Establishing Telephone Communication with Your PowerMax

To contact your PowerMax, dial the telephone number used by your system. Let it ring twice, then hang up. Wait at least 12 seconds but no more than 40 seconds, then call your PowerMax back. This time PowerMax will intercept your call. You will hear a click on the line, the ringing will stop a shrill signal will sound for 10 seconds. You may now issue any available command. If you wait longer than 45 seconds without keying in anything, the PowerMax will disconnect.

Two Way Voice Communications

Once you have established communications with PowerMax from a remote telephone, you may initiate a conversation with a person left within the premises by keying in:

**** + user code + 7 + 3***

The system starts to function in "LISTEN IN" mode. This mode allows you to listen to sounds within the premises. If you wish to initiate a two-way conversation you must switch from Listen-In to Speak Out manual. This means that only one party may talk at a time. It's recommended to finish sentences with "go ahead" or "over" to make the switch easier.

3 DEF	**Listen-In**
1	**Speak-out**
1 or 3 DEF	**Prolong the communication session by 50 seconds.**
*	**Quit two-way voice without severing the connection**
* 9 WXY 9 WXY	**Quit remote access**

Quick Reference Card

Arming AWAY	+ *(Code)**
Arming AWAY-INSTANT	+ *(Code)** +
Arming HOME	+ *(Code)**
Arming HOME-INSTANT	+ *(Code)** +
Arming AWAY-LATCHKEY	+ *(Code)** +
Force Arming AWAY (system not ready)	+ + *(Code)**
Force Arming HOME (system not ready)	+ + *(Code)**
Disarming and stopping alarms	+ *(Code)**

** The factory default master code is 1111. The code is not required if quick arming has been programming by the installer.*

Remote Access Commands

*You must press ***** on your phone followed by your user code prior to executing any of the available remote access commands.*

These are the commands available:

Disarming** ..... *** + user code + 1
Arming HOME** ..... *** + user code + 2
Arming HOME-INSTANT** ..... *** + user code + 21
Arming AWAY** ..... *** + user code + 3
Arming AWAY-INSTANT** ..... *** + user code + 31
Arming Latchkey** ..... *** + user code + 4
Arming AWAY-Instant Latchkey** ..... *** + user code + 41
Activating Electrical Devices (1 – 7)** ..... *** + user code + 5 + device # + 1
De-activating Electrical Devices (1 – 7)** ..... *** + user code + 5 + device # + 0
Activating the Auxiliary Output** ..... *** + user code + 5 + 8 + 1
De-Activating the Auxiliary Output** ..... *** + user code + 5 + 8 + 0
Recorded Message Playback** *** + user code + 8
Investigating System Status** ... *** + user code + 9
Quit (end communication)** ..... *** + 9 + 9

Statement of Liability – *Please Read This Section Carefully*

Note To Installers
This section contains important information. As the only individual in contact with the system users, it is your responsibility to bring each of these items to the attention of the users of this system.

System Failures
Although we have gone to great lengths to ensure this system has been designed to be as effective as possible, there are circumstances involving fire, burglary, or other types of emergencies where it may not provide protection. Any alarm system of any type may be compromised deliberately or may fail to operate as expected for a variety of reasons. Some but not all of these reasons are listed below.

Inadequate Installation
In order to provide adequate protection, the security system must be installed properly. A security professional should be used to ensure that all access points and areas are properly covered when installing any security system. Locks and latches on windows and doors must be secure and operate as intended. Windows, doors, walls, ceilings, and other building materials must be of sufficient strength and construction to provide the level of protection expected. A re-evaluation must be done during and after any construction activity. An evaluation by the fire and/or police department is highly recommended if this service is available.

Security System Effectiveness
The features in this system were known to be effective at the time of manufacture. Persons with criminal intent may possibly develop techniques that reduce the effectiveness of these features. Of extreme importance is that the security system be reviewed periodically to ensure the effectiveness of these features. If the system does not provide the protection expected, it should be updated or replaced.

Intruder Access
Intruders may attempt to enter the protected site through an unprotected access point. They may try to circumvent a sensing device, move through an area of insufficient coverage to elude a sensing device, disconnect, interfere with or prevent the proper operation of the system.

Power Failure
An adequate power supply is required to properly operate Control units, intrusion detectors, smoke detectors and many other security devices. If a device is battery operated, it is possible for the batteries to fail. Even if the batteries have not failed, they must be charged, in good condition and installed correctly. Typically, power interruptions of any length are accompanied by voltage fluctuations that may damage electronic equipment such as a security system. Immediately conduct a complete system test to ensure that the system operates as intended whenever a power failure has occurred.

Failure of Replaceable Batteries
This system's wireless transmitters have been designed to provide several years of battery life under normal conditions. The expected battery life is a function of the device environment, usage and type. Ambient conditions such as high humidity, high or low temperatures, or large temperature fluctuations may reduce the expected battery life. While each transmitting device has a low battery monitor which identifies when the batteries need to be replaced, this monitor may fail to operate as expected. Regular testing and maintenance will keep the system in good operating condition.

Compromise of Radio Frequency Devices
Signals may not reach the receiver under all circumstances that could include Metal objects placed on or near the radio path, deliberate jamming or other inadvertent radio signal interference may stop the communication signals from reaching the control panel.

Smoke Detectors
Smoke detectors that are a part of this system may not properly alert occupants of a fire for a number of reasons. Improper installation or positioning may render the smoke detectors ineffective. Fires in chimneys, walls, roofs, or on the other side of a closed door may produce smoke that cannot reach the smoke detectors. Smoke from fires on another level of the residence or building may not be detectable buy the smoke detectors. The amount of smoke produced and the rate at which a fire burns is different for every fire. Smoke detectors cannot sense all types of fires equally well. Smoke detectors may not provide timely warning of fires caused by carelessness or safety hazards such as smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloading electrical circuits, children playing with matches or arson. There may be circumstances when there is insufficient warning to allow all occupants to escape in time to avoid injury or death even when the smoke detector functions as intended.

Motion Detectors
Motion detectors will only detect motion within the designated areas as shown in their respective installation instructions. They cannot discriminate between intruders and intended occupants. Motion detectors do not provide volumetric area protection. They have multiple beams of detection and motion can only be detected in unobstructive areas covered by these beams. They cannot detect motion that occurs behind walls, ceilings, floor, closed doors, glass partitions, glass doors or windows. Any type of tampering whether intentional or unintentional such as masking, painting, or spraying of any material on the lens, mirrors, windows or any other parts of the detection system will impair its proper operation. Passive infrared motion detectors operate by sensing changes in temperature. However, their effectiveness can be reduced when the ambient temperature rises near or above body temperature or if there are intentional or unintentional sources or heat in or near the detection area. Some of these heat sources could be heaters, radiators, stoves, barbecues, fireplaces, sunlight, steam vents, lights, etc...

Warning Devices
Warning devices such as sirens, bells, horns, or strobes may not warn people or waken someone sleeping if there is an intervening wall or door. It is less likely that the occupants will be alerted or awakened when warning devices are located on a different level of the premises. Noise sources such as stereos, radios, televisions, air conditioners or other appliances, or passing traffic may interfere with audible warning devices. A hearing-impaired person may not be able to hear any audible warning device.

Telephone Lines
If telephone lines are used to transmit alarms, they may be out of service or busy for certain periods of time. Also an intruder may cut the telephone line or defeat its operation by more sophisticated means which may be difficult to detect.

Insufficient Time
There may be circumstances when the system will operate as intended, yet the occupants will not be protected from the emergency due to their inability to respond to the warnings in a timely manner. If the system is monitored, the response may not occur in time to protect the occupants or their belongings.

Component Failure
Although every effort has been made to make this system as reliable as possible, the system may fail to function as intended due to the failure of a component.

Inadequate Testing
Regular testing and maintenance can find most problems that would prevent an alarm system from operating as intended. The complete system should be tested weekly and immediately after a break-in, an attempted break-in, a fire, a storm, an earthquake, an accident, or any kind of construction activity inside or outside the premises.The testing should include all sensing devices, keypads, consoles, alarm-indicated devices and any other operational devices that are part of the system.

Security and Insurance
Regardless of its capabilities, an alarm system is not a substitute for property or life insurance. Any alarm system also is not a substitute for property owners, renters, or other occupants or act prudently to prevent or minimize the harmful effects of an emergency situation.

Table of Contents

Section 1 – Introduction

1.1 Overview

PowerMax is a wireless alarm control system that helps to provide protection against burglary, fire and tampering. In addition, it can be used to control lights and electrical appliances within the protected site and/or to monitor the activity of disabled or elderly people left at home. Status information is presented visually, audibly, and in most cases a recorded voice prompts you to take correct action.

PowerMax is governed by a control panel designed to collect data from various sensors that are strategically located within and along the perimeter of the protected site.

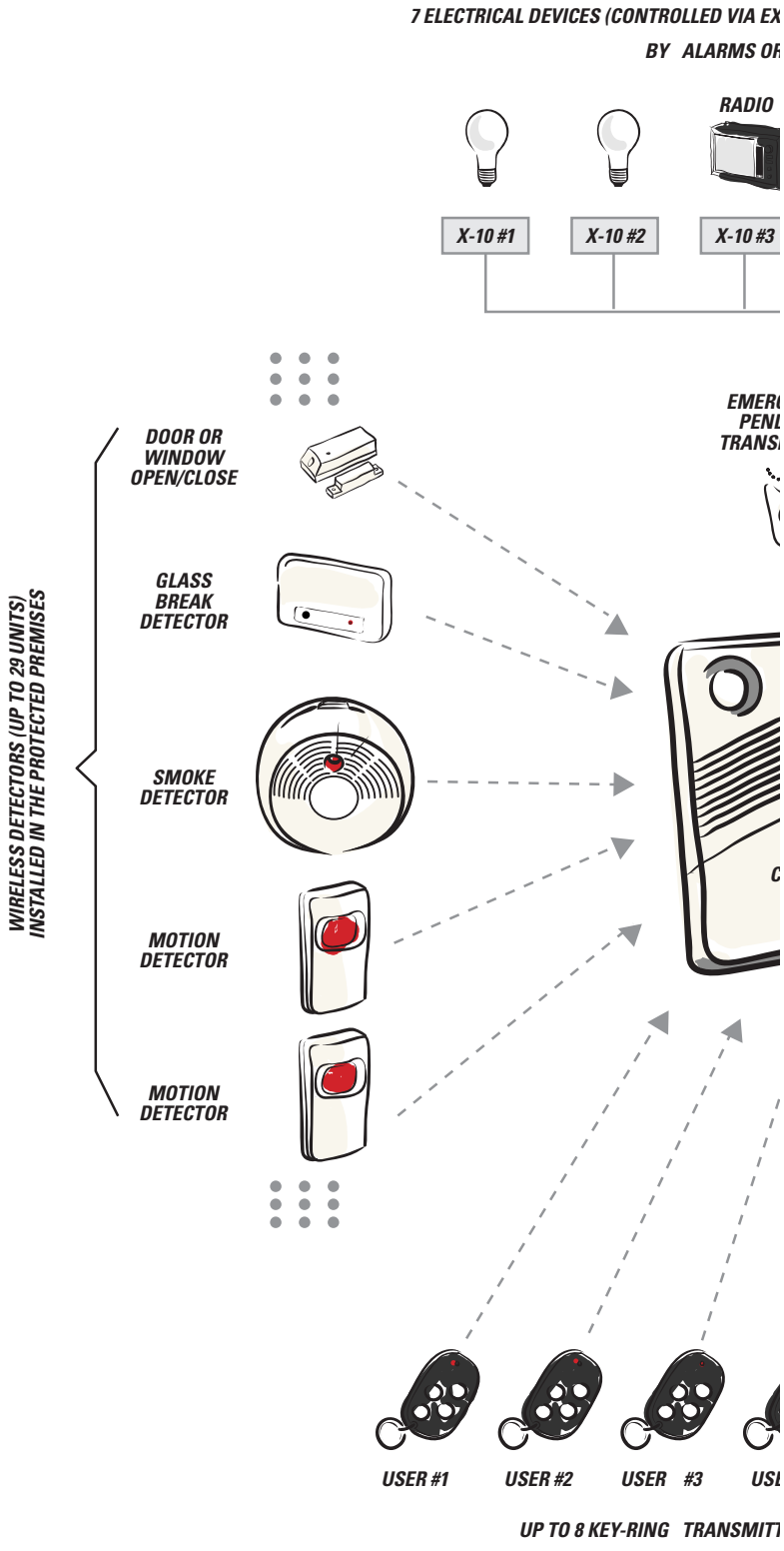
In the disarmed state, the system provides you with visual and verbal status information, and initiates an alarm if smoke is detected, upon disturbance in a 24-hour zone (a zone which is on active duty 24-hours a day), or when a panic alarm has been initiated.

In the armed state, the system will initiate an alarm upon detection of disturbance in any one of the armed zones or when a panic alarm has been initiated.

You will need a 4-digit security code to master the system, and you can authorize 7 other persons to use the system by providing them with their own security codes. Moreover, you can obtain up to 8 multi-function key-ring transmitters that will allow you and other users to control major functions without approaching the control panel.

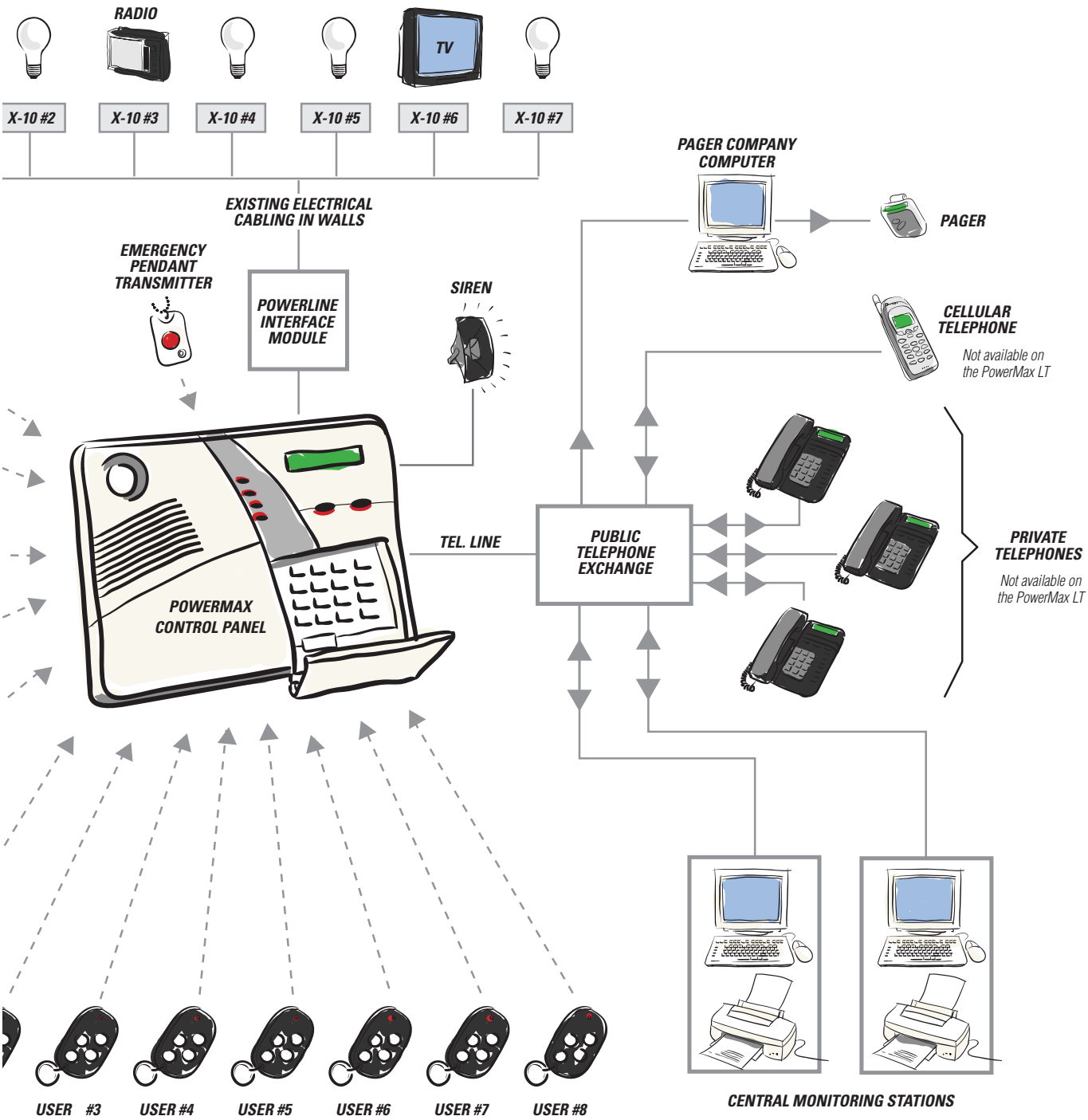
The system identifies a wide range of events – alarms, attempts to tamper with sensors and several types of trouble. Events are automatically reported via the public telephone network if such service is provided to central monitoring stations (in digital form) and to private telephones if programmed (as a plain language message). The person receiving such a message is expected to investigate the event and act accordingly.

NOTE: Not all features are available on the PowerMax LT version of this product



ES (CONTROLLED VIA EXISTING ELECTRICAL CABLING). ON/OFF BY TIMER – Manual on or off

BY ALARMS OR BY BUTTON ON KEY-RING TRANSMITTER



3 KEY-RING TRANSMITTERS DISTRIBUTED TO USERS OF THE SYSTEM

1.2 Additional Devices and Transmitters

Visonic Ltd. offers a complete line of wireless transmitters and detectors for PowerMax through their PowerCode product line. Some of these products are listed below.

K9480MCW

K-940MCW

K-940 MCW / K-980 MCW Pet Immune PIR Detector

These detectors are fully supervised wireless Passive Infrared motion sensors that ignore pets up to 40 lb (18 kg) (K-940 MCW) and 80 lb (36 kg) (K-980 MCW).

MCPIR-3000 PIR Detector

This fully supervised ultra-low current wireless PIR incorporates a PowerCode transmitter and is the most compact wireless PIR detector in the industry.

MCT-101/ MCT-102 / MCT-104 Hand held Transmitters

MCT-101, MCT-102 and MCT-104 are PowerCode 1, 2, or 4 button multipurpose, hand held transmitters for emergency signaling or activation of zones.

MCT101

MCT102

MCT104

MCT-134 Hand held Transmitter

MCT 134 is a four button, hand held transmitter for command / control of PowerMax. The buttons are configured as "Arming Away", "Off", "Arming home" and status, auxiliary or panic.

MCT-211 Waterproof Wristband Transmitter

MCT-211 is a miniature waterproof wrist-worn transmitter, for use with your PowerMax. When the push-button is pressed, this transmitter will send out a signal to your PowerMax, indicating an emergency. All MCT-211 units are supplied with a wristband. A 3-volt lithium battery supplies power to the MCT-211.

MCT-201 / MCT-201WP Pendant Transmitters

The MCT-201 and MCT-201WP (waterproof) are miniature pendant transmitters, designed to send emergency signals or activate zones. These devices are useful when you cannot reach PowerMax's control panel to initiate a panic alarm.

MCT201WP

MCT201

MCT-302 Magnetic Contacts

MCT-302 is a magnetic contact fitted with a fully supervised wireless transmitter. These contacts would be used on your windows and doors, eliminating the need for messy cabling.

MCT-423 Smoke Detectors

MCT-423 is a photoelectric smoke detector fitted with a PowerCode fully supervised UHF transmitter. It is designed to sense smoke, but not gas, heat or flame. The detector provides early warning of developing fires by sounding an alarm with its built-in alarm horn, and by transmitting a coded alarm signal to PowerMax. The fire alarm initiated by the MCT-423 allows people present within the protected area to escape before the fire spreads, or to put out the fire.

MCT-100 Universal Transmitter

The MCT-100 is a fully supervised PowerCode two-input wireless transmitter. Each input has its own individual 24-bit PowerCode ID which identifies it to PowerMax. Use this Universal Transmitter when you have hardwired zones that you want monitored by PowerMax.

MCT-124 4-Button, 3-Function Handheld Transmitters

MCT-124 is a four button, three function multi purpose hand held transmitter for emergency signaling or activation of zones. The three functions are activated by the two buttons on top and by simultaneously pressing the two buttons on the sides.

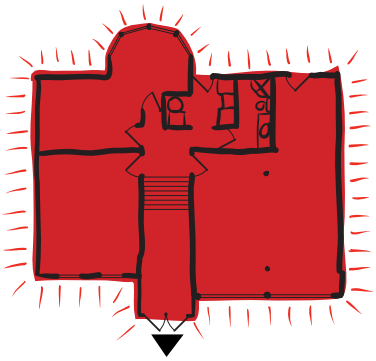
MCT-234 Keyfob

MCT-234 is a 4 button miniature "key-ring" transmitter. Specifically designed for PowerMax, it has "ARM AWAY", "ARM HOME", "OFF" and AUX buttons. The AUX button can report system status or can be programmed by your installer to perform various tasks such as opening or closing a gate, control of a garage door opener or light and appliance control.

MCT-501 Acoustic Sensor

The MCT501 is a fully supervised wireless glassbreak detector with a PowerCode transmitter. The acoustic sensor module is omni-directional, providing 360° coverage and is designed to detect breaking glass.

1.3 Security System Terms

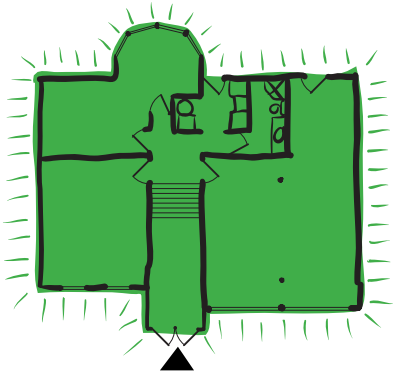


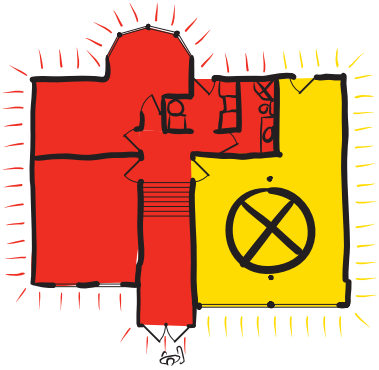
Arming

Arming the alarm system is an action that gets it ready to sound an alarm if a zone is "violated" by motion, by opening a door or window, as the case may be. The control panel may be armed in various ways (see AWAY, HOME, INSTANT and LATCHKEY).

Disarming

The opposite of arming – an action that returns the control panel to the normal standby state. In this site, only 24-hour zones will sound an alarm if violated and "panic alarm" may also be initiated.



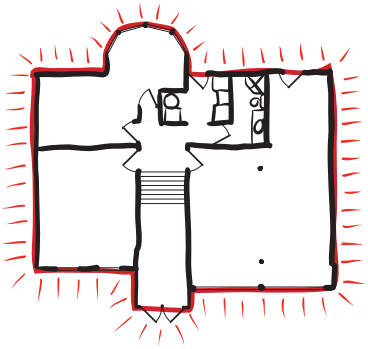


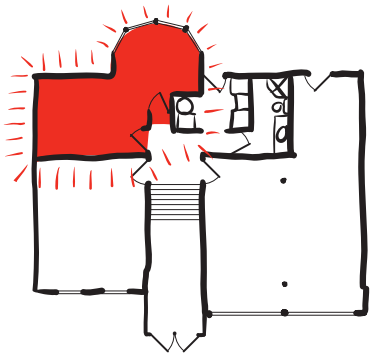
Force Arming

When any one of the system zones is disturbed (not secured), the alarm system cannot be armed. One way to solve this problem is to find and eliminate the cause for zone disturbance (closing doors and windows). Another way to deal with this is to impose force arming – automatic de-activation of zones that happen to be disturbed. If these zones are restored, disarming the system will return them to service.

Perimeter

The perimeter is the outside surrounding area of the protected site. This includes the doors and windows. During the installation magnetic contacts are installed on the doors and windows (depending on your requirements). The installer programs the contacts as the perimeter zones.





Zone

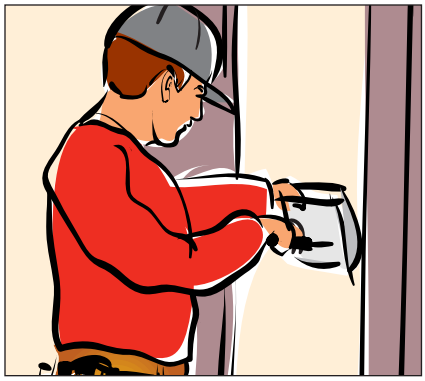
A zone is an area within the protected site which is under supervision of a specific detector. During programming, the installer allows the control panel to learn the detector's identity code and link it to the desired zone. Since the zone is distinguished by number and name, the control panel can report the zone status to the user and register in its memory all events reported by the zone detector. Instant and delay zones are "on watch" only when the control panel is armed, and other (24-hour zones) are "on watch" regardless of whether the system is armed or not.

Control Panel

The control panel is a cabinet that incorporates the electronic circuitry and programmable microprocessor required for controlling the alarm system. The control panel collects data from the sensors, processes it and responds in various ways. It also includes the user interface which includes a keypad, LCD display, LED indicators, sounder, microphone and loud speaker.

Emergency Response

A professional body such as police, ambulance or firemen. Your central monitoring station may dispatch any one of these in response to an alarm.



Installer

This is the person who installs and programs your alarm system. This person could be different from the central monitoring station.

1.3 Security System Terms

Restore

When a detector reverts from the state that caused an alarm to the normal restful state, it is said to have been "restored".

A motion detector restores automatically after detection of movement, and becomes ready to detect again. This kind of "restore" is not reported to the Emergency response services.

A magnetic contact detector restores only upon closure of the protected door or window. This kind of "restore" is reported to the Emergency response services.

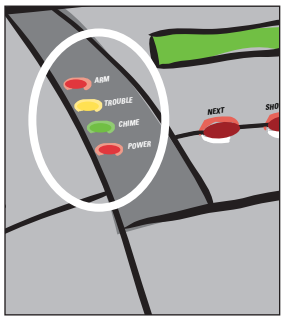
Alarm

A state of alarm is caused by:

- *Motion detected by a motion detector*
- *Change of state detected by a magnetic contact detector – a closed window or door is opened*
- *Detection of smoke by a smoke detector*
- *Tampering with any one of the detectors*
- *Someone presses the two emergency buttons simultaneously (panic)*
- *Tampering with the Control Panel.*

***Siren alarm** – both internal sounder and external siren yelp and the control panel reports the event by telephone.*
***Silent alarm** – the sirens do not sound, yet the control panel reports the event by telephone.*
***Internal alarm** – Only the internal sounder yelps and the control panel reports the event by telephone.*

1.4 Luminous Indicators

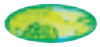


ARM

Indicates whether the system is in the armed state or the disarmed state. When lit, the system is armed in AWAY mode. When flashing the system is armed in HOME mode and when it is off, the system is disarmed.

TROUBLE

When lit, indicates a trouble or problem with the system or one of the sensors.



CHIME

When the Chime feature is enabled this indicator will light.

POWER

This indicator is normally on when the system is powered.

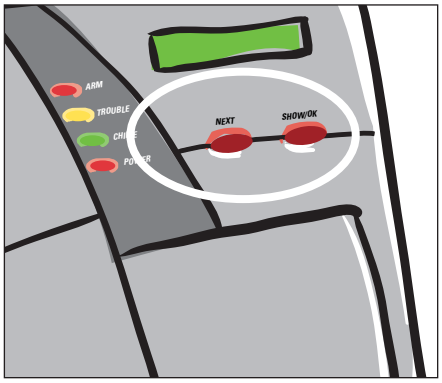
1.5 Control Pushbuttons

NEXT

This button is used to progress through items when accessing the system menu.

SHOW/OK

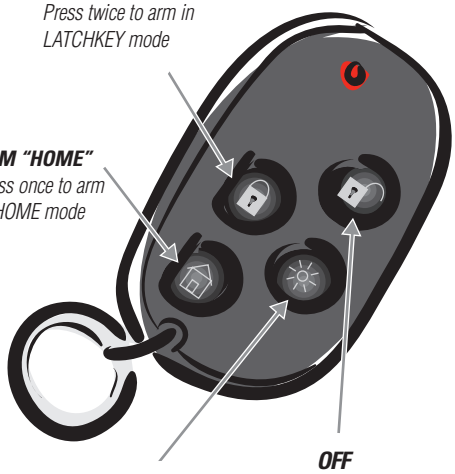
This button is used to review status messages one by one and to select menu options.



1.6: Multi Function transmitter

ARM "AWAY"
Press once to arm in AWAY mode
Press twice to arm in LATCHKEY mode

ARM "HOME"
Press once to arm in HOME mode



"AUX" BUTTON
IMPORTANT: *All options for 'AUX' button on the keyfob transmitter are selected by the installer when programming your system. Using PowerMax to activate garage doors or other electrical devices requires special installation by the alarm company.*

OFF
Press once to disarm the system.

INITIATE A PANIC ALARM:
Press ARM "AWAY" + ARM "HOME" simultaneously for two seconds.

Multi-Function Transmitter

Your system responds to signals sent by a 4-button miniature 'key-ring' transmitter (MCT- 234) that you and other users can carry. The function of each key is shown on the left. Your installer can program the AUX (auxiliary) button to perform various tasks, in accordance with your needs:

Controlling a gate or another electrical device.

Pressing the AUX button will open/close an electrically-controlled gate, or will activate/deactivate any chosen electrical device within or around your business or residence.

Arming the system in the INSTANT mode (without entry delay).

Pressing the AUX button immediately after arming, while the exit delay is in progress, will cause the system to be armed without an entry delay. This means that an attempt to enter the protected premises via any perimeter zone will trigger an immediate alarm. You and other holders of key-ring transmitters will have no problem, because you can disarm the system before entering by pressing the OFF (disarm) button on your transmitter before entry.

Getting status information.

Upon pressing the AUX button on your transmitter the voice module in the PowerMax will announce the status of the system over the built-in loudspeaker.

1.7 Using the System with the Voice Module

You can have PowerMax respond to your every action with a verbal prerecorded prompts in combination with the display.

PowerMax incorporates a voice module that helps you control the system at close range and also from a remote telephone. The pre-recorded voice responds to your commands by announcing what the system is doing and by prompting you to perform certain actions. It also announces alarms and troubles, and identifies the source of each.

The pre-recorded plain language announcements made by the voice module are quite clear and self-explanatory. We therefore omitted the spoken text in the following sections of this guide and focused attention on visual display and sounder beeps. This way we managed to keep the user guidance brief and concise.

PowerMax LT is not equipped with a voice module.

1.8 Symbols used in this manual

LCD Display on unit	Outlines when you will use the feature described
Single Beep sounds	Features not available on PowerMax LT version
Four Beeps sound	Success – Happy Melody / Continuous Buzzer
Area is protected / Zone is violated/troubled / Area is not protected	Exit Delay Sound / Alternate Display
Siren sounds	

Section 2 – Securing the Protected Site

2.1 Security Related Push buttons

Arming when nobody remains on the premises.

Arming when people remain on the premises.

Cancel the entry delay upon arming. (AWAY INSTANT or HOME INSTANT)

Disarm the system and stop alarms.

Test the system. (See Section 7).

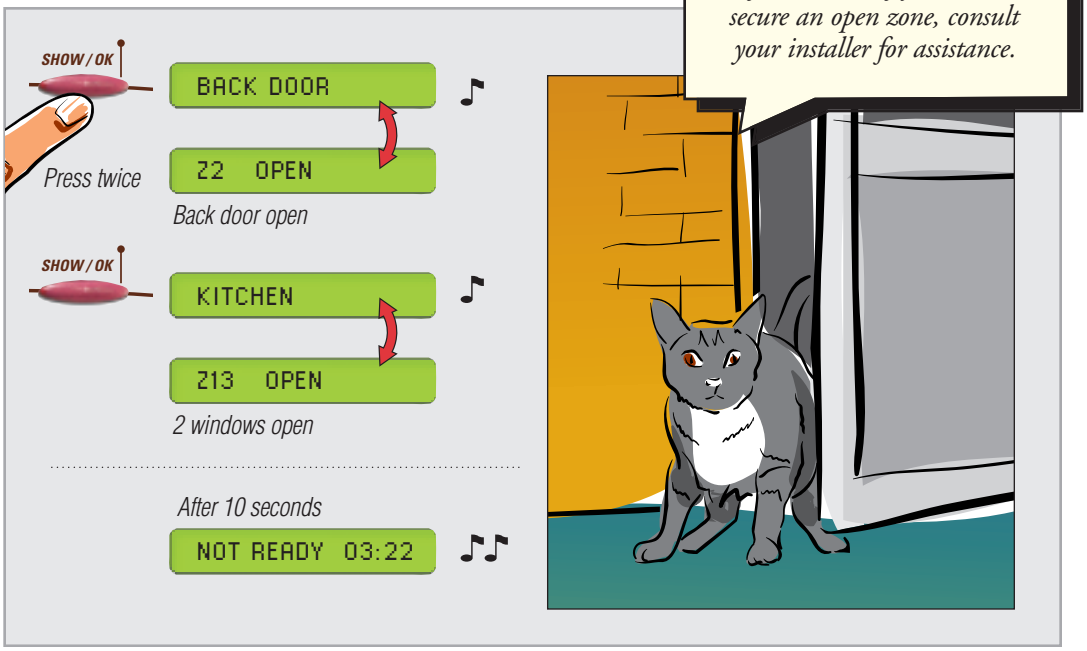
See page 9 for equivalent features on Keyfob

Preparing to Arm

Before arming your system, ensure READY *is displayed on the LCD. When* READY *is displayed, all zones are fully secured and you may arm the system.*

If any one of the zones is open, the system will display NOT READY*. In this case, you can press the* ***SHOW/OK*** *button twice to start review the numbers and names of all open zones one by one. For example, suppose zone 2 (back door) and zone 13 (the kitchen) are open. The system display will show* NOT READY*. To determine the open zones proceed as follows:*

Ensuring all zones are secure before arming the system will reduce the chances of creating a false alarm. If you cannot secure an open zone, consult your installer for assistance.

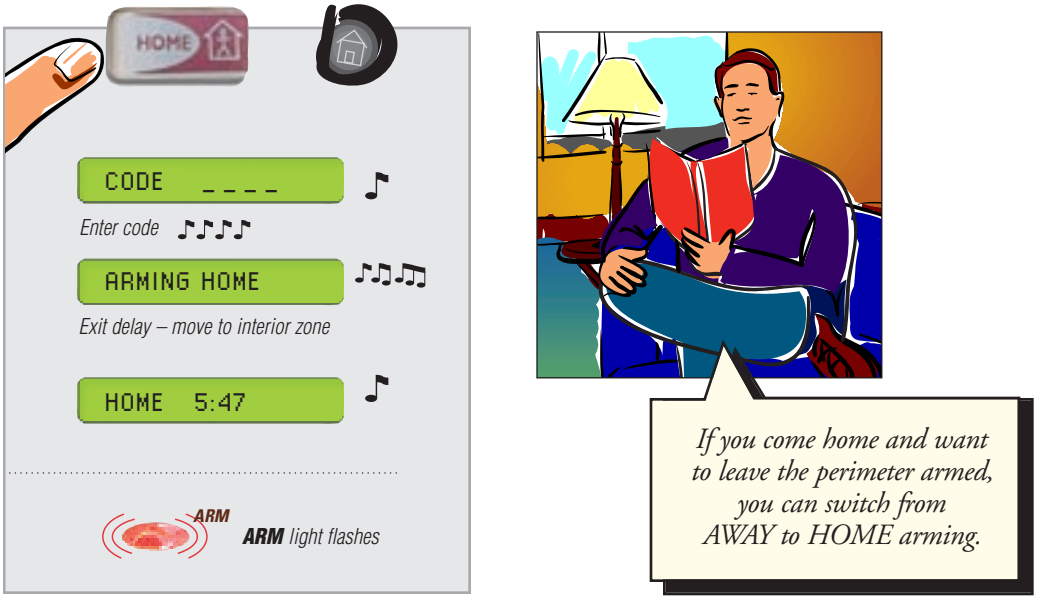


2.2: Arming "Away"

IMPORTANT: *All arming procedures on this page are based on the assumption that the installer has enabled quick arming. If quick arming is disabled, the PowerMax will prompt you to enter your security code before arming*

2.3: Switching from "Away" to "Home"

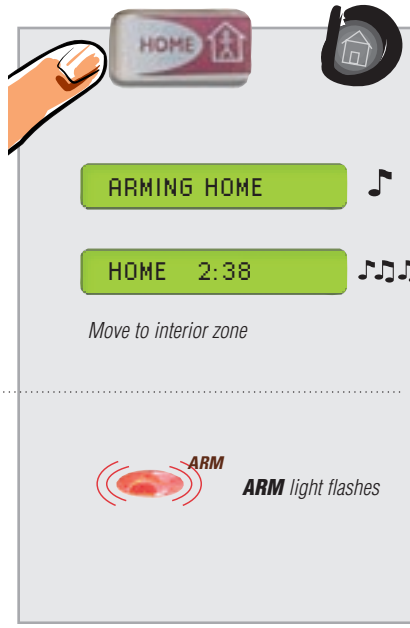
Without disarming the system, press the HOME *button. As this operation reduces the security level, PowerMax will ask you to enter your Master or user code to ensure you are an authorized user.*



Note: *To stop any alarm or to disarm the system press OFF and enter your system user code.*

2.4: Arming "Home"

Ensure all perimeter zones have been secured.



2.5: Switching from "Home" to "Away"

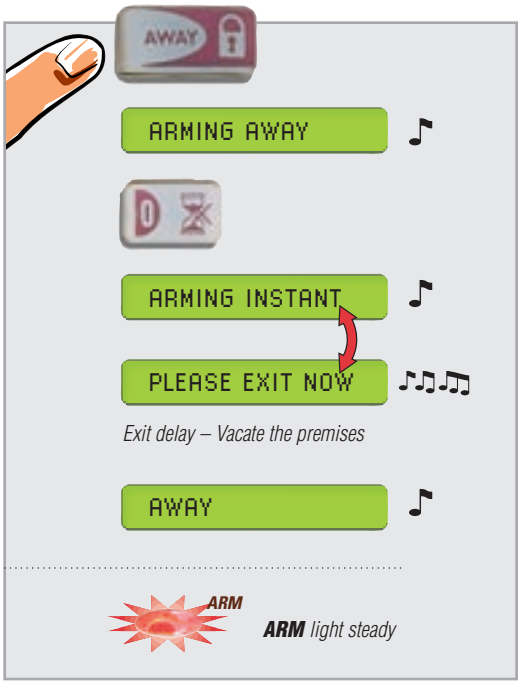
Without disarming the system, you can switch from home arming to away arming with a single press of a button.

Note: *To stop any alarm or to disarm the system press OFF and enter your system user code.*

2.6: Arming "Instant"

You may disable the entry delay when arming HOME or AWAY by using the INSTANT arming feature. When you arm in INSTANT AWAY mode, any detection in any zone will immediately cause an alarm. When you arm in INSTANT HOME mode, any detection in the perimeter zones will immediately cause an alarm.

To arm INSTANT AWAY

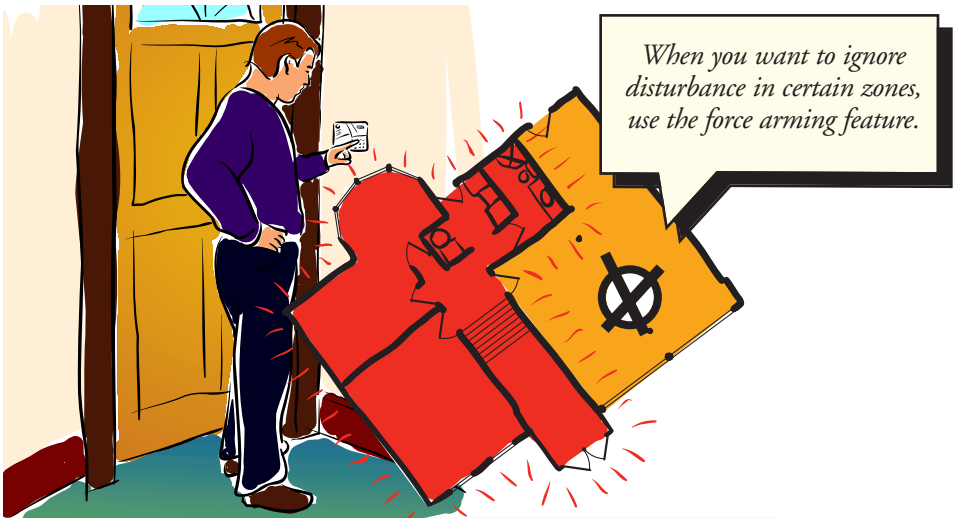


To arm INSTANT HOME

Note: *To stop any alarm or to disarm the system press OFF and enter your system user code.*

2.7: Force Arming

The Force arming feature allows you to arm the system, even though one or more of the zones are not secured and the NOT READY *message is displayed on the LCD. For this feature to work, the installer must enable this option while programming your system. Unsecured zones will be bypassed leaving them unprotected. You will NOT have the maximum protection on your site.*



Force arming AWAY

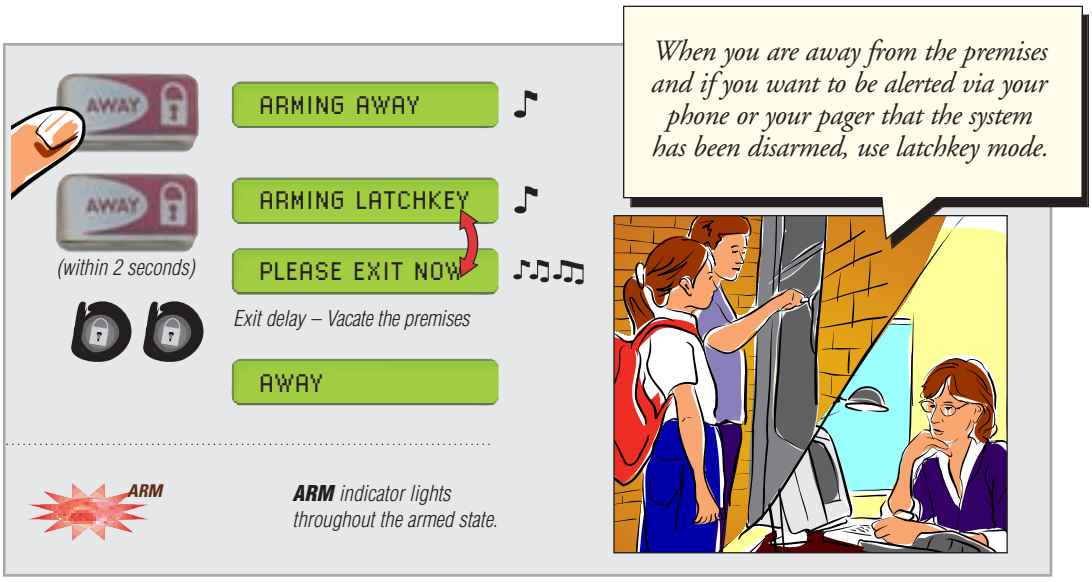
Force arming HOME

Note: *To stop any alarm or to disarm the system press OFF and enter your system user code.*

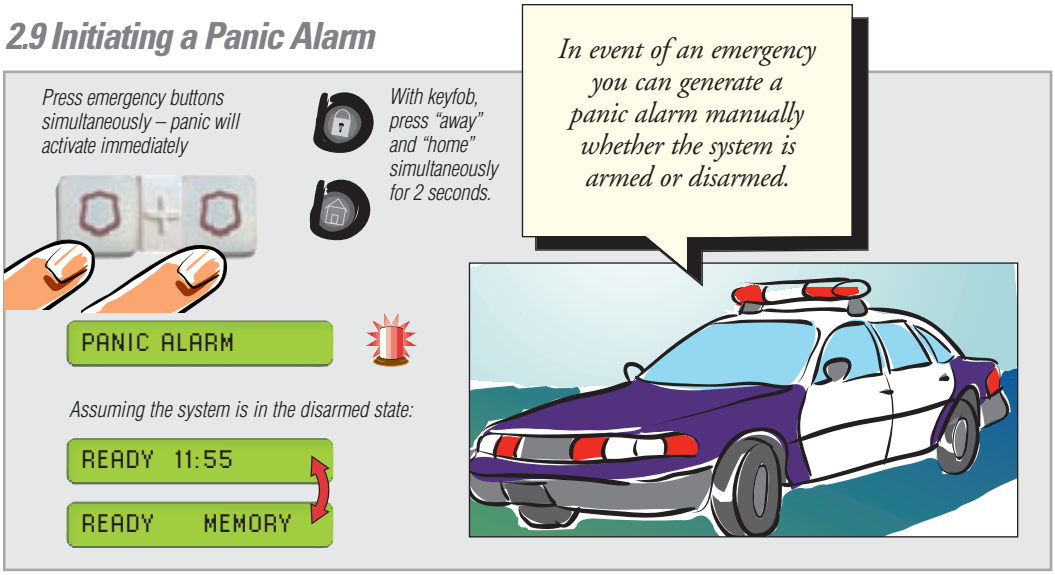
2.8 Arming in Latchkey Mode

The Latchkey mode is a special arming mode in which designated "latchkey users" will trigger a "latchkey" message to be sent to a telephone or a pager when they disarm the system. For example, if a parent wants to be sure that their child has returned from school and disarmed the system.

Latchkey users are holders of user codes 5 through 8 or users of Keyfob transmitters 5 through 8. The latchkey message is considered an alert and not an alarm, and is therefore sent to a private telephone number programmed by the user. Latchkey arming is only possible when the system is armed in the AWAY mode.



2.9 Initiating a Panic Alarm



Note: *To stop any alarm or to disarm the system press OFF and enter your system user code.*

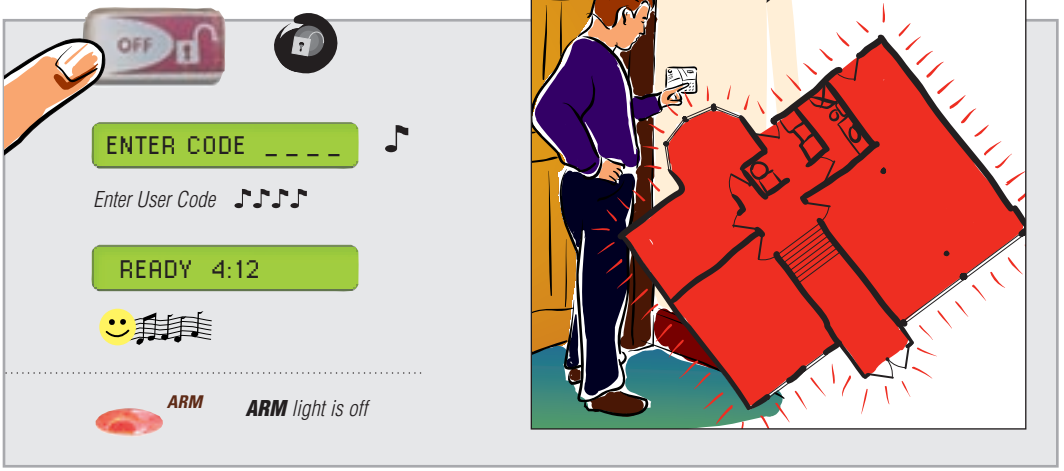
Section 3 – Alarm Response

3.1 Disarming and Stopping Alarms

Disarming the system stops the siren before it is muted automatically whether the alarm was initiated in the armed or disarmed state. You will see different messages on your display depending on the state of the system after disarming.

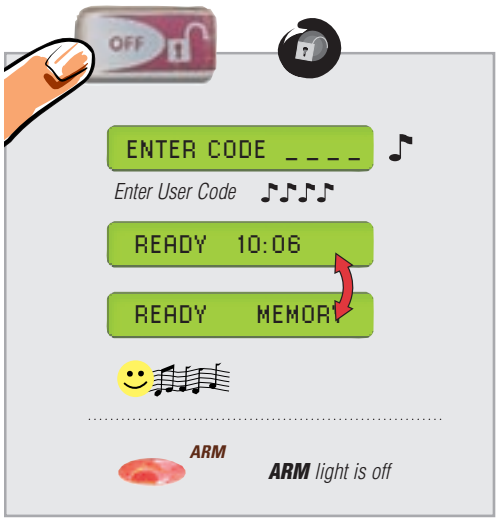
Disarming with no events

In this case, the armed term was uneventful.



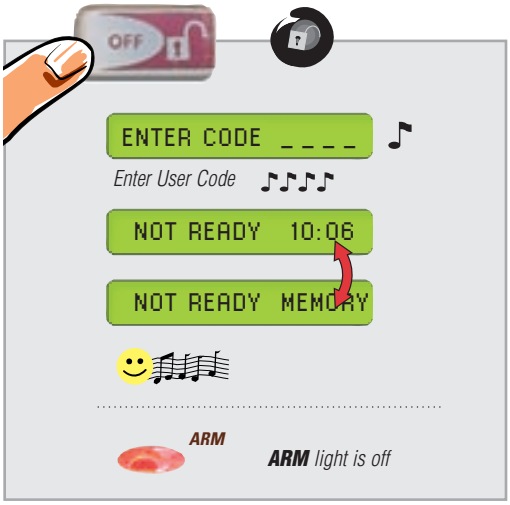
Disarming after an alarm, with all zones secure.

If an alarm occurred, and the zone has returned to normal status.



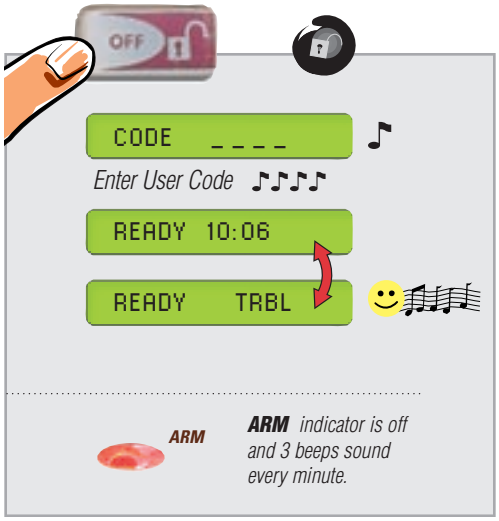
Disarming after an alarm, with one zone still disturbed.

If the zone that alarmed in the armed state is still disturbed when you disarm the system, you will see NOT READY *on the display.*



Disarming with the system in a state of trouble

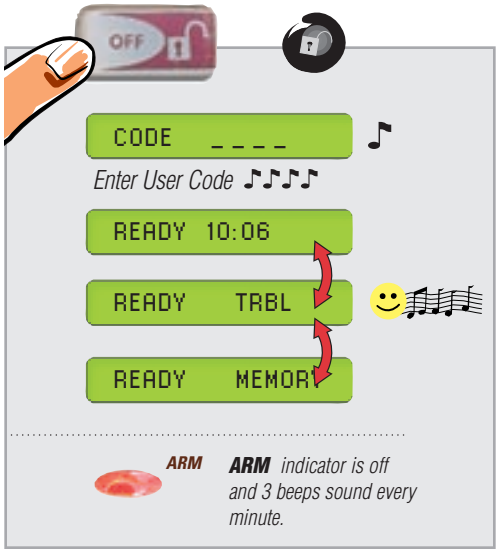
TROUBLE *If trouble is detected while in the armed state, the* ***TROUBLE*** *indicator on the front panel will light.*



To determine what type of trouble has been sensed, refer to Section 4.2. Once the trouble has been eliminated, the TRBL *display will disappear, the beeps will stop and* ***TROUBLE*** *indicator will turn off.*

Disarming after an alarm, with the system in a state of trouble

TROUBLE *The* ***TROUBLE*** *indicator on the front panel will light. If the zone that alarmed while in the armed state has been restored to normal, the disarming will proceed as follows:*



To determine which zone alarmed and the trouble being sensed, refer to Section 4.3. Once the trouble has been eliminated, the beeps will stop, the TRBL *display will disappear and the* ***TROUBLE*** *indicator will turn off. The* ***MEMORY*** *display will clear the next time you arm the system.*

Note: *There is a predetermined period of time in which you can cancel an alarm without contacting the central station. This 'abort interval' period is programmed by your installer and can be between 0 and 240 seconds. During this period the buzzer sounds a warning but the siren remains inactive and the alarm is not reported. If you disarm the system within the allowed abort interval, the alarm will be aborted.*

3.2 Accessing and Controlling PowerMax Remotely by Telephone

PowerMax is designed to respond to your commands at "intimate" range via the built in keypad, at short range via your key ring transmitter and at long range via the public telephone network. You can perform a wide range of functions when accessing PowerMax through the telephone.

Establishing Telephone Communication with Your PowerMax

When you are away from the protected site, all you need is a telephone or cellular phone to access and control your PowerMax system. PowerMax will prompt you for your user code every time you issue a command through the telephone. This prevents unauthorized access into the system.

To contact your PowerMax, dial the telephone number used by your system. Let it ring twice, then hang up. Wait at least 12 seconds but no more than 40 seconds, then call your PowerMax back. This time PowerMax will intercept your call. The ringing sound in your handset will stop, and a shrill tone will sound for 10 seconds. You may now issue any available command. If you wait longer than 45 seconds without keying in anything, the PowerMax will disconnect.

Executable Commands

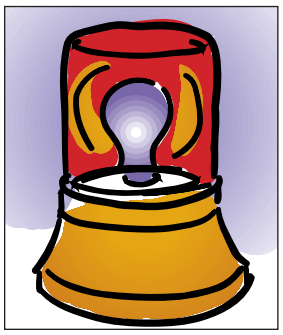
*You must press * on your phone followed by your user code prior to executing any of the available remote access commands.*

These are the commands available:

Disarming	**** + user code + 1***
Arming HOME	**** + user code + 2***
Arming HOME-INSTANT	**** + user code + 21***
Arming AWAY	**** + user code + 3***
Arming AWAY-INSTANT	**** + user code + 31***
Arming Latchkey	**** + user code + 4***
Arming AWAY- Instant Latchkey	**** + user code + 41***
Activating Electrical Devices (1 – 7)	**** + user code + 5 + device # + 1***
De-activating Electrical Devices (1 – 7)	**** + user code + 5 + device # + 0***
Activating the Auxiliary Output	**** + user code + 5 + 8 + 1***
De-Activating the Auxiliary Output	**** + user code + 5 + 8 + 0***
Recorded Message Playback	**** + user code + 8***
Investigating System Status	**** + user code + 9***
Quit (end communication)	**** + 9 + 9***

See page 22 for two way voice communications commands.

3.3 Siren behavior



The siren will sound differently depending on cause for alarm. The two types of siren outputs are a continuous steady signal and a repeated 3 pulse signal.
A continuous steady signal occurs when a panic alarm is initiated or when intrusion is detected.

When smoke is detected, the siren pulsates 3 times, then pauses, then pulsates 3 times again. If there is nobody around to disarm the system after an alarm and a zone remains "disturbed", the siren will sound until it times out as programmed by the installer. After 30 seconds, the siren will sound again for the programmed length of time. This cycle will continue for the maximum number of cycles as programmed by the installer ("swinger shutdown" parameter). The disturbed zone will then be disabled and the alarm siren will stop.

The same process will occur for alarms initiated by 24-hour zones or fire while the system is in the disarmed state.

A zone disabled by "swinger shutdown" will be re-enabled the next time the system is disarmed or armed.

3.4 Digital Monitoring

When an event or alarm is initiated, PowerMax (if programmed) will initiate a call to the Central Monitoring Station.The Central Monitoring Station's computer equipment answers the call and establishes a connection with PowerMax the same way your computer establishes a connection with your ISP when you access the internet (if you are on a dial-up connection).

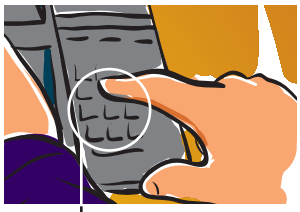
Once a connection has been established, PowerMax will send the event or alarm information in an encrypted digital format. This information is accepted by the Central Monitoring Station and redirected to a monitoring agent who then starts the process of investigating whether the authorities should be called.

3.5 Two Way Voice Communications

Once you have established communications with PowerMax from a remote telephone, you may initiate a conversation with a person left within the premises by keying in:

**** + user code + 7 + 3***

The system starts to function in "LISTEN IN" mode. This mode allows you to listen to sounds within the premises. If you wish to initiate a two-way conversation you must switch from Listen-In to Speak Out manually. While PowerMax will allow you have a two-way conversation with someone on-site, be aware that this mode is only half-duplex. This means that only one party may talk at one time. You will have to manually switch from Listen-In mode to Speak Out mode as required to carry on a conversation. You and the other party should agree on a signal to determine when you should listen and when you should speak. Finishing your sentences with "OVER" or "GO AHEAD" would suffice.



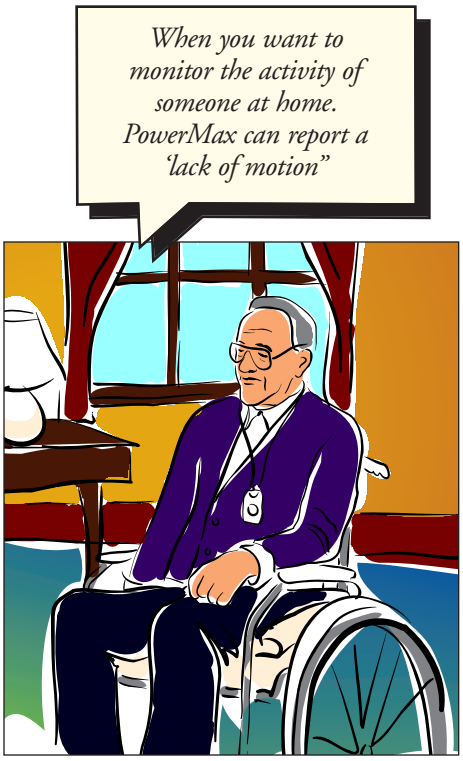
3 DEF	***Listen-In***
1	***Speak-out***
1 or 3 DEF	***Prolong the communication session by 50 seconds.***
*	***Quit two-way voice without severing the connection***
* 9 WXY 9 WXY	***Quit***

3.6 Looking After People Left at Home

PowerMax has a unique feature over other alarm systems, it can detect in-house activity when the system is in the disarmed state or even when armed in the HOME mode. PowerMax will report "lack of motion" if no motion is detected within a pre-determined time limit.

To use this unique feature, you must have your installer program a specific time limit for the system to determine when a "not active alert" would be appropriate.

If an elderly or sick person is left at home alone, it is reasonable to assume that this person will move about, either to go to the bathroom or get something to eat or drink. As soon as that person moves, a virtual clock is started within PowerMax. This clock will count down from the pre-programmed time limit until it reaches zero. If no motion is detected within the time limit, the system will send out an "not active alert" message to the central monitoring station or to private telephones designated by the installer. If motion is detected within the pre-programmed time limit, the virtual clock will restart its countdown from the beginning.



3.7 Emergency Calls for Help

If the elderly or sick person were to fall and hurt themselves, they may want emergency assistance before the "not active alert" is sent out. PowerMax can send an emergency signal to a central monitoring station or a private telephone number. If a person is down and cannot get to the control panel to activate the emergency call, they could be supplied with a single button transmitter that will initiate an "emergency alert" message to be sent to the central monitoring station and/or a private telephone number. This is accomplished by having your installer program one of the 30 zones as an emergency zone and supply you with one of the transmitters available for your system and link the transmitters ID to the emergency zone.

Available Emergency Transmitters for PowerMax are:

MCT-201 Pendant
MCT-201 WP Waterproof Pendant
MCT-211 Waterproof wrist worn
MCT-101 Handheld/belt clip

3.8 Receiving a Message at a Remote Telephone

PowerMax can be programmed by the installer to call you and report certain event information in a verbal message.

The messages are divided by type into three groups:

1. *Fire, Burglary, Panic, Tamper*
2. *Arming AWAY, Arming HOME, Disarming*
3. *No-Activity, Emergency, Latchkey*

Group 1 has the highest priority while group 3 has the lowest. When you answer a call initiated by PowerMax, you will hear a verbal message composed of the "house identity" and the type of event that has occurred. For example, if smoke is detected in the Smith residence, the message will be:

[The Smith Residence – Fire Alarm]

You must acknowledge the message using one of the acknowledge commands listed. If you do not acknowledge the message, PowerMax will repeat the message for 45 seconds. When the 45 seconds is up, PowerMax will disengage the line and call the next private telephone number on its list.

DIGIT	EFFECT
2	***Acknowledge only:*** *PowerMax disengages the line and considers the event reported.*
3	***Acknowledge and Listen-in:*** *The protected site is "bugged" for sound for 60 seconds. You may prolong the session by pressing **3** again or by pressing **1** to speak.*
1	***Acknowledge and speak out:*** *You may speak for 60 seconds to whoever is in the protected site. You may prolong the session by pressing **1** again before PowerMax disengages the line, or by pressing **3** to listen.*
9	***Acknowledge and request a status report:*** *PowerMax will issue a verbal report of the system status. For example:* ***[Disarm – ready to arm]*** *or* ***[Disarm – back door open]*** *or* ***[Disarm – alarm in memory].***

3.9 Receiving a Message With a Pager

Since PowerMax can be programmed to report events to a pager, the user of the pager must be informed on how to interpret the numerical message that is displayed on the pager.

Communication with the pager takes place as follows:

PowerMax dials the pager's phone number, waits 5 seconds and sends the numerical message.

The message transmitted by PowerMax to the pager is actually a string of digits.

XXXXXXXXXXXXXXX - Pager's PIN No. - Up to 16 digits, programmed by the installer.

YYY - Event Type

OOZZ - Zone or User No.

The person receiving the message sees only the YYY-OOZZ part of the message. The following table shows the YYY codes.

EVENT	CODE
Alarm	919
Trouble	818
Emergency	717
Panic	616
Fire	515
Close	101
Open	102
Latchkey	103

OOZZ represents the Zone or User No. depending on the type of event. For Close. Open and Latchkey, this number represents the User No. For all other events, this number represents the Zone number.

Section 4 – Reading Alarm Memory and Trouble Data

4.1 Reviewing the Alarm/Tamper Memory Content

PowerMax will retain in its memory alarm and "tamper" events that occurred during the last arming period. Please note that alarms enter the memory only after the abort period has expired. If you disarm the system prior to the abort period expiring, PowerMax will not record the alarm in memory.

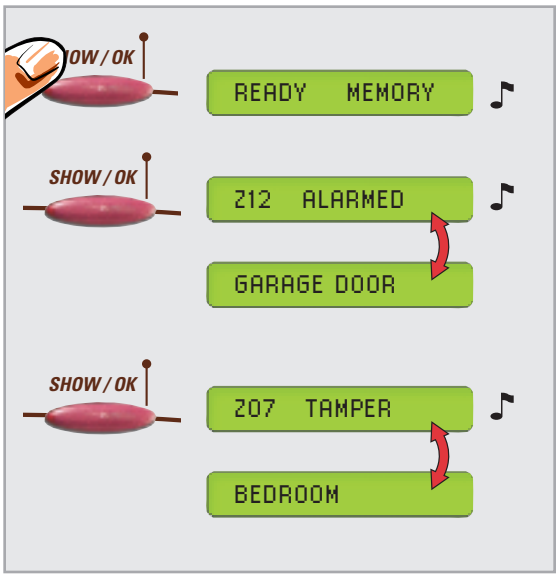
ALARM/TAMPER INDICATIONS

When an alarm has occurred and PowerMax has recorded the alarm in memory a flashing `MEMORY` *message will be displayed when you disarm the system.*

Investigating Alarm/Tamper Data

To investigate Alarm or Tamper data, press the ***SHOW/OK*** *button.*

Lets assume zone 12, the garage door alarmed while you were out and zone 7, the bedroom had the sensor cover removed and sent a tamper message to PowerMax.



If there are other events in memory, you may continue to press the ***SHOW/OK*** *button to review them. once you have reviewed all stored events, the system will return to its previous state.*

4.2 Reviewing Trouble Information

If TRBL *flashes on the display, the* TROUBLE *indicator lights and 3 beeps are sounded once per minute. To investigate where the trouble is, you will have to access PowerMax system's memory. Troubles are divided into two groups, sensor/transmitter troubles and system troubles.*

Sensor/Transmitter Troubles

1. Sensor Inactivity
When no radio signals have been received from a sensor throughout a pre-defined period of time, the sensor is assumed to have failed.

2. Low Battery
When a sensors battery power is running out, the sensor will send a trouble message to PowerMax.

System Troubles

1. AC Supply Failure
If the main power has been cut off, PowerMax will continue to work under battery power and a Trouble event will occur.

2. System Jammed
When a radio signal blocks the channel that the system is communicating on, a trouble event will occur.

3. Communication Failure
PowerMax fails to send a message to the Central Monitoring Station or a private telephone number.

4. CPU Low Battery
The control panel's backup battery is weak and must be replaced.

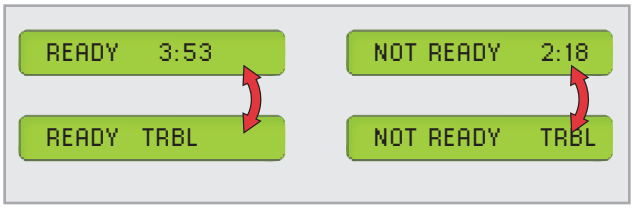
5. CPU Tamper
When the control panel is remove from its mounting bracket or when the backup battery compartment lid is removed.

6. Fuse Trouble
The siren fuse is burnt out.

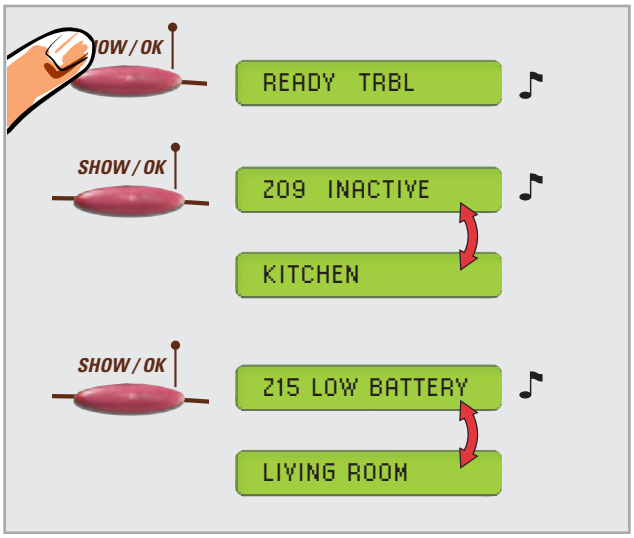
Investigating Trouble Sources

If a trouble has occurred, the display will flash TRBL.

Secured Zone ***Unsecured Zone***



Reviewing troubles is the same process as reviewing alarms and tamper data.You can press the ***SHOW/OK*** *button to see the zone causing the trouble and what is wrong with that zone.*



Press ***SHOW/OK*** *to view other troubles.*

4.3 Reviewing Co-Existing Memory and Trouble Information

If alarm/tamper events co-exist in memory with a trouble event the display will alternate between the MEMORY *display and the* TRBL *display.*

Undisturbed Zone	***Disturbed Zone***
READY 3:53	NOT READY 2:18
READY MEMORY	NOT READY MEMORY
READY TRBL	NOT READY TRBL

To review the alarm/tamper and trouble events, use the ***SHOW/OK*** *button to cycle through the memory content as described in sections 4.1 and 4.2.*

4.4 Correcting Trouble Situations

The ***TROUBLE*** *indicator and the flashing* TRBL *display are cleared once the trouble is eliminated. If you cannot cope with a trouble situation, call your installer and seek his advice.*

INACTIVITY: *Once an inactive sensor renews its periodical transmissions, the trouble no longer exists and will no longer be indicated by the control panel.*

LOW BATTERY: *Replacing the batteries in the sensor will clear this trouble on the next successful transmission from the sensor to the control panel.*

SYSTEM TROUBLES: *Correction of any system troubles will be sensed by the control panel and cleared immediately.*

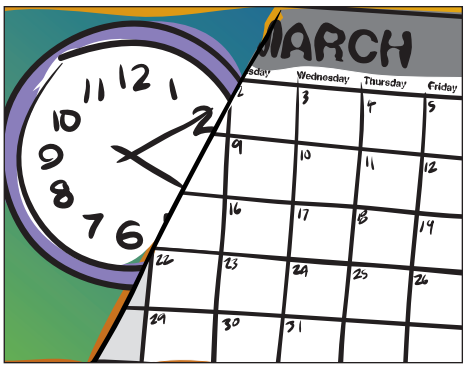
Section 5 – User Settings

5.1 What Settings do You Need?

The installer provides you with a ready-to-use alarm system, almost entirely tailored to your requirements, but there are a few settings and adjustments you will have to make.

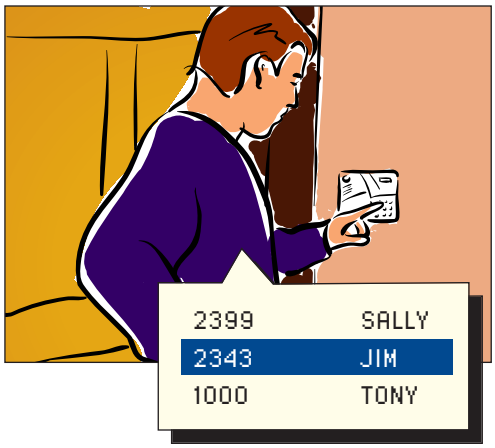
"Follow Me" Telephone Number

You can program a telephone number where you can be reached after leaving the premises. PowerMax will call this number to report the occurrence of events defined by the installer.



Setting the Time and Date

You will need to know how to adjust the built-in clock and calendar to display the correct time and date.



Setting User Codes

You may need to program security codes for yourself and for 7 other users. Code 5 through 8 are "Latchkey" user codes. Refer to Section 2.8 for information on "Latchkey" mode.

Setting Voice Options

You may select between full length verbal announcements or no announcements at all.

5.2 Opening the User Setting Menu

When the system is in the disarmed state, all zones are secured and the display reads,

READY 11:34

you can access the User Settings Menu.

NEXT → NORMAL MODE

NEXT → USER SETTINGS

SHOW / OK → ENTER CODE ____

Enter Master Code

ENTER CODE 1111

At this point you are required to enter the Master Code. If this is the first time you have accessed the User Settings Menu, the default Master Code is 1111.

*You can cycle through the User Settings menu by pressing the **NEXT** button. The menus will appear in this order:*

NEXT → SET PHONE NUMBER

NEXT → SET USER CODES

NEXT → SET VOICE OPTION

NEXT → TIME HH:MMA

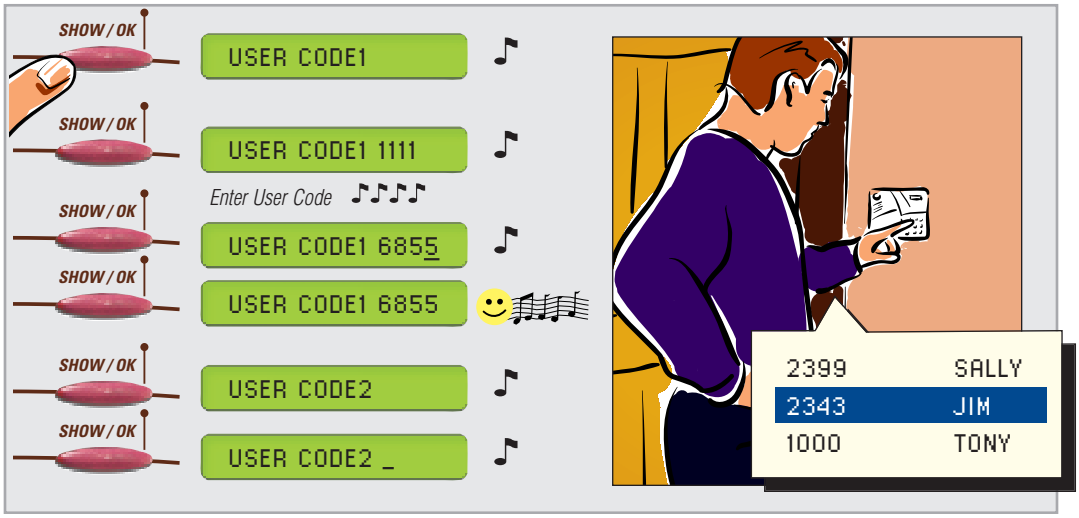
NEXT → DATE MM/DD/YYYY

NEXT → (OK) TO EXIT

*NOTE: To exit user setting programming, simply press **AWAY** and **SHOW/OK**. To go to the previous setting, press the **BACK** key.*

5.3 Setting the User Codes

There are 8 user codes in total. The first user code is also the Master Code. User codes 5 through 8 are Latchkey user codes. After successfully entering the User Settings Menu, press ***NEXT*** *until* `SET USER CODES` *is displayed.*



Note: It is important for users of the system to have different user codes in order for you and/or the central monitoring station to determine who has accessed the system. If you use the Latchkey feature, users must have different user codes to differentiate between the Latchkey users. A quick reference card is provided at the front of this manual with space for you to write down each user code.

5.4 Setting Voice Options

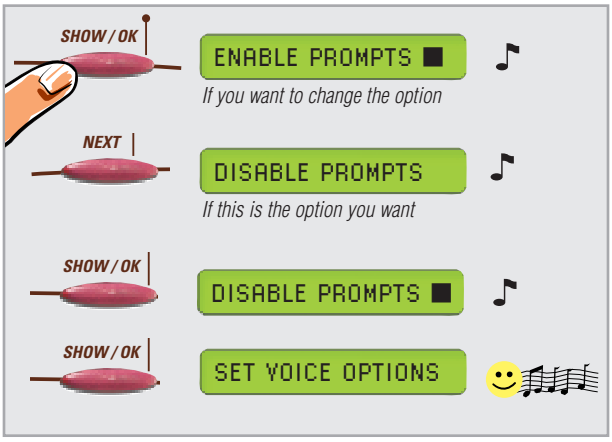
There are 2 voice prompt choices:

Enable Prompts: *PowerMax will announce full length verbal prompts when this option is selected.*

Disable Prompts: *PowerMax will not announce any verbal prompts when this option is selected.*

While setting the Voice Prompts options, a box in the display will indicate whether an option has been selected or not. No box at the far right of the display indicates an option that has not been selected. A dark box at the right of the display indicates an option has been selected.

Once you have entered into the User Settings Menu, press ***NEXT*** *until* `SET VOICE OPTION` *is displayed.*



To exit the Unit Settings Menu, press ***NEXT*** *until* `EXIT` *is displayed. Press* ***SHOW/OK*** *to return to normal operation.*

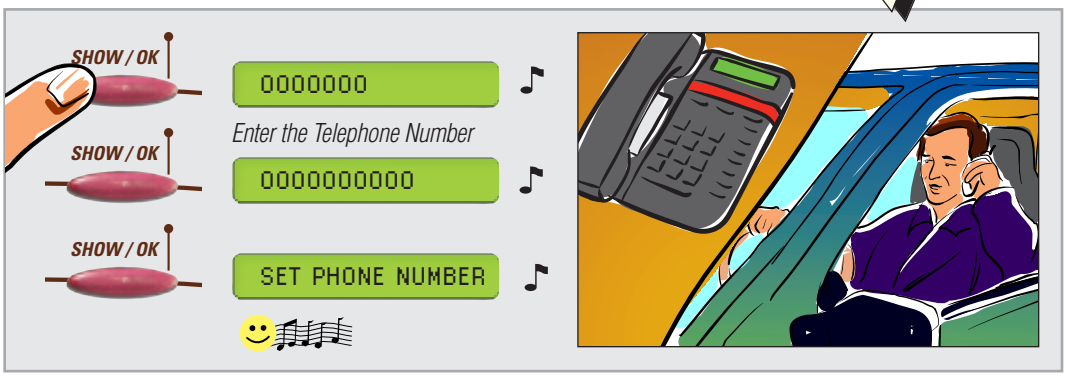
5.5 Programming the "Follow-Me" Telephone Number

The Follow Me telephone number feature is designed so that the PowerMax unit can call you with certain event information (programmed by the installer) to any telephone number. This number can be changed as often as you like without contacting your installer. Your installer may have already programmed for you, up to 3 telephone numbers that will be called before the follow me number with any event information.

Note: *PowerMax always calls the Central Monitoring Station first with event information.*

When you want PowerMax to contact you with voice messages on any private telephone about system activity.

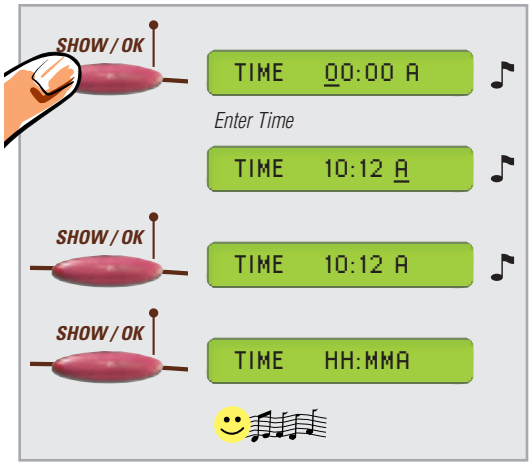
Having entered into the User Settings Menu, press ***NEXT*** *until* SET PHONE NUMBER *is displayed.*



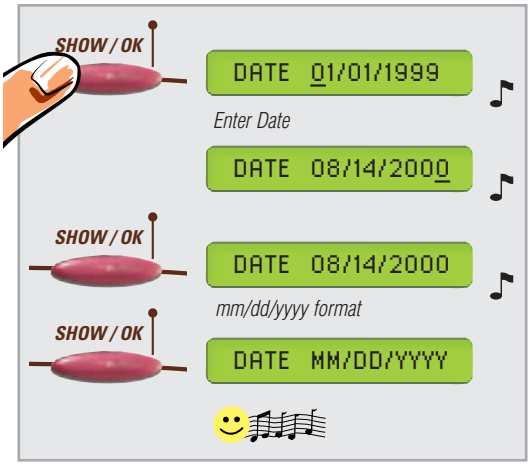
The "follow-me" telephone number is now programmed and you may continue to program other settings or exit.

5.6 Setting the Time and Date

Having entered into the User Settings Menu, you can press the ***NEXT*** *button until* TIME HH:MMA *is displayed.*



Having entered into the time, you can press the ***NEXT*** *button until* DATE MM/DD/YYYY *is displayed.*



NOTE: ***To enter A for AM press the***  ***button, to enter P for PM, press the***  ***button.***

Section 6 – Speech and Sound Control

6.1 Speech and Sound Control Pushbuttons

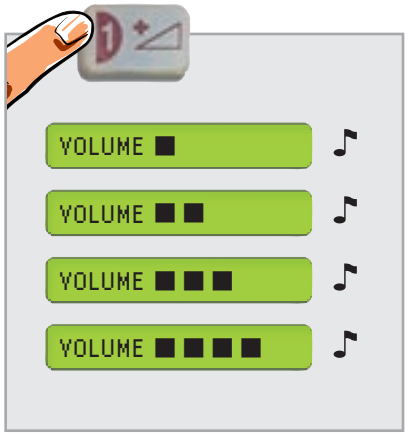
The sound and speech related functions offered by PowerMax are controlled with the keypad.

Increase the loudness of verbal messages.	*Decrease the loudness of verbal messages.*	*Enables or disables the speaker.*
Enables or disables the chime in chime zones.	*Record a verbal message for other user to listen to.*	*Listen to a recorded message left by another user.*

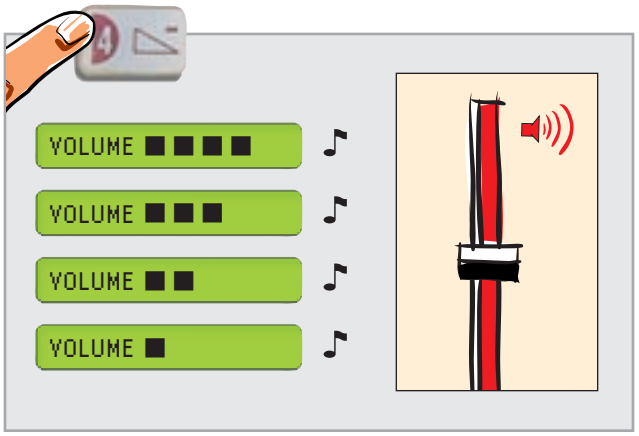
6.2 Adjusting the Speech and Volume

*The speech volume can be adjusted up or down using the **1 button** or the **4 button**. A solid-box scale indicates the volume level. As the volume is increased additional boxes appear moving to the right of the display.*

To increase the volume:

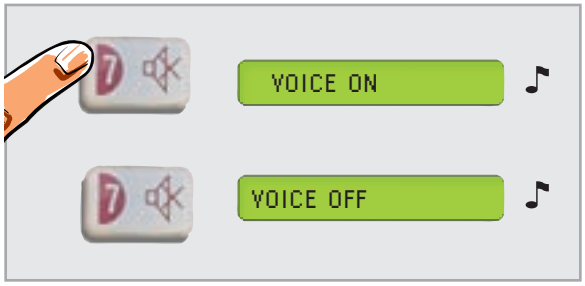


To decrease the volume:



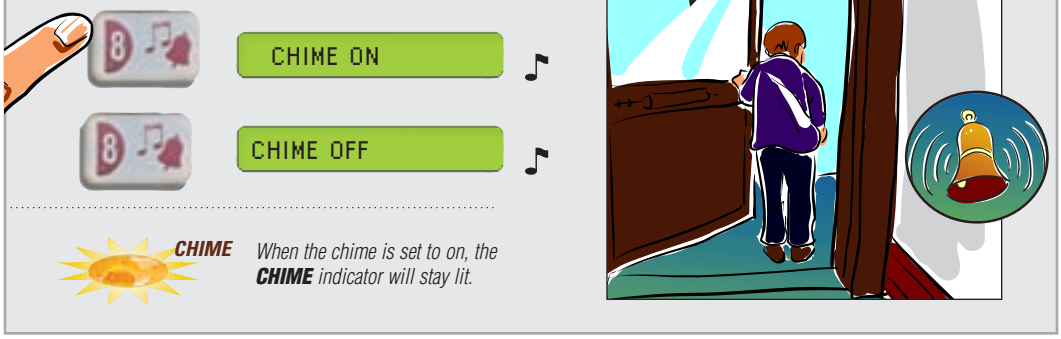
6.3 Setting the Voice ON or OFF

*You can use the **7 button** to turn the verbal announcements* ON *or* OFF.



6.4 Chime ON/OFF

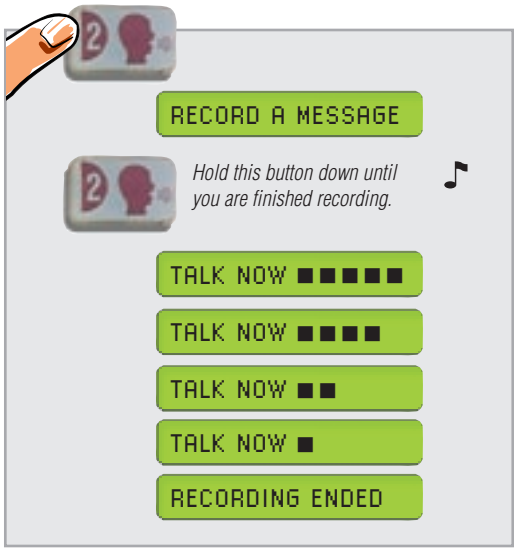
*PowerMax will sound a chime when zones programmed as chime zones, change from secured to unsecured. You can turn the Chime on or off by using the **8 button**.*



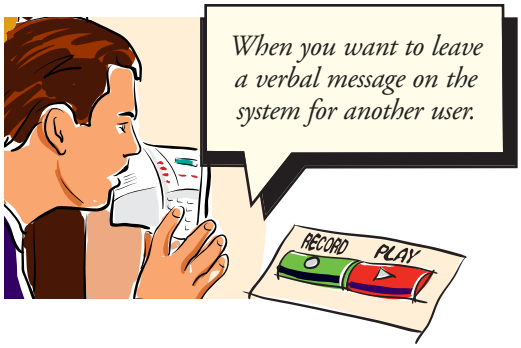
6.5 Recording / Playing a Message

*Before leaving you may wish to record a message for another user of the system. While facing the panel use the **2 button** to record the message. You press and hold the **2 button** while you are recording. The message TALK NOW and solid boxes will appear on the display. As you record your message the boxes will disappear one by one until you have reached the maximum allowable time for your message.*

Recording a Message



*When you release the **2 button**, the system will return to normal status.*

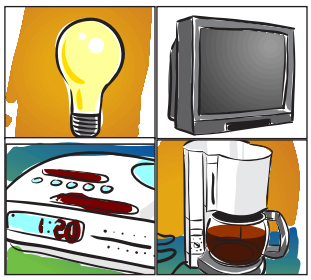


Message Playback

When the message is finished, the system returns to normal operation.

Section 7 – Electrical Device Control

7.1 Control Options and Pushbuttons



PowerMax is capable of interfacing and controlling up to 7 electrical devices (lights, radio, TV, tape recorders, fans, etc.), manually or automatically. This is accomplished by connecting optional X-10 devices to PowerMax. A total of seven X-10 devices can be connected to PowerMax. ON/OFF control codes are communicated through the electrical wiring of the premises. For example, PowerMax could be programmed so that when smoke detectors activate, hallway lights turn on allowing for an easier exit in the dark.

While programming your system, the installer determines which zone sensors will switch the remote controlled devices on and off. The installer can also program schedules for automatic operation.

Controlling how the devices will turn on or off is up to you. The following pushbuttons control the X-10 devices.

Manual activation of lights or other household devices.

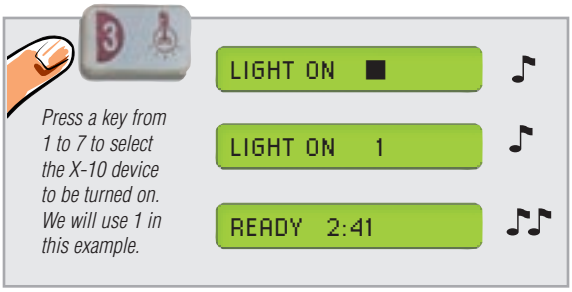
Manual deactivation of lights or other household devices.

Selection of the active control method:

***SENSORS:** devices are controlled by sensors (assigned by the installer).*
***TIMER:** devices are controlled by pre-programmed schedules set up by the installer.* ***BOTH:** devices are controlled by sensors and pre-programmed schedules set up by the installer.*

7.2 Manual Switch ON

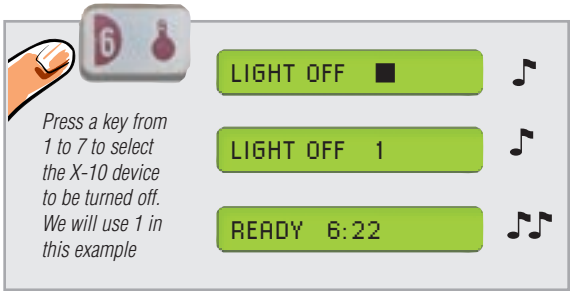
You may switch on any X-10 controlled appliance by pressing the ***3 button*** *and selecting the X-10 number from 1 to 7 on the keypad.*



Press a key from 1 to 7 to select the X-10 device to be turned on. We will use 1 in this example.

7.3 Manual Switch Off

You may switch off any X-10 controlled appliance by pressing the ***6 button*** *and selecting the X-10 number from 1 to 7 on the keypad.*



Press a key from 1 to 7 to select the X-10 device to be turned off. We will use 1 in this example

7.4 Automatic ON/OFF Control

There are four options available for Automatic ON/OFF control. You are allowed to select two of these options.

ON BY TIMER

ON BY SENSOR

OFF BY TIMER

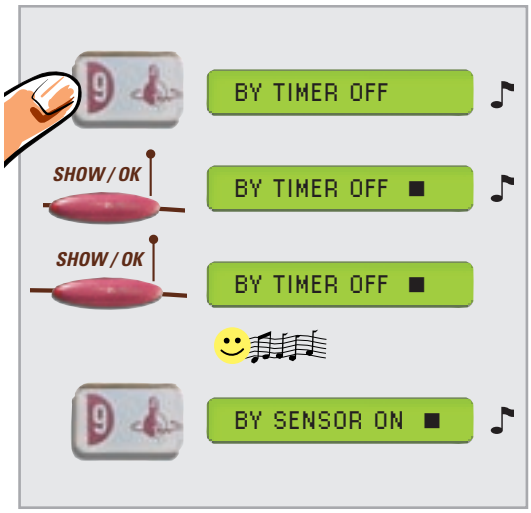
OFF BY SENSOR

Active options will have a solid box on the right hand side of the display. No box indicates that the option is not selected.

*If you press **SHOW/OK** while the option is displayed, the box will appear or disappear to reflect your selection.*

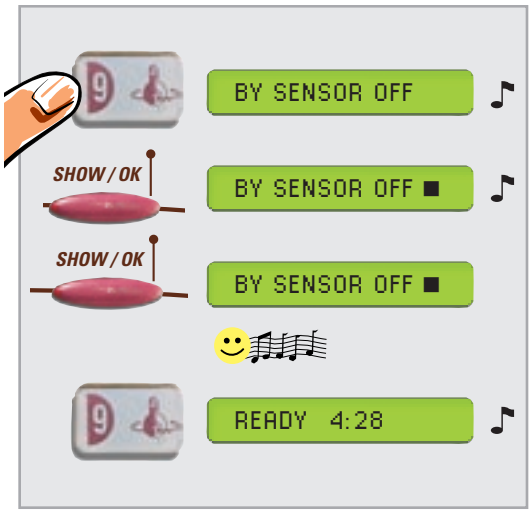
By Timer

This indicates that BY TIMER ON *is currently selected. If you wish to change this option:*



By Sensor

This indicates that BY SENSOR ON *is currently selected. If you wish to change this option:*



Section 8 – Maintenance

8.1 PowerMax Battery Replacement

PowerMax uses rechargeable NiCad batteries to ensure its proper operation during a power failure. These batteries have been designed to provide many years of use, but, should you ever see CPU LOW BATTERY *on your LCD display, these batteries would need replacing. To ensure the proper batteries are used and installed correctly, you should contact your installer to perform this service.*

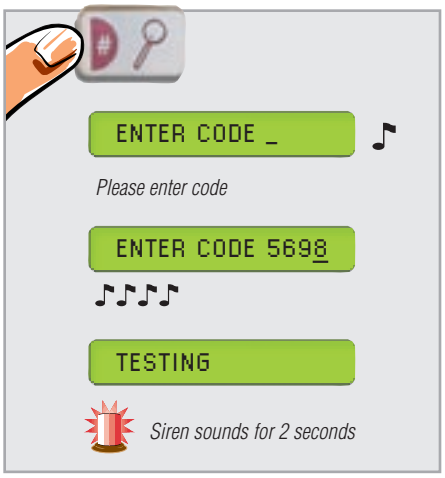
8.2 Sensor Battery Replacement

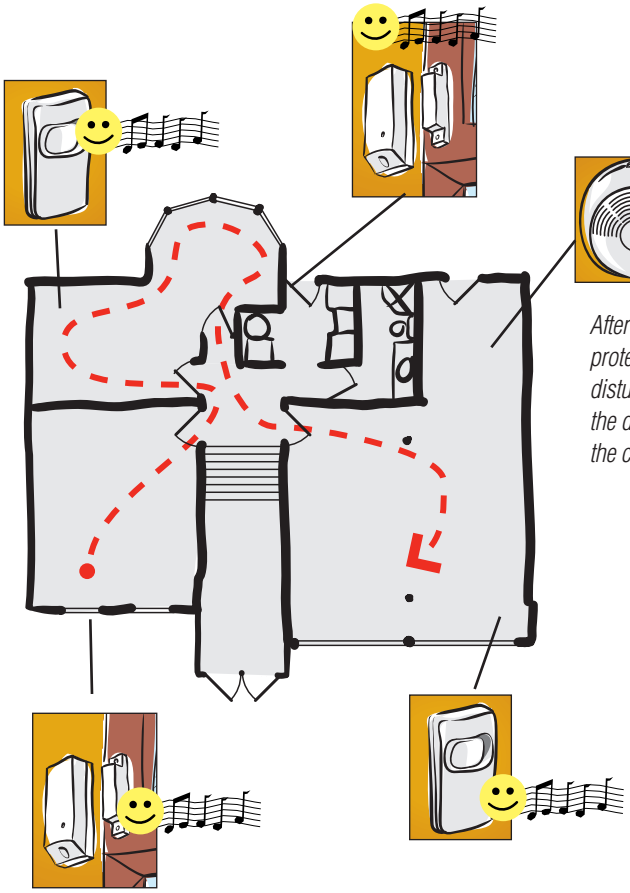
PowerCode sensors and devices use Lithium battery cells designed to provide many years of service. These batteries will require replacement at some time. The sensors or devices respective manuals should consulted for proper battery replacement guidelines.

8.3 Conducting a Walk Test

The walk test is an indispensible operation by which you verify the proper operation of every sensor in the protected site without disturbing your neighbors with loud sirens or speakers.This test must be conducted once per week and should include all sensors in all zones.

***NOTE:** During the test period, 24 hour zones will not cause an alarm if violated, but, fire zones will function normally.*





After initiating the test, walk through the protected premises. Every time a sensor is disturbed, a happy melody will play and the disturbed zone will display briefly on the control panel.

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