KYO

Unit

KYO

KYO

BENTEL
SECURITY

INSTALLATION MANUAL

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This control unit supports the following keypads:
PREMIUM, CLASSIKA, MIA series, ALISON series, OMNIA/TAST-R, NC2/TAST, ICON/KP
To keep things simple, this instruction manual refers only to the PREMIUM and CLASSIKA keypads.
If you require further information relating to the other types of keypad supported by this control unit,
the previous version of this instruction manual may be downloaded
from the web address www.bentelsecurity.com

KYO 4 M – KYO 8 M – KYO 8W M – KYO 32 M – KYO 4 P – KYO 8 P – KYO 8W P – KYO 32 P
KYO 8GWP-SW1 – KYO 8GWP-SW2 – KYO 8GWL-SW1 – KYO 8GWL-SW2
KYO 8G P-SW1 – KYO 8G P-SW2 – KYO 32G P-SW1 – KYO 32G P-SW2
KYO 8G L-SW1 – KYO 8G L-SW2 – KYO 32G L-SW1 – KYO 32G L-SW2
KYO16D
For all the Control Panels the performance level is II (unless otherwise specified).
The KYO16D performance level is I

Hereby, Bentel Security, declares the above mentioned Control Panels to be in compliance with the
essential requirements and other relevant provisions of 1999/5/EC Directive.

The complete R&TTE Declaration of Conformity for each Panel can be found at
www.bentelsecurity.com/dc.html.

These Control Panels comply with **CEI 79-2 2ᵃ ed. 1993**.

Installation of these systems 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 above mentioned Control panels have been designed and made
to the highest standards of quality and performance.
The manufacturer recommends that the installed system should be completely tested at least once a month.
BENTEL SECURITY Srl shall not assume the responsibility
for damage arising from improper application or use.
The above mentioned Control panels have no user-friendly components, therefore,

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IMPORTANT: The following information is for disassembled Control Panels ONLY.

Ensure the Manual you are using corresponds to, or is a later release than the one shown on
the "**RELEASE ISSUES**" label inside the package (see below).

```
RELEASE ISSUES
    OK32  1.01        ◄──────  Firmware Release
Installation Manual 1.1 ┐
User Manual         1.1 │
Keypad Prog. Man.1.1    ├──────  Manual Release
Main Unit Manual   1.1 ┘
Kyo Unit Software 5.10  ◄──────  Software Release
```

DO NOT attempt to assemble or install the Control Panel until you have the respective Re-
lease.

The **Manual Release Number** can be found at the bottom of the last page, between the Code
and Date (see below).

```
                 Manual
                 Release
                 Number
                   ▼
ISTPTBLEUNKYO 1.2 190503 P70
   Code            Date
```

TABLE OF CONTENTS

SECTION 1 - IDENTIFICATION OF PARTS

The numbers in boldface (in square brackets) refer to the hardware parts described in this Manual, and other Manuals relevant to this product.
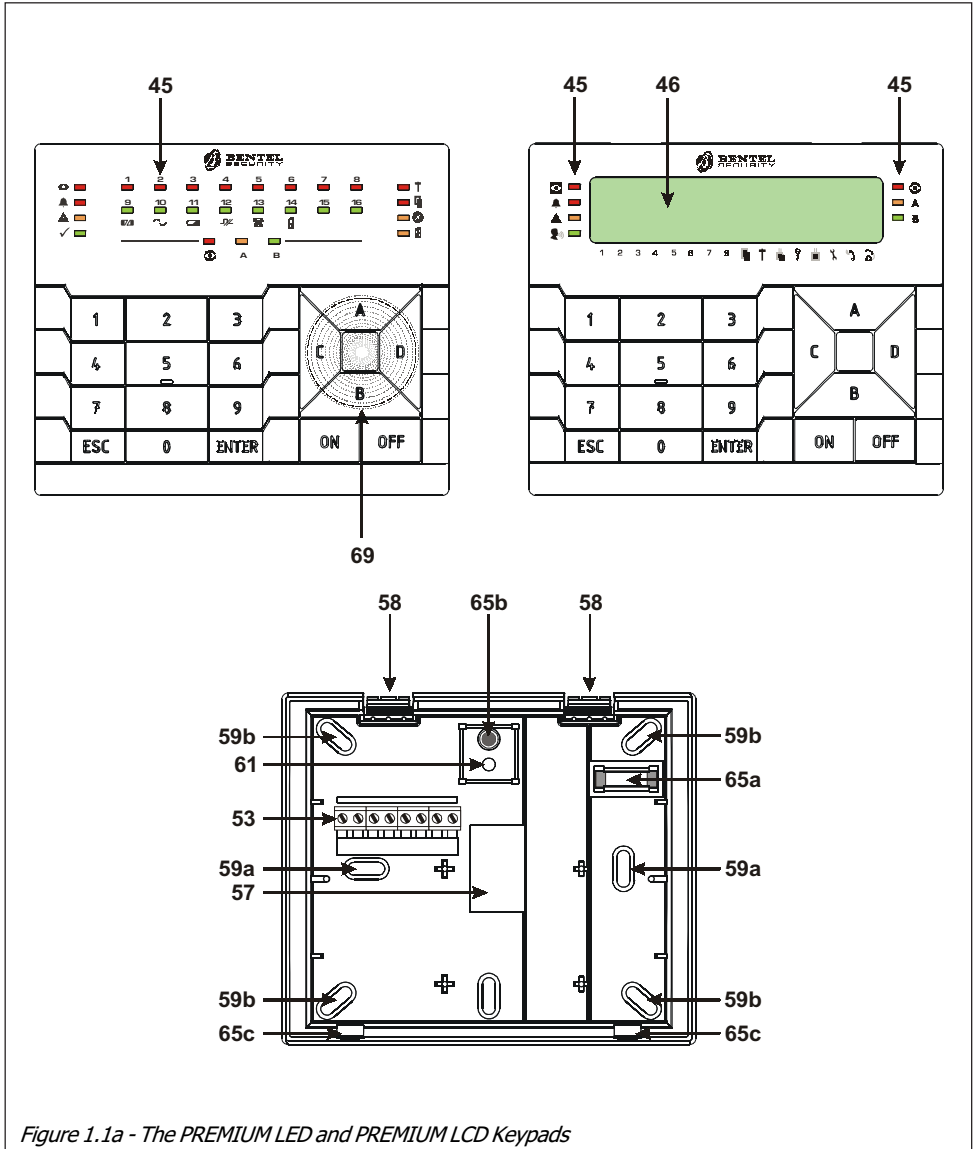
The PREMIUM LED and PREMIUM LCD Keypads

Figure 1.1a - The PREMIUM LED and PREMIUM LCD Keypads
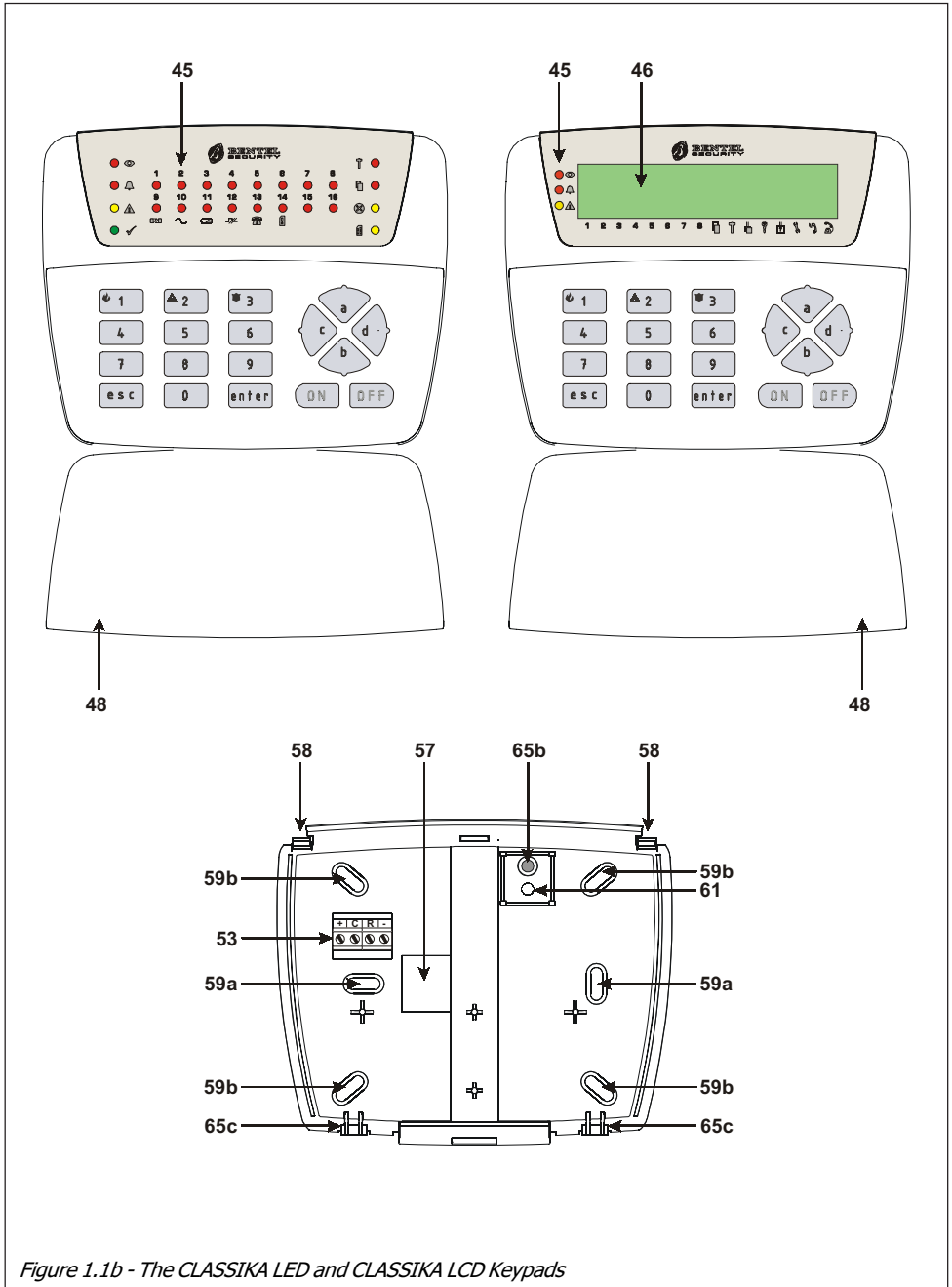
The CLASSIKA LED and CLASSIKA LCD Keypads

Figure 1.1b - The CLASSIKA LED and CLASSIKA LCD Keypads

Table 1.1 - Identification of Parts	
Part	**Description**
45	LED indicators (refer to the User Manual for details)
46	Display
47	Frontplate screws
48	Down flip
49	BPI Level Jumper: ⊟⊟ ⇨ 5 V (at default); ⊡⊡ ⇨ 12 V
50	Snatch switch connector
51	DIP Switch strip
52	Tamper switch (protects against forced opening). On the VRX32-433 radio receiver the tamper contact is formed by the tracks of the printed circuit. Thanks to a conductive pin on the cover, this contact is closed only when the cover is completely closed.
53	Terminal board
54	BPI Level Jumper: 12V⊙⊟⊟5V ⇨ 5 V (at default); 12V⊟⊟⊙5V ⇨ 12 V
55	Microprocessor
56	Snatch switch. Accessory item for PROXI-READER (Order Code: MINI-ASNC) On the VRX32-433 radio receiver the anti-snatch contact is formed by the tracks of the printed circuit. Thanks to a conductive pin on the back, this contact is closed only when the receiver is properly fixed to the wall.
57	Cable entry
58	PCB clip
59a	Anchor screw holes for mounting on Mod. '503' outlet box or similar
59b	Anchor screw holes for mounting on '10x10' outlet box or similar
60	Buzzer
61	Snatch bracket
62	PCB spacers
63	PCB supports
64	Catch
65	Buzzer connector
65a	Level Vial
65b	Conductive pin for closing of anti-tamper contact
65c	Clips for fixing of frontplate

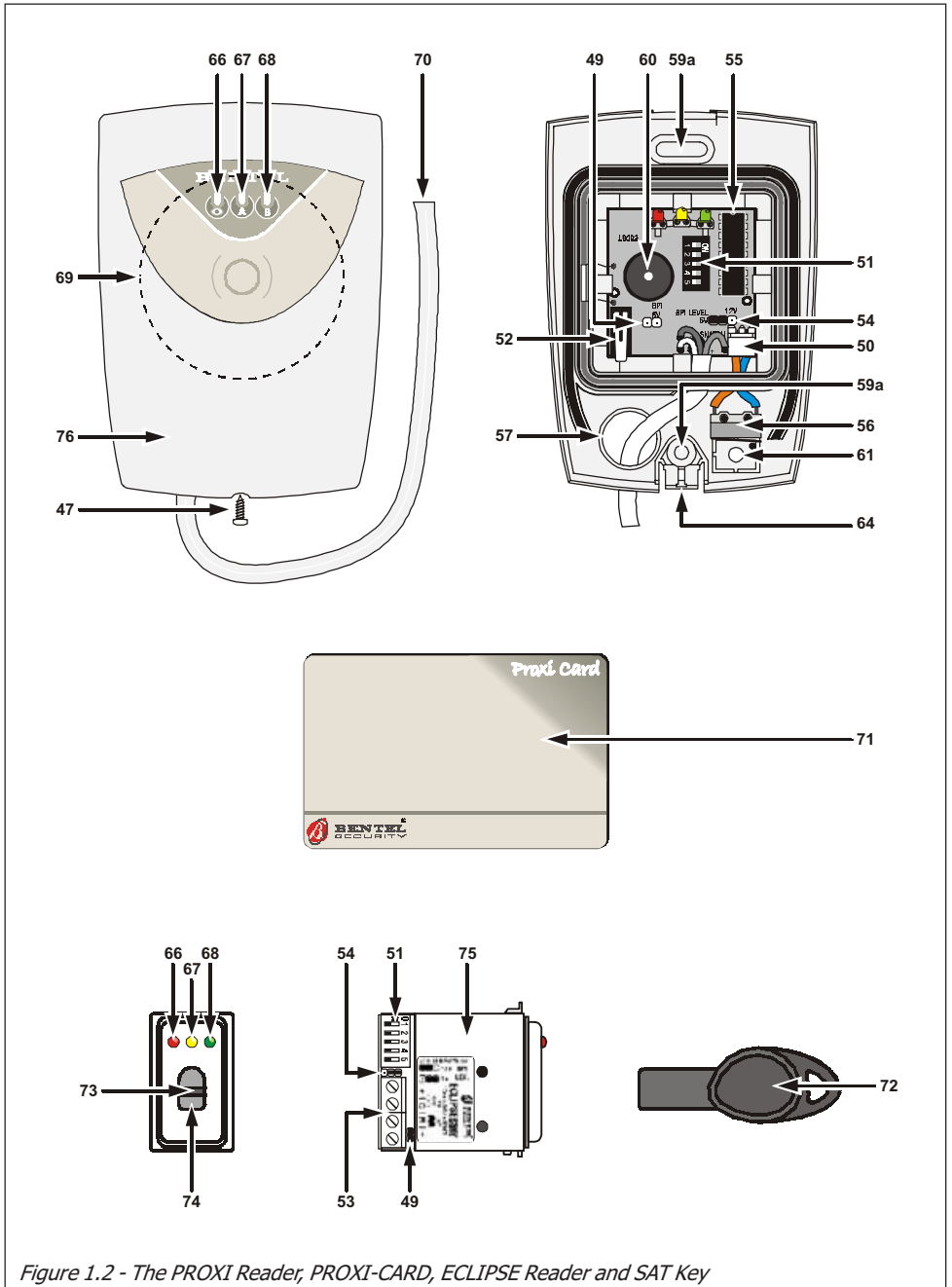# ECLIPSE Reader, PROXI Reader, SAT Key, PROXI-CARD

Figure 1.2 - The PROXI Reader, PROXI-CARD, ECLIPSE Reader and SAT Key

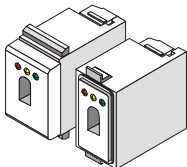| Table 1.2 - Identification of Parts	
Part	**Description**
66	Red LED - All-Reader-Partitions Arming Mode
67	Amber LED - **A** Arming Mode
68	Green LED - **B** Arming Mode
69	Sensitive field
70	Wires to be connected to the Control panel BPI Bus: **Red** ⇨ to terminal '+' (Positive) **White** ⇨ to terminal 'C' **Blue** ⇨ to terminal 'R' **Black** ⇨ to terminal '–' (Negative)
71	PROXI-CARD
72	SAT Key
73	Control switch
74	Key slot
75	ECLIPSE Reader MAGIC version (refer to Table 1.3)
76	PROXI frontplate

Table 1.3 - ECLIPSE Reader models		
	TICINO Magic	GEWISS
	TICINO Living	GEWISS Playbus
	TICINO International	GEWISS Noir
	TICINO Ready Magic	VIMAR Light
	AVE	VIMAR Idea
	AVE Noir	

| Table 1.4 - Identification of Parts	
Part	**Description**
77	**Tamper Contact -** The tamper contact is formed by the tracks of the printed circuit. Thanks to a conductive pin on the cover, this contact is closed only when the cover is completely closed
78	Tamper and Snatch bypass jumper: ⊙⊙ ⇨ Microswitches bypassed (at default); ⊜⊜ ⇨ Microswitches unbypassed
79	Frontplate screws (4)
80	Expander housing
81	Expander screws (2)
82	**Anti-snatch Contact** - The anti-snatch contact is formed by the tracks of the printed circuit. Thanks to a conductive pin on the back, this contact is closed only when the receiver is properly fixed to the wall
83	Anchor screw holes (2) for flush mounting on Mod. 503 outlet boxes or similar
84	Anchor screw holes (2) for surface mounting
85	Cable entry
86	Catch slots (2)
87	Antennas (2)
88	Microswitches for programming and for setting the address.
89-90	Conductive pins for closing the Tamper contact [**77**] and the Anti-snatch contact [**82**].

M-IN/OUT Expander
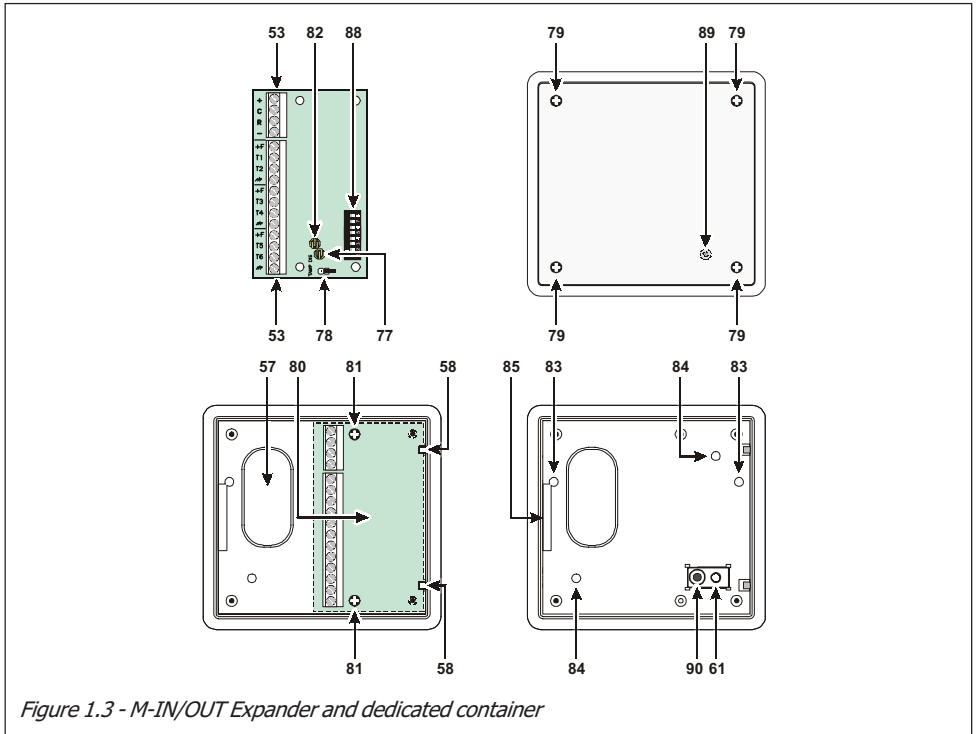
Figure 1.3 - M-IN/OUT Expander and dedicated container
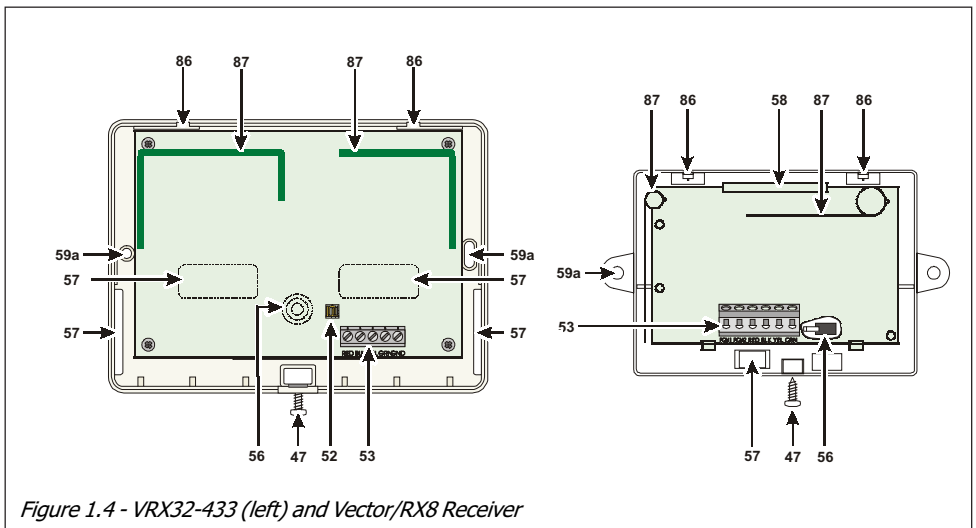
VRX32-433 and Vector/RX8 Receiver

Figure 1.4 - VRX32-433 (left) and Vector/RX8 Receiver

SECTION 2 - INSTALLATION

Mounting the Peripherals

The Main Unit

Refer to the **Main Unit Manual** for the respective installation instructions.

Mounting Keypads

Work carefully through the following steps:

CAUTION - For CLASSIKA keypad, before removing the keypad cover, OPEN THE FLIP [48] COMPLETELY.

1. Insert a sharp screwdriver into openings to release the hooks [**58**], then remove the cover taking care to slide the terminal board [**53**] out delicately.

2. Pass the connection wires through the opening [**57**].

3b If it is to be flush mounted, use the holes [**59b**] to fix the base to the wall.

3b. If it is to be mounted on a model 503 box or similar, use the holes [**59a**] to fix to the base.

To fix the keypad perfectly, use with the perforated sphere [65a] at the base.

4. Fix the anti-tamper plug [**61**].

5. Complete the connections between the terminal board [**53**] and Control panel BPI Bus.

WARNING - DO NOT connect the Keypad to the bus when the bus is live; if this is not possible connect the bus terminals in the following order: -, +, R, C.

6. Assign the Keypad Address (refer to *'Addressing Devices'*, further on in this section).

7. Reattach the frontplate by first hooking it to the clips [**65c**], then by blocking it by applying light pressure until the clips are released [**58**].

Mounting PROXI Proximity Readers

Work carefully through the following steps:

1. Remove the screws [**47**] and the frontplate.

2. Pull the wires through the cable entry [**57**].

3. Drill the holes [**59a**] for the backplate.

4. If necessary, install the Snatch Microswitch [**56**]. Ensure that the Snatch Microswitch lever is held firmly in position (pressed down) by the plastic tooth on the Snatch bracket [**61**]. Using a screw, secure the Snatch bracket to the wall.

In order to comply with the standards outlined in Performance Level 11 of the IMQ-SECURITY SYSTEM certification, Readers must be fitted with Snatch Microswitches.

5. Using the cable [**70**], complete the connections to the Control panel BPI Bus.

6. Assign the Addresses to all the peripheral devices (refer to *'Addressing Devices'*, further on in this section).

7. Reattach the frontplate.

PROXI Readers must be located at least 50 cm apart.

Mounting ECLIPSE Readers

ECLIPSE Key Readers can be flush mounted on standard electricity outlet boxes (refer to Table 1.3).

Before mounting the Reader, complete the connections between the ECLIPSE terminal board [**53**] and Control panel BPI Bus.

To tamper line

🔒)(((*In order to comply with the standards outlined in Performance Level 11 of the IMQ-SECURITY SYSTEM certification, Readers must be fitted with Snatch Microswitches.*
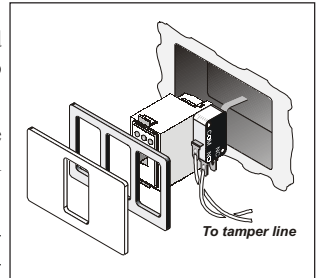
*ECLIPSE Readers must be located at least 50 cm apart.*

Using the Address Microswitches [**51**], assign the Reader Address (refer to *'Addressing Devices'*, further on in this section). For security reasons, outdoor flush-mounted Key Readers must be fitted with tamper protection (see Figure above).

M-IN/OUT Expanders

The Input and Output Expanders must be located as near as possible to the peripherals they are connected to. The Input and Output Expanders boxes can be surface or flush mounted.

To install the Expanders:

1. Remove the Wire entry knockout ([**57**] or [**85**], as required.

2. ■ **For Surface Mounting:** drill the holes for the back box and Snatch bracket (screw locations [**84**] and [**61**] respectively).

   ■ **For Surface Mounting on Mod.503 boxes or similar:** drill the holes for the back box and Snatch bracket (screw locations [**83**] and [**61**] respectively).

   ■ The M-IN/OUT expander can if necessary also be housed in a container other than the dedicated one. In this case, jumper [**78**] must be closed (inserted) to disable the Tamper contact [**77**] and the Anti-snatch contact [**82**].

3. Pull the wires through the wire entry.

4. Attach the back box and Snatch bracket.

5. Replace the Expander Module [**80**] (see Figure 1.3), ensure that it is held firmly in place by the PCB clips [**58**] then, using the two screws [**81**], secure it to the backplate.

6. Complete the connections on the terminal board [**53**].

7. Carry out coding of the Device by means of the first 5 microswitches on the Minidip [**88**], as shown in Table 2.2 (microswitch no. 1 must be left in the OFF position).

8. Set the operating mode for the tamper switch [**77**] and snatch microswitch [**82**] using jumper [**78**]:   ⊂⊃ = Switches enabled;   ⊂⊃ = Switches disabled.

9. Set the operating mode using microswitches 6 and 7 on DIP switch [**88**] as shown in the following table:

Microswitch		Operating Mode
n. **6**	n. **7**	
OFF	OFF	Input Expander with 6 Inputs
ON	OFF	Input Expander with 4 Inputs + Output Expander with 2 Outputs (T1 and T2 Outputs; T3, T4, T5 and T6 Inputs)
OFF	ON	Output Expander with 4 Outputs + Input Expander with 2 Inputs (T1, T2, T3 and T4 Outputs; T5 and T6 Inputs)
ON	ON	Output Expander with 6 Outputs

10. Set the operating mode of the Inputs using microswitch 8 on DIP switch [**88**] as shown in the following table:

Microswitch n. **8**	Operating Mode for the Inputs
OFF	All Inputs operate in Normal Mode
ON	All Inputs function as interface for Roller Blind contact (The zone goes into alarm if at least 5 pulses are detected in the space of 2 minutes.)

Addressing Devices

You must assign Addresses to all the BPI peripherals (Key Readers, Proximity Readers and Keypads). For devices with 4 DIP switches, refer to Table 2.1, for devices with 5 or more DIP switches, refer to Table 2.2.

You can assign the Addresses in any order, however, devices of the same type must have different Addresses. Devices of different types (e.g. a Keypad and a Key/Card reader) may have the same Address.

NOTE - If you are Addressing an **CLASSIKA** or **PREMIUM** keypads, without a DIP switch strip, you must assign the Address in accordance with the respective instructions in this section. You can exit the programming phase and restore normal operating mode at any point in the procedure by connecting the jumper [**54**].

Table 2.1 - Assigning Addresses via 4 DIP switches																
DIP Switch No.	Address															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON
2	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
3	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
4	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON

Table 2.2 - Assigning Addresses via 5 DIP switches																
DIP switch No.	Address															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1*	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON
3	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
4	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
5	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON

Microswitch no. 1 on Minidips with 5 or more positions must remain in the OFF position.

Addressing PREMIUM Keypads

NOTE - The first time it is switched on, the keypad will AUTOMATICALLY enter its programming phase, and will remain in that mode until the address has been programmed.

NOTE - To avoid any accidental or unauthorized programming, access to programming is ONLY possibile if less than half an hour has passed from the last BPI reset effected from the control panel. BPI resetting occurs every time the Keypad is powered up, and on exiting from the installer menu.

To program the Keypad, follow the procedure described in this paragraph.

Remember that pressing the **ENTER** key confirms the input values and a move forward is made to the next step while each pressing of the **ESC** key cancels the input values and a step backwards is made (up to exiting the programming phase).

NOTE - The keypad exits the programming phase one minute after the last button was pressed.

➢ To set the addresses, use keys **C** and **D** to scroll through the available addresses, or key the address into the Keypad:

➢ to enter addresses greater than 9, key the second digit of the address within 2 seconds of the first;

➢ if you enter an incorrect address, wait at least 1 second before trying again.

On the LCD keypad, the address that has been set is shown by the last two characters of the top line of the display.

On the LED Keypad, the address set is shown by LEDs 1 to 16.

During all the steps involved in programming, the bottom line of the LCD Keypad display shows all the keys which can be used at any given time.

NOTE - Every time a keypad which has already been programmed is powered, a keypad tamper alert will be generated.

Programming the LCD Keypad

For programming the LCD Keypad, follow the procedure described below.

1) Press and keep pressed the keys **1** and **OFF** for at least 3 seconds after which the programming phase starts: the display will show in the first line the name of the keypad (**PREMIUM**) and the actual address (for example, **1**).

2) **Programming the ADDRESS** - Set the address of the keyboard (from **1** to **8**), then press **ENTER** to confirm the appearing address and move on to the next step or press **ESC** to cancel the change and exit programming.

3) **Programming the Proximity Reader** - Press **ON** to enable the Proximity Reader, then set the address of the Proximity Reader (from **1** to **16**), then press **ENTER** to confirm and move on to the next step or, press **OFF** to disable the Proximity Reader, then press **ENTER** to confirm and move on to the next step or, press **ESC** to cancel the changes and return to the preceding step.

4) **Programming the INPUT EXPANDER** - Press **ON** to enable the Input Expander, then set the address of the Input Expander (from **1** to **4**) then press **ENTER** to confirm and move on to the step no. ***6)*** or, press **OFF** to disable the Input Expander, then press **ENTER** to confirm and move on to the next step or, press **ESC** to cancel the changes and return to the preceding step.

NOTE – If the Input Expander function is enabled, every time the keypad is connected to the power supply, an Input Expansion tampering signal will be generated, in addition to the normal device disconnection messages.

The zones corresponding to terminals L4, L5 and L6 of the Keypad Input Expander, although appearing on the application/display, CANNOT be used.

5) **Programming the OUTPUT EXPANDER** - Press **ON** to enable the Output Expander, then then set the address of the Output Expander (from **1** to **2**) then press **ENTER** to confirm and exit programming or, press **OFF** to disable the Output Expander, then press **ENTER** to confirm and move on to the next step or, press **ESC** to cancel the changes and return to the preceding step.

The outputs corresponding to terminals OC4, OC5 and OC6 of the Keypad Output Expander, although appearing on the application/display, CANNOT be used.

It is possible to enable ONLY ONE of the two Espanders: either the Input or the Output Expander. If you do not want to use any Expander, put in the value OFF for both of them.

6) **Programming of the ZONES** - Press the keys **1**, **2** or **3** to change the functioning mode, of the corresponding zone, respectively, at terminal T1, T2 or T3, as shown in the following table, then press **ENTER** to confirm and exit from the programming or, press **ESC** to cancel the changes and return to step no. **4)** .

Programming of Zones	
NORM	The zone functions in Normal Mode
FAST	The zone functions in Normal Mode and as Contact Interface for Roller Shutter, or rather, it sounds the alarm according to the programmed Sensitivity or if 5 tight pulses are detected, within 2 minutes.

If the Input Expander and the Output Expander have been disabled, it would be possible to program only the functioning mode relative to terminal T1 and terminal T2.

The FAST functioning mode (Roller blind) could be entered only with the procedure described in these instructions, and not by software, through the Bentel Security Suite application (the Roller blind Quality for the Zones related to the Keypads Input Expander is blocked).

Programming the LED Keypad

For programming the LED Keypad, follow the procedure described below.

1) Press and keep pressed the keys **1** and **OFF** for at least 3 seconds after which the programming phase starts.

2) **Programming the ADDRESS** -The lit LED ⬤ indicates that the keypad address is being programmed.

Program the required address for the Keypad (from **1** to **8**), then press **ENTER** to confirm and move on to the next step or, press **ESC** to cancel and exit programming.

3) **Programming the Proximity Reader** - The lit LED 🔔 indicates that the Proximity Reader address is being programmed.

Press **ON** to enable the Proximity Reader, then program the address which you would like to assign to the Proximity Reader (from **1** to **16**), then press **ENTER** to confirm and move on to the next step or, press **OFF** to disable the Proximity Reader, then press **ENTER** to confirm and move on to the next step or, press **ESC** to cancel the changes and return to the preceding step.

4) **Programming the INPUT EXPANDER** - The lit LED ▲ indicates that the Input Expander is being programmed.

Press **ON** to enable the Input Expander, then program the address which you would like to assign to the Input Expander (from **1** to **4**), then press **ENTER** to confirm and move on to the step no. **6)** or, press **OFF** to disable the Input Expander, then press **ENTER** to confirm and move on to the next step or, press **ESC** to cancel the changes and return to the preceding step.

NOTE – If the Input Expander function is enabled, every time the keypad is connected to the power supply, an Input Expansion tampering signal will be generated, in addition to the normal device disconnection messages.

The zones corresponding to terminals L4, L5 and L6 of the Keypad Input Expander, although appearing on the application/display, CANNOT be used.

5) **Programming the OUTPUT EXPANDER** - The lit LED ✓ indicates that the Output Expander is being programmed. Press **ON** to enable the Output Expander, then program the address which you would like to assign to the Output Expander (from **1** to **2**), then press **ENTER** to confirm and exit from programming or, press **OFF** to disable the Output Expander, then press **ENTER** to confirm and move on to the next step or, press **ESC** to cancel the changes and return to the preceding step.

The outputs corresponding to terminals OC4, OC5 and OC6 of the Keypad Output Expander, although appearing on the application/display, CANNOT be used.

It is possible to enable ONLY ONE of the two Espanders: either the Input or the Output Expander. If you do not want to use any Expander, put in the value OFF for both of them.

6) **Programmazione of the ZONES** - The lit LED ↑, ▮, ✖ and ▤ indicate that the functioning mode of the zone is being programmed.

LEDs 1, 2 and 3 show the programmed operating mode, respectively for the zones corresponding to terminals T1, T2 and T3:

➢ LED lit = normal operating mode (**NORM**);

➢ LED flashing = normal operating mode + interface for roller blinds (**FAST**).

Programming of Zones	
NORM	The zone functions in Normal Mode
FAST	The zone functions in Normal Mode and as Contact Interface for Roller Shutter, or rather, it sounds the alarm according to the programmed Sensitivity or if 5 tight pulses are detected, within 2 minutes.

Press keys **1**, **2** or **3** to change, respectively, the operating mode of the zones corresponding to terminals T1, T2 and T3:

Press **ENTER** to confirm and exit from the programming or, press **ESC** to cancel the changes and return to step no. **4)** .

If the Input Expander and the Output Expander have been disabled, it would be possible to program only the functioning mode relative to terminal T1 and terminal T2.

The FAST functioning mode (Roller blind) could be entered only with the procedure described in these instructions, and not by software, through the Bentel Security Suite application (the Roller blind Quality for the Zones related to the Keypads Input Expander is blocked).

Addressing CLASSIKA Keypads

NOTE - The first time it is switched on, the keypad will AUTOMATICALLY enter its programming phase, and will remain in that mode until the address has been programmed.

*NOTE - To avoid any accidental or unauthorized programming, access to programming is **ONLY** possibile if less than half an hour has passed from the last BPI reset effected from the control panel. BPI resetting occurs every time the Keypad is powered up, and on exiting from the installer menu.*

To program the Keypad, follow the procedure described in this paragraph.

Remember that pressing the **ENTER** key confirms the input values and a move forward is made to the next step while each pressing of the **ESC** key cancels the input values and a step backwards is made (up to exiting the programming phase).

NOTE - The keypad exits the programming phase one minute after the last button was pressed.

➢ To set the addresses, use keys **C** and **D** to scroll through the available addresses, or key the address into the Keypad:

➢ to enter addresses greater than 9, key the second digit of the address within 2 seconds of the first;

➢ if you enter an incorrect address, wait at least 1 second before trying again.

On the LCD keypad, the address that has been set is shown by the last two characters of the top line of the display.

On the LED Keypad, the address set is shown by LEDs 1 to 16.

During all the steps involved in programming, the bottom line of the LCD Keypad display shows all the keys which can be used at any given time.

Programming the LCD Keypad

1) Press and keep pressed the keys **1** and **OFF** for at least 3 seconds after which the programming phase starts: the display will show in the first line the name of the keypad (**CLASSIKA**) and the actual address (for example, **1**).

2) **Programming the ADDRESS** - Set the address of the keyboard (from **1** to **8**), then press **ENTER** to confirm or press **ESC** to cancel the change and exit programming.

Programming the LED Keypad

For programming the LED Keypad, follow the procedure described below.

1) Press and keep pressed the keys **1** and OFF for at least 3 seconds after which

the programming phase starts.

2) **Programming the ADDRESS** -The lit LED ☉ indicates that the keypad
address is being programmed. Program the required address for the Keypad
(from **1** to **8**), then press **ENTER** to confirm or press **ESC** to cancel and exit
programming.

Setting up the BPI Level

The BPI Level of the system peripherals (Keypads Readers, etc.) must match the
BPI Level of the Control panel (set by means of the Jumper [**49**]).

To program the BPI Level at **5 Volt**, insert Jumper [**54**] in the '*BPI LEV 5V*'
position, and insert Jumper [**49**].

To program the BPI Level at **12 Volt**, insert Jumper [**54**] in the '*BPI LEV 12V*'
position, and remove Jumper [**49**].

NOTE - ECLIPSE Readers with 4 DIP switches operate at +5V. Therefore, if
one of these devices is included in the system, the BPI Level of the Control
panel and BPI peripherals must be set at +5V .

KYO16D, PREMIUM, CLASSIKA and M-IN/OUT - Kyo16D Control Panel,
Keyboards and M-IN/OUT expander work only with 12V level BPI: all BPI
devices connected to the Kyo16D must have 12V BPI level.

Installing the VRX32-433 and Vector/RX8 Receiver

Control panels from the **8W**, **8GW**, **16D**, **32** and **32G** series support VRX32-433 and Vector/RX8 Wireless Receivers for Wireless device management. This section describes the features and installation procedure of these devices.

The VRX32-433 Receiver manages up to 32 Wireless detectors (PIR Detectors, Smoke Detectors and/or Magnetic contacts), and up to 16 Wireless Keys. The Vector/RX8 manages up to 8 Wireless Zones and 16 Wireless Keys.

Systems which are set up to manage more than 14 Wireless Keys, DO NOT COMPLY with IMQ-SECURITY SYSTEM Performance level II certification.

Before mounting the Receiver:

- Choose a safe dry place.
- Select a location that will provide the best possible reception.
- Locate the Receiver as high up as possible.
- Do not locate the Receiver near sources of EMI (television sets, electric motors, domestic appliances, etc.)
- Do not limit the range with large objects or furniture.

Installing the Radio Receiver (refer also to Figure 1.4)

1. **For VRX32-433** - Loosen the screw [**47**] (it is not necessary to remove them).

   For Vector/RX8 - Remove the screw [**47**].

2. **For Vector/RX8 only**: using a screwdriver, press down on the tab [**64**] in order to free the backplate from the frontplate.

3. Remove the frontplate then pull it away from the backplate.

4. Pull the connection wires through the wire entry [**57**], place the backplate in the proposed placement, mark the anchor screw locations [**59a**].

5. Remove the backplate from its placement, then drill the screw holes (check for plumbing and cable conduits before drilling).

6. Replace the backplate in the proposed placement, pull the wires through the wire entry [**57**], then secure the backplate to the wall.

7. Complete the connections on the terminal board [**53**].

8. Replace and secure the frontplate with the screws [**47**].

Changing the batteries of Wireless Devices

If you intend changing the batteries of the Wireless Devices, you must first put the Control panel in Service Mode by typing in the **Installer Code** + ENTER, or by using a Service Key at an Enabled Reader.

However, if your system includes any LCD Keypads, you must also access the Installer Menu and select "*Actions ⇨ Zone Status*" (refer to "Programming" in the "PROGRAMMING FROM KEYPAD" manual).

Connecting Peripherals

This section describes the wiring of the peripheral devices.

Shielded conductor cable must be used for all connections. One end of the shield must be connected to the Control panel, as shown in the wiring diagrams. Each wiring diagrams refers to a specific device type (Keypad, Key/Card Reader, Sensor or Signalling device) and shows the respective terminals.

Connecting Keypads, Readers and Expanders

The Keypads, Readers and Expanders (Input and Output) must be connected in parallel to the Control panel **BPI Bus** (terminals 1[+], 2[**C**], 3[**R**] and 4[−], as in the example in Fig. 2.3). The BPI bus supports up to **24 BPI devices (12 for KYO16D Control Panel)** in all, but not more than **8 Keypads (4 for KYO16D Control Panel)**.

IMPORTANT - KYO16D Control Panel manages all LCD keypads and only Alison/8L LED keypad.

For the terminals on M-IN/OUT expanders, see Table 2.4.

Table 2.4 - Terminals of the M-IN/OUT Input/Output Expander	
Ter.	Description
+F	Positive power supply to detectors or OC Peripheral
T1...T3	Input or Output zones depending on the operating mode of the Expander
⌐┴	Negative power supply to detectors or OC Peripheral
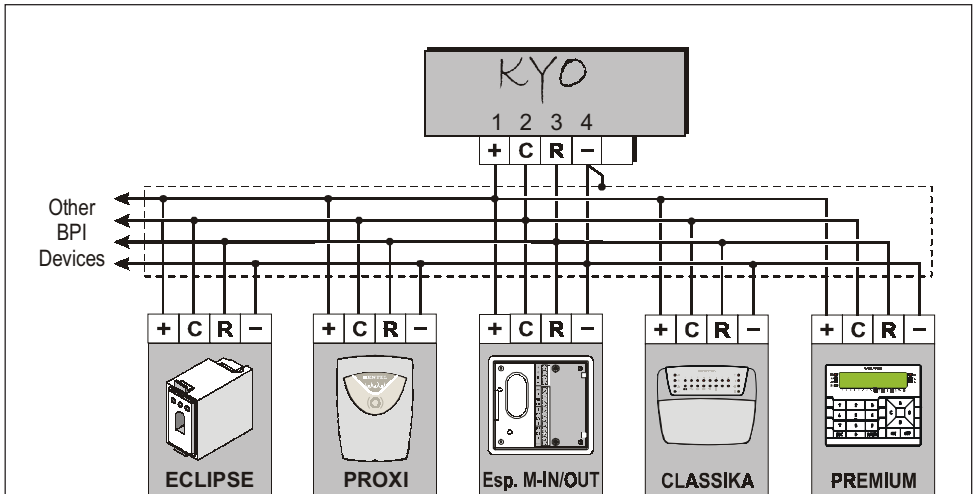
Figure 2.3 - Connecting ECLIPSE/PROXI Readers, keypads and M-IN/OUT Expanders

NOTE - The input lines L1, L2 and L3 on the PREMIUM keypad may be left disconnected if the keypad is NOT connected to a control unit in the KYO32 series, because all the other control units in the KYO UNIT series DO NOT support input expansion.

If the PREMIUM keypad is connected to a control unit in the KYO32 series, its L1, L2 and L3 input lines may be left disconnected if the Input Expansion function for the keypad is NOT enabled.

---

*NOTE: For Kyo4-8-32, this Control panel does not manage Lines L1 and L2 on **MIA/S** and **MIA/D** Keypads, and Line L1 on **OMNIA/TAST-R** and **ALISON** Keypads. KYO16D Control Panel does manage only L1 Line of LCD keypads, but to use a **10Kohm** resistor for balanced line.*

11.5V or over must be present across terminals [+] and [–], in order to allow the BPI peripherals to operate properly. Owing to Voltage drops and stray capacitance induced by the Control panel BPI bus connections, the following wiring limitations must be respected:

■ The maximum wire length between the Main Unit the BPI peripheral must not exceed **500 metres**;

■ The overall wire length for the BPI must not exceed **1000 metres**.

See to Figures 2.3 for the Keypad, Reader and Expander wiring diagrams.

    🔲◖◖◖ The IMQ-SECURITY SYSTEM approval applies only when the Expander OC outputs are interfaced with relays, installed inside the Expander box.

Alarm Detectors

The Control panel provides 8 independent zone terminals (4 on KYO4, 6 for Kyo16D): [**L1**], [**L2**], [**L3**], [**L4**], [**L5**], [**L6**], [**L7**], [**L8**] which accept Normally Closed and Normally Open detectors. The 10 KΩ resistors (1.2 KΩ for Kyo16D Control Panels) will allow you to set up the zones as Balanced or Double Balanced. Resistors are not required when the lines are programmed as N.C. or N.O.

Negative terminal [⏚] and Positive terminal [**+B**] (or [**+F**] on Series **G** models) can be used to power the detectors. Several detectors can be connected to each zone, however, one detector per zone is recommended. Figures 2.4, 2.5 and 2.6 show several wiring solutions.

Special features   Some detectors provide special features, such as the Memory function and Walk-Test mode.

Memory function   The Memory function is useful when several detectors are connected to the same Alarm line (see Figure 2.7) as, in the event of an Alarm, it will allow you to trace the violated zone.

Walk-Test mode   The Walk-Test mode will enable the LED for test purposes. The Walk-Test mode should not be enabled during standby status as, in the event of violation, the LED will turn ON thus warning intruders of their detection.

Both functions can be enabled by a Positive or Negative signal, depending on the detector. The Wiring diagram in Figure 2.7 shows three Bentel LB612 detectors with Memory function (terminal [**AB**]) which will be activated by a Positive signal. In a connection of this type, one of the three OC outputs (see terminal [**O1**]) must be programmed to disable the Walk Test mode during standby status.
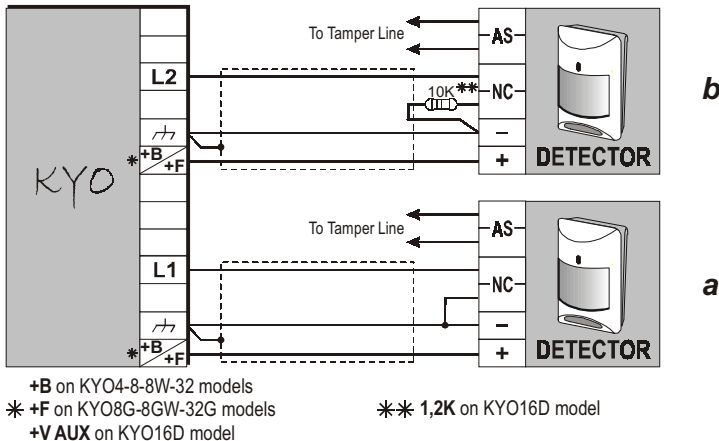

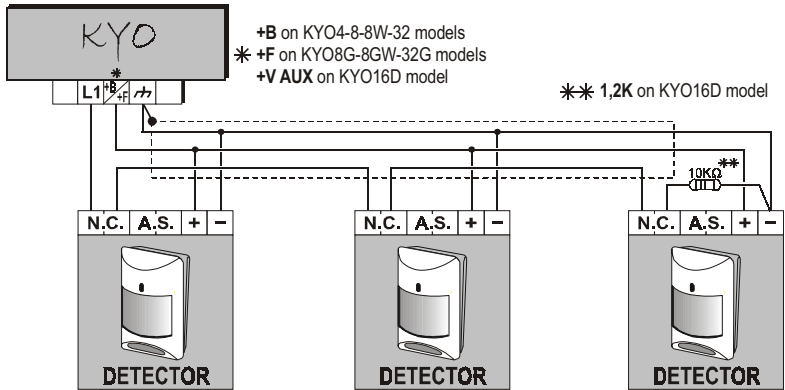*Figure 2.4 - Connecting detectors to N.C. (**a**) and Balanced lines (**b**)*

+B on KYO4-8-8W-32 models
✳ +F on KYO8G-8GW-32G models
+V AUX on KYO16D model

✳✳ 1,2K on KYO16D model

10KΩ ✳✳

N.C. A.S. + −   DETECTOR
N.C. A.S. + −   DETECTOR
N.C. A.S. + −   DETECTOR

Figure 2.5 - Connecting detectors to a Balanced zone

+B on KYO4-8-8W-32 models
✳ +F on KYO8G-8GW-32G models
+V AUX on KYO16D model

✳✳ 1,2K on KYO16D model

10KΩ ✳✳
10KΩ ✳✳

A.S.
N.C.
−
+   DETECTOR

KYO
L1
✳ +B
+F
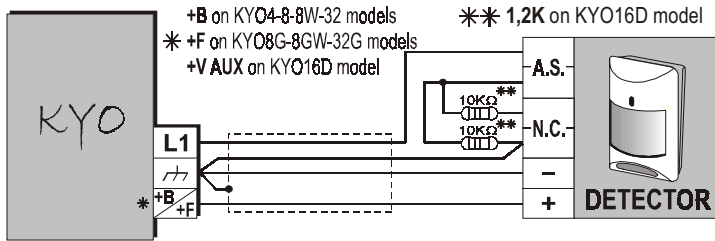
Figure 2.6 - Connecting detectors to a Double balanced zone

+B on KYO4-8-8W-32 models
✳ +F on KYO8G-8GW-32G models
+V AUX on KYO16D model

✳✳ 1,2K ono KYO16D model

+B O1 L1 +B +F

✳✳ 10KΩ

10KΩ ✳✳

AB NC AS + −   DETECTOR
AB NC AS + −   DETECTOR
AB NC AS + −   DETECTOR
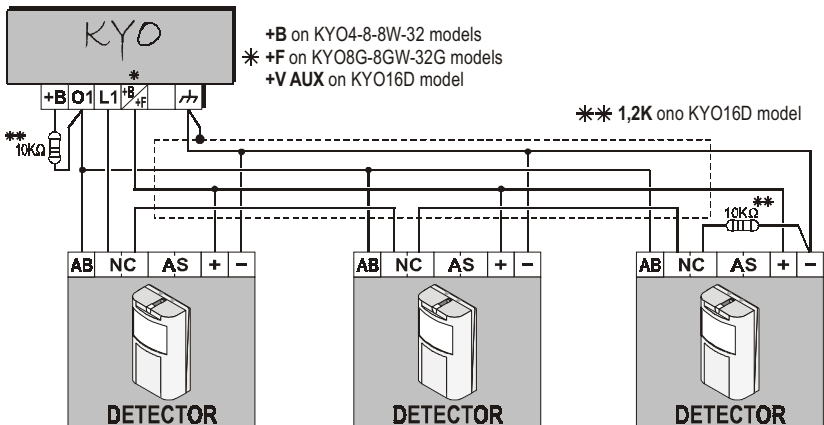
Figure 2.7 - Connecting detectors with Alarm memory (terminal AB) activated by a Positive signal

Connecting Fire Detectors (with Repeat Outputs)

This Control panel also accepts Fire detectors. The Alarm repeat outputs of the Fire detectors must be connected to **Fire** zones (Normally Open -24 hour zone).

The wiring diagrams in Figures 2.8a and 2.8b shows three detectors, e.g. Bentel's **600 Series** and Bentel's **ZT100PL Models** (smoke) connected to Alarm line [**L1**]. In a connection of this type, the Negative signal (Reset) is supplied by the Normally Closed OC output (see [**O1**]).

Connecting Relay bases
The wiring diagram in Figure 2.9 shows a similar connection using a Relay Base. In a connection of this type, the Control panel OC output (see [**O2**]) must be programmed as Normally Closed, and the Alarm Line ([**L2**]) as Balanced 10K ('Balanced 1k2' for Kyo16D Control Panels).
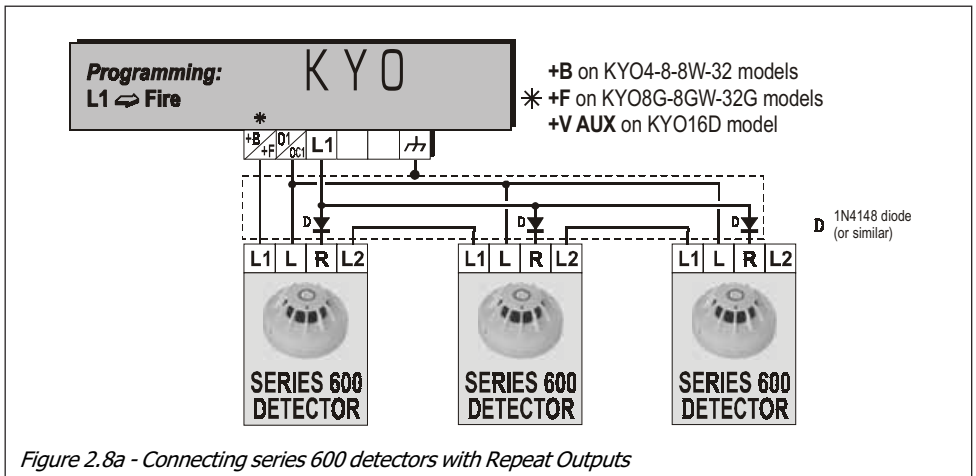
Figure 2.8a - Connecting series 600 detectors with Repeat Outputs
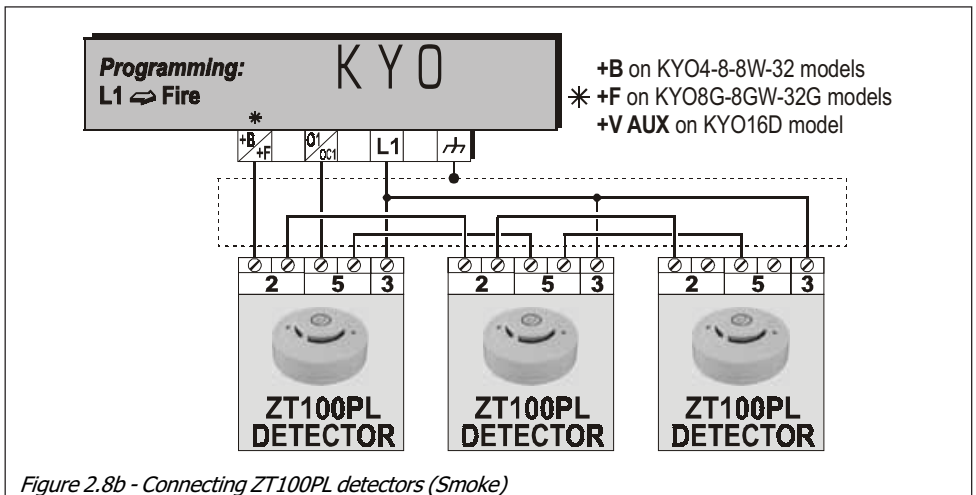
Figure 2.8b - Connecting ZT100PL detectors (Smoke)

Alarm Siren

All types of signalling devices can be connected to the free-voltage relay (terminals [**NC**], [**NO**] and [**COM**]). The wiring diagram in Figure 2.10 illustrates the wiring of a Self-powered Siren (e.g. CALL) and an Indoor Siren (e.g. Wave). In a connection of this type, the Self-powered Siren which will activate when the Positive signal drops on terminal [**+N**].
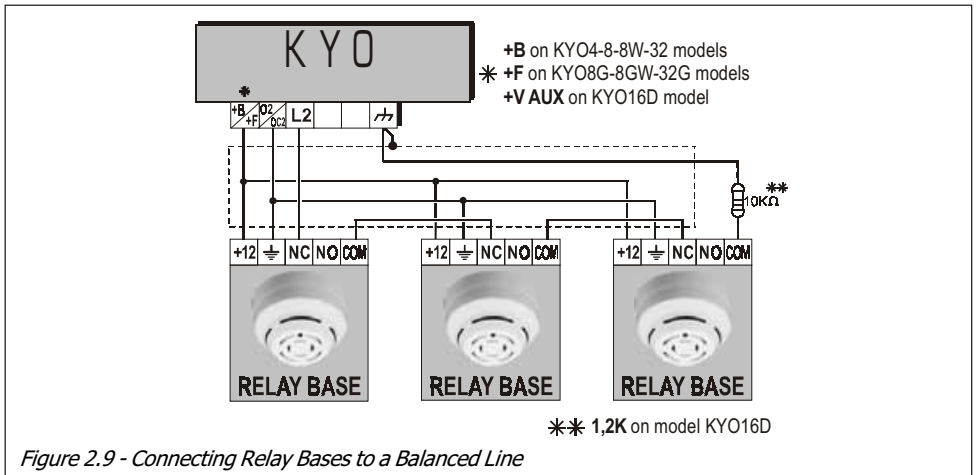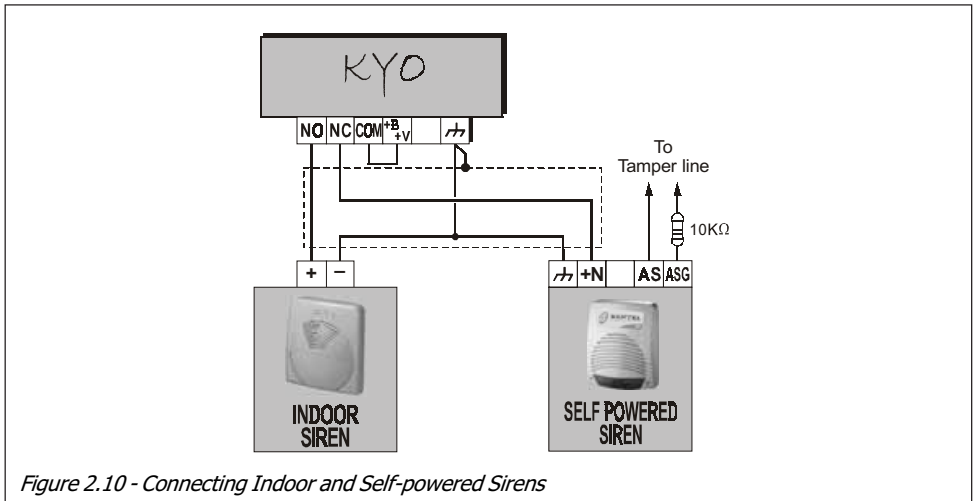

Figure 2.9 - Connecting Relay Bases to a Balanced Line

Figure 2.10 - Connecting Indoor and Self-powered Sirens
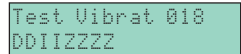
Connecting Roller-Blind and Vibration Detectors

Zones 1 through 6 of the KYO8 and KYO32 Models, and all zones of the KYO4 (zones 1 through 2 for Kyo16D) support Roller-blind and Vibration detectors. The zones must be programmed respectively with either the **Vibration** or **Roller-blind** attribute (refer to the *'PROGRAMMING FROM PC'* section in this Manual), and can be set up as Normally Closed (**N.C.**) or Balanced 1.5 KΩ (**BAL**). The wiring diagram in Figure 2.11 shows a typical connection. The 1.5. KΩ (600ohm for Kyo16D) Balance Resistor must be connected to the last device, as shown in Figure 2.11.

The 1.5 KΩ Balance Resistors are not supplied.

If the system has an LCD Keypad, it will be possible to Test the sensitivity of the '**Vibration**' zones. The system must be put in SERVICE MODE, by leaving a Digital Key in a Reader, or by inserting the INHIBIT ALARMS Jumper [**8**] (the zones must be tested SEPARATELY). The display will show the Test message and the 'Shock' value (0 through 20).

IMPORTANT - For the most reliable results, the 'Vibration' attribute must be disabled on all zones except the one being tested.

```
Test Vibrat 018
DDIIZZZZ
```


Figure 2.11 - Connecting Roller blind and Vibration detectors to a N.C. and a Balanced Line
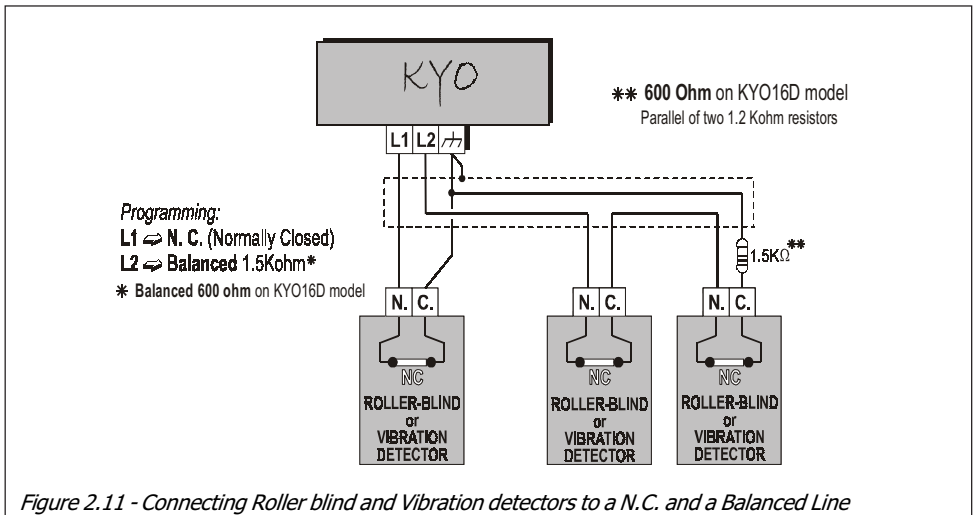
Connecting the Tamper Line

▲ - *The Tamper Line terminals [AS] are not present on KYO16D Control Panel.*

To make a 24 H Tamper Line on KYO16D Control Panel:

1. Une an alarm zone

2. Program this zone as "24 H"

3. Program this zone as "Balanced 10 K"

4. Assign this zone to one or more partitions

The Control panel (except KYO16D) has a 24h 10K Balanced Tamper line (Terminals 5 [**AS**] and 6 [⏚]). The Tamper terminals of the system peripherals must be connected in series to these terminals. The wiring diagram in Figure 2.12 illustrates a typical connection.

10 KΩ Balance resistor must be connected to the last device, as shown in Figure 2.12.
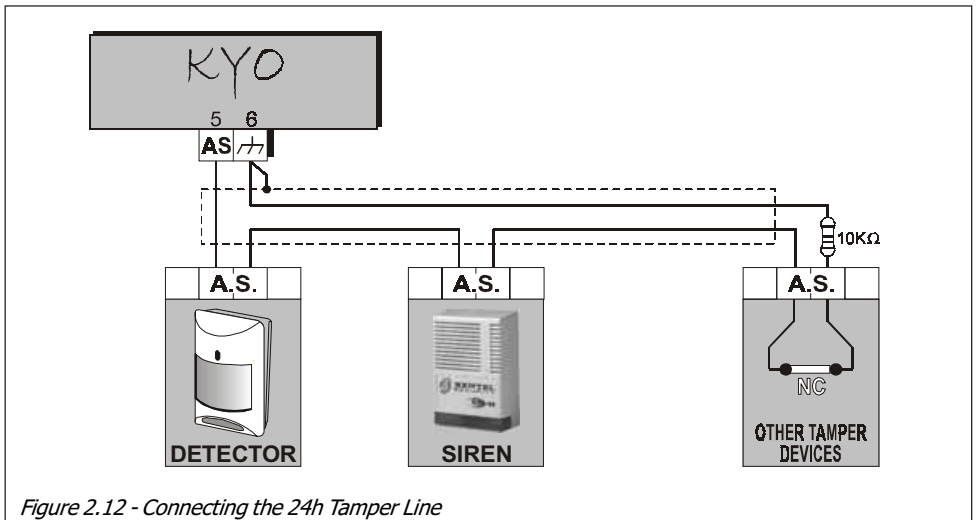
Figure 2.12 - Connecting the 24h Tamper Line

Auxiliary Device (Open Collector)

KYO4, KYO8, KYO8W and KYO32 have 3 programmable Open-Collector outputs (terminals 23 [**O1**], 24 [**O2**] and 25 [**O3**]). KYO8G, KYO8GW and KYO32G have 5 programmable Open-Collector outputs (terminals 38[**O1**], 39[**O2**], 40[**O3**], 41[**O4**] and 42[**O5**]). Kyo16D have 2 programmable Open-Collector outputs (terminals 22 [**OC1**] and 23 [**OC2**]). These terminals can be set up as Normally Open (NO) or Normally Closed (NC), and can be activated by one or more events (to be selected during the programming phase—refer to the 'PROGRAMMING FROM PC' section for the list of events).

The wiring diagram in Figure 2.13 illustrates the operating principles of a NO Open-Collector output (terminal [**O1**] on the Control panel) which will be activated by the 'Exit Delay' event.

The IMQ-SECURITY SYSTEM approval applies only when the Expander OC Outputs are interfaced with relays, installed inside the Expander box.
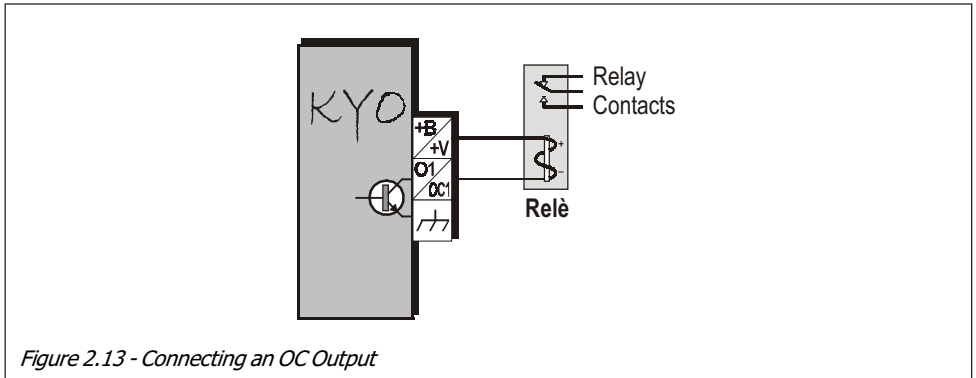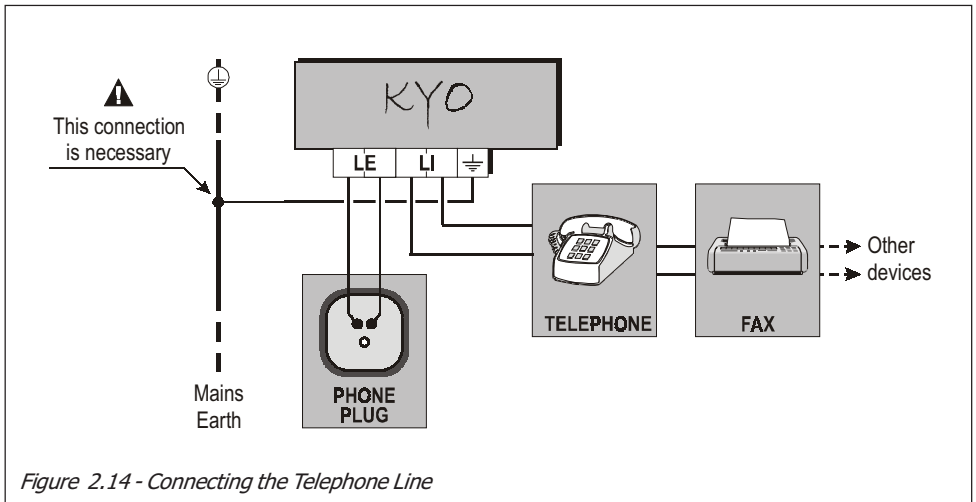

Figure 2.13 - Connecting an OC Output

Figure 2.14 - Connecting the Telephone Line

Connecting the Telephone Line

If Telephone Dialler facility is used, the Telephone line must be connected to terminals [**LE**]. In this way, the Control panel will be the first device on the telephone line. If the Control panel is sharing the line with another device, the latter must be connected to terminals [**LI**] (see Figure 2.14), thus allowing the Control panel to take priority in the event of an Alarm.

⚠ *- Terminal [⏚] must be connected to the Mains Earth in order to protect the PCB against line surges.*

⚠ *- Ensure that the Mains Earth line is intact and operating properly before connecting the telephone line.*

If the Control panel is not connected to the telephone line, the **Disable Telephone line check** option must be activated, otherwise, the Telephone Line Trouble event will be signalled continuously (refer to the 'Options Page' in the 'PROGRAMMING FROM PC' section).

VRX32-433 and Vector/RX8 Receiver

Control panels with K8W, K8GW, K16D, K32 and K32G boards support VRX32-433 and Vector/RX8 Wireless Receivers (accessory items). Connect the Control panel terminals — [**GRN**], [**YEL**], [**BLK**] and [**RED**] to the respective terminals on the Receiver, as shown in Fig. 2.15.

Use Shielded cable only. One end of the shield must be connected to the [BLK] terminal on the Control panel. Do not exceed 50 meters of cable length.
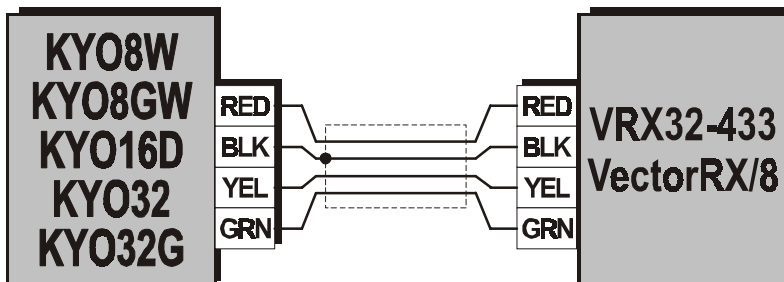

Figure 2.15 - Connecting a VRX32-433 or Vector/RX8 Receiver

'Double' line type (only for KYO16D)

The KYO16D has 6 zones connections. Each connection can be programmed "DOUBLE" or "DOUBLE with EOL" to reach a maximum of 12 zones.

A "Double" or "Double with EOL" connection can detect 2 alarm and a single tamper.

Fig. 2.16a shown the "Double with EOL" connection and Fig. 2.16b shown the "Double" connection

Fig. 2.16 - Connecting the "Double Line"
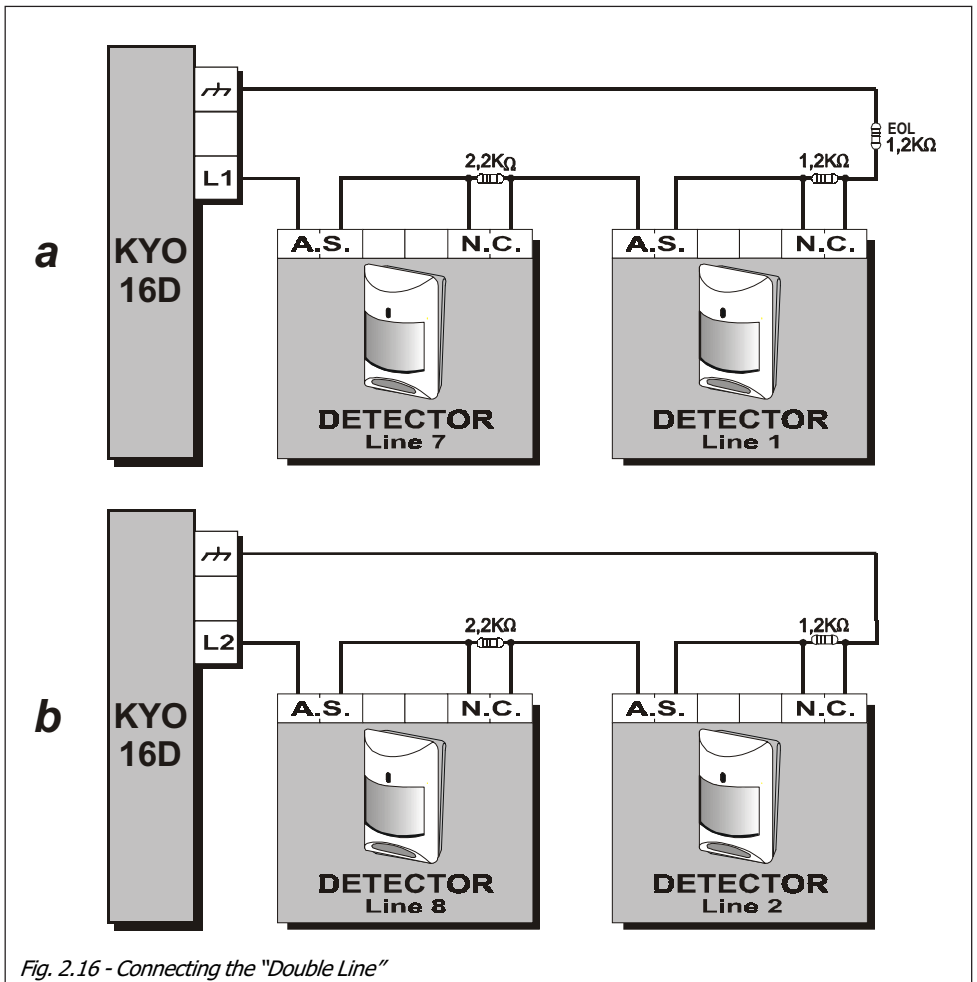
SECTION 3 - PROGRAMMING FROM PC

Introduction

This system can be programmed via keypad or via the '**KyoUnit**' software application from the **Bentel Security Suite**. In the latter case, the computer must be linked to the Control panel by a serial cable (e.g. Bentel's CVSER/9F9F).

This section holds in-detail information on the system parameters, and should also be referred to when programming via keypad.

The programmed parameters can be saved on the computer hard disk, or on a floppy disk, and downloaded to the Control panel via modem or on-site.

The parameters are grouped together in pages. The pages in this section follow the page order in the '**KyoUnit**' application.

NOTE - The images of the software are indicative and they depend on the Control Panel version used.

Main Window

The 'KyoUnit' application opens on the Main page (see Figure 3.1). The Tree-view menu (see **Pages** section) will allow you to access all the Pages in the Application.

Managing the Pages

Accessing the Pages Click once on the name of the required page — the page name will highlight and the page will open, ready for programming.

Saving the Parameters Use the **Save** command from the **File** menu.

Using the right button on the mouse, click any part of the **Page** section to access the context menu. The context menu will allow you to Select, Upload, Download and Print the Pages, as follows.

```
Select    Ins
Download
Upload
Print
```
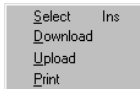
● **Select** - This command will select/deselect the pages. Only selected pages (✔) can be downloaded/uploaded/printed.

The Pages can also be selected/deselected via the "Ins" key on the Computer keypad.

● **Download** - This command will download the selected pages (✔) to the Control panel.

● **Upload** - This command will upload the selected pages (✔) to the Computer.

The pages will be deselected automatically after Downloading/Uploading.

● **Print** - This command will print the selected (✔) pages.

You can close the **Pages** section temporarily by clicking ⊠, and open it again temporarily by clicking the Page bar. If you want to keep the **Pages** section open, click also the drawing pin ▪⬚.

The Page name on the button will change in accordance with the open Page.

*You can show/hide the '**Pages**' section via Settings⇨ Layout ⇨ Pages.*

Managing Customers

This section describes the Database (Customer Names and Codes).

Alphabetical or
Code order

The Customer list can be organized in Alphabetical or Code order by clicking either the **Name** or **Code** bar.

| Upload |
| Delete |

Using the right button on the mouse, click the name of any Customer to access the context menu. This menu will allow you to **Load** or **Delete** the Customers, as follows.

● **Upload** - This command will load the Customer Configuration page.

You can also upload the Customer's data by double clicking the Customer's name on the Customer list.

● **Delete** - This command will allow you to delete the selected Customer from the Customer list, and consequently from the Database (see Figure 3.2).
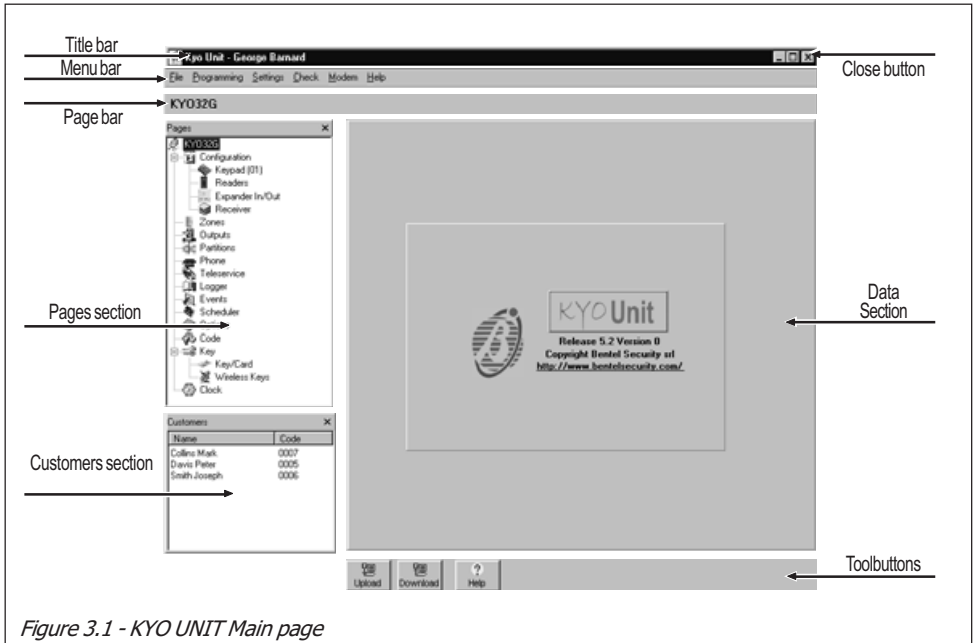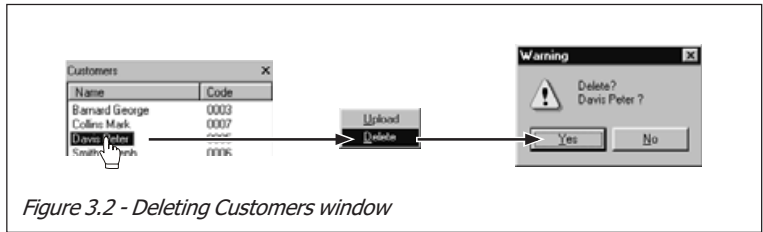

Figure 3.1 - KYO UNIT Main page

Figure 3.2 - Deleting Customers window

You can close the **Customers** section by clicking ☒, and show/hide the **Customers** section via Settings ⇨ Layout ⇨ Pages, or by pressing F9 on the computer keypad.

Data Section

The pages you select from the **Pages section** will be shown in this part of the Main window.

Toolbar and toolbuttons

The Main window (see Figure 3.1) provides the following bars and tools.

- **Title Bar** — this bar will show the selected Customer's name;

- **Toolbuttons** — these buttons will download/upload the current Page;

- **Menu Bar** — this bar is similar to the Menu bars of most Windows™ programs, and will allow you to access basic functions, such as: New Customer, Serial Ports, etc. The Menu bar options are described in the 'Menu Bar' paragraph.

- The **Close Application** button.

You can also close the Application via File ⇨ Exit.

Upload, Download and Help toolbuttons

There are 3 toolbuttons at the bottom of the Parameter Pages (5 at the bottom of the '**Logger Page**' and 6 at the bottom of the '**Events Page**'). The toolbuttons are not shown on the Main window.

Upload — this button will upload the parameters of the current Page (from Control Panel to Computer).

Download — this button will download the parameters of the current Page (from Computer to Control panel).
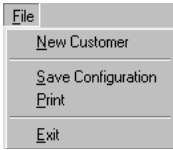
Help — this button will open the context window (Adobe® Acrobat® Reader™ required).

The Menu Bar

This chapter describes the Menu bar of the 'KyoUnit' application.

□ **File ⇨ New Customer** - This command will allow you to program New Customer systems. All settings will be at default and can be programmed as per requirements. The '**Panel**' window will allow you to specify the Customer's Control panel and Firmware Release. This information can be uploaded directly from the connected Control panel by clicking **Upload**. Click **OK** to exit.
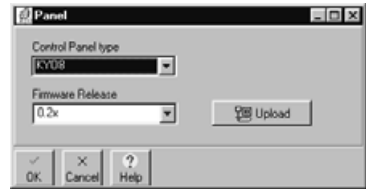
If the '**Confirm**' window opens, when **New Customer** is selected, it means that the Application has found unsaved data. If the data is not saved it will be cleared. Click **Yes** to save or '**No**' to quit without saving.
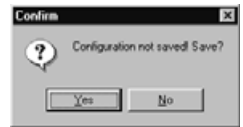
□ **File ⇨ Save Configuration** - This command will open the '**Customer**' page. If the Customer has already been enrolled, the respective details and Code will be shown. If the Customer is 'New', it will be necessary to enter the Customer details and assign a code. Codes can be assigned manually, or automatically by means of the "**Search**" button.
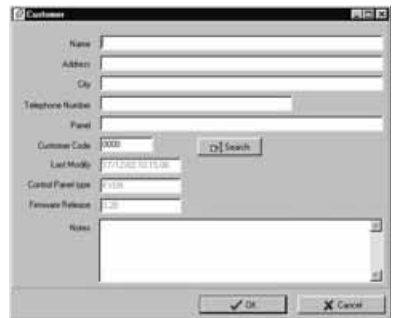
Enrolled Customer   When saving the parameters of an enrolled Customer, the Warning window will be shown. Click **Yes** to save new data or **No** to quit.
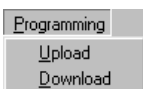
Duplicate Code (Manual assignment)   If a code is duplicated (Customer already enrolled) the Application will show the Error window.

□ **File ⇨ Print** - This command will print all the parameters of the selected pages (✔). Once the command has been executed, all the selected pages (✔) will be deselected automatically.

□ **File ⇨ Exit** - This command will close the Application.

□ **Programming ⇨ Upload** - This command will *transfer all the programmed data* from the Control panel to the Computer. Once the command has been executed, all the selected pages (✔) will be deselected automatically.

□ **Programming ⇨ Download** - This command will *transfer all the programmed data* from the Computer to the Control panel. Once the command has been executed, all the selected pages (✔) will be deselected automatically.

Settings
　Layout　▶
　Serial ports
　Language
　Print Setting
　Panel
　LCD strings

☐ **Settings ⇨ Layout** - This option will allow you to view/hide the **Pages** and **Customers** sections.

☐ **Settings ⇨ Serial Ports** - This option will allow you to setup two Computer COM Ports, for the connections between the Control panel and Modem (via RS232 link). It will also allow you to program the maximum number of connection attempts *(5 at default)*, and the maximum bytes in a single frame during remote transmission (64 at default). Poor quality transmission can be improved by reducing the number of transmission bytes.
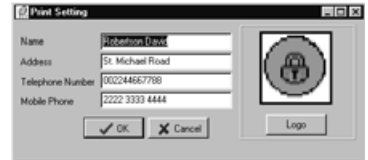
☐ **Settings ⇨ Language** - This option will allow you to select the Application language. Click the required language then the **OK** button.

☐ **Settings ⇨ Print Setting** - This window will allow you to create the letterhead for the printout.

To attach a picture or Logo to the letterhead: click **Logo** and select the path of the Bitmap (.BMP extension).

NOTE - Once the picture or Logo has been attached to the letterhead, DO NOT delete or move it from the Hard-Disk.

☐ **Settings ⇨ Panel** - This command will allow you to specify the Customer's Control panel and Firmware Release (refer to **File ⇨ New Customer**). If you make a **Download/Upload** request, and the data in the '**Panel**' window does not match the connected Control panel, the Application will show the '**Confirm**' window. Click **Yes** to confirm the **Download/Upload** request, or **No** to quit. In both cases, the Application will be updated automatically with the new Control Panel Type and Firmware release.
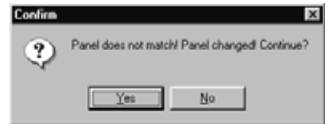
☐ **Settings ⇨ LCD Strings** - This command will allow you to select the Language for the LCD Keypads (refer to *"Available language on the software"*): after selecting the Language, click the **Download** button (bottom left) in order to update the Control panel. **KYO 32 Series** Control panels also provide the "Available *language on the panel"* option, which will allow you to **Upload** or **Download** one of the **4 resident languages** on the Control panel board. Click **OK** to exit.

☐ **Settings ⇨ Conversion table -** This command will allow you to create a alternative character table to Windows™ (e.g.Cyrillic), or to customize the current table.

Check
System enquiry and control
Key programming

☐ **Check ⇨ System enquiry and control** - This command will open a window similar to the one shown in Figure 3.3. which will allow you to:

- View the status of the Partitions
- View the status of the Zones
- View the status of the OC Outputs, and the Alarm Outputs
- View Trouble and Tamper events
- Arm/Disarm Partitions
- Bypass/UnBypass Zones
- Turn ON/OFF OC Outputs
- Reset Alarm/Reset Alarm Memory
- Reset Alarm Memory

You can access all the **System Enquiry** options without entering a Code, however you must enter a **Main User Code** to access the **System Control** options (Arm/Disarm, Bypass/UnBypass Zones, Reset Alarm/Reset Alarm Memory and Reset Alarm Memory). If the entered **Main User Code** is not Enabled on the Partitions involved in the requested operation, the commands will have no effect.

Following is a description of the '**System Enquiry and Control**' window:

▤ **Zones** - This section provides the following information for each of the Control panel Zones:

No. - Identifier number
Description - Zone Label
Part. - Enabled Partitions
Al. - GREEN ⇨ Zone in Standby; RED ⇨ Zone in Alarm;
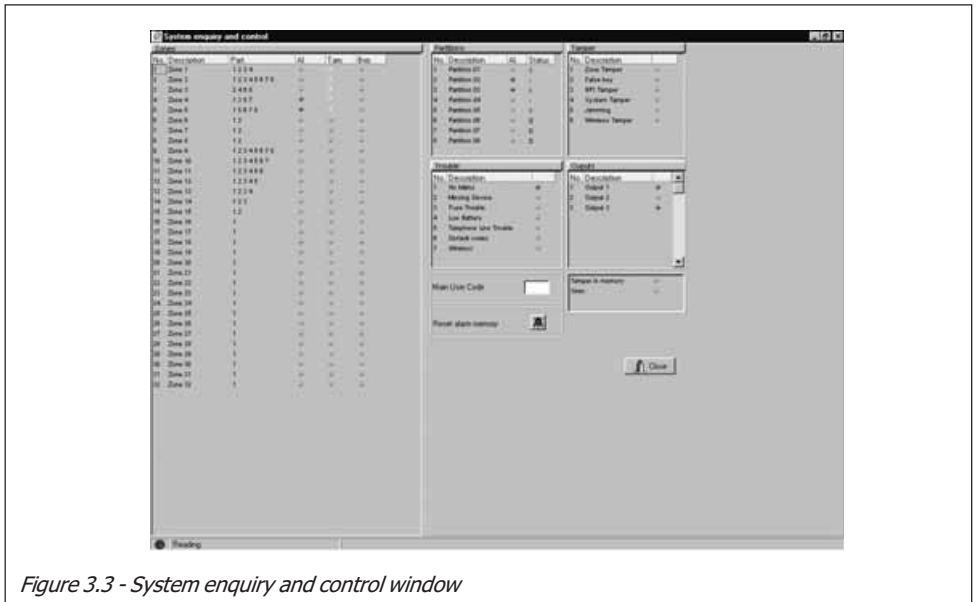RED BLINKING ⇨ Alarm in Memory

Figure 3.3 - System enquiry and control window

Tam. - GREEN ⇨ Zone in Standby; AMBER ⇨ Tamper on Zone; AMBER BLINKING ⇨ Tamper in Memory
Byp. - GREEN ⇨ Zone Unbypassed; AMBER ⇨ Zone Bypassed

*To Bypass/Unbypass a Zone - Using the left button on the mouse, select the Zone then click the right button and select the required option from the Pop-up menu. This **command can be sent** ONLY **when the Zone is Enabled on a Disarmed Partition.***

▤ **Partitions** - This section provides the following information for each of the Control panel Partitions:

No. - Identifier Number
Description - Partition Label
Al. - GREEN ⇨ All the zones of the Partition are in Standby
RED ⇨ At least one of the zones of the Partition is in Alarm
Status - This column indicates the Arming mode of the Partition (refer to table 3.1).

To Arm/Disarm a Partition: using the left button on the mouse, select the Partition then click the right button and select the required option from the Pop-up menu.

▤ **Tamper** - This section indicates current Tamper conditions:

GREEN⇨ No Tamper; RED ⇨ Tamper present

▤ **Trouble** - This section indicates current Trouble conditions:

GREEN ⇨ No Trouble; RED ⇨ Trouble present

▤ **Outputs** - This section indicates the current status of the OC Outputs:

GREEN ⇨ Output in Standby; RED ⇨ Output Active

To turn ON/OFF an Output: using the left button on the mouse, select the Output then click the right button and select the required option from the Pop-up menu. This applies ONLY to Outputs which have been set up for "Remote Command" (refer to the 'Output Page').

▤ **Tamper in memory** and **Siren** - This section indicates the current status of the 'Tamper Memory' and 'Siren':

**Tamper in memory** RED ⇨ Tamper events in Memory

Siren RED ⇨ The Alarm Output (or Output relay) is Active

▤ **Reset Alarm Memory** or **Reset Alarms -** You can reset the Alarm memory or stop ongoing Alarms by means of the 🔨 button. For further information, refer to the relevant paragraph in the USER MANUAL.

Press the **Close** button (🔲 Close)to exit the **System enquiry and control** session.

☐ **Check ⇨ Key programming** - This option will allow you to program the system Keys/Proxi-Cards. Once the Key/Proxi-Card has been properly programmed and assigned to its respective Partitions, it must be enrolled on the system. To enrol the Key/Proxi-Card: insert the Key into the Reader slot or hold the Proxi-Card near the sensitive area

of a Proxi-Reader. The 3 LEDs on the Reader will blink to confirm enrolment, and the computer will emit an audible confirmation signal (beep).
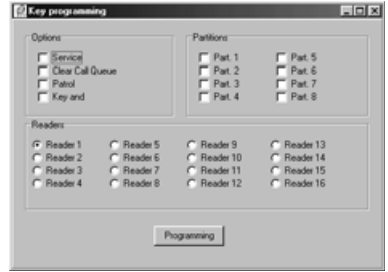
☐ **Check ⇨ View Configuration** - This option will allow you to view the system peripheral devices.

Each device type is identified by a colour (see Table).
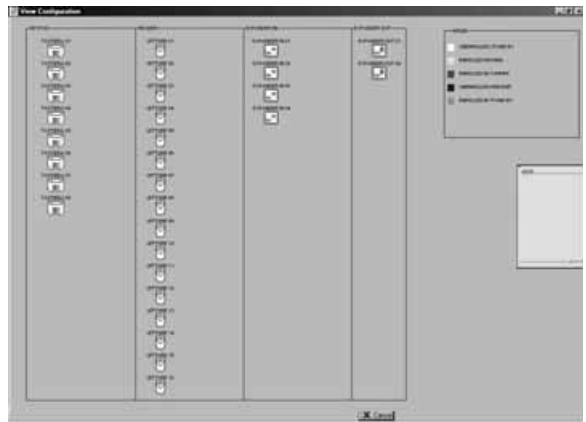
	Colour	Description
	WHITE	Device missing (not enrolled and not connected)
	RED	Device enrolled but in Tamper status
	BLUE	Device connected but not enrolled
	YELLOW	Device enrolled but missing
	GREEN	Device enrolled and present on the system

Modem
  Connection
  Setting
  Hang up

☐ **Modem ⇨ Connection** - This option will allow you to connect, via Modem, to the remote Control panel.

☐ **Modem ⇨ Setting** - This option will allow you to setup the Modem.

☐ **Modem ⇨ Hang up** - This option will allow you to end telephone communications.

For further information on the Modem menu options, refer to "Programming from PC via Telephone".

Help
  Guide

☐ **Help ⇨ Guide** - This option provides the System guide (Adobe® Acrobat® Reader™ required).

Keypads Page

At default or after a restoration Factory preset, in the Control Panel are automatically programmed one or more keyboards according to as specified in Tab. 6.1 of the Chapter 6 of MAIN UNIT MANUAL.

Keypads Table

This table will allow you to enable (✔) or disable (box empty) the system keypads.

No. - This column shows the keypad Address (non editable).

Description - This field is for the keypad label (maximum 16 characters).

The number next to the Page Name indicates the total number of enabled keypads.

Enable Keypad

This section will allow you to enable (✔) or disable (box empty) the keypad on the partitions.

Keypad Type

This section will allow you to specify the type of keypad (refer to Chapter 2). Select **"LCD"** for LCD keypads or select **"Icon/Kp - LED"** for LED keypads.
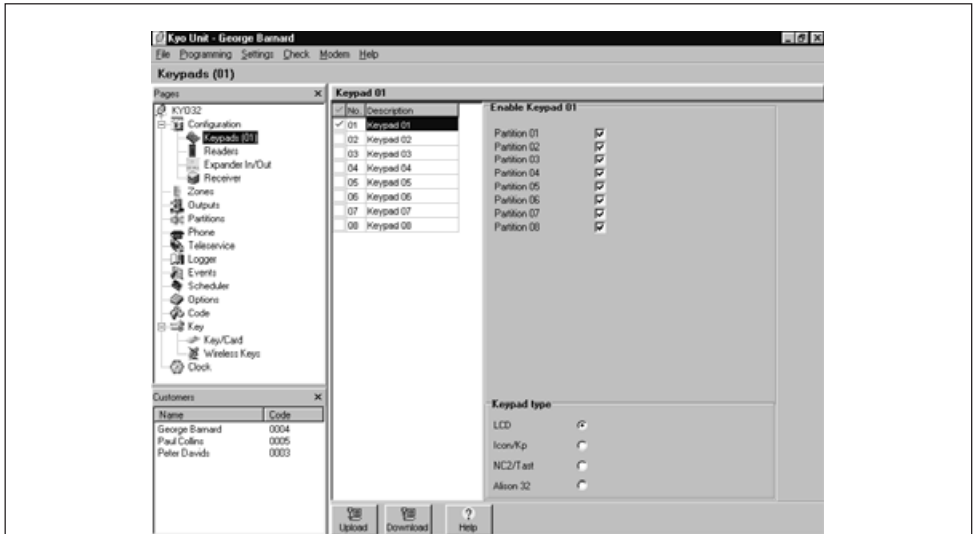

Figure 3.4 - Keypads Page

Readers Page

The Card/Key Readers will allow you to perform all basic operations, such as:

■ Global Arming
■ Disarm Partitions
■ A Mode Arming
■ B Mode Arming
■ Stop Alarm on Partitions

Readers Table
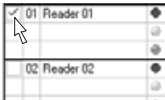
This window will allow you to enable (✔) or disable (box empty) the system Readers (see Figure).

No. - This column shows the Reader Address (non-editable).

Description - This field is for the Reader label (maximum 16 characters).

1 2 3 4 5 6 7 8 - These columns correspond to the 8 partitions. The Readers can be programmed to operate in 3 different modes on the 4 partitions, as follows.

RED - This row will allow you to enable (✔) or disable (box empty) the Reader for GLOBAL Arming on the selected partitions (see Figure). All the enabled partitions will arm, when the PROXI CARD/Key is removed from the Reader when the RED LED is ON.
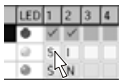
AMBER - This row will allow you to enable (✔) or disable (box empty) the Reader for **A Mode** Arming on the selected partitions. The partitions will Arm or Disarm, as programmed, when the PROXI CARD/Key is removed from the Reader when the AMBER LED is ON. Refer to table 3.1 for the **A Mode** programming instructions.
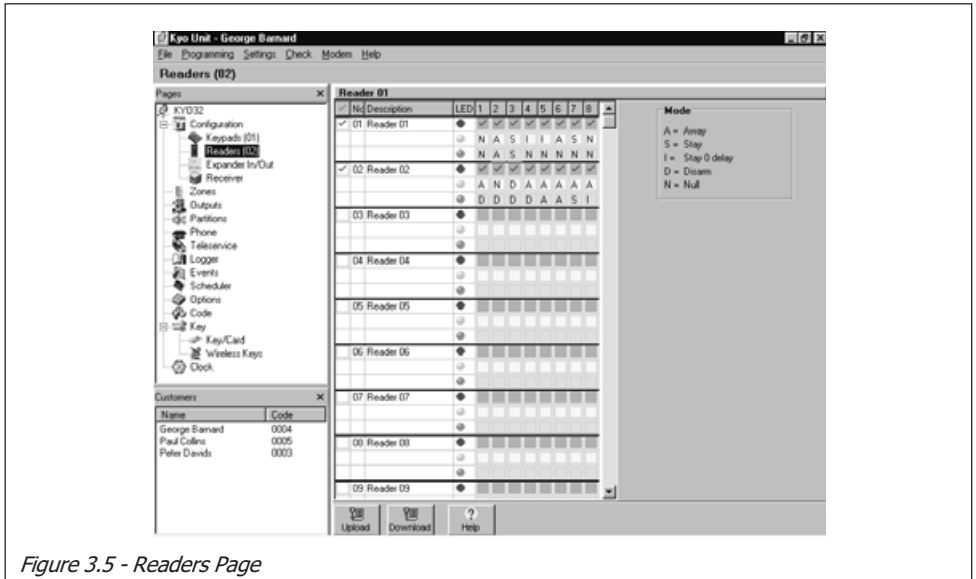
Figure 3.5 - Readers Page

Table 3.1 - A and B Mode Arming options		
Letter	**Action**	**Description**
A	**Away**	The respective Partition will arm in **Away** mode, in this way, violation of Zones with the *Internal* attribute will be signalled
S	**Stay**	The respective Partition will arm in **Stay** mode, in this way, violation generated by Zones with the *Internal* attribute will be ignored
I	**Stay 0 Delay**	The respective Partition will arm in **Stay** mode with *0 Entry and Exit Times*
D	**Disarm**	The respective Partition will disarm
N	**No Change**	The respective Partition will not change status
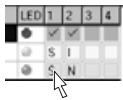
GREEN- This row will allow you to enable (✔) or disable (box empty) the Reader for **B Mode** Arming on the selected partitions. The partitions will Arm or Disarm, as programmed, when the PROXI CARD/Key is removed from the Reader when the GREEN LED is ON. Refer to table 3.1 for **B Mode** programming instructions.

*The number in brackets at the side of the 'Page' type (**Readers**), indicates the total number of enabled Readers.*

Receiver Page

This page will allow you to select the type of Receiver you are using: **VRX32-433** or **Vector/RX8**.

The receiver Vector/RX8 manages only 8 Wireless Zones. If this receiver is used on a Kyo16D Control Panel or on one of the Kyo32 Series Control Panels, only the zones from 9 through 16 can be programmed as "Wireless"

Expander In/Out Page

Series 32 control panels can have up to 4 M-IN/OUT Expanders connected to them, programmed as Input Expanders or Input/Output Expanders, in order to increase the number of zones (up to a maximum of 32) and up to 2 M-IN/OUT Expanders programmed as Output Expanders or Input/Output Expanders, in order to increase the number of outputs (up to a maximum of 16).

> *The M-IN/OUT Expander is seen as an Input Expander and/or as an Output Expander, depending on how it is programmed (see "M-IN/OUT Expander" in the "INSTALLATION" chapter). If the M-IN/OUT Expander is programmed as an Input and Output Expander, it must be configured as an Input Expander and as an Output Expander. For example, if you have programmed an M-IN/OUT Expander as an Input Expander and Output Expander, and assigned it address no. 1, you must configure Input Expander no. 1 and Output Expander no. 1.*

● ✓ - To enable the Input/Output Expander on the system.

> *If the Expanders are enabled, the number of Inputs and/or OC outputs in 'the Zones' and 'Outputs' pages will be updated automatically.*

No. - This column shows the Expander Address (non-editable).

Description - This field is for the Expander label (maximum 16 characters).

> *All other Control panels of the KYO series are unable to accept Expanders, even though the option appears on the menu.*

> *The number next to the Page Name shows the total number of enabled Expanders (Input and Output).*
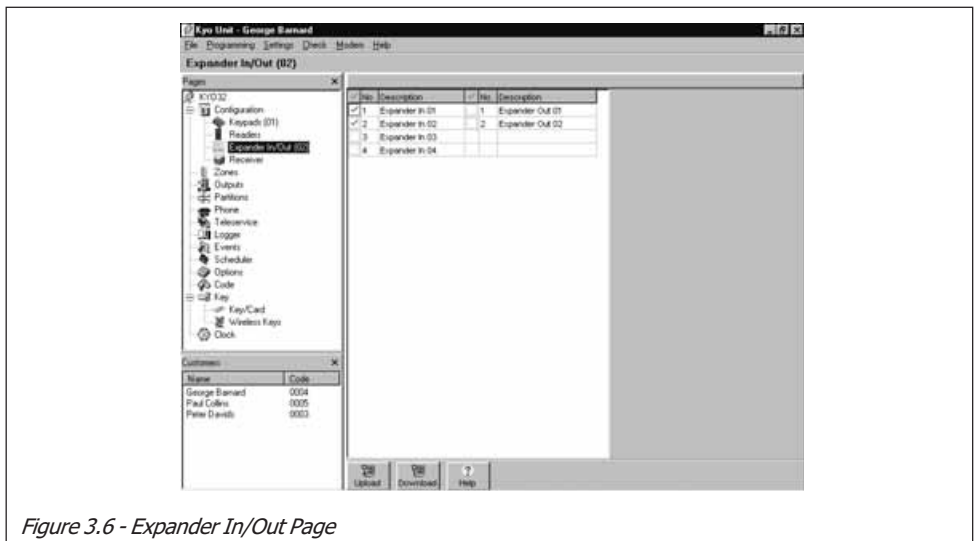
Figure 3.6 - Expander In/Out Page

Zones Page

This section describes the **Zones** page (see Figure 3.7).

Zones Table

No. - This column shows the *Zone identifier number* that will be used instead of the Zone label (Description) in some parts of the application.

If an M-IN/OUT Expander is configured as an Expander with 4 Zones + Expander with 2 Outputs, only the Zones corresponding to terminals L3, L4, L5 and L6 will be usable; if it is configured as an Expander with 4 Outputs + Expander with 2 Zones, only the Zones corresponding to terminals L6 and L7 will be usable.

Position/Placement - This column shows the non-editable label of the hardware component the zone is assigned to.

Description - This field is for the keypad label (maximum 16 characters). The Application will use the label as the zone identifier.

Ter. - This corresponds to the terminal identifier on the PCB.

The numbers L1, L2, ..., L6 on M-IN/OUT Expanders programmed as Input Expanders correspond, respectively to terminals T1, T2, ..., T3.

Serial No. - This field is for the 6 digit Serial number (**ESN**) of the Wireless device (if used). The **ESN** is printed on the device label .

To program the zone parameters:

1. *select* the zone *(click to highlight);*

2. *program* the following parameters for the selected zone.

Figure 3.7 - Zones Page

Type

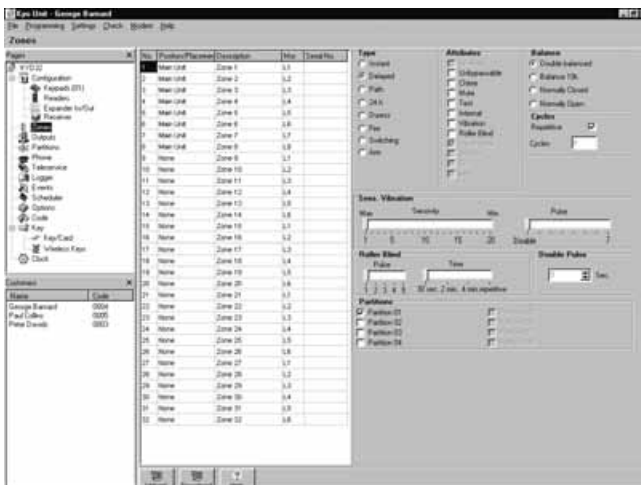*This section describes how the various Zone types respond to violation during Standby status (Unbypassed). Bypassed zones will ignore violation and will not generate Alarms.*

(...) *In this section, the text in brackets (...) refers to the text which will actually appears on the LCD Keypad.*

Alarm Zones
- **Instant (Instant)** - Violation of this type of zone will generate an Instant Alarm.

- **Delayed (Delayed)** - Violation of this type of zone will not generate an Alarm during the Exit Time. Violation during Armed status (after the Exit Time has elapsed) will generate an Alert signal (Entry-Time signal). If the system is not disarmed before the Entry-Time elapses, the zone will generate an Alarm.

- **Path (Path)** - If this type of zone is the first zone to be violated, it will generate an Instant Alarm. Path zones will not generate Alarms during Entry and Exit times.

- **24 h (24 hours)** - This type of zone will always be active, regardless of the Armed/Disarmed status of its Partition. Violation will generate an Instant Alarm.

- **Duress (Duress)** - This type of zone is automatically programmed as a Silent 24h zone. Duress zones activate the Communicator only, and are suitable for Panic buttons.

- **Fire (Fire)** - This type of zone is automatically programmed as a 24h N.O. (Normally Open) zone.

Command Zones
- **Switching (Switch.)** - This type of zone is automatically programmed as a 'Command Zone'. Violation of this type of zone will switch the status of all the Partitions it is assigned to (from Away to Stay Arming or vice-versa).

- **Arm (Arm Only)** - This type of zone is automatically programmed as a 'Command Zone'. Violation of this type of zone will Arm all the Partitions it is assigned to.

You cannot assign any attributes to 'Command Zones' (refer to the 'Attributes' section).

🄼🄼 *The IMQ-SECURITY SYSTEM approval applies only when command zones are dedicated to command devices with the same Performance level as the Control panel which houses the decoding circuit.*

Balancing

- **Double Balanced (DBAL)** - In Standby status, the zone must be connected to Negative by two 10KΩ resistors (for Kyo16D the value of this resistors is 1.2Kohm). If one of the resistors disconnects, the Control panel will generate a Zone Alarm. In all other cases (Zone Open) the Control panel will generate a Tamper event. This Type of connection (by means of just 2 wires) will signal open Alarm/Tamper contacts.

- **Balance 10k (BAL)** - **(Balance 1k2 for Kyo16D)** In Standby status, the zone must be connected to Negative by a 10KΩ (or 1.2Kohm for Kyo16D). For 'Vibration' or Roller Blind' zones attribute, the resistor is 1.5KΩ (or 600 ohm for Kyo16D). If the resistor is short-circuited, the Control panel will generate a Tamper Alarm. If the resistor disconnects (Zone Open), the Control panel will generate an Alarm event.

- **Normally Closed (NC)** - In Standby status, the Zone must be connected to Negative. The Control panel will generate an Alarm when the contact opens.

  ✱◉ *If Zones are programmed as Normally Closed, the Performance level of the Control panel will down-grade from Level II to Level I — as the Zones concerned will not be protected against short-circuit.*

- **Normally Open (NO)** - In Standby status, the zone must be Open. The Control panel will generate an Alarm when the Zone connects to Negative.

  ✱◉ *The IMQ-SECURITY SYSTEM Certification does not apply when Zones are programmed as Normally Open, as the zones concerned will not be protected against wire cutting.*

- **Doubled** (Only for KYO16D) - This balance type is used to double the zone. In this way every line (from L1 to L6) can manage two different devices (for example, 2 sensors or 1 sensor and 1 contact) and the Control Panel is able to recognize the one or the other in case of alarm.

- **Doubled EOL** (Only for KYO16D) - As the precedent, but it needs a series End-Line (EOL) resistor of 1.2 Kohm to detect short circuits.

Attributes

- **Unbypassable (Not Byp.)** - Zones with this attribute cannot be bypassed.

- **Chime (Chime)** - Violation of a zone with this attribute, during **Disarmed** status of its Partition, will generate an audible signal on Keypads and PROXI readers with the 'Chime' attribute (refer to 'Chime on Keypad' and 'Chime on Proxi Reader' on the 'Options' page). Violation of a 'Chime' zone, during **Armed** status of its Partition, will not generate an audible signal.

- **Test (Test)** - Zones with this attribute will be operative, however, violation will not activate the audible-visual signalling devices or the Communicator but will be recorded in the event buffer. Zones with this attribute will always operate as "Instant" Zones, even if they have been programmed as "Delayed" Zones.

- **Mute (Mute)** - Violation of a zone with this attribute will activate the Communicator only. The audible-visual signalling devices and the keypads and PROXI Readers will remain silent.

- **Internal (Internal)** - Zones with this attribute will be bypassed when their Partitions are armed in 'Stay' mode (S) or 'Stay 0 Delay' (I).

- **Vibration (Vibrat.)** - This attribute must be assigned to Zones used for Vibration detectors. There are two trimmers for sensitivity adjustment in the ' Sens. Vibration' section.

■   **Sensitivity**: This trimmer sets the 'Single Shock' threshold. The selected value — minimum 20 (100 ms), maximum 1 (5 ms) — will determine the 'Shock' impact the zone will allow before signalling violation. Set 1 for maximum sensitivity.

■   **Pulse**: This trimmer sets the 'Pulse' threshold. The selected value will determine the number of 'Shocks' the zone will allow before signalling violation. Therefore, if the trimmer is positioned on **Disable**, the corresponding zone will be completely insensitive to Pulses.

For example, a zone with the 'Sensitivity' threshold of 10 and 'Pulse' threshold of 5 will generate an Alarm when:

a) it receives a single Pulse that exceeds the Sensitivity threshold of 10;

b) it receives 5 Pulses of low Sensitivity within 30 seconds.

NOTE: *If you assign N.C. Balancing (Normally Closed) to a **Vibration** Zone, **Wire cutting** will not be signalled.*

●   **Roller Blind (Roll.Bl.)** -This attribute must be assigned to Zones used for Roller blind contacts. There are two trimmers for sensitivity adjustment in the 'Roller Blind' section.

■   **Pulse**: This trimmer regulates the 'Pulse' threshold (1 through 5). The selected value will determine the number of 'Shocks' that the zone will allow before signalling violation. Therefore, if **Disable** is selected, the corresponding zone will be completely insensitive to Pulses.

■   **Time** - This trimmer regulates the 'Time' window. The selected value will determine the 'Pulse' threshold time (i.e. the time allowed for the Pulse counter to reach the programmed threshold).

*For example, a zone with a 'Pulse' threshold of 4 and a 'Time' window of 2 minutes, will signal violation when its contact generates 4 Pulses **within 2 minutes.***

If less pulses than the programmed 'Pulse' threshold are generated during the 'Time' window, the zone will not signal violation, but will refresh the window and carry forward the memorized number of pulses minus one (e.g. 3 pulses memorized = 2 pulses carried forward). The window will be refreshed until there are no pulses to carry forward, at which point, the 'Pulse' threshold and 'Time' window will reset.

If the trimmer is positioned on '**repetitive**', the number of pulses (if less pulses than the programmed 'Pulse' threshold) will be stored indefinitely.

In all cases, the 'Pulse' threshold will reset automatically each time the Control panel disarms.

NOTE: ***Tamper** cannot be signalled if N.C. Balancing (Normally Closed) is assigned to the **Roller Blind** Zone.*

The 'Vibration' and 'Roller Blind' attributes can be assigned to the first 6 Control panel zones only (all zones for Kyo4 and only on the first 2 zones for Kyo16D).

- **Wireless (Wireless)** - (Only for **8W**, **8GW**, **16D, 32** and **32G models**). Only systems with a duly enabled VRX32-433 or Vector/RX8 Receivers (refer to 'Options' in this section) can manage zones with this attribute. The 6 digit Serial Numbers of devices connected to these zones must be specified in the respective column. If a zone is setup as a **Wireless** zone, the **Supervisory** attribute will be enabled automatically (refer to '*Supervisory*'), and it will be shown in red.

  IMPORTANT - If the "Low Battery" fault warning persists after the batteries have been changed, deselect the "Wireless" attribute of the respective zone then re-select it immediately.

- **Supervisory (Superv.)** - If a zone is setup as a **Wireless** zone, this attribute will be enabled automatically, thus allowing the VRX32-433 or Vector/RX8 Receiver to monitor the Wireless device that is connected to the zone (refer to 'Supervisory Time' on the 'Partitions' page). If the Wireless device fails to send a signal to the VRX32-433 or Vector/RX8 Receiver within the programmed **Supervisory window**, the Control panel will generate a 'Missing Device' event.

  The Identifier number of the zone which generated the event will be recorded in the Event logger.

- **Double (Double P)** - A Zone with this attribute will generate an Alarm if it is violated twice within the programmed time (accepted values: 0 through 250 seconds). Refer to the **'Double Pulse'**.

- **Or (Or)** - Violation of a Zone with this attribute will generate an Alarm even when only ONE of its Partitions is Armed.

- **And (And)** - Violation of a Zone with this attribute will generate an Alarm only when all the **'And'** Zones of the Partition concerned are violated within the programmed Time (refer to '**T. And Zone**' on the Partitions page).

Cycles

This parameter determines the number of times the zone will signal the 'Zone Alarm' event.

- **Repetitive (RP)** - Zones with this attribute will generate the 'Zone Alarm' event for an unlimited number of times.

- **Cycles (Cycles)** - The required number of Alarm cycles (0 through 14) can be programmed in this field. If zero (0) is programmed, the zone will be unable to generate Zone Alarm event.

NOTE: Zones that signal persistent Alarm status (e.g. due to Trouble) will generate One Alarm Cycle Only.

Double Pulse

This section describes how to program the Double Pulse time (0 to 250 seconds).

Partitions

This section will allow you to assign the Zones to the Partitions. The Zone will be able to generate Alarm events only when **all** its Partitions are armed.

Outputs Page

This section describes the Outputs page (see Figure 3.8).

🔲◎ *The IMQ-SECURITY SYSTEM approval applies only if Outputs which activate Alarm devices such as Sirens, are not Bistable.*

Outputs Table

No. - This column shows the *OC Output identifier number* that will be used instead of the Output label (Description), in some parts of the application.

Position/Placement - This column shows the non-editable label of the hardware component the OC Output is assigned to.

Ter. - This corresponds to the terminal identifier on the PCB.

Description - This field is for the keypad label (maximum 16 characters). The Application will use the label as the OC Output identifier.

To program the zone parameters of an Output:

1. *select* the Output *(click to highlight);*

2. *program* the following parameters for the selected Output.

Attributes

This section will allow you to select the status of the Outputs during standby status: **NO** (Normally Open) or **NC** (Normally Closed).
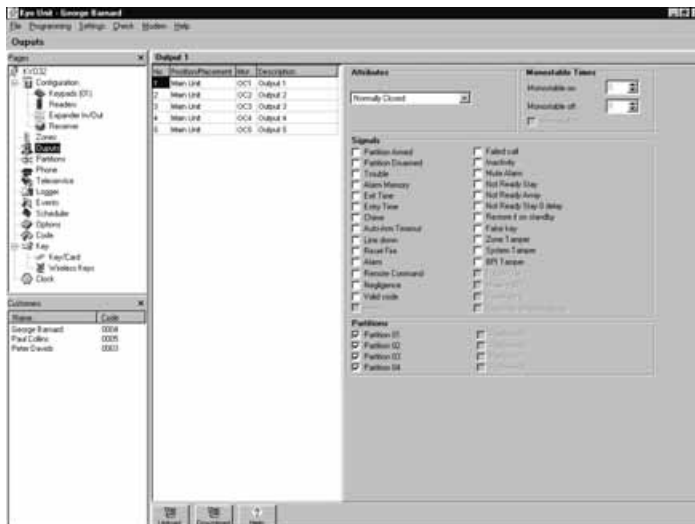

Figure 3.8 - Outputs Page

Monostable Times

This section describes how to set the **ON** and **OFF** Times of **Monostable** Outputs. Accepted values: 0 through 250 seconds.

To used this function, click on "Monostable" check-box.

● The **ON Time** determines the time an Output will remain active.

● The **OFF Time** determines the time an Output will remain in 'forced' standby status after expiry of its programmed **ON Time**.

An Output will hold 'forced' standby status (even after its programmed **OFF Time**) until the event which generated its activation clears.

Signals

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*NOTE: The 'Restoral' conditions described in this section refer to 'NON-Monostable' Outputs. Under normal circumstances, an Output will restore to standby when its programmed **ON Time** expires (refer to '**Monostable**' and the respective Table)*

NOTE: The text in brackets appears on the Installer Menu.

● **Away (Away Arm)** - The Output will activate when at least one of its Partitions arms in Away mode.

● **Partition Disarmed (Disarmed)** - The Output will activate when one of its Partitions disarms.

● **Trouble (Warning)** - The Output will activate when a Trouble event occurs (refer to the *'Events Page'* section), with the exception of the 'Telephone Line Trouble'. The Output will restore automatically when the Trouble clears. This signal is for Non-Monostable Outputs only.

● **Alarm Memory (AlarmMem)** - The Output will activate when Alarms are present in the memory. The Output will restore when the memory resets (via a *'Clear Alarm Memory'* command).

● **Exit Time (Exit T.)** - The Output will activate when the '**Exit Time**' of its assigned Partitions is triggered, and will remain active until the '**Exit Time**' expires.

● **Entry Time (Entry T.)** - The Output will activate when '**Entry Time**' of its assigned Partitions is triggered, and will remain active until the '**Entry Time**' expires.

● **Chime (Chime)** - The Output will activate when a 'Chime' zone is violated during disarmed status of one (or more) of its assigned Partitions. The Output will remain active for approximately 1 second. This signal is for Monostable Outputs only.

● **Auto-Arm Timeout (Alert T.)** - The Output will activate at the programmed time, and will remain active during the countdown to automatic arming.

● **Line Down (Line T.)** - The Output will activate for 15 minutes when telephone-line trouble is detected. If the trouble condition clears, the Output will restore automatically when the 15 minute interval expires, otherwise, it will remain active for a further 15 minutes.

● **Reset Fire (Fire res)** - The Output will activate in **Monostable** mode each a *'Clear Alarm Memory'* operation is requested (PIN required) at a Keypad which is assigned to one of the Partitions associated with the Output. If the Output is programmed as N.C., it can be used as the Negative power supply to the Fire detectors. In fact, the Negative signal will fail for the programmed 'Monostable Time' (refer to Outputs Page) each time a *'Clear Alarm Memory'* operation is requested, thus allowing the Fire detectors to reset.

● **Alarm (Al.r.bel)** - The Output will activate when one of its assigned Partitions signals Alarm, and will restore when the Alarm cycle ends.

● **Remote Command (Remote)** - The Output will activate when the User executes a command over the phone (the Control panel Answering device must be enabled). This signal can be used to activate or stop the OC Output over the phone. The Output (activated over the phone), can also be restored from the Keypad (via a *'Clear Alarm Memory'* command). Refer to the User Manual for further details.

● **Negligence (Neglig.)** - The Output will activate when the Control panel generates a Negligence event, and will restore when the Alarm memory resets (via a *'Clear Alarm Memory'* command).

● **Monostable (Monosta.)** - The Output will remain active until the **ON Time** expires, after which it will be forced to standby for the programmed **OFF Time**. The following Table shows the restrictions associated with Outputs with this attribute.

Type	Signal	
ONLY Monostable	Chime Reset Fire Sqwark Mute Alarm Failed Call	Valid Key Valid code Superkey 2 Superkey 2 on wireless key
NON Monostable	Trouble Alarm Remote Command	Not Ready Stay Not Ready Away Restore if in standby
Monostable and NON Monostable	Partitions Armed Partitions Disarmed Alarm Memory Exit Time Entry Time Auto-Arm Timeout Negligence Not Ready Stay 0 Delay	Line down Inactivity False Key Zone Tamper System Tamper BPI Tamper Missing BPI

If you associate any of the signals in the last section to a '**NON Monostable**' Output, the Output will restore when the cause of activation clears (automatically or manually).

For example, the "Entry Time" signal will activate the Output for the programmed Entry Time, then will restore automatically to standby.

However, if an Output is activated by a "... Tamper" signal, it will not restore to standby until the cause of its activation clears.

- **Valid Code (Code)** - The Output will activate when the Control panel recognizes a Valid Code. This signal can be associated with 'Monostable' Outputs only.

- **Squawk (Squawk)** - The Output will activate when the Control panel is Armed via a Command Zone or Remote Command. This signal can be associated with 'Monostable' Outputs only.

- **Failed call (Fail com)** - This event is generated by unsuccessful calls.
  To restore the Output:
  a) view the Event logger on an LCD Keypad;
  b) view the Trouble on an LED Keypad.

- **Inactivity (Inactiv.)** - The Output will activate when the Control panel generates an '**Inactivity**' event. The Output will restore when the Alarm memory resets (via a *'Clear Alarm Memory'* command).

- **Mute Alarm (Silent)** - The Output will activate when the Alarm is generated by a Zone that is assigned to a Partition with the following attributes:

    a) Type *'Duress'*,   **b**) Attribute *'Mute'* or
    c) If the Alarm is generated by a 'Duress' Code.

  This signal can be associated with 'Monostable' Outputs only.

- **Not Ready Stay (N.R.Stay)** - The Output will activate when the Control panel is not ready to arm in '**Stay**' mode (S) or, in accordance with Option **52** (refer to the **Options** Page), 'Stay 0 Delay' mode.

- **Not Ready Away (N.R.Away)** - The Output will activate when the Control panel is not ready to arm in '**Away**' mode.

- **Stay (Stay Arm)** - The Output will activate when at least one of its Partitions Arms in '**Stay**' mode ('S' or '0').

- **Restore if on standby (Al.r.zon)** - The Output will activate when Alarm conditions are detected on one of its Partitions. The Output will restore when the Alarm cycle ends, and the Alarm conditions have been cleared from all the Partition zones, or when the Partition disarms.

- **False key (FalseKey)** - The Output will activate when an attempt is made to use a False Key. This is real-time event, therefore, the Output cannot restore until the False key has been removed.

- **Zone Tamper (ZoneTamp)** - The Output will activate when Zone Tamper conditions are detected, and will remain active during the respective Alarm cycles.

- **System Tamper (Sys Tamp)** - The Output will activate when violation is detected on the 24h Tamper line, or when the Control panel is forced open. The Output will restore automatically when the Alarm cycle ends.

- **BPI Tamper (BPI Tamp)** - The Output will activate when Keypad tamper is detected (when the keypad, PROXI or Expander frontplate is removed). The Output will restore automatically when the Alarm cycle ends.

- **Valid Key/Code (Key)** - The Output will activate when the Control panel recognizes a valid Key/Card, and will remain active until the **ON Time** expires. This signal can be associated with 'Monostable' Outputs only.

- **Missing BPI (Missing)** - The Output will activate when an enrolled BPI device fails to respond to the Control panel.

- **Superkey 2 (Key 2)** - The Output will activate when the 'Superkey 2' facility is requested via Keypad. This signal can be associated with 'Monostable' Outputs only.

- **Superkey on wireless key (Key2 WLS)** - The Output will activate when the 'Superkey 2' facility is requested via Wireless Key. This signal can be associated with 'Monostable' Outputs only.

Partitions

This section will allow you to assign the Outputs to the Partitions. The Output will activate when the programmed signal is generated by one of its Partitions.

When the signal is generated by the Control panel (e.g. Trouble), the Output will activate directly, and its Partitions will not be influent. In all other cases, the Output will activate only when the signal is generated by one of its Partitions.

Partitions Page

This section describes the Partitions page (see Figure 3.9).

Partitions Table

No. - This column shows the *Partition ID number* that will be used instead of the Partition label (Description), in some parts of the application.

Description - This field is for the Partition label (maximum 16 characters). The Application will use the label as the Partition ID.

Exit Time - This parameter determines the Exit delay time (expressed in minutes). Violation of 'Delayed' Zones during the Exit time will not provoke Alarms. The Exit Time will start when the Partition arms, and will be signalled by:

■ Activation of the Partition OC Outputs (programmed with the 'Exit Time' signal);

■ A series of single beeps (emitted at one-second intervals) on all the Partition Keypads (Mute keypads will not emit this signal);

■ A series of double beeps (emitted at one-second intervals) on all the Partition PROXI Readers, the 'Chime on PROXI Reader' option must be enabled otherwise, the PROXI Readers will not emit this signal (refer to 'Options Page').

Entry Time - This parameter determines the duration (expressed in minutes) of the Audible signal which will be generated when a 'Delayed' Zone of an Armed Partition is violated. The Entry Time will be signalled by:
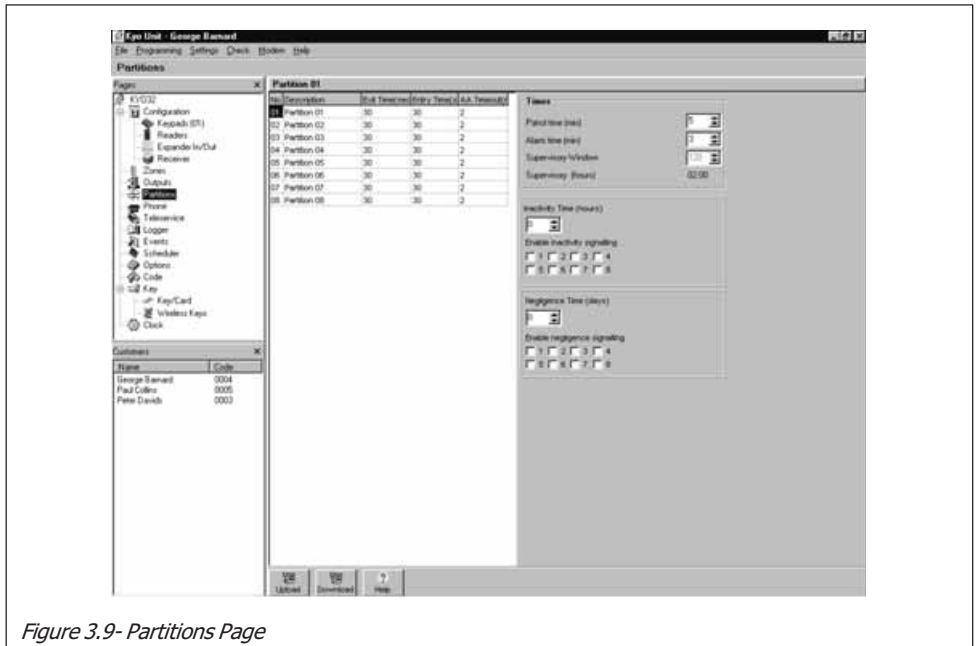

Figure 3.9- Partitions Page

■ Activation of the Partition OC Outputs (programmed with the 'Entry Time' signal);

■ A series of fast beeps, emitted by the Partition Keypads (except Mute keypads), and Partition PROXI Readers (the 'Enable buzzer on PROXI Reader' option must be active, otherwise, the PROXI Readers will not emit this signal — refer to 'Options Page').

Auto-arm Timeout - This parameter (expressed in minutes) determines the time between the Auto-arm Timeout signal and the Partition Auto-arming event.

Example: If the scheduler is programmed to Arm the Partition at 17:30, with a 15 minute Auto-arm Timeout, the 'Auto-arm Timeout' will be generated at 17:15. This signal can be used to activate one of the OC Outputs.

The 'Auto-arm Timeout' signal will cease when the Partition Arms, or when an Overtime Request is made.

T. And Zone - This parameter determines the time within which 2 or more '**AND**' Zones must detect violation before the Control panel will generate an Alarm (accepted values: 0 through 945 seconds by automatic step 15).

The IMQ-SECURITY SYSTEM approval applies only when the " T. And Zone" value is 30 seconds or more.

T. And Code - This parameter determines the time within which 2 or more '**AND**' Codes must be entered before the Control panel will Disarm (accepted values: 0 through 250 seconds).

Times

● **Patrol Time** - This parameter determines the time between disarming for patrol purposes (Patrol code required) and automatic rearming. The programmed patrol time is valid for all Partitions (accepted values: 0 through 63 minutes).

● **Alarm Time** - This parameter determines the duration of the Alarm cycle (accepted values: 0 through 63 minutes).

If the Alarm Time is set at 0 (zero), the Alarm Outputs (e.g. Siren) will not be activated, however, the event will be sent to the Logger.

● **Supervisory window** - This parameter determines the time within which a Wireless zone must send a supervisory signal (accepted values: 120 through 1440 minutes — in steps of 15 minutes). Use the computer mouse or the ⬆ and ⬇ keys on the PC keyboard to enter this value. This field will be inactive when the *'Enable Wireless Receiver'* option is disabled (refer to 'Options' page).

The IMQ-SECURITY SYSTEM approval applies only when the Wireless Supervisory Time is set at 2 hours 30 minutes and the 'Supervisory' option (refer to "Attributes" on the "Zones" page) is enabled for ALL Wireless Zones.

Inactivity

- **Inactivity** - This parameter determines the maximum time (accepted values: 0 through 99 hours) that a Partition will be allowed to stay without signalling zone violation. The 'Inactivity Partition no.' event will be generated when the programmed interval elapses.

- **Enable Inactivity 1, 2, 3, 4, 5, 6, 7, 8** - This parameter determines the Partitions that will be monitored for inactivity.

Negligence

- **Negligence** - This parameter determines the maximum time (accepted values: 0 through 99 days) that a Partition will be allowed to stay without signalling an 'Arming' event. The 'Negligence Partition no.' event and "Tamper Zone no.' event will be generated when the programmed interval elapses.

- **Enable Negligence 1, 2, 3, 4, 5, 6, 7, 8** - This parameter determines the Partitions that will be monitored for Negligence.

Phone Page

This section describes the Phone page (see Figure 3.10).

Telephone Numbers

No. - This column shows the *Telephone identifier number* that will be used instead of the Telephone label (Description), in some parts of the application. The *Telephone identifier number* will also be used when programming the system from a Keypad.

Telephone Number - This column is for the Telephone numbers that will be utilized by the Digital Communicator and Dialler, and for Teleservice calls. This field accepts a maximum of 20 characters (digits and pauses). Accepted values: 0 through 9, commas (,) for dialling pauses (e.g. between he prefix and telephone number), and star (*) and pound (#).

Description - This field is for the User's Name (maximum 16 characters).

Dialling

- **Disallow tone check** - Normally the Control panel will check for the Dialling Tone before dialling. If there is no dialling tone, the Control panel will hang up and retry. If the Disable Tone Check is enabled, the Control panel will dial without checking for the dialling tone. This option is useful when the Control panel is connected downstream to a switchboard with non-standard tones.

- **DTMF Dialling**- Normally the Control panel operates in touch-tone mode, as it is faster than Pulse dialling. If touch dialling is not supported by the telephone line, it will be necessary to enable Pulse dialling.

Figure 3.10 - Phone Page

Type

This section will allow you to select the operating mode of the 8 telephone Numbers.

To program the Type:

1. select the Telephone Number;

2. program the following parameters for the selected Telephone Number.

● **Telemonitoring** - This option will allow the Control panel to communicate with the Central Station. It will be necessary to program parameters in the **Telemonitoring** section.

● **Voice Message** - This option will allow the Control panel to send a Voice Message (this option requires the NC2/VOX).

● **Teleservice** - This option will allow the Control panel to manage Teleservice calls.

● **None** - No service.

Partitions

This section will allow you to assign the selected Telephone Number to the Partitions. It is possible to change a Telephone Number by entering a Main User Code at a Keypad (the Code and Keypad must be assigned to the Partition of the Telephone number concerned).

The 'Teleservice' option will activate the Reporting Protocol list (below).

● **Protocol** - The Reporting protocol is usually assigned by the Central Station. This system supports the following formats:

ADEMCO / SILENT KNIGHT - Slow 10 baud - 3/1, 4/1, 4/2
ADEMCO / SILENT KNIGHT - Fast 14 baud - 3/1, 4/1, 4/2
FRANKLIN / SECOA / DCI-VERTEX - Fast 20 baud - 3/1, 4/1, 4/2
RADIONICS - 40 baud - 3/1, 4/1, 4/2
SCANTRONIC - 10 baud - 3/1, 4/1, 4/2
CONTACT ID
CESA

● **Customer Code** - This code is usually assigned by the Central Station, and allows their operator to identify the system (user, location, type of system, etc.).

The Customer Codes must have 4 digits (5 for CESA protocol): 0 through 9 and A to F (hexadecimal).

For Contact ID — '**0**' and '**A**' have the same value.

For Pulse protocols — '**0**' corresponds to 10 pulses, whereas '**A**' corresponds to '0' pulses (empty digit).

When using Pulse protocols with 3 digit codes, the fourth digit must be programmed as 'A'.

● **Listen-in** - If this option is enabled, the Central Station operator (after receiving an Alarm call from the system) will be able to open a Listen-in session on the monitored premises.
If the *'2-wayAudio alert'* is enabled (refer to the 'Options' Page), the Control panel will open the Audio channel for 15 seconds before starting the Listen-in session. *The '2-wayAudio alert' is valid for all protocols.*

● **2-Way Audio** - This option will allow the operator to open a 2-Way Audio session and talk to persons on the monitored premises.

● **Two-Way Audio Timeout** - This parameter determines the duration of the Listen-in or 2-Way Audio session. The session will close automatically when the programmed Timeout ends, or when the operator ends the session.
The programmed Timeout is valid for all 8 Telephone Numbers.

Call Attempts

The value entered in this field determines the number of times the Control panel will dial a telephone number before quitting the unanswered call (8 at default).

Accessing the DTMF Menu

If you enable **Listen-in** with **2-Way Audio Timeout**, the operator will be able to **access the DTMF menu over the phone**. To do so, the operator must press any number on the telephone keypad and wait for the audible feedback signal (5 beeps), then enter a Valid DTMF Code (for further details refer to "Operating the System from a Telephone" in the USER MANUAL).

Export to WinBcs

Export to WinBcs

Use this button to export data to the "Bentel Central Station" application.

Teleservice Page

The parameters in this page (see Figure 3.11) determine the way the Control panel will respond to incoming Calls from the Central Station.

The Control panel will answer incoming Teleservice calls only when the User has enabled the Teleservice option or Answering device option (refer to 'Enable/Disable Teleservice' in the User Manual).

● **Double Call** - This option allows the Control panel to share the Telephone line with another answering device (Answerphone, Fax, etc.). If this option is enabled, the Control panel will override other telephone devices when it recognizes the Double call sequence.

● **Number of rings** - The value entered in this field determines the number of rings the Control panel will allow before answering an incoming call. If the 'Double Call' option is enabled this parameter will be ignored.

● **Callback** - If this option is enabled the Control panel will call the 'Installer Telephone Number' when it receives the Teleservice call. In this way, authorized persons **only** can access the system.

● **Customer Code** - This field shows the Customer code.

Installer Telephone Number
333988991120

● **Installer Telephone Number** - This field holds the 'Teleservice' number. The Control panel will call this number when it receives an incoming Teleservice call
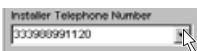
(the 'Callback' option must be enabled). If several Teleservice numbers have been listed in the 'Telephone' page, you can select the required number from the drop-down list (click the down arrow to open the drop-down list).

Test Event

The Test event will be generated at regular intervals, as per programming. This event will activate the Digital, Voice and Teleservice calls, in accordance with the 'Test Event' settings in the 'Events' page.

- **Teleservice Test call** - This option will allow the Control panel to send the 'Test' call (Teleservice) automatically at regular intervals (as per programming) to the 'Installer Telephone Number'. If you DO NOT want to Enable the Test call, enter '**00**' for **Event Code** in the '**445-Test Event**' field (**330** for Kyo16D and **265** for Kyo4/8, refer to the **Events page**).

- **Send Test programming** - This field is for the Date and Time of the 'Test' event.

■ *To view the Date and Time of the successive 'Test' event — click the Download button.*

■ *To send a New Date and Time to the Control panel — click the 'Send Test programming' check box then click the Upload button.*

- **Time/Interval** - This field is for the interval (in hours) between 'Test' events. To Disable the 'Test' event, enter '**0**'.

- **Date/Hour** - This field will allow you to View and Set the Date and Hour of the 'Test' event.
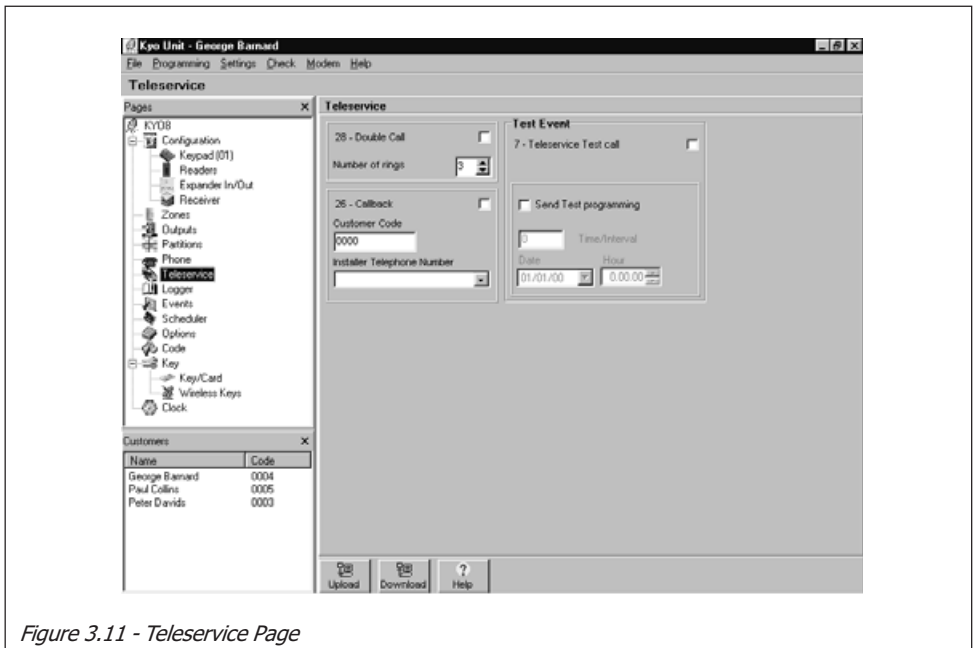

Figure 3.11 - Teleservice Page

Logger Page

This window (see Figure 3.12) will allow you to view the events recorded in the Logger.

● **No.** - This is the event number.

The rotating Logger holds 256 events (128 on Series 4-8 Models). When the Logger is full, the oldest events will be deleted to make space for new events.

● **Date** - Date when the event occurred.
● **Time** - Time when the event occurred.
● **Event Type** - Event description.

The following commands will allow you to manage the events:

■ **Upload button** - This command will allow you to upload the Events list from the Control panel to the Computer for viewing purposes.

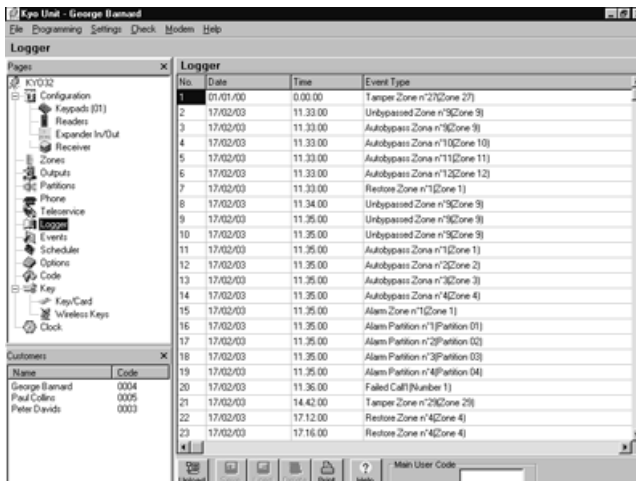■ **Print button** - This command will allow you to print the entire Events list.

The following buttons will become active when a Customer is loaded. The name of the Customer will be shown on the title bar.

■ **Save button** - This command will allow you to save the events on the Hard-Disk. Each Customer will have an Events file. The Application will create the file when the first 'Save' request is made.

■ **Load button** - This command will allow you to view the events stored on the Computer Hard-Disk.
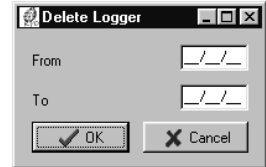

Figure 3.12 - Logger Page

■ **Delete button** - This button opens the Delete
Logger window, and will allow you to delete the
events from the Hard-Disk.

The events logged between the **From - to** dates
entered in this window will be deleted when the
OK button is clicked.

■ **Main User Code** - This field is for the Main User Code, which will allow
the user to view the Events List (Installer Code NOT required).

Events page

The parameters in this page (see Figure 3.13) determine the actions the Control
panel will take in response to the associated events.

Telephone actions:

a) activate the Digital Communicator (Pulse);

b) activate the Voice Dialler.

This section describes the 'Event Settings' table (see Table 3.3 for the complete
list of Programmable Events).

● **No.** - This column shows the Event Identifier Numbers.

● **Description** - This column shows the type of events the Control panel can
manage (see Table 3.3 in the following pages).

● **Telephone Number** - The Telephone Number table will allow you to assign
Telephone numbers to the various events. The selected Telephone Numbers will
be called when the corresponding event occurs (see the Figure in the left margin).

Figure 3.13 - Events Page

● **Event Code** - This column is for the Event Codes (usually assigned by the Central Station). Event codes comprise 2 digits, accepted values: **0** through **9** for CESA and, **0** through **9** and HEX digits **A** and **F** for all other protocols.

When using Pulse protocols with single digit codes, the second digit must be programmed as '**A**' (refer to 'Customer Codes' in the 'Teleservice' page).

The programmed Codes will be sent to the Telemonitoring Telephone numbers (refer to 'Types' in the 'Telephone' page) . Events that are not given Codes, or those with 'ØØ' value will not activate the Digital Communicator.

Existing Codes Event (e.g. ØØ) must be deleted before new Codes can be entered.

Assigning Voice Messages

● **Voice Message** - This field will allow you to assign a Voice message to the Event. The Voice Message will be sent when the Event occurs.

Voice Message Telephone numbers must have the 'Voice message' attribute (refer to 'Type' in the 'Phone Page').

To assign a Voice message — triple click the relative field, open the 'Voice Message' drop-down list (click the arrow) then select the Voice Message.

● **CONTACT-ID button** - This button will allow you to assign the Codes shown in Table 3.2. All the Events will be sent to the first Telephone Number programmed as Contact-ID.

● **Default SIA button** - This button will program the default SIA Codes (only for Kyo16D Control Panel). The complete list of this protocol is shown on the 'Programming Manual' of KYO16D Control Panel.

● **Clear button** - This button will allow you to clear all the data programmed in the 'Telephone numbers' column, Event Code and/or SIA.
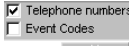
● **Details button** - This button opens the 'Events' window that will allow you to expand (check box selected) or contract (check box deselected) the details of specific events.

Therefore, if you wish to group the Partition Event details ('Partition Details' box deselected), the list will show just one string —*Global* — for all the Partition events, for example:

<div align="center">

Alarm Partition *Global*

Arm Partition *Global*

</div>

However, if you wish to expand the Partition Events details ('Partition Details' box selected) the list will show all the strings relative to Partition events, for example:

<div align="center">

Alarm Partition n°1 (Partition 01)

Alarm Partition n°2 (Partition 02)

Alarm Partition n°3 (Partition 03)

Alarm Partition n°4 (Partition 04)

Arm Partition n°1 (Partition 01)

</div>

Arm Partition n°2 (Partition 02)
Arm Partition n°3 (Partition 03)
Arm Partition n°4 (Partition 04)

● **Messages button** - Press this button to access the Messages window. This window will allow you to customize and edit the recorded **Messages**.

Table 3.2 - Event Codes for Contact ID			
Code	**Event**	**Code**	**Event**
Medical Alarms		**(1) 33**	24 Hours
(1) AA	Medical	**(1) 34**	Entry / Exit
(1) A1	Pendant Transmitter	**(1) 35**	Day / Night
(1) A2	Fail to Report In	**(1) 36**	Outdoor
Fire Alarms		**(1) 37**	Tamper
(1) 1A	Fire Alarm	**(1) 38**	Near Alarm
(1) 11	Smoke	*General Alarms*	
(1) 12	Combustion	**(1) 4A**	General Alarm
(1) 13	Water Flow	**(1) 43**	Exp. Module Failure
(1) 14	Heat	**(1) 44**	Sensor Tamper
(1) 15	Pull Station	**(1) 45**	Module Tamper
(1) 16	Duct	*24 Hour Non-Burglary*	
(1) 17	Flame	**(1) 5A**	24 Hour Non-Burglary
(1) 18	Near Alarm	**(1) 51**	Gas Detected
Panic Alarms		**(1) 52**	Refrigeration
(1) 2A	Panic	**(1) 53**	Loss of Heat
(1) 21	Duress	**(1) 54**	Water Leakage
(1) 22	Silent	**(1) 55**	Foil Break
(1) 23	Audible	**(1) 56**	Day Trouble
Burglar Alarms		**(1) 57**	Low Bottle Gas Level
(1) 3A	Burglary	**(1) 58**	High Temperature
(1) 31	Perimeter	**(1) 59**	Low Temperature
(1) 32	Interior	**(1) 61**	Loss of Air Flow
NOTE - The Non-Modifiable part of the code is shown in brackets.			

Priority Event

It is possible to give 'Priority' to one of the events on the Event list. When several events occur simultaneously, the calls relative to **Priority event** will be sent first.

The Priority Event can be selected/deselected in one of the following ways:

- double click the required event;
- select the event then, using the right button on the mouse, click once.

The Priority event will be highlighted in red.

☜◄◄ *The IMQ-SECURITY SYSTEM approval applies only when the Priority Event is associated with a BURGLAR, ALARM, TAMPER or TROUBLE event, in that order.*

Table 3.3 - Programmable Events				
Contact ID Code	**No.**			**Event Description**
	Kyo4-8 Series	**Kyo 16D**	**Kyo32 Series**	

Contact ID Code	Kyo4-8 Series	Kyo 16D	Kyo32 Series	Event Description	Occurs when ...
(1) 00	00...03	00...03	00...07	**Alarm on Partition n°**	... alarm conditions are detected on one of the zone assigned to **Partition n°**
(1) 3A	04...11	04...19	08...39	**Alarm on Zone n°**	... alarm conditions are detected on **Zone n°**
(1) 00	12...15	20...23	40...47	**Inactivity Partition n°**	... the Control panel detects Inactivity on **Partition n°**
(1) 00	16...19	24...27	48...55	**Negligence Partition n°**	... the Control panel detects Negligence on **Partition n°**
(5) 7A	20...27	28...43	56...87	**Bypassed Zone n°**	... **Zone n°** is bypassed
(5) 7A	28...35	44...59	88...119	**Unbypassed Zone n°**	... the **Zone n°** is unbypassed
(4) 22	36...59	60...100	120...143	**Recognized Code n°**	... the **Code n°** is recognized. *For CONTACT-ID, the User ID (CCC) ranges from 1 to 24 to specify the corresponding Recognized Code.*
(4) 22	60...187	101...228	144...271	**Recognized DGK n°**	... the Key/Card n° **(SAT or PROXI-CARD)** is recognized. *For CONTACT-ID, the User ID (CCC) ranges from 25 to 152 to indicate the Recognized Key number (e.g. Key 1 - CCC=25, Key 128 - CCC=152).*
(5) 7A	188...195	229...244	272...303	**Auto-bypass Zone n°**	... the **Zone n°** is unbypassed automatically *(refer to 'Options Page')*
(4) A2	196...199	245...248	304...311	**Arm Partition n°**	... the **Partition n°** is armed by Code or Key/Card
(4) A2	200...203	249...252	312...319	**Disarm Partition n°**	... the **Partition n°** is disarmed by Code or Key/Card
(4) 00	204...207	253...256	320...327	**Special Arming Partition n°**	... the **Partition n°** is armed via: a) a Command Zone b) the Scheduler c) the PC on-line
(4) 00	208...211	257...260	328...335	**Special Disarming Partition n°**	... the **Partition n°** is disarmed via: a) a Command Zone b) the Scheduler c) the PC on-line
(6) 00	212...215	261...264	336...343	**Reset Memory Partition n°**	... the Alarm Memory of the **Partition n°** is deleted
(1) 21	216...219	265...268	344...351	**Duress Partition n°**	... a **Duress** Code is used to disarm the **Partition n°**
(3) 50	220...227	269...276	352...359	**Failed Call n° (Description)**	... the call to the **Number** (1 ... 8) is unsuccessful. *Failed Call Events 220 (352) to 227 (359) cannot be programmed to generate calls to their assigned telephone numbers. For example, Failed Call Event 220 (352) cannot be programmed to generate a call to Tel. Number 1, as this would generate a series of Failed Calls to this Tel. Number.*
(1) 44	228...235	277...292	360...391	**Tamper Zone n°**	... tamper conditions are detected on the **Zone** (occurs only when the terminals of Balance or Double Balanced Zones are shorted)
(1) 3A	236...243	293...308	392...423	**Restore Zone n°**	... the **Zone** is restored after an Alarm or after a Tamper event
(1) 45	244	309	424	**BPI Tamper**	... tamper is detected on one of the BPI devices (Snatch or forced opening)
(1) 45	245	310	425	**Restore BPI Tamper**	... all the conditions that generated the BPI Tamper event cease

(1) 45	246	311	426	System Tamper	... the 24h Balanced Tamper line opens or is shorted or the Control panel is forced open. This event can also be activated by the Control panel snatch microswitch
(1) 45	247	312	427	Restore System Tamper	... all the conditions that generate the SystemTamper event clear
(1) 45	248	313	428	False Key	... a false Key/Card is detected at a reader
(3) A1	249	314	429	Mains Truoble	... the Mains power fails for the programmed time (refer to '*Options Page*')
(3) A2	250	315	430	Battery Trouble	... the battery is low or empty
(3) 00	251	316	431	Fuse Trouble	... the Fuse [9c] blows
(3) 00	252	317	432	BPI Fuse Trouble	... the BPI Fuse [9b] blows
(3) AA	253	318	433	Missing Device	... a BPI or Wireless device fails to respond
(3) 51	254	319	434	Telephone Line Trouble	... the telephone line is down
(3) A1	255	320	435	Reset mains	... the 230 Mains Voltage is restored
(3) A2	256	321	436	Reset battery	... the battery is fully charged
(3) 00	257	322	437	Reset fuse	... the fuse [9c] is replaced
(3) 00	258	323	438	Reset fuse BPI	... the BPI fuse [9b] is replaced
(3) AA	259	324	439	Device Restored	... all the BPI or Wireless devices respond
(3) 51	260	325	440	Reset Telephone Line	... the telephone line is restored
(1) 10	261	326	441	Superkey 1	... Superkey 1 is used
(1) AA	262	327	442	Superkey 2	... Superkey 2 is used
(1) 2A	263	328	443	Superkey 3	... Superkey 3 is used
(4) 22	264	329	444	Remote Command	... the Control panel receives a remote command via modem
(6) A2	265	330	445	Test Event	... the Control panel sends a Test event
(6) 22	266	331	446	Event Buffer 70% full	... the Logger is 70% full
(3) 50	267	332	447	Date at Default	... all power to the Control panel fails (total blackout)
(1) 45	—	333	448	Wireless Tamper	... the Wireless Receiver is forced open
(1) 45	—	334	449	WLS Tamper Restored	... the Wireless Receiver is closed after forced opening
(1) 45	—	335	450	Wireless JAM	... the Wireless Receiver detects Jamming
(1) 45	—	336	451	WLS JAM Restored	... the Wireless Receiver no longer detects Jamming
(3) A2	—	337	452	WLS Battery Low	... the battery of the Wireless device is low or not present
(3) A2	—	338	453	WLS Battery Restored	... the battery of the Wireless device is OK
NOTE - The Non-Modifiable part of the code is shown in brackets.					

Scheduler Page

This Control panel has a built-in Scheduler which manages **Auto-Arming**. The parameters programmed in this page (see Figure 3.14) will determine the automatic arming schedule.

In order to allow the Control panel to manage this function, the User must enable the 'Enable/Disable auto-arming' option.

Scheduler Table

- **Day** - This column will allow you to select the day.
- ✔ - The check boxes will allow you to select the Partitions that will auto-arm on the selected day.
- **Partition 01, 02, 03, 04, 05, 06, 07, 08** - This column will allow you to program the automatic arming time (accepted values: 00.00 through 23.59 hours/minutes).

> *Auto-arming operations can be delayed by overtime requests. However, the Control panel will not allow an overtime requests to go past 24.00 hours, and will auto-arm at midnight.*

- **Delete Entries** - This button will allow you to delete all the entries, and restore default.
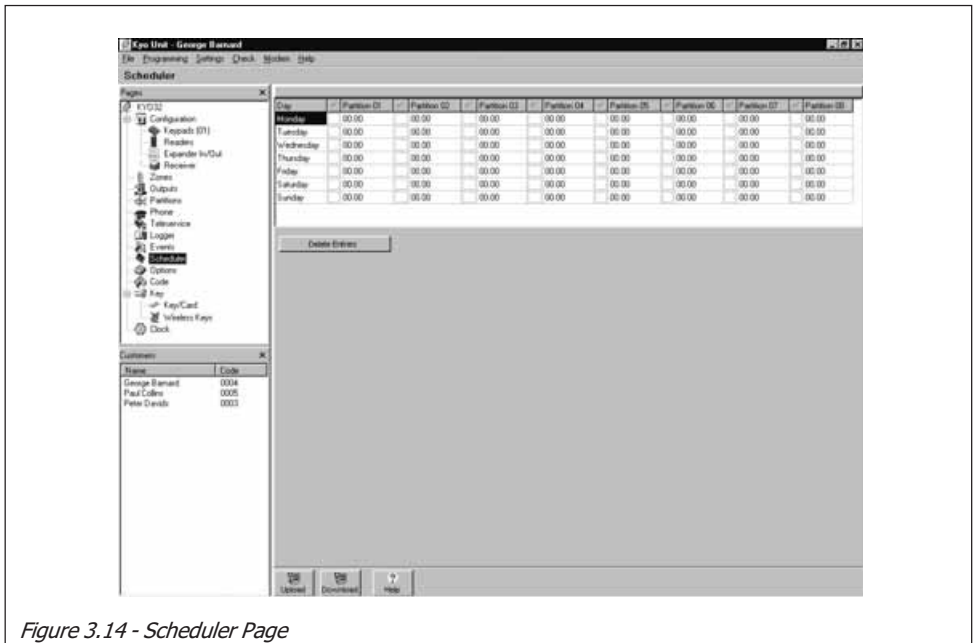

Figure 3.14 - Scheduler Page

Options Page

The options in this page (see Figure 3.15) will allow you to customize the Control panel.

Options

The numbers in brackets refer to the 'Options' in the Installer Menu (accessed via the LCD keypad).

- **View violated zones on keypad display (0)** - If this option is enabled, the keypad display will show zones violated during standby status.

- **Chime on Keypad (1)** - If this option is enabled, the keypad buzzer will emit 5 beeps when a 'Chime' zone is violated during disarmed status.

- **Chime on PROXI Reader (2)** - If this option is enabled, the PROXI Reader buzzer will emit 5 beeps when a 'Chime' zone is violated during disarmed status.

- **Enable Wireless Receiver (3)** - If this option is enabled, the Control panel will enable the VRX32-433 or VectorRX/8 wireless receiver.

  ☺◎(((*If the system is equipped with a Wireless Receiver, the Performance level of the Control panel will down-grade from Level II to Level I.*

- **Enable Jamming Detection (4)** - If this option is enabled, the Control panel will be able to detect attempts to jam the RF signal. If jamming occurs, the Control panel will generate a 'Jamming on Receiver' event (the zone
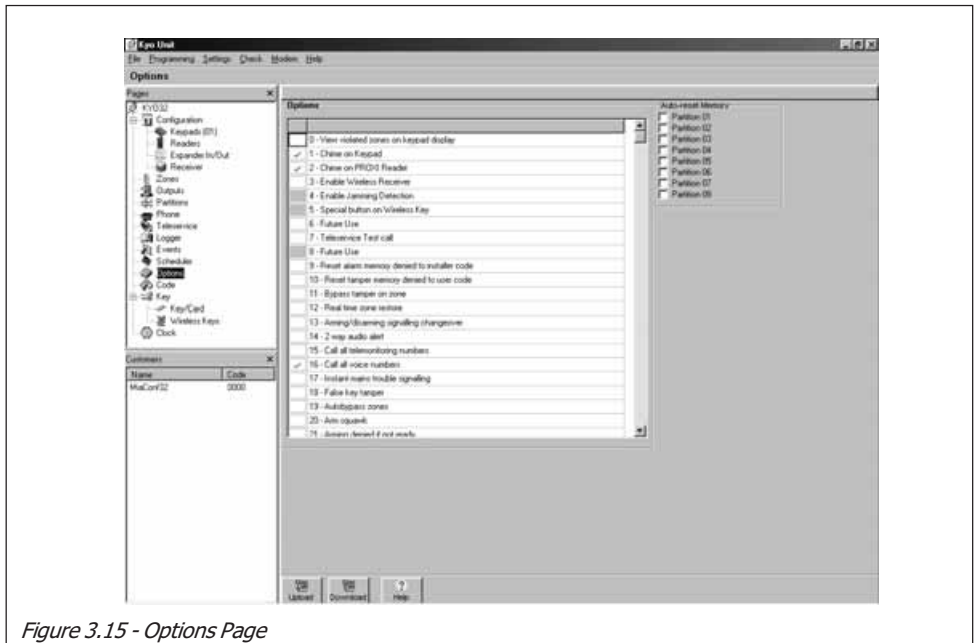

Figure 3.15 - Options Page

number will be specified in the Event Buffer).

If this option is enabled, Zone 32 cannot be programmed as "Wireless".

- **Special button on Wireless Key (5)** - If this option is enabled, the **'B Mode'** button on the Wireless key (▲) will not Arm the system, but will perform the function of SuperKey 2.
- **Future Use (6)** - Reserved. **DO NOT SELECT!**
- **Teleservice Test call (7)** - Refer to the 'Teleservice' page.
- **Future Use (8)** - Reserved for Future use (Inactive).
- **Reset alarm memory denied to installer code (9)** - If this option is enabled — **only** the Main User and User Codes will be able to delete the Alarm memories.
- **Reset tamper memory denied to user code (10)** - If this option is enabled — **only** the Installer Code will be able to delete the Tamper memories.
- **Bypass tamper on zone (11)** - If this option is enabled, the Control panel will inhibit 'Tamper on zone' when the zone is bypassed.

  ⊕⦅⦅ *The IMQ-SECURITY SYSTEM approval applies only when the "Bypass tamper on zone" option is disabled.*
- **Real time zone restore (12)** - If this option is enabled, the Control panel will signal 'Reset Zone' as soon as the zone is restored, regardless of the status of the Alarm cycle.
- **Arming/disarming signalling changeover (13)** - For CESA and CONTACT-ID reporting protocols: if this option is enabled, it will be possible to invert the significance of the digits used to transmit Activation/Restore messages to the Central station (for Arming/Disarming operations only).
- **2 way audio alert (14)** - If this option is enabled, the Control panel will open a 'Talk' channel for 15 seconds before starting the Listen-in session.
- **Call all telemonitoring numbers (15)** - If this option is enabled, the Control panel will call all the programmed Telemonitoring numbers for each event. If this option is disabled, the Control panel will stop the call cycle as soon as it recognizes a **Successful Call**.
- **(Kyo 4-8-32 Series) Call all voice numbers (16)** - If this option is enabled, the Control panel will call all the programmed Voice numbers for each single event. If this option is disabled, the Control panel will stop the call cycle as soon as it recognizes a **Successful Call**.
- **(Kyo16D) Programmable Output Relais (16)** - If this option is enabled, the Output terminals of Alarm Relais will work as a 'Programmable Output' instead that as 'Alarm Output'. This function applies on the Output n. 1.

  ⊕⦅⦅ *The IMQ-SECURITY SYSTEM approval applies only when the "Relay Output Programmable" is disabled.*
- **Instant mains trouble signalling (17)** - If this option is enabled, the Control panel will signal 'Mains Failure' immediately. Normally 'Mains Failure' is signalled 15 minutes after black-out.

- **False key tamper (18)** - If this option is enabled, a False Key/Card used at a Reader will generate a Tamper Alarm. If this option is disabled, False Keys/Cards will not generate any kind of Alarm.

- **Autobypass zones (19)** - If this option is enabled, the Control panel will bypass the zone automatically, if 'violated' (door or window open) at the time of Arming.

  🕮 *The IMQ-SECURITY SYSTEM approval will be invalidated, if the "Autobypass zones" option is enabled, and Burglar, Tamper or Armed Robbery protection devices are connected to the zones.*

- **Arm squawk (20)** - If this option is enabled, and the system is armed via a Command zone, the relay of the Siren will emit a 'squawk' to signal the arming request.

  In the KYO16D Control Panels this option is valid only if the option n. 16 is not selected.

- **Arming denied if not ready (21)** - If this option is enabled, and an attempt is made to arm a partition that is 'Not Ready to Arm' the Control panel will (see Table 2.2), the request will be denied. If the request is denied, the keypad buzzer will emit an error signal.

- **Arming denied on battery trouble (22)** - If this option is enabled, the Control panel will not Arm when the battery is low (Battery trouble).

- **Reader LEDs permanently active (23)** - If this option is enabled, the Reader LEDs (ECLIPSE and PROXI) will indicate the system status.

- **Buzzer on PROXI Reader (24)** - If this option is enabled, the Control panel will activate buzzers on the PROXI Readers.

- **Lock installer code (25)** - If this option is enabled, 'Reset of Default parameters' will not default the programmed Installer Code.

- **Callback (26)** - Refer to the 'Teleservice' page.

- **Disable Telephone line check (27)** - It is necessary to select this option when the Control panel is not connected to a Telephone Line, otherwise, the LED ⚠ on the keypad will signal 'Line down' condition permanently.

- **Double Call (28)** - Refer to the 'Teleservice' page.

- **Disable tone check (29)** - Refer to the 'Telephone' page.

- **DTMF Dialling (30)** - Refer to the 'Telephone' page.

- **Jamming (31)** - If this option is enabled, the "Jamming" event will generate a Zone Tamper event.

- **Internal use (32)** - Reserved. **DO NOT SELECT!**

- **Confirm voice call (33)** - If this option is enabled, it will be possible to send confirmation of Voice calls to the Control panel by pressing the ⊡ (star) key on the telephone keypad.

- **Auto-Unbypass zone (34)** - If this option is enabled, the Control panel will unbypass automatically the **Auto-bypassed** zones. This option is valid only when the "**Autobypass zones**" option is enabled.

- **Disable Verify voice answer (35)** - If this option is enabled, the Voice message will, under all circumstances, start 5 seconds after dialling.

- **Stop siren during Listen-in (36)** - If this option is enabled, the Alarm siren will be inhibited during Listen-in and 2-Way Audio sessions.

- **Lock keypad on invalid Code (37)** - If this option is enabled, entry of 5 'Wrong codes' will lock the Keypad for 2 minutes.

- **Arm/Disarm Voice Message (38)** - If this option is enabled, it will be possible to play the voice messages for the following events:

Exit Time	*Continuous playback of Message no. 6*
Entry time	*Continuous playback of Message no. 7*
Auto-arm Timeout	*Continuous playback of Message no. 8*

    For further information regarding Voice Messages, refer to the MAIN UNIT MANUAL.

- **Quick Arming (39)** - If this option is enabled, the User will be able to Arm a Partition by simply entering the Partition number and pressing **ON** (refer to "Operating from a Keypad" in the USER MANUAL).

- **Enable redundant arming on Partition 1 - 8 (40 through 47)** - If this option is enabled, the Control panel will generate a 'Disarm' event also when the Partition is disarmed. If the event is associated with an Output, the Control panel will activate the Output concerned. This option is for Codes/Keys with the '**And**' attribute (refer to "And" in the Attributes section). The Output will not activate until all the respective Keys and Codes have been used within the programmed window.

- **Enable Autoarm on Keypad and PROXI (48)** - If this option is enabled, the system Keypads and PROXI Readers will emit and audible signal (beeps) during the 'Timeout-to-autoarm' (refer to option 24 — 'Buzzer on PROXI Reader').

- **Inhibit DTMF functions during message playback (49)** - If this option is enabled, the Control panel will deny access to the DTMF Menu during Voice calls. However, the Answerphone functions, via the DTMF Menu, will still be available'.

- **Deny Arming during Control panel trouble (50)** - If this option is enabled, the Control panel will not accept arming commands when it detects 'System Trouble' (signalled on the ⚠ indicator).

- **Special Events for Stay Arming (51) -** If this option is enabled, the Stay (**S**) and Stay 0 Delay (**I**) Arming events will be logged as Eventi Speciali. Furthermore, Special Arming events (DTMF, Autoarm, Arming from PC or Command Zone) will be logged as Normal Arming events.

- **Include Delayed zones in the 'Not-Ready-Stay' output evaluation (52)** - If this option is enabled, the Control panel will activate the '**Not-Ready-Stay**' output when it detects violation on any type of zone. If this option is disabled, the Control panel will activate the '**Not-Ready-Stay**' output when it detects violation on Instant zones ONLY. For further details refer to the *Outputs Page* under 'Not Ready Stay' in the 'Signals' section.

- **Serial Port Events (53)** - If this option is enabled, any Events recorded in the Event Logger will also be sent via the RS232 Serial Port.

    NOTE: If this option is enabled, communications with the PC will be inhibited.

- **For Future Use (54)**
- **(Kyo4/8/32) - For Future Use (55)**
- **(Kyo16D) - Enable tamper for BPI Device or Receiver missing (55)** - When this option is enabled, the Control panel generate a tamper alarm for the BPI device missing or Wireless Receiver missing event. When this option is disabled, the control panel log these events only.

  The IMQ-SECURITY SYSTEM approval applies only when the "Enable tamper for BPI Device or Receiver missing" is ENABLED.

- **For Future Use (56 - 63)**

Auto-Reset Memory

This section will allow you to select the Partitions that will reset their Alarm memories automatically on Arming.

Code Page

The parameters programmed in this page (see Figure 3.16) will determine the different access levels of the Codes. This system can manage up to 25 Codes. Codes 1 through 24 are User Codes, and Code 25 is the Installer Code. The Codes can comprise 4, 5 or 6 digits.

☞ *Use of 4 digit Codes will down-grade the System Performance level from Level II to Level I.*

User Code Table

The User Codes can Arm/Disarm the system and perform various operations, in accordance with their programmed access levels (refer to the USER MANUAL).

No. - This column shows the Code Number (1 through 25).

Description - This field will allow you enter the Code label (max. 16 letters).

1, 2, 3, 4, 5, 6, 7, 8 - These numbers correspond to the 8 Partitions. The Codes can be programmed to operate in 3 different modes on the system Partitions, as follows:

Type On/Off (Red) - This row will allow you to Enable/Disable the Code on the Partition (✔ = Code enabled on the relative Partition).

A Mode (Amber) - This row will allow you to enable the status the Partition will assume when the Code makes an **A Mode** Arming request. The box will indicate the selected mode (see the **Mode** section—top right of the 'Code Page'). Refer to Table 3.1. for **A Mode** programming instructions.

Figure 3.16 - Code Page

B Mode (Green) - This row will allow you to select the status the Partition will assume when the Code makes a **B Mode** Arming request. The box will indicate the selected mode (see the **Mode** section—top right of the 'Code Page'). Refer to Table 3.1 for **B Mode** programming instructions.
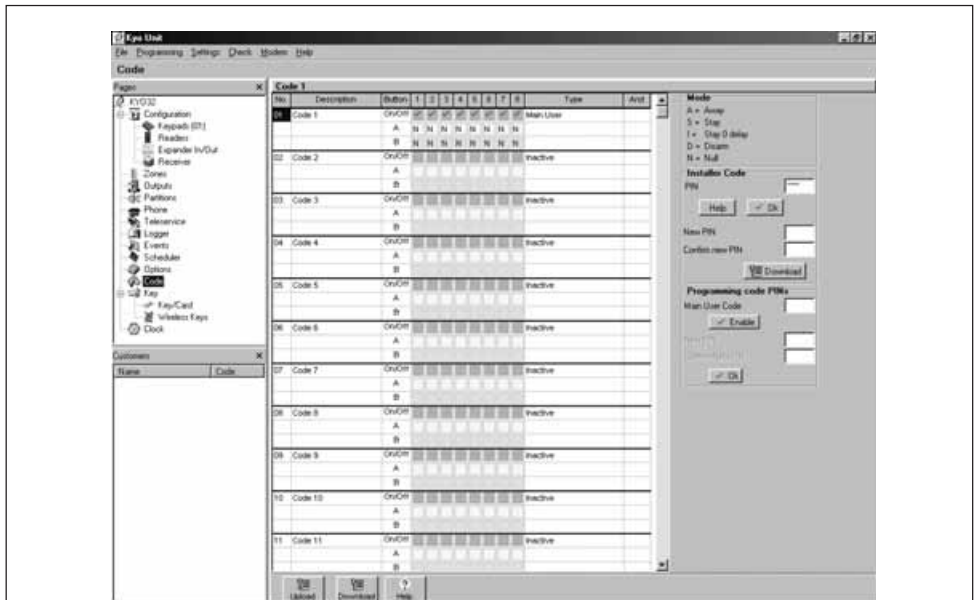
Type - Double click this field to open the drop-down list and select one of the following Code Types.

Main User - this Code type can perform all the operations allowed at the keypad.

User - this Code type allows:

> **a**) Arm/Disarm operations (in accordance with programming)
> **b**) Alarm memory reset
> **c**) Overtime requests
> **d**) Enabling/Disabling the Responder

Duress - this Code type can perform the same operations as a User Code, and is used in the event of Duress (forced disarming). Duress Codes disable the system and contemporarily activate the Dialler.

Patrol - this type of Code can disarm the Code Partitions for the programmed Patrol Time. The Partition will rearm automatically when the Patrol Time ends, or when the Patrol Code is entered again.

DTMF - this type of Code can access the system via touch-tone telephone.

Main User / Reset Call Queue - this type of Code is similar to the 'Main User' Code except that, if this Code is used to disarm the system it will Clear the Call Queue automatically.

And - Select this option if the Code is to be associated with an 'AND' operation (✔ = 'And' attribute assigned).

Partitions with 'And' Codes/Keys will not disarm until all the respective Codes and/or Keys are used within the programmed window (refer to 'T. And Code' in the Partitions Page). This attribute is uninfluential for Stay or Away Arming.

Quick Arm

Code **22** can be used for the **Quick Arm** feature. This feature will allow the User to Arm Code **22** Partitions from the Keypad by pressing and holding the **ON** key for 3 seconds.

If the system is Armed from the Keypad in this way, the 'Code Type' will be ignored.

For further information, refer to the '**Operating from a Keypad**' in the 'USER MANUAL'.

Wireless Key Codes

The functions programmed for Codes **23** and **24** can also be activated by Wireless Keys (this facility is available to Control panels with VRX32-433 and Vector/RX8 Receivers). For further information, refer to the description of the **Wireless Keys** Page in this section.

Installer Code

The Installer Code PIN will allow you to access the programming session, and program the Control panel parameters via keypad or computer (local or remote). The Installer Code PIN can be programmed from a keypad or computer. The **Default Installer Code PIN (0025) must be changed** for security reasons.

To change the **Default Installer Code PIN (0025)** proceed as follows:

> *Do not enter digits* in the **PIN** field.
>
> **a)** Enter the digits of your choice in the **New PIN** field.
>
> **b)** Enter the same digits in the **Confirm New PIN** field.
>
> **c)** Download the to the Control panel.

To change the current **Installer Code PIN** proceed as follows:

> **a)** Enter the current Installer Code PIN in the **PIN** field.
>
> **b)** Click **OK** (✓ Ok).
>
> **c)** Enter the digits of your choice in the **New PIN** field.
>
> **d)** Enter the same digits in the **Confirm New PIN** field.
>
> **e)** Download to the Control panel.

Programming User Code PINs

The default PINs of enabled User Codes must be changed for security reasons.

To change the **Default User Code PINs** proceed as follows:

1. Select the required **User Code** from the **User Code Table** (the selected code number will be shown at the top of the Table).

> *NOTE - Main User Code PINs can change the PINs of all the User, Duress and Patrol Codes that are enabled on the partitions it controls.*

2. Enter the Main User Code in the **Main User** field, then click **Enable**.

3. Enter the digits of your choice in the **New PIN** field.

4. Enter the same digits in the **Confirm New PIN** field, then press **OK**.

5. Repeat the procedure for all the User Codes, then Download to the connected Control panel.

Key/Card Page

The parameters programmed in this page (see Figure 3.17a) will determine access level of the Digital Keys/Cards. The system can manage 128 Digital Keys/Cards (SAT and/or PROXI-CARD).

Keys/Cards Table

The User Codes can Arm/Disarm the system and perform various operations, in accordance with their programmed access levels (refer to the USER MANUAL).

- **No.** - This column shows the Key/Code Number (1 through 25).

- **Description** - This column is for the Key/Card labels of the first 16 Keys/Cards (maximum 16 letters per label).

- **Service** - This field will allow you to enable the Key/Card to control **Service** mode (**Yes** = Key/Card enabled for **Service** mode).

  The Alarm relay will be inhibited during Service mode, and therefore, the Control panel will not generate Alarms.

- **Clear Call Queue -** This field will allow you to enable the Key/Card to clear the Call Queue (**Yes** = Key/Card enabled to clear the Call Queue).

- **Patrol** - This field will allow you to enable the Key/Card to manage **Patrol** mode (**Yes** = Key/Card enabled for **Patrol** mode). 'Patrol' Keys operate in the same way as 'Patrol' Codes, for details refer to the **Codes** Page.

- **And** - This field will allow you to enable the '**And**' operating mode (**Yes** = Key/Card enabled for '**And**' mode). 'And' Keys operate in the same way as
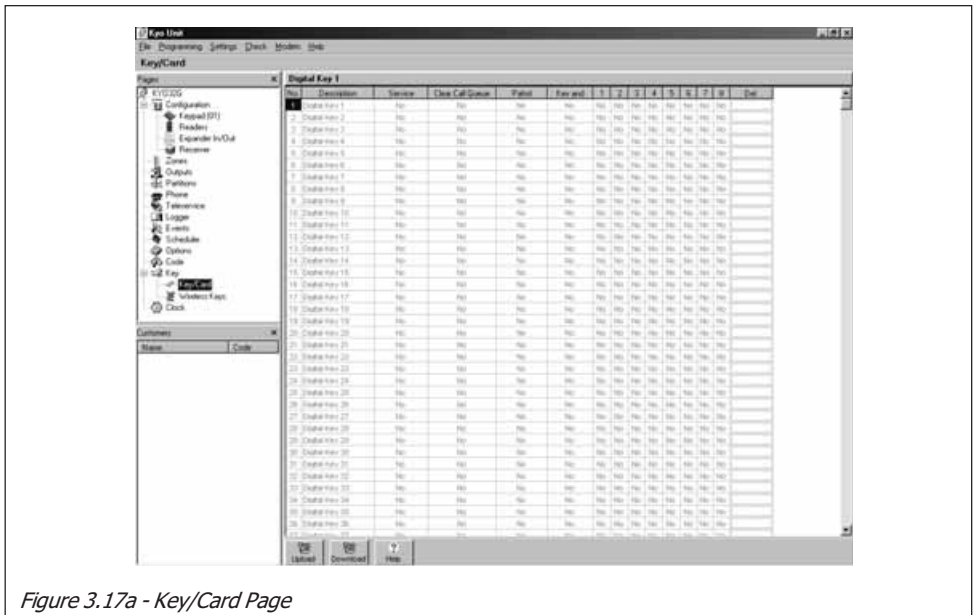

Figure 3.17a - Key/Card Page

'**And**' Codes, for details refer to the **Codes** Page.

● **Partitions 1, 2, 3, 4, 5, 6, 7, 8** - This field will allow you to enable the Key/Card on the Partitions (**Yes** = Key/Card enabled).

● **Del.** - This field will allow you to delete Keys/Cards (**X** = Key/Card deleted). Deletion will not be completed until the Program closes then reopens.

Wireless Keys Page

If the Control panel is equipped with a VRX32-433 Receiver, it will be able to manage up to 16 Wireless Keys. Each of the Wireless Key must be associated with one of the two Codes available for the Wireless key facility (Code **23** or **24**). The operating capacity of the Wireless Keys depends on the attributes and access level of the selected Code. Figure 3.17b illustrates Wireless Keys Page.

🔲◁◁ *The IMQ-SECURITY SYSTEM approval applies only when no more than 14 Wireless keys are used.*

● **No.** - This column shows the *Wireless Key identifier number*, to be used when programming the Wireless Key from a Keypad.

● **Description** - This field is for the Wireless Key label. The Application will use the label as the Wireless Key Identifier.

● **Serial No.** - This field is for the 6 hexadecimal digit serial number (**ESN**) of the Wireless Key. The **ESN** is printed on the Wireless Key label.

● **Code** - Select the Wireless Key Code (**23** or **24**).
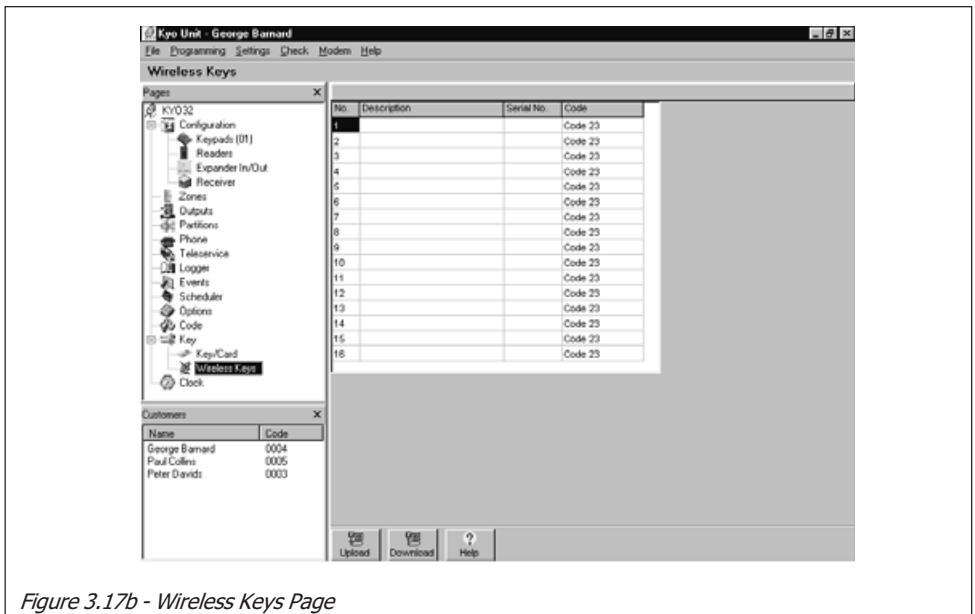

Figure 3.17b - Wireless Keys Page

Clock Page

The **Clock** Page (see Fig. 3.18) will allow you to set up the Control panel Clock (current Date and Time), and select the Date format.

When opened, this page will set up automatically in accordance with the current setting of the computer clock.

Click **Download** to send the current setting to the Control panel.

Click **Upload** to view the current setting in the Control panel memory.

Programming from Computer (via serial Link)

The Control panel serial port [**5**] must be connected to a computer serial port by a **CVSER/9F9F** link (accessory item). Figure 3.19 illustrates the **CVSER/9F9F** cable. If the computer serial ports have 25 pole connectors, use an **ADSER/9M25F** adapter (accessory item). Figure 3.20 illustrates the type of cable required.

To Download (to the Control panel), proceed as follows:

1. Select the PC serial port (used for the link), as follows:

  a) Select **Settings** ⇨ **Serial Ports**

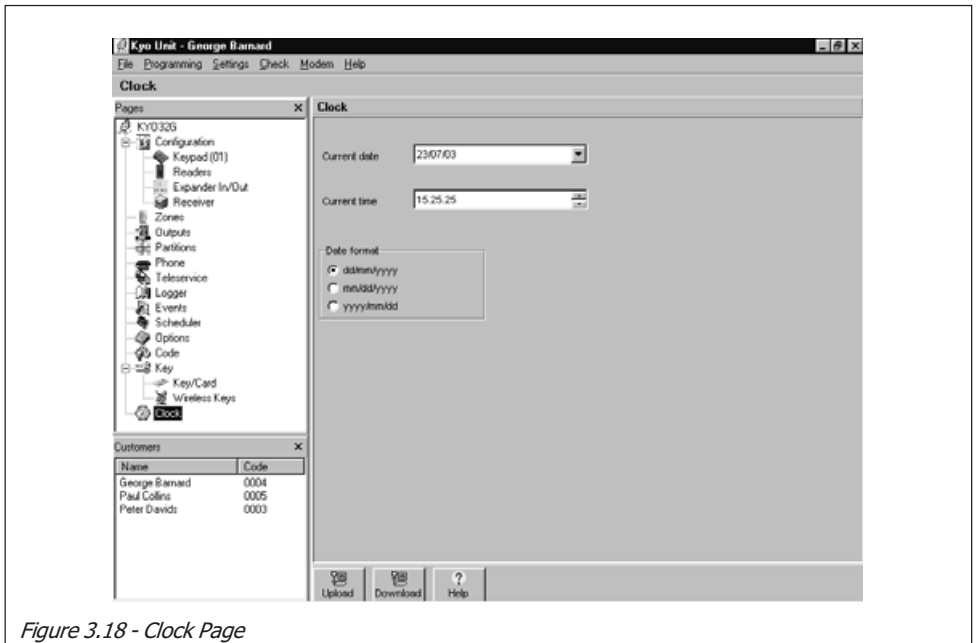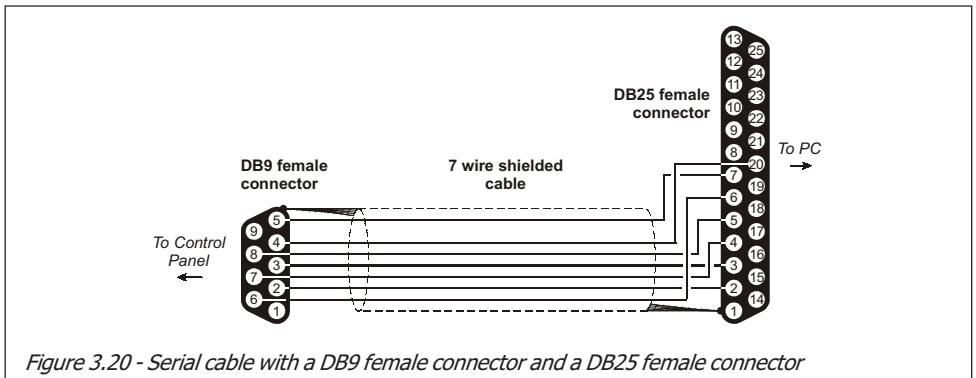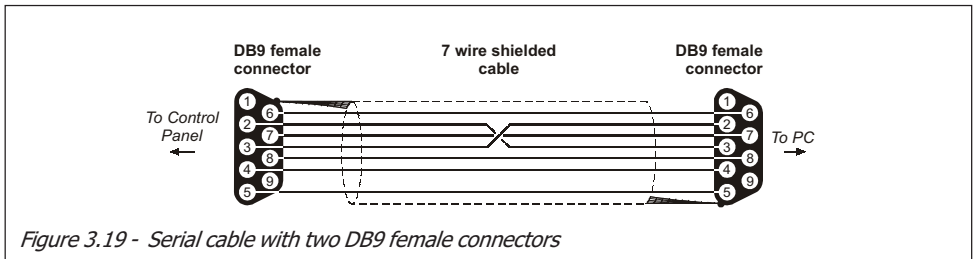 **b**) Select the Serial Port from the **Control panel** section

  c) Click **OK**

Figure 3.18 - Clock Page

2. Enter the Installer Code PIN (refer to 'Code Page').

3. Send the data to the Control panel, as follows:

a) Select **Programming** ⇨ **Download** — to send all the programmed parameters to the Control panel.

b) Click the open page **Download** button — to send the open page parameters to the Control panel.

c) Using the right mouse button, click anywhere inside the 'Pages' section, then select 'Download' from the pop-up window to send the parameters relative to the selected (✔) pages.

4. To upload and view Control panel parameters proceed as follows:

a) Select **Programming** ⇨ **Upload** to view **all** the parameters stored in the Control memory.

b) Select **Upload** to view the parameters relative to the current page.

c) Using the right mouse button, click anywhere inside the 'Pages' section, then select 'Upload' from the pop-up window to view the parameters relative to the selected (✔) pages.

Figure 3.19 - Serial cable with two DB9 female connectors

Figure 3.20 - Serial cable with a DB9 female connector and a DB25 female connector

Programming via Modem

The programmed parameters can be downloaded to the Control panel via the B-Mod2 Modem (remote connection). The B-Mod2 serial port must be connected to a computer serial port by a **CVSER/9F9F** link (accessory item) and, if necessary, by an **ADSER/9M25F** adapter (accessory item). Use a cable similar to that used for the computer to Control panel link (see Figure 3.19 and 3.20).

1. Select the PC serial port (used for the Modem link), as follows:

    a) Select **Settings ⇨ Serial Ports**

    b) Select the Serial Port from the **Modem** section

    c) Click **OK**

2. Enter the Installer PIN (refer to 'Code Page').

3. Select **Modem ⇨ Connection** to open the 'Connection Window' (see Figure 3.21)

4. Program the following parameters:

    a) The **Telephone Number** of Customer (see **File ⇨ Save Configuration** to 'The Menu Bar' paragraph).

    b) The **Disable Tone check** option (refer to the 'Phone Page').

    c) The **Double Call** option (refer to the 'Teleservice Page').

    d) The **Callback** option (refer to the 'Teleservice Page').
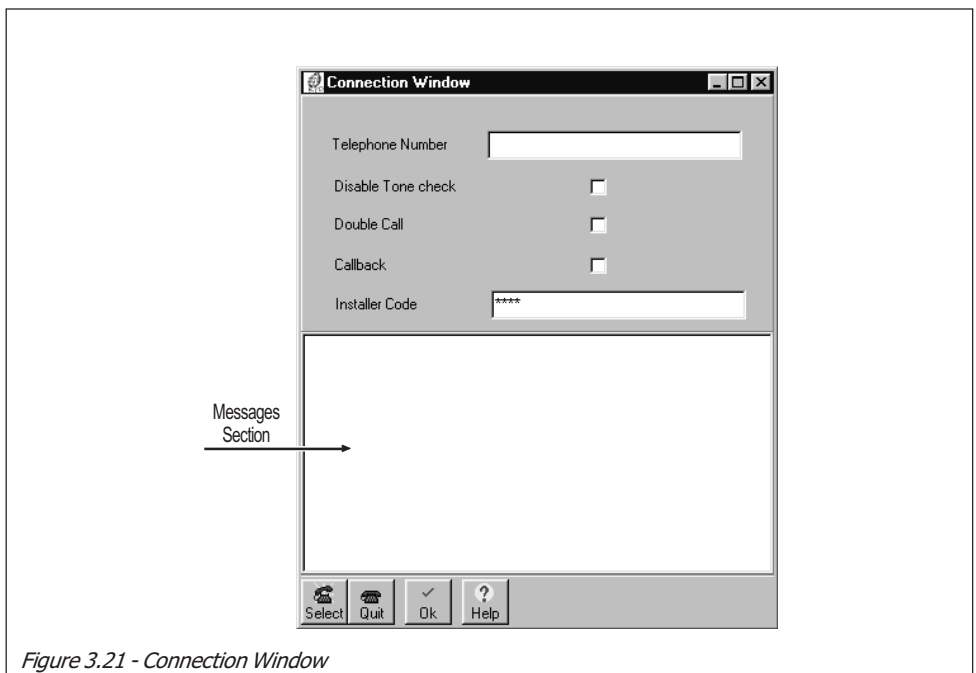

Figure 3.21 - Connection Window

When the Connection Window opens, parameters **b**), **c**) and **d**) will assume the values of their counterparts in the 'Teleservice Page' or 'Phone Page'.

The parameters programmed in the 'Connection Window' will not affect their counterparts in the Application pages.

�
Select

5. Click the **Select** button (below the 'Messages' section) to view the connection status. Table 3.4 shows the complete Message list. If the connection is successful, the following message will be shown:

KYOxACK

X.XX

Connections

✓
Ok

6. Click the **OK** button to close the '**Connection Window**', and activate the connection. All Download and Upload commands will affect the Control panel that is connected via telephone.

7. To program or view the Control panel parameters, go to the 'Programming from PC' section, and proceed from steps 3 and 4.

8. To end the connection, select **Modem** ⇨ **Hang up**. The 'Connection ended' message will be shown after several seconds.

🕾
Quit

*To abandon the telephone connection, click the **Quit** button.*

Table 3.4 - Modem Messages	
Message	**Description**
Omnia/Norma MODEM v. X.XX	This is the type of Modem that is connected to the computer serial port
Unknow Modem	The configured Modem is not recognized or does not respond. Check the cable and the serial port connection.
Receiving..	The Modem/PC system is waiting for an incoming call. This is the system status when the 'CONNECTIONS' window opens
BACKRING	The dialled telephone number is ringing
KYOxACK	KYO Panel Control has been recognized
Wrong Installer Code	The remote Control panel cannot read the Installer PIN — probably due to a bad line
Busy Line on Hook	The Modem has detected the engaged tone and has released the line

SECTION 4 - TERMINALES

Table 4.1 - Description of the Terminals					
PCB Terminals			**Description**	**Voltage (V)**	**Current Max. (A)**
K8G - KG8W K32G	**K4 - K8 K8W - K32**	**K16D**			
1-2-3-4 **[+][C][R][-]**	1-2-3-4 **[+][C][R][-]**		Terminals for the BPI Device connections (Keypads, Readers, Expander, etc.)	13.8	(*)
5 **[AS]**	17 **[AS]**	–	Balanced 10K Tamper Line	–	–
6-9-12-15-18 21-24-27-30-3-7 **[⏚]**	4-6-8-11 14-17 **[⏚]**	6-9-12 **[⏚]**	Negative Terminal	0	–
7-10-13-16-19 22-25-28 **[+F]**	22 **[+B]**	+V **[AUX]**	Positive Terminal — power supply to the Detectors	13.8	(*)
8-11-14-17-20 23-26-29 **[L1] ... [L8]**	7-9-10-12-13 15-16-18 **[L1] ... [L8]**	5-7-8 10-11-13 **[L1] ... [L6]**	Programmable Alarm Lines (KYO4 manages Lines L1 ... L4)	–	–
31-32-33 **[NC][COM] [NO]**	19-20-21 **[NC][NO] [COM]**	18-19-20 **[NC][NO] [COM]**	Free Voltage Changeover Alarm Relay: during **Standby** ⇨ COM Terminal connected to NC (NO floating) during **Alarm** ⇨ COM Terminal connected to NO (NC floating)	–	–
34 **[+N]**	–	–	**Positive** is present on this terminal during **Standby** this Terminal is Open during **Alarm**	13.8	(*)
35 **[+A]**	–	–	**Positive** is present on this terminal during **Alarm** this Terminal is Open during **Standby**	13.8	(*)
36 **[+B]**	22 **[+B]**	+V **[AUX]**	Auxiliary Power Supply for peripherals	13.8	(*)
–	23-24-25 **[O1][O2] [O3]**	22-23 **[OC1] [OC2]**	150 mA Auxiliary Open-Collector Outputs — Programmable	–	0.15 (*)
38-39-40 41-42 **[O1][O2] [O3][O4] [O5]**	–	–	500 mA Auxiliary Open-Collector Outputs — Programmable		0.5 (*)
43-44-45-46 **[GRN] [YEL] [BLK] [RED]**	26-27-28-29 **[GRN] [YEL] [BLK] [RED]**	14-15-16-17 **[GRN] [YEL] [BLK] [RED]**	Key Bus Terminals (if present): **RED** ⇨ Positive **BLK** ⇨ Negative	13.8	(*)
47-48 **[LE]**	32-33 **[LE]**	25-26 **[LE]**	External Telephone Line Terminals	–	–
49-50 **[LI]**	34-35 **[LI]**	27-28 **[LI]**	Terminal for line-sharing devices (Fax, Modem, Telephone, etc.) — connected to the same Telephone line as the Panel	–	–
51 **[⏚]**	36 **[⏚]**	29 **[⏚]**	Terminal for the Earth connection	–	–
–	30-31 **[AC]**	24-25 **[AC]**	Terminals for the Transformer secondary connection	–	–

(*) - the total current draw of these terminals must not exceed:
(*) - **0.6 A** - for K4, K8, K8W and K32 with Transformers
(*) - **0.4 A** - for K16D
(*) - **1 A** - for K8G-SW1, K8GW-SW1 and K32G-SW1 with the BAQ15T12 Switching Power Supply
(*) - **2.3 A** - for K8G-SW2, K8GW-SW2 and K32G-SW2 with the BAQ35T12 witching Power Supply
(*) - (the Battery Charge value must be subtracted from these values)

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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