4.4.21 "Not Active" (fig. 4.4, location 21)

Here you determine the time limit for reception of signals from sensors used to monitor the activity of sick, elderly or disabled people. If no device detects and reports movement at least once within the defined time limit, a "not-active" alert is initiated.

Options: **3**, **6**, **12**, **24**, **48**, **72 hours** and **no act disable**.

4.4.22 Back Light (fig. 4.4, location 22)

Here you determine whether the keypad back lighting will remain on at all times or will come on when a key is pressed and go off within 10 seconds if no further keystrokes are sensed.

The two options are: **always on** and **off after 10 s**.

4.4.23 Duress (fig. 4.4, loc. 23)

A duress alarm (ambush) message can be sent to the central station if the user is forced to disarm the system under violence or menace. To initiate a duress message, the user must disarm the system with the duress code (2580 by default). Here you can change the code digits or enter "0000" to disable the duress feature. **The system does not allow the user to program the duress code saved in this memory location as an existing user code.**

4.4.24 Piezo Siren (fig. 4.4, location 24)

Here you determine whether the internal siren will sound or remain silent upon alarm (according to the user preference). Options: **piezo siren on**, **piezo siren off**.

4.4.25 Reset Option (fig. 4.4, location 25)

(Not applicable in the USA)

Here you determine whether the system can be rearmed (after an event) by the user or only by the installer.

Options: **user reset** or **engineer reset**.

If Engineer Reset is selected, the system can be rearmed only by the installer; by entering and exiting the installer menu, by entering and exiting the event log (see section 7), or by remote telephone. To perform Engineer Reset via the telephone, establish communication with the PowerMax Pro (see user guide, par. 6.3A, steps 1-5) and continue as follows:

a. ☞ [*], [installer code], [#]

b. Wait for 2 beeps

c. ☞ [*], [1], [#]

d. ☞ [*], [99], [#]

4.4.26 Tamper Option (fig. 4.4, location 26)

Here you determine whether zone tamper will be reported or ignored. Available options are: **zone tamper ON** and **zone tamper OFF**.

4.4.27 Siren On Line (fig. 4.4, location 27)

Here you determine whether the siren will be activated or not when the telephone line fails during system armed state. Available options are: **enable on fail**, **disable on fail**.

4.4.28 Memory Prompt (fig. 4.4, location 28)

Here you determine whether the user will receive indication that an alarm has been activated.

Available options are: **enable** and **disable**.

4.4.29 Disarm Option (fig. 4.4, location 29)

Here you determine when it is possible to disarm the system:

A. Any time.

B. In AWAY mode, during entry delay, by using the PowerMax Pro keypad or wireless device (keyfob).

C. In AWAY mode, during entry delay, by using a wireless device (keyfob) only (this is set as a default in UK to comply with DD423).

D. During entry delay, or by using the PowerMax Pro keypad in AWAY mode.

Options: **any time**, **on entry all**, **on entry wireless**, or **entry + away kp**.

4.4.30 Bell/Rep. Option (fig. 4.4, location 30)

Here you determine whether an alarm will be initiated (siren / report) when there is a supervision / jamming failure during AWAY arming state.

Available options are: **EN standard** and **other**. When "EN standard" is selected, if there is supervision / jamming failure during AWAY arming, the siren is activated and the events are reported as tamper events. When "Other" is selected, there is no such activity during AWAY arming.

4.4.31 Low-Bat Ack (fig. 4.4, location 31)

Here you determine whether the user will hear or will not hear low battery sound when he tries to disarm the system with a keyfob whose battery voltage is low.

Available options are: **keyfob L-B on** (the user has to acknowledge the keyfob low battery message) or **keyfob L-B off** (the user does not have to acknowledge the keyfob low battery message).

4.4.32 Screen Saver (fig. 4.4, location 32)

Here you can determine that if no key is pressed during more than 30 seconds, the display will be "PowerMax" (to prevent possible intruder of knowing the system status). You can determine that normal display will return after pressing the  button followed by entering user code (**Refresh by Code**) or after pressing any key (**Refresh by Key**).

If **Refresh by Key** is selected, the first pressing of any key (except Fire and Emergency) will cause normal display return and the second press will perform the key function. Regarding the Fire and Emergency keys, the first key press will cause normal display return and also will perform the Fire/Emergency function.

Options: **scrn saver OFF**, **refresh by code**, **refresh by key**.

4.4.33 Confirm Alarm (fig. 4.4, location 33)

Here you determine that if 2 successive alarms will occur during a specific period, the second alarm will be considered as a **confirmed alarm** (for confirmed alarm reporting, see par. 4.5.12 REPORT CNF ALARM).

Options: **disable 30 min.**, **45 min.**, **60 min.**, or **90 min.**

4.4.34 AC FAIL REP (fig. 4.4, location 34)

Here you determine the time interval between AC power failure occurrence and the failure reporting. Options: **5 minutes, 30 minutes, 60 minutes** or **180 minutes.**

4.4.36 User Permission (fig. 4.4, location 36)

Here you determine whether the access to the INSTALLER MODE requires user permission. If you select ENABLE, the installer mode will be accessible only through the user menu after entering the user code.

Options: **Enable**, **Disable**.

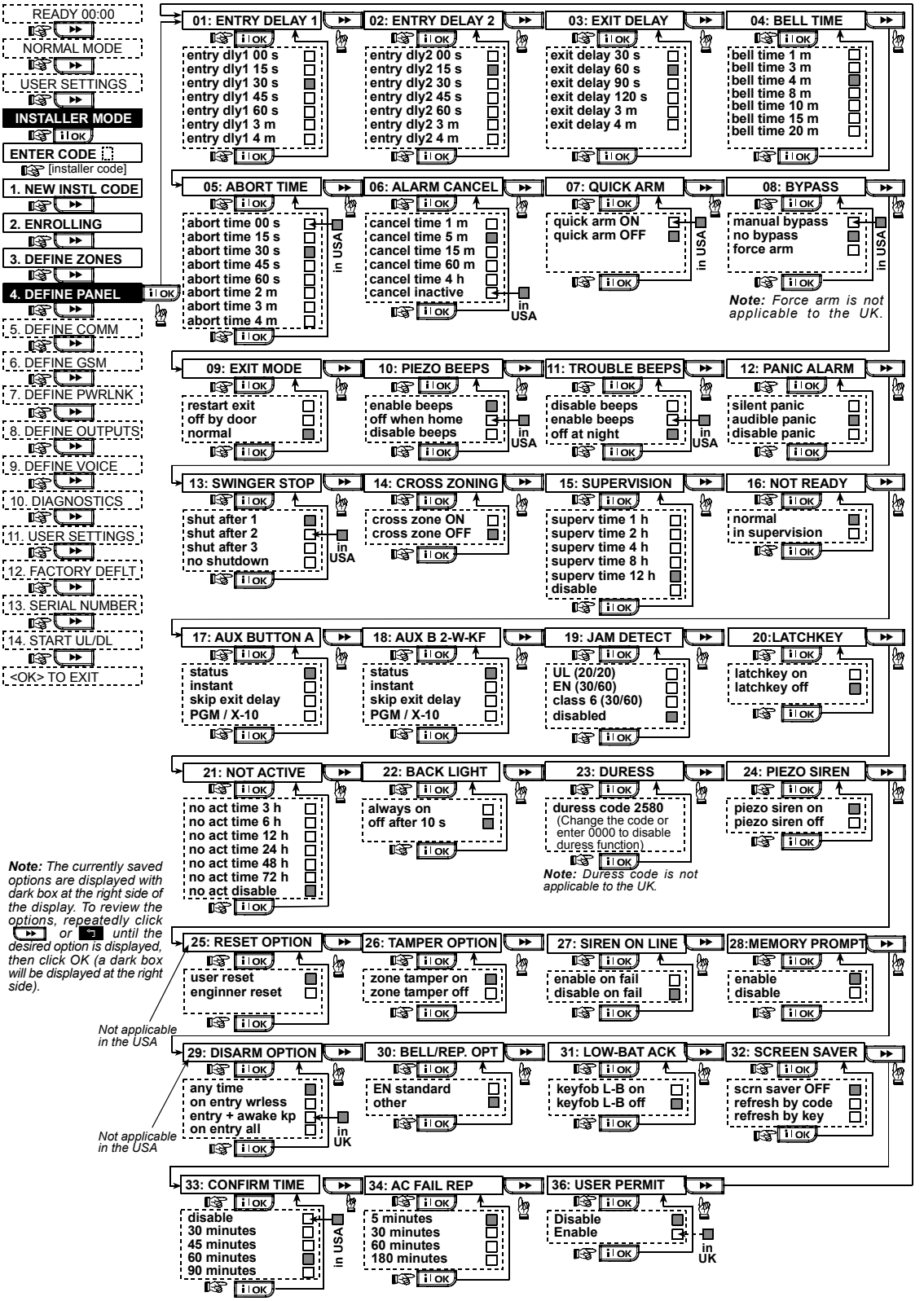


Figure 4.4 - DEFINE PANEL Flow Chart

4.5 DEFINING COMMUNICATION PARAMETERS

Preliminary Guidance

This mode allows you to adapt the telephone communication parameters to the local requirements.

Compatible central station receivers are: Osborne-Hoffman model 2000, Ademco Model 685, FBII Model CP220, Radionics Model D6500, Sur-Gard Model SG-MLR2-DG and Silent Knight Model 9500.

IMPORTANT: *In telephone / pager number locations and account number locations, you may be required to enter hexadecimal digits. In telephone number locations, these digits are used as codes to control the dialer:*

Hex. Digit	*Keying Sequence*	*Code Significance*
A	***<#> ⇒ <0>***	*Applicable only at the beginning of a number - the dialer waits 10 seconds or waits for dial tone, whichever comes first and then dials.*
B	***<#> ⇒ <1>***	*Inserts an asterisk (✳)*
C	***<#> ⇒ <2>***	*Inserts a pound sign (#)*
D	***<#> ⇒ <3>***	*Applicable only at the beginning of a number - the dialer waits 5 seconds for dial tone and goes on hook if none is received.*
E	***<#> ⇒ <4>***	*Applicable only in the middle of the number - the dialer waits 5 seconds*
F	***<#> ⇒ <5>***	*Not applicable in phone numbers*

To enter a series of digits, use the following keys:
<Numeric keypad> - to enter the number


- moves the cursor from left to right


- moves the cursor from right to left


- deletes everything after the cursor (to the right).

4.5.1 Autotest Time (fig. 4.5, location 01)

Here you determine the time at which the telephone line will be tested and reported to the central station.

4.5.2 Autotest Cycle (fig. 4.5, location 02)

Here you determine the time interval between consecutive telephone line test messages sent to the central station. The control panel performs this at regular intervals to verify proper communications.
The options are: **test every 1**, **5**, **7**, **14**, **30 days** and **test off**.

4.5.3 Area Code (fig. 4.5, location 03)

Here you enter the system tel. area code (up to 4 digits).

4.5.4 Out Access No (fig. 4.5, location 04)

Here you enter the number that is used as a prefix to access an outside telephone line (if exists).

4.5.5 First Central Station Tel. (fig. 4.5, loc. 05)

Here you program telephone number of the 1st central station (including area code, 16 digit max) to which the system will report the event groups defined in memory location 11 (see note in fig. 4.5).

4.5.6 First Account No. (fig. 4.5, location 06)

Here you enter number that will identify your specific alarm control system to the first central station. The number consists of 4 or 6 hexadecimal digits (see note in fig. 4.5).

4.5.7 2ND Central Station Tel. (fig. 4.5, loc. 07)

Here you program telephone number of the 2nd central station (including area code, 16 digit max) to which the system will report the event groups defined in memory location 11 (see note in fig. 4.5).

4.5.8 Second Account No. (fig. 4.5, loc. 08)

Here you enter number that will identify your system to the 2nd central station. The account number consists of 4 or 6 hexadecimal digits (see note in fig. 4.5).

4.5.9 Report Format (fig. 4.5, location 09)

Here you select the reporting format used by the control panel to report events to central stations (see note in figure 4.5).
The options are: ■ **Contact-ID** ■ **SIA** ■ **4/2 1900/1400** ■ **4/2 1800/2300** ■ **Scancom** (see Appendix C - code lists).

4.5.10 4/2 Pulse Rate (fig. 4.5, location 10)

Here you select the pulse rate at which data will be sent to central stations if any one of the 4/2 formats has been selected in Location 09 REPORT FORMAT (see note in fig. 4.5). The options are: **10**, **20**, **33** and **40** pps.

4.5.11 Reporting to Central Stations

(fig. 4.5, location 11) (see note in fig. 4.5).

Here you determine which types of event will be reported to central stations. Due to lack of space in the display, abbreviations are used: alarm is "**alrm**", alert is "**alrt**" and open/close is "**o/c**". The asterisk (✳) is a separator between events reported to **central station 1** and events reported to **central station 2**.
Messages are divided by type into three groups:

GROUP	**EVENTS REPORTED**
Alarms	Fire, Burglary, Panic, Tamper
Open/Close	Arming AWAY, Arming HOME, Disarming
Alerts	No-activity, Emergency, Latchkey

"Alarm" group has the highest priority and "Alert" group has the lowest priority.
The selectable options are as follows:

Plan name	Sent to center 1	Sent to center 2
all -o/c ✳ backup	All but open/close	All but open/close if center 1 doesn't respond
all ✳ all	All	All
all-o/c ✳ all -o/c	All but open/close	All but open/close
all –o/c ✳ o/c	All but open/close	Open/close
all (–alrt) ✳ alrt	All but alerts	Alerts
Alrm ✳ all (–alrm)	Alarms	All but alarms
Disable report	Nothing	Nothing
all ✳ backup	All	All if cent. 1 doesn't respond

Note: *"All" means that all 3 groups are reported and also trouble messages - sensor / system low battery, sensor inactivity, power failure, jamming, communication failure etc.*

4.5.12 Report CNF Alarm (fig. 4.5, location 12)

Here you determine whether the system will report whenever 2 or more events (**confirmed alarm)** occur during a specific period (see par. 4.4.33 and note in figure 4.5).
Available options are: **enable report, disable report, enable + bypass** (enabling report and bypassing the detector - applicable to PowerMax Pro that is compatible with DD423 standard).

4.5.13 Send 2WV Code (fig. 4.5, location 13)

Here you determine whether the system will send two-way voice code to the central station (to turn the central station from data communication to voice communication state) by using pre-selected SIA or Contact-ID communication format only (see note in fig. 4.5). Options: **send** and **don't send.**

4.5.14 Two-Way Voice Central Stations

(fig. 4.5, loc. 14). (See note in fig. 4.5).

Here you select the timeout for 2-way voice communication with Central Stations, or enable the central station to ring back for 2-way voice function. This option is applicable only after reporting an event to the central station. (The central station person can press [3] for listen-in", [1] for "speak out" or [6] for listening and speaking).
The options are: **10**, **45**, **60**, **90 seconds**, **2 minutes**, **ring back** and **disable** (no two-way voice communication).

Note: *If "Ring Back" is selected, you should select "Disable Report" for private telephone (see par. 4.5.20 - Reporting to Private Telephones), otherwise the central station will establish communication with the PowerMax Pro (after an event occurrence) in the normal manner (and not after one ring).*

4.5.15 Ring Back Time (fig. 4.5, location 15)

Here you determine the period during which the central station can establish 2-way voice communication with the PowerMax Pro (after 1 ring), if:

A. Alarm type message was received by central station.
B. Ring Back function was selected (see par. 4.5.14).

The options are: **1**, **3**, **5** or **10** min. (see note in fig. 4.5).

4.5.16 Dialing Attempts (fig. 4.5, location 16)

Here you determine how many times the communicator will dial the central station's number. (see note in fig. 4.5).

The options are: **2**, **4**, **8**, **12**, and **16** attempts.

Attention! *A maximum of 2 dialing attempts is permitted by the Australian Telecommunication Authority.*

4.5.17 Set Private Tel. No. (fig. 4.5, location 17)

Here you program the four telephone numbers (including area code) of the private subscriber to which the system will report the event groups defined in Location 20.

4.5.18 Two-Way Voice - Private Phones (fig. 4.5, location 18)

Here you determine whether 2-way voice communication with private telephones will be allowed or not.

The two options are: **enable 2-way** and **disable 2-way**.

4.5.19 Private Tel. Dialing Attempts (fig. 4.5, location 19)

Here you determine how many times the communicator will dial the called party's number (private telephone).

The options are: **1, 2, 3** and **4** attempts.

Attention! A maximum of 2 dialing attempts is permitted by the Australian Telecommunication Authority.

4.5.20 Reporting to Private Telephones (fig. 4.5, location 20)

Here you determine which event groups will be reported to private telephone subscribers. The options are as follows:

Term	Description
all	All messages
all (-op/cl)	All messages, except open/close
all (-alerts)	All messages, except alerts
alarms	Alarm messages
alerts	Alert messages
op/cl	Open/close
disable report	No message will be reported

Note: *"**All**" means all events including the L. BAT and AC FAIL trouble messages.*

4.5.21 Tel. Acknowledge (fig. 4.5, location 21)

Here you determine whether the system will use the single acknowledge or the all acknowledge mode when reporting to private telephones.

Note: *In the single acknowledge mode, receiving an acknowledge signal from a single telephone is sufficient to consider the current event closed and call off the communication session. The remaining telephones serve for backup purposes only. In the all acknowledge mode, an acknowledge signal must be received from each telephone before the current event is considered reported.*

The options are: **single ack** and **all ack.**

4.5.22 Pager Tel. No. (fig. 4.5, location 22)

Here you program the telephone number (including area code) of the pager to which the system will report (if any).

4.5.23 Pager's PIN No. (fig. 4.5, location 23)

Here you enter the pager's PIN code - a digital sequence that is the pager's address. The paging company's computer needs this input for routing messages to the specific pager. The PIN sequence precedes any digital message that the PowerMax Pro sends to the pager to report an event. It may include digits, pauses and special characters (***** or #). Call the paging company to find out what the pager's PIN code should consist of.

Important! *In this location, special characters can be entered as shown below:*

To Insert	*Keying Sequence*	*Character Displayed*
*****	**<#> ⇒ <1>**	**B**
#	**<#> ⇒ <2>**	**C**
5 sec pause	**<#> ⇒ <3>**	**E**

Enter the pager's PIN number (up to 16 digits, including special characters, depending on pager system protocol).

4.5.24 Reporting to a Pager (fig. 4.5, loc. 24)

Here you determine which event groups will be reported to the pager. (For the abbreviations, refer to par. 4.5.11).

The options are: ■ **all** ■ **alarms + alerts** ■ **all (- op/cl)** ■ **trbl + op/cl** ■ **trbl** ■ **op/cl** ■ **disable report**

4.5.25 Recent Closure (fig. 4.5, location 25)

Here you enable or disable the "recent closing" report, that is sent to the central station if an alarm occurs within 2 minutes from the expiry of the exit delay.

The options are: **recent close ON** and **recent close OFF**.

4.5.26 Remote Access (fig. 4.5, location 26)

Here you give or deny permission to access the system and exercise control from a remote telephone.

The options are: **rem. access ON** and **rem. access OFF**.

4.5.27 Mast. DL Code (fig. 4.5, location 27)

Here you determine the master installer 4-digit password for downloading/uploading data into/from the PowerMax Pro memory. (See note in fig. 4.5).

Attention! If "0000" is used, it will not enable connection of the PowerMax Pro to the PC for upload/download purpose.

4.5.28 Inst. DL Code (fig. 4.5, location 28)

Here you determine the installer 4-digit password for downloading data into the PowerMax Pro memory.

Attention! If "0000" is used, it will not enable connection of the PowerMax Pro to the PC for upload/download purpose.

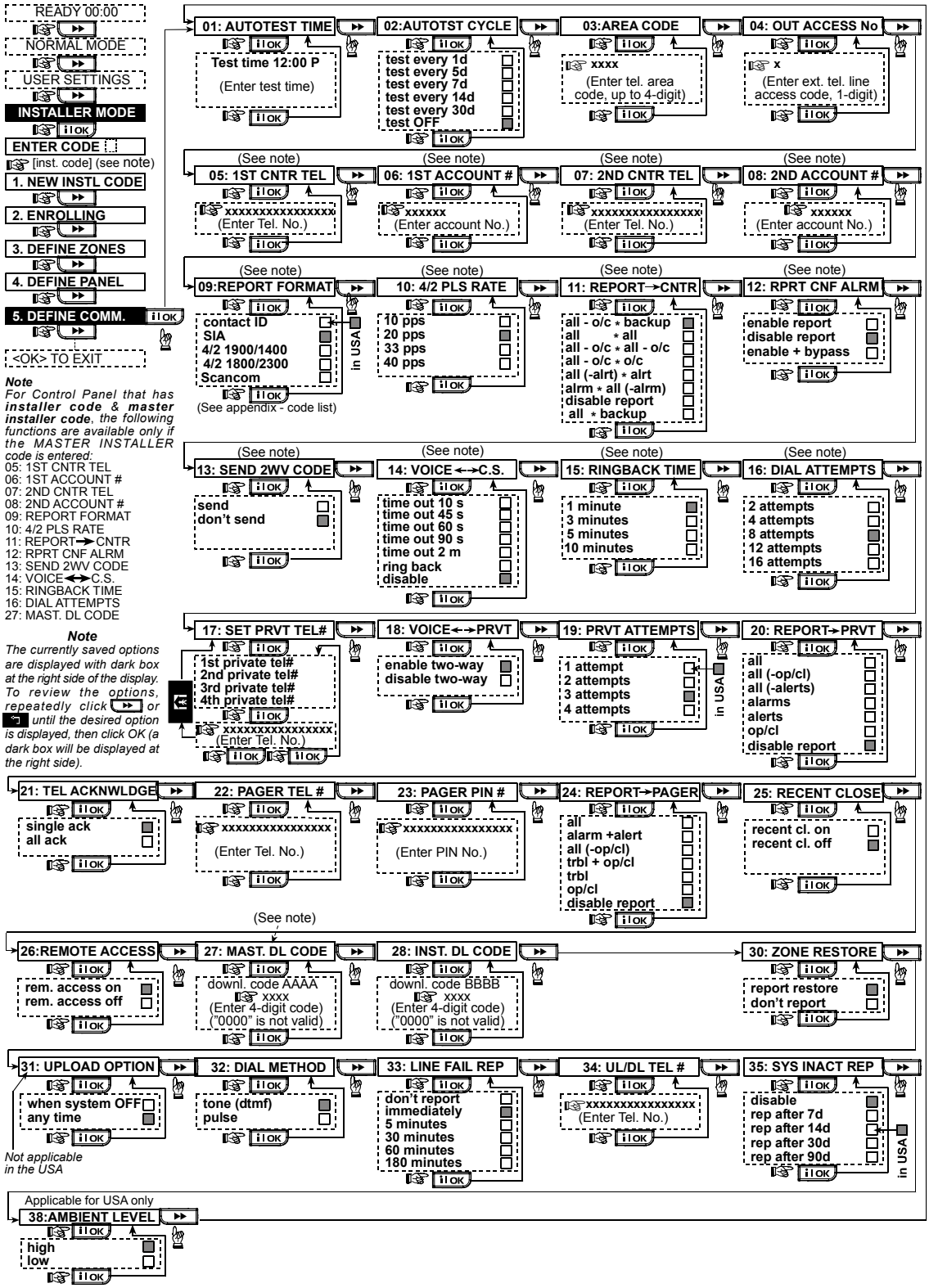
4.5.30 Zone Restore (fig. 4.5, location 30)

Here you determine whether a zone restore will be reported or not. Options: **report restore** and **don't report**.

4.5.31 Upload Option (fig. 4.5, location 31)

Here you determine whether the PowerMax Pro data can be uploaded into a computer while the system is in disarm state or any time (in HOME/AWAY arming & disarm state).

The options are: **when system OFF** and **any time**.



Note

*For Control Panel that has **installer code** & **master installer code**, the following functions are available only if the MASTER INSTALLER code is entered:*

05: 1ST CNTR TEL
06: 1ST ACCOUNT #
07: 2ND CNTR TEL
08: 2ND ACCOUNT #
09: REPORT FORMAT
10: 4/2 PLS RATE
11: REPORT→CNTR
12: RPRT CNF ALRM
13: SEND 2WV CODE
14: VOICE←→C.S.
15: RINGBACK TIME
16: DIAL ATTEMPTS
27: MAST. DL CODE

Note

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

Figure 4.5 - DEFINE COMM Flow Chart

4.5.32 Dialing Method (fig. 4.5, location 32)

Here you determine the dialing method used by the automatic dialer built into the PowerMax Pro control panel. The options are: **Pulse** and **DTMF** (tone).

4.5.33 Line Failure Report (fig. 5, loc. 33)

Here you determine if the telephone line disconnection will be reported or not and determine the delay between detection of line disconnection and the failure reporting. If the telephone line is disconnected, the message "tel line fail" will be stored in the event log.

The options are: **don't report, immediately, 5 minutes, 30 minutes, 60 minutes** or **180 minutes**.

4.5.34 UL/DL Tel. Number (fig. 4.5, loc. 34)

Here you enter the telephone number (up to 16 digits) of the UL/DL server.

Note: *Only for use with panels monitored by compatible central stations. Leave empty if not being used.*

4.5.35 System Inactivity Report (fig. 4.5, loc. 35)

Here you determine whether the central station will receive a message if the system is inactive (not armed) during a defined period (days).

The options are: **disable**, **rep. after 7d**, **rep. after 14d**, **rep. after 30d**, **rep. after 90d**.

4.5.38 Ambient Level (fig. 4.5 loc. 38)

Applicable for USA only. In this section you select the ambient noise level of the installation. If it is relatively noisy environment, set it to High (default setting) If it is very quiet environment, set to Low.

4.6 DEFINING GSM PARAMETERS

This mode is applicable only if your PowerMax Pro is connected to the internal / external GSM unit. By using this mode, you can:

1. Define that the GSM unit is installed / not installed.
2. Define 4 cellular phone numbers to which events will be reported via SMS text message.
3. Define which types of events will be reported to SMS phone numbers.
4. Define whether the GSM unit will serve as:
   - GSM IS BACKUP – The system will try to report events using the PSTN line, and if that fails, it will try the GSM line (SMS messages are always sent using the GSM line).
   - GSM IS PRIMARY –The system will try dialing using GSM line first, and if that fails, it will try the PSTN line (SMS messages are sent using GSM anyway).
   - GSM ONLY –The system will report events by using only the GSM line.
   - SMS ONLY –The system will not use GSM line for anything else than for SMS messages.
5. Define whether GSM line failure will not be reported, or will be reported after 2/5/15/30 minutes.

An illustrated process is shown in figure 4.6. 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 i OK button.

4.6.1 GSM Installation

Here you define whether the GSM unit is installed or not installed. Available options are: **installed** or **not installed**.

4.6.2 1st, 2nd, 3rd & 4th SMS Number

Here you define the first, second, third and fourth SMS phone number (including area code, 16 digits maximum) to which pre-selected events types (see next paragraph) will be reported.

4.6.3 Reporting to SMS Phone Number

Here you determine the types of events that will be reported to the pre-selected SMS phone numbers.

Event messages are divided by type into three groups:

GROUP	EVENTS REPORTED
Alarms	Fire, Burglary, Panic, Tamper
Open/Close	Arming AWAY, Arming HOME, Disarming
Alerts	No-activity, Emergency, Latchkey

The selectable options are detailed in the next table.

Option	Description
All	All event types
all (-op/cl)	All event types except open/close
all (-alerts)	All event types except alerts
Alarms	Alarms only
Alerts	Alerts only
op/CL	Open/close only
Disable report	No events reporting

Note: *"**All**" means that all 3 groups are reported and also trouble messages - sensor / system low battery, sensor inactivity, power failure, jamming, communication failure etc.*

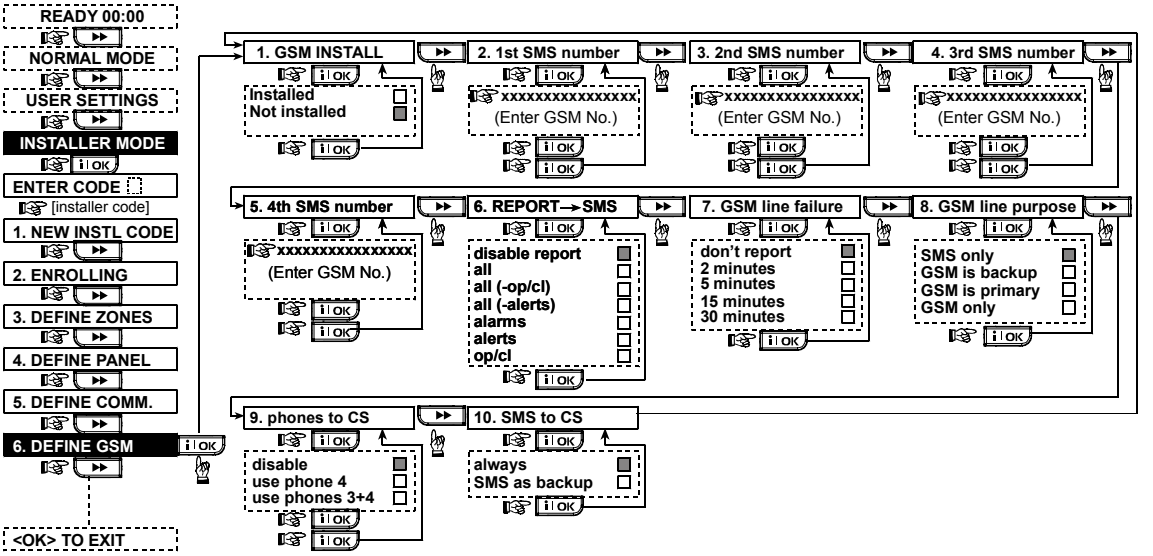


Figure 4.6 - DEFINE GSM

4.6.4 GSM Line Failure Reporting

Here you determine whether GSM network failure will be reported after 2 min., after 5 minutes, after 15 min., or after 30 minutes. Available options: **don't report**, **2 min**, **5 min**, **15 min**, or **30 min**.

4.6.5 GSM Line Purpose

Define whether the GSM unit will serve as a backup for the regular telephone line, as a primary communication channel or as the only telephone channel or for sending SMS only. Available options are: **GSM is backup**, **GSM is primary**, **GSM only** or **SMS only**.

4.6.6 Phones to Central Station

Here you determine the report format of the third and fourth pre-selected SMS phone numbers. Available options are: **disable**, **use phone 4** or **use phone 3+4**.

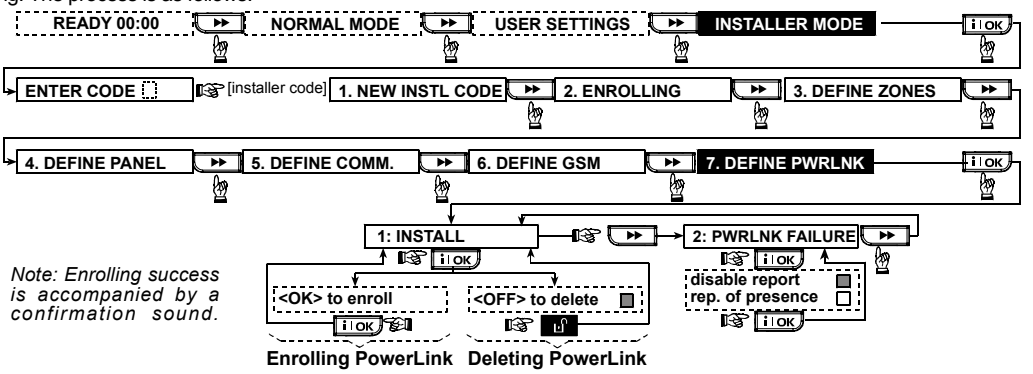
4.6.7 SMS to Central Station

Here you determine if an SMS message will always be reported to the central station via telephones 3 or 4, or only in case of a failure of a reported event via the PSTN line. Available options are: **always** or **SMS as backup**.

Note: *This feature is enabled only if* ***use phone 4*** *or* ***use phone 3+4*** *is selected in section 4.6.6.*

4.7 DEFINING POWERLINK

This mode enables you to enroll/delete the internal / external PowerLink and to enable/disable PowerLink communication failure reporting. The process is as follows:



Note: Enrolling success is accompanied by a confirmation sound.

Figure 4.7 - DEFINE POWERLINK

4.8 DEFINING OUTPUT PARAMETERS

4.8.1 Preliminary Guidance

This mode allows you:

a. Events/conditions selection under which PGM (programmable) output and fifteen "X-10" devices will function.
b. Function type selection for every X-10 unit and PGM output.
c. General definitions selection for X-10 units.
d. Selection of the internal siren or STROBE light (that will be activated according to system programming).
e. Enrolling 2-way X-10 units.

The process is shown in Fig. 4.8. 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 i OK button.

4.8.2 Define PGM

For the PGM output, you can select **disable, turn on**, **turn off** or **pulse active** (turn on for predefined period, selected by **PULSE TIME**), as follows:

- **BY ARM AWAY (**upon AWAY arming).
- **BY ARM HOME** (upon HOME arming).
- **BY DISARM** (upon disarming).
- **BY MEMORY** (activated upon registration of an alarm in the memory, turned off upon memory clearing).
- **BY DELAY** (during exit / entry delays).
- **BY KEYFOB** (upon AUX button pressing in the keyfob transmitter / MCM-140+, if "**PGM/X-10**" is selected in "Define Panel" menu, locations 17 and 18).
- **BY ZONES** (by disturbance in each of 3 selected zones, irrespective of arming / disarming). If you select **toggle**, the PGM output will be turned on upon event occurrence in these zones and will be turned off upon next event occurrence, alternately.
- **BY LINE FAIL:** PGM output is ON if telephone line is disconnected.

4.8.3 Defining INT/STRB

Here you determine whether the INT output will be used for an **internal siren** or for a **strobe**. If **strobe** is selected, the INT output will be activated when an alarm occurs until the system is disarmed and rearmed again (i.e. clearing alarm memory).

4.8.4 X-10 GENERAL DEF

For X-10 devices, you can select the following actions:

- **FLASH ON ALARM** (you can select **no flash** or **all light flash**, to control X-10 lighting devices in alarm conditions).
- **TRBL INDICATION** (you can select **don't indicate** or **indicate** for X-10 failure indication by the TROUBLE LED).
- **FAIL REPORT** (You can select **report to central station 1**, **report to central station 2, report to pager, report to private telephone** and **send SMS**, for X-10 devices failure reporting).
- **3 PHASES & FREQ** (you can select **disable 3 phase**, **3 phase 50 Hz**, or **3 phase 60 Hz** to define the X-10 signal transmission type).
- **LOCKOUT TIME** (You can enter daytime limits between which X-10 lighting devices controlled by sensors will be off, even when the associated sensors are triggered).

4.8.5 X-10 UNIT DEFINE

For the fifteen X-10 units you can perform the following programming actions:

a. House code selection (a code letter from A to P that will distinguish the site in which the system is installed from other sites in the neighborhood).
b. Specific number definition for every X-10 unit (01 – 15).
c. Enrolling 1-way X-10 units
d. Enrolling 2-way X-10 units (that can perform status reporting).
   Note: *If a 2-way X-10 unit is installed without enrolling, interference to the 1-way X-10 units operation may occur.*
e. For each X-10 unit you can select **disable, turn on**, **turn off** or **pulse active** (turn on for predefined period, selected by **PULSE TIME**), upon the following conditions:
   - **BY ARM AWAY (**upon AWAY arming).
   - **BY ARM HOME** (upon HOME arming).
   - **BY DISARM** (upon disarming).
   - **BY MEMORY** (activated upon registration of an alarm in the memory, turned off upon memory clearing).
   - **BY DELAY** (during exit / entry delays).
   - **BY KEYFOB** (upon AUX button pressing in the keyfob transmitter / MCM-140+, if "**PGM/X-10**" is selected in "Define Panel" menu, location 17).
   - **BY ZONES** (by disturbance in each of 3 selected zones, irrespective of arming / disarming). If you select **toggle**, the PGM output will be turned on upon event occurrence in these zones and will be turned off upon next event occurrence, alternately.

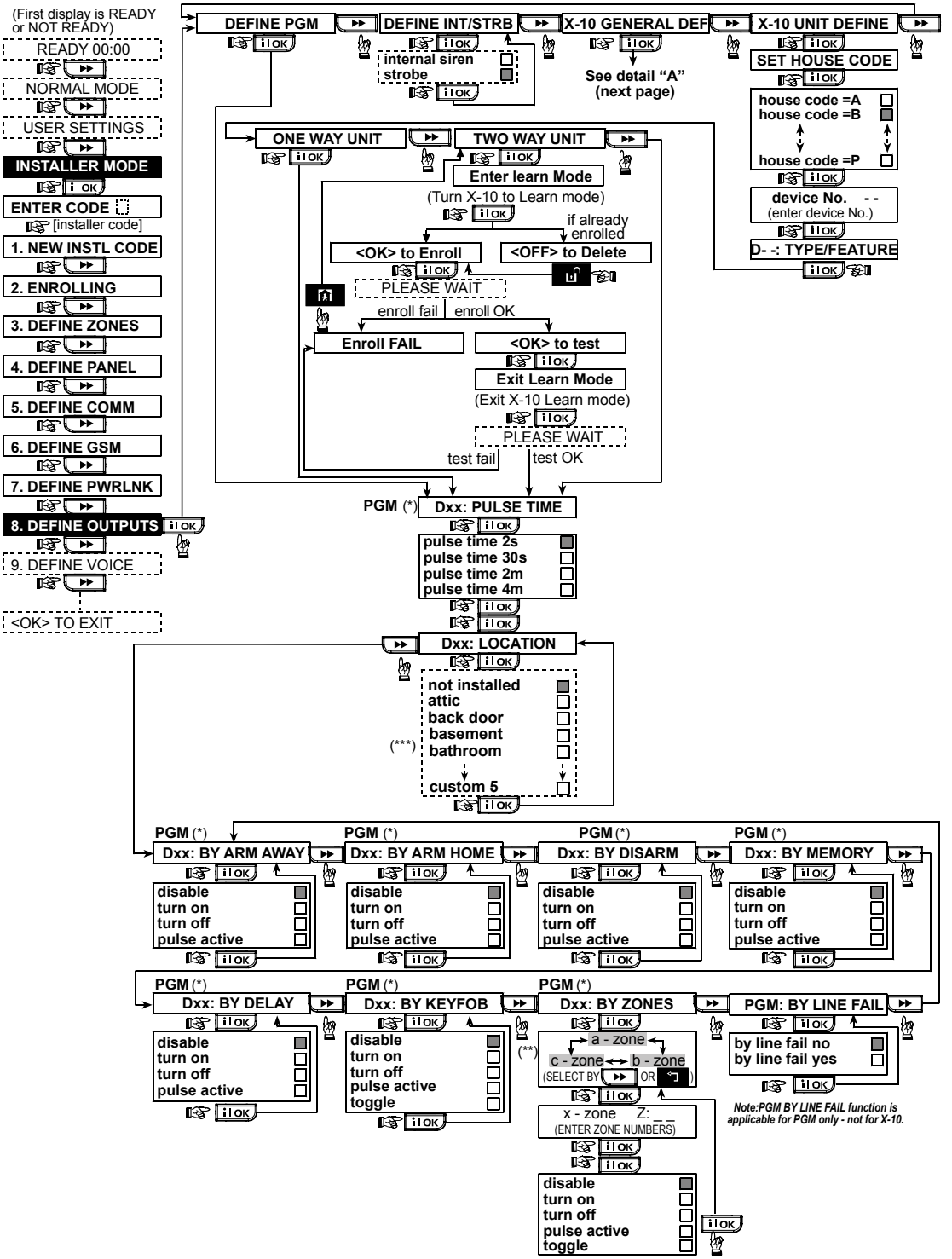


Figure 4.8 - Define Outputs Flow Chart

* If PGM is selected, the letters "PGM" will be displayed instead of "Dxx".

** Upon selecting any one of the 3 options (zone a, b and c) you may enter a zone number and then select "disable", "turn on", "turn off", "pulse active" or "toggle".

*** The currently saved option is displayed with a dark box at the right side. To review the options, repeatedly click ▸▸ button until the desired option is displayed, then click OK (a dark box will be displayed at the right side). For zone name list, refer to paragraph 4.3 (DEFINE ZONE TYPES).
Each X-10 unit has default zone name (01- front door, 02 - garage, 03 - garage door, 04 - back door, 05 – child room, 06 – office, 07 – dining room, 08- dining room, 09 – kitchen, 10 – living room, 11 – living room, 12 – bedroom, 13 – bedroom, 14 – guest room, 15 – master bedr).

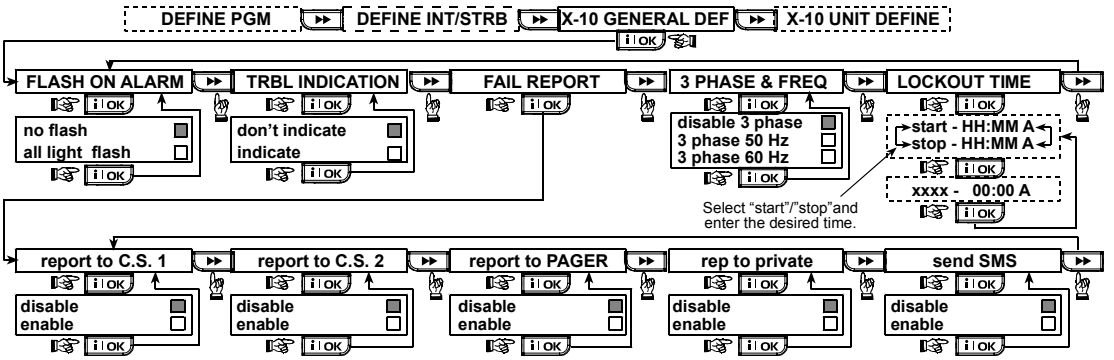


Figure 4.8 - Detail A

4.9 DEFINE VOICE

4.9.1 Record Speech

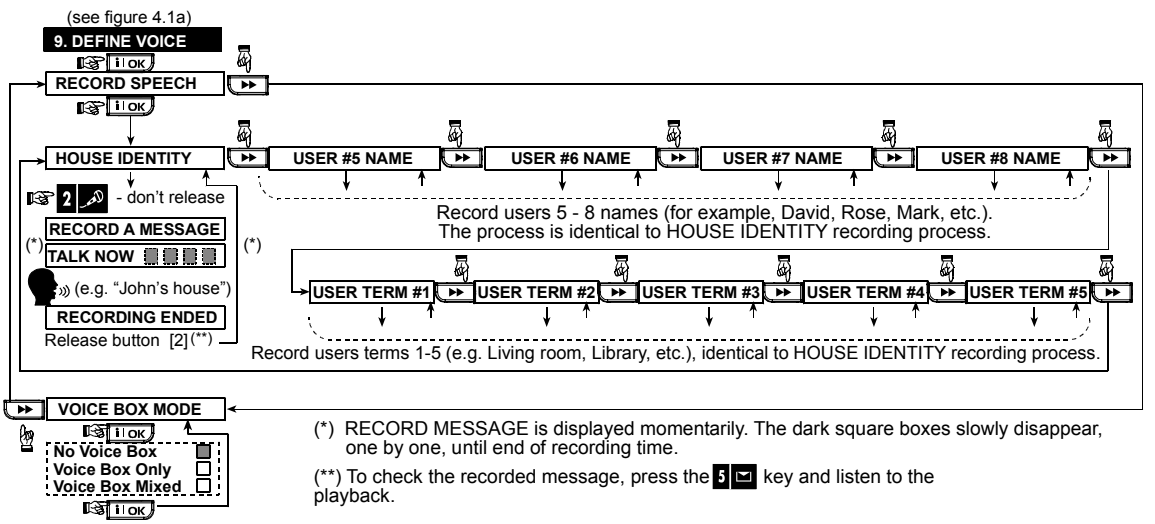
This mode allows you to record short-duration speech messages for the following purposes:

- **House identity** is a message announced automatically when events are reported to private telephones.
- **4 User Names** can be recorded and assigned to users numbered 5-8. In case of event, the relevant user name will be added to the message that will be reported via the telephone.
- **5 custom zone names** can be recorded and assigned to specific zones. These names are useful if none of the 26 fixed zone names are found suitable for a certain zone (see fig. 4.3).

The recording process is shown below.

4.9.2 Voice Box Mode

This mode allows you to determine whether two-way voice communication is to be sounded either via an external speakerphone, via the PowerMax Pro, or via both.



(*) RECORD MESSAGE is displayed momentarily. The dark square boxes slowly disappear, one by one, until end of recording time.

(**) To check the recorded message, press the 5 key and listen to the playback.

Figure 4.9 - Speech Recording Flow Chart

4.10 DIAGNOSTIC TEST

This mode allows you to test the function of all protected area wireless sensors / wireless sirens / wireless keypads and to receive / review information regarding the received signal strength. Three reception levels are sensed and reported:

Received Signal Strength Indication:

Reception	Buzzer Response
Strong	Happy Tune twice (- - - ———) (- - - ———)
Good	Happy Tune (- - - ———)
Poor	Sad tune (———————)

The diagnostic test process is shown in figure 4.10.

When you are instructed to perform "walk test", walk throughout the site to check the detectors / sensors. When a detector/sensor is triggered into alarm, its name, number and the alarm reception level should be indicated (for example, "Bathroom", "Z19 strong") and the buzzer should sound according to the alarm reception level (1 of 3).

***IMPORTANT!** Reliable reception must be assured. Therefore, **a "poor" signal strength is not acceptable**. If you get a "poor" signal from a certain detector, re-locate it and re-test until a "good" or "strong" signal strength is received. This principle should be followed during the initial testing and also throughout subsequent system maintenance.*

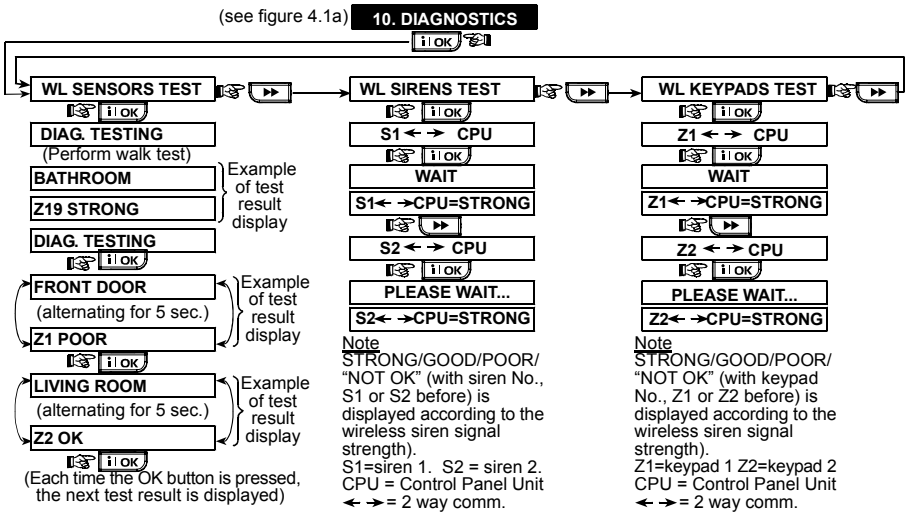


Figure 4.10 - Diagnostic Test Flow Chart

4.11 USER FUNCTIONS

This mode provides you with a gateway to the user functions through the regular user programming menu. You may:

- Program the 4 (private) telephone numbers
- Program user codes
- Enroll keyfobs
- Enroll proximity tags
- Select the voice option
- Set the auto arm option
- Set arming time
- Set the squawk option
- Set the system time and time format
- Set the date and date format
- Define PowerLink
- Set the time scheduler

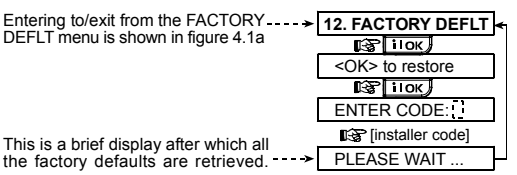
Refer to the User Guide for detailed procedures.

Caution! If after having programmed the user codes the system does not recognize your installer code, this indicates you must have programmed a user code that is identical with your installer code. If so, access the user menu and change the code that is identical with your installer code. This will re-validate your installer code.

4.12 RETRIEVING FACTORY DEFAULTS

If you want to reset the PowerMax Pro parameters to the factory default parameters, you should enter the installer menu and perform the "FACTORY DEFLT" function, as described in the right side illustration. To get the relevant parameters defaults, contact the PowerMax Pro dealer.

***Note:** For PowerMax Pro with 2 installer codes, INSTALLER code and MASTER INSTALLER code, only the master installer code enables to perform factory default function.*



4.13 SERIAL NUMBER

The menu "13. SERIAL NUMBER" enables reading the system serial number for support purposes only.

4.14 CALLING UPLOAD/DOWNLOAD SERVER

Note

This option is only used during the installation of panels monitored by compatible central stations.

This option allows the installer to initate a call to the upload/download server. The server uploads the PowerMax Pro configuration to its data base and can unload predefined parameters to the PowerMax Pro.

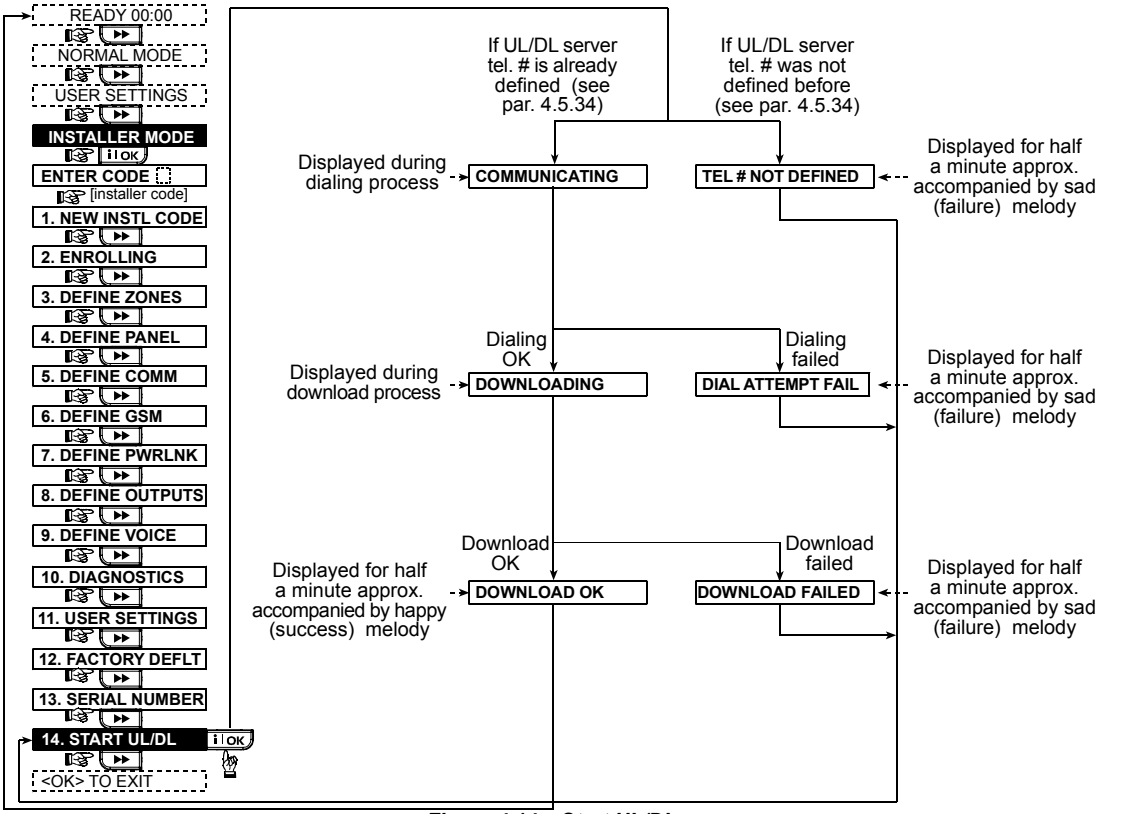


Figure 4.14 – Start UL/DL

5. TESTING PROCEDURES

5.1 Preparations

Make sure all windows and doors are closed. If all zones are secured (undisturbed), the display should read:

```
READY          HH:MM
```

If the display is "NOT READY", query the control panel by pressing the OK button repeatedly. The source(s) of the problem(s) will be displayed and read aloud. Take the necessary measures to eliminate the problem(s) before testing the system (see next paragraph).

5.2 Diagnostic Test

To verify proper function of all detectors in the system, a comprehensive diagnostic test is required. To perform this test, refer to figure 4.10.

5.3 Keyfob Transmitter Test

Initiate transmission from each transmitter enrolled as a keyfob unit (according to the list in Table A2, Appendix A). Use each transmitter to arm the control panel AWAY and immediately disarm it. Upon pressing the keyfob unit's AWAY key, the ARM indicator should light.
The display should respond as follows:

```
ARMING AWAY
        ↓
PLEASE EXIT NOW
```

The exit delay beeps will begin.
Press the keyfob unit's DISARM (🔓) key. The ARM indicator should extinguish, the announcement "Disarm, ready to arm" should be heard and the display should revert to:

```
READY          HH:MM
```

Test the **AUX** button in each keyfob in accordance with the information noted in Table A.2, Appendix A. Verify that the **AUX** button performs its duty as programmed.

- If the AUX (✻) button is defined as "STATUS", system status should be displayed and announced upon pressing the button.
- If the AUX (✻) button is defined as "INSTANT", press the AWAY button and then the AUX button. The response should be:

```
ARMING INSTANT
  (alternating)
PLEASE EXIT NOW
```

and the exit delay beeps will start. Press the DISARM (🔓) key immediately to disarm.

- If the AUX (✻) button is programmed as "PGM / X-10" and permitted to activate one or several X-10 units, pressing (✻) should activate the appliance controlled by the chosen X-10 unit(s).
- If the AUX (✻) button is programmed as "PGM / X-10" and permitted to activate the PGM output, pressing (✻) should activate the device wired to the PGM output.

5.4 Appliance ON/OFF Test

The "**X-10 unit assignment**" information that you noted in Appendix B of this manual is very useful for this test.

Go over the table in **Appendix B** column by column. If, for instance, the "**BY ARM AWAY**" column has "X"s marked in the rows pertaining to units 1, 5 and 15 - then arm AWAY the system and verify that the appliances controlled by these units are actually activated upon arming.

Continue in the same manner in the following columns, always creating the state or event that will activate the relevant units. Verify that all appliances are activated as programmed.

IMPORTANT! *Before testing "BY TIMER" and "BY ZONE", make sure that these forms of control are permitted - click* 9 *repeatedly and verify that the display shows:*

BY TIMER ON ■

and:

BY SENSOR ON ■

A dark box at the extreme right means that these functions are enabled.

The easiest way for test timed activation is to select the ninth item in the installer's menu ("**10. USER SETTINGS**") and set the system clock a few minutes before the relevant "start time". Do not forget to return the clock to the correct time after completion of this test.

5.5 Emergency Transmitter Test

Initiate transmission from each transmitter enrolled to an emergency zone (according to the list in Table A3, Appendix A). For example, upon pressing the transmit button of an emergency transmitter enrolled to zone 22, the display should read:

Z22 EMERGENCY
(alternating)
VIOLATED

It is advisable to let the central station know that you are conducting this test, or just disconnect the telephone line from the PowerMax Pro during the test, to prevent false alarms.

6. MAINTENANCE

6.1 Dismounting the Control Panel

A. Remove the screw that fastens the front unit to the back unit (see figure 3.1H).

B. Remove the 3 screws that fasten the back unit to the mounting surface (see figure 3.1A) and remove the control panel.

6.2 Replacing the Backup Battery

Replacement and first-time insertion of battery pack is similar (see figure 3.1C).

With fresh battery pack, correct insertion and tightened battery compartment lid, the TROUBLE indicator should extinguish. However, the "MEMORY" message will now blink in the display (caused by the "tamper" alarm you triggered when opening the battery compartment lid). Clear it by arming the system and immediately disarming.

6.3 Fuse Replacement

The PowerMax Pro has two internal fuses that have automatic reset. Therefore, there is no need to replace fuses.

When over current condition occurs, the fuse cuts off the circuit current. Upon fault current being removed for several seconds

, the fuse is automatically reset and allows current flow through the circuit again.

6.4 Replacing/Relocating Detectors

Whenever maintenance work involves replacement or re-location of detectors, always perform **a full diagnostic test according to par. 4.10.**

Remember! *A "poor" signal is not acceptable, as stated at the end of the test procedure.*

7. READING THE EVENT LOG

Up to 100 events can be stored the event log. You can access this log and review the events, one by one. If the event log fills up completely (100 events), the oldest event is deleted upon registration of each new event.

The date and time of occurrence are memorized for each event.

When reading the event log, events are shown in chronological order - from the newest to the oldest. Access to the event log is provided by clicking the * key and not through the installer's menu. Reading and erasing process of the event log is shown in the next drawing.

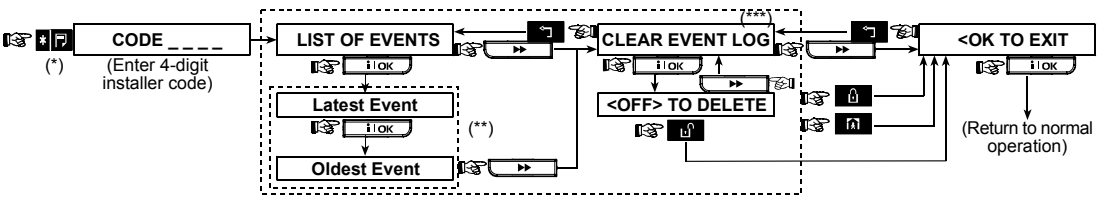


Figure 7 - Reading / Erasing the Event Log

* While the system is in normal operation mode, click * to review the event log.

** Event is displayed in 2 parts, for example, "Z13 alarm" then "09/02/00 3:37 P". The two displays will be shown alternately until clicking OK again to move to the next event or until the end of the event log (4 minutes).

*** Applicable only if installer code is entered.

APPENDIX A. Detector Deployment & Transmitter Assignments

A1. Detector Deployment Plan

Zone No.	Zone Type	Sensor Location or Transmitter Assignment (in non-alarm or emergency zones)	Chime (Yes / No)	Controls PGM (X = YES)	Controls X-10 Unit No.
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29 (*)					
30 (*)					

Zone Types: *1 = Interior follower ✹ 2 = Perimeter ✹ 3 = Perimeter follower ✹ 4 = Delay 1 ✹ 5 = Delay 2 ✹ 6 = 24 h silent ✹ 7 = 24 h audible ✹ 8 = Fire ✹ 9 = Non-alarm ✹ 10 = Emergency ✹ 11 = Gas ✹ 12 = Flood ✹ 13 = Interior.*

Zone Locations: *Note down the intended location for each detector. When programming, you may select one of 26 available zone names (plus 5 custom zone names that you can add - see Figure 4.3 - Define Zones).*

** Zones 29 & 30 only are hardwired zones.*

A2. Keyfob Transmitter List

Transmitter Data			AUX button Assignments		
No.	**Type**	**Holder**	**Status or Arming "instant"**	**PGM Control**	**X-10 Unit Control**
1			Indicate the desired function (if any) – see par. 4.4.17 (Aux button).	Indicate whether this output will be activated or not – see par. 4.7.	Mark the boxes of the X-10 units to be activated - see par. 4.7.
2					
3					
4					
5					**1**☐ **2** ☐ **3** ☐ **4** ☐ **5** ☐
6			**System status** ☐	**Yes** ☐ **No** ☐	**6**☐ **7** ☐ **8** ☐ **9** ☐ **10** ☐
7			**Arming "instant"** ☐		**11** ☐ **12** ☐ **13** ☐ **14** ☐ **15** ☐
8					

A3. Emergency Transmitter List

Tx #	Transmitter Type	Enrolled to Zone	Name of holder
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

A4. Non-Alarm Transmitter List

Tx #	Transmitter Type	Enrolled to Zone	Name of holder	Assignment
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

APPENDIX B. X-10 Unit and PGM Output Assignments

Unit No.	Controlled Appliance	ON by arm HOME	ON by arm AWAY	ON by disarm	ON by Memory	ON by Delay	ON by Keyfob	ON by Timer		ON by Zone No.			ON by line fail
								ON Time	OFF Time	a	b	c	
1													-
2													-
3													-
4													-
5													-
6													-
7													-
8													-
9													-
10													-
11													-
12													-
13													-
14													-
15													-
PGM													

APPENDIX C. Event Codes

Contact ID Event Codes

Code	Definition
101	Emergency
110	Fire
113	Flood alarm
120	Panic
121	Duress
122	Silent
123	Audible
131	Perimeter
132	Interior
134	Entry/Exit
137	Tamper/CP
139	Burglary verified
151	Gas alarm
180	Gas trouble
301	AC loss
302	Low system battery
311	Battery disconnect
313	Engineer reset
321	Bell
344	RF receiver jam detect
350	Communication trouble

Code	Definition
351	Telco fault
373	Fire detector trouble
381	Loss of supervision RF
383	Sensor tamper
384	RF low battery
393	Fire detector clean me
401	O/C by user
403	Auto arm
406	Cancel
408	Quick arm
426	Door open event
441	Armed home
454	Fail to close
455	Fail to arm
456	Partial arm
459	Recent close event
570	Bypass
602	Periodic test report
607	Walk test mode
641	Senior watch trouble

SIA Event Codes

Code	Definition
AR	AC Restore
AT	AC Trouble
BA	Burglary Alarm
BB	Burglary Bypass
BC	Burglary Cancel
BR	Burglary Restore
BT	Burglary Trouble / Jamming
BV	Burglary Verified
BZ	Missing Supervision
CF	Forced Closing
CI	Fail to Close
CL	Closing Report
CP	Auto Arm
CR	Recent Close
EA	Door Open
FA	Fire Alarm
FT	Fire Detector Clean
FJ	Fire detector trouble
FR	Fire Restore
GA	Gas alarm
GR	Gas alarm restore
GT	Gas trouble

Code	Definition
GJ	Gas trouble restore
HA	Holdup Alarm (duress)
LR	Phone Line Restore
LT	Phone Line Trouble
OP	Opening Report
OT	Fail to Arm
PA	Panic Alarm
QA	Emergency Alarm
RN	Engineer Reset
RP	Automatic Test
RX	Manual Test
RY	Exit from Manual Test
TA	Tamper Alarm
TR	Tamper Restore
WA	Flood alarm
WR	Flood alarm restore
XR	Sensor Battery Restore
XT	Sensor Battery Trouble
YR	System Battery Restore
YT	System Battery Trouble / Disconnection
YX	Service Required

4/2 Event Codes

Note: *The report to central station is on the following zones: First wireless siren - zone 31, second wireless siren - zone 32, GSM - zone 33, first 2-way keypad (MKP-150) - zone 35, second 2-way keypad (MKP-150) - zone 36.*

Alarms

Zone #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1st digit	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2nd digit	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F

Restorals

Zone #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1st digit	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
2nd digit	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F

Supervisory trouble

Zone #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1st digit	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
2nd digit	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1	2	3	4	5	6	7	8	9	A	B	C	D

Low Battery

Zone #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1st digit	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9
2nd digit	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1	2	3	4	5	6	7	8	9	A	B	C	D

Forced Arming – 8 users

User No.	1	2	3	4	5	6	7	8
1st digit	A	A	A	A	A	A	A	A
2nd digit	1	2	3	4	5	6	7	8

Zone Bypass

Zone #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1st digit	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
2nd digit	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F

Panic / 24 Hours - 8 users

User No.	1	2	3	4	5	6	7	8	Panic CP	*Duress*
1st digit	2	2	2	2	2	2	2	2	2	*2*
2nd digit	1	2	3	4	5	6	7	8	9	A

Arm HOME and AWAY (Closing)

User No.	1	2	3	4	5	6	7	8	Cancel alarm	Recent Close
1st digit	E	E	E	E	E	E	E	E	E	E
2nd digit	1	2	3	4	5	6	7	8	9	C

Disarm (Opening)

User No.	1	2	3	4	5	6	7	8
1st digit	F	F	F	F	F	F	F	F
2nd digit	1	2	3	4	5	6	7	8

Trouble

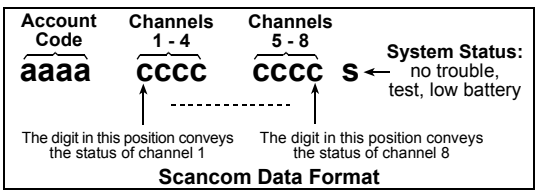
Event	Fuse Fail	Fuse Restore	Jamming	Jamming Restore	AC Failure	AC Restore	CPU Low Battery	CPU Low Battery Restore	CP Tamper
1st digit	2	2	2	2	1	1	1	1	1
2nd digit	C	D	E	F	1	2	3	4	6

Event	CP Tamper Restore	No Active	COMM. & LINE Restore	Enter Test	Exit Test	Auto Test
1st digit	1	1	1	1	1	1
2nd digit	7	8	A	D	E	F

Understanding the Scancom Reporting Protocol Data Format

The SCANCOM data format consists of 13 decimal digits divided into 4 groups, from left to right, as shown at the right side.
Each channel is associated with a specific event as follows:

1st "C": Fire
2nd "C": Personal attack
3rd "C": Intruder
4th "C": Open/close
5th "C": Alarm cancel
6th "C": Emergency
7th "C": Second alarm
8th "C": Trouble messages



Scancom Data Format

APPENDIX D. Programmable Zone Types

D1. Delay Zones

A delay zone has exit and entry delays set by you in the course of programming the system. Warning beeps will sound throughout these delays, unless you choose to mute them.

- **Exit Delay** - The exit delay begins once the user arms the system. It allows him to leave via interior zones and a doorway before arming actually takes effect. When the exit delay starts, the buzzer beeps slowly and maintains a slow beeping rate until the last 10 seconds, during which it beeps rapidly. The PowerMax Pro has two types of delay zones, for which different delay times may be set.
- **Entry Delay** - The entry delay begins once the user enters the protected area via a specific doorway (his entry is sensed by a delay zone detector). To avoid an alarm, he must reach the keypad via interior zones (which become "follower zones" during the entry delay) and disarm the system before the delay expires. When the entry delay starts, the buzzer beeps slowly until the last 10 seconds, during which it beeps rapidly.

D2. Emergency Zones

You can provide incapacitated, sick or elderly people with a miniature single-button transmitter to be carried on the neck like a pendant or to be worn on the wrist like a watch. In distress situations, they can press the button on their transmitter, causing the PowerMax Pro to send an **emergency call** to the central monitoring station or to private telephones designated by the installer.

To make this possible, define the required number of zones as emergency zones and enroll a portable transmitter to each one of these zones. When completed, ask the master user to distribute these transmitters to their potential users.

D3. Fire Zones

A fire zone uses smoke detectors and is permanently active (a fire alarm is triggered regardless of whether the system is armed or disarmed). Upon detection of smoke, a **pulsating siren** sounds immediately and the event is reported via the telephone line.

D4. Flood Zone

A flood zone is permanently active (a flood alarm is triggered regardless of whether the system is armed or disarmed). Upon detection of flood leak, the event is reported via the telephone line.

D5. Gas Zone

A gas zone is permanently active (a gas alarm is triggered regardless of whether the system is armed or disarmed). Upon detection of gas leak, the event is reported via the telephone line.

D6. Interior Zone

Interior zones are zones within the protected premises that have nothing to do with perimeter protection. Their most important feature is that they allow free movement within the protected area without initiating an alarm, provided that the system is armed in the "HOME" mode. People can therefore stay at home and move about freely, as long as they do not disturb a PERIMETER zone.

Once the system is armed in the AWAY mode (all zones are protected), interior zones will initiate an alarm if violated.

D7. Interior Follower Zones

"Interior Follower" zone is a zone that is located between entry/exit zone and the alarm system control panel. This zone is temporarily ignored by the alarm system during entry/exit delay periods, to enable you to walk (without causing an alarm) in front of a motion detector that is associated with the Interior Follower zone, after you enter through an entry zone on the way to the control panel, or when leaving the protected premises after system arming.

D8. Non-Alarm Zones

A non-alarm zone does not directly participate in the alarm system. Its main use is to perform auxiliary remote control tasks such as opening/closing a gate, activating/deactivating courtesy light and similar applications. No alarm, silent or otherwise, is associated with a non-alarm zone.

For remote control of electrical devices, you can define the desired number of non-alarm zones and enroll a portable transmitter or a wireless device (detector) to this type of zone. Then, you must ensure that these zones are permitted to control the PGM output, or the X-10 units or both (see par. 4.8). Next, you can select the zones (3 at most) that will control each output. The outputs, in turn, will control the external electrical devices.

Note: *A device control can also be carried out by holders of all keyfob transmitters, by pressing the AUX [✳] button. This method will work provided that you programmed the [✳] button for PGM/X-10 control (see Par. 4.4.17 and 4.4.18), and that you programmed the PGM output and the X-10 units to be controlled by keyfob transmitters (see par. 4.8).*

D9. Perimeter Zones

Perimeter zones rely on detectors designed to protect doors, windows and walls. An immediate alarm is initiated when such a zone is violated by opening the door/window or by trying to break the wall.

D10. Perimeter Follower Zones

A non-entry/exit zone, typically a perimeter zone located on an entry/exit path, that is treated as an entry/exit zone during an entry/exit time.

D11. 24-Hour Zones

24 hour zones are mainly used for PANIC buttons, perimeter detectors and anti-tamper protection. They therefore trigger an alarm in both armed and disarmed states.

- **24 Hour Zone - Silent.** - Upon detection, this zone initiates a silent alarm, meaning that the sirens do not function. Instead the PowerMax Pro dials telephone numbers and reports the event to central stations and/or to private telephones, as programmed.
- **24 Hour Zone - Audible.** - Upon detection, this zone initiates a siren alarm. The PowerMax Pro also dials telephone numbers and reports the event to central stations and/or to private telephones, as programmed.

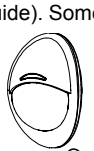
APPENDIX E. PowerMax Pro Compatible Devices

E1. PowerMax Pro Compatible Detectors

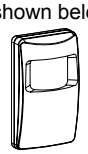
Each detector compatible with the PowerMax Pro system is packed with its own installation instructions. Read them carefully and install as indicated.

A. PIR Motion Detectors

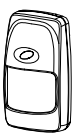
The wireless passive infrared (PIR) motion detectors used in the system are of the PowerCode type. The PowerMax Pro is capable of "learning" each detector's identification code and linking it to a specific zone (see par. 4.3 in this Guide). Some units are shown below:



NEXT®
K9-85 MCW



MCPIR-3000
or K-940 MCW



DISCOVERY
K9-80/MCW

Note: *K-940 MCW, Discovery K9-80/MCW and NEXT® K9-85 MCW are pet immune units.*

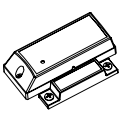
In addition to its unique 24-bit identification code, each detector transmits a message, containing status information:

- The detector is in alarm (or not).
- The detector is being tampered with (or not).
- The battery voltage is low (or normal).
- "This is a supervisory message".

If any of these detectors detects motion, it sends out a message to the alarm control panel. If the system is in the armed state, an alarm will be triggered.

B. Magnetic Contact Transmitter

MCT-302 is a PowerCode magnetic-contact transmitter used to detect the opening of a door or a window. The alarm contacts are closed as long as the door or window remains closed.

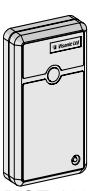


MCT-302

The unit has an extra alarm input that acts as if it were a separate wireless transmitter. It sends (or does not send) a "restored to normal" message to the alarm system, depending on the setting of an on-board "DIP" switch. The "restore" message informs you, through the control panel's display, whether the door or window is open or closed.

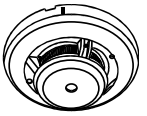
C. MCT-100 Wireless Adapter for Wired Detectors

MCT-100 is a PowerCode device used mainly as a wireless adapter for 2 regular magnetic switches installed on 2 windows in the same room. It has two inputs, behaving as separate wireless transmitters with different PowerCode IDs. Each input sends (or does not send) a "restored" message to the alarm system, depending on the setting of an on-board "DIP" switch.



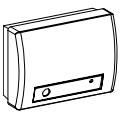
MCT-100

D. Wireless Smoke Detector MCT-430. A photoelectric smoke detector equipped with a PowerCode-type transmitter. If enrolled to a fire zone, it initiates a fire alarm upon detection of smoke.



MCT-430

E. Glass Break Detector MCT-501
An acoustic detector equipped with a PowerCode-type transmitter. Since it restores automatically after detection, this unit does not send a restoral message to the control panel.



MCT-501

E2 PowerMax Pro Compatible Transmitters

***Note:** Each transmitter is packed with its own instructions for battery installation and use. Be sure to pass these documents on to the "Master User" of the alarm system.*

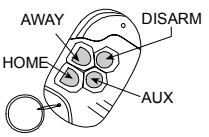
The PowerMax Pro system is compatible with multi-button and single button key-ring and hand-held transmitters that use PowerCode and CodeSecure coding methods.

Multi-button PowerCode transmitters transmit the same code each time the same button is pressed. They can be used for emergency signaling, for activating the PGM output or for controlling appliances via X-10 units. **They can not be used for arming / disarming.**

CodeSecure transmitters are of the rolling code type - they transmit a new code each time the same button is pressed. This provides a higher security level, especially in arming / disarming applications, because the code can not be copied ("grabbed") by unauthorized people.

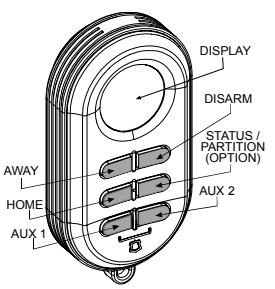
Following are the basic details of several compatible transmitters. The possible applications for each push-button are indicated in each drawing.

A. MCT-234
'Keyfob' transmitter - one unit is supplied with PowerMax Pro. You can program the AUX (auxiliary) button to perform various tasks, in accordance with the user's needs.
Pressing AWAY and HOME together for 2 sec. initiates PANIC alarm. Pressing AWAY for 2 sec. initiates Latchkey arming.



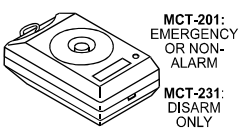
MCT-234

B. MCT-237
Two-way 'Keyfob' transmitter - one unit is supplied with PowerMax Pro. You can program the AUX (auxiliary) buttons to perform various tasks, in accordance with the user's needs.
Pressing A and B together for 2 sec. initiates PANIC alarm. Pressing AWAY twice within 2 sec. initiates Latchkey arming.



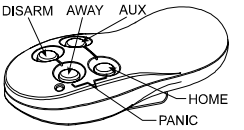
MCT-237

C. MCT-231 / 201*
(N.A. in North America) Single-button pendant units. The MCT-231 (Code- Secure) and the MCT-201 (PowerCode) can be enrolled to perform functions as shown. Both units look alike.



MCT-231 / 201

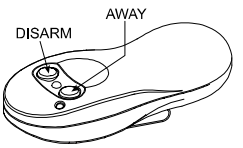
D. MCT-134 / 104*
(N.A. in North America)
4-button hand-held units. MCT-134 (CodeSecure) can replace the MCT-234 keyfob. MCT-104 (PowerCode) can perform emergency and non- alarm functions. Both units look alike.



***NOTE:** BUTTON FUNCTIONS SHOWN ARE TRUE FOR MCT-134 ONLY*

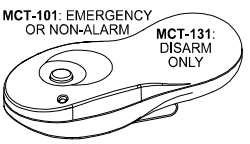
MCT-134 / 104

E. MCT-132 / 102*
(N.A. in North America) 2-button units. MCT-132 (CodeSecure) can perform functions as shown. MCT-102 (PowerCode) can perform emergency and non-alarm tasks. Both units look alike.



MCT-132 / 102

F. MCT-131 / 101*
(N.A. in North America) Single-button units. The MCT-131 (CodeSecure) and the MCT-101 (PowerCode) can be enrolled to perform functions as shown. Both units look alike.



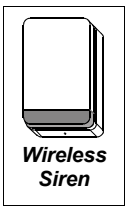
MCT-131 / 101

G. MCT-211*
Water-proof, wrist-worn Power-Code transmitter. Can be enrolled to perform emergency or non-alarm functions.

MCT-211

E3 PowerMax Pro Compatible WL Siren

The MCS-700/710 (*) wireless siren can be integrated with the PowerMax Pro in areas in which wiring action is difficult or impossible. The MCS-700/710 is a fully supervised, 2-way communication device (it includes a receiver, to receive activation commands from the alarm system, and a transmitter to periodically transmit its status signal to the alarm system).

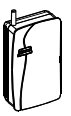


Wireless Siren

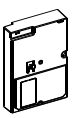
When an identifiable activation command is received from the PowerMax Pro, the siren activates its sounder and the flash light (strobe light every 1.5 seconds).

E4. PowerMax Pro Compatible GSM Modem

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



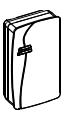
External GSM



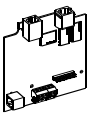
Internal GSM

E5. PowerLink

The internal / external PowerLink enables you to view and control the PowerMax Pro system over the Internet. For details regarding the external PowerLink features and connections, refer to the PowerLink user guide.



External PowerLink



Internal PowerLink

Federal Communications Commission (FCC) Statements

FCC PART 15 STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

WARNING! Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The digital circuits of this device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

– Re-orient or re-locate the receiving antenna.
– Increase the distance between the device and the receiver.
– Connect the device to an outlet on a circuit different from the one which supplies power to the receiver.
– Consult the dealer or an experienced radio/TV technician.

FCC PART 68 STATEMENT

This equipment complies with Part 68 of the FCC rules. On the front cover of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment uses the following jacks: An RJ31X is used to connect this equipment to the telephone network. The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area. If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe necessary. The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice that will enable you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact the manufacturer for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request that you remove the equipment from the network until the problem is resolved.

There are no user serviceable components in this product, and all necessary repairs must be made by the manufacturer. Other repair methods may invalidate the FCC registration on this product.

This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.

When programming or making test calls to an emergency number, briefly explain to the dispatcher the reason for the call. Perform such activities in the off-peak hours; such as early morning or late evening.

Alarm dialing equipment must be able to seize the telephone line and place a call in an emergency situation. It must be able to do this even if other equipment (telephone, answering system, computer modem, etc.) already has the telephone line in use. To do so, alarm dialing equipment must be connected to a properly installed RJ31X jack that is electrically in series with and ahead of all other equipment attached to the same telephone line. If you have any questions concerning these instructions, you should consult your telephone company or a qualified installer about installing the RJ31X jack and alarm dialing equipment for you.

Supplier Declaration of Conformity (SdoC)

Visonic, located at 30, 24 Habarzel street, Tel Aviv 69710, Israel, hereby certifies that the Wireless Alarm Control Panel model "PowerMax Pro", bearing the labeling identification number US:VSOAL03BPOWERMAX PRO complies with the Federal Communication Commission's ("FCC") Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments ("ACTA") adopted technical criteria: TIA/EIA/IS-968, Telecommunications - Telephone Terminal Equipment - Technical Requirements for Connection of Terminal Equipment to the Telephone Network, July 2001.

09/10/2002

Yaacov Kotlicki

Chairman

WARRANTY

Visonic Ltd. and/or its subsidiaries and its affiliates ("the Manufacturer") warrants its products hereinafter referred to as "the Product" or "Products" to be in conformance with its own plans and specifications and to be free of defects in materials and workmanship under normal use and service for a period of twelve months from the date of shipment by the Manufacturer. The Manufacturer's obligations shall be limited within the warranty period, at its option, to repair or replace the product or any part thereof. The Manufacturer shall not be responsible for dismantling and/or reinstallation charges. To exercise the warranty the product must be returned to the Manufacturer freight prepaid and insured.

This warranty does not apply in the following cases: *improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than the Manufacturer.*

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express or implied, including any warranty of merchantability or fitness for a particular purpose, or otherwise. In no case shall the Manufacturer be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties whatsoever, as aforesaid.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products.

The Manufacturer does not represent that its Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. User understands that a properly installed and maintained alarm may only reduce the risk of events such as burglary, robbery, and fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no death, personal damage and/or damage to property as a result.

The Manufacturer shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function. *However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, the Manufacturer's maximum liability shall not in any case exceed the purchase price of the Product, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.*

Warning: *The user should follow the installation and operation instructions and among other things test the Product and the whole system at least once a week. For various reasons, including, but not limited to, changes in environmental conditions, electric or electronic disruptions and tampering, the Product may not perform as expected. The user is advised to take all necessary precautions for his /her safety and the protection of his/her property.*

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VISONIC INC. (U.S.A.): 65 WEST DUDLEY TOWN ROAD, BLOOMFIELD CT. 06002-1376. PHONE: (860) 243-0833, (800) 223-0020. FAX: (860) 242-8094
VISONIC LTD. (UK): FRASER ROAD, PRIORY BUSINESS PARK, BEDFORD MK44 3WH. PHONE: (0870) 730-0800 FAX: (0870) 730-0801
INTERNET: www.visonic.com
 POWERMAX PRO Installer guide DE5468IP (REV. 2, 9/06)

MADE IN ISRAEL