EXPANDABLE MULTIFUNCTION CONTROL PANEL

KYO 320

INSTALLATION MANUAL Vol.2

ISO 9001 9105.BNT1 | ISO 9001 IT-52587 | ISO 14001 9191.BNT2 | ISO 14001 IT-52588 | OHSAS 18001 9192.BSEC | OHSAS 18001 IT - 60983

BENTEL SECURITY

This system can be programmed using the respective (**KYO320**) Software Application 5.4.3 or higher.

Installation of the system must be carried out strictly in accordance with the instructions described in this manual, and in compliance with the local laws and bylaws in force.

The **KYO320** Control panels have been designed and manufactured to the highest standards of quality and performance.

The **KYO320** Control panels have no user-friendly components, therefore, should be serviced by authorized personnel only.

BENTEL SECURITY shall not assume the responsibility for damage arising from improper application or use.

The manufacturer recommends that the installed system should be completely tested at least once a month.

Hereby, Bentel Security, declares that **KYO320** Control panels comply with the essential requirements and other relevant provisions of Directive **1999/5/EC**.

ATTENTION:

The control keypads of KYO320 control panel are the CLASSIKA and PREMIUM LCD keypads. All previous Bentel LCD keypads (Alison-S, Alison-DVP, Mia-S, Mia-D) continue to be supported by the KYO320 Control panel. For a correct functionality of PREMIUM and CLASSIKA LCD keypad, the KYO 320 control panel must have a firmware rev. 2.06 or higher.

Kyo320 control panel supports both the new key readers of the ECLIPSE2 serie that the previous versions of ECLIPSE serie.

Recycling information

BENTEL SECURITY recommends that customers dispose of their used equipments (panels, detectors, sirens, and other devices) in an environmentally sound manner. Potential methods include reuse of parts or whole products and recycling of products, components, and/or materials.

For specific information see:
www.bentelsecurity.com/en/environment.htm

Waste Electrical and Electronic Equipment (WEEE) Directive

In the European Union, this label indicates that this product should NOT be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

For specific information see:
www.bentelsecurity.com/en/environment.htm

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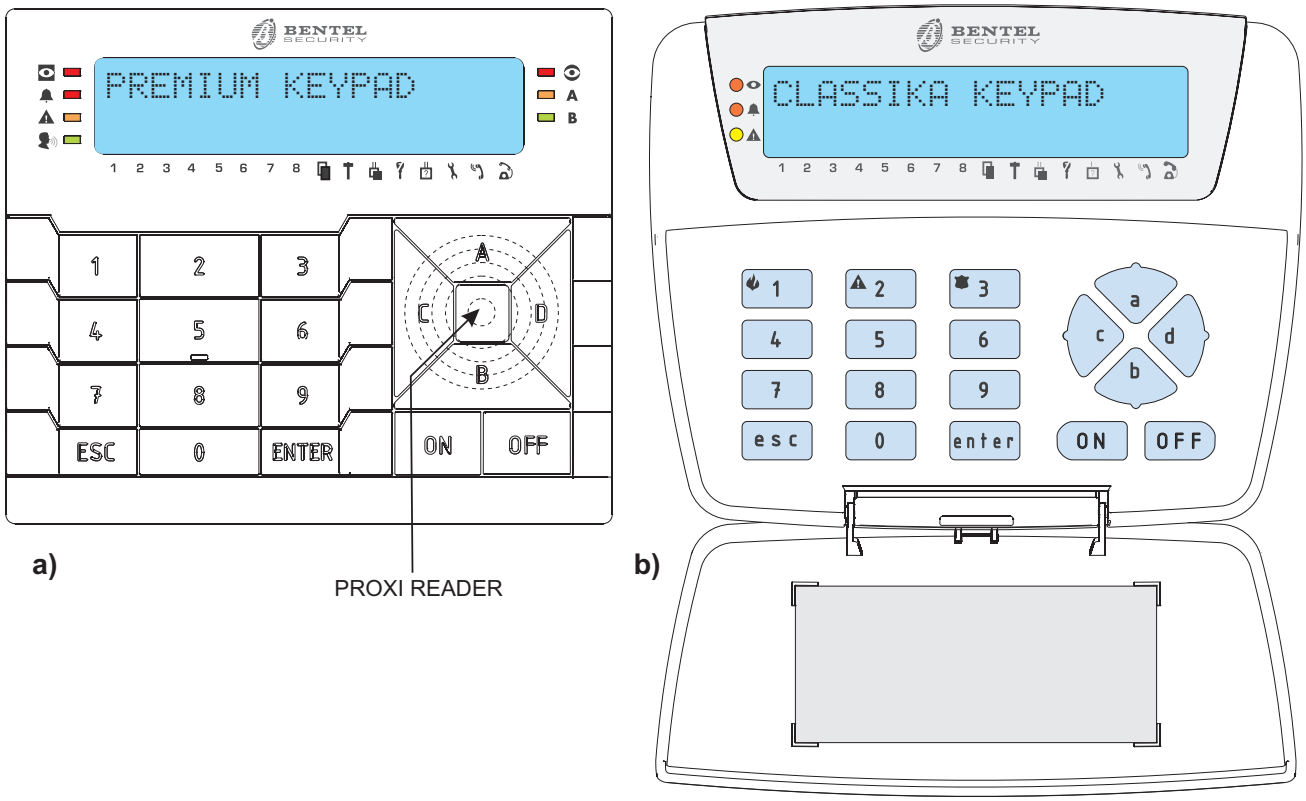


Figura 1 *Control Panel keypads: a) PREMIUM LCD; b) CLASSIKA LCD.*

Introduction

You can operate your system from PREMIUM LCD and CLASSIKA LCD keypads, using the following options:
Event logger: this option will allow you to view the Event Logger.
Zone status: this option will allow you to view the zone status and level.
Zone test: this option will allow you to test the functionality of zones without generating alarms.
Output test: this option will allow you to activate/test preset Outputs.
Clear call queue: this option will allow you to stop outgoing Alarm calls.
Voice functions: this option will allow you to Record/ Playback voice messages (requires **K3/VOX2** kit).
Installer PIN: this option will allow you to program the Installer Code PINs.
User codes: this option will allow you to program the User code attributes.
Digital keys: this option will allow you to enrol electronic keys.
Program panel: this option will allow you to program the Control panel parameters.
Enrol wireless: this option will allow you to enrol wireless detectors, keys and cards and carry out placement tests.
Update strings: this option will allow you to update the PREMIUM LCd and CLASSIKA LCD keypad strings.
Change time/date: this option will allow you to set the Control panel clock.
Release: this option will allow you to view the Control panel release.
Test Keypad: this option will allow you to test the display, LEDs and buzzer.
Reset warning lithium: this option will allow you to clear the battery fault signal.

☞ ***NOTE:*** *The following options and parameters CANNOT BE programmed from Keypads:— the* ***Sensitivity*** *of the hardwired zones;* ***the Contact ID, and SIA code*** *of Digital Communicator, —the* ***Scheduler*** *parameters, except for* ***Max. no. overtime Requests*** *and* ***Overtime Request****;*
—the Timers;
—Enable Keypad Codes/Keys/Cards (LCD/LED Keypads);
The following operations CAN BE DONE from Keypads ONLY:
—Record and Playback ***Voice Messages****;*
—Request Log printout;
—Enrol/Unenrol the K-NET module.

Using the keypad

Read the following section carefully, to get an overall view of how to use the Function keys.

Function keys

Unless otherwise stated, the keys operate as follows:
A and **B** scroll the menus;
C and **D** move along the display lines;
ON and **OFF** enable/disable options instantly;
ESC quits the entry and steps back;
ENTER saves the entry and allows you to continue.

Audible signalling

Buzz: this is the audible error signal emitted by the keypad when commands are denied.

Parameter Descriptions

This manual describes how to program and operate the Control panel from a keypad.
A complete description of the system functions and parameters can be found in the INSTALLATION MANUAL. Indications as where to look in the INSTALLATION MANUAL are shown in brackets (the parts underlined in inverted commas) next to the respective function/parameter.

Editing a text

The following table shows the letters (small and capital) and punctuation marks provided by the keys. To edit a text, press the respective until the required character is shown.

1		1	!	.	;	#	$	%	'	"	(	)	[	]	{	}	
2	a	b	c	A	B	C	2	**3**	d	e	f	D	E	F	3		
4	g	h	i	G	H	I	4	**5**	j	k	l	J	K	L	5		
6	m	n	o	M	N	O	6	**7**	p	q	r	s	P	Q	R	S	7
8	t	u	v	T	U	V	8	**9**	w	x	y	z	W	X	Y	Z	9
0		@	+	-	*	/	=	:	;	<	>	?	&	@	^	|	

Use **D** to move along the display lines.
Use **D** or **C** to scroll the text: the selected character will blink.
Use **0** or **1** for spaces between letters.

Enable Partitions in A, B, C or D Mode

Keys **1** to **8** will allow you to enable/disable the Partitions and set up A, B, C and D operating Mode.
The first eight positions on the bottom line of the display (1 through 8) indicate the Partition status, as follows:
X— the element concerned is enabled on, or assigned to the respective Partition;
A— **Away** mode (ALL Zones **ON**);
S— **Stay** mode ("**Internal**" Zones **OFF**);
I — **Instant** mode (Stay mode with zero delay);
D— Disarm;
N— No change to the current status (None).

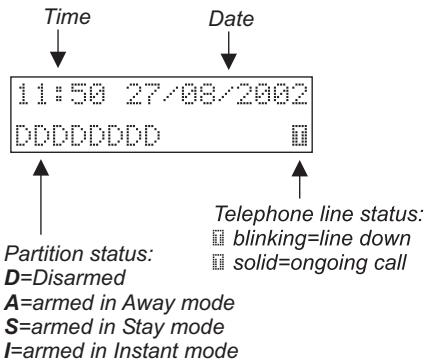
In order to allow you to program the 32 Partitions of the KYO 320, from the keypad, this programming section has been divided into 4 Partition groups:
1st group — Partitions 1 to 8;
2nd group — Partitions 9 to 16;
3rd group — Partitions 17 to 24;
4th group — Partitions 25 to 32.
Keys 1 to 8 correspond respectively to the first 8 Partitions. For Partitions 9 to 16 — key **1** corresponds to Partition 9, key **2** to Partition 10 and so forth to key **8** which corresponds to Partition 16. The same applies to Partitions 17 to 24 and 25 to 32 (see Table) :

KEYS		1	2	3	4	5	6	7	8
Keys to use for Partition groups...	1-8	1	2	3	4	5	6	7	8
	9-16	9	10	11	12	13	14	15	16
	17-24	17	18	19	20	21	22	23	24
	25-32	25	26	27	28	29	30	31	32
DISPLAY		1	2	3	4	5	6	7	8

In Partition group 1 to 8, key **2** and position 2 on the display correspond to Partition 2.

KEYS		1	2	3	4	5	6	7	8
Keys to use for Partition groups...	1-8	1	2	3	4	5	6	7	8
	9-16	9	10	11	12	13	14	15	16
	17-24	17	18	19	20	21	22	23	24
	25-32	25	26	27	28	29	30	31	32
DISPLAY		1	2	3	4	5	6	7	8

In Partition group 9 to 16, key **2** and position 2 on the display correspond to Partition 10.



KEYS		1	2	3	4	5	6	7	8
Keys to use for Partition groups...	1-8	1	2	3	4	5	6	7	8
	9-16	9	10	11	12	13	14	15	16
	17-24	17	18	19	20	21	22	23	24
	25-32	25	26	27	28	29	30	31	32
DISPLAY		1	2	3	4	5	6	7	8

Press **C** or **D** to view the required section.

Accessing the Installer menu

When the system starts, on the display keypad is possible to select the programming languages:

```
1:<ITA>   2:ENG
3: ESP    4:FRA
```

1. Enter the number which corresponds to language and then press **ENTER**.

2. only if the system has a number of PREMIUM LCD and CLASSIKA LCD keypads greater than 5, the update strings fase follows.

Access to the programming phase will be denied when the Partitions are Armed or the Partition Patrol Times are Active.
NOTE: If the system is already up and working, access requires the consent of all the system users.
To access the Installer menu from standby status:

1. Enter an Active Installer Code PIN.

```
11.50 27/08/2002
pin:  ****XX
```

At default, only Installer Code no. 200 (PIN **0200**) has **Active** status for KYO 320.

2. Press **ENTER**

```
INSTALLER MENU
Event logger
```

Once you have accessed the Installer menu, the Control panel will:
- set all the keypads to standby status, except the one you are using (the label of the keypad concerned will be shown on all the system keypads);
- clear all the Alarm memories;
- set all the Outputs to standby;
- lock the event evaluation;
- interrupt ongoing calls (if necessary), and put the Call queue on hold.

☞ *Teleservice calls will NOT be interrupted.*

■ **Exiting the Installer menu**
To exit the Installer menu, press **ESC**:

```
INSTALLER MENU
  Confirm?
```

Press **ENTER** to confirm to exit the Installer menu. If you press **ESC** you will be in the programming fase. When you exit the Installer menu, only if the system has a number of PREMIUM LCD and CLASSIKA LCD keypads greater than 5, the update strings fase follows.

☞ *If you exit the PROGRAMMING menu after changing the parameters of the Receiver or a wireless key, the display may show the following message*

```
PROG. WLS RECEIV
 PLEASE WAIT
```

If the Control Panel has not programmed the Receiver, the display will show the following message:

```
PROG. WLS RECEIV
   ERROR
```

If this occurs, check that the Receiver is operating properly.
If you exit the PROGRAMMING menu the Control panel will:
- set the keypad to standby status;
- reset the zone cycle counter;
- clear the BPI, Tamper and False key/card warnings;
- ignore the open Main unit event (until after closure);
- restart the Call queue from the interrupted call.

☞ *The Control panel will generate a "Start Programming" event each time you exit the INSTALLER MENU (this event will be signalled on the ⚠ indicator on the Keypads, and by the* `Start program.` *message in **View Trouble** mode).*

"Start Programming" events can be deleted by Active User Codes only, via the **Reset PC Prog.** from the USER MENU.

Event logger

This command will allow you to view and print the events in the Event Logger. The KYO 320 Event logger can store up to 10,000 events. Events are stored in chronological order —starting from the most recent event.

Each event provides the following information:
- **Ev.** (Event number)
- **TYPE** (e.g. Zone Alarm, Invalid Code, etc.)
- **IDENT** (e.g. Zone number, Partition, etc.)
- **AGENT** (e.g. Keypad, Reader, etc.)
- **ID.AGEN** (e.g. User code, Card/Key, etc.)
- **TIME** (Time and Date of the event)

From the Installer menu:

```
INSTALLER MENU
 Event logger
```

1. Using **A** or **B**, select the **Event logger** option, then press **ENTER**.

```
 EVENT LOGGER
 from last..
```

To view all Events
Press the **ENTER** key to view all the Events in the Logger —starting from the most recent (from last . .).
Use **A** and **B** to scroll the Events.
Press **D** to view the Event details.

To view Events from a specific Date
Using **A** or **B** scroll for the following prompt:

```
EVENT LOGGER
starting from..
```

Press the **ENTER** key, the display will show the Date prompt.

```
starting from..
  27/08/2002
```

Enter the required Date (DD/MM/YYYY), then press the **ENTER** key. Use **A** and **B** to scroll the Events.
Press **D** to view the Event details (see above).

```
Ev.00033   TYPE
Viewing buffer
```

☞ *The display will show the details of each Event. For example, Tamper Events show the TYPE and TIME only.*

To Print Events from a specific Date

```
EVENT LOGGER
Print from..
```

Using **A** or **B**, scroll for the following prompt:

☞ *You will not be able to select the **Print from ...** option if the **Print Logger** option is enabled (refer to "Print Logger" under "Configuration" in the "PROGRAM PANEL" section).*

Press the **ENTER** key, the display will show the Date prompt.

```
Print from.
 27/08/2002
```

Enter **all** the digits of the required Date (DD/MM/YYYY), then press the **ENTER** key. The Keypad will exit the INSTALLER MENU, and the Printer will print the Events starting from the entered date to the most recent.

☞ *This function is provided by the optional **K3-PRT2** Printer Interface.*

The Event logger
The Event logger is set up as follows:
- the Event number (**Ev.**) is shown on the left side of the first line;
- the Event details (**TYPE**, **IDENT.**, **USER**, **USER ID**, **TIME**) are shown on the second line.

Using the Event Logger:
- Use **A** and **B** to scroll the Events.
- Press **D** to view the Event details (see above).
- Press **ESC** to step back to the **Event Logger** menu.

☞ *The display will show the details of each Event. For example, Tamper Events show the TYPE and TIME only.*

Zone status

This option will allow you to view the status of the zones (Standby, Alarm, Tamper, Short-circuit or Bypassed, and also the Zone voltage level). This option is important during installation and placement tests.
Double-balance zones can signal **Short-circuit**, **Standby**, **Alarm** or **Tamper** status.
Balance zones can signal **Short-circuit**, **Standby** or **Alarm** status. ***NC** and **NO** zones* can signal **Standby** or **Alarm** only. If a zone is about to change status, the display may show the intermediate status before showing the final status.

☞ *For example, if a Double Balance zone is changing from Standby to Tamper, the Zone status option may indicate Alarm Status for several seconds before finally showing Tamper status.*

To view the Zone status, work carefully through the following steps.

From the Installer menu:

```
INSTALLER MENU
Event logger
```

1. Using **A** or **B**, select the **Zone status** option, then press **ENTER**.

```
zone n.    001
South entrance
```

2.Using **A** or **B**, scroll the zones or enter the zone ID number (three digits required).
NOTE: Wrong entries will be signalled by an audible error signal.

```
zone n.  002
Staircase Window
```

3.Press **ENTER** to view the status.

```
Staircase Window
STBY UNBYPASSED
```

4. Press **ENTER** again to view the Zone Resistance (in ohm, see the example below).

```
Staircase Window
4265 ohm
```

5. Press **ESC** to go back to the Installer menu.

On the contrary, if you press **ENTER** it is possible to check, one at time, the zone with “Vibration” attribute (if in programming fase the same zone has been programmed with “Vibration” attribute and has been programmed the sensitivity and the pulse number):

```
Zone n.  001
Vibrat. Test 001
```

Zone test

This option will allow you to test all the partition zones without generating alarms. The Test event will be recorded in the event logger as: <Alarm - Zone under test>. The following events may also be recorded in the logger: keypad buzzer or activation of Output 1; or keypad buzzer+activation of Output 1.

From the Installer menu:

```
INSTALLER MENU
Event logger
```

1.Using **A** or **B**, select the **Zone test** option, then press **ENTER**.

```
Zone test
Logger only
```

2.Using **A** or **B**, select Test mode, then press **ENTER**.

```
Partition  001
Test  ON
```

3.Using **A** or **B**, select the Partition the zones belong to.

```
Partition  002
Test  ON
```

4.Using **ON** or **OFF** respectively, to activate/stop the test for the partition concerned. Press **ENTER** to run the test.

```
Test running...
```

NOTE: The Zone status (Activated or Restored) will be recorded in the Event Logger.

5.Press **ESC** to go back to the Installer menu

Output test

This option will allow you to test the system Outputs. From the Installer menu:

```
INSTALLER MENU
Event log9er
```

1.Using **A** or **B**, select the **Outputs test** option.

```
INSTALLER MENU
outputs test
```

2. Press **ENTER**, a description of the first Control panel Output will be shown.

```
Output n.  001
Burglar Siren
```

3.Using **A** or **B**, select the required Output.
4.Press **ENTER,** then **ON** or **OFF**, respectively, to activate/stop the selected Output.

```
Burglar Siren
INACTIVE
```

5.Press **ESC** to go back to the Installer menu.

Clear call queue

The option will allow you to clear all the telephone calls in the outgoing Call queue.

From the Installer menu:

```
INSTALLER MENU
Event log9er
```

1.Using **A** or **B**, select the **Clear call queue** option, then press **ENTER**.

```
CLEAR CALL QUEUE
   Confirm?
```

2. Press **ENTER** again, the Call Queue will clear, and the system will go back to the Installer menu.

```
CLEAR CALL QUEUE
     done!
```

Voice functions (**K3/VOX2** only)

These functions are provided by the **K3/VOX2** Voice Board (accessory item). If the system is not equipped with a **K3/VOX2** board, the **Voice functions** option will not be shown on the Installer menu.The **K3/VOX2** Voice Board will allow the system to manage up to 64 voice messages — all with programmable quality and duration. The total message time depends on sound quality, and ranges from approximately 3 minutes 48 seconds — for good sound quality, to approximately 8 minutes 44 seconds — for average sound quality. The recorded messages can be associated with the Control panel Inputs for Telephone access, or sent to preset telephone numbers (Dialler function), or used as Answer messages (Answering machine function).

From the Installer menu:

```
INSTALLER MENU
Event log9er
```

1.Using **A** or **B**, select the **Voice functions** option, then press **ENTER**.

```
VOICE FUNCTIONS
Record messa9e
```

2.Using **A** or **B**, select the **Record message**, **Play message** or **Delete messages** option.

```
VOICE FUNCTIONS
Play messa9e
```

■ **Recording**
To record a voice message:

```
VOICE FUNCTIONS
Record messa9e
```

3.Press **ENTER**.

```
REC MESSAGE 01
Messa9e   001
```

4.Using **A** or **B**, select the message.

```
REC MESSAGE 02
Messa9e   002
```

The Message description (maximum 16 characters) will be shown on the second line of the display.
This description can be edited via PC or keypad by accessing the “Keypad Programming” section on the Installer menu.

5.Press **ENTER**.

```
Quality
Excellent
```

6. Using **A** or **B**, select the recording quality: Excellent, Good, Average and poor and press **ENTER**:

```
Seconds      180
Start record.
```

The message length (the example shows 180 seconds) depend on selected message quality.

7. Press **ENTER** to start the recording phase, the following message will be shown:

The second line of display shows the remaining time to record, so it is easy to check the message length.

8. Speak at about 20 cm from the microphone. The message must be recorded within the message time. Once you have finished recording the message, you can either continue recording or go back to the Installer menu by pressing **ESC**.

■ ***Playback***

To play the recorded messages:

3a. Press **ENTER**.

4a. Using **A** or **B**, select the message.

5a. Press **ENTER**

6a. Press **ENTER** again.

The Voice board will playback the selected message (the message length will be shown on the display). Once the message has ended, you can either continue listening or, go back to the step **2.** of the procedure by pressing **ESC**.

■ ***Delete***

To delete all messages work carefully through the following steps:

3b. Press **ENTER**

ATTENTION: if press **ENTER** again, **all the messages** will be deleted and then the procedure go back to step **2.**

Installer PIN

The Installer PINs can access the INSTALLER MENU and Teleservice. This Control panel manages 5 Installer codes: **196**, **197**, **198**, **199** and **200**. Installer code **200** has **Father** code status and is already **Active** at default, therefore it can be used to change the PINs of all the other Installer Codes, and also its own (**0200** at default). Installer Codes **196**, **197**, **198** and **199** have **Son** status, therefore, can change their own PINs only (respectively **0196**, **0197**, **0198**, **0199** at default).
The default Installer PINs should be changed for security reasons. To change the Installer PINs, work carefully through the following steps. From the Installer menu:assistenza. Il PIN Installatore può essere modificato come descritto di seguito: dal menù installatore:

1. Using **A** or **B**, select the **Installer PIN** option.

2. Press **ENTER**.

☞ ***NOTE:*** *If you access the menu using Installer Code 200 (PIN 0200 at default), you will go to step **3.** If you access the menu using one of the other Installer Codes (**0196**, **0197**, **0198** or **0199** at default), you will go to step **5.***

3.Using **A** or **B**, select an Installer code then press **ENTER**.

4.Using **ON** or **OFF**, enable (**Active**) or disable (**Not active**) the code concerned, then press **ENTER**.

☞ *ONLY code no. **200** can assign **Active** or **Not active** status to the other Installer Codes*

5.Enter the new PIN, then press **ENTER**. This programming field accepts 4, 5 or 6 digits.

☞ ***NOTE:*** *If you enter a PIN with less than 4 digits the keypad will emit an audible error signal and wait for a valid PIN.*

6. Enter the new PIN again, then press **ENTER**. The keypad will step back to the start of the procedure.

☞ *You cannot assign default PINs (refer to Table 10 on page 38).*

If you attempt to assign a default PIN, the display will show the following message:

```
Repeat new PIN
Invalid code!
```

☞ *You cannot assign a PIN which already exists on the system.*

☞ *Installer PIN allowed, for the 4-digit PINs: from 0201 to 9999 (0200 not usable), for the 5-digit PINs from 00001 to 99999, for the 6-digit PINs from 000001 to 999999.*

If you attempt to assign a duplicate PIN, the display will show the following message:

```
Repeat new PIN
Duplicated PIN!
```

This message means that another User is using the PIN concerned, therefore, the Control panel will consider the Code to be "Uncovered" and, for security reasons, will automatically restore the default PIN of the Code concerned. If a User attempts to access the system using an "Uncovered" PIN the display will show the following message:

```
17:05 26/08/2006
Uncovered  PIN!
```

☞ *"Uncovered" PINs must be reprogrammed (refer to Table 10 on page 38).*

"Uncovered" PINs will be signalled by:
- the ⚠ LED (ON) on the Keypad
- the `Uncovered PIN!` message in **View Trouble** mode
- the Event details in the Logger

TYPE = Uncovered PIN
IDENT. = the Keypad used
TIME = Time and Date of the Event
The Trouble status will clear as soon as a New PIN (other than the default PIN) is assigned to the "Uncovered" Code.

User codes

The Installer code can:
- enable (make **Active**) the necessary number of User codes (maximum 195)
- enable the User codes on specific Partitions
- define the **A**, **B**, **C** and **D** Arming modes of each User code
- define the Father codes of each User code (for Codes 1 to 131 only)
- define the access level of each User code (refer to "Control Panel Programming")
  A Father code can enable/disable the **Active** status of its Son codes and change their PINs.
- For full details on User Code programming, refer to "Code Type" under "Control Panel Programming".

To program the User code parameters, carefully work through the following steps. From the Installer menu:

```
INSTALLER MENU
Event log9er
```

1. Using **A** or **B**, select the **User codes** option.

```
INSTALLER MENU
User codes
```

2. Press **ENTER**.

```
Code  n.    001
Code        001
```

3. Using **A** or **B**,select the required Code, or enter the Code ID number. To go back to the INSTALLER MENU, press **ESC**.

```
Code  n.    002
Code        002
```

4. Press **ENTER**

```
Description
Code          002
```

5. Enter the Code Description (refer to "Editing a text" under "Using the Keypad"), then press **ENTER**.

```
Code Type n. 001
User    type 001
```

6. Using **A** or **B,** select the required User Type then Press ⏎. 16 User Types are available (in the example the User Type is 001). You can program the description of the User Type via the "Code Type" option from the "Control Panel Programming" menu.

```
Max Num. access
Always
```

7. Enter the maximum number of times the User Code concerned will be allowed to access the system (refer to "User Menu Access") or, using **0** select the `Always` option to allow unlimited use. Press **ENTER** to confirm and go to the next step.

```
Ass.timer n. ---
None
```

8. Using **A** or **B**, select the required Timer (refer to "Associated Timer"), or enter its ID Number. If you do not require a Timer, using **0** select the `None` option. Press **ENTER** to confirm and go to the next step.

```
Partition    1_8
XXXXXXXX
```

9. Enable the Code on the Partitions (refer to “Enabling Partitions and A, B, C and D Mode” under “Using the Keypad”), then press **ENTER**.

```
A arm.mode    1…8
AAAAAAAA
```

10. Setup the **A Arming** mode configuration (refer to “Enabling Partitions and A, B, C and D Mode” under “Using the Keypad”), then press **ENTER**.

```
A arm.mode    1…8
IDNDDADD
```

In the example above, the Code concerned will Arm partition 1 in Instant mode, Arm partition 6 in Away mode, Disarm partitions 2, 4, 5, 7 and 8 but will not affect partition 3 .

11. Program **B**, **C** and **D Arming** modes. The procedure is the same as for **A Arming** mode. If you press **ENTER** whilst you programming **D Arming** mode, you will go to the next step.

```
Options
Duress        —
```

12. Using **A** or **B**, scroll for the required option: **Duress** (refer to “Duress Code”), **Patrol** (refer to “Patrol Code”) or **Available**, then press **ON** or **OFF** to enable/disable the option concerned. Press **ENTER** to confirm and go to step **13.** (if the **Available** option is enabled), or step **14.** (if the **Available** option is enabled).

☞ *An ‘**Available**’ Code will become ‘**Active**’ automatically, if its ID number is lower than 131 (131 not included) for KYO 320, it will become the sole Father Code of itself. If the Code ID number is higher than 131 (131 included) for KYO 320, the system will assign the first ‘**Available**’ Code as its Father Code.*

☞ *You cannot change the status of an **Active** Code from **Enrolled** (able to perform its enabled functions) to **Unenrolled** (unable to perform its enabled functions) until it has been Disabled via the User menu (this operation can be carried out by its Father Codes only).*

☞ *Each code can have up to 3 Father codes. A code can be programmed as its own Father. By default, Code 001 is its own Father. Codes 002 to 131 have two Father codes: themselves and code 001. Codes 132 to 195 (Telephone access codes) have one Father code, that is, code 001. Codes 132 to 195 cannot be programmed as Father codes.*

```
Father  PIN  ?
PIN:   xxxxxx
```

13. To disable a code (make **NOT Active**), enter the PIN of a valid Father Code, then press **ENTER** and go back to step 3.

☞ *The “Father PIN?” prompt will remain on the display until you enter a valid PIN.*

```
Father  1 N. 001
Code         001
```

14. Using **A** or **B**, select the code to be programmed as Father Code 1, or enter the Code ID number.

16. Press **ENTER** to save Father Code 1, then program Father Code 2 and Father Code 3. Press **ENTER** to save Father Code 3, and go to step 3.

Digital Keys

To program the Digital keys, refer to “Keys” under “Control Panel Programming”. The **Digital Keys** option will allow you to enrol Digital keys.

From the Installer menu:

```
INSTALLER MENU
Event logger
```

1.Using **A** or **B**, select the **Digital Keys** option:

```
INSTALLER MENU
Digital keys
```

2. Press **ENTER**.

```
Reader :  01
Reader    001
```

The top line of the display will show the ID number of the first Reader in the configuration, while the bottom line will show the Reader label (Description).

☞ *At least one Reader must be enrolled in order to provide this option.*

3. Using A or **B**, select the Reader that you intend to use for the enrolling procedure:

```
Reader :  02
Reader    002
```

4. Press **ENTER**.

```
Digital key: 001
Digital key  001
```

5. Using **A** or **B** ,select the key to be enrolled, then press **ENTER**. The key label (Description) will blink to indicate that the system is ready to enrol the key, hold it in the vicinity of a Proximity Reader). When the system has enrolled, and consequently enabled the key, the GREEN LED will turn ON and the system will go to the next Key and allow you to continue. To step back to the Installer menu, press **ESC**.

Program Panel

The Control panel parameters can be programmed via keypad, refer to the “PROGRAM PANEL” section for details and instructions.

Enroll wireless

The **Enrol wireless** option will allow you to enrol wireless devices (detectors and keys), and perform the Placement Test.

From the Installer menu:

```
INSTALLER MENU
Event lo99er
```

1. Using **A** or **B**, select the **Enrol wireless** option:

```
INSTALLER MENU
Enrol wireless
```

2. Press **ENTER**:

```
ENROLL WIRELESS
Enrol detectors
```

☞ *If the Receiver has not been enrolled, the display will show the following message:* [WARNING! ⁄ No Receiver!].

3. Using **A** or **B**, select **Enrol detectors**, **Enrol WLS keys** or **WLS Placement Test**, then press **ENTER**.

From **Enrol sensors**:

```
ENROL WIRELESS
Zone         281
```

4. Using **A** or **B**, assign the wireless detector to a zone, then press **ENTER**:

```
Zone         281
Serial  #:000000
```

Enter the Electronic Serial Number (ESN) of the wireless detector. The ESN (6 digits) is printed on the back of each wireless device. This Control panel accepts 6-digit ESNs only. To correct wrong entries, press e then enter the correct digit. The ESN may comprise hexadecimal digits (A, B, C, D, E and F: use **A**, **B**, **C**, **D**,**ON** and **OFF**, respectively). The ESN will allow the Control panel to identify the wireless device.

☞ ***NOTE:*** *To unenrol wireless detectors, enter the ESN 000000 then press **ENTER** to confirm.*

5. Press **ENTER**.

```
ENROL  WIRELESS
Zone         281
```

6. Use **A** or **B** to continue enrolling.
Acceptance will be confirmed by the following message:

```
ENROL  WIRELESS
Enrol       ok!
```

When all the wireless detectors have been enrolled, press **ESC** to go back to step 3 then, if you want to enrol wireless keys, select the **Enrol WLS Keys** option:

Enrol WLS Keys

```
ENROL  WIRELESS
Enrol   WLSKey
```

4a. Press **ENTER**.

```
ENROL  WIRELESS
Wireless key 001
```

5a. Using **A** or **B**, select the wireless key to be enrolled, then press **ENTER**.

```
Wireless key 001
Serial #: 000000
```

Wireless keys are enrolled in the same way as wireless detectors. When you have enrolled all the wireless keys, press **ESC** to go back to step 3 then select the **Placement Test** option, in order to test the transmission signal between the Receiver and the wireless detectors. All placements should be tested before mounting the wireless detectors.

```
ENROL WIRELESS
Placement test
```

4b. Press **ENTER**.

```
WLSPlacementTest
Zone         281
```

5b. Using **A** or **B**, select the zone of the wireless detector to be tested, then press **ENTER**.

```
Wait result...
```

6b. Activate the wireless detector (refer to “Activating Wireless Detectors”), then check the Test result on the display.

```
Wait result..
    Good!
```

If the result is **good**, run further tests until you obtain three consecutive **good** results. Press **ESC** to go back to step 6b. If the result is **bad**, move the Detector to another location and repeat the test. Sometimes a matter of a few inches can correct a Bad result.
If an **Error** is signalled, enrol the wireless detector again.
To go back to the Installer menu, press **ESC**.

Wireless detectors should not be located in places that give “bad” test results.

☞ *If several devices produce “Bad” results, it may be due to the Receiver, in which case, move the Receiver to another location (for suggestions regarding Receiver placement, refer to “Choosing a mounting location” under ”Wireless Receiver" in the “INSTALLATION MANUAL APPENDIX”).*

■ **Activating Wireless Detectors**

AMD20 - To Test an AMD20 wireless detector, remove it from its backplate then reattach it. The LED will blink 5 times to indicate that a signal has been sent. The result will be shown on the keypad display. Repeat the procedure until you obtain 3 successive “Good” results.

⚠ **Be careful not to damage the Tamper microswitch when relocating the Detector to the bracket.**

☞ *Removal of a wireless detector from its bracket (detector tamper) will activate the “Placement Test” mode. During this status, the wireless detector will activate the LED each time it detects motion, and will also send a signal to the Receiver (5 seconds after detecting motion). The detector LED will blink 5 times to indicate that the transmission signals have been sent. The LED will operate in this way for 10 motion detections after a tamper/restore. These transmissions will be ignored by the Receiver during the Placement Test. The only time the Receiver will acknowledge a Placement Test is when a detector is removed from its bracket then replaced.*

ASD20 - To run the Placement Test on an ASD20, remove it from its bracket, wait 5 seconds then reattach it, or move a magnet towards the notch on the outer edge of the detector, then move it away.

AMC30 - To run the Placement Test on an AMC30 detector, open the contact by moving the magnet away from the unit. The Test result will be shown on the keypad display. After the first result (about 10 seconds), close the contact to generate another Test. If the unit is attached to a door or window, open and close the door or the window to activate the device.

Updating Strings

☞ *Only if the system has a number of PREMIUM LCD and CLASSIKA LCD keypads greater than 5, the update strings fase follows, otherwise the update strings fase has no effects.*

The Keypad Strings are stored in the Keypad memory, therefore, any changes made at a Keypad or via PC must be broadcasted to all the system Keypads. Each time you exit a programming session via Keypad or PC, the Control panel will check the Strings, if any changes are found, it will update all the system keypads automatically.

☞ *Under certain circumstances, the Control panel is unable to detect changes, therefore, will not update the system Keypads. For example, if you ‘swap’ the description of two objects, the Control panel will be unable to detect the changeover and therefore will not update the system Keypads.*

The **Update strings** option will allow you to update at any time. As this operation takes 4 or 5 minutes, the system will always request command confirmation.

```
Update strings
 Confirm?
```

To confirm the Update, press **ENTER**.

```
Update strings
 Done!
```

During the Update broadcast, all the system keypads will lock and their displays will blink.
Once the update has been done, the system will go back to the Installer menu.

Change time/date

The **Change time/date** option will allow you to set up the Control panel clock.

From the Installer menu:

```
INSTALLER MENU
Event logger
```

1. Using **A** or **B**, select **Change time/date** option, then press **ENTER**.

```
NEW TIME - DATE
14:20 03/09/2006
```

2. Enter the New Time and Date, then press **ENTER** to confirm and go to the next step (Date format), or **ESC** to quit and step back to the USER MENU.

☞ *The New Time and Date field will not allow you to change the digits individually, therefore, you must enter the entire Time and Date. If you press ENTER before completion, the setting will be deleted.*

```
date format
hh:mm dd/mm/yyyy
```

3. Using **A** or **B** select Date format:

hh:mm dd/mm/yyyy
hh:mm mm/dd/yyyy
hh:mm yyyy/mm/dd

then press **ESC** to confirm and go back to step 2

Release

The **Release** option will allow you to view of the Control panel firmware release. From the Installer menu:

```
INSTALLER MENU
Event log9er
```

1. Using **A** or **B**, select the **Release** option.

```
INSTALLER MENU
   Release
```

2. Press **ENTER**.

```
rev. firmware:
KYO320 -  2.06
```

3. To go back to the Installer menu, press **ESC**.

keypad

The **keypad** option will allow you to test the keypad display, LEDs and buzzer.

From the Installer menu:

```
INSTALLER MENU
Event log9er
```

1. Using **A** or **B**, select the **Test keypad** option.

```
INSTALLER MENU
Keypad
```

2. Press **ENTER**:

```
Keypad
Lan9ua9e
```

3. Press **ENTER**:

```
1:<ITA>   2:ENG
3: ESP    4:FRA
```

is possible to select the programming languages: enter the number which corresponds to language and then press **ENTER**.

```
Keypad
Lan9ua9e
```

4. Using **A** or **B**, to select:

```
Keypad
Test keypad
```

5. Press **ENTER**

```
ABCDEFGHIJKLMNOP
ABCDEFGHIJKLMNOP
```

If the keypad display is operating properly, it will show the letters A to P on the top and bottom line. If the LEDs 👁, 🔔, ⚠ and 🔊 are operating properly, they will blink for several seconds. If the buzzer is operating properly, it will emit three beeps.

Reset warning lithium

The **Reset warning lithium** option will allow you to clear the trouble signals generated by the RAM battery.

☞ *Under normal circumstances, the battery should last about two years, after which it must be replaced. This Control panel monitors the battery life — starting from the last **Reset Lithium battery** operation, but DOES NOT monitor the battery charge.*

From the Installer menu:

```
INSTALLER MENU
Event log9er
```

1.Using **A** or **B**, select the **Reset warning lithium.**

```
INSTALLER MENU
Res.warn.lithium
```

2. Press **ENTER**:

```
INSTALLER MENU
   Done!
```

The Keypad will indicate that the operation has been caried out and then will go back to step 2.

Serial Ports

From the Installer menu:

1. Using **A** or **B**, select the **Serial Ports** option.

```
INSTALLER MENU
 Serial Ports
```

2. Press **ENTER**. The Keypad will show the BAUD RATE value and, by means of an **X**, the presence of the respective Parity Bit. The first line will show the speed of the serial communication between the Control panel and the local PC. The second line will show the speed of the serial communication between the Control panel and the PC used for remote Teleservice.

```
 57600      x
 1200       x
```

3. To go back to the Installer menu, press **ESC**.

☞ *If the IP board (K-NET module) has been configured in the system, the display will show the corresponding IP address (see page n. 46).*

The **Program Panel** option will allow you to program all the parameters which determine system operation. Refer to “PROGRAMMING” in the INSTALLATION MANUAL for the description of the following parameters:

Configuration:
And-Zone Groups
Zone
Outputs
Partitions
Keys/Card
Code types
Events-Actions
Events setup
Telephone
Voice messages
Teleservice
Options
Scheduler options

From the INSTALLER MENU:

```
INSTALLER MENU
Event logger
```

1. Using **A** or **B**, select the **Program Panel** option.

```
INSTALLER MENU
Program Panel
```

2. Press **ENTER**.

```
INSTALLER MENU
Configuration
```

3.Using **A** or **B**, select the required option. Refer to the respective paragraph for the programming instructions. To exit the PROGRAMMING menu, press **ESC**.

Configuration

The Configuration section is divided into different programming sections: **Keypads**, **Readers**, **Input expanders**, **Output expanders**, **Power stations**, **Vector-RX module**, **Vox board**, **Print Logger** and **IP Board** (K-NET):

```
INSTALLER MENU
Configuration
```

1.Press **ENTER**:

```
Configuration
Keypad
```

■ **Keypad**
2. Press **ENTER**:

```
Keipad  N.  001
Keypad      001
```

3. Using **A** or **B**, select the required keypad , then press **ENTER**.

```
Description
Keypad    001
```

4. Enter the Keypad label “Editing a text” under “Using the Keypad”), then press **ENTER**.

```
Keypad  N. 001
Present
```

5. Press **ON** to enrol the keypad (Present), then press **ENTER**. To unenrol a Keypad (delete from the Configuration), press **OFF**.

☞ *You cannot unenrol a keypad during the programming phase. The values shown on the display are the current values in the Control panel memory.*

```
Keypad  N. 001
Memo       -
```

6. Using **A** or **B**, select **Memo** (refer to “Memo”) or **Part. Fast View** (refer to “Quick viewing of Partition status”) or **Tamp./ Al. beep** (refer to “Tamper /Alarm Beep”) or **Disp.pan.mem**. or **Disp.part.mem.** or **EN50131 Comp** (Compatibility with EN50131) press **ON** or **OFF** to enable or disable the option concerned, then press **ENTER**.

☞ *If you enable the **Part. Fast View** option, memory of Partition Alarm and Tamper events will be signalled by blinking on the respective character will blink.*

7. Assign the Keypad to the partitions (refer to "Enabling Partitions and A, B, C and D Mode" under "Using the Keypad"), then press **ENTER**.

8. Enter the ID number of the User Code to be used for Fast Arming, then press **ENTER**. The bottom line of the display will show the User Code label. To disable Fast Arming, enter 000. The bottom line of the display will show the word "None".

9. During standby status, the first eight positions on the bottom line (indicated by numbers 1 through 8 on the frontplate) will show the partition status.
Each keypad can be enabled on up to thirty-two partitions, you can select the partitions that will be shown on the display via the **Displayed Partitions** option.

☞ *The partitions must be selected in successive order, therefore, if partition no. 5 is selected first, partitions 1 through 4 CANNOT be selected.*

Using **C** or **D**, select the position , then, using **A** and **B**, select the partition that will be shown (or "None").

10. Press **ENTER** to go back to step 3.

■ **LED Keypads**
2. Press **ENTER**.

3. Using **A** or **B**, select the keypad to be configured, then press **ENTER**.

4. Enter the Keypad label (refer to "Editing Texts") then press ENTER:

5. Press ON to enrol the keypad (Present), then press **ENTER**.

To unenrol a Keypad (delete from the Configuration), press **OFF**.

6. Press **ON** or **OFF**, respectively, to enable or disable the option on the display, then press **ENTER**.

7. Assign the Keypad to the partitions (refer to "Enabling Partitions and **A**, **B**, **C** and **D** Mode" under "Using the Keypad"), then press **ENTER**.

■ **Readers**
This system supports up to 32 Readers.
From the Configuration menu:

2. Press **ENTER**

3. Using **A** or **B**, select the required Reader then press **ENTER**.

4. Enter the Reader label (refer to "Editing a text" under "Using the Keypad"), then press **ENTER**.

5. Press **ON**, to enrol the Reader (Present), then press **ENTER**.
To unenrol a Reader (delete from the Configuration), press **OFF**.

6. Using **A** or **B**, select the operating mode of the Reader: **3 LED Monitor** or **3 LED**.

Readers can be used to manage the system (Arming, Disarming, etc.), or to display the status of the Control panel events.
If the **3 LED Monitor** option is selected, the Reader will be able to display the status of up to three events but will be UNAVAILABLE for system management).
If the **3 LED** option is selected, the Reader will be able to manage the system (Arming, Arming Type A and Type B, Disarming

6a. Press **ENTER**:

```
Ev. on red LED
Event  n. ----
```

To associate an event with the Red LED (enter the Event ID number (refer to the **EVENT** column in the "Events-Actions" table under "PROGRAMMING" in the INSTALLATION MANUAL). Enter zeros, if no event is to be assigned to the Red LED.

6b. Press **B** to go to the next step (to assign an event to the Yellow LED).

```
Ev.on yel. LED
Event  n.  ----
```

6c. Press **B** to go to the next step (to assign an event to the Green LED).

```
Ev.on green LED
Event  n.  ----
```

then press **ENTER**.
From step 6, to select the **3 LED** operating mode.

```
Reader      001
3 LED
```

6d. Press **ENTER**;

```
Partition    1-8
XXXXXXXX
```

6e. Select the Reader partitions (refer to "Enabling Partitions and A, B, C and D Mode" under "Using the Keypad"), then press **ENTER**.

```
Yel.arm.     1-8
AAAAAAAA
```

6f. Set up the A Mode configuration for the Reader concerned (refer to "Enabling Partitions and A, B, C and D Mode" under "Using the Keypad"), then press **ENTER**.

```
Green arm.   1-8
AAAAAAAA
```

6g. Set up the B Mode configuration for the Reader concerned (refer to "Enabling Partitions and A, B, C and D Mode" under "Using the Keypad"), then press **ENTER**.

7. Press the **A** or **B** buttons to scroll through and program the following options: "**View.contr. mem.**" (View control unit alarm memory), "**View. Area.mem.**" (View area alarm memory) , "**Comp EN50131**" (Compatibility with EN50131), "**BuzzerEntryTime**" (Buzzer during entry time) and "**BuzzerExitTime**" (Buzzer during Exit time), then press **ENTER** and return to step 3.

■ **Input Expanders**[1]
From the Configuration menu, using **A** or **B**, select the **Input Expanders** option.

```
Configuration
Input Expanders
```

1. Press **ENTER**;

```
Input Exp. n.001
InputExpander001
```

2.Using **A** or **B**, select the Input Expander[1] to be programmed, then press **ENTER**.

```
Description
InputExpander001
```

3. Enter the Input Expander[1] label (refer to "Editing a text" under "Using the Keypad"), then press **ENTER**.

```
InputExpander001
Not present
```

4. Press **ON** to enrol the Input Expander[1] (Present), then press **ENTER** to continue. To unenrol an Input Expander (delete from the Configuration), press **OFF**.

5. To go back to the Configuration menu, press **ESC**.

■ **Output Expanders**[2]
From the Configuration menu, using **A** or **B**, select the **Output Expanders** option.

```
Configuration
Output Expanders
```

1. Press **ENTER**.

```
Output Exp.n.001
Expander out 001
```

2. Using **A** or **B**, select the Output Expander[2] to be programmed then press **ENTER**.

```
Description
Expander-out 001
```

3. Enter the Output Expander[2] label (refer to "Editing texts" under "Using the Keypad"), then press **ENTER**.

```
Expander-out 001
Not present
```

4. Press **ON** to enrol the Output Expander[2], then press **ENTER** to continue.

---

1 *M-IN/OUT expander programmed as Input Expander or Input/Output Expander (see "M-IN/OUT Programmable Input/Output Expander" in the "INSTALLATION" chapter in Vol. 1).*

2 *M-IN/OUT expander programmed as Input Expander or Input/Output Expander (see "M-IN/OUT Programmable Input/Output Expander" in the "INSTALLATION" chapter in Vol. 1).*

To unenrol an Output Expander[2] (delete from the Configuration), press **OFF**.

5. Press **ESC** to go back to the Configuration menu.

■ **Power Station**

This Control panel is unable to support Power stations. The following instructions are for upgraded models only. From the Configuration menu, using **A** or **B**, select the **Power stations** option:

```
Configuration
Power stations
```

1. Press **ENTER**

```
Power stat.  001
PowerStation 001
```

2.Using **A** or **B**, select the Power Supply Station to be programmed then press **ENTER**.

```
Description
PowerStation 001
```

3. Enter the Power Supply Station label (refer to “Editing a text” under “Using the Keypad”), then press **ENTER**.

```
PowerStation 001
Not present
```

4. Press ON to enrol the Power Station (Present), then press **ENTER** to continue. To unenrol the Power Station (delete from the Configuration), press **OFF**.

5. Enter the **Mains Fault Timeout**, that is, the amount of time (in seconds) that must expire before the system generates the **Mains Failure on Power Station** event (refer to the INSTALLATION MANUAL), then press **ENTER**.

```
Main Fault Delay
Sec.    0180
```

6. Enter the Low battery delay, that is, the amount of time (in seconds) that must expire (after a reading below 11.4 V) before the system generates the Low Battery on Power Station event (refer to the INSTALLATION MANUAL).

```
Batt.Low Delay
Sec.    0180
```

7. Press **ENTER** to continue the Power Station enrolling phase, or **ESC** to go back to the Configuration menu.

■ **Wireless Module**

This Control panel can support a Wireless Receiver. From the Configuration menu, using **A** or **B**, select the **Wireless module** option.

```
Configuration
Vector-RX module
```

1. Press **ENTER**:

```
Vector-RX module
Not present
```

2. Press **ON** to enrol the Receiver (Present), then press **ENTER** to continue. To unenrol the Receiver (delete from the Configuration), press **OFF**.

```
Supervision time
hh.mm      02.30
```

3. Enter the **Supervision time**, then press **ENTER**. Each enrolled wireless device will send a supervisory signal to the Receiver at regular intervals. If the Receiver does not receive the signal within the time programmed in the Supervision window, it will generate a supervisory fault (**Lost wireless zone**).

☞ ***NOTE:*** *You must enter two digits for the hours and 2 for the minutes, (e.g. To program 3 hours and 30 minutes, enter 0330).*

```
Zone contr. time
hh.mm    00.15
```

4. Set this option for the Supervised Wireless Zones ONLY(refer to “Supervised” under “Wireless”). When the **Zone control time** is elapsed from when the Receiver has received the signal that each wireless zone should send, the control panel does not allow the arming if the **"Disable arming on wireless zones fault"** option is enable (See Option, page 75). Valid entries: 15 minutes (at default) to 2 hours (in 15-minute steps).

```
Options
Jam disable   X
```

5. Using **ON** or **OFF**, respectively, enable or disable the RF Jamming detection option, then press **ENTER**.

■ **Vox board**

This Control panel can manage the **K3/VOX2** Voice board. It is not necessary to enrol the Vox board manually, as this will be done automatically by the Control panel. However, it may become necessary to unenrol the Vox board (e.g. To clear Trouble signalling), in such cases, using **A** or **B**, select the **Vox board** option.

```
Configuration
 Vox  Board
```

1. Press **ENTER**:

```
Vox Board
Not present
```

2. Press **OFF**, then press **ENTER**.

■ **Log Printer**
From the Configuration menu, using **A** or **B**, select **Log Printer**.

```
Configuration
Log Printer
```

1. Press **ENTER**:

```
Options
Print Logger
```

2. Using **A** or **B**, select **Print Logger** option (refer to "Real-time Printout") or **Agg. Linefeed** (refer to "Agg. Linefeed"), then press **ON** or **OFF** to enable or disable the option concerned. The last character on the bottom line will show.
– option disabled
× option enabled
Press **ENTER** to confirm and go back to the Configuration menu.

■ **IP board (K-NET module)**
From the Configuration menu, using **A** or **B**, select "IP board"

```
Configuration
IP board
```

1. Press **ENTER**:

```
IP board
  Not present
```

2. Press **ON** to enrol the IP board (Present), then press **ENTER** to continue. To unenrol the IP board (delete from the Configuration), press **OFF**.

Zones

Press **ESC** to exit the Configuration menu and go back to the PROGRAMMING menu.

```
PROGRAMMING
Configuration
```

1. Using **A** or **B**, select the **Zones** option, then press **ENTER**.

```
PROGRAMMING
Zones
```

2. Press **ENTER**:

```
Zones
Wired zones
```

Using **A** or **B**, select **Wired Zones** or **Wireless Zones**.

```
Zones
Wireless zones
```

Wired Zones

From step 2 press **ENTER**.

```
Wired  Zone  001
Zone       001
```

3. Using **A** or **B**, select the wired zone to be programmed[3], then press **ENTER**.

```
Description
Zone       001
```

4. Enter the Zone label (refer to "Editing a text" under "Using the Keypad"), then press **ENTER**.

```
Zona       001
Double balanced
```

5. Using **A** or **B**, select the Zone Balancing: **Double Balanced**, **10K Balanced**, **Normally Closed**, **Glass Break**, **Balanced Alarm Only**, **Customized**, **1K Balanced**, **Normally Open**. Once the Balancing has been selected, press **ENTER**.

☞ *If you select **Customized**, you must also assign the **Standby**, **Alarm**, **Tamper** or **Short-circuit** status to the Voltage range, as follows.*

5a. Using keys **1** through **4**, assign the status to the corresponding Threshold (refer to "Thresholds").
Default settings:

1 = 1% through 34%; **2** = 34% through 50%;
3 = 50% through 67**%; 4** = 67% through 98%

```
Zone       001
Alarm
```

You must assign either the **Alarm** Zone attribute (for Alarm detection), or the **Command** Zone attribute (for System management) to all Zone Balancing types other than **Glass Break**.

6. Using **A** or **B**, select **Alarm** or **Command**, then press **ENTER**. Go to step **7a** for **Alarm** zones, or **7d** for **Command** zones.

3 *Zones relating to M-IN/OUT expanders programmed as Input and Output Expanders are NOT all usable, even if they are shown on the display. For example, if Input Expander no. 1 is an M-IN/OUT Expander programmed as an Expander with 4 Zones + 2 Outputs, Zones 073 and 074 are NOT usable. In general, Zones [67+(x*6)] and [68+(x*6)] of M-IN/OUT Expanders programmed as Expanders with 4 Zones + 2 Outputs, and Zones [67+(x*6)], [68+(x*6)], [69+(x*6)] and [70+(x*6)] of M-IN/OUT Expanders programmed as Expanders with 4 Outputs + 2 Zones, where "x" is the address of the Expander, are NOT usable.*

■ **Programming Alarm zones**
Work carefully through the following steps.

```
Zone Type
Instant       x
```

7a. Using **A** or **B**, select the **Zone type** (**Instant**, **Entry delay**, **Entry path**, **Exit delay**, **Last exit**, **24 hours**, **Fire** or **Duress**). The zone types that will be available depend on the zone settings.
Using **ON** or **OFF**, enable/disable the selected zone type ("x" means enabled, and "-" disabled), press **ENTER** to go to the next step.

```
Zone Attribute
Unbypassable  -
```

7b. Using **A** or **B**, select the zone attribute (**Unbypassable**, **Chime**, **Test**, **Autobypassable**, **Autobyp.+reinc.** (refer to "Autobypass with reset unbypass"), **Stay**, **Delay on part.** (refer to "Delayed on stay arming"), **Del&Est. r.t.a.** (refer to "Delayed and estimated on ready to arm"), Disp.Entry Time (refer to "Display during Entry Time"). The attributes that will be available depend on the zone settings.
Using ON or OFF, enable/disable the selected zone attribute "x" means enabled, and "-" disabled), then press **ENTER** to go to the next step.

8b. Using **A** or **B** select, in this section, the zone attributes "**Vibration**" and "**Roller Blind**" (for the first eight zones ONLY)

```
Zone Attribute
Roller Blind
```

Using **ON** or **OFF**, enable/disable the selected zone attribute "**Vibration**" and "**Roller Blind**" , "x" means enabled, and "-" disabled). Refer to following Table for other parameters relevant to Zones with the '**Roller Blind**' attribute.

Times/ Pulses	1	2	3	4	5	6	7
30 s	0	1	2	3	4	5	6
2 min.	7	8	9	10	11	12	13
4 min.	14	15	16	17	18	19	20
Always	21	22	23	24	25	26	27

Example: for 3 PULSES and 4 MINUTES, you must set a value of 16.
To set the two attributes of a "**Vibration**" zone

```
Vibration
Sensitivity→  00
```

Set the sensitivity value from 0 up to 30, and the Pulse value from 1 up to 7.

```
Vibration
Pulses        0
```

9. press **ENTER**.

```
Cycles
Repetitive
```

7c. Enter the required number of cycles, or enter all zeros to set Repetitive, then press **ENTER** and go to step **8c**.

8c. This parameter determines the number of times the zone will generate the **Alarm on zone** event.
Valid entries: **Cycles** from **1** to **254** or **Repetitive**.
If the zone is a **Glass Break** zone, the **Cycles** parameter will be forced to **1**.

■ **Programming Command zones**
If you selected **Command** at **step 6**, work carefully through the following steps.

```
Select command
Toggle arm/dis x
```

7d. Using **A** or **B**, select the **Action/s** that will be generated by the Command zone (**Toggle arm/dis.** (refer to "Arm/Disarm/Toggle"), **Hard arm/dis.** (refer to "Arm/Disarm hard"), **Arm only**, **Disarm only**, **Partition reset**, **Panel reset**, **Del.tel.queue** (refer to "Clear call queue").
8. Using **ON** or **OFF**, enable/disable the selected Action/s ("x" means enabled, and "-" disabled), then press **ENTER**.

The **Alarm Messages** section is for **Alarm** and **Command** zones.

```
Alarm mes.n. ---
None
```

This programming section will allow you to assign two voice messages (from the 64 available) to the zone concerned. You can assign one message to **Standby** status and the other to **Alarm** status.
If you select "None" in the **Alarm Message** field, Alarm status will be signalled by two Beeps, when the system is accessed over the phone.
If you select "None" in the **Standby Message** field, Standby status will be signalled by one Beep, when the system is accessed over the phone.
9. Using **A** or **B**, select the message number or "None", then press **ENTER**.

```
Stdby mes.n. ---
None
```

For the Standby message, repeat step 9, then press **ENTER**.
10. The **Partitions** parameter assumes different meanings for **Alarm** zones and **Command** zones.

```
Partition  1-8
x
```

For Alarm zones — the Partition parameter determines the partitions the zone belongs to, and thus its operating times, codes and keys.
For **Command** zones — the **Partition** parameter determines the partitions the command will affect. Each Command zone can affect more than one Partition.
To select/deselect partitions 1 through 8, press the corresponding key: "x" means the zone belongs to the corresponding partition.
To go to the next group of partitions, press **B**.
For partitions 9 through 16 — key **1** corresponds to partition 9, key **2** to partition 10 and so forth to key **8** which corresponds to partition 16. The same reasoning applies to partitions 17 through 24 and partitions 25 through 32.

11. Press **ENTER**.

```
Options
Enable autoarm -
```

12. Using **A** or **B**, select the **Enable autoarm** option (refer to "Auto-arm on delay") or **Full arming Al.** (refer to "Full Arming Alarm").
Using **ON** or **OFF**, respectively, enable or disable the option concerned, then press **ENTER** to confirm and continue.

```
Timeout
Disabled
```

13. If the **Enable autoarm** option is **OFF**, go directly to the next step.
If the **Enable autoarm** option is **ON**, enter the required **Timeout** (refer to "**Inactivity Time**"), then press **ENTER** to confirm and continue.

```
Inactivity Time
Disabled
```

13. If the **Enable autoarm** option is **OFF**, go directly to the next step.
If the **Enable autoarm** option is **ON**, enter the required **Timeout** (refer to "**Inactivity Time**"), then press **ENTER** to confirm and continue.

14. Enter the required **Inactivity time** (refer to "Inactivity") or, using **0**, select **Disabled** to stop Inactivity supervision. Press **ENTER** to confirm and go to the next step.

```
Low threshold
Volts       34%
```

This Control panel can signal zone Alarm, Tamper, Short-circuit and Standby. To provide the various signals, the Control panel must measure the voltage on the zone terminals and compare it with the **Threshold** values programmed in this section.
The Thresholds must be set between 00 % and 99 %. The Thresholds must be programmed with rising values.

15. Using **A** or **B**, select the required Threshold: **Low**, **Mid**, **High**, enter the value (e.g. For 5 % enter 05), then press **ENTER**.

Wireless Zones

This system supports up to 32 wireless zones.
To program the wireless zones, using the **ESC** key, go to step 3 in the "Zones" section.

```
Zones
Wireless Zones
```

(281 Zones for Kyo320)

3b. Using **A** or **B**, select the **Sel. wls zone** option then press **ENTER**.

```
Wls zone n. 001
Zone        281
```

4b. Using **A** or **B**, select the wireless zone to be programmed, then press **ENTER**.

```
Description
Zone        281
```

5b. Enter the zone label (refer to "Editing a text" under "Using the Keypad"), then press **ENTER**.

```
Zone        281
Supervision   x
```

If the Supervision option is enabled, the system will be able to detect zone trouble (e.g. detector trouble). Each wireless device will send a supervisory signal to the Receiver at regular intervals. If the Receiver does not receive the signal within the supervisory window (refer to "Vector-RX module"), it will generate a supervisory fault (**Lost wireless zone** event).
Use **ON** or **OFF**, respectively, to enable or disable the Supervision attribute, then press **ENTER**.

```
Zone type
Instant       x
```

Using **A** or **B**, select the zone type: **Instant**, **Entry delay**, **Entry path**, **Exit delay**, **Last exit**, **24 hours** and **Fire**.
To enable/disable the zone type, use **ON** or **OFF**:
"x" means enabled and "-" disabled.
6b. Press **ENTER**.

```
Zone attribute
Unbypassable
```

Setup the zone attributes: **Unbypassable**, **Test**, **Autobypassable**, **Autobyp.+reinc.** (refer to "Autobypass with reset unbypass"), **Stay**, **Delay on part.** (refer to "Delayed on stay arming"), **Del&Est. r.t.a.** (refer to "Delayed and estimated on ready to arm").
Using **A** or **B**, select the attribute. Press **ON** or **OFF**, re-

spectively, to enable or disable the respective attribute. The display will show the attribute status: "×" means Active, "–" NOT active.

7b. Press **ENTER**.

```
Cycles
Repetitive
```

This programming field will allow you to program the number of times the zone will generate the **Alarm on zone - Via Radio** event.
Valid entries: **1** through **254** or **Repetitive**.

8b. Enter the required number of cycles, or enter all zeros to set **Repetitive**, then press **ENTER**.

```
All.messa9e ---
None
```

This programming section will allow you to assign two voice messages (from the 62 available) to the wireless zone being programmed. You can assign one message to **Standby** status and another to **Alarm** status.
If you select "None" in the **Alarm Message** field, Alarm status will be signalled by two beeps, when the system is accessed over the phone.
If you select "None" in the **Standby Message** field, Standby status will be signalled by one beep, when the system is accessed over the phone.

9b. Using **A** or **B**, select the message number or "None", then press **ENTER**.

10b. For the Standby message, repeat step 9b, then press **ENTER**.

```
Stdby mes.n. ---
None
```

11b. Assign the Zone to the respective Partitions (refer to "Enabling Partitions and A, B, C and D Mode" under "Using the Keypad"), then press **ENTER**.

```
Partition    1-8
×
```

12b. Using **A** or **B**, select the **Enable autoarm** option (refer "Auto-arm on delay") or **Full arming Al.** (refer to "Full Arming Alarm"). Using **ON** or **OFF**, respectively, enable or disable the option concerned.
Press **ENTER** to confirm and go to the next step.

```
Options
Enable autoarm -
```

13b. If the Enable Autoarm option is OFF, go to step 14b. If the **Enable Autoarm** option is **ON**, enter the required **timeout** (refer to "Inactivity Time"), then press ⏎ to confirm and continue.

```
Timeout
Disabled
```

14b. Enter the **Inactivity Time** (refer to "Inactivity"). Using **0**, select **Disabled** to disable Inactivity supervision.

```
Inactivity time
Disabled
```

Press **ENTER** to confirm and continue.

AND-zone Groups

This programming section will allow you to create up to 32 **AND-Zone** groups. Each **AND-Zone** group can include up to 8 Zones. If a Zone is included in an **AND-Zone** group it will generate Alarms ONLY when ALL the Zones in the Group are violated within a set time (refer to "Zones in AND Mode" under "PROGRAMMING").

From the PROGRAMMING menu:

```
PROGRAMMING
Configuration
```

1. Using **A** or **B**, select the **AND-Zone Groups** option.

```
PROGRAMMING
AND-Zone Groups
```

2. Press **ENTER**.

```
AND-Zone Groups
Number     01
```

3. The display will show the ID Number of the first **AND-Zone** Group. If you require a different **AND-Zone** Group, use **A** or **B**, or enter the respective ID Number, then press **ENTER**. To exit this programming section, press **ESC**.

```
AND-Zone     1___
Zone         001
```

4. Using **A** or **B**, select the first Zone to be included in the **AND-Zone** Group, or enter the respective 3 digit Zone ID Number (for example, enter 003 for Zone 3). Press **ENTER** to go to the successive programming field.

☞ ***NOTE:*** *To delete an **AND-Zone** from a Group, enter 000 in the respective programming field.*

```
AND-Zone Window
hh.mm.ss00.00.00
```

5. Once the **AND-Zone** Group has been set up, program the **AND-Zone Window** (in hours, minutes and seconds). The system will not generate Alarms unless

ALL the **AND-Zones** detect violation within the set time. Press **ENTER** to go back to step 3.

```
PROGRAMMING
Configuration
```

Outputs

From the PROGRAMMING menu:

```
PROGRAMMING
Configuration
```

1. Using **A** or **B**, select the **Outputs** option.

```
PROGRAMMING
Outputs
```

2. Press **ENTER**.

```
Output  n.    001
Output        001
```

3. Using **A** or **B**, select the Output to be programmed[4], then press.

```
Description
Output     001
```

4. Enter the Output label (refer to "Editing a text" under "Using the Keypad"), then press **ENTER**.

```
Output       001
Monostable
```

5.Using **A** or **B**, select the Output **Type** (**Monostable** or **Bistable**), then press **ENTER**.

```
Output       001
Superv.norm.clo
```

6.Using **A** or **B**, select the Output **Polarity**: **Superv.norm.clo** (refer to "Normally closed" and "Supervised"), **Normally open** or **Normally closed**, then press **ENTER**.

☞ *Only Outputs 1, 2 and 3 of KYO 320 can be programmed as **Superv.norm.clo**.*

```
Follow   n.  ---
None
```

7.Enter the ID number of the Output which will be tracked by the Output concerned. Enter all zeros if the Output is not to track another Output.
The keypad will emit an audible error signal, if you:

- attempt to program a value other than "None" for an Output which is associated with an event;
- attempt to program an Output which has been programmed to track another Output;
- attempt to program the selected Output.

Press **ENTER**.

```
Options
Reserved     -
```

8. Using **ON** or **OFF**, enable/disable the **Reserved** attribute ("x" means enabled, and "-" disabled).

☞ *The **Reserved** and **Follow No.** attributes exclude each other automatically. The **Reserved** Outputs cannot be associated with events.*

Press **ENTER**:

```
Ass.timer n. ---
None
```

9. Using **A** or **B**, select the Timer which will control the Output, then press **ENTER**:

```
ON        time
Min.        003
```

10. Using **A** or **B**, select Minutes or Seconds for the **ON time**, then enter the ON time for the Output. Valid entries: 0.2 to 25.4 seconds in steps of 0.2 or 1 through 127 minutes in steps of 1 minute.
Press **ENTER**.

```
Off  time
Sec.        006
```

11. Enter the amount of time that must elapse (after Output restoral) before the Output can be reactivated. The **OFF time** can be set for Monostable Outputs ONLY. Valid entries: 1 through 255 seconds in steps of 1 second.
Press **ENTER**:

```
Oscillation
None
```

12. Using **A** or **B**, select the **Half Cycle** of the oscillation. The Output will activate for the programmed time, restore to standby for the same amount of time, and then reactivate.
Valid entries: 200 through 1400 msec (milliseconds; 1000 msec = 1 second) in steps of 200 msec. Press ⇩:

4 *Outputs relating to M-IN/OUT expanders programmed as Input and Output Expanders are NOT all usable, even if they are shown on the display. For example, if Output Expander no. 1 is an M-IN/OUT Expander programmed as an Expander with 4 Zones + 2 Outputs, Outputs 07, 08, 09 and 10 are NOT usable. In general, Outputs [3+(x*6)], [3+(x*6)], [5+(x*6)] and [6+(x*6)] of M-IN/OUT Expanders programmed as Expanders with 4 Zones + 2 Outputs, and Outputs [5+(x*6)] and [6+(x*6)] of M-IN/OUT Expanders programmed as Expanders with 4 Outputs + 2 Zones, where "x" is the address of the Expander, are NOT usable.*

```
Cicles
Number       01
```

13. Using **A** or **B**, set the number of **Cycles** for the Output concerned. The **Cycles** can be set for the Monostable Outputs only. Valid entries: **1** through **31** or **Timeless**. Press **ENTER** to go back to step 3.

Partition

From the Programming menu:

1. Using **A** or **B**, select the **Partitions** option.

```
PROGRAMMING
Partition
```

2. Press **ENTER**:

```
Partition n. 001
Partition    001
```

3.Press **A** or **B** to select the required partition, then press **ENTER**.

```
Description
Partition    001
```

4. Enter the partition label (refer to "Editing a text" under "Using the Keypad"), then press **ENTER**.

```
Entry time
mm.ss.     00.30
```

5. Enter the time (in minutes and seconds) the system must wait before generating an **Alarm on zone** event after violation of an **Entry delay** zone, then press .

```
Exit time
mm.ss      00.15
```

6. Enter the **Exit time** (in minutes and seconds). Violation of an Armed **Exit Delay** zone will generate the programmed **Exit time**. If violation ends before the **Exit time** expires the zone will not generate the **Alarm on zone** event.

Press **ENTER** to continue.

```
Last exit time
mm.ss      00.15
```

7. Enter the **Last exit** time (in minutes and seconds), then press **ENTER**. Violation of a **Last exit** zone will generate the **Last exit** time of the partition the zone belongs to. This feature will allow the system to Arm as soon as the **Last exit time** expires. Valid entries for **Entry**, **Exit** and **Last exit** times: 0 minutes 0 seconds through 59 minutes 59 seconds.

```
Auto arm timeout
Min.    010
```

8. Enter the time (in steps of 1 minute) of the **Auto-arm timeout** signal.
Valid entries: 1 through 240 minutes.
Press **ENTER** to continue.

```
Options
AutoArm del.si9x
```

9. Using **A** or **B**, select the **AutoArm del. sig.** (refer to "Autoarm Signal"), **Autoreset** (refer to "Autoreset on Arming"), **Disarm with mem.** (refer to "Disarm with alarm memory") or **Confirm Alarm** (refer to "Disarm with alarm memory") then, using **ON** or **OFF**, respectively, enable or disable the option concerned, then press **ENTER**.
If you select the **Confirm Alarm** option, you must enter the respective **Confirm time** (in steps of 1 minute).
Valid entries: 30 to 60 minutes.

```
Confirm time
Sec.       0060
```

Press **ENTER** to continue.

```
Negli9ence time
None
```

10. Enter the **Negligence time** (in steps of 1 minute). If the **Negligence time** of a partition expires, the Control panel will generate the respective **Negligence** event. The **Negligence time** of a partition will refresh each time the partition is Armed.
Valid entries: 1 to 60000 minutes, or enter all zeros to set **None**.

Press **ENTER** to continue.

```
Ext.r.toArmDelay
min.        05
```

11. Enter the **Extended Ready-to-Arm delay**, then press **ENTER**.

```
Patrol Time
Min.      00010
```

12. Enter the relevant **Patrol Time**, then press **ENTER**.

```
InhibitArming---
None
```

13. Using **A** or **B** , select the Timer that will filter Arming commands, then press **ENTER**:

```
InhibitDisar ---
None
```

14.Using **A** or **B** , select a Timer to filter the Disarm commands, then press **ENTER**.

```
Armed Mess.n ---
None
```

15. Using **A** or **B** , select the Voice message (or None), assigned to Partition Armed status, then press **ENTER**:

```
Disar.mess n.---
None
```

16. Using **A** or **B**, select the Voice message (or None), assigned to Partition Disarmed status, then press **ENTER**:

```
Partition Code
Code    000000
```

17. Enter the Partition code, then press **ENTER** to go back to step 3.
If the **Send always** option is disabled (refer to "**Digital Communicator**" section), the Digital Communicator will send the **Partition code** and the Event Code to the Central Station/s when a partition related event occurs (associated with the Digital Communicator).

☞ *The Partition Code must have 6 digits.*

Keys/Card

From the "PROGRAMMING" menu.

```
PROGRAMMING
Configuration
```

1. Using **A** or **B**, select the **Keys** option.

```
PROGRAMMING
Keys /Card
```

2. Press **ENTER**:

```
Keys /Card
Digital Key
```

3. Using **A** or **B**, select either **Digital key** or **Wireless key** as required, then press **ENTER**.

```
Dig. Key n.  001
Digital key  001
```

4. Using **A** or **B**, select the required digital key, then press **ENTER**.

```
Description
Digital key  001
```

5. Enter the digital key label (refer to "Editing a text" under "Using the Keypad"), then press **ENTER**.

```
Digitalkey   001
Enabled       _
```

6. Using **ON** or **OFF**, respectively, enable or disable the digital key concerned, then using **A** or **B**, select the **Patrol** attribute.

```
Digital Key  001
Patrol
```

7. Using **ON** or **OFF**, respectively, enable or disable the **Patrol** attribute for the digital key concerned, then using **C** or **D**, select the **Stop Partition Alarms**.

```
Digital key  001
Stop part.alarmx
```

7a. Using **ON** or **OFF**, respectively, enable or disable the **Stop Partition Alarms** for the digital key concerned (refer to "Stop Partition Alarms") then, using **C** or **D** select the **Del.tel.queue** attribute.

```
Digital key  001
Del.tel.queue  -
```

8. Using **ON** or **OFF**, respectively, enable or disable the **Del.tel.queue** attribute for the digital key concerned (refer to"Delete Call queue on Disarming"), then using **C** or **D**, select **Stop panel alar.**

```
Digital key  001
Stop panel alarm
```

9. Using **ON** or **OFF**, respectively, enable or disable the **Stop panel Alarms** attribute (refer to "Stop Panel Alarms"), then press **ENTER**.

```
Max Num. access
Always
```

10. Enter the number of times the digital key will be allowed to access the system, then press **ENTER**. To allow unlimited use, enter zero (0).

```
Ass.Timer n. ---
None
```

11. Using **A** or **B**, select the **Timer** which will control the digital key (the bottom line will show the label of the selected Timer), then press **ENTER**.

```
Partition    1-8
XXXXXXXX
```

12. Enable the Key on the relevant Partitions (refer to "Enabling Partitions and A, B, C and D Mode" under "Using the Keypad"), then press **ENTER**.

To program the wireless keys, go back to step 3, then using **A** or **B**, select the **Wireless keys** option.

```
Key /Card
Wireless Key
```

4a. Press **ENTER**:

5a. Using **A** or **B**, select the wireless key to be programmed, then press **ENTER**.

6a. Enter the respective label (refer to "Entering a text" under "Using the Keypad"), then press **ENTER**.

7a. Enable the Wireless Key on the relevant Partitions (refer to "Enabling Partitions and under "Using the Keypad"), then press **ENTER**.

8a. Set up the **Yellow** Mode configuration for the Wireless Key concerned (**D**: Disarm, **N**: None, **A**: Arm, **S**: Arm in Stay mode, **I**: Istant mode, then press **ENTER**.

9a. Set up the **Green** Mode configuration for the Wireless Key concerned (**D**: Disarm, **N**: None, **A**: Arm, **S**: Arm in Stay mode, **I**: Istant mode), then press **ENTER** to go back to step 5a.

Code Types

From the Programming menu:

1. Using **A** or **B**, select the **Code types** option.

2. Press **ENTER**:

3. Using **A** or **B**, select the Code type, then press **ENTER**.

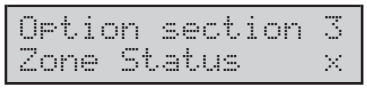
4. Enter the label (Description) (refer to "Entering a Text") of the selected Code type, then press **ENTER**.

☞ *NOTE: If, at step 3 (User type), you select a **User type** (codes 1 through 16) go to "User Code Types". If you select an **Installer type** (codes 17, 18 and 19) go to "Installer Code Types".*

■ **User Code Types**

5.Using **A** or **B**, select the functions from Option section 1: **Reset Alarms** (refer to "Panel reset"), **Stop Alarms** (refer to" Stop Alarm"), **Arm/Disarm** (refer to "Arm./Dis. from User menu"), **Overtime Request** (refer to "Request overtime"), **Teleservice Req** (refer to "Request teleservice"), **En./Dis. autoar** (refer to "Enab./Disab. scheduler"), **En./Dis. Teleser** (refer to "Enab./Disab. teleservice"), **En./Dis.Ans.Dev** (refer to "Enab./Disab. answering machine"). Press **ON** or **OFF**, respectively, to enable or disable the function concerned ("×" means enabled, and "–" means disabled). Press **ENTER** to go to the next Option section.

6. Using **A** or **B**, select the functions from Option section 2: **Disable buzzer** (refer to "Enab./Disab. keypad buzzer"), **Change tel. num** (refer to "Phone number modify"), **Change time/date** (refer to "Date/time modify"), **Reset PC Prog.** (refer to "Reset warning PC progr."), **Test keypad** (refer to "Keypad test"), **Test siren** (refer to "Squawk"), **Activate output** (refer to "Output On/Off"). Press **ON** or **OFF**, respectively, to enable or disable the function concerned ("×" means enabled, and "–" means disabled). Press **ENTER** to go to the next Option section.



7. Using **A** or **B**, select the functions from Option section 3: **Zone status** (refer to "Bypass/Unbypass zones"), **Continuous rec.** (refer to "Reset/play/restart continuous rec."), **Home message** (refer to "Play/Reg. memo"), **Event Logger** (refer to "View logger"), **Clear call queue** (refer to "Clear Call Queue"), **En./Dis. timers** (refer to "Enable Timers Control"). **En./Dis. Keys** (refer to "Enable Key Control"). Using **ON** or **OFF**, respectively, enable or disable the function concerned ("×" means enabled, "–" means disabled). Press **ENTER** to go to the next Option section.

8. Using **A** or **B**, select the functions from Option section 4: **No tel.part.S/R** (refer to "Clear phone queue on partition in stop/reset"), **No tel.pan. S/R** (refer to "Clear phone queue on panel in stop/reset"), **No tel. disarm** (refer to "Clear phone queue on disarming"), **Reset part.al.** (refer to "Reset Partition Alarms"), **Stop**

part.alarm (refer to "Stop Partition Alarms"), **Print logger** (NOT available!). Press **ON** or **OFF**, respectively, to enable or disable the function concerned ("x" means enabled, and "-" means disabled). Press **ENTER** to go to step 3.

```
Option section 5
Arming type  A x
```

9. Using **A** or **B**, select the functions from Option section 5: **Arming type A** (refer to "Arming A with user code"), **Arming type B** (refer to "Arming B with user code"), **Arming type C** (refer to "Arming C with user code"), **Arming type D** (refer to "Arming D with user code"), **Away arming** (refer to "Away arming with user code"), **Disarming** (refer to "Disarming with user code"). Press **ON** or **OFF**, respectively, to enable or disable the function concerned ("x" means enabled, and "-" means disabled). Press **ENTER** to go to step 3.

■ **Installer Code Types**

```
Option block  1
Event logger  x
```

5a. Using **A** or **B**, select the functions from Option section 1: **Event logger** (refer to "View logger"), **Zone status** (refer to "Zone Status"), **Zone test** (refer to "Zone Test"), **Outputs test** (refer to "Output Test"), **Clear call queue** (refer to "Clear Call Queue"), **Voice functions** (refer to "Voice Functions"), **Installer PIN** (refer to "Change Installer PIN"), **User codes** (refer to "User Codes"). Press **ON** or **OFF**, respectively, to enable or disable the function concerned ("x" means enabled, and "-" means disabled). Press **ENTER** to go to the next Option section.

```
Option block   2
Digital Keys   x
```

6a. Using **A** or **B**, select the functions from Option section 2: **Digital keys** (refer to "Digital Keys"), **Program Panel** (refer to "Panel programming"), **Enrol wireless** (refer to "Enrol Wireless"), **Update strings** (refer to "Keypad Broadcast"), **Change time/date** (refer to "Change date/time"). Press **ON** or **OFF**, respectively, to enable or disable the function concerned ("x" means enabled, and "-" means disabled). Press **ENTER** to go back to step 3.

N	EVENT
0000 + n	**Alarm on zone no.**
0280 + n	**Alarm on zone no. – Wireless**
0344 + n	**Tamper on zone no.**
0624 + n	**Tamper on zone no. – Wireless**

Tabella 1 *Zones events for KYO320*

N	EVENT
0688 + n	**Fire alarm on partition no.**
0720 + n	**24h alarm on partition no.**
0752 + n	**Burglar alarm on partition no.**
0784 + n	**Generic alarm on partition no.**
0816 + n	**Tamper alarm on partition no.**
0848 + n	**Generic+Tamper alarm on partition n.**
0880 + n	**Away alarm on partition no.**
0912 + n	**Stay alarm on partition no.**

Tabella 2 *Partition events for KYO320*

N.	EVENTI
0945	**Fire alarm on panel**
0946	**24h alarm on panel**
0947	**Burglar alarm on panel**
0948	**Generic alarm on panel**
0949	**Tamper alarm on panel**
0950	**Generic+Tamper alarm on panel**
0951	**Tamper on Main unit**
0952	**Stop-alarms jumper**
0953	**Balanced tamper**
0953 + n	**Tamper on supervised output no.**
0957	**Tamper BPI readers**
0958	**Tamper BPI input expanders**
0959	**Tamper keypads**
0960	**Tamper LED Keypad**
0961	**Tamper output expanders**
0962	**Tamper power stations**
0963	**Tamper wireless device**

Tabella 3 *KYO 320 Panel events*

N.	EVENTI
0964	**Warning readers**
0965	**Warning BPI input expander**
0966	**Warning keypad**
0967	**Warning LED keypad**
0968	**Warning output expanders**
0969	**Warning power stations**
0970	**Warning wireless device**
0971	**False key**
0972	**Warning fuse +F**
0973	**Warning fuse +B1**
0974	**Warning fuse +B2**
0975	**Warning fuse +B3**
0976	**Warning fuse +B4**
0977	**Warning fuse +B5**
0978	**Warning fuse BPI1**
0979	**Warning fuse BPI2**
0980	**Warning fuse KEYBUS**
0981	**Warning mains failure**
0982	**Warning low battery**
0983	**Warning power trouble**

0984	**Warning mains failure on Power station**
0985	**Warning low battery on Power station**
0986	**Warning power trouble on Power station**
0987	**Battery not connected on Power station**
0988	**Battery charger trouble on Power station**
0989	**Switching not connect on Power station**
0990	**Short circuit output 1/2/3 on Power station**
0991	**Battery low memory**
0992	**Warning low battery on wireless device**
0993	**Memory tamper BPI device**
0994	**Memory balanced tamper**
0995	**Memory tamper on main unit**
0996	**Memory false key**
0997	**Memory tamper supervised output**
0998	**Lost wireless zone**
0999	**Generic Warning**

Tabella 4 *Generic events (continued) for KYO320*

N.	EVENT
1000	**Installer maintenance**
1001	**Central station maintenance**
1002	**Clock Forward/Back**
1002+n	**Not Ready-to-arm partition n.**
1034+n	**Extended not Ready-to-Arm partition n.**
1066+n	**Global arming partition n.**
1098+n	**Global Disarming partition n.**
1130+n	**Exit time on partition no.**
1162+n	**Entry time on partition no.**
1194+n	**Autoarming warning partition no.**
1226+n	**Memory alarm on partition no.**
1258+n	**Memory tamper on partition no.**
1290+n	**Valid key no.**
1790+n	**Key present on reader no.**
1822+n	**Valid key on partition no.**
1854+n	**Alarxm stop on partition no.**
1887	**Alarm stop on panel**
1887+n	**Bypass zone no.**
2167+n	**Bypass zone no. - Wireless**
2232	**Telephone line trouble**
2233	**Error printer**
2234	**Call queue full**
2234+n	**Timer no.**
2298+n	**Real time of zone no.**
2578+n	**Real time of zone no. - Wireless**

Tabella 4 *Generic events (Continued) for KYO320*

N.	EVENT
2643	**Test**
2643+n	**Reset on partition no.**
2676	**Reset on panel**
2671+ (6*n)	**Super key [Fire] [Keypad no.]**
2672+(6* n)	**Super key [Assistance] [Keypad no.]**
2673+ (6*n)	**Super key [Police] [Keypad no.]**
2674+ (6*n)	**Super key [Key 1] [Keypad no.]**
2675+ (6*n)	**Super key [Key 2] [Keypad no.]**
2676+ (6*n)	**Super key [Key 3] [Keypad no.**
2916+n	**Key F on KeyFob Pno.**

Tabella 5 *Spot Events (continued...) per KYO320*

N.	EVENTO
2948+n	**Chime on partition no.**
2980+n	**Negligence on partition no.**
3012+n	**Delinquency on partition no.**
3044+n	**Block keypad no.**
3092+n	**Recognized user code no.**
3287+n	**Recognized user code on keypad no.**
3335+n	**Recognized code on partition no.**
3368	**Invalid code**
3369	**Recognized installer code**
3370	**Kissoff recognized**
3371	**Start telephone call**
3372	**Teleservice requested**
3373	**Start teleservice**
3374	**Dialler action OK**
3375	**Action on digital communicator OK**
3376	**Digital communicator action OK**
3377	**Teleservice action OK**
3378	**Dialler action failed**
3379	**Action on digital communicator failed**
3380	**Digital communicator action failed**
3381	**K-NET communication failed**
3382	**Teleservice action failed**

Tabella 5 *Spot Events (continued) for KYO320*

N.	EVENTO
3382+n	**User event no.**

Tabella 6 *Customised Events*

N.	EVENTO
3415	**Memo message present**
3416	**K-NET module missing**
3417	**Lan Link missing**
3418	**IP receiver missing**

Tabella 7 *Special events for KYO320.*

Events - Actions

From the Programming menu:

```
PROGRAMMING
Configuration
```

1. Using **A** or **B**, select **Event -> Action**:

```
PROGRAMMING
Event  → Action
```

2. Press **ENTER**:

```
Event →   Action
Event n.    0001
```

3. Enter the Event ID number, then press **ENTER**.

☞ ***NOTE:*** *The **Event** ID numbers can be found in the **No.** column of the **Event** tables. For events that regard system elements such as: Zones, Partitions, Outputs, Codes, Keypads, Keys/Cards and Readers, you must add the ID number of the object to the Event ID number shown in the **Event No.** column. EXAMPLE: The Event ID number of **Burglar alarm on partition 1** is 0753 (i.e. 0752 + partition **1** = 0753), whereas, the Event ID number of **Burglar alarm on partition 6** is 0758 (i.e. 0752 + partition **6** = 0758).*

```
Event  n.    0001
Output       ____
```

4. Enter the ID number of the Output associated with the selected event (enter all zeros for NO Output), then using **A or B**, select **Dig.Com.On**.

```
Events n.    0001
Dig.Com.  On ___
```

5. Enter the ID number of the Digital Communicator action the Control panel must perform when the selected event **occurs** (enter all zeros for NO action), then using **A** or **B**, select **Dig.Com.Off**.

```
Events n.    0001
Dig.Com.  Off___
```

6. Enter the ID number of the Digital Communicator action the Control panel must perform when the selected event **ends** (enter all zeros for NO action), then using **A** or **B**, select **Dialler On**.

```
Event  n.  0001
Dialler On  ___
```

7. Enter the ID number of the Dialler action which the Control panel must perform when the selected event **occurs** (enter all zeros for NO action), then using **A** or **B**, select **Dialler Off**.

```
Event n.   0001
Dialler Off  ___
```

8. Enter the ID number of the Dialler action which the Control panel must perform when the selected event **ends** (enter all zeros for NO action), then press **ENTER** to go back to step 3.

Event setup

The **Event setup** option will allow you to program the **Event Types** to be stored in the Logger and/or printed in real time (refer to"Logger – Setting up events" under "Programming").

```
PROGRAMMING
Configuration
```

1. Using **A** or **B**, select the **Event setup** option.

```
PROGRAMMING
Event setup
```

2. Press **ENTER**:

```
Event setup 001
Zone Alarm
```

3. Using **A** or **B**, select the required **Event Type**, or enter the **Event Type** ID number (3 digits, see **NOTE**), then press **ENTER**.

☞ ***NOTE:*** *The **Event Type** ID numbers can be found in the **No.** column of the **Event Type** tables.*
For Event Types with 2 digit ID numbers, you must enter zero (0) followed by the 2 digit ID number.

```
Zone Alarm
Log enabled  x
```

4. Using **A** or **B**, select the **Log enabled** option (refer to "") or **Printer enabled** option (refer to "Printout"). Press **ON** or **OFF** to enable or disable the option concerned, then press **ENTER** and go back to step **3.**

Telephone

The **Telephone** option will allow you to setup the Control panel Phonebook, the telephone line parameters and the Answering machine.

From the Programming menu:

```
PROGRAMMING
Configuration
```

1. Using **A** or **B**, select the **Telephone** option

```
PROGRAMMING
Telephone
```

2. Press **ENTER**:

```
Telephone
Panel Phonebook
```

3. Using **A** or **B**, select **Panel Phonebook**, **Dialler**, **Dig. communicat.**, **Aux.communicator** or **AnsweringMachine**, as required, then press **ENTER**. Refer to the respective paragraph for instructions.

■ **Phonebook**

```
Phonebook
Phone numbers
```

4. Using **A** or **B**, select **Phone numbers**, or **Phone options** then press ENTER. Refer to the respective paragraph for instructions, or press **ESC** to go back to step 3.

Phone numbers

```
Tel. numb.n. 001
Phone number 001
```

5a. Using **A** or **B**, select the Telephone Number to be programmed, then press **ENTER**, or press **ESC** to go back to step 4.

```
Description
Phone number 001
```

6a. Enter the Telephone number label (refer to "Entering a text" under "Using the Keypad"), then press **ENTER**:

```
Phone number 001
_
```

7a. Using keys **0** through **9**, enter the telephone number.
— OFF corresponds to the hash sign (#);
— ON corresponds to the comma and star, when the display shows the required character, press **D** to continue;
— **C** and **D** will allow you to move the cursor along the line and overwrite wrong digits. **To delete** the entire Telephone number, press and hold **1** until the keypad emits a beep.

☞ *If you wish to include pound (#) or star (*) in the telephone numbers, you must program the telephone numbers from a keypad.*

Press **ENTER** to go back to step 5.

Phone options

```
Max.rings number
Number    04
```

5b. Set the number of Rings the Control panel must allow before answering the call, then press **ENTER**.

KEYS		1	2	3	4	5	6	7	8
Keys to use for the telephone number groups	1-8	1	2	3	4	5	6	7	8
	9-16	9	10	11	12	13	14	15	16
	17-24	17	18	19	20	21	22	23	24
	25-32	25	26	27	28	29	30	31	32
DISPLAY		1	2	3	4	5	6	7	8

Table 8 *Programming the telephone number groups*

```
Delay Calls
Sec.      0000
```

6b. Set the **Start telephone call delay**, then press **ENTER**.

```
Dialling option
Wait dial tone
```

7b. Using **A** or **B**, select **Wait dial tone** (refer to "Tone check"), **Test tel. line** (refer to "Telephone line check") **Pulse dialling** (refer to "Pulse dial") or **High/Low Volume** , then press **ON** or **OFF**, respectively, to enable or disable the option concerned ("✕" means enabled, and "—" means disabled). If the option **Wait dial tone** is disabled, press **ENTER** to go back to step 4, or:

```
Timeout for tone
Sec.        12
```

8b. Set the **Timeout for dial tone** (i.e. the time the Control panel must wait for the dial tone before aborting the call, then press **ENTER** to go back to step 4.

■ **Dialler**

```
Dialler
Dialler numbers
```

4b. Using **A** or **B**, select **Dialler numbers**, **Dialler actions** or **Dialler settings**, then press **ENTER**. Refer to the relevant paragraph for instructions, or press **ESC** to go back to step 3.

Dialler numbers

```
Dialler numbers
Number       01
```

5b. Enter the ID number of the Dialler number to be programmed, then press **ENTER**, or press **ESC** to go back to step 4b.

```
Telef.numb.n.001
Telef.numb.  001
```

6b. Using **A** or **B**, select the Telephone number (from the **Phonebook**) to be associated with the selected Action, then press **ENTER** to go back to step 5b.

Dialler actions

```
Dialler actions
Action  n.  01
```

5c. Enter the ID number of the Dialler Action to be programmed, then press **ENTER**, or press **ESC** and go back to step 4b.

```
Tel.numbers 1-8
x
```

6c. Select the Dialler numbers which will be generated by the selected Action. Using **A** or **B**, select the group of Dialler numbers (**1-8**, **9-16**, **17-24**, **25-32**). Press the key that corresponds to the ID number of the Dialler Number (refer to Table 8) to enable the selected Action to trigger a call to the number ("x" means enabled). Press **ENTER** to continue.

```
Action Options
Priorit.tel.  _
```

7c. Using **A** or **B**, select **Priorit. tel.** (see !) or **Call anyone** (see All), then press **ON** or **OFF**, respectively, to enable or disable the option. Press **ENTER** to continue.

```
Message 1 001
VoiceMessage 001
```

This option will allow you to setup the **Dialler** message for the selected action. Up to 5 **Voice** messages (from the 62 Voice messages available) can be included in the **Dialler** message

8c. Using **A** or **B**, select the first **Voice** message to be included, or enter the Voice message ID number (1 through 62), then press **ENTER** to continue (select the next Voice message), and so forth until the Dialler message is complete.

☞ ***NOTE:*** *If no* ***Voice*** *message is required, enter 3 zeros, or select "None".*

The right-hand side of the top line will show the Dialler message and the ID number of the selected Voice message. The bottom line of the display will show the Voice message label (Description). Press **ENTER** or **ESC**, respectively, to go to the next or previous Dialler message (message 1, 2, 3, 4 or 5).
Using **A** or **B**, select the Voice message for the selected Dialler message.

```
Message  5 ---
None
```

9c. Press **ENTER** when the display shows Dialler message 5, and go back to step 5c.

Dialler settings

```
Attempts
Number       05
```

5d. Enter the maximum number of times the Control panel must try to call a Telephone number before quitting and going to the next number (**Attempts**), then press **ENTER**.

```
N.repetitions
Number       02
```

6d. Enter the number of times the Control panel must play the Dialler message (**Message repetitions**), then press **ENTER**

```
Replay  Pause
Sec.       02
```

7d. Enter the time (in seconds) that must elapse between Dialler message replays (**Replay pause**), then press **ENTER**.

```
Dialler options
Call succ.num.-
```

8d. Press **ON** or **OFF**, respectively, to enable or disable the **Call succ. num.** option (refer to "Call successful numbers"). If this option is enabled, the telephone numbers of successful calls will be redialled in the successive cycles. If this option is disabled, the telephone numbers of successful calls will NOT be redialled in the successive cycles. Press **D** to continue.

```
Dialler options
Confirm calls -
```

9d. Press **ON** or **OFF**, respectively, to enable or disable the **Confirm calls** option (refer to "Confirm successful calls"). If this option is enabled, the Control panel will consider a call successful when it detects the feedback signal of a telephone key being pressed at the other end of the line. Press **C** to display the previous option (step 8d) or press **ENTER**.

```
Play    after
Dial
```

10d. Using **A** or **B**, select the **Dial**, **Timeout** or **Voice on line** option, then press **ENTER**. Refer to the respective paragraph for instructions.

Timeout

The Dialler Message will be played when the programmed **Timeout length** (refer to Delay) expires.

```
Timeout  length
Sec.      005
```

11d. Enter the **Timeout length** (from 1 to 255 seconds), then press **ENTER** to go back to step 4b, or press **ESC** to go back to step 10d.

Voice on line

The Dialler message will be played as soon as the Control panel detects a voice answer. If the Control panel does not detect a voice answer within the programmed **Wait voice for** time (refer to Voice timeout), it will end the call.

```
Wait voice for
Sec.      015
```

11e. Enter the **Wait voice for** (from 1 to 255 seconds), then press **ENTER** to go back to step 4b, or press **ESC** to go back to step 10d.

Dialling

The Dialler message will be played as soon as the Control panel finishes dialling the telephone number. Go back to step 4b.

■ **Dig. comunicat.**

```
Dig. Comunicat.
Dig.com.numbers
```

4c. Using **A** or **B**, select the **Dig.com. numbers**, **Dig.com. actions** or **Dig.com. settings** option, then press **ENTER**. Refer to the respective paragraph for instruction. Press **ESC** to go back to step 3.

Dig. com.numbers

```
Dig.com.numbers
Number     01
```

5g. Enter the ID number of the Digital Communicator Number to be programmed, then press **ENTER** to continue. Press **ESC** to go back to step 4c.

```
Tel.numb. n.001
Phone number 001
```

6g. Using **A** or **B**, select the Telephone Number (from the Phonebook) to be associated with the selected Digital Communicator Number, then press **ENTER**.

```
Protocol
ADEMCO SLOW
```

7g. Using **A** or **B**, select the **Protocol** supported by the Central Station the Digital Communicator call will be sent to, then press **ENTER**.

```
System code
Code     0000
```

8g. Enter the **System code** (three to six digits as required by the reporting format). The System Code (assigned by the Central Station) allows the operator to identify the system. Press **ENTER**.

```
Send  always
System  Code x
```

9g. Press **ON** or **OFF**, respectively, to enable or disable the **Send always** option. If this option is enabled, the Control panel will always send the **System Code**. If this option is disabled, the Control panel will send the partition code (refer to “Customer Code” under “Partitions”) for partition related events and the **System Code** for all other events. Press **ENTER** to go back to step 5g.

Dig.com. actions

Each Digital Communicator action can manage one Event code which can be sent to a group of up to eight Telephone numbers.

```
Dig.com.actions
Action n.  001
```

5h. Enter the ID number of the Digital Communicator action to be programmed then, using **A** or **B**, select the Event code A or B. Press **ENTER** to continue or **ESC** to go back to step 4c.

```
Tel. Number  1-8
x
```

6h. Using keys **1** through **8**, setup the Digital Communicator Tel. numbers that will be called when the selected action is generated (“û” means the Tel. number will be called). Press **ENTER** to go to the next step.

```
Action options
Priorit. tel.
```

7h. Press **ON** or **OFF**, respectively, to enable or disable the **Priorit. tel.** option (refer to “!”). Press **B** to go to the next option.

```
Action options
Call anyone
```

8h. Press **ON** or **OFF**, respectively, to enable or disable the **Call anyone** option (refer to “All”). Press **A** to go to the previous option (refer to step 7h) or press **ENTER**.

```
Event  code
Code
```

9h. Enter the **Event code** (refer to “Code”) of the action being programmed, (This is not valid for Contact ID, SIA and SIA over K-NET protocols) then press **ENTER** to go back to step 5h.

Dig.com. setting

```
Attempts
Number      03
```

5j. Enter number of times (refer to “Attempts”) the Control panel must dial a telephone before aborting a call, then press **ENTER**.

```
Voice duration
Sec.      030
```

6j. Enter the maximum time allowed for the “2-way audio” session (refer to “2-way audio”), then press **ENTER** and go back to step 4c.

■ **Answering Machine**

```
Message   ---
Nothing
```

4k. Using **A** or **B**, select the Voice message for the Answering machine facility, then press **ENTER**.

```
Repetition n.
Number    003
```

5k. Enter the number of times the Control panel must play the Answering machine message (refer to “Message repetitions”), then press **ENTER**.

```
Replay Pause
Sec.      005
```

6k. Enter the pause (in seconds) between the message replays (refer to “Replay pause”), then press **ENTER**.

```
PIN     timeout
Sec.      030
```

7k. Enter the maximum time the system will wait for a valid PIN (entered on the remote telephone keypad) for access to the system over the phone (refer to “PIN timeout”), then press **ENTER**.

```
DTMF   timeout
Sec.      030
```

8k. Enter the maximum time the system will wait for the user to press a telephone key before it ends the call (refer to “DTMF Tone Timeout”), then press **ENTER** to go back to step 3.

Voice messages

1.Using **A** or **B**, select the **Vocal messages** option.

```
PROGRAMMING
Vocal messages
```

2. Press **ENTER**:

```
Message   n. 001
Message      001
```

3. Using **A** or **B**, select the Voice message to be programmed or enter the Voice message ID number, then press **ENTER**, or press **ESC** to go back to step 1.

```
Description
Message   001
```

4. Enter the message text (refer to “Entering a text” under “Using the Keypad”), then press **ENTER**.

```
Quality
Good
```

5. Using **A** or **B**, select the required message **Quality** (**Poor**, **Average**, **Good** or **Excellent**), then press **ENTER**.

```
Length   (000)
Sec.       002
```

☞ ***NOTE:*** *The selected quality will not be provided, if the **Leftover** time is insufficient.*

6. Enter the **Message Length** (refer to “Time”). The **Leftover time** will be shown in brackets on the top line. Press **ENTER** to go back to step 3.

```
PROGRAMMING
Configuration
```

☞ *The Quality and the Length of messages will be set for number messagges 63 and 64 only.*

Teleservice

1. From the PROGRAMMING menu, using **A** or **B**, select the **Teleservice** option.

```
PROGRAMMING
Teleservice
```

2. Press **ENTER**:

```
Teleservice
Num.teleservice
```

3. Using **A** or **B**, select: **Num. teleservice**, **Teleservice param.**, **Teleservice option**, **Init teleservice**, **Mainte-**

nance call or **Vigilance call**, then press **ENTER** and refer to the respective paragraph.

■ **Num. teleservice**

4a. Enter the ID number of the required Teleservice number, then press **ENTER**. To go back to the Teleservice menu (step 3), press **ESC**.

5a. Using **A** or **B**, select the Telephone number (from the Phonebook) for the Teleservice facility, or enter the relevant ID number (enter three zeros to disable the Teleservice number). The ID number of the selected Telephone number will be shown on the top right of the display, and the Description on the bottom line. Press **ENTER** to go back to step 4a.

■ **Teleserv. param.**

4b. Enter the **Customer code** that will identify the Control panel during Teleservice operations 4 digits required), then press **ENTER**.

5b. Enter the number of times the Control panel must dial a Teleservice number before aborting the call and going to the next number (refer to “Attempts”), then press **ENTER**.

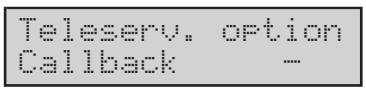
6b. Enter the time and date of the **First test**, then press **ENTER**.

7b. Enter the time (hours) that must elapse between tests (refer to “Repeat test event”), then press **ENTER** to go back to step 3.

■ **Teleserv. option**

4c. Using **A** or **B**, select: **Callback**, **En. test call**, **En. test event** or **Double call**. Refer to the relevant paragraph for instructions

Callback



5c. Press **ON** or **OFF**, respectively, to enable or disable the **Callback** option. If this option is enabled, the Control panel will call the programmed Teleservice numbers when it receives a Teleservice call. Press **ENTER** to go back to step 3.

En. test call

5d. Press **ON** or **OFF**, respectively, to enable or disable the **Test call**. If this option is enabled, the Control panel will make the Teleservice call in accordance with the **First test** and **Repeat test event** values. Press **ENTER** to go back to step 3.

En. test event

5e. Press **ON** or **OFF**, respectively, to enable or disable the **Test Event**, then press **ENTER** to go back to step 3.

Double call

5f. Press **ON** or **OFF**, respectively, to enable or disable the **Double call**. If this option is enabled, the Control panel will override any other Answering devices, and answer incoming calls on the first ring (refer to “Double call sequence” in the INSTALLATION MANUAL). Press **ENTER** to go back to step 3.

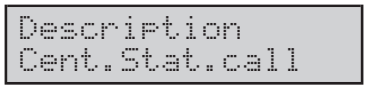
■ **Init. teleservice**

4g. Press **ENTER** to initialise the **First test** and **Repeat test events**.

The display will show a confirmation message before going back to step 3.

■ **Maintenance call**

4h. Enter the time and date of the *Installer Maintenance Request* (enter all zeros to disable this option), then press **ENTER**.



5h. Enter the keypad message for the *Installer Maintenance Request* memo (refer to "Entering a text" under "Using the Keypad"), then press ⇩ to go back to step 3.

■ **Central Station call**

```
Cent.Stat.Date
Disabled
```

4i. Enter the time and date for the *Central station call* memo (enter all zeros to disable this option), then press **ENTER**.

```
Description
Cent.Stat.call
```

5i. Enter the keypad message for the *Central Station Maintenance call* memo (refer to "Entering a text" under "Using the Keypad"), then press **ENTER** to go back to step 3.

Options

1. Using **A** or **B**, select **Options** from the PROGRAMMING menu:

```
PROGRAMMING
Options
```

2. Press **ENTER**:

```
Mains fault tim.
Min.       0003
```

3. Enter the time (in minutes) the Control panel must wait before signalling blackout (**Mains fault timeout**), then press **ENTER**.

☞ *For the system to conform to EN50131, this value must not exceed 60 minutes.*

```
Max.Wrong  PINs
Number      03
```

4. Enter the number of times the keypad will allow entry of wrong PINs before locking or enter **0** (zero) to disable this option, then press **ENTER**.

```
Lock       Time
Min.        03
```

5. Enter the amount of time (in minutes) the keypad must lock for, then press **ENTER**.

```
Option section 1
No us.res.tamp.-
```

6. Using **A** or **B**, select the required option (see Table 9), then press **ON** or **OFF**, respectively, to enable or disable the option concerned. Press **ENTER** to go to the next Option section 2.

```
Option section 2
Block ist.code -
```

7. Using **A** or **B**, select the required option (see Table 9), then press **ON** or **OFF**, respectively, to enable or disable the option concerned. Press **ENTER** to go to the next Option section 3.

```
Option section 3
Realtime Chime
```

8. Using **A** or **B**, select the required option (see Table 9), then press **ON** or **OFF**, respectively, to enable or disable the option concerned. Press **ENTER** to continue.

☞ ***NOTE:*** *At this step, if you have already enabled the* ***Continuous Recording*** *option (Option section 1), the 'Stop Recording Events' will be shown*

```
Option section 1
Cont.Recording
```

```
Stop recording01
Event n.   0753
```

9. This programming field will allow you to program the Events (up to 32) which will interrupt **Continuous Recording**. Using **A** or **B**, select a position, then enter the event ID number (refer to the Event Tables). The event ID numbers must be entered without zeros, for example, for event 0001, enter **1**. Enter **0** to deselect all events. Press **ENTER** to continue.

```
Timeout cont.rec
(Max 021)  010
```

10. Enter the (in seconds) between the start of an event (from those selected) and the termination of recording. Press ⇩ to go back to the PROGRAMMING menu.

☞ ***NOTE:*** *The bottom line of the display will show the maximum value (equal to 75% of the length of message 64).*

Scheduler opt.

This programming section will allow you to program the parameters of the **Max. overtime requests** and **Overtime request** options.

1. From the PROGRAMMING menu, using **A** or **B**, select **Scheduler opt.**:

```
PROGRAMMING
Scheduler opt.
```

2. Press **ENTER**:

```
Overtime length
(Max 60)    20
```

3. Enter the **Overtime length** (in minutes), then press **ENTER** to go to the next parameter. Valid entries: 0 through 60 minutes.

```
Max overtime n.
(Max 009)  003
```

4. Enter the maximum number of overtime requests allowed, then press **ENTER** to go back to the PROGRAMMING menu. Valid entries: 0 through 9 requests.

☞ ***NOTE:*** *The **Overtime length** value multiplied by the **Max. overtime requests** value MUST NOT exceed 180 minutes.*

Option block 1	Corresponding option
No us.res.tamp.	Disable tamper memory reset with User code
Test zone dis.	Maintain Zone Test Attribute
Delay bat.Test	Enable dynamic battery test timeout after mains restoral
No ist.res.al.	Disable alarm memory reset with Installer code
No key>leds off	LEDs OFF on Readers
Bypass z.tamp.	Bypass tamper on zone
Test bat.to arm	Disable arming on battery trouble
Cont.recording	Enable continuous recording
Option block 2	**Corresponding option**
Block inst.code	Lock Installer code
No arm z.open	Disable arming on partition alarm
Legal Time	Enable automatic changeover Standard time/Summer time
DTMF Voice menu	Voice guide for commands made over the phone
Logger on RS232	NOTE: This option is available via Keypad only.
ZoneAlarmFlash	Shows open zones on the keypad display
Chime in memory	Shows Chime zones on the Keypad display (memory)
Option block 3	**Corresponding option**
Code Hierarchy	The user can choose whether to enable the Installer code or not
Tamp.OnExpInLoss	Generates a Tamper event if the Expander In is not detected
Tamp.OnKeyp.Loss	Generates a Tamper event if the Keypad is not detected
Realtime Chime	Shows Chime zones on the Keypad display (real time)
Disab.False Key	Disable false key event
NoArmReceivLost	Disable arming on wireless receiver lost
NoArm ZoneTroub	Disable arming on wireless zone fault

Table 9 *Keypad options and their corresponding Computer Software options*

Default PIN

The Installer Code default PINs can be found in Table 10:

- the **no.** column shows the ID Number of the respective Installer Code;
- the **Description** column is for the label of the respective Installer Code;
- the **PIN** column shows the PIN of the respective Installer Code, if it is "Active" and "Unhidden" (refer to the "Installer PIN" under "KEYPAD OPERATIONS").

n.	Description	PIN
196		0196
197		0197
198		0198
199		0199
200		0200

Table 10) *KYO320 installer code Default PIN.*

K3/VOX2 Voice Board

⚠ **Disconnect the Mains and battery power before starting the installation procedure.**

The **K3/VOX2** Voice board records and plays Voice messages. The recorded voice messages can be assigned to the:

- Status enquiry
- Answer message
- Dialler messages
- Memo
- Continuous recording

■ Features

- ❒ Messages stored on ChipCorder
- ❒ Manages up to **64** Voice messages with programmable sound quality and duration — varying from **3** minutes **48** seconds of **high** sound quality to **8** minutes **44** seconds of **low** sound quality
- ❒ Speaker for Message playback
- ❒ Telephone-dialler
- ❒ Answerphone
- ❒ Telephone access
- ❒ Listen-in and remote 2way Speaker system (Teleassistance)

☞ *At default the Voice board will record messages, if power to the Voice board fails, the recorded messages will be stored for at least 2 hours.*

■ Identification of Parts

No.	DESCRIPTION
110	*LED terminal : in the "remote Listen in" case, a LED with 470 Ohm resistor must be connected between the LED terminal and the **+** terminal.*
111	*Main Unit Voice board connector*
112	*Microphone*
113	*Local Microphone Jumper (**114**):* *= Local Microphone enabled (at default)* *= Local Microphone disabled*
114	*Speaker Connector*
115	*Terminal board (for Microphone board connection) (VOX-REM)*

■ Installation

Work carefully through the following steps (see Figure 2 and Figure 2 in the Installation Manual Vol.1).

1. Insert the Speaker into one part of the plastic holder.
2. Join the two parts then twist to lock in place.
3. Screw the Speaker onto the backplate.
4. Plug the Voice board into the connector **17**, secure it firmly in position by means of the screws (see Installation Manual Vol.1).
5. Plug the Speaker into the connector **114** on the Voice board.

■ Expanding Listen-in coverage

You can expand Listen-in coverage by connecting several Microphone-Speaker boards to the Voice board. This is especially useful for large premises, or in places where there is a high risk of sound muffling caused by walls or heavy machinery, etc.

☞ *In the text and diagrams in this section, the term "Voice Module" refers to **VOX-REM** Microphone-Loudspeaker board.*

The **VOX-REM** Microphone-Speaker board can be housed in custom made accessory boxes with wire entry knockouts (order code: **MINI-BOX**). The MINI-BOX can be wall mounted, or flush mounted to 503 outlet boxes

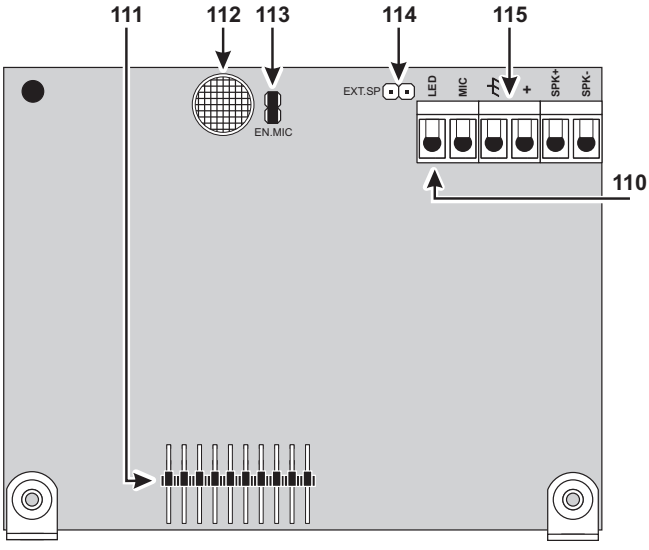


Figure 2 *Voice board components*

or similar. The installation instructions can be found in the MINI-BOX package.

☞ *The Microphone and Loudspeaker should be housed in separate boxes.*
"Voice Modules" should be mounted in places which allow easy access.
*DO NOT mount **VOX-REM** Microphone-Speaker boards until you have tested the placements for squealing.*

Connect the "Voice Modules" in parallel to the Voice board, as shown in Figure 3. The number of "Voice Modules", and the connection lengths can affect sound quality, therefore:

- DO NOT connect more than 4 "Voice Modules" to the Voice board.
- DO NOT use more than 50 metres of cable between each "Voice Modules" and the Voice board.

☞ *In order to improve message quality, use the Voice Board Microphone, and temporarily disconnect the other "Voice Modules".*

All "Voice Modules" will be interconnected during Teleassistance mode thus allowing users to communicate with one another.

■ Manual selection

Installation of several "Voice Modules" will allow the user to listen-in on the various parts of the premises at the same time, however, sound tracing will not be possible.

For sound tracing—complete the connections, as shown in Figure 4. The wiring diagram shows the Voice board and 4 "Voice Modules", and also:

- an M-IN/OUT Expanders programmed as Expander with 6 Outputs.
- an M-IN/OUT Expanders programmed as Expander with 6 Zones.
- two Omnia/4R Relay modules

The Control panel must be programmed as follows:

- All the Outputs of the M-IN/OUT Expander, programmed as Expander with 6 Outputs, as such must be **Reserved Outputs (manual)**, **Bistable**, **Normally Open**;
- All the Zones of the M-IN/OUT Expander, programmed as Expander with 6 Zones, must be **Instant**, **Repetitive**, **Normally Open** (DO NOT assign these to Partitions). The zones must be associated with a **Standby** Voice message that identifies the location of the zones (e.g. Kitchen, Sitting room, etc.).

Enable Remote Listen-in via Telephone

1. Press **3** (to access Outputs Management).

2. Press **1** (to select **ON**), then enter the number (3 digits) of the required "Voice Module" Output.

3. Press **1** (to start the Remote Listen-in session).

For example, if the M-IN/OUT Expander, programmed as Expander with 6 Outputs (see "M-IN/OUT Programmable Input/Output Expander" in the Installation Manual, Vol.1), is assigned address no.**01**, its hardware outputs **T1**, **T2**, **T3** and **T4** correspond respectively to software outputs nos. **7**, **8**, **9** and **10**. Therefore, to activate the first "Voice Module" (connected to hardware Output **T1** — software Output no. 7) enter: **310071** (**3** to access Outputs Management; **1** to select O; **007** to select Output no. 7; and **1** to start the Listen-in session).

4. To Listen-in on other parts of the premises during the same call: press # (to stop the active "Voice Module".); **3** (to access Outputs Management); **0** (to select OFF); enter the Identifier number of the active "Voice Module" Output (3 digits — **007** in the example), then repeat steps **1** through **3**.

■ Auto-select mode

The Auto-select mode will allow the Control panel to select the nearest "Voice Module" to the zone in alarm. Figure 4 shows the necessary wiring. The Outputs and Event-Actions must be programmed, as follows.

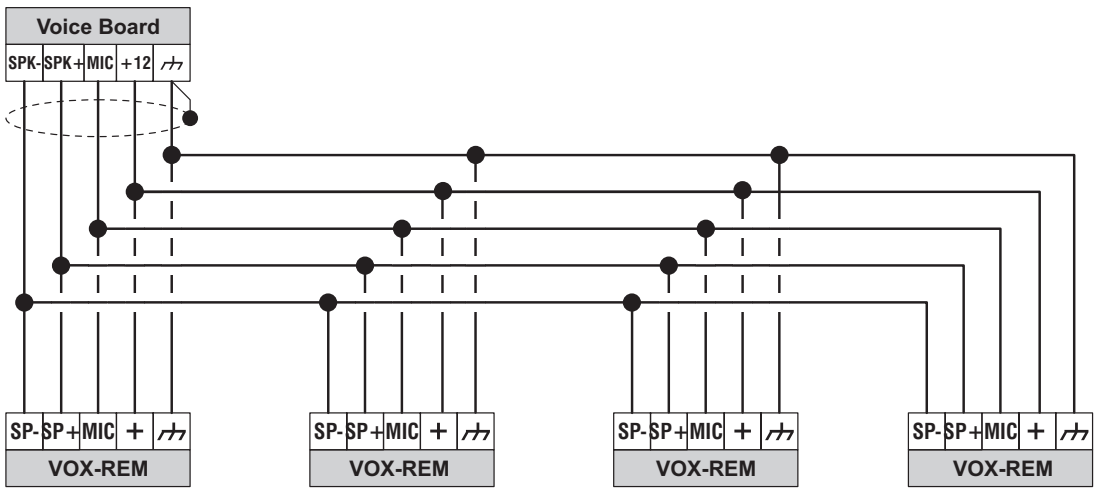


Figure 3 *Connecting 4 **VOX-REM** Microphone Board*

Software Outputs **7**, **8**, **9** and **10** (available for this application) must be: **Monostable** and **Normally open** (DO NOT program these Outputs as Reserved).
The **ON Time** of the Output determines how long the "Voice Module" will stay ON after activation, therefore, must be long enough to allow the User to Listen-in on the location. Each Output, connected as shown in the wiring diagram (Figure 4) will be able to control one "Voice Module".
Use the Partition and/or Control panel Events in the Event-Actions page to activate the Dialler and Telephone Communicator Outputs. In this way, the zone events will be available for "Voice Module" management. Program the zone events (relevant to the location concerned) to activate the Output that controls the respective "Voice Module". Repeat this procedure for the other Outputs, as required.
Upgrade FirmwareAuto-select mode will allow the User (during a dialler call) to activate Remote listen-in on the location that generated the Alarm.

■ **Manual and Auto-select mode**
Manual and Auto-select Listen-in can be integrated. This will allow the User to select (manually) specific locations during standby status.

Use 4 Outputs for Manual-select Listen-in mode, and 4 Outputs for Auto-select listen-in mode.

The Outputs must be connected in two's — one Manual and one Auto, as shown in Figure 4.

To ensure proper functioning of Auto-select mode, the manually controlled Outputs must be in standby status. Therefore, the Outputs must always be restored to Standby when a manually controlled listen-in session ends.

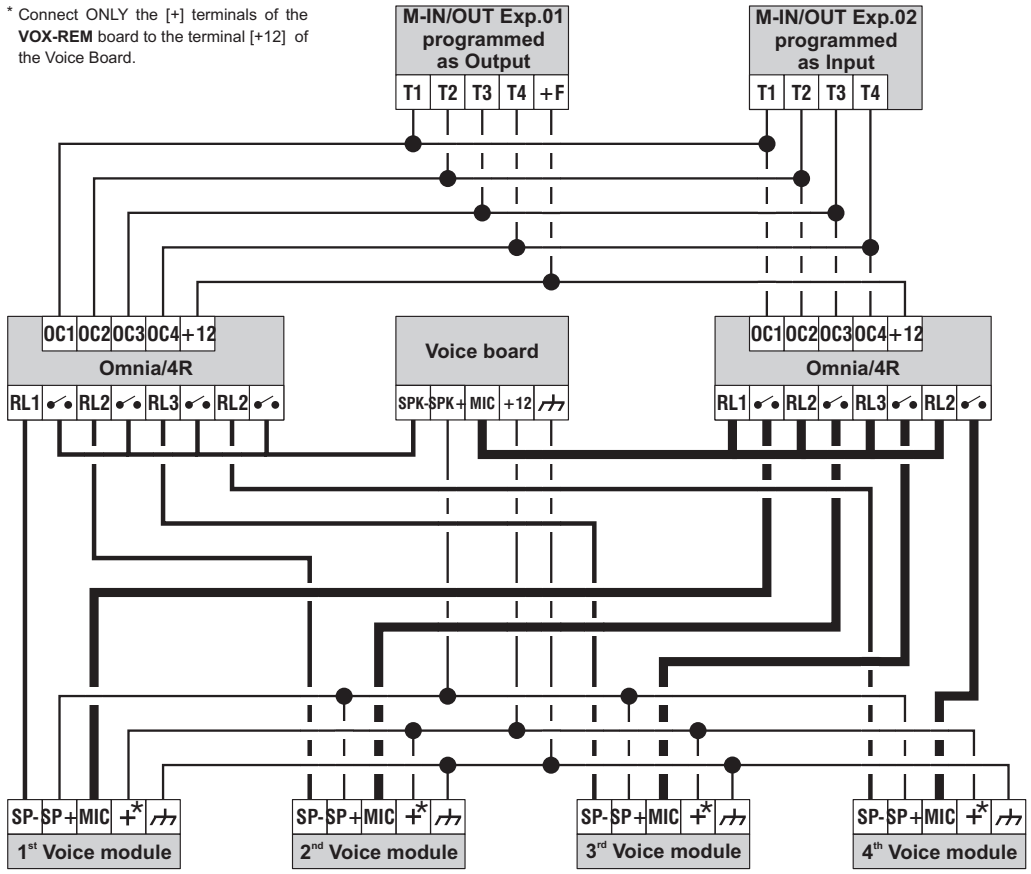


Figure 4 *Wiring for Manual-select Listen-in mode*

K3/PRT2 Printer Interface

⚠ **Disconnect the Mains and battery power before starting the installation procedure.**

The optional K3/PRT2 Printer Interface will allow you to connect the Control panel to a parallel printer for:
— **Real-time** printout of events (refer to “Accessories” under “Configuration” in the Programming” section);
— **Entire Log** printout (refer to “Print Log” under “Keypad Codes – User” in the Programming” section and/or “Event Log” under “Operating your system from a Keypad” in the USER MANUAL);
— **Specific events** printout (refer to “ Log — Events Setup” under “Programming” in the Installation Manual Vol.1).

■ Identification of Parts

The following Table describes the parts illustrated in Figure 5. The numbers in boldface in this section, refer to parts in Figure 5 (unless otherwise specified).

No.	DESCRIPTION
116	*Interface connector*
117	*Printer connector*

■ Connecting the Printer

If you prefer to chase the lead, use a plug-free cable (refer to Table 11 for the wiring specifications and see also Figure 6). Moulded plug leads (usually supplied with the printer) cannot be chased.

■ Installation instructions

Work carefully through the following steps (see Figure 5 and Figure 6).

1. Lay the cable between the printer and the Control panel.

2. Plug the Printer interface into the connector **15** on the Control panel PCB (see the paragraph “Identification of parts” in the Installation Manual, Vol.1) then, using the screws, secure it in place.

3. Connect the Printer lead to the connector **117** on the Printer Interface.

Interface connector: DB25 connector, male																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19
18 wire cable + shield: the shield must be soldered to the metal casing of both connectors																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	32	31	36	15÷17/19÷30
Printer side: Centronics connector, 36 pin, male																	

Table 11 *Wiring diagram of the cable between the parallel printer and the Printer Interface*

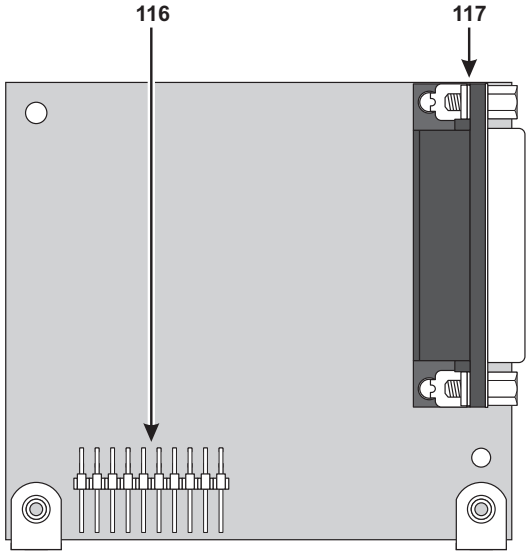


Figure 5 *Printer Interface components*

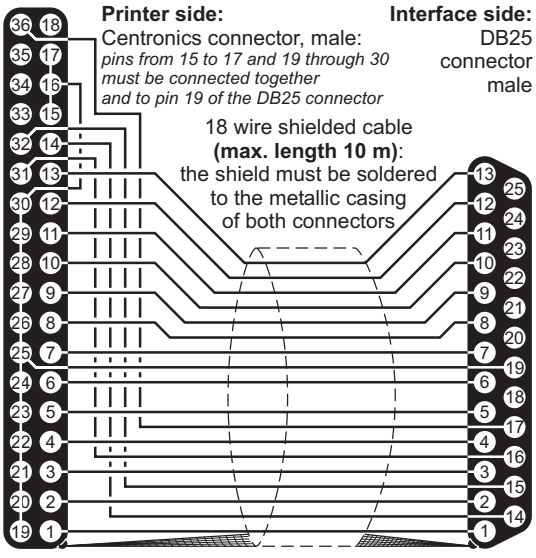


Figure 6 *Wiring diagram of parallel printer cable*

Wireless Receivers

The VRX32-433 and VRX32-868 Receiver (accessory item) will allow your system to manage up to 32 Wireless detectors (PIRs, Magnetic Contacts, Smoke detectors), and up to 16 Wireless keys (KeyFobs). VectorRX-8 Receiver manages up to 8 Wireless detectors (PIRs, Magnetic Contacts, Smoke detectors), and up to 8 Wireless keys (KeyFobs). Please read this section to get an overall view of the steps involved in installing the Receivers.
The term “Receiver or VectorRX Receiver” has been used in the parts where the functions and operating modes are common to all Receivers. However, in parts where the functions and operating modes differ, the respective Receiver has been specified.

■ Identification of Parts

The following Table describes the components of the Receiver (see Figure 8 - 7 -).The numbers in boldface in this section, refer to the descriptions in the Table and Figure.

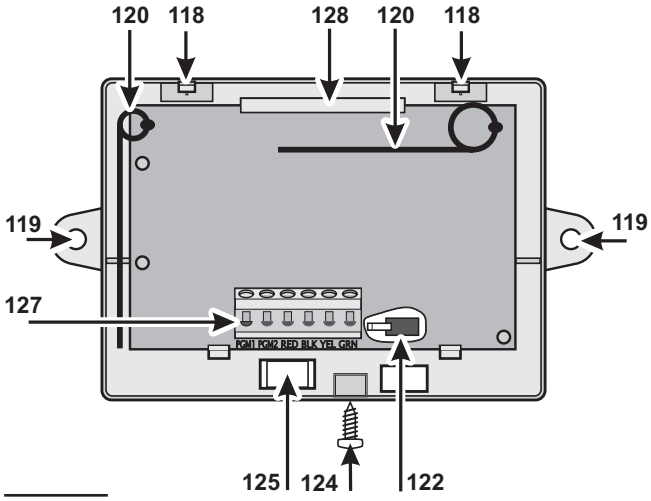


Figure 8 *VectorRX-8 Receiver components*

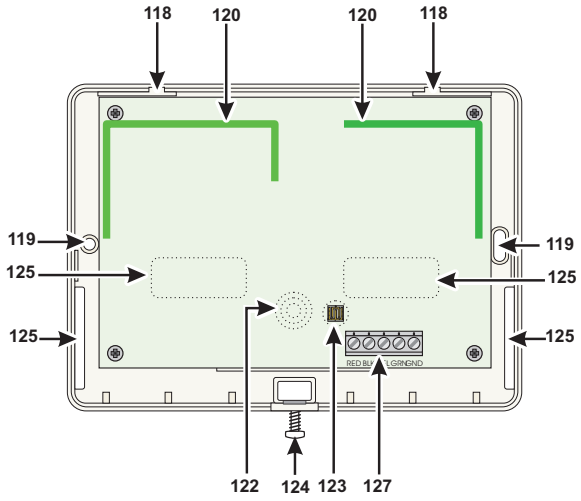


Figure 7 *VRX32-433 / VRX32-868 Receiver components*

No.	DESCRIPTION
118	*Spring catch slots (2)*
119	*Anchor screw locations (3 x ø 4.6 mm)*
120	*Antennas (2)*
121	*Microprocessors (2)*
122	*Seize microswitch*
123	*Tamper button*
124	*Screws (2)*
125	*Wire entry (10 x 6.4 mm)*
126	*Spring Catch*
127	*Terminal board*
128	*PCB clip*

■ Choosing a Mounting Location

☞ *Mount the Receiver and Wireless Devices after the placement tests.*

Choose a place that is:
- Dry
- Central to the proposed placement of all Wireless Devices
- As close to the ceiling as possible
- Far from sources of interference such as: electrical noise (computers, televisions, electric motors in appliances, and heating and air-conditioning units), and large metal objects (heating ducts and plumbing) which may shield the antennas.

Ensure that no electrical wires run over the Receiver antennas. When mounting in a basement, place the module as high and as close to the underside of the first floor as possible. The range of the Receiver will be reduced if the unit is mounted below ground level.

■ Mounting the Receiver

When choosing the mounting location ensure that the mounting surface is flat, as uneven surfaces may impair proper functioning of the Seize microswitch **124**.

Read the following instructions carefully before mounting the Receiver (refer to the Figure 8 - 7 -).

1. Loosen the screws **124** (it is not necessary to remove them).
2. Press down on the tab **118** to release the backplate from the frontplate.
3. Lift the frontplate upwards to a 90° angle, then pull the frontplate away from the backplate.
4. Pull the connection wires through the wire entry **125**.
5. Place the backplate in the proposed placement, mark the screw positions **119** then drill the screw holes.

⚠ **Be careful to avoid conduits and plumbing when drilling.**

6. Place the backplate in the proposed placement, pull the wires through the wire entry **125**, then secure the backplate to the wall (use anchor screws).

7. Complete the connections on the terminal board **127** (refer to “Connecting the Receiver”).

8. Push the frontplate spring catches into the slots on the backplate then push the bottom of the frontplate into place.

9. Fasten the screws **124**.

■ Connecting the Receiver

Connect the Receiver terminal **127** to the Control panel terminal (as shown in Figure 9).

☞ *Use Shielded cable for the connection: connect one end of the shield to terminal **BLK** on the Interface, and leave the other end free. Do not use more than 50 metres total wire length.*

■ Technical Specifications

The following table contains the technical Specifications of the Vector Receivers.

Voltage	**13.8 V⎓**
Current draw	**50 mA**
VectorRX-8 and VRX32-433 Frequency	**433 MHz**
VRX32-433 Frequency	**868 MHz**
Dimensions (W x H x D)	**146 x 290 x 28 mm**
VectorRX-8 Dimensions	**135 x 79 x 26**
VRX32-433 and 868 Dimensions	**145 x 105 x 25**
VRX32-433 and VRX32-868 Weight	**152 g**
VectorRX-8 Weight	**90 g**

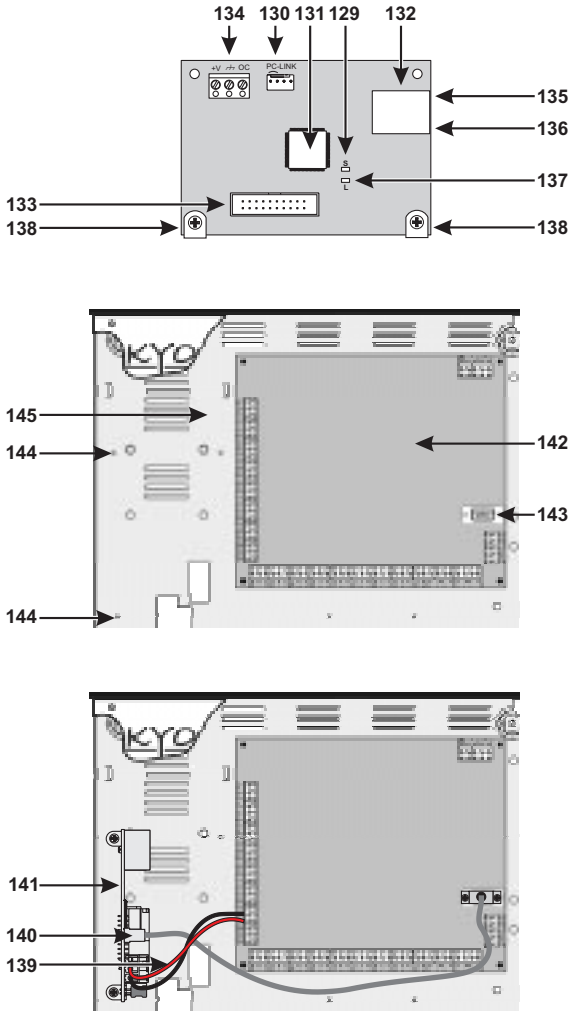


Figure 10 *K-NET components*

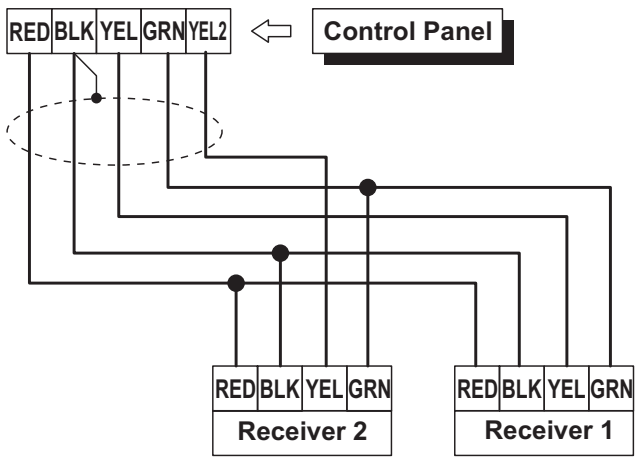


Figure 9 *Connecting the receivers to the Control panel*

K-NET MODULE

Installing the K-NET Module (Refer to K-NET manual), will allow you to connect several Control panels to the LAN and control them from a remote location .

☞ *The K-NET Module can be enrolled via Keypad only, and once enrolled ("Present"), the Control panel will no longer be able to communicate via computer.*

■ Identification of parts

The following table describes the components shown in Figure 10. The numbers in boldface used in this section refer to these components.

No.	DESCRIPTION
129	*Indicator light (S) for connection speed: off = 10 Mbps; on = 100 Mbps*
130	*Connector for the Control panel link.*
131	*Microprocessor*
132	*LAN link*
133	*Reserved connector*
134	*Terminal board*
135	*YELLOW indicator light for LAN traffic*
136	*GREEN indicator light for LAN present*
137	*Indicator light (**L**) for IP Module status*
138	*Fixing brackets*
139	*IP Module power supply cables*
140	*PC-Link cable*
141	*IP Module*
142	*Control unit motherboard*
143	*RS-232 serial port*
144	*IP Module fixing holes*
145	*Control unit base*

■ Mounting the K-NET Module

The K-NET Module should be installed in the control unit base, as illustrated in Figure 11 and in accordance with the following instructions.

⚠ **Before installing the IP Module, cut the control unit off from its power supply (it should be disconnected from the electricity mains and the batteries). If this is not possible, do not connect the IP Module power supply until the very end of the process: connect terminal [M] first, followed by terminal [+V].**

1. Open the control unit as described in the corresponding set of instructions.
2. Fix the Module to the base of the control unit using the screws supplied, making sure it is correctly aligned with the screw anchor holes (**144**).
3. Connect the Module connector (**130**) to the control unit serial port (**143**) using the PC-Link cable supplied (**140**).
4. Connect connector (**132**) to the LAN using an Ethernet cable.

☞ *Use a category 5 (or better) shielded Ethernet cable (STP or FTP).*

5. Where present, connect the [OC] terminal to terminal block (**134**).
6. Connect terminals [+V] and [M] on the terminal block (**134**) to the corresponding terminals [+B4] and [M] on the control unit motherboard (**142**).
7. Reconnect the control unit to the power supply.

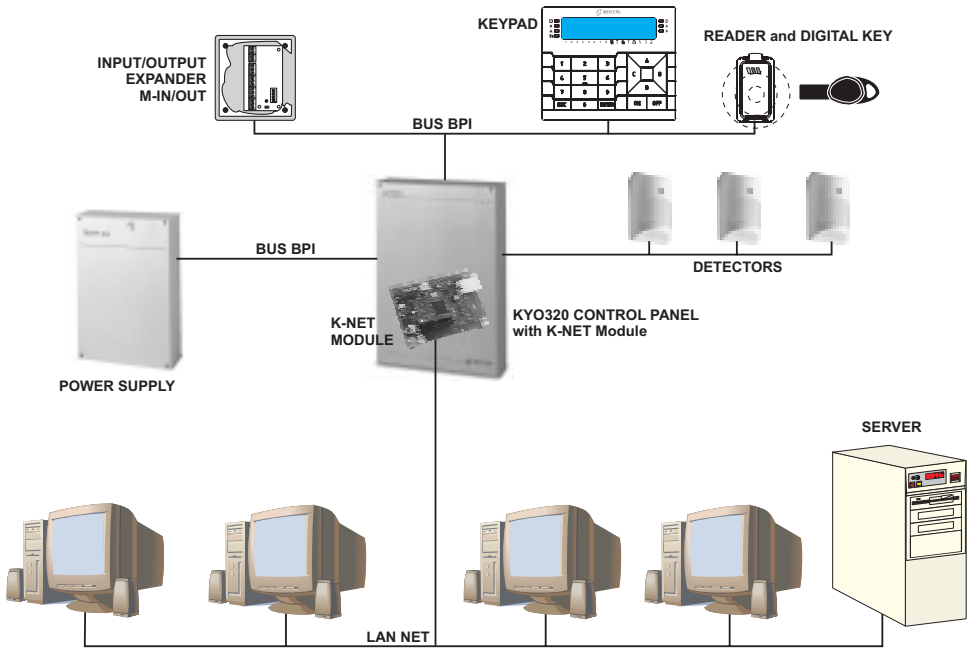


Figure 11 *Example of a K-NET configuration*

8. Program the K-NET Module as described in the "Programming" section of the K-NET manual.

■ Viewing the IP Address

If the DHCP is configured, the current IP address of the KNET circuit board may be checked in 2 ways:

- using a keypad connected to the KYO320 control unit with the network P.C.B. present and configured (see procedure in the Initial programming section of the K-NET manual), after entering the Installer menu, press the A or B buttons to display the SERIAL PORTS option, followed by the ENTER button. View the IP address and return to the Installer menu by pressing the ESC button. (see also the Kyo320 Installation manual Vol.2 – Keypad procedures);

- for advanced users only: from the control screen of a Windows PC connected to the same network, use the command “PING KNET-xxyyzz”, where xxyyzz are the last 6 digits of the MAC-ADDRESS printed on the KNET label.

A Windows PC may be configured so that it does NOT allow this type of command, meaning this type of procedure will not be available.

■ Technical Specifications

The following table contains the technical specifications of the K-NET Module.

Voltage	**9.6 ÷ 27.6 V⎓**
Current draw	**250 mA**
Standby current	**50 mA**
Operating Temperature	**-5 ÷ +40 ° C**
Dimensions (W x H)	**95 x 65 mm**

Reset default

To reset the factory default programming (see the Installation Manual Vol.1) :

1. Remove all power from the Control panel (Mains and battery).

2. Remove the jumper **21** (M).

3. Wait at least 20 seconds.

4. Replace the jumper **21** (M).

5. Reset the power supply to the Control Panel (see “Connecting a Power Supply” in the “INSTALLATION” chapter in the Installation Manual, Vol.1).

⚠ **Jumper 21 (M) must be disconnected for at least 20 seconds in order to ensure full reset of the factory default programming, and to avoid problems that may occur when the power supply is restored.**

Installer code locked If the **Lock Installer code** option is enabled, the Installer PIN will not be able to reset to factory default (refer to Lock Installer code in the Options section in the Installation Manual Vol.1).

Reporting Formats

This paragraph describes the structures of the main reporting formats supported by the system.

■ TELIM

The TELIM protocol transmits as follows:

- **User Code** (4 digits — 0 through 9);
- **Event Code**: **41** in the event of Alarm or Tamper on the first 16 zones of the Control panel, **0** in all other cases;
- 2 byte (16 bit) representing the status of the first 16 zones — **0** Standby; **1** = Alarm or Tamper.

■ Contact ID

Contact ID transmits as follows:

- **User Code** (4 hexadecimal digits — 0 through F);
- **Qualifier: 1** = new event or Disarming operation; **3** event restore event or Arming operation
- **Class Code** (**CL.** column): identifies the type of event (Alarm, Trouble, Fire, etc.);
- **Event Code** (**CODE** column): identifies the event (Event Codes can be changed, refer to “Actions” under “Digital Communicator” in the “PROGRAMMING” section in the Installation Manual Vol.1);
- **Group Number** (**GROUP** column), where possible, identifies the Partition of the “object” which generated the event;
- **Zone Number** (**ZONE** column), where possible, identifies the “object” (Zone, Code, Key, etc.) which generated the event.

■ SIA/SIA over K-NET

SIA/SIA over K-NET is a FSK (Frequency Shift Keying) format, that transmits alternatively in two slightly different

EVENT	CONTACT ID				SIA		
	CL.	CODE	GROUP	ZONE	TYPE	1st	2nd
Alarm on zone	1	30	00	zone no.	BA/BR	0000	zone no.
Tamper on zone	1	37	00	zone no.	TA/TR	0000	zone no.
Fire alarm on partition	1	10	part. no.	000	FA/FR	part. no.	000
24h alarm on partition	1	33	part. no.	000	BA/BR	part. no.	000

Table 12 *Structure of the main Reporting formats supported by the System (continued ...)*

EVENT	CONTACT ID				SIA		
	CL.	CODE	GROUP	ZONE	TYPE	1st	2nd
Burglar alarm on partition	1	30	part. no.	000	BA/BR	part. no.	000
Generic alarm on partition	1	30	part. no.	000	BA/BR	part. no.	000
Tamper alarm on partition	1	37	part. no.	000	TA/TR	part. no.	000
Generic+Tamper alarm on partition	1	37	part. no.	000	TA/TR	part. no.	000
Away alarm on partition	1	30	part. no.	000	BA/BR	part. no.	000
Stay alarm on partition	1	30	part. no.	000	BA/BR	part. no.	000
Fire alarm on panel	1	10	00	000	FA/FR	0000	000
24h alarm on panel	1	33	00	000	BA/BR	0000	000
Burglar alarm on panel	1	30	00	000	BA/BR	0000	000
Generic alarm on panel	1	30	00	000	BA/BR	0000	000
Tamper alarm on panel	1	37	00	000	TA/TR	0000	000
Generic+Tamper alarm on panel	1	37	00	000	TA/TR	0000	000
Tamper on Main unit	1	37	00	000	TA/TR	0000	000
Stop-alarms jumper	3	00	00	000	RO/RC	0000	000
Balanced tamper	1	37	00	000	TA/TR	0000	000
Tamper on supervised output	3	24	00	000	YA/YH	0000	000
Tamper BPI readers	3	41	00	000	ET/ER	0000	000
Tamper BPI input expanders	3	41	00	000	ET/ER	0000	000
Tamper on keypads	3	41	00	000	ET/ER	0000	000
Tamper output expanders	3	41	00	000	ET/ER	0000	000
Tamper power stations	3	41	00	000	ET/ER	0000	000
Tamper wireless device	3	41	00	000	ET/ER	0000	000
Warning readers	3	33	00	000	ET/ER	0000	000
Warning BPI input expander	3	33	00	000	ET/ER	0000	000
Warning keypads	3	33	00	000	ET/ER	0000	000
Warning output expanders	3	33	00	000	ET/ER	0000	000
Warning power stations	3	33	00	000	ET/ER	0000	000
Warning wireless device	3	33	00	000	ET/ER	0000	000
False key	4	21	00	000	DD/DR	0000	000
Warning fuse +F	3	00	00	000	YP/YQ	0000	000
Warning fuse +F1	3	00	00	000	YP/YQ	0000	000
Warning fuse +B1	3	00	00	000	YP/YQ	0000	000
Warning fuse +B2	3	00	00	000	YP/YQ	0000	000
Warning fuse +B3	3	00	00	000	YP/YQ	0000	000
Warning fuse +B4	3	00	00	000	YP/YQ	0000	000
Warning fuse +B5	3	00	00	000	YP/YQ	0000	000
Warning fuse BPI1	3	00	00	000	YP/YQ	0000	000
Warning fuse BPI2	3	00	00	000	YP/YQ	0000	000
Warning fuse KEYBUS	3	00	00	000	YP/YQ	0000	000
Warning mains failure	3	01	00	000	AT/AR	0000	000
Warning low battery	3	02	00	000	YT/YR	0000	000
Warning power trouble	3	00	00	000	YM/YR	0000	000
Warning mains failure on Power station	3	01	00	000	AT/AR	0000	000

Table 12 *Structure of the main Reporting formats supported by the System (continued ...)*

EVENT	CONTACT ID				SIA		
	CL.	CODE	GROUP	ZONE	TYPE	1st	2nd
Warning low battery on Power station	3	02	00	000	YT/YR	0000	000
Warning power trouble on Power station	3	03	00	000	YM/YR	0000	000
Battery not connected on Power station	3	00	00	000	YP/YQ	0000	000
Battery charger trouble on Power station	3	00	00	000	YP/YQ	0000	000
Switching not connected on Power station	3	00	00	000	YP/YQ	0000	000
Short circuit output ½/3 on Power station	3	00	00	000	YP/YQ	0000	000
Battery low memory	3	07	00	000	YT/YR	0000	000
Warning low battery on wireless device	3	38	00	000	XT/XR	0000	000
Memory tamper BPI device	3	41	00	000	ET/ER	0000	000
Memory balanced tamper	1	37	00	000	TA/TR	0000	000
Memory tamper on main unit	1	37	00	000	TA/TR	0000	000
Memory false key	4	21	00	000	DD/DR	0000	000
Memory tamper supervised output	3	21	00	000	YA/YR	0000	000
Lost wireless zone	3	33	00	000	ET/ER	0000	000
Warning generic	3	00	00	000	BT/BJ	0000	000
Installer maintenance	6	00	00	000	QA/QH	0000	000
Central station maintenance	6	00	00	000	QA/QH	0000	000
Standard time/Summer time changed	6	25	00	000	JD/UX	0000	000
Not Ready-to-arm partition	3	00	part. no.	000	NF/NF	part. no.	000
Extended not Ready-to-Arm partition	3	00	part. no.	000	NF/NF	part. no.	000
Partial arming partition	4	41	part. no.	[5]	NL/OP	part. no.	000
Global arming partition	4	00	part. no.	[5]	CL/OP	part. no.	000
Disarming partition	4	00	part. no.	[5]	OP/CL	part. no.	000
Exit time on partition	6	00	part. no.	000	UX/UX	part. no.	000
Entry time on partition	6	00	part. no.	000	UX/UX	part. no.	000
Autoarming warning partition	6	00	part. no.	000	UX/UX	part. no.	000
Memory alarm on partition	1	30	part. no.	000	BA/BR	part. no.	000
Memory tamper on partition	1	37	part. no.	000	TA/TR	part. no.	000
Valid key	4	22	00	key no.	JP/UX	0000	key no.
Key present on reader	4	22	00	reader no.	JP/UX	0000	reader no.
Valid key on partition	4	22	00	partition no.	JP/UX	0000	partition no.
Alarm stop on partition	6	00	part. no.	000	BC/UX	part. no.	000
Alarm stop on panel	6	00	00	000	BC/UX	0000	000
Bypass zone	5	70	00	zone no.	BB/BU	0000	zone no.
Telephone line trouble	3	51	00	000	LT/LR	0000	000
Error printer	3	36	00	000	VT/VR	0000	000
Call queue full	6	24	00	000	JL/UX	0000	000
Timer	6	00	00	000	UX/UX	0000	000

Table 12 *Structure of the main Reporting formats supported by the System (continued ...)*

5 *Transmits the Identification Number, reduced by 1 unit, of the User Code which produced the event (from 000 to 194) or the Identification Number, increased by 199 units, of the Digital Key which produced the event (from 200 to 699). For example, if the event was produced by User Code no.1, 000 (1-1) is transmitted; if the event was produced by Digital Key no.1, 200 (1 + 199) is transmitted.*

EVENT	CONTACT ID				SIA		
	CL.	CODE	GROUP	ZONE	TYPE	1st	2nd
Real time of zone	6	00	00	zone no.	UA/UH	0000	zone no.
Test	6	02	00	000	RP/UX	0000	000
Reset on partition	6	00	part. no.	000	BC/UX	part. no.	000
Reset on panel	6	00	00	000	BC/UX	0000	000
Super key	6	00	00	000	UX/UX	0000	000
Key F on KeyFob	6	00	00	000	UX/UX	0000	000
Key A on KeyFob	6	00	00	000	UX/UX	0000	000
Key P on KeyFob	6	00	00	000	UX/UX	0000	000
Chime on partition	6	00	part. no.	000	UX/UX	part. no.	000
Negligence on partition	4	04	part. no.	000	CD/UX	part. no.	000
Delinquency on partition	6	00	part. no.	000	BT/BU	part. no.	000
Block keypad	4	21	00	000	JA/UX	0000	000
Recognized user code	4	22	00	code no.	JP/UX	0000	code no.
Recognized user code on Keypad	4	22	00	keypad no.	JP/UX	0000	keypad no.
Recognized user code on Partition	4	22	00	partition no.	JP/UX	0000	partition no.
Invalid code	4	21	00	000	DD/DR	0000	000
Recognized installer code	6	27	00	000	LB/LX	0000	000
Second dialler on	3	50	00	000	UX/UX	0000	000
Kissoff recognized	3	50	00	000	UX/UX	0000	000
Start telephone call	3	50	00	000	UX/UX	0000	000
Teleservice requested	6	01	00	000	UX/UX	0000	000
Start Teleservice	6	01	00	000	RB/RS	0000	000
Dialler action OK	3	50	00	000	UX/UX	0000	000
Action on digital communicator OK	3	50	00	000	UX/UX	0000	000
Digital communicator action OK	3	50	00	000	UX/UX	0000	000
Teleservice action OK	3	50	00	000	UX/UX	0000	000
Dialler action failed	3	54	00	000	UX/UX	0000	000
Action on digital communicator failed	3	54	00	000	UX/UX	0000	000
Digital communicator action failed	3	54	00	000	UX/UX	0000	000
Teleservice action failed	3	54	00	000	UX/UX	0000	000
User event	6	00	00	000	UX/UX	0000	000

Table 12 *Structure of the main Reporting formats supported by the System*

frequencies. The frequency shift is usually 170 Hertz, and the two frequencies are associated with 0 and 1 of the binary digit which transmits the following data:

- **User Code** (4 digits — 0 through 9)
- **Function Code** (1 digit; N=new event, O=restore event)
- **Date** (month-day-year)
- **Time** (hour-minutes-seconds)
- **Event Type** (refer to the **TYPE** column in Table 12)
- **Event Agent** (refer to the **1st** and **2nd** columns in Table 12).

DbManager

DbManager (in Bentel security Suite) is an application developed to copy safely customer's data from a source to a destination. For example, data can be copied on a USB Flash Disk and can be used on a laptop. Besides the DbManager can recover corrupted database data.

DbManager main window contains **File**, **Acces Levels**, **Language** and **Help** menus, all described in the following paragraphs.

File Menu

Data transfer : Select **Data transfer** to copy customer's data (see par. "Data transfer").

Tools: Select **Tools** to access data recover utilities.

Exit: Select **Exit** to terminate the program.

■ **Data Transfer**
Data Transfer from the File menu opens the Data Transfer window described below (see also figure 13).

Origin Select the disk and folder which contains the customer accounts concerned.

☞ *The Bentel security Suite application will save customer account data to the \DATA installation folder of the suite (Bentel).*

Customers Select the customer accounts concerned from the Customer account list. To select/deselect ALL customer accounts click on Selection.

Destination Select the destination disk and folder.

☞ *The customer accounts must be saved to the \DATA installaton folder of the BSS Software suite (Bentel).*

Data to transfer Select the data to export.

Show warnings Click on Show warnings if you want information regarding the risk of exporting customer accounts with duplicated Codes or Names from the Origin folder to the Destination folder.
In the event of a duplicated Name but different Code a window as per figure **14a** will open with the following options.

- Keep - the data of the customer account from the Origin folder will overwrite the data of the customer account with the duplicated Name in the Destination folder.
- Create (at default) - the data will be saved as a new customer account with the same Name but different Code as the customer account in the Origin folder.
- Do Not export - the data will not be saved.

In the event of a duplicated Code but different Name a window as per figure **14b** will open with the following options.

- Keep - the data of the customer account from the Origin folder will overwrite the data of the customer account with the duplicated Code in the Destination folder.
- Create (at default) - the data will be saved as a new customer account with the same Name but different Code as the customer account in the Origin folder.
- Do Not export - the data will not be saved.

Figure 12 *DBmanager main window*

☞ *If you disable the Show Warning option, the application will enable the Create option automatically.*

Panel types Check in this box panel types involved in the data transfer. The **Customers** window will show all the customers using the selected panel type.

Print Select **Print** to print down a list showing all customers shown in the **Customers** window.

■ **Tools**
Tools command opens **Tools** window, as shown below.

Data path Select the source drive and folder containing the database to be restructured/reindexed.

Update structure Use **Update structure** to regenerate the internal phisical structure of the database. If during normal use, one of BSS softwares shows a "File not found" or "Table does not exist" error, update your database's structure.

Reindex Use **Reindex** to generate all the database indexes. If during normal use one of BSS softwares shows a "Corrupt table index" or "Index for field does not exist" error, perform a reindex on your database.

Figure 13 *Data transfer window*

Close Closes the Tool window.

☞ *Almost all database errors are caused by a phisical damage of its files. Even if Bentel utilities can recover corrupted database files, if you're having frequent database errors, there could be some hardware problem on your PC*

Access Levels Menu

Access Levels menu provides the possibility to manage users data for all Bentel Security Suite softwares.

Users List Shows the users list wondow. If you want to delete or modify a user, username and password will be requested.

New User Inserts a new user in the database. Select name and password, and then choose user's rights.

Language menu shows the **Language selection** window. Choose a new language and click OK.

Help Menu

Help shows this file for a fast reference.

■ Copying Customer accounts

To copy customer accounts

1. Select Export data from the File menu.
2. Select the disk and folder of the customer accounts concerned from the Origin box.
3. Select the required customer accounts from the Customers box.
4. Select the destination disk and folder from the Destination box.
5. Select Log and/or Show warnings.
6. Select Execute - if there are no customer accounts in the Destination folder, the following warning will be shown.

7. Select Yes to copy

A)

B)

Figure 14 *Choose action Windows*

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