IntegrAlarm

IA-1000 WIRELESS SECURITY SYSTEM

CONTROL PANEL MODEL IA-CP1

USER GUIDE

February 2004

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General

1.1 IntegrAlarm Wireless Alarm System Overview

The IntegrAlarm wireless security system consisting of a Control Panel and a number of wireless peripheral units. This is a two way system operating on the ISM wireless band of 902-928 MHz, in frequency hopping mode, transmitting short (about 10 ms) packets of data, with each packet transmitted on a different frequency. Every packet is validated by means of a 16 bits CRC and ARQ (Autometic Repeat Request) ensure a new concept of reliability in wireless security systems. Time and frequency synchronization is maintained by a synchronization signal transmitted by the system Control Panel to the various peripherals every 3 minutes. The system operates on 56 pseudo random selected channels.

The IntegrAlarm Control Panel includes a digital communicator for reporting of events to the Central Station and a voice communicator for reporting of events to up to six regular PSTN subscribers.

The IntegrAlarm System offers several options for access to the operational system functions:

- By means of the control panel keypad and display.

- By means of a hand-held remote control (with up to five functions).

- By means of any local or remote PSTN telephone.

- By means of a local PC.

- By means of a remote PC.

Voice guidance and voice help (optional dual-language) ensure ease of system operation in all access options listed above. A voice mailbox is also available.

The IntegrAlarm is designed for easy and quick installation; it can be programmed by any person with minimal computer skills, on a local PC with IntegrAlarm programming software. The system can also be installed and programmed by means of the Control Panel keypad and display.

Technical assistance for installation and programming can be obtained from the Central Station service provider or the EMTS company web site. Upload/download of the complete Control Panel setup may be implemented by the Central Station or by a PC with the IntegrAlarm software package.

In its present configuration, the system includes five types of peripheral units:

Door / window sensor IntegrAlarm model IA-DWC1.

PIR sensor IntegrAlarm model IA-PIR1.

Smoke detector IntegrAlarm model IA-SMK1.

Handheld 5 functions keyfob IntegrAlarm model IA-FOB1.

Remote siren IntegrAlarm model IA-SRN1.

Installation instructions for the IntegrAlarm peripherals appear in the User and Installer Manuals for the respective units.

1.2 Security Characteristics

- Up to 64 distinct wireless zones (sensors) and 1 wired zone: Each zone is identified by number and name (zone names are assigned by installer).

- Multiple arming modes: AWAY, HOME, AWAY-INSTANT, HOME-INSTANT and LATCHKEY.

- Reporting destinations: Events of each category (panic, fire, medical, burglary, alert, arrival) are reported automatically to the central monitoring station.

- The IntegrAlarm can be accessed from a remote telephone, to arm or disarm the system and receive system status information.

- Voice guidance: Users are guided by pre-recorded announcements and instructions, heard via the control panel speaker or a remote telephone.

- Message exchange: Short verbal messages may be recorded by any user. On arrival, each user can automatically receive any messages left for him. Messages may also be collected by remote telephone.

- Electrical device control: X-10 modules can be programmed to control specific lights/appliances within the building.

- Remote control from control panel, keyfob or telephone: PGM (programmable) modules can be used to control gate mechanisms, courtesy lighting and other devices outside the building.

- A DAA (Direct Access Arrangement) with capacitive coupling to a DSP provide all PSTN functions including all pulse, DTMF and FSK communication protocols. A 2400 baud fast data transfer modem for remote programming. The DSP includes Telephone Line Monitor (TLM) that monitors continuously the status of the PSTN line.

- Fully programmable control panel for a wide range of security options.

The IntegrAlarm control panel meets the following SIA standards:

- ANSI/SIA CP-01-2000 Control Panel standard – False Alarm Reduction Feature Standard.

- SIA DC-02 Digital Communication Protocols for SIA pulse protocols P1, P2, P3, P4, SIA DTMF protocol and SIA FSK protocols (Level 1 and partially Level 3)

- SIA DC-05 Digital Communication – Ademco (R) Contact ID Dialer Protocol Standard.

- SIA AV-01 Audio Verification Standard.

1.3 Wireless Specifications

Operating frequency band – ISM 902-928 MHz.

Mode of operation – frequency hopping; every data packet is transmitted on a different pseudo random selected frequency.

Number of hopping frequencies – 56

Channel spacing – 350 KHz

Data packet transmission duration – less than 10 milliseconds.

Data packet validity check – CRC.

Transmission and reception verification – two-way communication; each received packet is acknowledged and an automatic repeat request (ARQ) in case of unacknowledged data packet.

Automatic self-test (transmission of a data packet and receipt of acknowledgment).

1.4 General Specifications

Power source – mains, 120 / 9 VAC UL approved isolation transformer.

Back-up battery – 6 X 1.2 volt NiCd batteries, size AA, sufficient for 4 hours of operation in case of mains failure. The back-up battery is automatically charged when mains voltage is restored. Charge time: 24 hours from fully discharged to fully charged.

Environmental conditions – 0 to +45 deg. C, 15 to 90 % RH.

Dimensions: 220 mm max H x 186 mm max W x 57 mm D.

Weight: 300 g.

2   FCC Compliance & Statements

2.1   FCC Part 15 Compliance Statement

The FCC Wants You to Know

This equipment 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 a residential installation. 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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

a) Reorient or relocate the receiving antenna.

b) Increase the separation between the equipment and receiver.

c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

d) Consult the dealer or an experienced radio technician.

FCC ID: RUF150704

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.

FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

Instructions concerning human exposure to radio frequency electromagnetic fields.

To comply with FCC Section 1.307 (b)(1) for human exposure to radio frequency electromagnetic fields, implement the following instruction:

A distance of at least 20cm. between the equipment and all persons should be maintained during the operation of the equipment.

2.2 FCC Part 68 Statements

a. This equipment complies with Part 68 of the FCC rules and requirements adopted by ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US: AAAEQ##TXXXX. If requested this number must be provided to the telephone company.

b. Facility Interface Codes ("FIC"): 02LS2. Service Order Codes ("SOC"): 9.0Y

c. Screw terminals are used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. It is designed to be connected to a compatible modular jack that is also compliant. For shared telephone line (premises telephones and the security system) an RJ31X junction box must be used at the telephone company cable entrance into the premises.

d. REN - NA

e. If the IA-CP1 Control Panel for security systems causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't 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 it is necessary.

f. 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 in order for you to make necessary modifications to maintain uninterrupted service.

g. If trouble is experienced with the VPP - T1 channel recording adapter, for repair or warranty information, please contact VERINT Systems Inc, 330 South Service road, Melville, New-York, 11747, USA, phone number 001 631 9629600. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

h. user should not attempt to perform any repair in this equipment. The control panel includes telephone line monitor that gives an alarm in case of the telephone line failure.

i. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

j If your premises has specially wired alarm equipment connected to the telephone line, ensure the installation of this IA-CP1 Control Panel for security systems does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

3   System Operation

3.1   Glossary of Terms

The following terms, as used in this section, have the meanings listed alongside each term:

Alarm   There are two types of **Alarm**:

<u>Siren Alarm</u>: internal and external sirens sound, strobes flash, and the **Control Panel** reports the event by telephone to preprogrammed destinations.
<u>Silent Alarm</u>: the **Control Panel** reports the event by telephone to preprogrammed destinations without sirens or strobes.

Arming   Preparing the alarm system to issue an **Alarm** if motion is detected or if a door/window is opened within the premises. Arming modes include **Away**, **Home**, **Instant Away, Instant Home** and **Latchkey**.

Away   An **Arming** type used when the building is entirely vacated. All areas of the premises are protected.

Chime   A function which issues an audio signal when the alarm system is disarmed and a defined door is opened. The **Chime** function can be enabled and disabled.

Control Panel   An electronic unit which houses the microprocessor and circuitry used to control the alarm system, as well as the user interface (keys, display, buzzer, speaker and built-in microphone).

Disarming   Restoring the system to the normal standby state.

Entry Delay   The amount of time between entry into the building and issue of an **Alarm**. (<u>Note</u>: An alarm will not be issued if the **User ID** is entered within the **Entry Delay** period.)

Exit Delay	The amount of time between setting the system to **Away** and actual **Arming** of the system in **Away** mode.
Forced Arming	A procedure which enables **Arming** of the system when one or more **Zones** are not ready, by automatically bypassing those **Zones**.
Home	An **Arming** type used when persons are present in the building. The perimeter of the premises is protected, but interior areas of the premises are not.
Instant	The **Instant** feature enables **Arming** of the system with no **Entry Delay**.
Latchkey	A type of **Silent Alarm** mode which automatically reports the entry of certain predefined users (typically children) by telephone to preprogrammed destinations. **Latchkey** mode may be programmed to switch the system to **Home** arming a predefined time after a **Latchkey** user enters the building.
Master ID	A four-digit security access code enabling one predetermined user to perform a series of additional functions.
Quick Arming	A procedure which enables **Arming** of the system without entry of the **User ID**. The **Quick Arming** function can be enabled or disabled.
User ID	A four-digit security access code enabling the user to arm and disarm the system and receive system status information.
Zone	A specific sensor in a specific location within the system.

3.2 Control Panel Layout

A photograph of the IntegrAlarm Control Panel appears on the next page.

3.2.1 The Control Panel keypad is made of a single semi-transparent silicon rubber mask with back-light keys arranged in four groups as follows:

3.2.1.1 Three operating keys at left of keypad:

- Off (disarm) Key – disables all burglary protection.

- Away Key – arms both perimeter and interior burglary protection.

- Home Key – arms the perimeter intrusion protection but not interior burglary protection.

3.2.1.2 Standard, 4x3, dual-function telephone keys for code entry, commands and programming:

- 1/chime ON/OFF
- 2/ X10 ON/OFF
- 3/record and delete memo
- 4/mute speaker ON/OFF
- 5/PGM ON/OFF
- 6/replay memo
- 7/[unassigned]
- 8/view alarm history
- 9/delete memo
- 0/trouble report
- #/delete character 1 position left
- */pause dialing

3.2.1.3 Standard Three instant alarm keys at right of keypad:

- Panic
- Fire
- Medical

3.2.1.4 Four control keys:

- OK/NEXT key
- DOWN/RIGHT key
- UP/LEFT key
- Cancel key

3.2.1.5 Four colored LEDs located at the left side of the speaker louvers:

System State	Troubles	"READY" LED (Green)	"AC" LED (Red)	"TROUBLE" LED (Yellow)	"ARMED" LED (Red)
Disarmed	No troubles, all sensors inactive	ON	ON	OFF	OFF
Disarmed	No troubles, any sensor active	OFF	ON	OFF	OFF
Disarmed	Any trouble excluding AC	OFF	ON	Blinks (med.)	OFF
Disarmed	AC trouble	OFF	OFF	Blinks (med.)	OFF
Alarm when disarmed	x	OFF	x	X	Blinks (fast)
Exit delay	x	OFF	x	x	Blinks (slow)
Arm	x	OFF	x	OFF	ON
Alarm when armed	x	OFF	x	OFF	Blinks (fast)
Entry delay	x	OFF	x	OFF	Blinks (slow)

3.3 Arming / Disarming the System

Arming and disarming functions are implemented by means of the keys at the extreme left of the Control Panel.

3.3.1 Home / Away Arming

Home arming is used to protect persons within the building from intruders. In Home arming, perimeter areas (outside doors and windows) are protected and will issue an alarm when breached. Interior areas are not protected, enabling users to move freely within the building without issuing an alarm. (Note: issuing an alarm includes sending an alarm message to the monitoring station and activation of an internal and an external siren as defined in the system.)

Away arming is used to protect the premises when no persons are present. In Away arming, perimeter areas and interior areas are protected and will issue an alarm when breached.

To implement Home arming, press the HOME key at left of Control Panel; to implement Away arming, press the AWAY key at left of Control Panel. (Note: For arming from telephone, see Section 3.3.7 below. For arming from keyfob (which will always be in Instant mode, with no entry delay), see Section 3.3.6 below.)

If Quick Arming is not enabled (default state; see Section 3.6.4 below), an ENTER ID prompt will be displayed and an "Enter ID" voice prompt will sound. Enter your User ID.

If the ID entered at any stage of the process is incorrect, the system will respond by displaying an INCORRECT ID prompt and an "Incorrect ID" voice prompt will sound. After 1 second, an ENTER ID prompt will be displayed and an "Enter ID" voice prompt will sound. Enter your User ID. (Note: After three incorrect ID entries, the system will respond with an INCORRECT ID prompt and an "Incorrect ID" voice message, followed by an ACCESS DENIED prompt and an "Access Denied" voice message, and access to the system from the control panel will be denied for a preprogrammed interval of time.)

If the ID entered is correct, and if the system is ready, the word ARMING will be displayed on Control Panel along with a countdown time indicating

the Exit Delay. A series of beeps will sound until the countdown time reaches 0. (Note: If Away arming is implemented, user should leave the building during the Exit Delay; otherwise, once the system is armed, any movement within the building will issue an alarm.) When the Exit Delay expires, the word ARMING will be replaced by ARM HOME or ARM AWAY. When ARM HOME or ARM AWAY appears, a beep will sound and an appropriate voice message will be given. The system is now armed.

If Quick Arming is enabled, an ENTER ID prompt will not be displayed. As soon as the AWAY key is pressed, if the system is ready, the word ARMING will be displayed on Control Panel along with a countdown time indicating the Exit Delay, and the arming will proceed as in the previous paragraph.

If the system is not ready, and if Force Arming is not enabled (default state; see Section 3.6.4 below), a NOT RDY: message will be displayed, listing the number of the sensor which is not ready and the nature of the problem (OPEN, TAMPER, LOW BAT, ZONE LOST).

If the sensor which is not ready can be bypassed, a BYPASS? message will be displayed.

To bypass the faulty zone, press OK at top of Control Panel; the word ARMING will be momentarily displayed on Control Panel, and will then be replaced by ARM. When ARM appears, a beep will sound. The system is now armed.

To abort the arming (in order to remedy the problem): when the BYPASS? message is displayed, press ESC at top of Control Panel. The word DISARM will appear on Control Panel, indicating that the arming has been aborted.

If the sensor which is not ready cannot be bypassed, an OK? message will be displayed. Press OK at top of Control Panel. The word DISARM will appear on Control Panel, indicating that the arming has been aborted.

Smart Arming: This feature enables the user to arm the system by entering the User ID without having selected HOME or AWAY. When the User ID is entered with no function selected, Home arming will take place as described above. If one of the zones used to exit the building opens and closes while the system is Smart Home armed, the system will

automatically switch to Smart Away arming. (<u>Note</u>: Smart Arming cannot be implemented from a keyfob or telephone.)

3.3.2 Instant Home / Away Arming

Instant arming means that there will be no Entry Delay – that is, an alarm will be issued immediately upon entrance to the building, if the system is not disarmed from outside via keyfob or telephone.

To implement Instant arming (Home or Away), first press the HOME or AWAY key at left of Control Panel; enter User ID if required (see Section 3.3.1 above) and proceed as for normal Home / Away arming. When the series of beeps signaling the Exit Delay begins, press the HOME or AWAY key again. When the Exit Delay expires, the word ARMING will be replaced by INSTANT HOME or INSTANT AWAY. When INSTANT HOME or INSTANT AWAY appears, a beep will sound and an appropriate voice message will be given. The system is now armed in Instant mode.

(<u>Note</u>: For Instant arming from keyfob, see Section 3.3.6 below; from telephone, see Section 3.3.7 below.)

3.3.3 Disarming

To disarm the system, ensure that system is armed (ARM is displayed on Control Panel) and press the OFF key at left of Control Panel. (<u>Note</u>: For disarming from keyfob, see Section 3.3.6 below; from telephone, see Section 3.3.7 below.)

An ENTER ID prompt will be displayed and an "Enter ID" voice prompt will sound. Enter your User ID.

<u>If the ID entered at any stage of the process is incorrect</u>, the system will respond by displaying an INCORRECT ID prompt and an "Incorrect ID" voice prompt will sound. After 1 second, an ENTER ID prompt will be displayed and an "Enter ID" voice prompt will sound. Enter your User ID. (<u>Note</u>: After three incorrect ID entries, the system will respond with an INCORRECT ID prompt and an "Incorrect ID" voice message, followed by an ACCESS DENIED prompt and an "Access Denied" voice message, and access to the system from the control panel will be denied for a preprogrammed interval of time.)

If the ID entered is correct, the word DISARM will be displayed on Control Panel and a "System Disarmed" voice prompt will sound. The system is now disarmed.

(Note: If an alarm has already been issued, it will be necessary to perform the disarming operation twice – the first time will shut off the siren, and the second time will disarm the system.)

Smart Disarming: This feature enables the user to arm the system by entering the User ID without having pressed the OFF key. When the system is armed and the User ID is entered with no function selected, disarming will take place as described above. (Note: Smart Disarming cannot be implemented from a keyfob or telephone.)

3.3.4 Panic/Fire/Medical

Panic, Fire and Medical alerts can be sent from the Control Panel keyboard or from a telephone, keyfob or panic transmitter.

The following paragraphs of this section refer to the Control Panel only. (Note: For sending a Panic alert from keyfob, see Section 3.3.6 below; from telephone, see Section 3.3.7 below.)

To summon assistance by means of a Fire alert, press the Fire button (the top button) immediately to the right of the numeric keypad on the Control Panel. The system will transmit a "Fire" alarm to the monitoring station.

To summon assistance by means of a Panic alert, press the Panic button (the second button) immediately to the right of the numeric keypad on the Control Panel. The system will transmit a "Panic" alarm to the monitoring station.

To summon assistance by means of a Medical alert, press the Medical button (the third) immediately to the right of the numeric keypad on the Control Panel. The system will transmit a "Medical" alert to the monitoring station.

3.3.5 Chime Enable/Disable

The Chime function, when enabled, causes an audio signal to be issued when the alarm system is disarmed and a defined Chime door is opened

(for example, when someone enters or leaves the building or opens a door to a restricted area).

To enable the Chime function, ensure that system is disarmed (DISARM is displayed on Control Panel) and press the asterisk key followed by the "1" key. DISARM will remain displayed on Control Panel, the CHIME LED will flash green, and a "Chime On" voice prompt will sound.

To disable the Chime function, ensure that system is disarmed (DISARM is displayed on Control Panel) and press the asterisk key followed by the "1" key. DISARM will remain displayed on Control Panel, the CHIME LED will stop flashing, and a "Chime Off" voice prompt will sound.

3.3.6 Keyfob Operation

The arming, disarming, and Panic alert functions described in Sections 3.3.1 – 3.3.4 above, as well as activating various X10/PGM auxiliary appliances, can be implemented by means of a hand-held keyfob transmitter, from within the building or from up to 50 meters away.

The standard IntegrAlarm keyfob has a red LED, a green LED and five buttons: OFF, HOME, AWAY, AUX and PANIC.
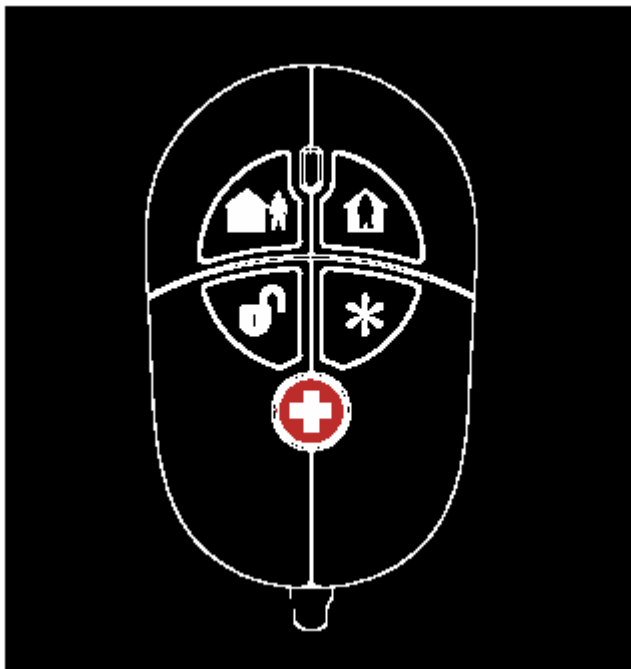
To implement Instant Home arming, press the HOME button on the keyfob. To implement Instant Away arming, press the AWAY button on the keyfob. (<u>Note</u>: Home and Away arming from keyfob will always be in Instant mode.)

To disarm the system, press the OFF button on the keyfob.

To turn ON the appliance(s) for which the specific keyfob is programmed, press the AUX button on the keyfob. (The system will automatically turn OFF the appliance(s) in question after a preprogrammed interval of time.)

For all of the above functions in this section, the red LED on the keyfob will flash when the button is pressed, and the green LED will flash when confirmation is received from the system.

(<u>Note</u>: In all types of arming by keyfob, <u>if the system is not ready</u>, the green LED will <u>not</u> flash, and <u>the system will not be armed.</u>)

To summon assistance by means of a Panic alert, press the PANIC button on the keyfob. The system will transmit a "Panic" alert to the monitoring station.

3.3.7 Telephone Operation

The arming, disarming and alert functions described in Sections 3.3.1 – 3.3.4 above, as well as activating and deactivating X10/PGM auxiliary appliances, can be implemented by means of a cordless or remote telephone, from within or outside the building. In addition, the telephone can be used to obtain system status reports.

To implement an arming or disarming function, dial the telephone number of the alarm system. The system will respond with an "Enter ID" voice prompt. Enter your User ID.

<u>If the ID entered at any stage of the process is incorrect</u>, the system will respond with an "Incorrect ID" voice message, followed by an "Enter ID" voice prompt. Enter your User ID. (<u>Note</u>: After three incorrect ID entries, the system will respond with an "Incorrect ID" voice message, followed by an "Access Denied" voice message, and telephone access to the system will be denied for a preprogrammed interval of time.)

If the ID entered is correct, the system will respond with an "OK" voice message; proceed to implement the desired function as set forth below.

To disarm the system, dial *10. An "Enter ID" voice prompt will sound. Enter your User ID. A "System Disarmed" voice prompt will sound. The system is now disarmed.

(Note: If an alarm has already been issued, first dial *8 to disable the siren. A "Done" voice prompt will sound and the siren will stop. Now dial *10 to disarm the system.)

To implement Away arming, dial *11. To implement Instant Away arming, dial *12. If Quick Arming is not enabled (default state; see Section 2.6.4 below), an "Enter ID" voice prompt will sound. Enter your User ID. If the ID entered is correct (or if Quick Arming is enabled), and if the system is ready, a "System armed in Away (or Instant Away) mode" voice prompt will sound. The system is now armed.

To implement Home arming, dial *13 To implement Instant Home arming, dial *14. If Quick Arming is not enabled (default state; see Section 2.6.4 below), an "Enter ID" voice prompt will sound. Enter your User ID. If the ID entered is correct (or if Quick Arming is enabled), and if the system is ready, a "System armed in Home (or Instant Home) mode" voice prompt will sound. The system is now armed.

(Note: In all types of arming by telephone, if the system is not ready, a "Not ready" message, followed by the number of the zone – for example, "Not ready zone 4" – will sound, and the system will not be armed.)

To obtain a system status report, dial *15.

To activate a PGM / X-10 module, dial *6, followed by the number of the desired module. (Example: to activate X-10 module 4, dial *64.)

To deactivate a PGM / X-10 module, dial *7, followed by the number of the desired module. (Example: to deactivate X-10 module 4, dial *74.)

To obtain help with telephone commands, dial *9. The first help sentence will be heard. To hear the next help sentence, press * again and so forth.

To listen in to the premises **from PSTN only**, dial *3. To speak to the inhabitants through the system speakers **from PSTN only**, dial *1.

To summon assistance by means of a Fire alert **from cordless telephone only**, dial **1. The system will transmit a pre-recorded "Fire" message to the monitoring station.

To summon assistance by means of a Panic alert **from cordless telephone only**, dial **2. The system will transmit a pre-recorded "Panic" message to the monitoring station.

To summon assistance by means of a Medical alert **from cordless telephone only**, dial **3. The system will transmit a pre-recorded "Medical" message to the monitoring station.

After completing all desired operations **from PSTN only**, dial *99. A "Goodbye" voice prompt will sound, and the call to the alarm system will be disconnected. (To terminate use of cordless telephone, just hang up.)

A summary of commands that can be used from cordless or remote telephones appears in the following table.

Code	Function	Comments
[*] [10]	Disarm system	
[*] [11]	Away	Arms perimeter and interior zones, with entry/exit delay.
[*] [12]	Instant Away	Arms perimeter and interior zones, without entry/exit delay.
[*] [13]	Home	Arms perimeter zones only, with entry delay.
[*] [14]	Instant Home	Arms perimeter zones only, without entry delay.
[*] [15]	Report status	
[*] [6] [x]	Activate PGM/X10 module x	x= 1 to 8 for X10, x= 9 to 10 for PGM
[*] [7] [x]	Deactivate PGM/X10 module x	x= 1 to 8 for X10, x= 9 to 10 for PGM

Code	Function	Comments
[*] [8]	Disable all sirens	Indoor, outdoor and buzzer.
[*] [9]	Help	Activates the first help sentence. Pressing [#] plays the next sentence.
[*] [3]	"Listen-in" function	Allows user to listen to the premises or talk to the inhabitants. Any other command terminates listen-in or speak-out modes. **Valid for PSTN only.**
[*] [1]	"Speak-out" function	
[*] [99]	Disconnect	End of remote telephone session. **Valid for PSTN only.**
[*] [*] [1]	Fire alarm	**Valid for cordless telephone only.**
[*] [*] [2]	Panic alarm	
[*] [*] [3]	Medical alarm	

3.4 Numeric Keypad Shortcut Functions

When the system is disarmed, a number of functions can be performed by any user, by means of the numeric keypad at center of control panel.

3.4.1 Setting Voice Message Volume

To increase voice message volume, press * and the UP arrow above the numeric keypad at top of Control Panel.

To decrease, press * and the DOWN arrow above the numeric keypad at top of Control Panel.

3.4.2 Operating X-10 Units

To change the state of any X-10 unit (to turn it ON if it is OFF or OFF if it is ON), press * and 2 on the numeric keypad at center of Control Panel. Screen will show:

```
                X-10 No: 1
               APPLIANCE 1
```

Use arrow keys at top of Control Panel to scroll to the desired X-10 unit number and press OK at top of Control Panel.

A voice prompt will sound: "APPLIANCE [x] OPEN" if the appliance has been turned ON, and "APPLIANCE [x] CLOSED" if the appliance has been turned OFF ([x] = appliance number).

3.4.3 Recording/Playing Voice Memos

(Note: This section refers to voice memos left for users. Recording and playback of voice prompts are discussed in Sections 2.5.4 and 2.5.5 below.)

To record a voice memo for users, press * and 3 on the numeric keypad at center of Control Panel. Screen will show:

```
             RECORD A MESSAGE
              Start ↵ Delete #
```

Press OK and start recording your message. To stop recording, press OK again.

To delete a recorded voice memo, press Delete. The recorded message will be deleted.

To play a voice memo for users, press * and 6 on the numeric keypad at center of Control Panel. Screen will show:

```
              PLAY A MESSAGE
                 Start ↵
```

Press OK to start playing the message. To stop playback, press OK again.

3.4.4 Muting Speaker

To mute speaker, press * and 4 on the numeric keypad at center of Control Panel. Screen will show:

```
            MUTE SPEAKER
               * ON
```

From this point on, voice prompts will not sound at any stage until muting is removed.

To remove muting, press * and 4 again. Screen will show:

```
            MUTE SPEAKER
               * OFF
```

3.4.5 Operating PGM Units

To change the state of any PGM unit (to turn it ON if it is OFF or OFF if it is ON), press * and 5 on the numeric keypad at center of Control Panel. Screen will show:

```
             PGM No: 1
            APPLIANCE 1
```

Use arrow keys at top of Control Panel to scroll to the desired PGM unit number and press OK at top of Control Panel.

A voice prompt will sound: "APPLIANCE [x] OPEN" if the appliance has been turned ON, and "APPLIANCE [x] CLOSED" if the appliance has been turned OFF ([x] = appliance number).

3.4.6 View Alarm History

To view a history of the last 16 system alarms, press * and 8 on the numeric keypad at center of Control Panel. Screen will show the date, time and type of alarm, and an appropriate voice prompt will sound.

To remove alarm history from display and return to opening screen, press Esc.

3.4.7 Trouble Report

To obtain a report of trouble in system when FAULT LED is flashing, press * and 0 on the numeric keypad at center of Control Panel. Screen will show the date, time and type of trouble, and an appropriate voice prompt will sound.

To remove trouble report from display and return to opening screen, press Esc.

3.5 Additional User Functions

In addition to the arm/disarm and numeric keypad functions described above, the IntegrAlarm enables a wide range of other functions. Some of these can be implemented by any user; others can only be implemented by the user predefined as Master.

Master functions are discussed in Section 2.6 below.

If an ordinary User ID or an incorrect code is entered for any Master function, or if an incorrect code is entered for any User function, an INCORRECT ID prompt will be displayed and an "Incorrect ID" voice prompt will sound. After 1 second, an ENTER ID prompt will be displayed and an "Enter ID" voice prompt will sound. (Note: After three incorrect ID entries, the system will respond with an INCORRECT ID prompt and an "Incorrect ID" voice message, followed by an ACCESS DENIED prompt and an "Access Denied" voice message, and access to the system from the control panel will be denied for a preprogrammed interval of time.)

These functions are viewed from the Main Menu. To access the Main Menu, press OK at top of Control Panel when the system is disarmed. Screen will show:

```
          MAIN MENU
           1: USER
```

An ENTER ID prompt will be displayed and an "Enter ID" voice prompt will sound.

Enter your User ID.

If the User ID has been correctly entered, screen will show:

```
          USER MENU
        1. ZONE BYPASS
```

(Note: At any point in Section 3.5, pressing OK at top of Control Panel will move one level downward in the menu structure; pressing ESC at top of Control Panel will move one level upward in the menu structure.)

3.5.1 Bypass

This function is used to bypass any alarm zone whose activation is not desired, and to clear any bypass that has already been set.

After the User ID has been entered from the User Menu, screen will show:

```
        USER MENU
     1. ZONE BYPASS
```

Press OK.

To set a bypass, press OK. Screen will show:

```
    ZONE 1      No Bypass
    FRONT DOOR
```

Use arrow keys at top of Control Panel to scroll to the desired zone number, or use numeric keypad at center of Control Panel to enter desired zone number, and press OK. If bypass is successful, screen will show:

```
    ZONE 1           Bypass
    FRONT DOOR
```

and a "Zone bypassed" voice prompt will sound.

If bypass is unsuccessful, screen will display:

```
      Zone 1 Bypass
          FAILED
```

Press OK to confirm. Screen will now again show:

```
    ZONE 1      No Bypass
    FRONT DOOR
```

Repeat until all desired bypasses have been set.

To clear a bypass, use arrow keys at top of Control Panel to scroll to the desired zone number, or use numeric keypad at center of Control Panel

to enter desired zone number, and press OK. If bypass clearing is successful, screen will show:

```
    ZONE 1          No Bypass
    FRONT DOOR
```

and a "Zone not bypassed" voice prompt will sound.

If bypass clearing is unsuccessful, screen will display:

```
    Zone 1 Unbypass
         FAILED
```

Press OK to confirm. Screen will now again show:

```
    ZONE 1              Bypass
    FRONT DOOR
```

Repeat until all desired bypasses have been cleared.

To leave the Bypass function, press ESC.

3.5.2 View Troubles

To view a history of trouble (malfunction) and miscellaneous events (low battery alerts for sensors, etc.), use arrow keys at top of Control Panel to scroll through User functions on the User Menu to the View Troubles function. Screen will show:

```
       USER MENU
       1. ZONE BYPASS
```

Press OK. If there is no trouble history, screen will show:

```
    NO TROUBLES
```

If there is a trouble history, screen will show the most recent trouble incident with the date and type of trouble. If the trouble applies to a specific zone, the zone number will also be designated.

Use DOWN arrow key at top of Control Panel to scroll through trouble events.

3.5.3 Alarm History

To view a history of alarm events, use arrow keys at top of Control Panel to scroll through User functions on the User Menu to the Alarm History function. Screen will show:

```
        USER MENU
      3: ALARM EVENTS
```

Press OK. If there is no alarm history, screen will show:

```
        NO ALARMS

```

If there is an alarm history, screen will show the most recent alarm incident with the date and type of alarm. If the alarm applies to a specific zone, the zone number will also be designated.

Use DOWN arrow key at top of Control Panel to scroll through alarm events.

3.5.4 Memo

(Note: The functions in this section are identical to those appearing in Section 2.4.3 above.)

To record, play or delete a voice memo for users, use arrow keys at top of Control Panel to scroll through User functions on the User Menu to the Memo function. Screen will show:

```
        USER MENU
         4: MEMO
```

Press OK. Screen will show:

```
        MEMO MENU
      1. MEMO RECORD
```

Press OK. Screen will show:

```
     RECORD A MESSAGE
      Start ↵ Delete #
```

Press OK and start recording your message. To stop recording, press OK again.

To delete the last recorded voice memo, press Delete. The recorded message will be deleted.

To play a voice memo for users, use arrow keys at top of Control Panel to scroll through Memo functions on the Memo Menu to the Memo Play function. Screen will show:

```
        MEMO MENU
       2. MEMO PLAY
```

Press OK. Screen will show:

```
      PLAY A MESSAGE
          Start ↵
```

Press OK to start playing the message. To stop playback, press OK again.

To delete a voice memo, use arrow keys at top of Control Panel to scroll through Memo functions on the Memo Menu to the Memo Delete function. Screen will show:

```
        MEMO MENU
      3. MEMO DELETE
```

Press OK. Screen will show:

```
      DELETE MEMO?
   No - x↵        Yes - ↵
```

Press OK to delete the message. Press Cancel if deletion is not desired.

3.5.5 X10 ON/OFF

(Note: The functions in this section are identical to those appearing in Section 3.4.2 above.)

To turn X10 appliances connected to the system ON and OFF, use arrow keys at top of Control Panel to scroll through User functions on the User Menu to the X10 ON/OFF function. Screen will show:

```
┌─────────────────────────────┐
│         USER MENU           │
│        5: X10 ON/OFF        │
└─────────────────────────────┘
```

Press OK. Screen will show:

```
┌─────────────────────────────┐
│          X10 No: 1          │
│         APPLIANCE 1         │
└─────────────────────────────┘
```

To turn the appliance OFF, press OK. An "Appliance 1 closed" voice prompt will sound.

To turn the appliance ON, press OK. An "Appliance 1 open" voice prompt will sound.

Press DOWN arrow key to scroll to the next appliance. Screen will show:

```
┌─────────────────────────────┐
│          X10 No: 2          │
│         APPLIANCE 2         │
└─────────────────────────────┘
```

Repeat until all desired X10 appliances have been turned ON or OFF.

3.5.6 PGM ON/OFF

(Note: The functions in this section are identical to those appearing in Section 3.4.5 above.)

To turn PGM appliances connected to the system ON and OFF, use arrow keys at top of Control Panel to scroll through User functions on the User Menu to the PGM ON/OFF function. Screen will show:

```
┌─────────────────────────────┐
│         USER MENU           │
│        6: PGM ON/OFF        │
└─────────────────────────────┘
```

Press OK. Screen will show:

```
┌─────────────────────────────┐
│          PGM No: 1          │
│         APPLIANCE 1         │
└─────────────────────────────┘
```

To turn the appliance OFF, press OK. An "Appliance 1 closed" voice prompt will sound.

To turn the appliance ON, press OK. An "Appliance 1 open" voice prompt will sound.

Press DOWN arrow key to scroll to the next appliance. Screen will show:

```
PGM No: 2
APPLIANCE 2
```

Repeat until all desired PGM appliances have been turned ON or OFF.

3.5.7 Door Chime

To turn door chime ON and OFF, use arrow keys at top of Control Panel to scroll through User functions on the User Menu to the Door Chime function. Screen will show:

```
USER MENU
7: DOOR CHIME
```

Press OK. Screen will show:

```
DOOR CHIME
OFF          ↓
```

To confirm that chime should be OFF, press OK. A "Chime OFF" voice prompt will sound.

To turn chime ON (when screen shows OFF), press DOWN arrow. The word OFF will change to ON. Press OK. A "Chime ON" voice prompt will sound.

To turn chime OFF (when screen shows ON), press UP arrow. The word ON will change to OFF. Press OK. A "Chime OFF" voice prompt will sound.

3.5.8 Mute Speaker

To turn speaker mute function ON and OFF, use arrow keys at top of Control Panel to scroll through User functions on the User Menu to the Mute Speaker function. Screen will show:

```
USER MENU
8: MUTE SPEAKER
```

Press OK. Screen will show:

```
┌─────────────────────────────────────┐
│          MUTE SPEAKER               │
│       OFF          ↓                │
└─────────────────────────────────────┘
```

To confirm that mute speaker function should be OFF, press OK.

To turn mute speaker function ON (when screen shows OFF), press DOWN arrow. The word OFF will change to ON. Press OK.

To turn mute speaker function OFF (when screen shows ON), press UP arrow. The word ON will change to OFF. Press OK.

3.5.9 LCD Contrast

To adjust LCD contrast on Control Panel display, use arrow keys at top of Control Panel to scroll through User functions on the User Menu to the LCD Contrast function. Screen will show:

```
┌─────────────────────────────────────┐
│           USER MENU                 │
│        9: LCD CONTRAST              │
└─────────────────────────────────────┘
```

Press OK. Screen will show:

```
┌─────────────────────────────────────┐
│          LCD CONTRAST               │
│     <UP>            <DOWN>          │
└─────────────────────────────────────┘
```

Use arrow keys at top of Control Panel to adjust LCD contrast to desired level and press OK.

3.6 Master Functions

The following functions can only be implemented by the user predefined as Master.

If an ordinary User ID or an incorrect code is entered for any Master function, an INCORRECT ID prompt will be displayed and an "Incorrect ID" voice prompt will sound. After 1 second, an ENTER ID prompt will be displayed and an "Enter ID" voice prompt will sound. (Note: After three incorrect ID entries, the system will respond with an INCORRECT ID prompt and an "Incorrect ID" voice message, followed by an ACCESS DENIED prompt and an "Access Denied" voice message, and access to the system from the control panel will be denied for a preprogrammed interval of time.)

These functions are viewed from the Main Menu. To access the Main Menu, press OK at top of Control Panel when the system is disarmed. Screen will show:

```
┌─────────────────────────────────┐
│          MAIN MENU              │
│          1: USER                │
└─────────────────────────────────┘
```

Use DOWN arrow key at top of Control Panel to obtain the following screen:

```
┌─────────────────────────────────┐
│          MAIN MENU              │
│          2: MASTER              │
└─────────────────────────────────┘
```

Press OK.

An ENTER ID prompt will be displayed and an "Enter ID" voice prompt will sound.

Enter your Master ID.

If the Master ID has been correctly entered, screen will show:

```
┌─────────────────────────────────┐
│          Master MENU            │
│          1. ADJUST CLOCK        │
└─────────────────────────────────┘
```

(Note: At any point in Section 3.6, pressing OK at top of Control Panel will move one level downward in the menu structure; pressing ESC at top of Control Panel will move one level upward in the menu structure.)

3.6.1 Adjust Clock

From the Master Menu, use arrow keys at top of Control Panel to scroll to the Adjust Clock function. Screen will show:

```
┌─────────────────────────────────┐
│          MASTER MENU            │
│          1. ADJUST CLOCK        │
└─────────────────────────────────┘
```

Press OK. Screen will show:

```
┌─────────────────────────────────┐
│          01: TIME hh-mm-ss      │
└─────────────────────────────────┘
```

followed by the time. Use numeric keypad at center of Control Panel to adjust time and press OK. Screen will show:

```
            02: DATE mm-dd-yy
```

followed by the date. Use numeric keypad at center of Control Panel to adjust date and press OK. Screen will show:

```
            03: 24 HOUR CLOCK
              Yes
```

If 24-hour clock is desired, press OK. If not, use arrow keys at top of Control Panel to change "Yes" to "No" and then press OK.

To leave the Adjust Clock function, press ESC.

3.6.2 Event Logger

To view a history of alarms, arming/disarming operations, bypasses set and cleared, trouble (malfunctions) and miscellaneous events (low battery alerts for sensors, etc.), press OK from the Main Menu. The User Menu will be displayed:

```
            MASTER MENU
            2: EVENT LOGGER
```

Press OK. Screen will show:

```
            EVENT LOGGER
              1. All events
```

To select a display of all events (Alarm/Restore, Arm/Disarm, Bypass, Trouble and Misc. Events), press OK.

If there are no events at all recorded in the system, screen will show:

```
            NO EVENTS
```

If there are any events, screen will show the most recent event. (Note: screens depicting events are shown in the paragraphs below.) Use arrow keys at top of Control Panel to scroll through events.

To select a specific type of event (Alarm/Restore, Arm/Disarm, Bypass. Trouble or Misc. Events), use arrow keys at top of Control Panel to scroll to the desired type of event.

To view Alarm/Restore events, scroll until screen shows:

```
        EVENT LOGGER
        2. Alarm/Restore
```

Press OK. If there are no Alarm/Restore events recorded in the system, screen will show:

```
        NO EVENTS
```

If there are any events, screen will show the most recent event of the type selected. The first line of the display shows the date and time of the event; the second line shows the number of the event, followed by "e" for an event or "r" for a restore, and a description of the event.

Alarm/Restore events include:

BURGLARY
PANIC
FIRE
MEDICAL
DURESS
TAMPER
FALSE CODE

Example:

```
        SEP.06,02:05:44A
        01e: ALARM
```

Use arrow keys at top of Control Panel to scroll through events.

To view additional parameters (location of event or user initiating event, depending on type of event), press OK from any displayed event. Example:

```
        Location:
        MASTER BEDROOM
```

Pressing OK again restores the display of the event in question.

To view Arm/Disarm events, scroll until screen shows:

```
┌─────────────────────────────────┐
│        EVENT LOGGER             │
│        3. Arm/Disarm            │
└─────────────────────────────────┘
```

Press OK. If there are no Arm/Disarm events recorded in the system, screen will show:

```
┌─────────────────────────────────┐
│        NO EVENTS                │
│                                 │
└─────────────────────────────────┘
```

If there are any events, screen will show the most recent event of the type selected, as described above. Arm/Disarm events include:

ARM_HOME
ARM_AWAY
ARM_QUICK
ARM_AUTO
ARM_REMOTE
ARM_KEYFOB
DISARM
DISARM_AUTO
DISARM_REMOTE
DISARM_KEYFOB

Example:

```
┌─────────────────────────────────┐
│       SEP.06,02:05:44A          │
│       01e: ARM AWAY             │
└─────────────────────────────────┘
```

Use arrow keys at top of Control Panel to scroll through events.

To view additional parameters (user initiating event), press OK from any displayed event. Example:

```
┌─────────────────────────────────┐
│       Armed by:                 │
│       MASTER                    │
└─────────────────────────────────┘
```

Pressing OK again restores the display of the event in question.

To view Bypass events, scroll until screen shows:

```
┌─────────────────────────────────┐
│        EVENT LOGGER             │
│        4. Bypass                │
└─────────────────────────────────┘
```

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Press OK. If there are no Bypass events recorded in the system, screen will show:

```
NO EVENTS
```

If there are any events, screen will show the most recent event of the type selected, as described above.

Example:

```
SEP.06,02:05:44A
01e: BYPASS
```

Use arrow keys at top of Control Panel to scroll through events.

To view user initiating event, press OK from any displayed event. Example:

```
Bypassed by:
MASTER
```

Pressing OK again displays the location of the bypass. Example:

```
Location:
FRONT DOOR
```

Pressing OK yet again restores the display of the event in question.

To view Trouble events, scroll until screen shows:

```
EVENT LOGGER
5. Trouble
```

Press OK. If there are no Trouble events recorded in the system, screen will show:

```
NO EVENTS
```

If there are any events, screen will show the most recent event of the type selected, as described above. Trouble events include:

AC TROUBLE
DC TROUBLE
PHONE TROUBLE
LOGGER FULL
X10 TROUBLE
RTC TROUBLE (real time clock)

Example:

```
        SEP.06,02:05:44A
     01e: PHONE TROUBLE
```

Use arrow keys at top of Control Panel to scroll through events.

Note: no additional parameters are available for Trouble events.

To view Misc. events, scroll until screen shows:

```
        EVENT LOGGER
         6. Misc. Events
```

Press OK. If there are no Misc. events recorded in the system, screen will show:

```
        NO EVENTS
```

If there are any events, screen will show the most recent event of the type selected, as described above. Misc. events include:

INSTALL
SENSOR BATTERY
SENSOR LOST

Example:

```
        SEP.06,02:05:44A
     01e: SENSOR BATTERY
```

Use arrow keys at top of Control Panel to scroll through events.

To view additional parameters (location of event), press OK from any displayed event. Example:

```
┌─────────────────────────────────┐
│           Location:             │
│        MASTER BEDROOM           │
└─────────────────────────────────┘
```

Pressing OK again restores the display of the event in question.

To leave any category and return to the Event Logger opening screen, press ESC. To leave the Event Logger function, press ESC again.

3.6.3 Access Codes

This function is used to set Master ID, User ID and special ID code numbers.

From the Master Menu, use arrow keys at top of Control Panel to scroll to the Access Codes function. Screen will show:

```
┌─────────────────────────────────┐
│          MASTER MENU            │
│         3. Access Codes         │
└─────────────────────────────────┘
```

Press OK. Screen will show:

```
┌─────────────────────────────────┐
│          ACCESS CODES           │
│          1. Master Code         │
└─────────────────────────────────┘
```

To confirm or adjust master code, press OK. Screen will show:

```
┌─────────────────────────────────┐
│        01: MASTER CODE          │
│              1111               │
└─────────────────────────────────┘
```

Use numeric keypad at center of Control Panel to adjust master code and press OK, or simply press OK to confirm master code. The ACCESS CODES screen will again be displayed.

To confirm or adjust user codes, press DOWN arrow key until screen shows:

```
┌─────────────────────────────────┐
│          ACCESS CODES           │
│          2. User Codes          │
└─────────────────────────────────┘
```

Press OK. Screen will show:

```
┌─────────────────────────────────┐
│        01: 1st USER CODE        │
│              1111               │
└─────────────────────────────────┘
```

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Use numeric keypad at center of Control Panel to adjust user code and press OK, or simply press OK to confirm user code. Repeat for users 2-6, pressing OK each time. When all user codes have been confirmed or adjusted, press ESC. The ACCESS CODES screen will again be displayed.

To confirm or adjust special codes (one-time codes, duress code, phone code), press DOWN arrow key until screen shows:

```
        ACCESS CODES
        3. Misc. Codes
```

Press OK. Screen will show:

```
    01: 1st ONE TIME CODE
            1111
```

Use numeric keypad at center of Control Panel to adjust user code and press OK, or simply press OK to confirm user code. Repeat for second one-time code, duress code and phone code, pressing OK each time.

To leave the Access Codes function, press ESC.

3.6.4 Arm Options

This function is used to set Auto Arm, Auto Disarm, Quick Arm, Force Arm and Latchkey Disarm functions.

From the Master Menu, use arrow keys at top of Control Panel to scroll to the Arm Options function. Screen will show:

```
        MASTER MENU
        4. Arm Options
```

Press OK. Screen will show:

```
        01: AUTO ARM
            00:00 A
```

Use numeric keypad at center of Control Panel to adjust auto arm time and press OK. (If auto arm is not desired, simply press OK). Screen will show:

```
          02: AUTO DISARM
              00:00 A
```

Use numeric keypad at center of Control Panel to adjust auto disarm time and press OK. (If auto disarm is not desired, simply press OK). Screen will show:

```
          03: QUICK ARM
              Yes
```

If Quick Arm is not desired, use arrow keys at top of Control Panel to change "Yes" to "No" and press OK. (If Quick Arm is desired, simply press OK). Screen will show:

```
          04: FORCE ARM
              No
```

If Force Arm is desired, use arrow keys at top of Control Panel to change "No" to "Yes" and press OK. (If Force Arm is not desired, simply press OK). Screen will show:

```
          05:  LATCHKEY DISARM
                 Yes
```

If Latchkey Disarm is not desired, use arrow keys at top of Control Panel to change "Yes" to "No" and press OK. (If Latchkey Disarm is desired, simply press OK).

To leave the Arm Options function, press ESC.

3.6.5 System Test

This function is used to test the system battery.

From the Master Menu, use arrow keys at top of Control Panel to scroll to the Battery Test function. Screen will show:

```
          MASTER MENU
           5. System Test
```

Press OK. Screen will show:

```
┌─────────────────────────────────┐
│         SYSTEM TEST             │
│          1. Walk Test           │
└─────────────────────────────────┘
```

This function is used to test a specific sensor. Press OK. Screen will show:

```
┌─────────────────────────────────┐
│ PLEASE ACTIVATE                 │
│ THE ZONE                        │
└─────────────────────────────────┘
```

Activate the sensor to be tested and press OK. If sensor is in good order, two alternating screens will be displayed. One will show the sensor serial number and type. The other will indicate the sensor signal level: SIGNAL LEVEL OK or SIGNAL LEVEL TOO LOW.

If the sensor is not in good order, screen will show after 2 minutes:

```
┌─────────────────────────────────┐
│ PU                              │
│ NOT FOUND                       │
└─────────────────────────────────┘
```

To test the system battery, use arrow keys at top of Control Panel to scroll through System Test functions until screen shows:

```
┌─────────────────────────────────┐
│         SYSTEM TEST             │
│          2. Battery Test        │
└─────────────────────────────────┘
```

Press OK. Screen will show:

```
┌─────────────────────────────────┐
│ TESTING BATTERY                 │
│ PLEASE WAIT…                    │
└─────────────────────────────────┘
```

After about 30 seconds, if battery is present and in good order, screen will briefly show:

```
┌─────────────────────────────────┐
│         BATTERY TEST            │
│              OK                 │
└─────────────────────────────────┘
```

If battery is missing or not in good order, screen will briefly show:

```
┌─────────────────────────────────┐
│         BATTERY TEST            │
│            FAILED               │
└─────────────────────────────────┘
```

Display will then return to opening screen.

To test the wireless siren, use arrow keys at top of Control Panel to scroll through System Test functions until screen shows:

```
            SYSTEM TEST
          3. Wireless Siren
```

Press OK. Wireless siren will sound for 5 seconds and stop.

To test the internal siren, use arrow keys at top of Control Panel to scroll through System Test functions until screen shows:

```
            SYSTEM TEST
          4. Internal Siren
```

Press OK. Internal siren will sound for 5 seconds and stop.

To test the buzzer, use arrow keys at top of Control Panel to scroll through System Test functions until screen shows:

```
            SYSTEM TEST
           5. Buzzer Test
```

Press OK. Buzzer will sound briefly.