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MESSAGE TO THE INSTALLER

The PowerMax Pro control panel is supplied with 2 instruction manuals:

■ **Installer Guide** (this manual - for your exclusive use)

■ **User's Guide** (for your use during installation only - Must be handed over to the master user after testing the system).

Appendices A.1 and A.2 will help you prepare an installation plan. Please take time to fill out the forms - your job will become much easier and confusion will be prevented. Filling out the forms will also help you create a list of detectors and transmitters that must be obtained for the particular application. Compatible detectors and transmitters are listed and described briefly in Appendix E.

Remember - it is advisable to power up the control panel temporarily after unpacking and program it on the work bench, in accordance with the installation plan.

The programming flow charts in the programming section show all options available for each parameter. Factory defaults are marked with a dark box to their right, and other options (that can be selected instead) are marked by clear boxes. This method allows you to put a checkmark in the appropriate clear box whenever you deviate from the factory defaults.

Most of the programming section paragraph numbers correlate with the programming menu numbers. For example, paragraph 4.4.19 describes the "Jam detect", that exists in menu 4 (define panel), sub-menu 19 (Jam detect).

Although setting the correct time and date is one of the user tasks, we recommend that you set the time and date in the course of programming. Access to the "User Settings" for the installer is possible through item 10 on the installer's menu or through the user menu (see User's manual section 7).

After programming, proceed to install the system as detailed in the Installation Instructions, from paragraph 3.4 onward.

The installer should verify line seizure. Be aware of other phone line services such as DSL. If DSL service is present on the phone line, you must install a filter. It is suggested to use the DSL alarm filter model Z-A431PJ31X manufactured by Excelsus Technologies, or equivalent. This filter simply plugs into the RJ-31X jack and allows alarm reporting without breaking the internet connection.

1. INTRODUCTION

The PowerMax Pro is a user and installer-friendly, 30-zone fully-supervised wireless control system. The system is designed to function in a way that appeals to the user but also offers features that make installers' life easier than ever before:

EASY TO INSTALL

- Plug-in terminal blocks can be wired while detached from the unit.
- Quick attach-detach TELCO sockets for telephone line and X-10 controller. Terminal block for telephone line & set.
- Special wall-mounted bracket permits installation without having to open the unit's cabinet.
- Optional plug-in dual RS-232 module that enables a concurrent connection of an external GSM, Powerlink, or local computer (only 2 simultaneous device connections).

EASY TO MAINTAIN

- Status, alarm memory and trouble data are displayed upon request.

- Diagnostic test provides visual and audible indication of the signal level of each detector.
- Remote control and status verification from distant telephones.
- Event log stores and displays information on 250 past events.
- Upload / download from distant computer via telephone line and modem.

QUICK PROGRAMMING

- Multiple-choice selection of options for each parameter.
- Unequivocal visual prompts and audible signals.
- Installer access to the user menu.

A fully equipped alarm system based on the PowerMax Pro consists of the units shown in Figure 2 of the user's guide.

The basic PowerMax Pro kit includes installer guide, user guide, backup battery pack, 3 flat cables, telephone cable, screws, NEXT MCW detector, MCT-234 keyfob transmitter and MCT-302 magnetic contact transmitter.

2. SPECIFICATIONS

2.1 General Data

Zones Number: 28 wireless, 2 hardwired (zones 29 & 30).

Hardwired Zone Requirements: 2.2 k Ω E.O.L. resistance (max. resistance of wires 220 Ω).

Zone Types: Interior follower, interior, perimeter, perimeter follower, delay 1, delay 2, 24h silent, 24h audible, fire, non-alarm, emergency, gas and flood.

User Codes: 8 codes, 4 digits each (9999 different combinations). Code 0000 is not allowed.

Control Facilities:

- Integral keypad
- PowerCode / Code-Secure™ hand-held transmitters
- Wireless commander, MCM-140+
- Remote telephone
- Local or remote computer

Display: Single line, Backlit 16-character LCD.

Arming Modes: AWAY, HOME, AWAY-INSTANT, HOME-INSTANT, LATCHKEY, FORCED, BYPASS.

Alarm inhibited during a single arming period (swinger stop) after: 1, 2, 3, alarm/tamper/fault, or not inhibited (programmable / selectable).

Alarm Types: Silent alarm, siren alarm or sounder (internal) alarm, in accordance with zone attributes.

Siren Signals: Continuous (intrusion / 24 hours / panic); triple pulse - pause - triple pulse... (fire).

Siren (bell) Timeout: Programmable (4 min. by default)

Internal Sounder Output: At least 85 dBA at 10 ft (3 m)

Supervision: Programmable time frame for inactivity alert

Special Functions:

- Speech and sound control
- Powerline Carrier Device Control (up to fifteen X-10 brand units) by various factors, as programmed

- Chime zones
- Diagnostic test and event log
- Remote control by telephone
- Computer control and data download/upload
- Calling for help by using an emergency transmitter
- Tracking inactivity of elderly, physically handicapped and infirm people
- Message center (recording and playback)
- Two-way voice communication

Data Retrieval: Status, alarm memory, trouble, event log.

Real Time Clock (RTC): The control panel keeps and displays time and date.

Compliance with U.S. Standards:

Meets FCC Part 15 and Part 68 requirements.

Compliance with CE Standards:

EN 50082-1, EN301489-3,7, EN6100-4-6, EN60950

According to the European standard EN50131-1, the PowerMax Pro security grading is 2 – "low to medium risk" and environmental classification is II – "indoor general" and the power supply type is A.

The PowerMax Pro is compatible with the RTTE requirements - Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999.

GSM standards:

Europe : Complies with CE standards 3GPP TS 51.010-1, EN 301 511, EN 50361, EN301489-7

USA: FCC 47 Part 22 (GSM850) and Part 24 (GSM 1900).

EMC standard: FCC 47 Part 15.

SAR standards: FCC rule 2.1093, FCC Docket 96-326 & Supplement C to OET Bulletin 65

2.2 RF Section

Operating Frequencies (MHz): 315 (in USA & Canada), 868.95, or other UHF channel per local requirement in the country of use.

Receiver Type: Super-heterodyne, fixed frequency

Receiver Range: 600 ft (180 m) in open space

Antenna Type: Spatial diversity

Coding: PowerCode and/or CodeSecure™

2.3 Electrical Data

Power Supply: Internal switching power supply 100VAC to 240VAC, 50/60 Hz, 0.5A / 12.5 VDC, 1.6A.

Current Drain: Approx. 40 mA standby, 1400 mA at full load and in alarm.

Site External Siren Current (EXT): 450* mA max @ 10.5 VDC minimum when powered by AC & DC (battery).

Site Internal Siren Current (INT): 450* mA max. @ 10.5 VDC minimum when powered by AC & DC (battery)

PGM Output Current: 100* mA max.

Detector 1 & 2 Total (Sum) Current: 36* mA max.

High Current / Short Circuit Protection: All outputs are protected (automatic reset fuse).

* Total PowerMax Pro output current (of INT & EXT sirens, PGM output and detectors) cannot exceed 550 mA.

Backup Battery Options:

Backup period	Maximum external devices current ⁽¹⁾			
	9.6V 1800 mAh Battery Pack ⁽²⁾		9.6V 2200 mAh Battery Pack ⁽³⁾	
	1 battery pack ⁽⁴⁾	2 battery packs ⁽⁵⁾	1 battery pack	2 battery packs ⁽⁵⁾
4h	240mA	400mA	300mA	300 mA
8h	100mA	200mA	140 mA	260 mA
12h	55mA	120mA	80 mA	160 mA
24h	0mA	40mA	25 mA	70 mA
36h	(no backup)	15mA	10 mA	36 mA
48h	(no backup)	0mA	0 mA	18 mA

3. INSTALLATION

3.1 Unpacking the Equipment

Open the cardboard packing box and check whether all items have been included. If you find out that an item is missing, contact your vendor or dealer immediately.

3.2 Supplying Power to the Unit

Enrolling the transmitting devices' ID codes in the PowerMax Pro memory will be easier if carried out before actual installation, with all detectors and the control panel on a work bench. It is therefore necessary to connect power to the PowerMax Pro temporarily (see figure 3.1G). Alternatively, you may power up from the backup battery, as shown in figure 3.1C.

Disregard any "trouble" indications pertaining to lack of battery or lack of telephone line connection.

3.3 System Planning & Programming

It pays to plan ahead - use the tables in appendices A and B at the end of this guide to register the intended location of each detector, the holder and assignment of each transmitter and the control plan for the X-10 units.

The backup periods, when the PowerMax Pro includes internal PowerLink with 1 active camera, GSM and proximity reader, with external load connected between +12 / V+ terminal and GND terminal, is as follows:

Battery Pack type	Battery pack Quantity	Backup period	external load ⁽¹⁾
9.6V 1800 mAh ⁽²⁾	1	10h	30mA
	2	20h	16 mA
9.6V 2200 mAh ⁽³⁾	1	12h	50 mA
	2	24h	27 mA

- 1 Devices that are connected between +12 / V+ terminal and GND of PowerMax Pro, that includes internal GSM and proximity reader.
- 2 9.6V 1800 mAh, rechargeable NiMH battery pack, p/n GP180AAM8YMX, manufactured by GP.
- 3 9.6V 2200 mAh, rechargeable NiMH battery pack, p/n GP220AAH8BMX, manufactured by GP.
- 4 Standard / UL installation
- 5 Extended backup installation

Maximum battery recharge time: 72 hours

Battery Test: Once every 10 seconds.

2.4 Communication

Built-in Modem: 300 baud, Bell 103 protocol

Data Transfer to Local Computer: Via RS232 serial port

Report Destinations: 2 central stations, 4 private telephones, 1 pager.

Reporting Format Options: SIA, Pulse 4/2 1900/1400 Hz, Pulse 4/2 1800/2300 Hz, Contact ID, Scancom.

Pulse Rate: 10, 20, 33 and 40 pps - programmable

Message to Private Phones: Tone or voice

Message to Pager: PIN No. → Alarm Type → Zone No.

2.5 Physical Properties

Operating Temp. Range: 14°F to 120°F (-10°C to 49°C)

Storage Temp. Range: -4°F to 140°F (-20°C to 60°C)

Humidity: 85% relative humidity, @ 30°C (86°F)

Size: 10-13/16 x 8 x 2-1/8 in. (275 x 203 x 55 mm)

Weight: 990g (2.2 pounds) without batteries

Color: Silver

Gather up all transmitters and detectors used in the system and mark each one in accordance with your deployment plan.

Program the system now as instructed in the programming section.

3.4 Mounting

Required tool: Philips screwdriver #2.

PowerMax Pro mounting process is shown in figure 3.1A - 3.1H.

3.5 Wiring

Required tools: Cutter and slotted screwdriver - 3 mm blade.

PowerMax Pro wiring is shown in figure 3.1B.

Extract the screw terminal blocks one by one and make the necessary connections. When done, plug each terminal block onto its PCB mounted pins.

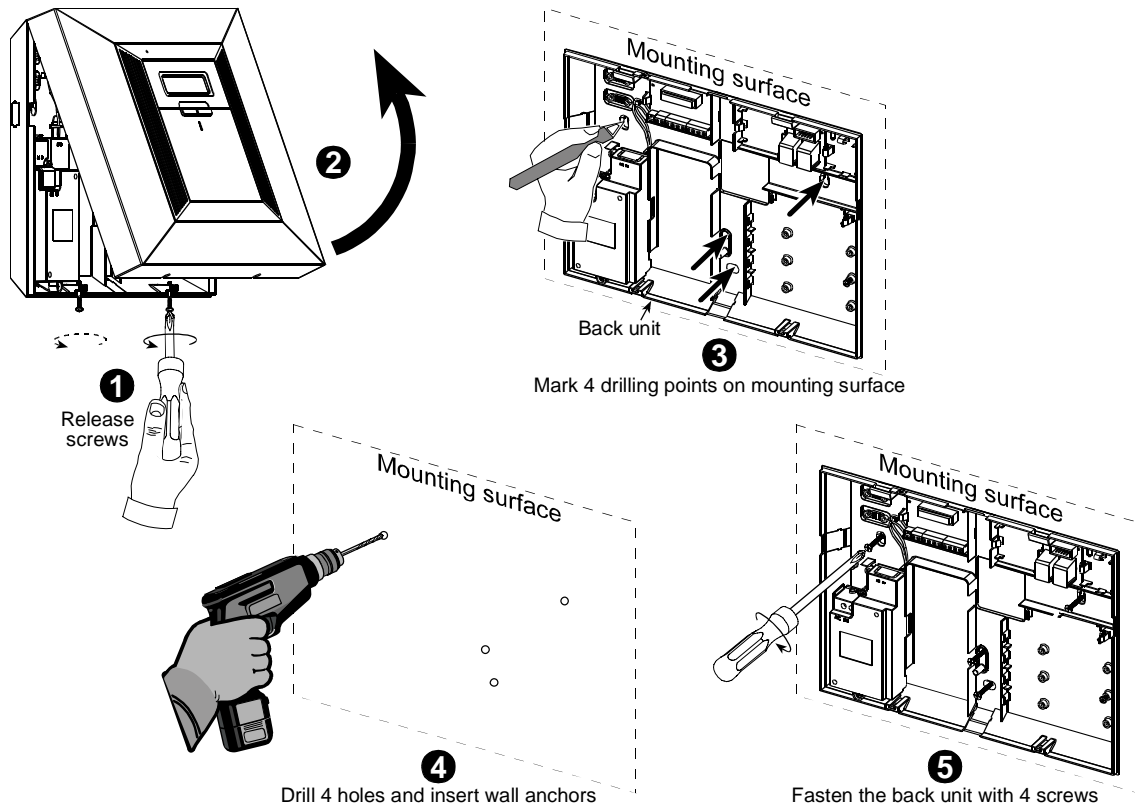
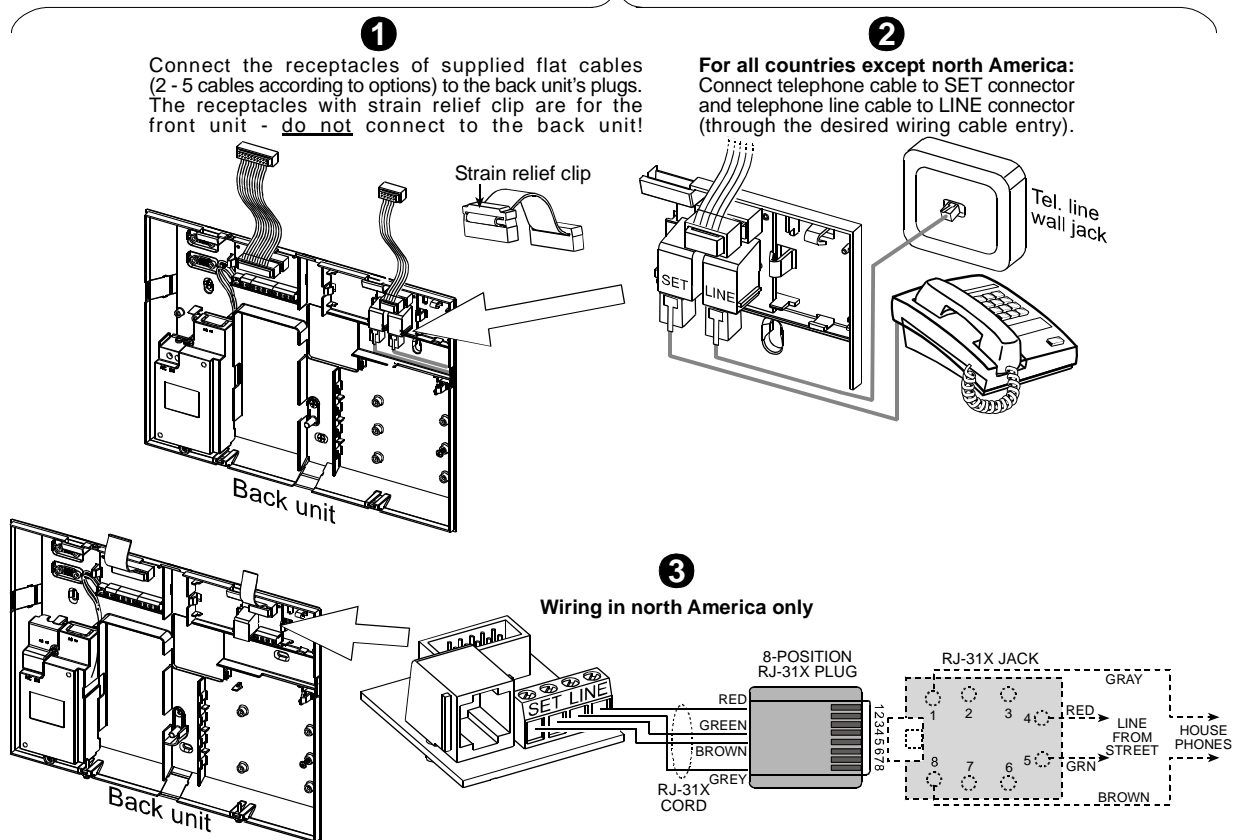


Figure 3.1A – Back Unit Mounting

PHONE WIRING



ZONES & SIRENS WIRING

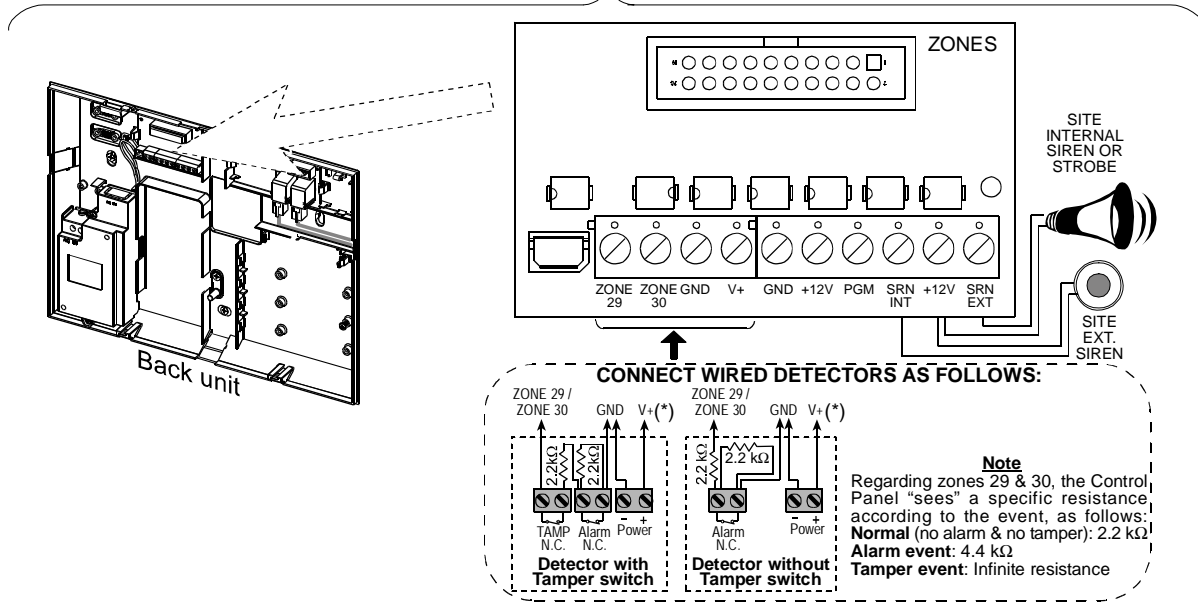


Figure 3.1B - Wiring

Notes:

- * Zone 29/GND and Zone 30/GND terminals can be connected to a normally closed contact of a detector, switch (for example a Tamper switch of any device), or a pushbutton, via a 2.2 KΩ resistor. Such a resistor is connected at the factory across both Zone 29/GND and Zone 30/GND terminals. The resistors should remain there if the terminals are not used. **The V+ terminal can be used to supply 12V (up to 36mA) to a detector (if necessary).**
- ** Both +12V terminals are identical (shorted together). The EXT terminal can be used to trigger an external siren. The INT terminal can be programmed for an "internal siren" or "strobe" (see DEFINE OUTPUTS - DEFINE INT/STRB in par. 4.8). The +12V and "GND" terminals can be connected to a siren (for constant DC power supply) – **not applicable in North America.**
- *** The X-10 jumper should be in 1-W position (for 1-way power line interface unit) or in 2-W position (for 2-way power line interface unit).

WARNING! When plugging terminals back into place, be sure to align them carefully with the pins on the PCB. Misaligned or reverse insertion of terminals may damage internal PowerMax Pro circuits!

IMPORTANT! The terminals for internal and external sirens are DC outputs intended for 12V sirens. Connecting a loudspeaker to any of these outputs will cause a short circuit and will damage the unit.

3.6 Backup Battery Insertion

Open battery compartment cover (see figure 3.1C). Insert one 8-battery pack and connect its connector to the PowerMax Pro receptacle.

For optional two 8-battery packs: Insert both battery packs and connect one battery pack connector to either receptacles and the second battery pack connector to the other receptacle.

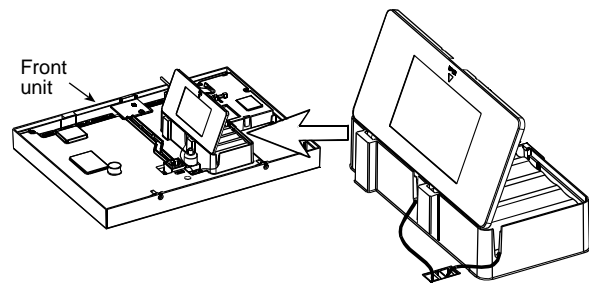


Figure 3.1C - Battery Insertion

3.7 X-10 Interface Module Connection

Connect the X-10 interface module connector to the PowerMax Pro receptacle. Route the cable through the cable channel and connect to the X-10 interface module, via the back unit.

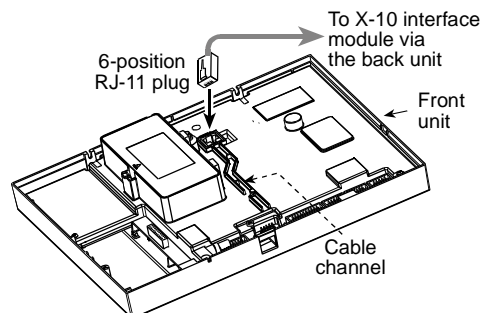


Figure 3.1D - X-10 Interface Module Connection

3.8 Optional GSM Module Mounting

Plug in the GSM module and fasten it with the screw (see drawing below).

Mount the optional GSM external antenna on the desired site surface and connect its connector to the PowerMax Pro as shown below).

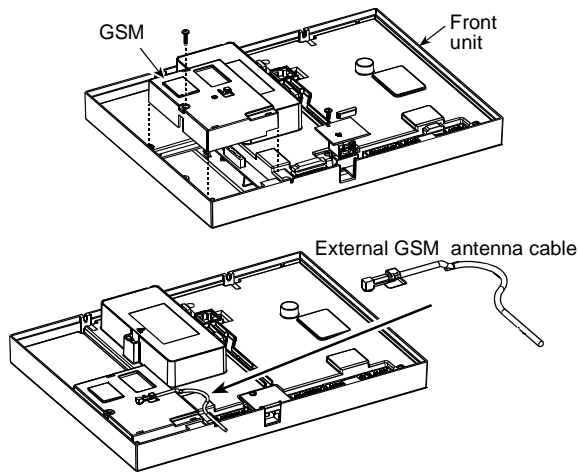


Figure 3.1E - Optional GSM Module Mounting

3.9 Additional Optional Module Mounting

The GSM/PL/PC is a dual RS-232 Module that permits any two simultaneous device connections such as: internal or external PowerLink, Local PC programming, external GSM module.

Note: Connecting an internal and external GSM modules simultaneously will disable both.

Note: The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Press the GSM/PL/PC and AUDIO modules into the marked locations (see figure 3.1F) until a click is heard.

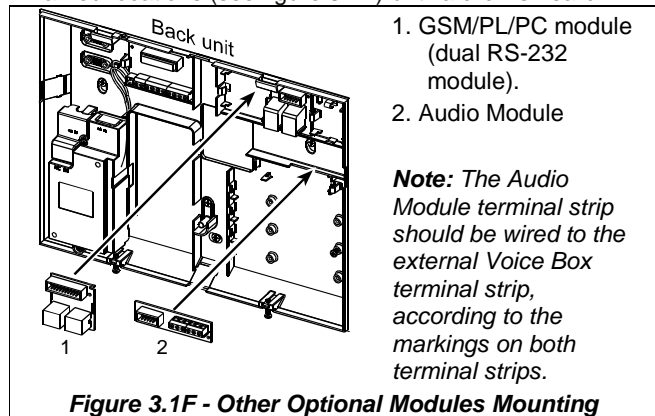


Figure 3.1F - Other Optional Modules Mounting

1. GSM/PL/PC module (dual RS-232 module).
2. Audio Module

Note: The Audio Module terminal strip should be wired to the external Voice Box terminal strip, according to the markings on both terminal strips.

3.10 Power Cable Connection

Connect the power cable and close the control panel as shown in figure 3.1G.

Socket-outlet shall be installed near the equipment and shall be easily accessible.

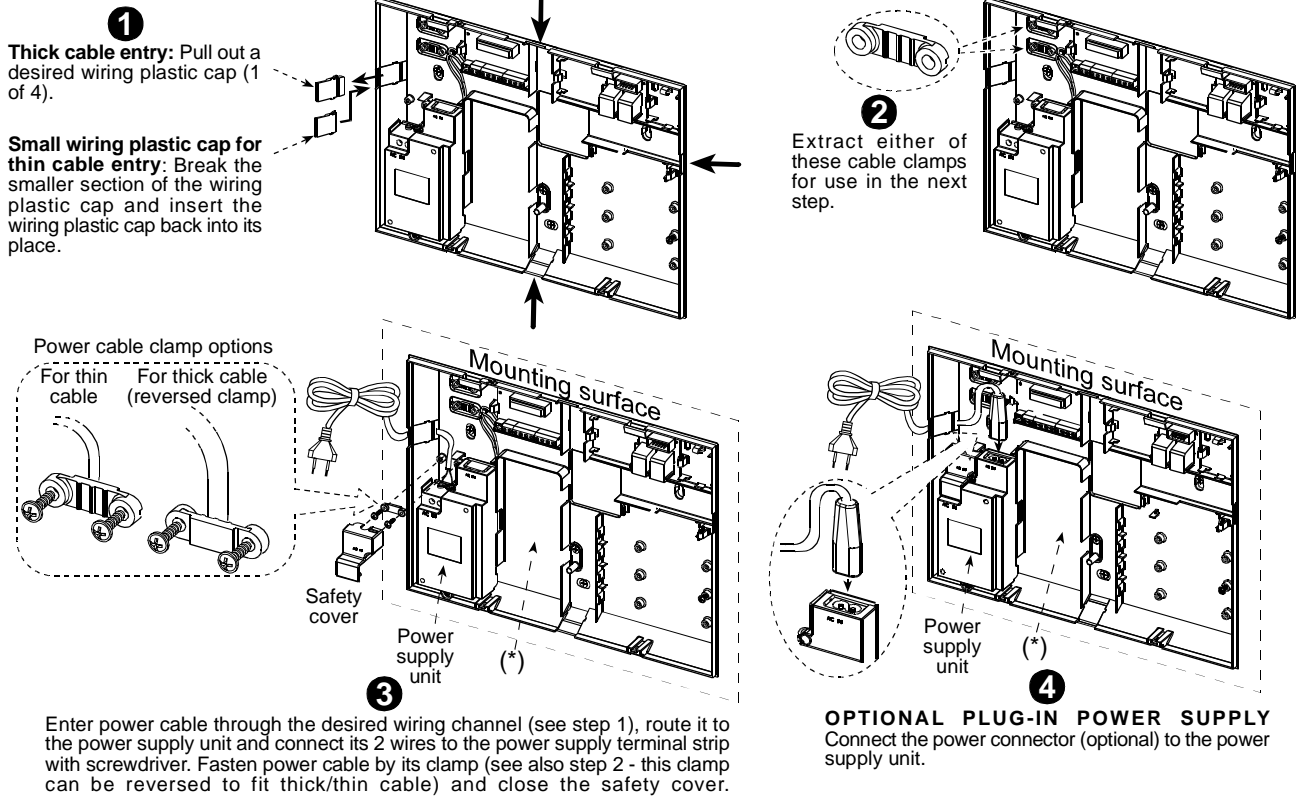


Figure 3.1G - Back Unit Power Cable Connection

* Do not route wiring in this area, to enable proper closure of the control panel.

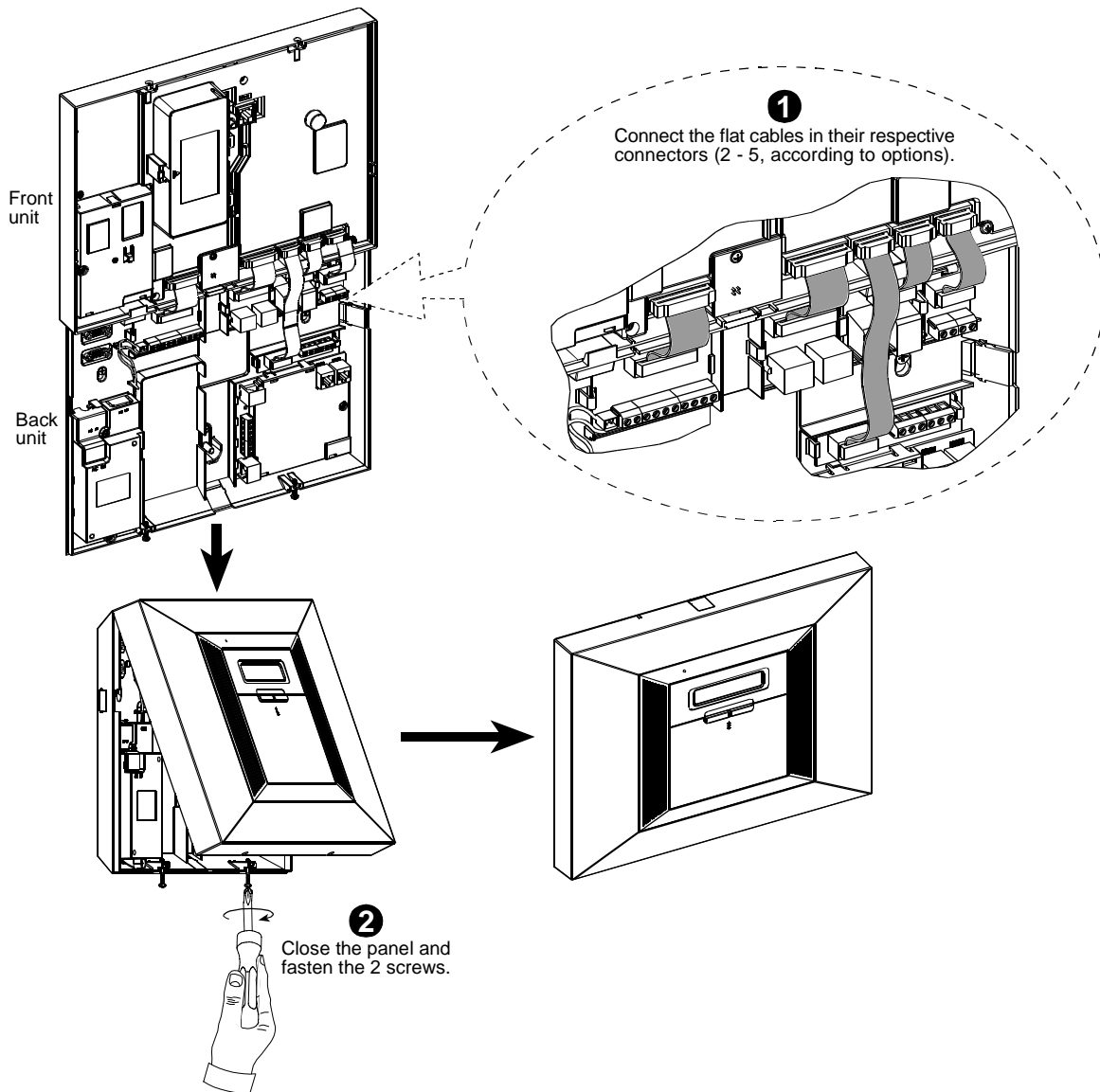


Figure 3.1H - Final Closure

3.11 Installing an Optional X-10 Siren

If you need a “wireless” external siren, you may install an X-10 siren module which is triggered by a signal transmitted via the built-in electrical wiring of the protected site. This siren can replace the regular external siren or complement it without laying out additional wires. Of course, such a siren can be used only in conjunction with an optional power-line interface module.

The X-10 siren is ready to function upon connection to an electrical power outlet, without re-programming the PowerMax Pro. You only have to set the HOUSE CODE and the UNIT CODE selectors on the X-10 siren as follows:

House Code: Set this selector to the letter that follows, by alphabetical order, the letter that you programmed as a house code for the protected premises. For example, if the programmed house code is “J”, set the siren house code selector to “K”.

Note: If the programmed house code letter is “P” (which is the last programmable letter), select “A” for the siren.

Unit Code: The siren will function only if you set the unit code selector to “1”.

3.12 Connecting to a Computer

The control panel can be equipped with an optional RS232 module for serial data interchange with a local computer. If this module is not supplied, a special plastic cap blocks the niche designed to accommodate the module.

Pull out the plastic cap (see figure 3.1). Insert the RS-232 adapter and secure it with the screw. Break the smaller section of the removed plastic cap and insert it back into its place.

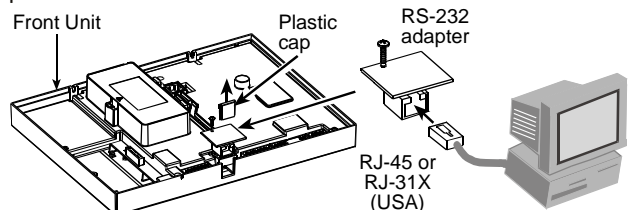


Figure 3.1 I - Connecting to a Computer

3.13 Connecting to GSM Modem

The GSM unit enables the PowerMax Pro system to operate over a cellular network. For details regarding the GSM modem features and connections, refer to the GSM Modem installation instructions.

4. PROGRAMMING

4.1 INTRODUCTION

4.1.1 General Guidance

We recommend to program the PowerMax Pro on the work bench before actual installation. Operating power may be obtained from the backup battery or from the AC power supply.

The installer's menu is accessible only to those who know the installer's 4-digit code, which is **9999** by factory default.

Note: Access to the installer menu, in PowerMax Pro that has "User Permission" enabled (for example in UK) is accessible only at the end of the user menu. This option can be changed is necessary (see par. 4.4.36).






For PowerMax Pro that has 2 installer codes (not applicable in UK), the default INSTALLER code is **8888** and the default MASTER INSTALLER code is **9999**.

The following actions can be done only by using the master installer code:





- Changing master installer code.
- Resetting the PowerMax Pro parameters to the default parameters,
- Defining specific communication parameters, as detailed in a note in figure 4.5.

Obviously, you are expected to use this code only once for gaining initial access, and replace it with a secret code known only to yourself.

You will mainly use 5 control pushbuttons during the entire programming process:

	- to move one step forward in a menu.
	- to move one step backward in a menu.
	- to enter the relevant menu or confirm data.
	- to move one level up in a menu.
	- to return to the "OK TO EXIT" state.

The sounds you will hear while programming are:

	- Single beep, heard whenever a key is pressed.
	- Double beep, indicates automatic return to the normal operating mode (by timeout).
	- Happy Melody (- - - —), indicates successful completion of an operation.
	- Sad Melody (—), indicates a wrong move or rejection.

4.1.2 Entering an Invalid Installer Code

If you enter an invalid installer code 5 times, the keypad will be automatically disabled for 90 seconds and the message WRONG PASSWORD will be displayed.

4.1.3 Installer's Menu

The installer's menu is shown in figure 4.1a. The text in rectangles represents the current PowerMax Pro display.

4.1.4 Setting a New Installer Code

To set an installer code, perform the actions that are presented in figure 4.1b. When you are instructed to enter code, enter a 4-digit code.

4.1.5 Setting a New Installer Code in PowerMax Pro that has 2 Installer Codes

For PowerMax Pro with 2 installer codes, INSTALLER code (default 8888) and MASTER INSTALLER code (default 9999), set new codes as shown in figure 4.1c.

For details regarding the different authorization levels when logging in with installer code and master installer code, refer to the note inside figure 4.5 (DEFINE COMM).

By using the master installer code, the menu enables changing both master installer code and installer code.

By using the installer code, the menu enables changing the installer code only.

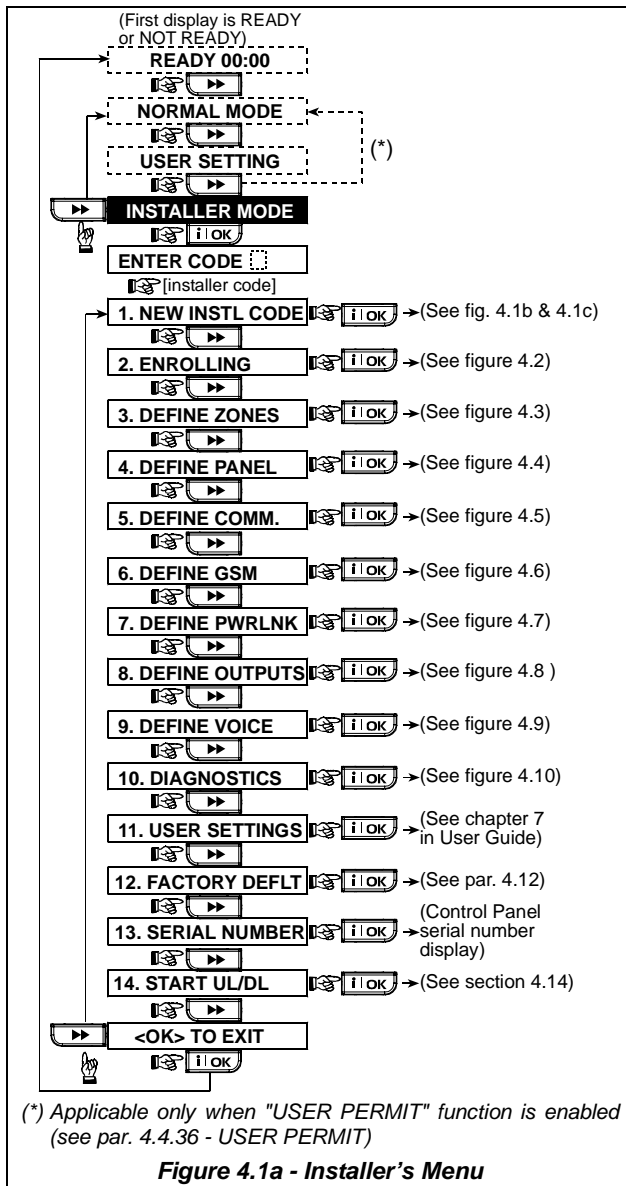


Figure 4.1a - Installer's Menu

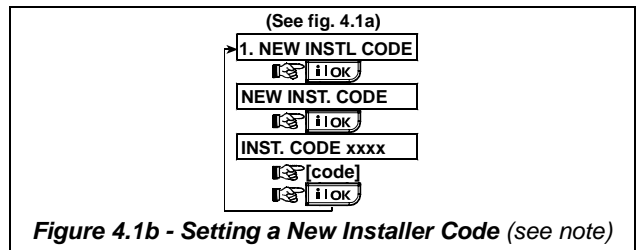


Figure 4.1b - Setting a New Installer Code (see note)

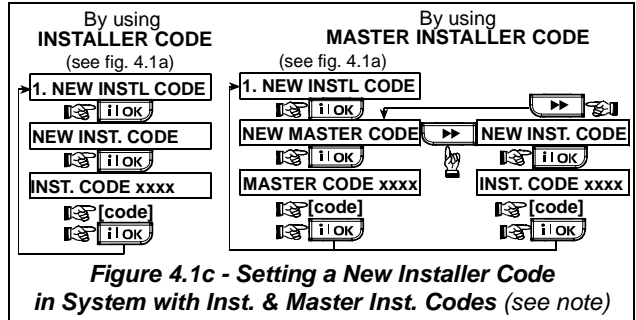


Figure 4.1c - Setting a New Installer Code in System with Inst. & Master Inst. Codes (see note)

Note: *Installer* Code should never be programmed as "0000". Doing so will lock the user out of the installer menu!

4.2 ENROLLING WIRELESS DEVICES AND KEYFOB TRANSMITTERS

4.2.1 General Guidance

The ENROLLING mode has 5 sub-modes:

- ENROLLING TYPE (wireless devices)
- ENROLL WL (wireless devices) DEVICE
- ENROLL KEYFOB (multi-button CodeSecure transmitters)
- ENROLL WL 1WAY KP (wireless commander MCM-140+)
- ENROLL WL 2WAY KP (wireless 2-way keypad MKP-150)
- ENROLL WL SIREN (wireless siren)
- ENROLL PROX TAG (proximity tag)

Before beginning, gather all the devices that you intend to enroll and make sure they all have batteries installed. Your control panel must recognize the unique identification code (ID) of each such device in order to supervise them, receive their signals and respond accordingly.

Attention! CodeSecure transmitters are mainly used for arming/disarming and can not be enrolled to zones. **For enrolling to zones, use only non-CodeSecure wireless devices.**

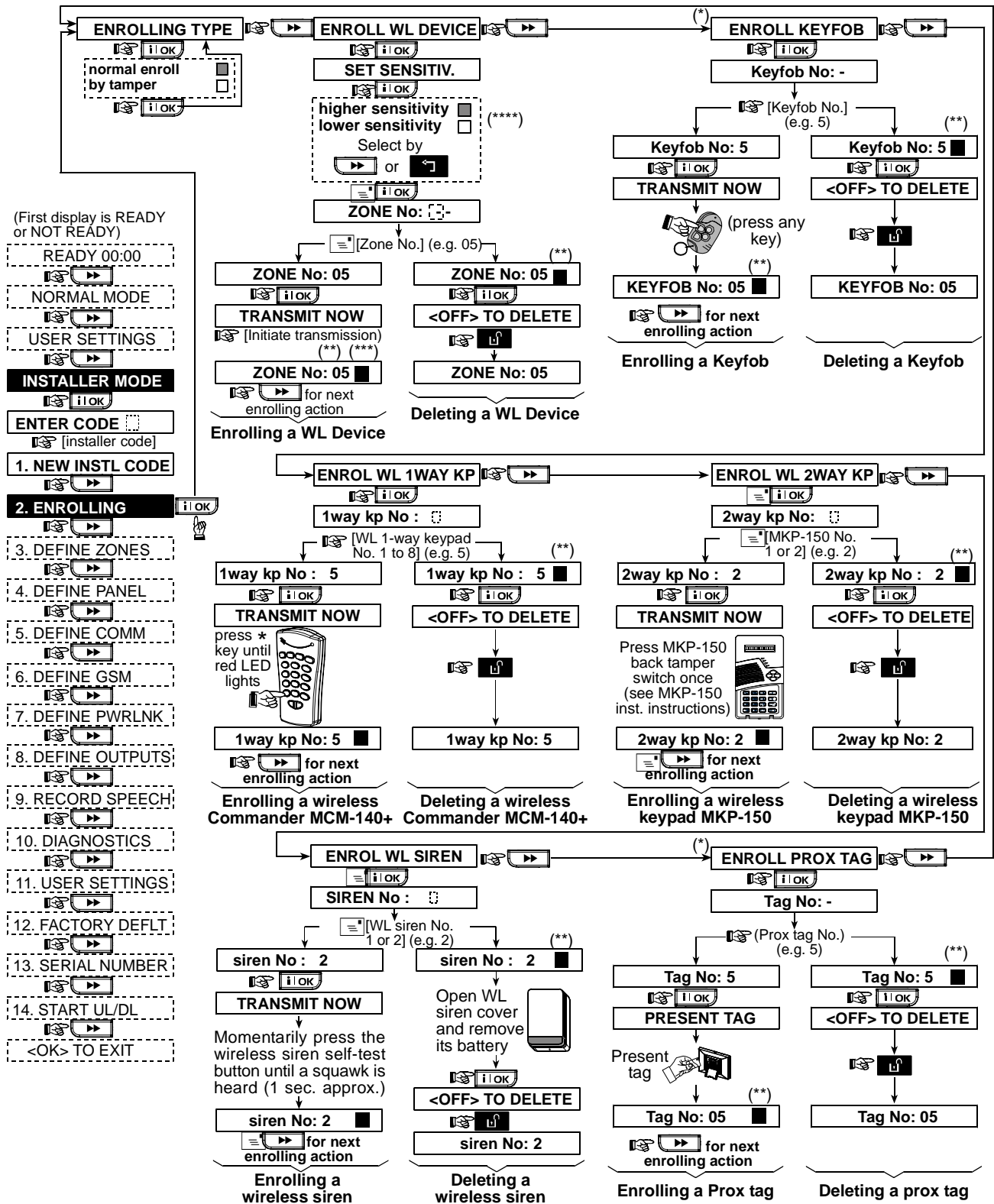


Figure 4.2 - Enrolling / Deleting Wireless Devices / Keyfobs / Wireless Commanders / Wireless Sirens

- * Keyfob & proximity tags enrolling can be performed by the installer or by the user (via USER SETTINGS menu).
- ** Black box in the display means that a device is enrolled (the system has learned its ID). No black box indicates that the device is not enrolled.
- *** Initiate either normal transmission or the device tamper function (see ENROLLING TYPE, Par. 4.2.2).
- **** Select "higher" sensitivity for far wireless device, "lower" for near devices.

4.2.2 Enrolling Type

Here you determine whether to enroll a wireless device by normal transmission or by device Tamper function (opening its cover). Options: **normal**, or **by tamper**.

4.2.3 Enroll/Delete Wireless Devices

Wireless devices include various PowerCode detectors and hand-held transmitters.



- Before enrolling, the lens at the front of PIR and dual-technology sensors should be masked to prevent inadvertent transmission.
- Make sure that magnetic contact transmitters are together with their magnets, to prevent them from sending out alarm transmissions.

To enroll / delete wireless devices, refer to figure 4.2.

4.2.4 Enroll/Delete Keyfob Transmitters

Keyfob transmitters are multi-button wireless CodeSecure™ transmitters. Eight system users use them for better, quicker and safer control over various system functions.

To enroll / delete 1-way or 2-way keyfob transmitters, refer to figure 4.2.

4.2.5 Enroll/Delete Wireless Commander

The Wireless Commander (MCM-140+) is a remote control unit that enables the user to remotely control the system. To enroll / delete up to 8 wireless commanders, refer to figure 4.2 (Enroll WL 1-way KP).

4.2.6 Enroll/Delete 2-Way Keypad

The 2-way keypad, type MKP-150, enables the user to remotely control the system and also to receive data from the system (status, alarm and trouble data). To enroll up to two 2-way keypads, refer to figure 4.2.

4.2.7 Enroll/Delete Wireless Siren

The wireless siren is a remote siren that is activated upon predefined events by the PowerMax Pro system. To enroll / delete up to 2 wireless sirens, refer to figure 4.2.

4.2.8 Enroll/Delete Proximity Tags

Proximity tags enable authorized people to enter restricted areas. Presenting valid proximity tag, while the system is armed, causes the system to disarm. Presenting valid proximity tag, while the system is disarmed, causes the system to be armed in AWAY (optional HOME) mode. To enroll / delete proximity tags, refer to figure 4.2.

4.3 DEFINING ZONE TYPES, NAMES & CHIME ZONES

This mode allows you to assign one of 13 zone types to each of the system's 30 (wireless & wired) zones. In addition, it also allows you to assign a name to each zone and determine whether the zone will operate as a chime zone (only while the system is in the disarmed or Home arming state). When a chime zone is triggered, chime melody or zone name is heard (there are 3 selectable chime modes - Melody chime, Zone Name Chime or Chime Off).

A list of factory defaults is printed on table 1. You may fill out the blank columns even before you start and proceed to program according to your own list.

Remember!

A delay zone is also a perimeter zone by definition.

Zone types are fully explained in Appendix D.

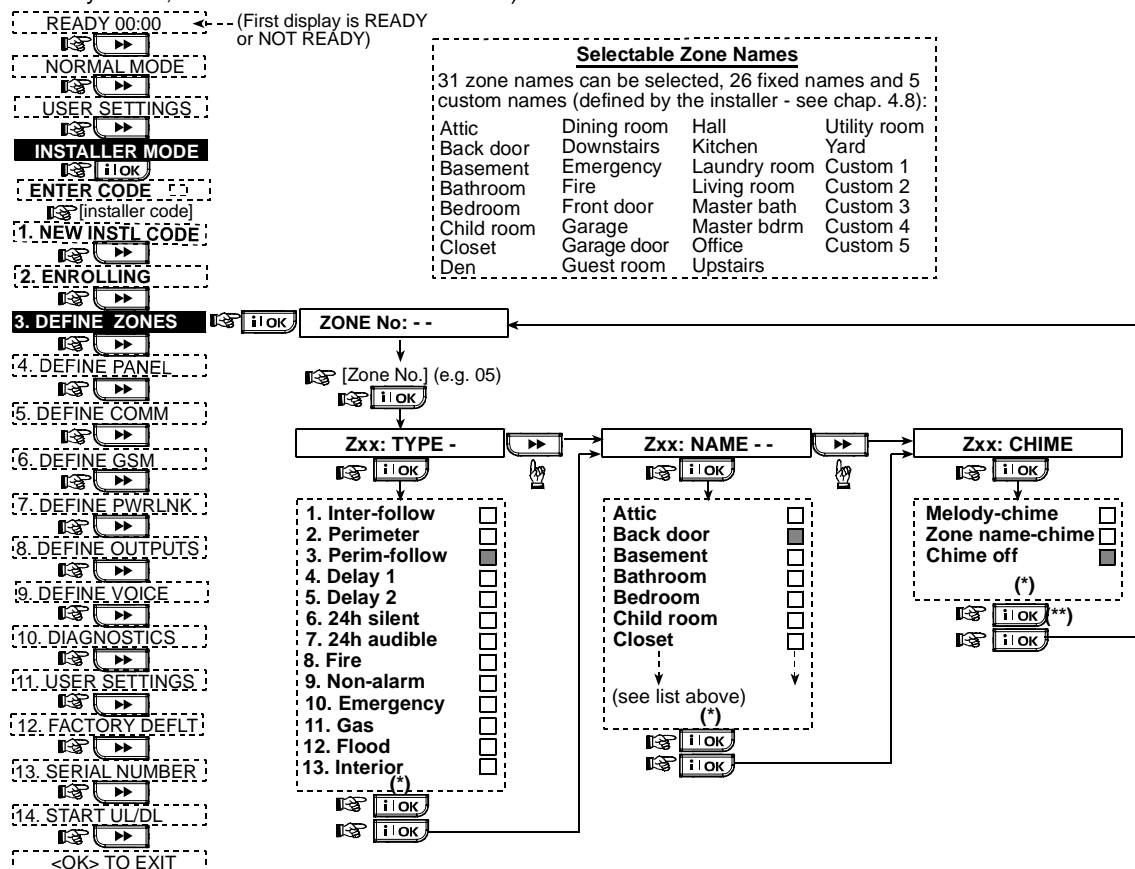


Figure 4.3 - DEFINE ZONES Flow Chart

* The currently saved option is displayed with a dark box at the right side. To review the options, repeatedly click or button, until the desired option is displayed, then click (a dark box will be displayed at the right side).

** Clicking the button in this location brings you to the same zone number that you are dealing with. Press or to select the next zone.



Table 1 - DEFAULT AND PROGRAMMED ZONE DEFINITIONS

Zone No.	Zone Type		Zone Name		Chime (melody Zone Name or Off) (*)
	Default	Programmed	Default	Programmed	
1	Delay 1		Front Door		
2	Delay 1		Garage		
3	Delay 2		Garage Door		
4	Perimeter		Back Door		
5	Perimeter		Child Room		
6	Interior		Office		
7	Interior		Dining Room		
8	Perimeter		Dining Room		
9	Perimeter		Kitchen		
10	Perimeter		Living Room		
11	Interior		Living Room		
12	Interior		Bedroom		
13	Perimeter		Bedroom		
14	Perimeter		Guest Room		
15	Interior		Master Bedroom		
16	Perimeter		Master Bedroom		
17	Perimeter		Laundry Room		
18	Perimeter		Master Bathroom		
19	Perimeter		Basement		
20	Fire		Fire		
21	Fire		Fire		
22	Emergency		Emergency		
23	Emergency		Emergency		
24	24 h / silent		Basement		
25	24 h / silent		Office		
26	24 h / audible		Attic		
27	24 h / audible		Den		
28	non-alarm		Yard		
29	non-alarm		Hall		
30	non-alarm		Utility room		

* **Note:** All zones are Off-chime by default. Enter your own choice in the last column and program accordingly.

4.4 DEFINING CONTROL PANEL PARAMETERS

4.4.1 Preliminary Guidance

This mode allows you to customize the control panel and adapt its characteristics and behavior to the requirements of the particular user. An illustrated process is shown in figure 4.4. In this illustration, each selected option is displayed with a dark box at the right side. To review the options, repeatedly click  or  button, until the desired option is displayed, then click SHOW/OK button.

4.4.2 Entry Delays 1&2 (fig. 4.4, location 01, 02)

Two different entry delays allow the user to enter the protected site (while the system is in the armed state) via 2 specific doors and routes without causing an alarm.

Following entry, the user must disarm the control panel before the entry delay expires. Slow-rate warning beeps start sounding once the door is opened, until the last 10 seconds of the delay, during which the beeping rate increases. Locations No. 1 (entry delay 1) and 2 (entry delay 2) allow you to program the length of these delays. Available options for each delay are: **00s, 15s, 30s, 45s, 60s, 3m and 4m.**

4.4.3 Exit Delay (fig. 4.4 location 03)

An exit delay allows the user to arm the system and leave the protected site via specific routes and doors without causing an alarm. Slow-rate warning beeps start sounding once the arming command has been given, until the last 10 seconds of the delay, during which the beeping rate increases. Location No. 3 allows programming of the exit delay length. Available options are: **30s, 60s, 90s, 120s, 3m, 4m.**

4.4.4 Bell Time (fig. 4.4, location 04)

Here you select the length of time the bell (or siren) is allowed to function upon alarm. The bell time starts upon activation of the siren. Once the bell time expires, the siren is automatically shut down.

Available options are: **1, 3, 4, 8, 10, 15 and 20** minutes.

4.4.5 Abort Time (fig. 4.4 location 05)

Here you select the length of time allowed by the system to abort an alarm (not applicable to alarms from FIRE, 24H SILENT, EMERGENCY, GAS and FLOOD zones). The PowerMax Pro is programmed to provide an "abort interval" that starts upon detection of an event. During this interval, the buzzer sounds a warning but the siren remains inactive and the alarm is not reported. If the user disarms the system within the allowed abort interval, the alarm is aborted.

Available options are: **00s, 15s, 30s, 45s, 60s, 2m, 3m, 4m.**

4.4.6 Alarm Cancel (fig. 4.4, location 06)

Here you determine the "cancel alarm" period that starts upon reporting an alarm to the central station. If the user disarms the system within that time period, a "cancel alarm" message is sent to the central station.

Available options are: **1, 5, 15, 60 minutes, 4 hours** and also **cancel inactive.**

4.4.7 Quick Arm (fig. 4.4, location 07)

Here you determine whether the user will be allowed to perform quick arming or not. Once quick arming is permitted, the control panel does not request a user code before it arms the system.

The two options are: **quick arm ON** and **quick arm OFF.**

4.4.8 Bypass (fig. 4.4, location 08)

Here you permit either manual bypassing of individual zones (through the USER SETTINGS menu), or allow the system to "force arm" (perform automatic bypassing) of open zones during the exit delay. If desired, press the arming key twice if you want to eliminate the delay beeps that continue during a force arming. If a zone is open and forced arming is not permitted, "NOT READY" is displayed and the system does not arm (the "Sad Melody" will sound). If "no bypass" is selected, neither manual bypassing nor force arming is allowed.

Options: **manual bypass, force arm and no bypass.**

4.4.9 Exit Mode (fig. 4.4, location 09)

Here you determine whether the exit delay will restart if the exit / entry door is reopened before the exit delay expires. Restarting the exit delay is helpful if the user re-enters immediately after going out to retrieve an item that he left behind. Three types of exit mode are available:

Restart Exit - Exit delay restarts when the door is reopened during exit delay. The restart occurs once only.

Off by door - When the door is closed, the exit delay is automatically terminated (even if the defined exit delay was not completed).

Normal - The exit delay is exactly as defined, regardless of whether the door is open or closed.

4.4.10 Piezo Beeps (fig. 4.4, location 10)

Here you determine whether warning beeps will sound or muted during exit and entry delays. An additional option is to mute the warning beeps only when the system is armed "HOME".

Options: **enable beeps, off when home and disable beeps.**

4.4.11 Trouble Beeps (fig. 4.4, location 11)

Under trouble conditions, the sounder emits a series of 3 short beeps once per minute. Here you determine whether this special beeping sequence will be active, inactive, or just inactive at night (the range of "night" hours is defined in the factory). The 3 options are: **enable beeps, off at night (8 PM through 7 AM) and disable beeps.**

4.4.12 Panic Alarm (fig. 4.4, location 12)

Here you determine whether the user will be allowed to initiate a panic alarm by simultaneous pressing either the two panic buttons (on the keypad / wireless commander) or away + home (on a keyfob transmitter). Audible panic activates the siren and simultaneously transmits a message via telephone. Silent panic only transmits a message via telephone. The options are: **silent panic, audible panic and disable panic.**

4.4.13 Swinger Stop (fig. 4.4, location 13)

Here you determine how many times each zone is allowed to initiate an alarm within a single arming period (including tamper & power failure events of detectors, PowerMax Pro and wireless siren). If the alarms number from a specific zone exceeds the programmed number, the control panel automatically bypasses the zone to prevent recurrent siren noise and nuisance reporting to the central station. The zone will be reactivated upon disarming, or 48 hours after having been bypassed (if the system remains armed).

Available options are: **shut after 1, shut after 2, shut after 3 and no shutdown.**

4.4.14 Cross Zoning (fig. 4.4, location 14)

Here you determine whether cross zoning will be active or inactive. Cross zoning is a method used to counteract false alarms - an alarm will not be initiated unless two adjacent zones are violated within a 30-second time limit.

This feature is active only when arming AWAY and only with zone couples from zone No. 18 to 27 (18 and 19, 20 and 21, etc.). You may use any one of these zone couples to create a "cross-zoned" area.

Note: If one of two crossed zones is bypassed (see Para. 4.4.8), the remaining zone will function independently.

Note: Every 2 crossed zones must be of the allowed zone type (Interior, Perimeter, Perimeter follower).

The options are: **cross zone ON** and **cross zone OFF.**

Cross zoning is not applicable in Entry/ Exit zones and 24h zones (Fire, Emergency, 24h audible, 24h silent).

4.4.15 Supervision (fig. 4.4, location 15)

Here you determine the time limit for reception of supervision reports from various supervised wireless devices. If any device does not report at least once within the selected time limit, an "INACTIVITY" alert is initiated.

The options are: **1, 2, 4, 8, 12 hours** and **disable.**

4.4.16 NOT READY (fig. 4.4, location 16)

Here you determine if the system will be NOT READY status when there is a supervision failure. In the "in supervision" mode, the system will be in NOT READY status if during the last 20 minutes a supervision message was not received. Options: **normal** and **in supervision.**

4.4.17 AUX Button A (fig. 4.4, location 17)

Here you select the function of the AUX button on keyfob transmitters and wireless commanders MCM-140+. Four options are offered for each AUX button:

Status: Pressing the AUX button will cause the control panel's voice module to announce the system status.

Instant: Pressing the AUX button while the exit delay is in progress will cause the system to arm "instant" (the entry delay is canceled).

Skip exit delay: Pressing the AUX button will immediately cause the system to arm "instant".

PGM / X-10: Pressing the AUX button will activate the PGM output or X-10 units (see further programming under "DEFINE OUTPUTS", par. 4.8).

4.4.18 AUX Button B 2-W-KF (fig. 4.4, location 18). Applicable only for 2-way keyfob MCT-237. Same as 4.4.17 but for AUX button B.

4.4.19 Jam Detect (fig. 4.4, location 19)

Here you determine whether jamming (interfering transmissions, on the radio channel used by the system) will be detected and reported or not.

If a jam detection option is selected, the system does not allow arming under the relevant jamming conditions.

Jam Detection Options

Option	Detection and Reporting when
UL (20/20) (USA standard)	There is continuous 20 seconds of jamming
EN (30/60) (Europe standard)	There is an accumulated 30 seconds of jamming within 60 sec.
class 6 (30/60) (British standard)	Like EN (30/60) but the event will be reported only if the jamming duration exceeds 5 minutes.
Disabled	(no jamming detection and reporting).

4.4.20 Latchkey (fig. 4.4, location 20)

Here you determine whether the system can be armed in the latchkey mode. If the system is armed this way, a "latchkey" message will be sent to specific telephones upon disarming by a "latchkey user" (users 5-8 or keyfob transmitters 5-8). This mode is useful when parents at work want to be informed of a child's return from school. You can record a name for latchkey users.

The options are: **Latchkey ON** and **Latchkey OFF.**