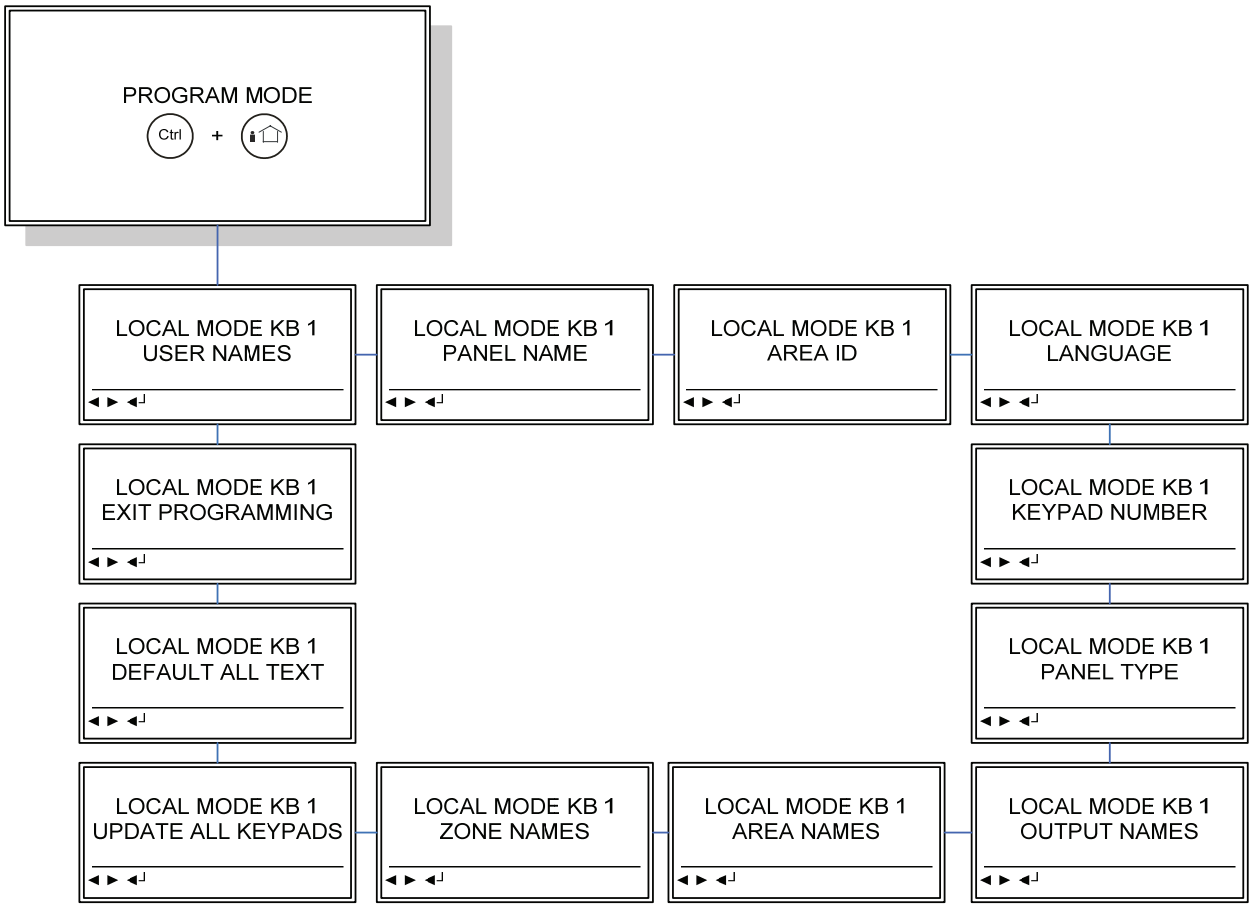


Fig. 16 LCD - Local program Mode - Menu Headings

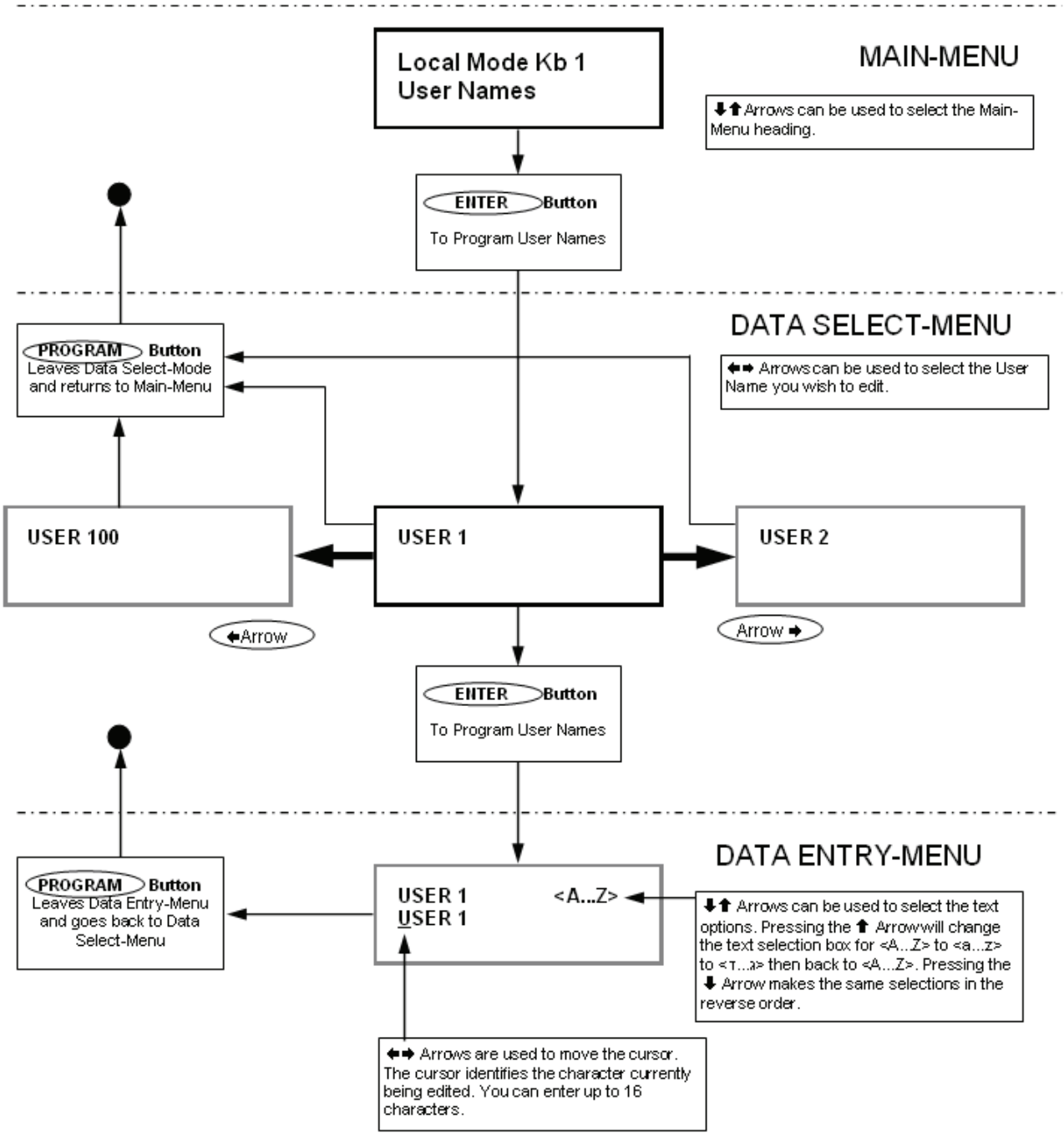


Fig. 17 Menu Tree

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

8.3.3 Local program mode direct program addresses

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

Sequence	Action
P1E	ZONE #1 TEXT (maximum 16 characters)
P16E	ZONE #16 TEXT
P800E	UPDATE EDITABLE TEXT TO ALL LCD KEYPADS
P801E	RETURN ALL EDITABLE TEXT TO DEFAULT
P995E	PANEL TYPE
P996E	SET KEYPAD ADDRESS NUMBER FROM 1-8
P997E	KEYPAD LANGUAGE
P998E	AREA IDENTIFYING CHARACTER (assigning numbers or letters to Areas)
P999E	PANEL NAME DISPLAY (maximum 16 characters)
P1001E	PROGRAM USER 1 NAME
P1100E	PROGRAM USER 100 NAME
P2001E	AREA A IDENTIFYING NAME (maximum 16 character Area name)
P2002E	AREA B IDENTIFYING NAME (maximum 16 character Area name)
P3001E	PROGRAM OUTPUT 1 NAME
P3008E	PROGRAM OUTPUT 8 NAME

Tab. 3 Shortcut programming codes Local program mode

8.3.4 Exiting local edit program mode

Press and hold the Ctrl button for 2 seconds and the LCD keypad will leave Local Program Mode and return to normal Mode or; press the Ctrl button repeatedly until the display reads `Exit Programming`, then press the ↵ button to exit program mode.

8.4 Programming a keypad to the system – addressing

All following programming steps in this chapter are requesting the Local Program Mode as described before.

8.4.1 Language change of LCD

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 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
- Swedish (*only valid as of version 9.07*)

When in Local Program Mode, you scroll with the buttons ⌂/↓ to the position `Language` or go directly by pressing P997E, the display will look like this:

Language
English (ENG)

Scroll with the buttons ⌂/↓ to the language you prefer.

When you are happy with the changes press ↵ to save.

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 + i for 2 sec.
2. press P997E
3. scroll up/down

8.4.2 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 ⌂/⌄ to the position `Keypad Number` or go directly by pressing P996E, the display will look like this:

Keypad Number 1

- Select an unused address, e.g. 2 then press ↵ to save.
- To exit Local Program Mode, press and hold the Prog button for two seconds.

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

8.4.3 Copying text to another LCD keypad

The individual programmed wording, as described in the chapter 8.5: Changing names – personalization of the system, 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 8.4.1: Language change of LCD).

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 P800E, 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 ♫ 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.

8.5 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 Ctrl button first and the ⌂ button must be pressed within 2 seconds of pressing the Ctrl button. If you make a mistake press the ↵ button then repeat the process.

8.5.1 How to use the alphanumeric keypad buttons

- When in Local Program Mode, you scroll with the buttons ⌂/↓ 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 ↵ button the display will show the `Zone 1` which you can now select by using the ◄/► buttons to the Zone that should be renamed e.g. `Zone 1-16`.
- If the right Zone is indicated press ↵ 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 ⌂ 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 ↓ 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 ► 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 ◊ button to move the cursor towards the left and make any corrections.

When you are happy with the text press ↵ to save the changes. You can program the text for all following identifications in the same way.

8.5.2 Changing the keypad name

When in Local Program Mode, you scroll with the buttons ⌂/⌄ to the position `Panel Name` or go directly by pressing P999E, 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 ↵ to save.

8.5.3 Changing the user names

When in Local Program Mode, you scroll with the buttons ⌂/⌄ to the position `User Name` or go directly by pressing P1001E, 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 ↵ to save.

8.5.4 Changing the zone names

When in Local Program Mode, you scroll with the buttons ⌂/⌄ to the position `Zone Name` or go directly by pressing P1E, 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 ↵ to save.

8.5.5 Changing the keypad area name

When in Local Program Mode, you scroll with the buttons ⌂/↓ to the position `Area Name` or go directly by pressing P2001E, 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 ↵ to save.

8.5.6 Changing the output names

When in Local Program Mode, you scroll with the buttons ⌂/↓ to the position `Area Name` or go directly by pressing P3001E, 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 ↵ to save.

8.5.7 Changing the area single character identifier

When in Local Program Mode, you scroll with the buttons ⌂/↓ to the position `Area Id` or go directly by pressing P998E, 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 ↵ to save.

8.5.8 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 P1E 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 (Ctrl) then (1) or (A) will return the default text anyway.

8.5.9 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 P801E display will prompt you to press 801E again. Once you have pressed 801 (↵), all customizable text (e.g. zone names, user names, output names, etc) will be returned to the default text.

8.6 Operating a LCD keypad

8.6.1 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 (⌂) button.

There are two parts to the Memory Display Mode:

8.6.2 Current system alarms

If there are any current system alarms, they will be displayed first under the heading of `Check System`. When the (⌂) 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 (⌂) 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.

8.6.3 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 button. The keypad will beep and the display is advanced to the next event every time the button is pressed.

If you wish to go back and look at an earlier event you can use the button to go back to an earlier event. Each time the is pressed the memory will go back one event.

To cancel the memory displays just press .

If the 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.

The `System Check` display will be reset- change to `System OK` once the event has been viewed.

8.6.4 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 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 button again or the keypad will time out automatically in approximately 30 seconds.

8.6.5 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 pressing ⌂, entering the Code and pressing ↵ 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 ⌂ , entering the Code and pressing ↵ 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 ⌂, entering the Code and pressing ↵ 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 ↵ button now, both areas A&B will arm. If before pressing the ↵ 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 ↵ button is pressed.

On disarming, after entering the Code an pressing ↵ the display on the LCD keypad will show `Area/s to Disarm A B`. You can press the ↵ 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.

8.6.6 Toggle chime mode on-off

On the LCD Keypad there is a ♫ button. Pressing and holding that button for 2 seconds will toggle Chime Mode from On-Off or Off-On.

8.6.7 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 Ctrl 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. For details see chapter 22.7: Forced test call code options; P175E 15E and chapter 22.8: Manual test call initiated voice message number; P176E 11E.

8.6.8 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 Ctrl 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.

8.7 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.

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.

8.7.1 LCD backlight adjustment

Increasing the LCD backlight:

- By holding down the Ctrl button and repeatedly pressing the ◄ 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 ► button the LCD backlight level can be decreased to the minimum which is until function light off.

8.7.2 Keypad button backlight adjustment

Increasing the keypad button backlight

- By holding down the Ctrl button and repeatedly pressing the ⌂ 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 ▼ button the keypad LED backlight level can be decreased to the minimum, which is until function light off.

8.7.3 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.

9 How to program the alarm system

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

9.1 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 through 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 through the programming port of the control panel unit if connected to the phone line).

For more details refer to the separate available Software description.

When the system is plugged/ unplugged to the PC it could happen that the system does a restart automatically. We recommend to plug and unplug always under powerless condition (battery and main disconnected from the panel to avoid damage).

9.2 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 through 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 through a telephone modem and a PC (see chapter 9.1: Programming the system by PC).

9.3 Programming the system by 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 (see chapter 27.4 Read or write to/from the memory stick (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 (see chapter 9.4.1 Access to installer 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.

When the system is plugged/ unplugged to the Memory stick it could happen that the system does a restart automatically. We recommend to plug and unplug always under powerless condition (battery and main disconnected from the panel to avoid damage).

9.4 Programming the system through a keypad

The system can be programmed through the clear text menu by using the cursor (⌂/↓/◄/►) and ↵ 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 User program mode first and then to the Installer program mode.

9.4.1 Access to installer program mode

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

1. Press Prog
2. Enter Master code (default is 258369)
3. Press ↵

When you enter the Installer program mode the LCD Keypad display automatically `Installer: User`. Now using the cursor (⌂/↓/◄/►) and ↵ 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.

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.

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.

9.4.2 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 Prog button repeatedly until the display reads `Exit Programming`, then press the ↵ button to exit the Installer program mode.

9.4.3 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.

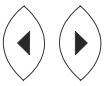
E.g. User can change all codes:P5E 1-100E 2E

This means when in Installer program mode:

1. Press Prog
2. Press 5
3. Press ↵
4. Select now the user number you want to have (1-100).
   e.g. 25
5. Press 2abc & 5
6. Press ↵
7. Now select the functionality to the user 25 by pressing the option number.
   e.g. 2
8. Press 2abc
9. Press ↵
   ➔ Now you have programmed the user 25 to option 2 `can change all codes`
10. To left the programming press Prog again.

9.4.4 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> key selects the Menu you wish to work in or the option in a Sub-Menu you wish to use.
	<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)

9.4.5 Selecting the main-menu headings

- To access a desired program location you first navigate to the desired Main-Menu by using the ▲ or ▼ arrow keys on the keypad.
- Each press of ▲ or ▼ 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 ↵ button.

9.4.6 Selecting the sub-menu headings

- Having pressed the ↵ 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 ▲ or ▼ 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 ↵ button.

9.4.7 Selecting the data entry-menu headings

- Having pressed the ↵ button at the desired Sub-Menu heading, the keypad will now be in the Data Entry-Mode.
- At this point you can use the ▲ or ▼ 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 ◄ or ► arrow keys to cycle through all of the menu points. This allows you to program the entire menu from 1-xxx.

9.4.8 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 Ctrl button then within 2 seconds pressing the ↵ button you can access the sub- text that describes what each option can do. To exit the sub-text display press ↵.

9.4.9 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 Prog button.

Each time the Prog 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.

9.4.10 Flowchart for button function on the keypad

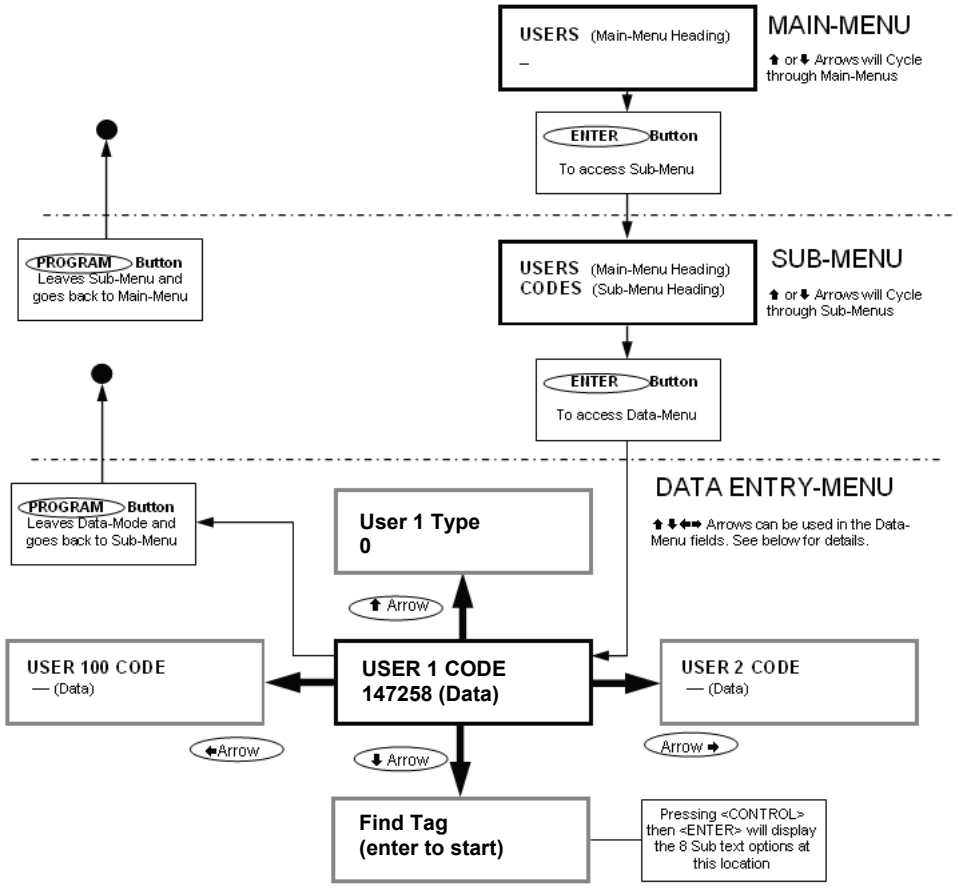


Fig. 18 Flowchart with Menu-steps using Arrow (⌂/⌄/⟨/⟩), Enter (↵) and Program (Prog) Button

10 Default access 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 9.4.3: Keypad code programming.

In the case of systems that are programmed to EN 50131, access to the installer mode is only possible if the User code is entered first. Changing to the installer mode is only possible by entering P 200 E 13E in the client mode.
This setting can be changed at P25 E 10E 2E (refer to chapter 27.7: Installer code).

10.1 Access code to the user mode - default user PIN

P147258E

10.2 Access code to the installer mode - default installer PIN

P258369E

10.3 Reset a system to default settings

If the installer code is still working use the following commands to set the system back to default setting:

P200E_9E for all codes and numbers reset back to default setting
P200E_10E for all parameters reset back to default setting

If the installer code was lost or forgotten their is still a chance to reset the system by connecting with the PC and the Sylcom 60 programming SW to the system and read out the stored codes.
Without PC there is no chance to get back into the programming mode if the code was forgotten! In this case please contact the Siemens Hotline support for help.

11 Programming users

11.1 User codes

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

11.1.1 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 P25E 11E 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.

1. 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)
2. Now enter the Code e.g. P1E 2E 2580E
3. Press ↵.

   ➔ 3 beeps - program light on solid or flashing

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

Another example:

4. Now enter the Code e.g. P1E 5E 9876E

   ➔ 3 beeps - program light on solid or flashing

In this example we have programmed Code 5 to be 9876

11.1.2 Removing a user code

1. To remove a User Code you must first be in client or installer program mode.
2. 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)
3. To remove or delete a code simply press and hold the Ctrl button then within 2 seconds press the 0 button. Followed by ↵.

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:

1. Press P1E 3E, then press Ctrl and 0.

   ➔ 3 beeps

   ➔ User Code # 3 erased

11.2 User code type

Only Users 21-100 can be Radio Users

User Type
P2E 1-100E 0-8E

Option	Display text	Description
0	Keypad User	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	Radio Users: 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	Tag User	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	Tag AND Code	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	Tag OR Code	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.

11.3 User access options

User Access Options
P4E 1-100E 1-8E

Option	Display text	Description
1	Can Arm	User can Arm Area: if a User has option 1 on, they can Arm all Areas assigned at location P3E.
2	Can Stay	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	Can open	User can Disarm Area: if a User has option 3 on, they can Disarm all Areas assigned at location P3E.
4	Can Unstay	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	Guard Mode	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	Latch Key Open	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 ⌂, ⌂, A or B, (see chapter 18.3, 18.5, 18.6 & 18.7; P75E, P77E, P79E & P81E option 6) or the key-switch (see chapter 19.3; 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 P176E 10E. Normally you would select a telephone number/s set for domestic or voice reporting to report the Latchkey disarm signal.
7	Use Call Divert	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	Can View Memory	User can view event Memory: if a User has option 8 on he as access in the Memory section to all stored events.(P4E 8E)

11.4 User code privileges

User Program Options
P5E 1-100E 1-8E

Option	Display text	Description
1	Change Own Code	User can change their Code: if a User has option 1 on, they can access Client Program Mode and change their code number.
2	Change Any Code	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	Allow Installer	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	Edit Phone #s	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	Change Clock	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	Edit DTMF Codes	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 Outputs On/Off or acknowledge a Voice/Domestic alarm.
7	Learn Radio Devices	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	Start Callback	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 P200E 12E or if using an LCD keypad go to the `Diagnostics` Menu and select `Start Callback`.

11.5 Radio user type

Only Users 21-100 can be Radio Users.

Pendant Type
P7E 21-100E 1E

Option	Display text	Description
0	Free	Not in Use
1	IRCW6	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.
2	Free	Not in Use

11.6 Radio user privileges

Only Users 21-100 can be Radio Users.

Pendant Options
P8E 21-100E 1-5E

Option	Display text	Description
1	Can Open Always	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	Immediate Panic	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	Delayed Panic	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	Disarm on Entry	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	Duress on Open	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	

11.7 User time zone assignments

User Time Zones
P9E 1-100E 1-8E

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	Display text	Description
1	Time Zone 1	User Controlled by Time Zone # 1
2	Time Zone 2	User Controlled by Time Zone # 2
3	Time Zone 3	User Controlled by Time Zone # 3
4	Time Zone 4	User Controlled by Time Zone # 4
5	Time Zone 5	User Controlled by Time Zone # 5
6	Time Zone 6	User Controlled by Time Zone # 6
7	Time Zone 7	User Controlled by Time Zone # 7
8	Time Zone 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 Time Zone #1 and now assuming Time Zone #2 is set to 09:00-12:00 on day 7 (Saturday), by assigning both TZ 1 & 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 P200E 4E (see chapter 27.2: Display active zones and battery voltage; Active Time Zones).

11.8 User to keypad assignment (user devices)

User Devices
P10E 1-100E 1-8E

Option	Display text	Description
1	Keypad1	User will work at Keypad # 1
2	Keypad 2	User will work at Keypad # 2
3	Keypad 3	User will work at Keypad # 3
4	Keypad 4	User will work at Keypad # 4
5	Keypad 5	User will work at Keypad # 5
6	Keypad 6	User will work at Keypad # 6
7	Keypad 7	User will work at Keypad # 7
8	Keypad 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).

11.9 Radio pendant panic beeps to keypad

Only Users 21-100 can be Radio Users.

Radio Panic Beeps
P11E 21-100E 1-8E

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

If a Radio Pendant is programmed to create a Panic Alarm (see chapter 11.6: Radio user privileges; Pendant Options; 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).

11.10 User to output mask

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

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

11.11 User can turn an output on

User Outputs On
P13E 1-100E 1-8E

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

11.12 User can turn an output off

User Outputs Off
P14E 1-100E 1-8E

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

11.13 Radio pendant panic alarm to output

Only Users 21-100 can be Radio Pendant.

Radio Panic Output
P15E 21-100E 1-8E

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

If a Radio Pendant is programmed to create a Panic Alarm (see chapter 11.6: Radio user privileges; Pendant Options; 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.

12 Learn, find and delete remote controls and tags

12.1 Learn a remote control / radio pendant

Only Users 21-100 can be Radio Pendant.

Pendant Learn
P18E 21-100E

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 bus. 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.

12.2 Delete a remote control / radio pendant

Only Users 21-100 can be Radio Pendant.

Pendant Delete
P19E 21-100E

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.

12.3 Find a remote control / radio pendant location

Only Users 21-100 can be Radio Pendant.

Find Pendant
P20E 21-100E

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.

12.4 Learn an access tag / card code to the system

Tag Learn
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).

12.5 Delete an access tag / card code

Tag Delete
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.

12.6 Find an access tag / card location

Find Tag
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.

13 Miscellaneous panel and timing settings

13.1 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 P25E 1E. 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.

13.2 Duress digit

The system is only able to work with codes of a maximum length of 6 digits. If a duress code shall be used within the system, the individual codes of the users are restricted to a maximum length of 5 digits.

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 12345 and the duress number is programmed as 4, then entering a code of 412345 and press ↵ would create a duress alarm).

13.3 Dial report delay

Reporting 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.

Valid as of version 9.07: (both during the exit delay time if option 3 is on at P122E for a zone or when an instant zone is triggered when fully armed). While the timer is active certain outputs can be disabled at location P36E Option 5. Once the timer has expired it will not start again, the panel must be disarmed then armed to reset the timer.

According EN 50131-3 if an alarm occurred during Exit Delay the dialer should reported only after 30sec.

The dial report delay is only working during entry or exit delay time.
Alarms in full set state are transmitted immediately.

13.4 Radio zone supervised timer

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.

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.

13.5 Two trigger timer

Two Trigger Time
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 if 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.

13.6 Mains fail reporting delay

AC Fail 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.

13.7 Receiver fail delay-timer

Radio Reset Time
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.

13.8 Upload-Download site code number

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

Tab. 4 How to enter code numbers

13.9 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.

14 Miscellaneous installer and panel options

14.1 Miscellaneous panel options

Miscellaneous Options
P25E 10E1-8E

Option	Display text	Description
1	Tamper uses EOL	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	Installer Direct	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	Ignore AC Fail	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	Output1 Low Volume	Listen-in to Output # 1 Low Volume: if Listen-In to Output 1 is turned on (P175E 8E), 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 (P35E 1E Option 1 on). Failure to do this could result in damage to the speaker & output.
5	No Arm RF Fault	Receiver Fail Lockout: if the receiver fail delay (P25E 7E) 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	Output data to bus	Send Output information to Keypad Bus: there is an optional 4 x relay output expander board that can be connected to the keypad bus if required. For this output expander to work option 6 must be turned on for the data to be sent on the keypad bus to the expander.
7	No Arm AC-Low Battery	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 Lock	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 Prog then ↵ 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.

14.2 Miscellaneous installer options

Installer Options
P25E 11E 1-8E

Option	Display text	Description
1	Installer Alarm Reset	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	Installer Tamper Reset	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	Installer Battery Reset	Entry to Installer Mode Resets Battery Alarms: if this option is turned on and a Battery 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	Installer Supv. Reset	Entry to Installer Mode Resets Supervision Alarms: if this option is turned on and a Supervision 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	No Arm Missing Keypad	Cannot Arm if there is a keypad Fault: if this option is turned on and a missing keypad alarm is present the panel cannot be armed until the keypad has been re-instated.
6	No Arm Bad Comms.	Cannot Arm if there is a Telephone Line Failure or Comms Fault: if this option is turned on and the control panel has detected a telephone line fault or the dialer failed to get kissed off (Comms Fault) following an alarm report the panel cannot be armed. To reset the line failure the telephone line must be re-instated to allow arming again. To reset the Comms Fault alarm, a user must access the memory.
7	Bad Code Lockout	10 Incorrect Code Attempts locks out the keypad for 90 Seconds: if this option is turned off the panel will create a keypad tamper alarm if more than 4 incorrect codes are entered at a keypad but the keypad will not be locked out. If this option is turned on the panel will create a keypad tamper alarm if more than 10 incorrect codes are entered at a keypad and that keypad will then be locked out for 90 seconds.
8	Min. 4 Digit Code	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

14.3 Miscellaneous user options

Miscellaneous User Options
P25E 13E 1-8E

Option	Display text	Description
1	View Requires Codes	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 , enter Code and press to have access to the event memory.
2	No Handover in Stay	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	Keypad Outputs Disable if Armed	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 Code Disable if Entry	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 Indication if Armed	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	-	*Up to version 9.07*: Spare
	Supervised Output data to bus	*Valid as of version 9.07:* Monitored Keypad Bus Output Board: this option performs a similar function to option 6 at location P25E10E in that if it is turned on the Output status messages are sent to the keypad bus. The difference with this option is when turned on the panel is expecting the OutputX4 board connected to the keypad bus to acknowledge the messages. If the OutputX4 does not acknowledge the output status messages the panel will show an output board failure. This option should only be turned on if an OutputX4 board (Version 1.1) is connected to the keypad bus. According EN 50131-3 all units connected to the Control Panel should be monitored.
7	-	Spare
8	-	*Up to version 9.07*: Spare
	Limit Report to 3 Events	*Valid as of version 9.07:* Limit Events & Dialer to 3 of any one Type: if this option is turned on the panel will not record any more than 3 events in memory for any event type during a single arm or disarm cycle, e.g. if the AC. Failed 4 times while armed or disarmed the panel will only record the AC fail 3 times in memory. And will only report the AC fail 3 times to the dialer. As soon as the arm state has changed any count are reset back to zero again. If this option is off there is no limit on the recording and reporting of Events. According EN 50131-3 the events of the same type should be limited to 3.

14.4 Hide user codes – User options

Client Options
P25E 12E

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.

15 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.

15.1 How to set time and date

Time HH:MM
P26E 1E

(Value 0-2359)

Week Day 1-7
P26E 2E

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

Date DDMMYY
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).

15.2 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
P26E 4E 1E

This function activates the automatic change in the time.

If you are in Daylight Saving Time when the alarm system is installed you MUST turn on option 1 at location P26E 4E 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 Sunday Start
P27E 1E

(Value 0-5, 0= DLS Disabled)

On which Sunday in the month the daylight saving should start. Per default this is set to the 1 Sunday in the Month.

Daylight Saving Sunday Stop
P27E 2E

(Value 0-5, 0= DLS Disabled)

On which Sunday in the month the daylight saving should end. Per default this is set to the 3 Sunday in the Month.

Daylight Saving Month Start
P28E 1E

(Value 1-12)

On which Month in the Year the daylight saving should start. Per default this is set to the 10 Month in the Year.

Daylight Saving Month End
P28E 2E

(Value 1-12)

On which Month in the Year the daylight saving should stop. Per default this is set to the 3 Month in the Year.

Daylight Saving Hour Start
P29E 1E

(Value 0-23)

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.

Daylight Saving Hour End
P29E 2E

(Value 0-23)

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.

16 Outputs

16.1 Output options

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 bus (the output module provides 4 change-over relay contacts).

Output A Options
P34E 1-8E 1-8E

Option	Display text	Description
1	Inverted	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	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 Ctrl button.
3	Single Pulse	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	Retrigger able	Lockout Output: this option is used to limit the output to one operation per arming period.
5	DTMF controlled	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 (P175E 12E) of the Outputs, this option selects which Outputs are able to be controlled by the remote user.
6	User code to Output	Keypad User can Operate Output: if a DTMF Output control code is programmed into the panel (P175E 12E), the same code can be entered at the panel keypad to allow local control of the Outputs selected at this address.
7	<Control> to Output	<Control> button can Operate Output: the Ctrl 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 Ctrl 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 2abc button for output 2 etc. When finished the operator then presses the ↵ button to cancel the Control mode and return to normal
8	Chime Flash	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 B Options
P35E 1-8E 1-8E

Option	Display text	Description
1	AC Fail	Mains Fail to Output: this option is used to assign a Mains Fail alarm to an output.
2	Fuse Fail	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 12 V DC outputs.
3	Battery Low	Battery Low to Output: this option is used to assign a Battery Low alarm to an output.
4	Line Fail	Telephone Line Failure to Output: this option is used to assign a Telephone Line Failure alarm to an output.
5	Zone Supervisory Fail	Supervisory Radio failure to Output: this option is used to assign a Radio Detector Supervisory Fail alarm to an output.
6	Sensor Watch Fail	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	System Tamper to Output: this option is used to assign a panel tamper alarm to an output.
8	Receiver Fail	Receiver Fail to Output: if the receiver fail timer expires (see chapter 13.7: Receiver fail delay-timer; Radio Reset Time; P25E 7E) this option will assign the alarm to an output.

Output C Options
P36E 1-8E 1-5E

Option	Display text	Description
1	Walk Test Pulse	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	Blink when Idle	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	Dial Arming Acknowledge Pulses Output	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	Dial Zone Alarm Acknowledge Pulses Output	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).
5	Disable during dial delay	*Valid as of version 9.07:* Output Disabled when P25E 3E timer is running: this option will cause the Output to be disabled when the dialer reporting delay is active. It is designed to keep external audible alarms silent when the dial delay is active (allowing internal alarms to warn that the alarm will be reported to monitoring if not unset) but if the alarm hasn’t been reset before the timer expires the external alarm will sound. According EN 50131-3 if an alarm occurred during Exit Delay the dialer should reported only after 30sec. And the Siren shouldn't activate until the Exit delay is expired.

Output D Options
P37E 1-8E 1-8E

Option	Display text	Description
1	Modulated Output	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 and Chime is in Minutes	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 Disable 10s	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	-	*Up to version 9.07*: Spare
	Output Disable for 2-way Voice	*Valid as of version 9.07:* Turn Output OFF during Two Way Voice Mode: if the panel has a full duplex two way voice board fitted and the settings at P175E 2E option 8 and P183E option 5 are set to allow full duplex mode, any outputs with this option turned on will be disabled while two way voice is operational. This is to ensure that local sirens do not interfere with the two way voice audio signal. According EN 50131-3 if an alarm occurred during Exit Delay the dialer should reported only after 30sec. And the Siren shouldn't activate until the Exit delay is expired.
5	-	Spare
6	-	Spare
7	-	Spare
8	Monitor	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.

16.2 Output on delay, pulse, reset and chime times

Output 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 Flash 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 (P46E 4E) 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.

Output Chime 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.

16.3 Output voice board remote control start message

Output 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.

16.4 Un-map an output

Un-map Output
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 P43E 4E and ALL defaults will be removed. This removes all options assigned to the output and makes the reset time 0 for latched operation

16.5 Assigning a time zone to an output

Time Zones to Output
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 time zones starts and turn the output off when the time zones ends. You should un-map the output at P43E first before assigning the time zones to ensure that only the time zones will control the state of the output.

17 Areas

17.1 Area arm and special function options

Area A Options
P45E 1-2E 1-8E

(1 = Area A, 2 = Area B)

Option	Display text	Description
1	ARM before Code	<Arm> button Required Before Code to Arm: this option determines if the 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 before Code	<Stay> button Required Before Code to Arm Stay Mode: this option determines if the 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	Code required to Arm: if this option is turned on, the button is disabled and the panel requires a code to Arm.
4	Bypass required Code	Code required to Bypass: if this option is turned on, the button cannot access Bypass Mode directly. To enter Bypass mode the User must press , enter code and press before they can bypass zones.
5	-	Spare
6	Dial After Exit	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	Arm if Secured	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	Stay if Secured	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 B Options
P46E 1-2E 1-8E

(1 = Area A, 2 = Area B)

Option	Display text	Description
1	Near/Confirm Reporting	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	Arm at Time Zone end	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	Open at Time Zone start	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	Tags Chirp Output	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	-	*Up to version 9.07*: Spare
	No Arm on Violation	*Valid as of version 9.07*: Cannot Arm if Zone Unsealed at end of Exit Delay: if this option is turned on and a zone becomes unsealed as the exit delay expires the panel will fail to arm and report this via the dialer. The unsealed zone must be corrected and the system re-armed again. According EN 50131-3 the system shouldn't Arm if one of the zones is open at the end of Exit Delay.
8	Spare	

17.2 Area arm-stay pulse and chirps to output

Area Arm Follow
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 Follow
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 Open Follow
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.

Area Arm Chirp
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 chapter 16.1: Output options; Output D Options, option 1; P37E 1 or 2E), 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.

Area Stay Chirp
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 chapter 16.1: Output options; Output D Options, option 1; P37E 1 or 2E), 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.

Area Open Chirp
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 chapter 16.1: Output options; Output D Options, option 1; P37E 1 or 2E), 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.

Area Unstay Chirp
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 chapter 16.1: Output options; Output D Options, option 1; P37E 1 or 2E), 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.

Area Arm Pulse
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.

Area Stay Pulse
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.

Area Open Pulse
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.

Area Unstay Pulse
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.

17.3 Area arm-stay beeps keypad

Area Arm Exit Beeps
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.

Area Stay Exit Beeps
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 ↵ button following arming of Stay Mode. The next time Stay Mode is armed, if the ↵ button is not pressed, all programmed exit and entry delays will apply.
Option 1 = Keypad 1; Option 2 = Keypad 2 etc.

17.4 Exit delay time settings / area

Area Arm Exit 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.

Area Stay Exit 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.

17.5 Monitoring account code number

Area Account Code
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 KEYPAD TELEPHONE INDICATIONS	CID & 4+2 SPECIAL CHARACTERS	TELEPHONE NUMBER SPECIAL FUNCTION
Ctrl & 0	-	DELETE #	DELETE #	DELETE #
Ctrl & 2abc	B	#	“B”	“#”
Ctrl & 3def	C	*	“C”	“*”
Ctrl & 4ghi	D	-	“D”	“2.5 sec Pause”
Ctrl & 5jkl	E	w	“E”	“Wait for 2nd Dial-tone”
Ctrl & 6mno	F	=	“F”	“5 sec Pause”

Tab. 5 How to enter code numbers

17.6 Remote arm/disarm DTMF code and start voice message

Area DTMF Code
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.

Area 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.

17.7 Area exit beeps to output

Area Exit-Output A
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.

Area Exit-Output S
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.

17.8 Area delinquency delay – arming activation indication

Area Delinquency Days
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.

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.

17.9 Automatic arm/disarm time zone

Area Arm Time Zone
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.

18 Keypads

18.1 Keypad area assignment

Keypad Areas
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.

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

18.2 Keypad button individual operations (beeps and LED control)

Keypad Options
P72E 1-8E 1-8E

Option	Display text	Description
1	Enable Chime key	<Chime>: this option enables the ♫ button on the LCD keypads. Chime alarms to the keypad buzzer and outputs are disabled when ♫ 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 Mode 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 ♫ button. If you press the ♫ 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	<Bypass> button Enabled: this option enables the ⌂ button (by keypad number) on any keypads connected to the pane
3	Panic	<Panic> button Enabled: this option enables the button (by keypad number) on the Keypad connected to the panel
4	Delayed Panic	Delayed Operation of <Panic> button: this option assigns a 2 second delay before the button will cause an alarm. The button must be held down for longer than 2 seconds to create a panic alarm.
5	1st Combination	1 & 3 Panic Alarm Enabled: this option enables a Panic Alarm to be created when buttons 1 & 3 def are pressed simultaneously on the reader or keypad. It also enables the ♫ & Ctrl Panic Alarm when both buttons are pressing simultaneously on the LCD keypad.
6	2nd Combination	4 & 6 Fire Alarm Enabled: this option enables a Fire Alarm to be created when buttons 4 ghi & 6 mno 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.

Option	Display text	Description
7	3rd Combination	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 & ♫ Medical Alarm when both buttons are pressing simultaneously on the LCD keypad.
8	Stay Arming Beep	Stay Armed Beep to Keypad: If this option is turned on the keypad will give three short beeps when Stay Mode is armed. It is designed to be used when stay mode exit delay beeps (P59E) are turned off to provide an audible indication that. Stay mode is now armed from the selected keypad

18.3 Keypad system beeps and LED options

Keypad Beeps
P73E 1-8E 1-8E

Option	Display text	Description
1	AC Fail	Mains Fail Beeps Keypad Buzzer: if this option is on a Mains Failure will cause the keypad buzzer to sound continuously. The continuous beep will automatically clear when the Mains returns to normal or it can be silenced by pressing the ↵ button on the keypad.
2	Fuse Fail	Fuse Fail Beeps Keypad Buzzer: if this option is on a Fuse Failure (12 V DC output short) will cause the keypad buzzer to sound continuously. The continuous beep will automatically clear when the short is removed and the fuse returns to normal or it can be silenced by pressing the ↵ button on the keypad.
3	Battery Low	Battery Low Beeps Keypad Buzzer: if this option is on a Panel Battery Low will cause the keypad buzzer to sound continuously. The continuous beep will automatically clear when the battery returns to normal or it can be silenced by pressing the ↵ button on the keypad.
4	Line Fail	Telephone Line Fail Beeps Keypad Buzzer: if this option is on a Telephone Line Failure will cause the keypad buzzer to sound continuously. The continuous beep will automatically clear when the Telephone Line returns to normal or it can be silenced by pressing the ↵ button on the keypad.
5	System Tamper	System Tamper Beeps Keypad Buzzer: if this option is on a Panel Tamper Alarm will cause the keypad buzzer to sound continuously. The Alarm must then be cleared by entering in a valid code at the keypad.
6	Receiver Fail	Receiver Fail Beeps Keypad Buzzer: if this option is on a Receiver Failure will cause the keypad buzzer to sound continuously. The continuous beep will automatically clear when the Receiver starts to see transmissions again or it can be silenced by pressing the ↵ button on the keypad.
7	Leds off Armed / Power safe	Turn Off Keypad LEDs when Armed: if option 7 is activated the backlight of LCD and all LEDs are turned off after 10 sec. when the panel is not in use. By pressing any button lights will go on again.
8	AC Fail dims Keypad	Turn Off Keypad LCD & Keypad Backlighting on Mains Fail: this option allows the backlighting on an LCD on a keypad (both the keypad buttons and the LCD module backlighting) to be turned off when there is a Mains Failure. It is normally used to cut the power consumed by the keypad during a power failure. The LCD backlighting will turn off within 90 seconds of the mains failing. If a button is pressed at the keypad the backlighting will turn back on again. Following 90 seconds of no keypad activity the backlighting will turn off. The LCD backlighting will return to the normal state when Mains is restored.

18.4 Keypad <Arm> Button options

Keypad ARM Areas
P74E 1-8E 1-2E

Option	Display text	Description
1	Area A	Area A: this option assigns the keypad ⌂ button to Area A. If a keypad ⌂ button is assigned to only Area A it can only arm or disarm that area.
2	Area B	Area B: this option assigns the keypad ⌂ button to Area B. If a keypad ⌂ button is assigned to only Area B it can only arm or disarm that area.

Keypad ARM Access
P75E 1-8E 1-8E

Option	Display text	Description
1	Can Arm	<Arm> button can arm: this option enables single button arming using the ⌂ button. For single button operation to work options 1 & 3 must be off at location P45E
2	Can Stay	<Arm> button can arm Stay Mode: this option enables single button arming of Stay Mode using the ⌂ button. For single button operation to work options 1 & 3 must be off at location P45E. (NOTE: Following arming of Stay Mode, if the ↵ button is pressed, all entry & exit delays will be reset to zero for that armed period).
3	Open Anytime	<Arm> button can disarm at all Times: this option enables single button disarming using the ⌂ button. For single button disarm operation to work options 1 & 3 must be off at location P45E
4	Unstay Anytime	<Arm> button can disarm Stay Mode at all Times: this option enables single button disarming of Stay Mode using the ⌂ button. For single button disarm operation to work options 1 & 3 must be off at location P45E
5	Can Reset Alarms	<Arm> button can reset Alarms: if this option is on, pressing the ⌂ button (provided Option 3 is also on) will reset an alarm condition without having to enter a user code.
6	Latch Key Option	<Arm> button can arm Latchkey Mode: this option enables single button arming of the alarm in Latchkey report mode using the ⌂ 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	Open on Exit	<Arm> button can disarm during Exit Delay: this option allows single button disarming using the ⌂ button provided the Armed Mode exit delay is active. If the exit delay has expired the ⌂ 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	Unstay on Exit	<Arm> button can disarm Stay Mode during Exit Delay: this option allows single button disarming of Stay Mode using the ⌂ button provided the Stay Mode exit delay is active. If the Stay Mode exit delay has expired the ⌂ button cannot be used to disarm Stay Mode. For single button disarm operation to work options 1 & 3 must be off at location P45E

18.5 Keypad <Stay> button options

Keypad STAY Areas
P76E 1-8E 1-2E

Option	Display text	Description
1	Area A	Area A: this option assigns the keypad ⌂ button to Area A. If a keypad ⌂ button is assigned to only Area A it can only arm or disarm that area.
2	Area B	Area B: this option assigns the keypad ⌂ button to Area B. If a keypad ⌂ button is assigned to only Area B it can only arm or disarm that area.

Keypad STAY Access
P77E 1-8E 1-8E

Option	Display text	Description
1	Can Arm	<Stay> button can arm: this option enables single button Arming using the ⌂ button. For single button operation to work options 2 & 3 must be off at location P45E.
2	Can Stay	<Stay> button can arm Stay Mode: this option enables single button arming of Stay Mode using the ⌂ button. For single button operation to work options 2 & 3 must be off at location P45E. ℹ Following arming of Stay Mode, if the ↔ button is pressed, all entry & exit delays will be reset to zero for that armed period.
3	Can Open	<Stay> button can disarm at all Times: this option enables single button disarming using the ⌂ button. For single button disarm operation to work options 2 & 3 must be off at location P45E.
4	Can Unstay	<Stay> button can disarm Stay Mode at all Times: this option enables single button disarming of Stay Mode using the ⌂ button. For single button disarm operation to work options 2 & 3 must be off at location P45E.
5	Guard Mode	<Stay> button can reset Alarms: if this option is on, pressing the ⌂ button (provided Option 4 is also On) will reset an alarm condition without having to enter a user code.
6	Latch Key Open	<Stay> button can arm Latchkey Mode: this option enables single button arming of the alarm in Latchkey report mode using the ⌂ 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	N/O Switch	<Stay> button can disarm during Exit Delay: this option allows single button disarming using the ⌂ button provided the Armed Mode exit delay is active. If the exit delay has expired the ⌂ 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	Momentary	<Stay> button can disarm Stay Mode during Exit Delay: this option allows single button disarming of Stay Mode using the ⌂ button provided the Stay Mode exit delay is active. If the Stay Mode exit delay has expired the ⌂ button cannot be used to disarm Stay Mode. For single button disarm operation to work options 2 & 3 must be off at location P45E

18.6 Keypad <A> button options

Keypad A Key Areas
P78E 1-8E 1-2E

Option	Display text	Description
1	Area A	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	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 Key Options
P79E 1-8E 1-8E

Option	Display text	Description
1	Can Arm	<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	Can Stay	<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 Following arming of Stay Mode, if the (↵) button is pressed, all entry & exit delays will be reset to zero for that armed period.
3	Open Anytime	<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	Unstay Anytime	<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	Can Reset Alarms	<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	Latch Key Open	<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	Open on Exit	<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	Unstay on Exit	<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

18.7 Keypad <B> button options

Keypad B Key Areas
P80E 1-8E 1-2E

Option	Display text	Description
1	Area A	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	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 Key Options
P81E 1-8E 1-8E

Option	Display text	Description
1	Can Arm	<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	Can Stay	<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. Following arming of Stay Mode, if the (↵) button is pressed, all entry & exit delays will be reset to zero for that armed period.
3	Open Anytime	<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	Unstay Anytime	<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	Can Reset Alarms	<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	Latch Key Open	<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	Open on Exit	<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	Unstay on Exit	<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

18.8 Keypad to output mask

Keypad User 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.

18.9 Control button to output mask

Keypad Control Mask
P83E 1-8E 1-8E

The Ctrl button at a Keypad can be assigned to an output or multiple outputs. If the Ctrl button is not assigned to an output a User cannot access Local Control Mode (by pressing the Ctrl 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 Ctrl 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.

18.10 Keyboard panic, fire and medical alarms to outputs and KP buzzer

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 def or Ctrl & ♫)

Keypad Panic Outs
P84E 1-8E 1-8E

(includes 1 & 3 def or Ctrl & ♫)

A Keypad generated Panic Alarm (either pressing button, 1 & 3 def or Ctrl & ♫ 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 Outs
P85E 1-8E 1-8E

(includes A & B or 4 GHI & 6 MNO)

A Keypad generated Fire Alarm (either pressing the A & B or 4 GHI & 6 MNO 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 Outs
P86E 1-8E 1-8E

(includes B & ♫ or 7 PQRS & 9 WXYZ)

A Keypad generated Medical Alarm (either pressing the B & ♫ or 7 PQRS & 9 WXYZ 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 Panic Beep
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.

Keypad Fire Beep
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.

Keypad Medical Beep
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.

18.11 Keypad wrong code and manipulation alarms to outputs

Keypad Duress Outs
P87E 1-8E 1-8E

A Keypad generated Duress Alarm (see chapter 13.2: Duress digit; Duress Digit; P25E 2E) 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 Outs
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 Error Outs
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.

Keypad Tamper Beep
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. P93E 1E 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.

18.12 Keypad chime timer

Keypad Chime 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.

18.13 Learn a card reader to the system, addressing an LED

To learn a card reader to a system a card/ tag is required to start the learning process. This card must not be from the system but any 125kHz card will do it. Make sure before starting the learning that a card is available.

Reader Learn
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 bus. Then from installer program mode, enter in P99E followed by the keypad address you wish to assign to the reader (e.g. P99E 4E 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. P99E 5E 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 bus, 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.

When a card reader is connected to the system it must be restarted to address the reader. Is a keypad already connected as address 1 the reader does not work correctly if addressed with the same address.

Proximity LED Follows Output
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 (P46E 4E) 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.

19 Key-switches

19.1 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.

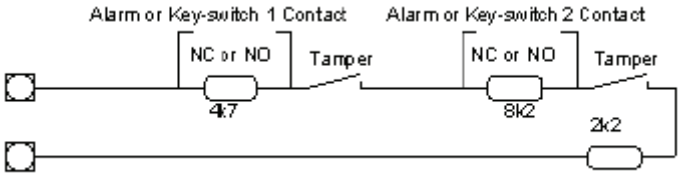


Fig. 19 Type 14 Zone doubling with tamper

19.2 Key-switch area assignment

Keyswitch Areas
P111E 1-2E

(1 = Key-switch # 1; 2 = Key-switch # 2)

Option	Display text	Description
1	Area A	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	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.

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

19.3 Key-switch arm-disarm options

Keyswitch Access
P112E 1-2E 1-8E

(1 = Key-switch # 1; 2 = Key-switch # 2)

Option	Display text	Description
1	Can Arm	Key-Switch can arm: this option enables arming of the assigned Area via the Key-switch.
2	Can Stay	Key-Switch can arm Stay Mode: this option enables Stay Mode arming of the assigned Area via the Key-switch.
3	Can Open	Key-Switch can disarm: this option enables disarming of the assigned Area via the Key-switch.
4	Can Unstay	Key-Switch can disarm Stay Mode: this option enables Stay Mode disarming of the assigned Area via the Key-switch.
5	Guard Mode	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	Latch Key Open	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	N/O switch	Key-Switch is N/O (Normally Open): the key-switch can be a N/O (Normally Open) or a N/C (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	Momentary	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.

20 Zones

20.1 Zone area assignment

Zone Areas
P121E 1-16E 1-2E

Option	Display text	Description
1	Area A	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	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.

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

20.2 Zone type options- basic information

Zone A Options
P122E 1-16E 1-8E

Option	Display text	Description
1	Active	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	Normally open	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.

Zones

Option	Display text	Description
3	-	*Up to version 9.07*: Spare
	No Exit Delay	*Valid as of version 9.07:* Zone is not an Exit Delay Zone: if this option is turned on the zone will not have any exit delay and will cause an instant alarm if triggered during the exit delay time. Also you MUST ensure that if this option is turned on for a zone, that same zone should not have any entry delay (P144E) programmed. If the zone does have an entry delay the zone can activate during the exit time thereby starting an entry delay on the same zone which means the user might not be aware of the pending alarm and leave the premises. If the zone has no entry delay and the zone is triggered during the exit time the alarm will then be instant alerting the user that they deviated off the exit route. According EN 50131-3 the user must have an option to define the zones in the exit route.
4	Prox Reader Input	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 P122E 1E (zone #1) had option 4 on then the input at reader one will operate zone 1. If P122E 9E (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.
5	Radio Device	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	Stay Mode	Zone 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	Bypass able	Zone can be Manually Bypassed: if this option is on the zone can be Manually Bypassed at the keypad using the ⌂ 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	Auto Bypass able	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 B Options
P123E 1-16E 1-8E

Option	Display text	Description
1	Handover	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	Dual Trigger	Zone is a Two Trigger Zone: if this option is on the zone will have to trigger twice within the two trigger time (P25E 5E) 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	24 Hour	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.
4	24 Hour Auto Reset	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	24 Hour Fire	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	-	Spare
7	Activate Chime	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	Always Chime	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.

20.3 Special zone type options

Zone C Options
P124E 1-16E 1-8E

Option	Display text	Description
1	Ignore Seal	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	Multiple Reports	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	Activity Monitor	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	Soak Test	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	Report to Area B	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 chapter 17.5: Monitoring account code number; Area Account Code; P62E). By turning this option on when a zone is in both areas it will report to Area B account Code
6	No 24 Hours Report to dialer	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	Acknowledge Pulse	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	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.

20.4 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 4.3.2: Zone wiring examples).

Zone EOL Mode
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

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 through 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)

20.5 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
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. See chapter 20.4: Different End of Line (EOL) Resistor value options).

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 200ms for setting 9 (standard default setting) through to 1.0 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		

20.6 Supervising setting of wireless detector type

The wireless detectors of this systems work 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 is 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. About how to set the supervision timer refer to chapter 13.4: Radio zone supervised timer (P25E 4E 0-9999E).

Zone Radio Type
P127E 1-16E 3-4E

Option	Display text	Discription	Grade of Securiy
3	SiWay Supervised	SiWay with checksum supervised: selecting this option also starts the supervise timer (P25E 4E).	High-recommended
4	SiWay UnSupervised	SiWay with checksum not-supervised: the automatic supervisory signal sent by the detector is ignored in this mode by the control panel.	Low

To activate this function and connect a wireless detector, the zone must be programmed as a Radio zone (see chapter 20.2: Zone type options- basic information; P122E 1-16E 5E)

Also the supervision timer must be set (P25E 4E). 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.

20.7 Zone alarms to output mapping

Zone Arm Outs
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.

Zone Stay Outs
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.

Zone 24Hours Outs
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 (P123E 3E) the output will turn for the full reset time, if it is an Auto-reset type (P123E 4E) the output will either turn off when the reset time expires or if the input clears and if it is a Fire type (P123E 5E) the output will pulse at a rate equal to the pulse time for that output.
Option 1 = Output 1; Option 2 = Output 2 etc.

Zone Chime Outs
P131E 1-16E 1-8E

If a zone is programmed as a Chime zone (P123E 7E) 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 Outs
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.

Zone Near Alarm Output
P167E 1-16E 1-8E

If the option near alarm zone or confirmed alarm zone is activated (this could be done only for a total Area. See chapter 17.1: Area arm and special function options; Zone B Options; 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.

Zone Confirm Alarm 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. See chapter 17.1: Area arm and special function options; Zone B Options; 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.

20.8 Zone alarms to keyboard buzzer mapping

Zone Arm Beeps
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.

Zone Stay Beeps
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.

Zone 24Hours Beeps
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 (P123E 3E) or Fire type (P1235E) the keypad buzzer will sound until reset by a User but if it is an auto-reset type (P123E 4E) the keypad buzzer will reset when the input clears.
Option 1 = Keypad 1; Option 2 = Keypad 2 etc.

Zone Chime Beeps
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 Beeps
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.

Zone Supervise Beeps
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 Active Beeps
P141E 1-16E 1-8E

If the zone is programmed for inactivity monitoring (P124E 3E) 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.

Zone Arm Entry Beeps
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.

Zone Stay Entry Beeps
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.

20.9 Zone timing settings

20.9.1 Entry delay time

Zone Arm Entry Time
P144E 1-16E 0-9999E

(Value 0-9999 Seconds)

Each Zone has its 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.

Zone Stay Entry Time
P145E 1-16E 0-9999E

(Value 0-9999 Seconds)

Each Zone has its 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.

20.9.2 Retrigger time

Zone Lockout Counter
P146E 1-16E 0-255E

(Value 0-255 Minutes)

Each Zone has its 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.

20.10 Armed and stay mode entry delay times to output mapping

Zone Entry Output/Away
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.

Zone Entry Output/Stay
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.

20.11 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.

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.

Zone Activ Time
P163E 1-16E 0-9999E

(Value 0-9999 Minutes)

If the zone is programmed as a Sensor-watch zone (P124E 3E) 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.

20.12 Learn a wireless detector / code to the system

Zone Learn Radio
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 bus. 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.

20.13 Delete a wireless detector / code of the system

Zone Delete Radio
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 – press ↵ to start, to delete the selected code.
E.g.: P165E 5E E will remove the code stored for zone 5.

20.14 Find a wireless detector / code in the system

Find Radio
P166E 1-16E E

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 ↵ 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

21 Time zones

21.1 Holidays

Holiday DDMMYY
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.

21.2 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.

Time Zone Days
P171E 1-8E

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

21.3 Time zone start and stop times

Time Zone Start
P172E 1-8E

(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 P200E 4E.

Time Zone End
P173E 1-8E

(2359 (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)

Time Zone 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.

22 Dialer

22.1 Dialer options

Dialer A Option
P175E 1E 1-8E

Option	Display text	Description
1	Enable Dialer	Dialer is Enabled: if this option is turned on the dialer will be enabled. The option must be on to allow the dialer to make calls.
2	Fax Defeat	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 (P175E 4E) 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	Ignore Line Fail	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	Decadic Dialer	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 Decadic	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 Dial Tones	Long DTMF Dialing Digits: if this option is Off, the panel will dial using normal dialing (75ms on & 75ms off). If it is On, the panel will dial using the long tones (100ms on & 100ms off).
7	Modem AutoDetect	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	Modem Force V21	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 B Option
P175E 2E 1-8E

Option	Display text	Description
1	Cycle Phone #s	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	Allow Callback	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	PC only if Open	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	Tests if armed	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	P175E 5E as Days	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 for DTMF	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	1st-Open/ Last-Close	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	-	*Up to version 9.07*: Spare
	Alarm Enables Answer	*Valid as of version 9.07:* Answer after 1 ring for Two Way Voice Call-back Mode (if using speech protocol): if this option is turned ON and a full duplex voice board is fitted, the panel will answer an in-coming call after 1 ring and automatically enter full duplex two way voice mode if an alarm was already transmitted.

22.2 Auto answer ring count

Auto 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.

22.3 Test call options

Test Resync HHMM
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 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 P175E 5E. Check also the option P175E 2E 5E test call time period change from hours to days.

22.4 Listen dialing function through keypad and output

Keypad Listen In
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	Display text	Description
1	Dial when Open	Listen-in enabled when dialing only and in disarmed State
2	Dial when Closed	Listen-in enabled when dialing only and in armed State
3	Dial when Stay	Listen-in enabled when dialing only and in Monitor Mode
4	Full Call Open	Listen-in enabled through the entire call only in disarmed state
5	Full Call Closed	Listen-in enabled through the entire call only in armed State
6	Full Call Stay	Listen-in enabled through the entire call only in Monitor Mode
7	Answering a call	Listen-in enabled when the panel answers a call
8	At all times	Listen-in on at all times

Output 1 Listen In
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	Display text	Description
1	Dial when Open	Listen-in enabled when dialing only and in disarmed State
2	Dial when Closed	Listen-in enabled when dialing only and in armed State
3	Dial when Stay	Listen-in enabled when dialing only and in Monitor Mode
4	Full Call Open	Listen-in enabled through the entire call only in disarmed state
5	Full Call Closed	Listen-in enabled through the entire call only in armed State
6	Full Call Stay	Listen-in enabled through the entire call only in Monitor Mode
7	Answering a call	Listen-in enabled when the panel answers a call
8	At all times	Listen-in on at all times

22.5 Dialing pre-fix numbers

Prefix Number
P175E 8E

(Value 1-16 digits)

The panel can be programmed with a Pre-fix telephone number. The Prefix 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
Ctrl & 0	DELETE #	DELETE #
Ctrl & 2	#	"#"
Ctrl & 3	*	"*"
Ctrl & 4	-	"2.5 sec Pause"
Ctrl & 5	w	"Wait for 2nd Dial-tone"
Ctrl & 6	=	"5 sec Pause"

Tab. 6 How to enter prefix numbers

22.6 Remote control by external phone through DTMF dialing tones

Output DTMF
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.

DTMF Acknowledge Code
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.

22.7 Forced test call code options

DTMF Call Code
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 chapter 22.8: Manual test call initiated voice message number; P176E 11E) 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 Ctrl button then 0 within two seconds of pressing control. This will force a test call to the monitoring company.

If using this remote test code and any of the other remote DTMF codes at locations (P63E, P175E 12E, P175E 13E & P175E 14E) 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.

22.8 Manual test call initiated voice message number

Remote Test Message
P176E 11E

You can trigger the panel by manual (Ctrl+0) to send test call to the central station and receive immediately a call (P176E 11E) with your voice recorded indicate that manual test as been done.

23 Telephone numbers

23.1 Programming telephone numbers

Phone Number
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
Ctrl & 0	-	DELETE #	DELETE #	DELETE #
Ctrl & 2	B	#	“B”	“#”
Ctrl & 3	C	*	“C”	“*”
Ctrl & 4	D	-	“D”	“2.5 sec Pause”
Ctrl & 5	E	w	“E”	“Wait for 2nd Dial-tone”
Ctrl & 6	F	=	“F”	“5 sec Pause”

Tab. 7 How to enter code numbers

23.2 Reporting formats

Phone Format
P182E 1E 1-11E

Option	Display text	Description
1	Contact ID	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	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 P175E 14E 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	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.

Telephone numbers

Option	Display text	Description
4	Speech Dialer	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.
5	4+2 10p 14/19	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 1400Hz and the transmit tone from the panel will be at 1900Hz at 10 pulses per second.
6	4+2 10p 23/18	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 2300Hz and the transmit tone from the panel will be at 1800Hz at 10 pulses per second.
7	4+2 20p 14/19	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 1400Hz and the transmit tone from the panel will be at 1900Hz at 20 pulses per second.
8	4+2 20p 23/18	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 2300Hz and the transmit tone from the panel will be at 1800Hz at 20 pulses per second
9	4+2 DTMF CSum	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 1400Hz/2300 Hz.
10	SIA	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 25: SIA Codes reporting format SIA III (SIA code is a Digital communication Standard for Alarm System communications defined by ANSI.).
11	SIA slow	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.

23.3 Telephone number report options

Phone Options
P183E 1-8E 1-8E

Option	Display text	Description
1	Kiss Off	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	Call Process	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.
3	Blind Dial	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 CID Groups	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 (P62E 1E Area A) and use the group number to identify the two areas. Turning this option on sends one account with group numbers.
5	-	*Up to version 9.07*: Spare
	Listen-In on Alarm	*Valid as of version 9.07:* Stay On-line after Alarm report for two way voice: if this option is turned ON and a full duplex two way voice board is fitted, the panel will send a command to the monitoring company in CID or SIA formats to tell the receiver to stay on-line so the operator can listen or talk to the site (full duplex two way voice).
6	Domestic Kissoff	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 (P175E 14E) 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 Dial Prefix	Use the Dial Prefix Number: if the Telephone number does not provide sufficient digits for dialing purposes it is possible to program a dial pre-fix number (P175E 8E). 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	Callback Number	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.

23.4 Maximum dial re-tries per telephone number

Phone Retries
P184E 1-8E 0-99E

(Value 0-99)

The maximum dial retries is the number of times that the panel will dial a telephone number in an attempt to get kissed-off.

23.5 Dial progress options

Phone A Reporting
P186E 1-8E 1-8E

Option	Display text	Description
1	AC or Fuse Fail	Report Mains Fail: if this option is on the panel will report a Mains fail after the report delay time (P25E 6E) has expired.
2	Battery Low	Report Battery Low: if this option is on the panel will report a Battery Low.
3	Radio Low Battery	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	Line Fail	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	System Tamper	Report System Tamper: if this option is on the panel will report a Tamper Alarm on the panel tamper input.
6	Keypad Tamper	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	Zone Tamper	Report Zone Tamper: if this option is on the panel will report a Zone Tamper Alarm.
8	Radio Tamper	Report Radio Tamper: if this option is on the panel will report a Radio Tamper Alarm.

Phone B Reporting
P187E 1-8E 1-8E

Option	Display text	Description
1	Duress	Report Supervised Duress Alarm: if this option is on the panel will report a Duress radio Alarm (see chapter 13.2: Duress digit; P25E 2E).
2	Supervised Radio Fail	Report Supervised Radio Alarm: if this option is on the panel will report a Supervised radio Alarm (see chapter 13.4: Radio zone supervised timer; P25E 4E).
3	Zone Inactive	Report Zone Inactivity Alarm: if this option is on the panel will report a Zone Inactivity (Sensor-watch) Alarm (see chapter 20.11: Zone movement / activity control – watch timer; P163E).
4	Keypad Panic	Report Manual Panic Alarm: if this option is on the panel will report a Keypad generated Panic Alarm.
5	Keypad Fire	Report Manual Fire Alarm: if this option is on the panel will report a Keypad generated Fire Alarm.
6	Keypad Medical	Report Manual Medical Alarm: if this option is on the panel will report a Keypad generated Medical Alarm.
7	Pendant Panic	Report Radio Pendant Panic Alarm: if this option is on the panel will report a Panic Alarm generated by a radio key (pendant).
8	Bypassed	Report Zone Bypasses: if this option is on the panel will report a Manual or Auto Bypass on a zone.

Phone C Reporting
P188E 1-8E 1-8E

Option	Display text	Description
1	All Arm/Open	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	All Stay/Open	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	Open after Alarm	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 by a valid user.
4	Unstay after Alarm	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	Stay Mode Alarms	Report Stay Mode Zone Alarms: if this option is on, the panel will report zone alarms in Stay Mode.
6	Program Entry	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	24 Hours to Domestic	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	Send Restores	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.

Phone D Reporting
P189E 1-8E 1-8E

Option	Display text	Description
1	Latch Key Report	Report Latchkey Disarm: if the panel is armed in Latchkey Report Mode by using a Code, Key-switch, ⌂, ⌂, 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	Delinquent Report	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	Tests Report	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	Fuse Report	Report Fuse Failure: the panel has two on-board thermal fuses designed to protect the 12 V 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	Output Fail Report	Report Output 1 or 2 Fail: the panel has two high current outputs (output 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 output 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 Report	Time Change Reporting: if this option is turned on all changes in the RTC – real time clock setting will be reported.
7	Missing Keypad Report	Missing Keypad Reporting: if this option is turned on and a Keypad is disconnected it will be reported immediately.
8	RF Blocking Report	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.

23.6 Call divert numbers and options

This function is 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.

Divert Events
P192E 1-2E 1-8E

(1 = Area A Trigger Events; 2 = Area B Trigger Events)

Option	Display text	Description
1	Away Arm	Divert Arm: if this option is on then the Call-Divert On number (P194E 1E) 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	Away Open	Divert on Disarm: if this option is on then the Call-Divert Off number (P194E 2E) 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	Stay Arm	Divert on Stay Mode Arm: if this option is on then the Call-Divert On number (P194E 1E) 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	Stay Open	Divert on Stay Mode Disarm: if this option is on then the Call-Divert Off number (P194E 2E) 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 if Keyswitch	Divert on Key-switch Arm/Disarm: if this option is on then the Call-Divert On and Off numbers (P194E 1E & 2E) will be dialed when the system is Armed or Disarmed with the key-switch.
6	Divert if Time Zone	Divert on time zone Arm/Disarm: if this option is on then the Call-Divert On and Off numbers (P194E 1E & 2E) will be dialed when the system is Armed or Disarmed by a time zone.
7	Divert if remote	Divert on DTMF or PC Arm/Disarm: if this option is on then the Call-Divert On and Off numbers (P194E 1E & 2E) will be dialed when the system is Armed or Disarmed by a Remote DTMF code or by a PC connection.

Option	Display text	Description
8	Divert if Button	Divert on single button <Arm> or <Stay>: if this option is on then the Call-Divert On number (P194E 1E) will be dialed when the system is Armed with the ⌂ or ⌂ buttons. This option must be selected if the Call Divert function is required and single button arming is being used.

Divert Options
P193E 1-2E 1-8E

(1 = Divert ON Number; 2 = Divert OFF number)

Option	Display text	Description
1	-	Spare
2	-	Spare
3	Blind Dial	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 Dial Prefix	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 (P175E 8E). 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

24 4 plus 2 program options

24.1 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 and F. The chart below shows how to program the special 4+2 characters.

Using the 4+2 Codes

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

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

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

25 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 23.2: Reporting formats (P182E1E10E).

25.1 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 P197E 1E)	PA	PH
Keypad Fire Alarm (programmable P197E 2E)	FA	FH
Medical Alarm (programmable P197E 3E)	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 (OP 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	

Tab. 8 Report codes alarm events used with SIA protocol transmission

25.2 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 Alarm SIA Code
P196E 1-16E 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	-	-

Tab. 9 Chart for the individual programmable SIA code events

26 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.

26.1 Change Zone Contact Identification (CID) report codes

Zone Alarm CID 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 P157E 5E).

Zone Near Alarm CID
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 CID
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.

26.2 Change keypad panic, fire and medical alarms CID report code

Panic CID 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 CID 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 CID 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.

26.3 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 #1	409	000	Key-switch # 1 Arm/Disarm
Arm/Disarm by Key-switch #2	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.

27 Panel diagnostic & default options

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

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.

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

27.1 Display software version - keypad numbers and keypad areas

Panel Version
P200E 1E

This location will display the software version of the panel.

This keypad
P200E 2E

This location will display the keypad number of the keypad currently in program mode.

Areas for keypad
P200E 3E

This location will display the Areas assigned to the keypad currently in program mode.

27.2 Display active zones and battery voltage

Active Time Zones
P200E 4E

This location will display which of the 8 time zones are currently on.

Battery Voltage
P200E 5E

This location will display the system battery voltage measured by the panel.

27.3 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

press ↵ to start

This address is used to start walk-test mode while in installer or client program mode. By pressing P200E 6E 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 Prog or ↵ 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 chapter 16.1: Output options; Output D Options, option 1; P37E 1 or 2E), 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.

During Walk Test Mode the control panel receiver attenuate the incoming Signal by about 6 dB which is a requirement of the EN 50131. 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.

27.4 Read or write to/from 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.

When the system is plugged/ unplugged to the Memory stick it could happen that the system does a restart automatically. We recommend to plug and unplug always under powerless condition (battery and main disconnected from the panel to avoid damage).

27.5 Reset back to defaults

Clear User/Phone
P200E 9E

This location is used to return the panels User and Installer Codes plus the Telephone Numbers & Account Codes to the default settings.

Clear All
P200E 10E

This location is used to return all other parameters back to the default settings.

27.6 Start a call-back call

Start Callback
P200E 12E

This location is used to force a call to the call-back number.

27.7 Installer code

Valid as of version 9.07!

Installer
P200E 13E

If option 2 in P25E 10E (Installer Direct Access) is off, the only way for installer to Access is through client mode. The installer must enter first to client mode and go to P200E 13E and enter the code there. The code will not be presented on the LCD (confidential), he will be blanked out.

According EN 50131-3 the system shouldn't present the Installer code while typing it through the Client mode

27.8 Radio Signal Strength Indication (RSSI)

Valid as of version 9.07!

Radio RSSI
P200E 14E

Entering P200E 14E will trigger the panel to measure the RF signal from any wireless device (e.g. wireless zone and remote pendant). When the panel receives a signal, the device name and RSSI level will be displayed on the LCD for 30 seconds.

100% RSSI = - 65dBm

0% RSSI = - 105 dBm

For presentation purposes the range from - 65dBm to - 105 dBm is linear divided by 10 steps (0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100%). 100 is the highest sensitivity.

Only in the Walk test mode the sensitivity decreases by 6 dBm.

We recommend not to install devices which have a lower reception than 50%. Although it might work during testing, this device might cause problems during life-time.

The radio signal strength can be influenced by the environmental conditions, e.g. humidity, day/night, influence by other radio signals such as mobile phones, WLAN, etc.
Therefore the RSSI indication may vary and should only be used for general information.

28 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.

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 malfunctions and false alarms!

Program Location	P5E Options:								
	Option 8: Can force download								
	Option 7: Learn new radio devices								
	Option 6: Change DTMF command								
	Option 5: Change clock								
	Option 4: Change phone numbers								
	Option 3: Full access								
	Option 2: Change others codes								
	Option 1: Change own code	1	2	3	4	5	6	7	8
P1E	User Code	X	X	X					
P2E	User Type			X					
P3E	User Areas			X					
P4E	User Access Options			X					
P5E	User Program Options			X					
P7E	Pendant Type			X					
P8E	Pendant Options			X					
P9E	User Time Zones			X					
P18E	Pendant Learn							X	
P19E	Pendant Delete							X	
P20E	Find Pendant							X	
P21E	Tag Learn							X	
P22E	Tag Delete							X	
P23E	Find Tag							X	
P25E12E	Client Options		X						
P26E (all)	Time and Date					X			
P170E	Holiday DDMMYY					X			
P63E	Area DTMF Code						X		
P164E	Zone Learn Radio							X	
P165E	Zone Delete Radio							X	
P166E	Find Radio							X	
P175E3E	Auto Ring Count				X				
P175E4E	Test Resync HHMM				X				
P175E5E	Test Period				X				
P175E8E	Prefix Number				X				
P175E12E	Output DTMF						X		
P175E13E	Monitor DTMF						X		
P175E14E	DTMF Acknowledge Code						X		

P175E15E	DTMF Call Code						X		
P181E	Phone Number				X				
P194E	Divert Number				X				
P200E1E	Panel Version		X	X					
P200E2E	This keypad		X	X					
P200E3E	Areas for keypad		X	X					
P200E4E	Active Time Zones		X	X					
P200E5E	Battery Voltage		X	X					
P200E6E	Walk Test Mode							X	
P200E12E	Start Callback			X					X

29 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 110/230V mains cables. A separate cable entry must be used for 110/230V 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.

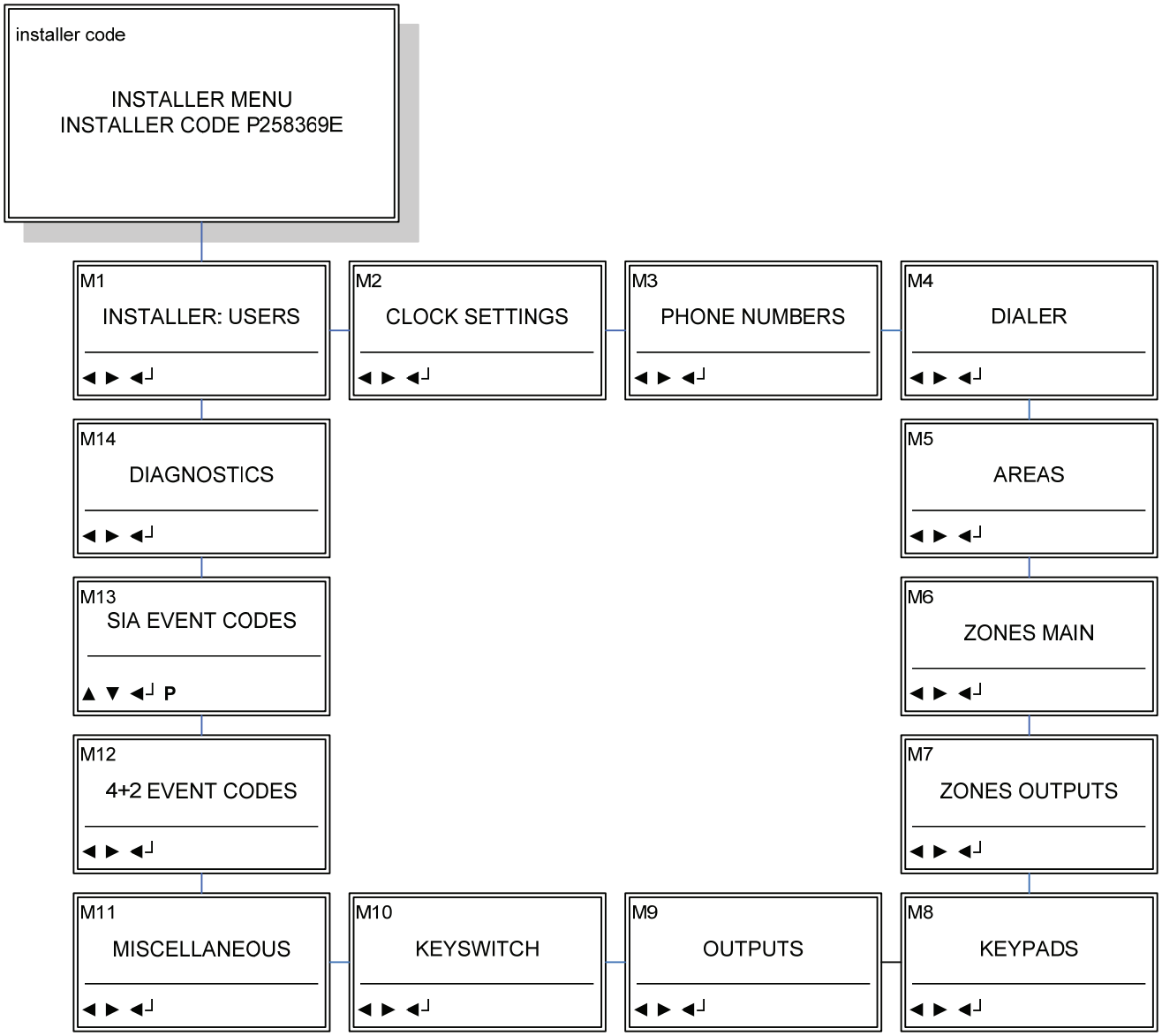
CAUTION	Check local governmental rules for connection to the local Police- Medical or Fire Emergency Service directly. In some countries it may not be allowed to connect automatic dialing equipment directly to such services.

30 Flow chart of programming menus

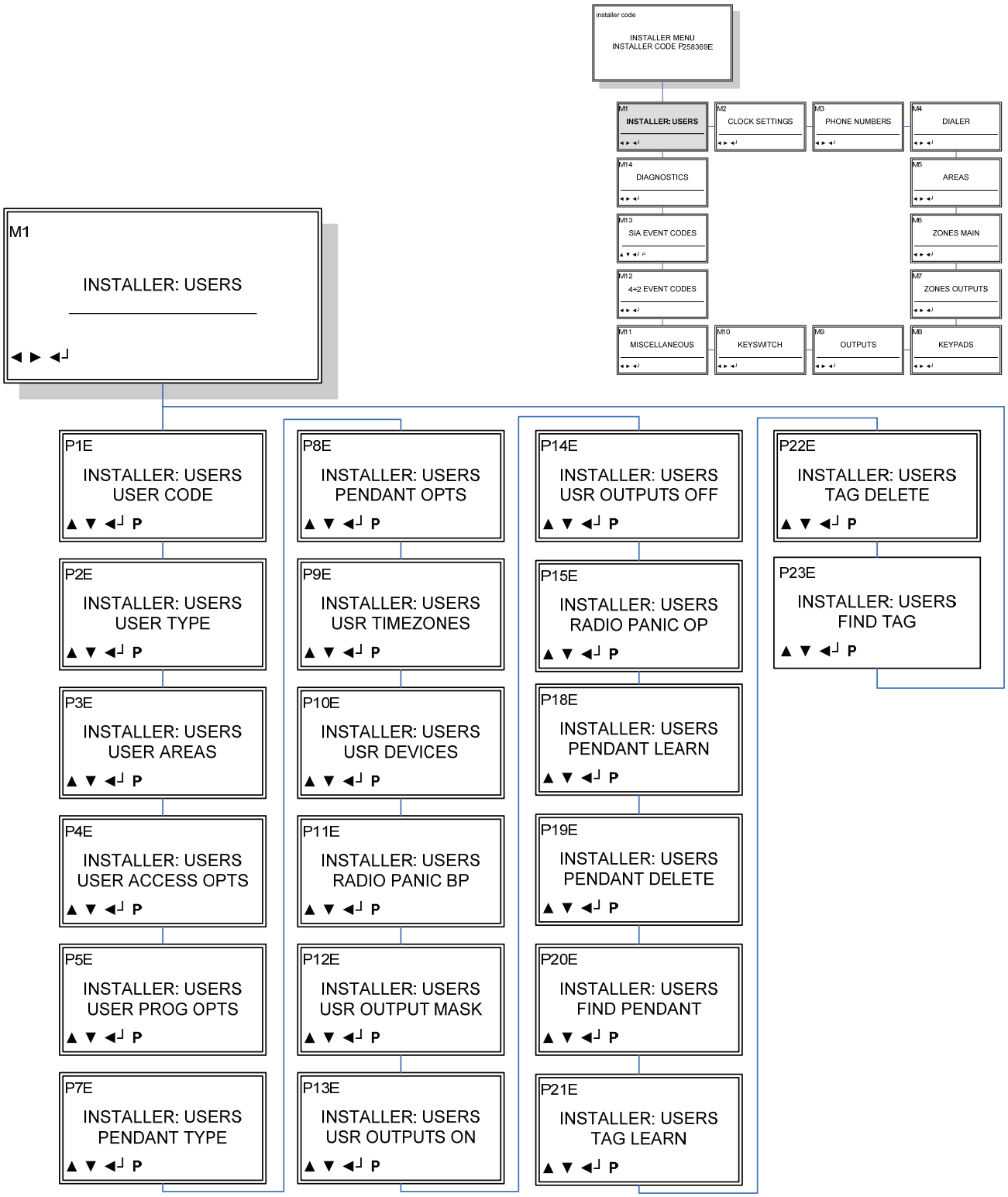
For all programming menus are separate programming flow charts available. For more detail refer to the separate available programming flow chart.

As example here shown the main menu: Installer: User

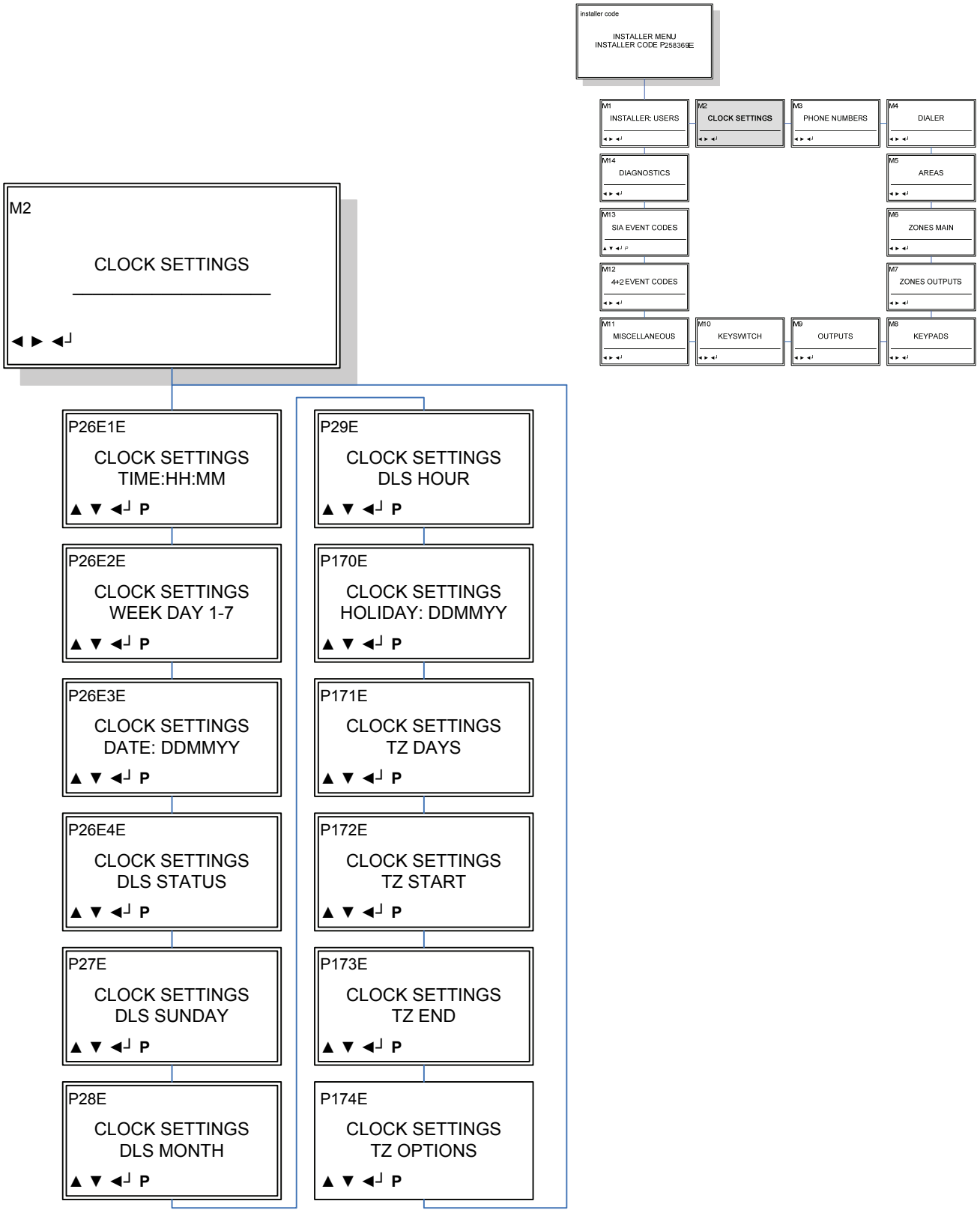
30.1 Installer menu



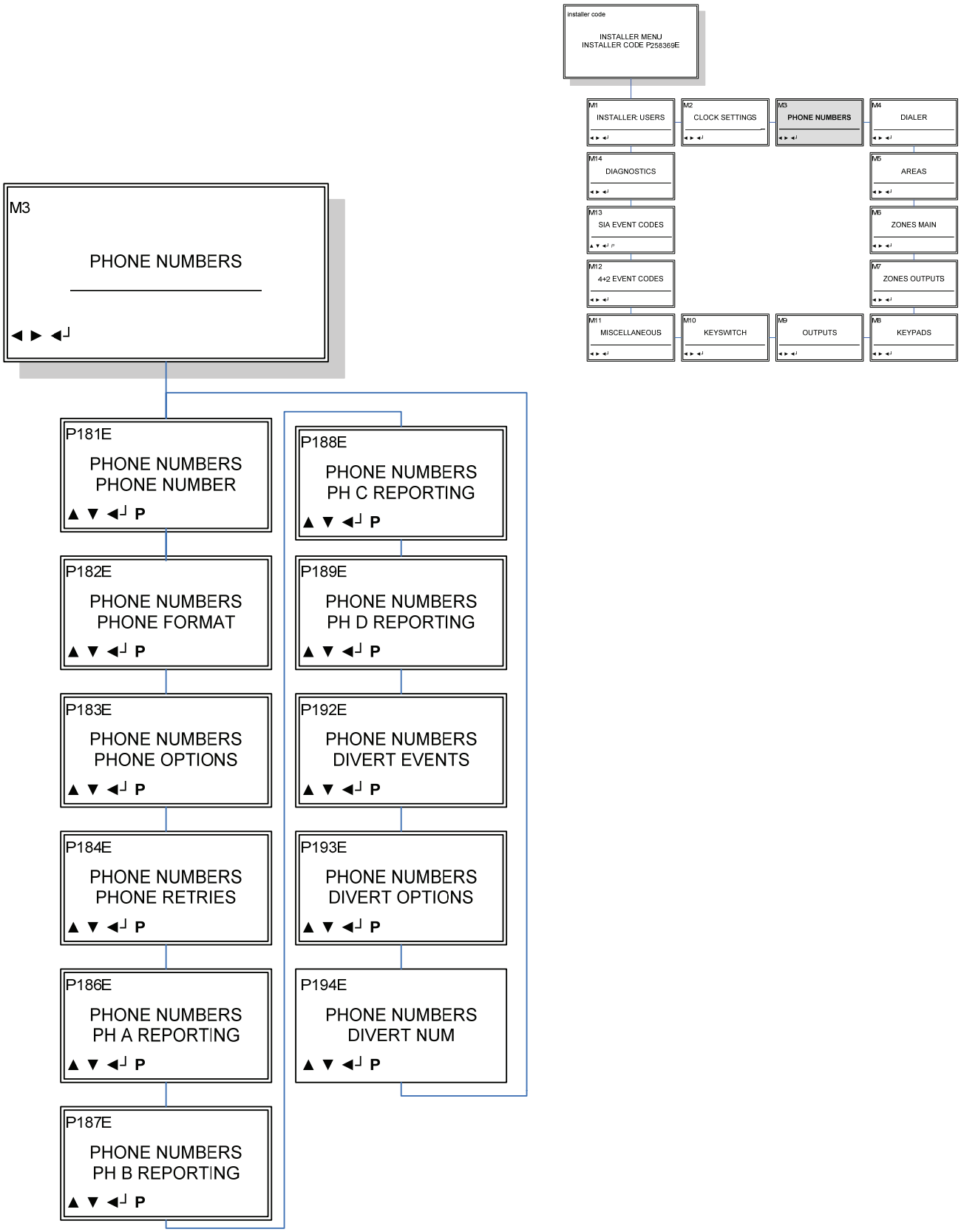
30.2 Installer: Users



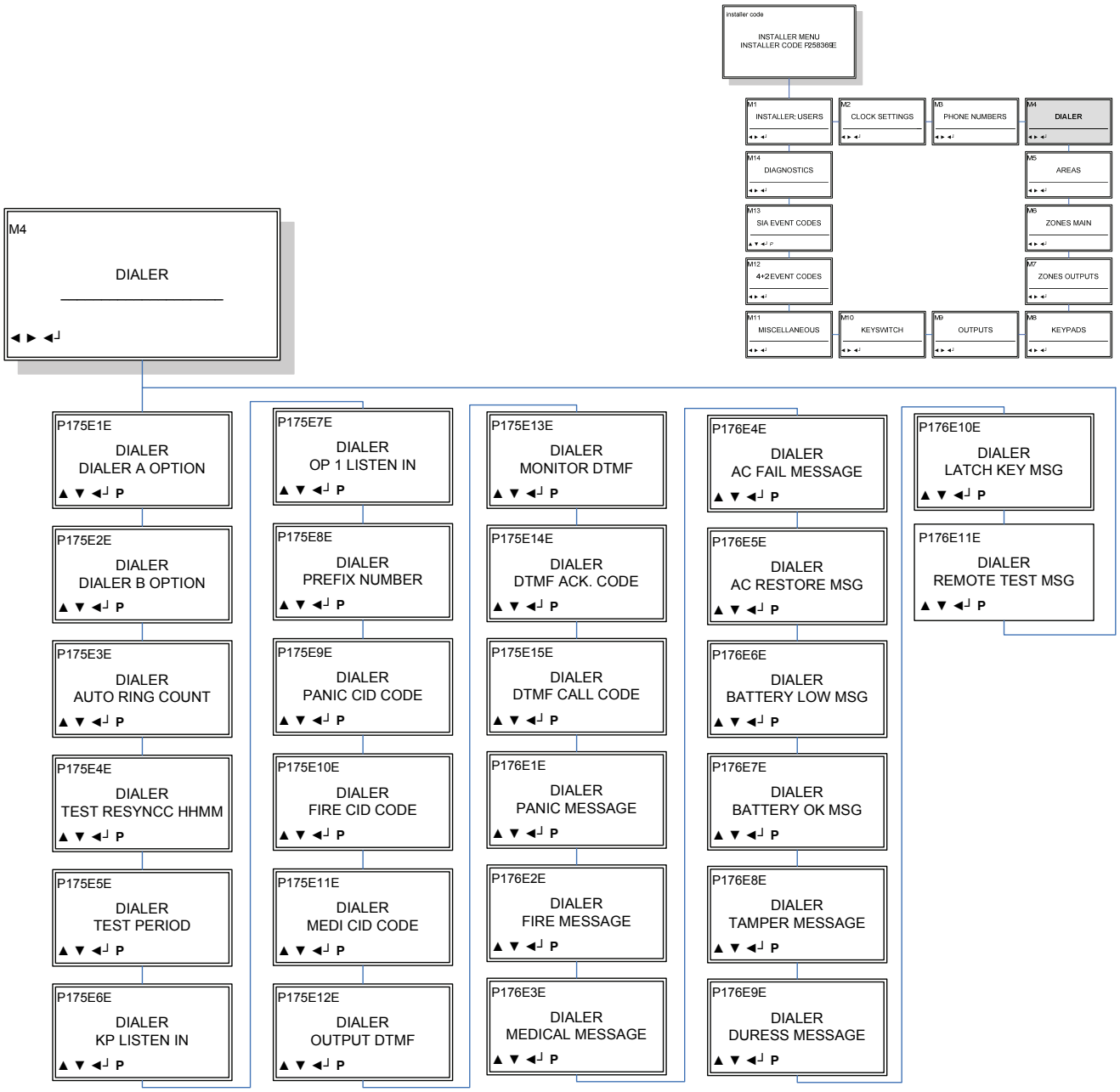
30.3 Clock settings



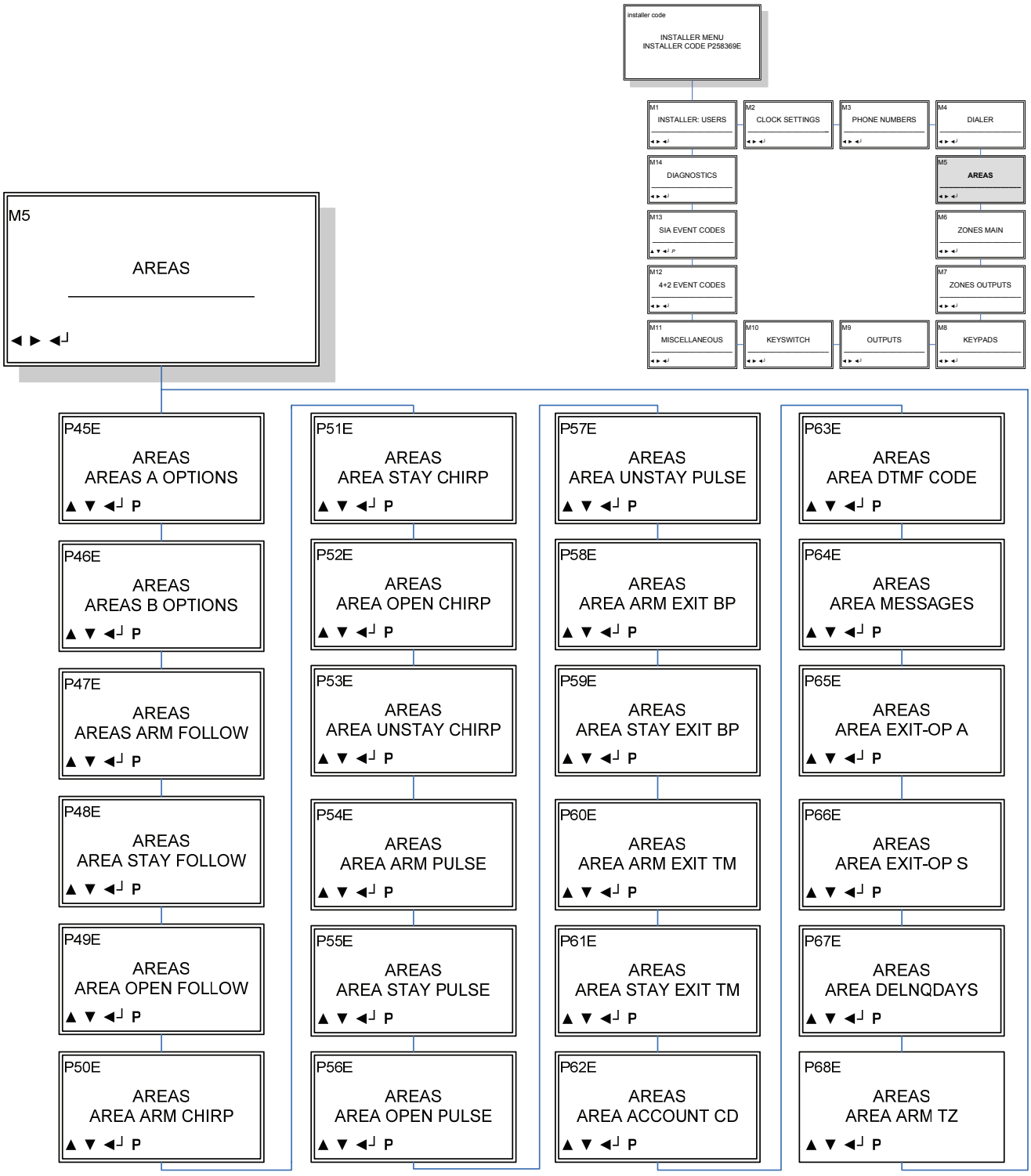
30.4 Phone numbers



30.5 Dialer


installer code
INSTALLER MENU
INSTALLER CODE P258369E
M1 INSTALLER: USERS
M2 CLOCK SETTINGS
M3 PHONE NUMBERS
M4 DIALER
M14 DIAGNOSTICS
M5 AREAS
M13 SIA EVENT CODES
M6 ZONES MAIN
M12 4+2 EVENT CODES
M7 ZONES OUTPUTS
M11 MISCELLANEOUS
M10 KEYSWITCH
M9 OUTPUTS
M8 KEYPADS
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
▲ ▼ ◄┘ P

30.6 Areas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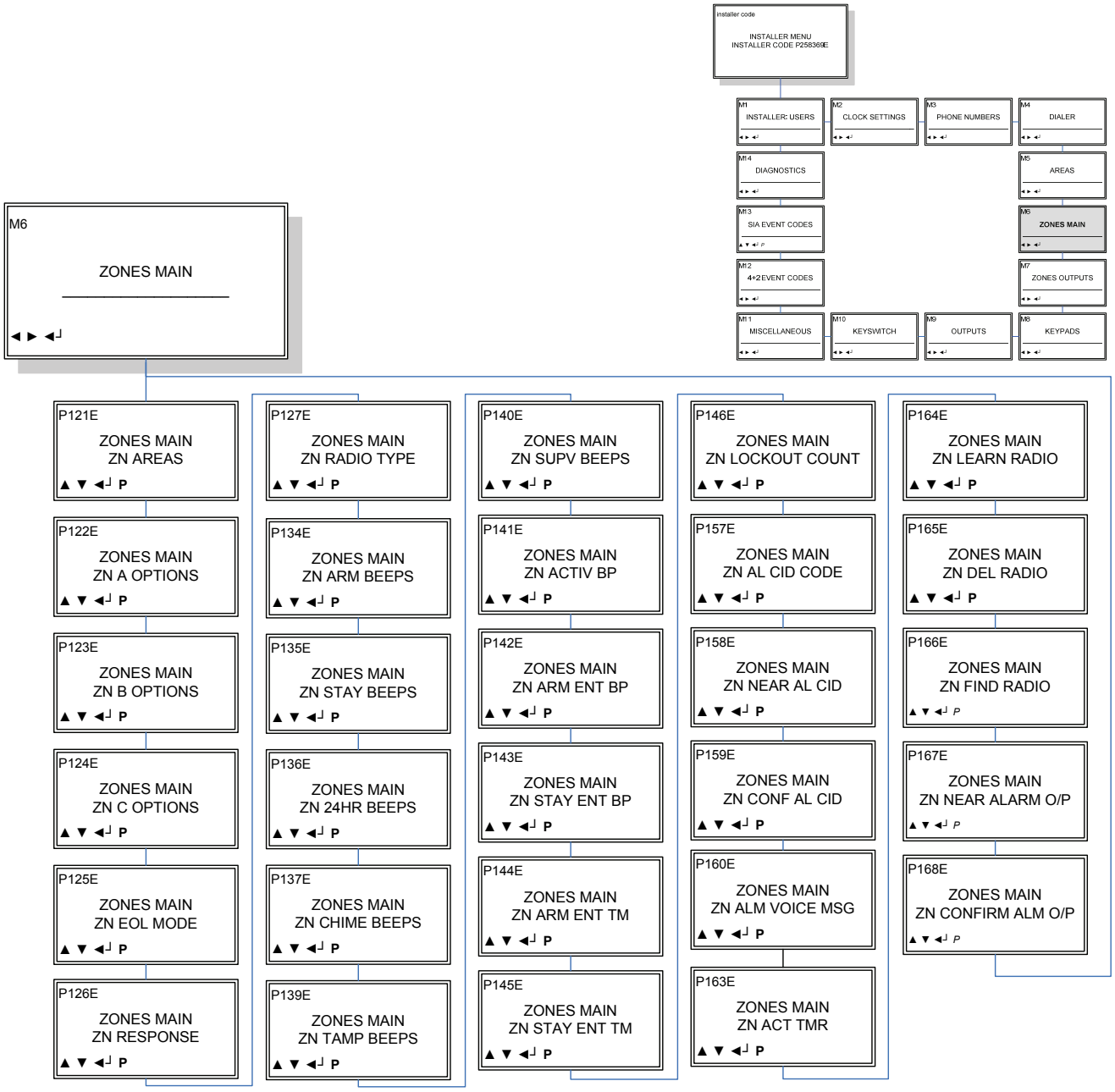
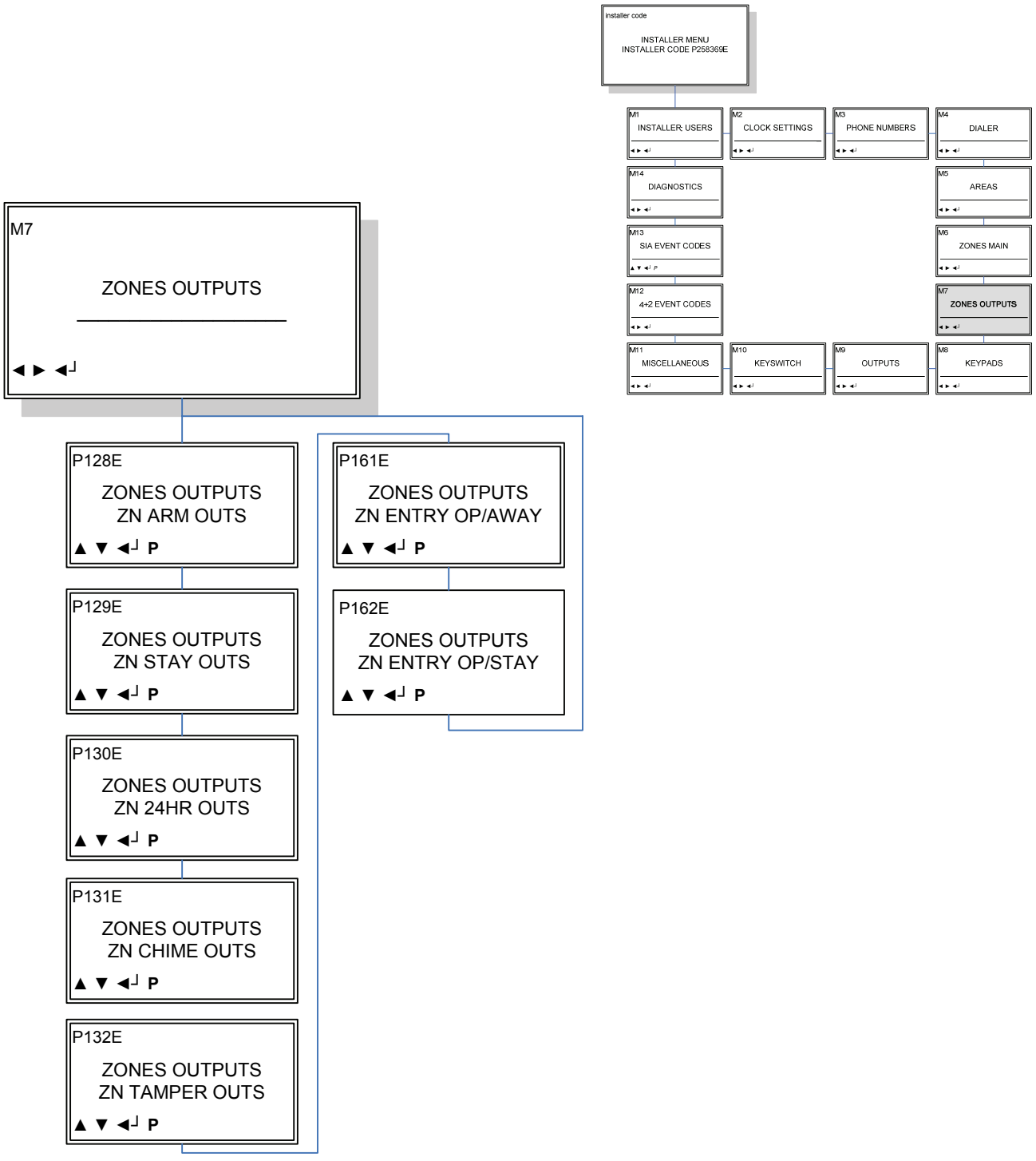
M7 ZONES OUTPUTS
M11 MISCELLANEOUS
M10 KEYSWITCH
M9 OUTPUTS
M8 KEYPADS
M5
AREAS
◄ ► ◄┘
P45E AREAS AREAS A OPTIONS
P46E AREAS AREAS B OPTIONS
P47E AREAS AREAS ARM FOLLOW
P48E AREAS AREA STAY FOLLOW
P49E AREAS AREA OPEN FOLLOW
P50E AREAS AREA ARM CHIRP
P51E AREAS AREA STAY CHIRP
P52E AREAS AREA OPEN CHIRP
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
▲ ▼ ◄┘ P

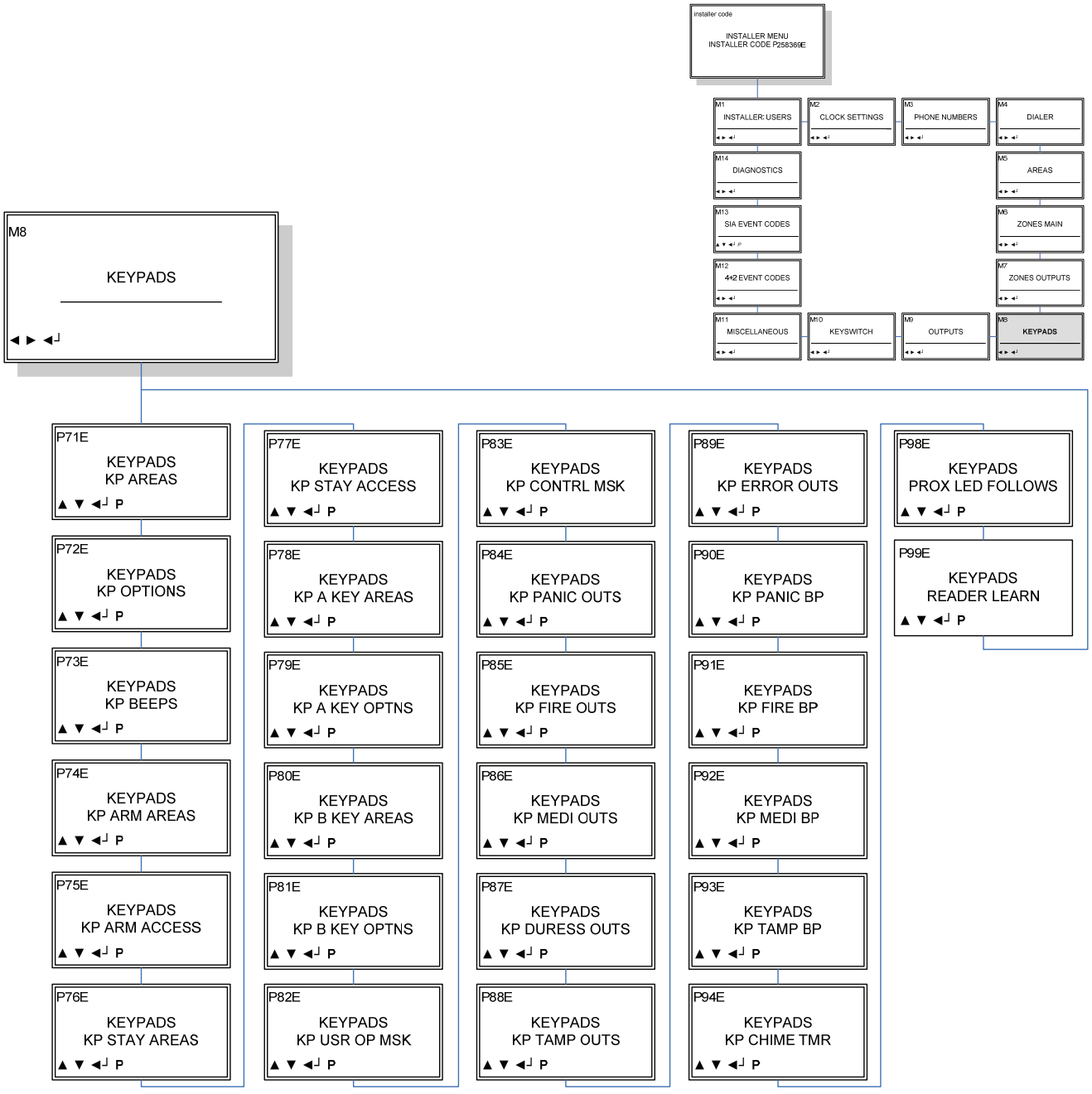
30.7 Zones main



30.8 Zones outputs



30.9 Keypads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INSTALLER CODE P258369E
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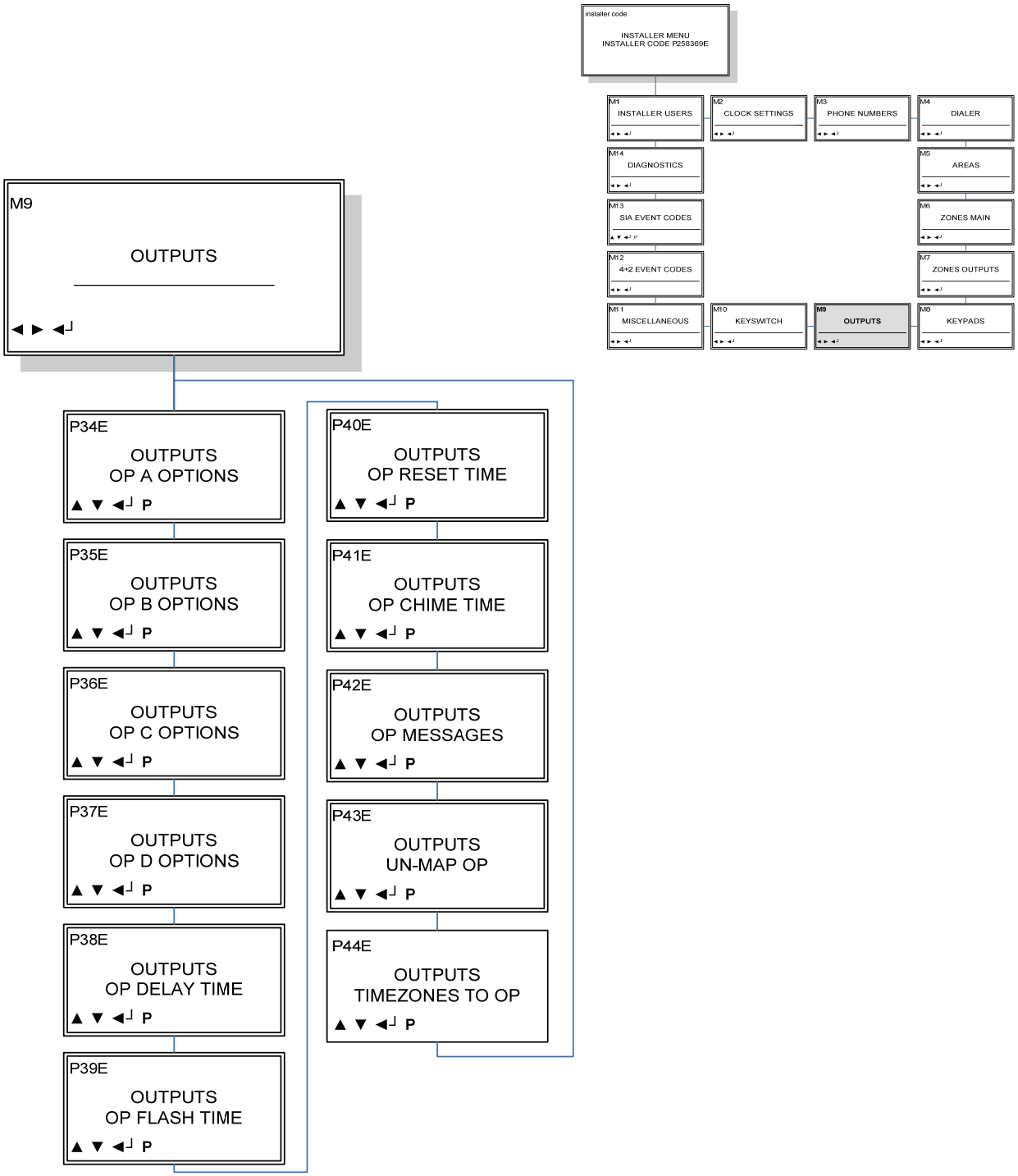
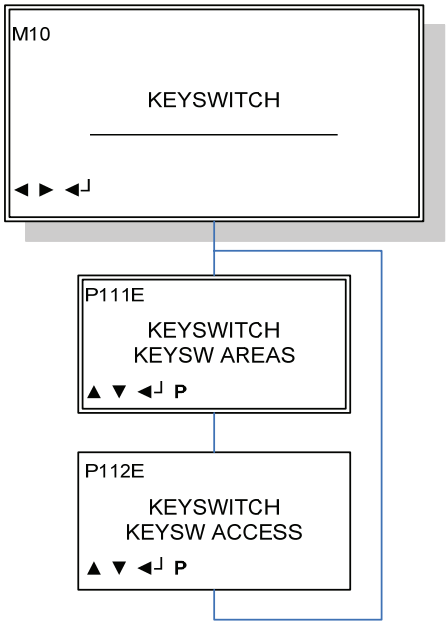
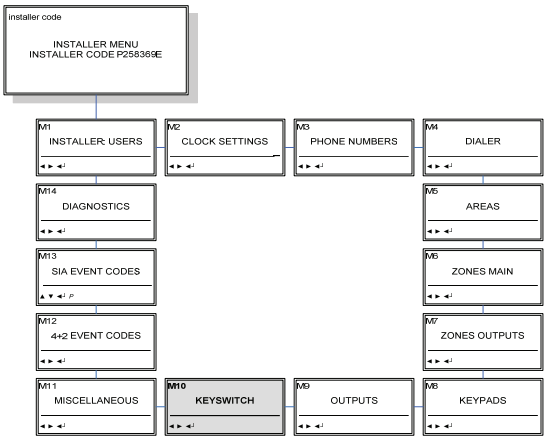
M11 MISCELLANEOUS
M10 KEYSWITCH
M9 OUTPUTS
M8 KEYPADS
M8
KEYPADS
P71E KEYPADS KP AREAS
P72E KEYPADS KP OPTIONS
P73E KEYPADS KP BEEPS
P74E KEYPADS KP ARM AREAS
P75E KEYPADS KP ARM ACCESS
P76E KEYPADS KP STAY AREAS
P77E KEYPADS KP STAY ACCESS
P78E KEYPADS KP A KEY AREAS
P79E KEYPADS KP A KEY OPTNS
P80E 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

30.10 Outputs

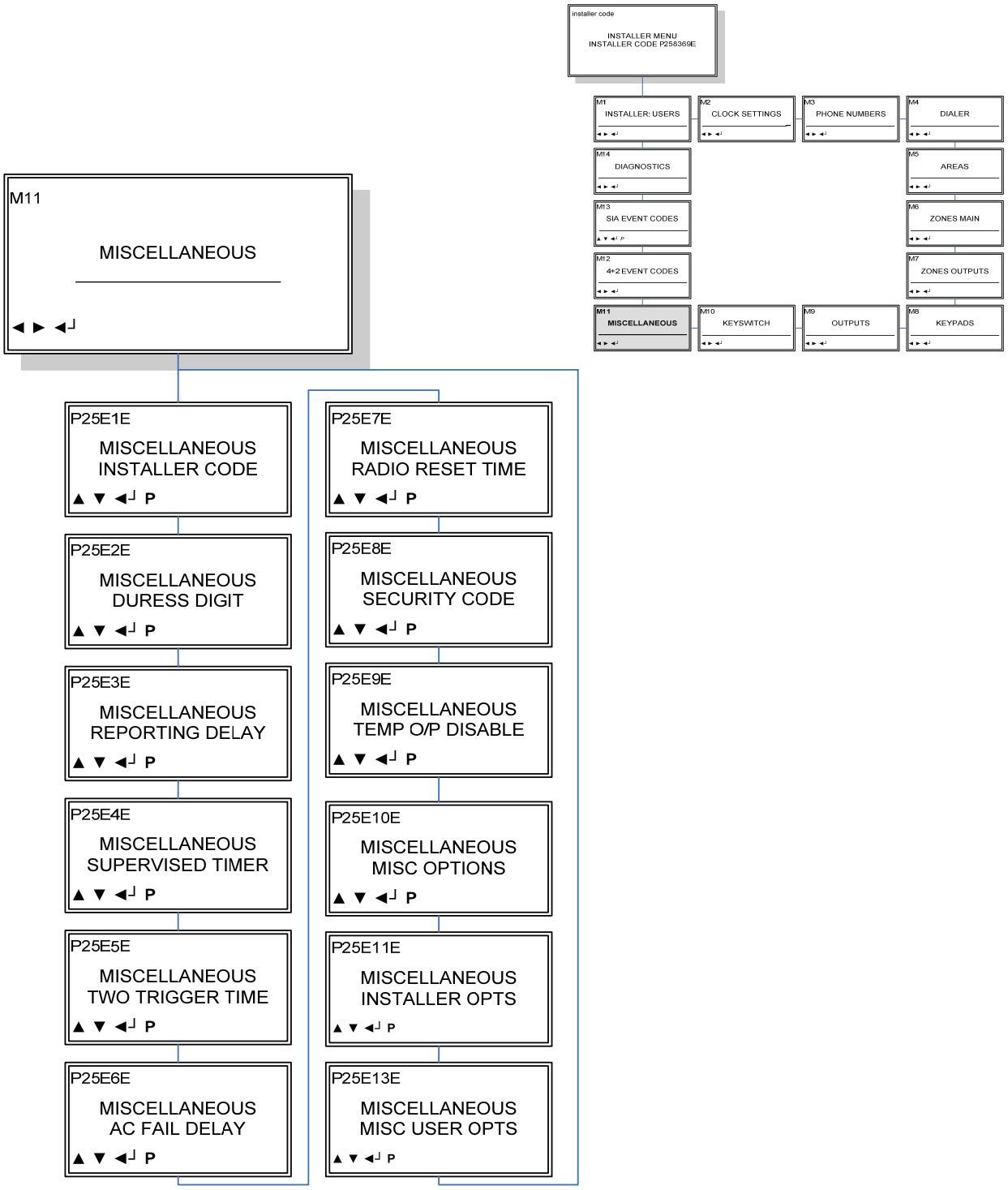


30.11 Keyswitch

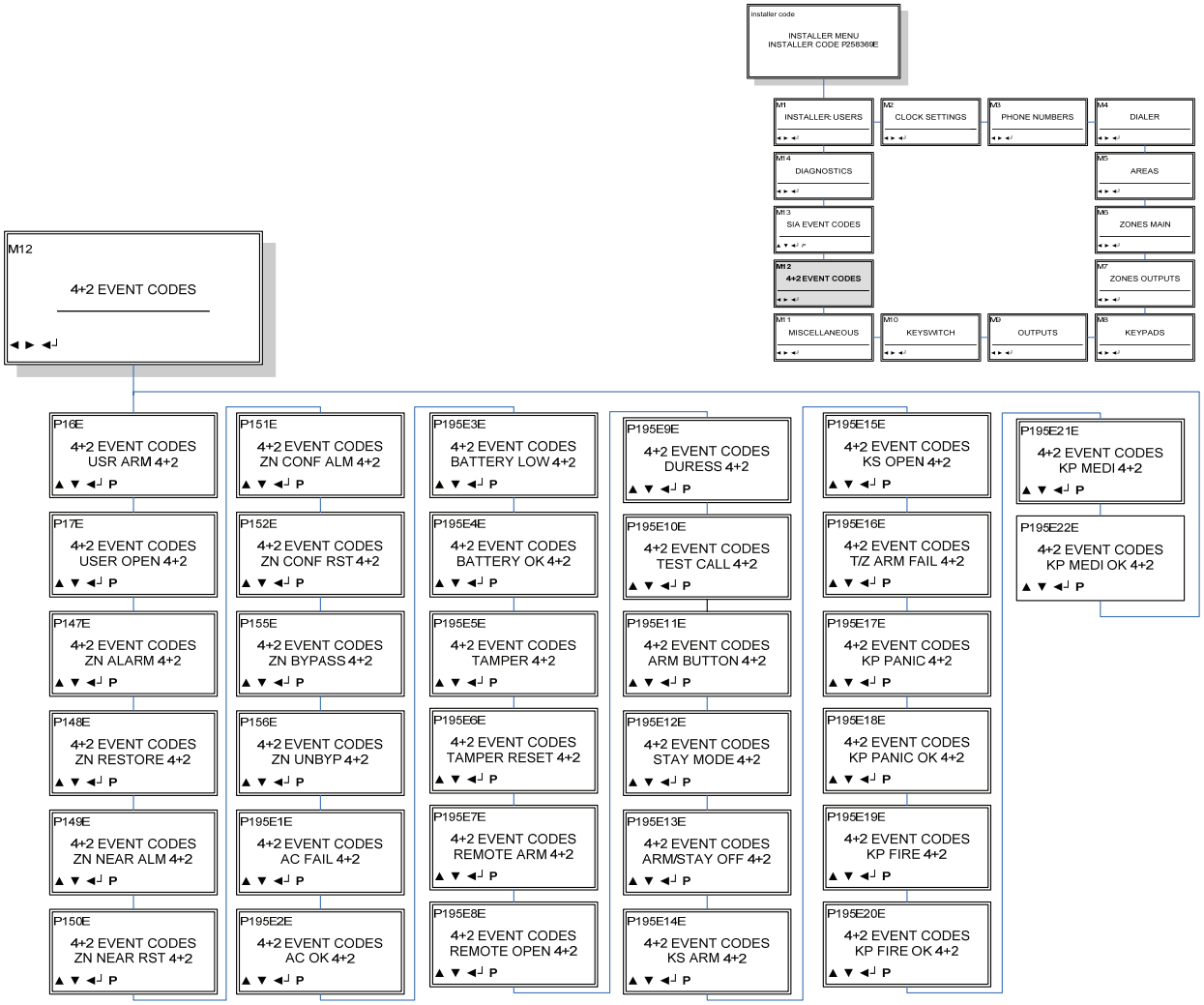




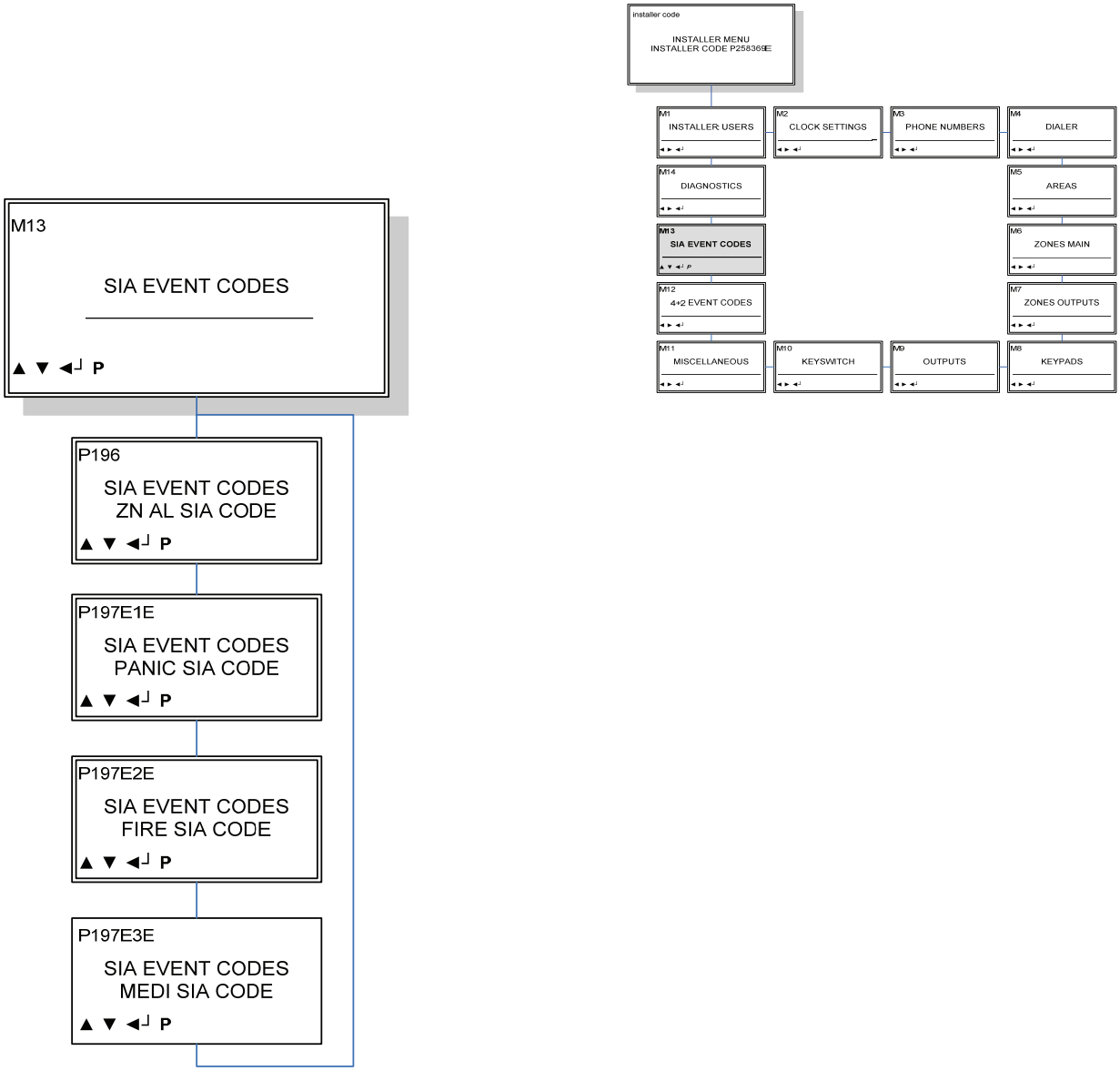
30.12 Miscellaneous



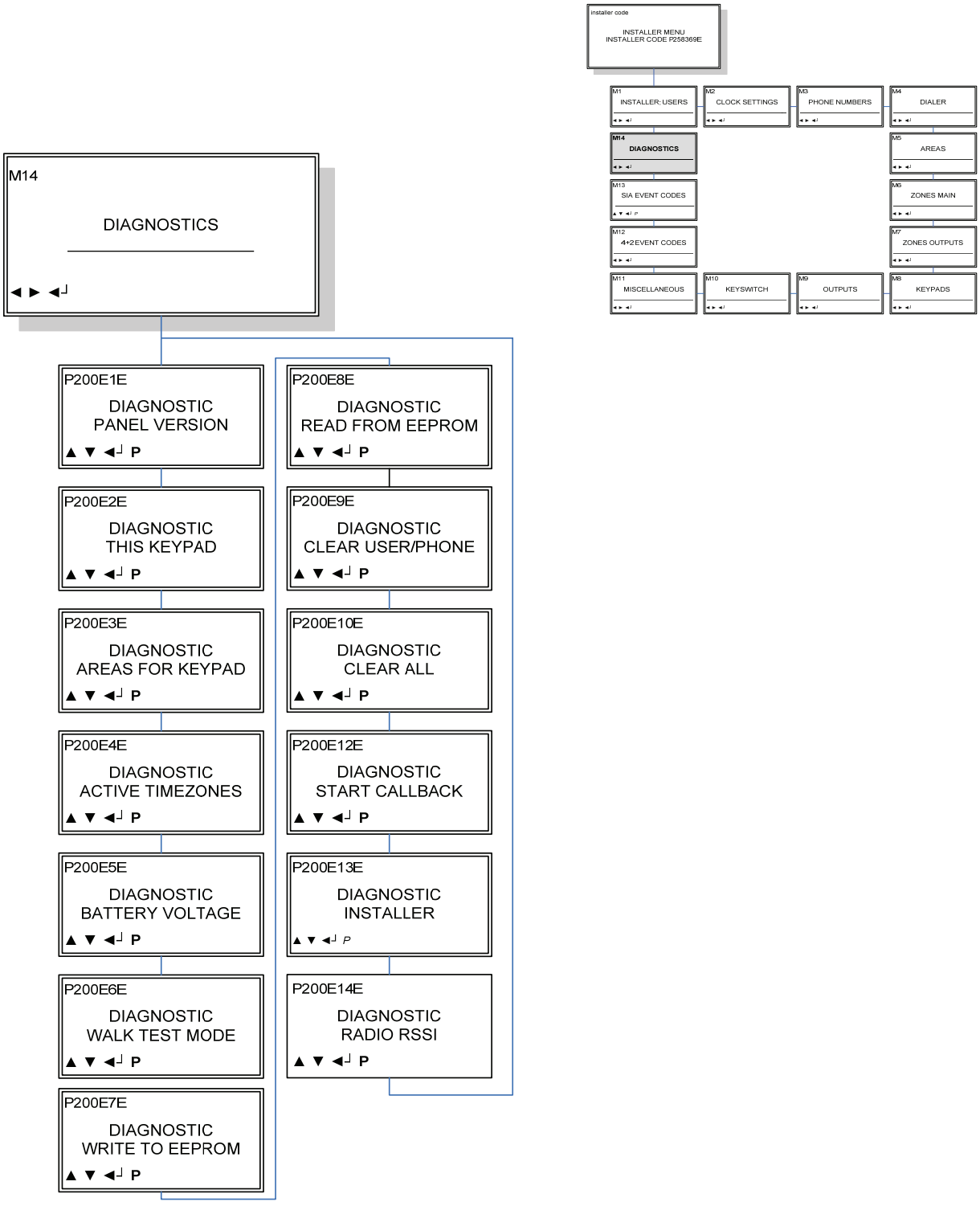
30.13 4+2 event codes



30.14 SIA event codes



30.15 Diagnostics



31 Support

31.1 FAQ frequently asked questions

What can the installer do when the user forgets its user code?

Answer: when the user forget his user code there are several things that the installer can do:

A - If the system is disarmed and direct access to installer mode is enabled then get into installer mode and check the code

B - If the system is armed you can use the upload/download software and then disarm, get the code and if needed change it.

C- If the system is armed there is a second possibility, in the default configuration the key-switch is enabled, so you can simulate a key-switch by adding a 4.7K ohm resistor to the tamper input. This way you can disarm the system

D - Another way to reach installer mode is the “back door “option. If the installer enabled the back door option then you have to open the tamper, power up the system with a tamper opened and press Prog than ↵ and the system enters installer mode

What is wrong when an installer connects to the control panel with the upload/download software and there communication (there is a connection, the Rx TX led's are Blinking) but you can upload or download or enter real time monitor?

Answer: this can happen if there is a security code defined in the system the code isn’t typed when you are connected, all you have to do is type the code.

If the installers replace the receiver board is there a need to learn the detectors again?

Answer: No, when you learn the detectors the radio code is saved in the control panel memory, and not in the receiver

Is it possible to connect a second receiver to the control panel in case of bad reception areas, and if yes wont there be a double alarm (one from each receiver)?

Answer: There is no problem to connect several receiver boards, for the control panel it is the same if it has 1 or 2 or 5 receivers on the bus. There will not be a multiple alarm from several receivers because there is a short lockout for the message from the receiver and the panel will only relate to the first one.

When you have several phone numbers defined the CP stops dialing after the first phone number?

Answer: There can be two reasons for that, the first is if you disarm the system during the call , when the system is disarmed it finishes the call and doesn't go on to the next numbers since the alarm is acknowledged , unless you are in Contact ID format then you have another dial to report disarm to the monitoring station.

Another possibility is in domestic/voice dialing format. Normally the auto kiss of is on then you can't put the option "stop if kiss-off" on since it will always be kissed-off since will never go next numbers.

I have defined a follow-up zone and have no delay when I enter, why?

Answer: When you define a follow up zone (handover) and a delayed zone, first the zone numbers should be following (for example 1 & 2 or 3 & 4) and second the delay time must be the same.

Do I need a separate unit to program the audio verification board?

Answer: The audio verification board has a micro and loudspeaker integrated and can be programmed directly in place without any additional units.

Is there a PSTN dialer integrated in the control unit?

Answer: Yes with 8 different Telephone numbers.

31.2 Typical programming guidelines

31.2.1 DTMF command control how to use and program

Command control messages are voice messages and used to give status information of the areas and outputs during the dial-in control.

Example 1: arming/disarming area A by DTMF

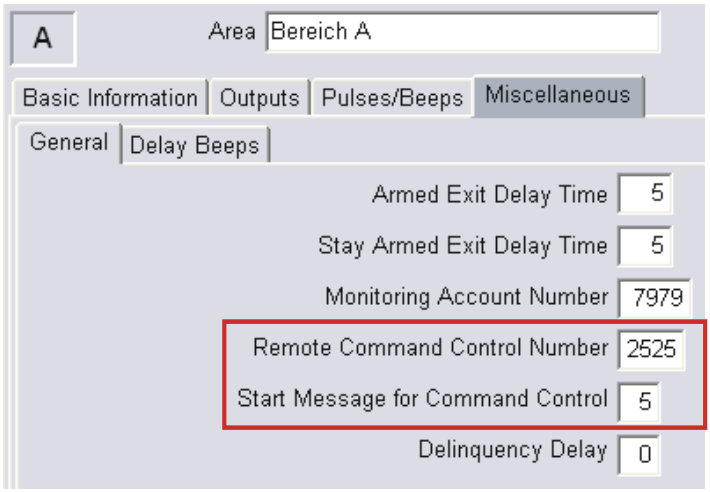
Access code for area A = 2525. The voice message for arming confirmation is 5 and disarming confirmation is ". The messages MUST be recorded correlated, started with the arming message.

1. Dial in to Sintony 60 and wait until the communication is established.
2. Press <#> button at your phone to reset the digit counter.
3. Press 2 5 2 5 to hear the status of the areas (voice message from the panel).
4. Press <*> to change the area status. The control panel will confirm with the recorded voice message relating to the new status.
5. Hang up

You can change the area status as often as you want.
At any time you can press the **<#>** button to reset the digit counter (i.e. by inserting a wrong number).

Related parameters for example 1:

This values are defined in **Areas → Miscellaneous → General**.



Remote Command Control Number:

Here you enter the value 2 5 2 5 to get the permission for changing the area status by DTMF.

Start Message for Command Control:

Arming the area will be confirmed by the 5th message record on the voice board, so disarming will now confirmed by the 6th message automatically.

Example 2: switching on/off output 4 by DTMF

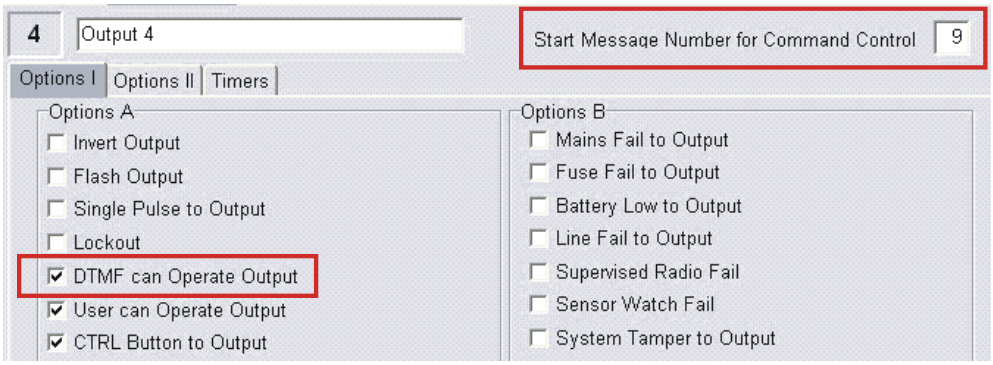
Access code for acting on outputs = 3535. The voice message for switching output on confirmation is 9 and off confirmation is 10. The messages MUST be recorded correlated, started with the switch on message.

1. Dial in to Sintony 60 and wait until the communication is established.
2. Press <#> button at your phone to reset the digit counter.
3. Press 3 5 3 5 4 to hear the status of output 4 (voice message from the panel).
4. Press <*> to change the output status. The control panel will confirm with the recorded voice message relating to the new status.
5. Hang up

You can change the output status as often as you want.
At any time you can press the **<#>** button to reset the digit counter (i.e. by inserting a wrong number).

Related parameters for example 2:

This values are defined in **Outputs → Options I → Options A**



DTMF can operate output:

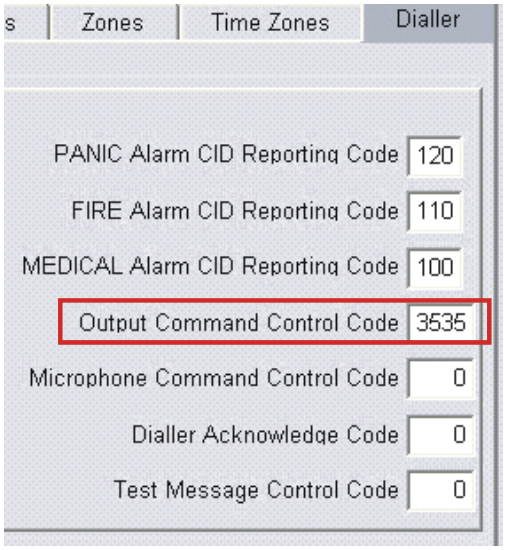
This is the basic permission for this output to allow operations by DTMF.

Start Message Number for Command Control:

Switching on this output will be confirmed by the 9th message record on the voice board, so switching off will confirmed by the 10th message automatically.

Related parameters for example 2:

This values are defined in **Dialer → Voice/CID**

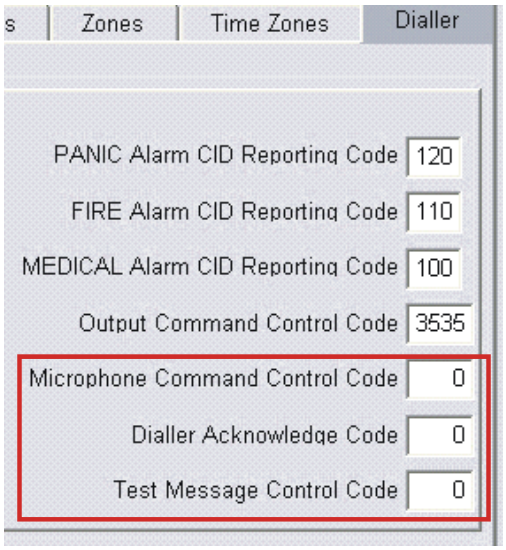


Output Command Control Code:

Here you enter the value 3 5 3 5 to get the permission for changing the output status by DTMF.

Other available control codes:

This values are defined in **Dialer → Voice/CID**



Microphone Command Control Code:

The panel can be used to allow remote listen-in via an on-site microphone. This value is the DTMF code that must be used when turning the microphone on or off. Pressing the **<*>** button will toggle the microphone.

Dialer Acknowledge Code:

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. If you want to use a secure kiss-off method, 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.

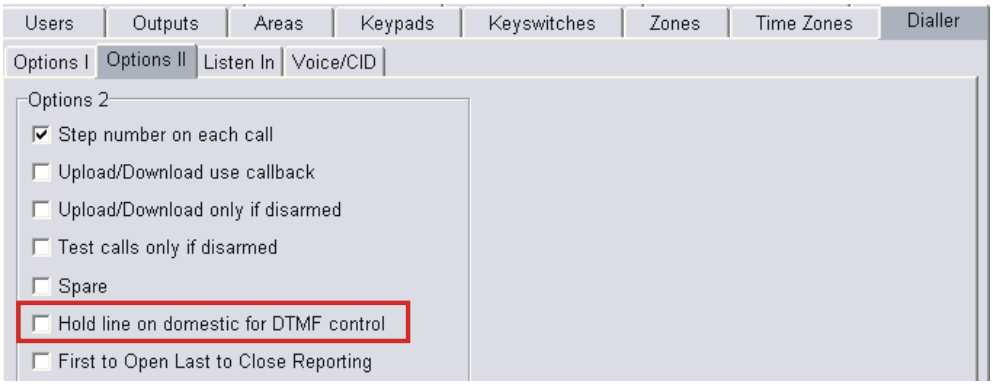
Test Message Control Code:

There is a possibility to force a test call from the panel to a monitoring company using the Contact ID test message by dialing the panel and entering the code programmed at this location on the telephone.

After a voice alarm ...:

If the system is set up for command control, you can dial in and operate at any time with the defined options.

If you want to use the DTMF command control directly after a voice alarm transmission, you have enable the option hold line on domestic for DTMF control at the dialer options, otherwise Sintony will hang up after receiving the first DTMF tone and you must call back to the system.



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