
VISTA ***4140XMPT2***

PARTITIONED SECURITY SYSTEM with SCHEDULING

INSTALLATION INSTRUCTIONS and **PROGRAMMING GUIDE**



CONGRATULATIONS!

On Your Purchase Of The Ademco 4140XMPT2

The purpose of these Installation Instructions is to give you a complete overview of the system, and provide instructions for installing a basic system.

CONTACTING TECHNICAL SUPPORT

PLEASE,

Before you call Technical Support, be sure you:

- **READ THE INSTRUCTIONS!**
- **Check all wiring connections.**
- **Determine that the power supply and/or backup battery are supplying proper voltages.**
- **Verify your programming information where applicable.**
- **Note the proper model number of this product, and the version level (if known) along with any documentation that came with the product.**
- **Note your ADEMCO customer number and/or company name.**

Having this information handy will make it easier for us to serve you quickly and effectively.

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TABLE OF CONTENTS

PART 1. INSTALLATION INSTRUCTIONS	6
Section 1. GENERAL INFORMATION	7
SUMMARY OF SYSTEM FEATURES.....	7
System Features.....	8
Programming Features.....	9
Communication Features.....	9
INTRODUCTION TO THE PARTITIONED SYSTEM.....	10
Basic Partitioning Features.....	10
Global Partitioning Features and Resources.....	11
Partition Specific Features.....	11
SCHEDULING OVERVIEW.....	12
Section 2. ZONE CONFIGURATIONS	13
ZONE TYPES & APPLICABLE SENSORS.....	15
BASIC 9 HARD-WIRED ZONES.....	15
Zone 1.....	15
Zone 9.....	15
Zones 2 - 8.....	16
2-WIRE POLLING LOOP EXPANSION (Zones 10 through 87).....	17
Intercom Interference.....	17
Compatible Polling Loop Devices.....	18
WIRELESS EXPANSION (Zones 1-63).....	19
4280 Series Receiver.....	20
4281 Series Receiver.....	20
5881 Series Receiver.....	20
Transmitters.....	21
Wireless Zone Types.....	22
Fault Annunciation.....	22
Important Battery Notice.....	23
Compatible 5700 Series Wireless Devices.....	23
Compatible 5800 Series Wireless Devices.....	24
VOLTAGE TRIGGERS (Connector J7).....	25
Remote Keypad.....	26
Ground Start Module.....	27
Remote Console Sounder Operation.....	27
OUTPUT CONTROL (4204 Relay Module/X-10 Devices).....	28
4204 Relay Module.....	28
4300 Transformer & X-10 Devices.....	28
Examples Of Uses For Relays.....	29
Section 3. REMOTE CONSOLES, SOUNDERS & PHONE CONNECTIONS	32
REMOTE CONSOLES.....	32
6128.....	32
6139.....	32
Programming The Consoles.....	33
Mounting The Consoles.....	33
Wiring Consoles.....	33
Powering Additional Consoles.....	33
EXTERNAL SOUNDERS.....	34
Compatible Sounders.....	34
PHONE CONNECTIONS.....	34
Section 4. MOUNTING THE CONTROL, PC BOARD & LOCK	35
Mounting The 4140XMPT2 PC Board.....	35
Mounting The Cabinet Lock.....	35
Section 5. POWERING THE SYSTEM	36
Primary Power.....	36
Back-Up Power.....	36
Earth Ground Connections.....	36
Power-Up Procedure.....	36
Section 6. SETTING THE REAL-TIME CLOCK	36
Section 7. AUDIO ALARM VERIFICATION (AAV)	39
Section 8. VIDEO ALARM VERIFICATION (VAV)	41

PART 2. PROGRAMMING GUIDE	4 2
Section 1. SYSTEM LAYOUT WORKSHEETS	4 3
Section 2. GENERAL PROGRAMMING PROCEDURES	5 0
Communication Default Programming.....	50
Entering The Various Program Modes.....	50
Programming Steps.....	51
Section 3. DATA FIELD PROGRAMMING	5 2
PROGRAMMING SYSTEM-WIDE (GLOBAL) DATA FIELDS.....	52
INDEX TO PROGRAMMING FIELDS.....	53
DATA FIELD DESCRIPTIONS.....	54
PROGRAMMING PARTITION-SPECIFIC DATA FIELDS.....	61
Section 4. PROGRAMMING WITH #93 MENU MODE	6 4
ZONE PROGRAMMING.....	65
SERIAL NUMBER LEARNING/DELETING.....	66
DEVICE PROGRAMMING.....	67
RELAY PROGRAMMING.....	68
ALPHA PROGRAMMING.....	72
Section 5. SYSTEM COMMUNICATION	7 6
COMMUNICATION FORMATS.....	76
COMMUNICATION DEFAULTS.....	81
Section 6. DOWNLOADING	8 5
REMOTE DOWNLOADING.....	85
DIRECT WIRE DOWNLOADING.....	87
Section 7. #80 SCHEDULING MENU MODE	8 8
INTRODUCTION TO SCHEDULING.....	88
#80 SCHEDULING MENU MODE	92
Steps To Programming Scheduling Options.....	92
Time Windows Definitions Worksheet.....	93
Open/Close Scheduling Worksheets.....	94
Holiday Definitions & Schedule Worksheet.....	94
Daily Open/Close Worksheet.....	94
Limitation of Access by Time Worksheet.....	95
Time-Driven Event Worksheet.....	95
Basic Scheduling Menu Structure.....	97
Programming Time Windows.....	97
Open/Close Schedule.....	98
Holiday Programming.....	99
Time-Driven Event Programming.....	99
Access Control Schedules.....	101
#81 TEMPORARY SCHEDULE MENU MODE	102
Temporary schedule Worksheet.....	102
Programming Temporary Schedules.....	103
#83 USER SCHEDULING MENU MODE	104

PART 3. SYSTEM OPERATION and TESTING.....	105
Section 1. SYSTEM OPERATION	106
SECURITY ACCESS CODES	106
User Codes & Levels Of Authority.....	106
Multiple Partition Access Examples	108
To ADD a Master, Manager or Operator code.....	109
To CHANGE a Master, Manager or Operator code	110
To Delete a Master, Manager or Operator code	110
To EXIT The User Code Entry Mode.....	110
KEYPAD FUNCTIONS	111
Arming Functions	111
Access Control.....	112
Delay closing window	112
Partition "Goto" Commands	112
View Capabilities Of A User	112
Viewing Downloaded Messages.....	112
Using The Built-In User's Manual	112
Displaying Descriptors	113
Panic Keys	113
Trouble Conditions.....	113
"Check" Messages	113
Other Trouble Conditions	113
Power Failure.....	113
Section 7. EVENT LOGGING	114
Event Logging Printer Connections.....	114
Event Logging Procedures	115
Programming.....	115
Event Logging Display & Print Modes	115
Clear Event Log	116
Screen Definitions.....	116
Section 3. TESTING THE SYSTEM.....	117
Using Test Mode	117
Armed System Test	117
Turning The System Over To The User	118
Section 4. REGULATORY AGENCY STATEMENTS.....	119
Section 5. SUMMARY OF SYSTEM COMMANDS.....	120
DIP SWITCH TABLES.....	121
Section 6. SPECIFICATIONS.....	124
SUMMARY OF CONNECTIONS DIAGRAM.....	131

PART 1

INSTALLATION INSTRUCTIONS

Section 1. GENERAL INFORMATION

SUMMARY OF SYSTEM FEATURES

General Information

The following table lists the major features of the 4140XMPT2 system.

NOTE: At least one 6139 addressable alpha display console must be used with this system.

System	The 4140XMPT2 Control is a microprocessor based, programmable, partitioned system, and features EEROM memory technology (power loss does not result in the loss of information).
Zones Supported	<ul style="list-style-type: none"> • Supports up to 9 traditional wired zones of protection. • Expandable to 87 zones (consisting of combinations of wired and/or wireless zones) using 2-wire polling loop devices, and/or 5700 or 5800 series wireless transmitters. • Zones can be distributed among up to 8 logical partitions of operation.
Fire Zones	<ul style="list-style-type: none"> • Supports up to sixteen 2-wire smoke detectors (zone 1). • Other zones can be fire zones using 4-wire smoke and heat detectors and/or polling loop detectors.
Output Control	<ul style="list-style-type: none"> • Supports up to 16 devices (4204 relay modules or X-10 devices). • These devices can be put under schedule control.
Remote Consoles	<ul style="list-style-type: none"> • Supports up to sixteen addressable remote consoles (6139, 6128).
Keyswitch	Supports the Ademco 4146 keyswitch.
Programming	<ul style="list-style-type: none"> • Programming can be performed at the office prior to installation, or on the job site directly from the console. • Can be downloaded from a remote location or at the job site (using a PC/laptop with 4100SM Serial Module) by using the Ademco V-LINK Downloading Software. • The Control is pre-programmed with a set of standard values that is designed to meet the needs of many installations. These values, however, can be changed to suit the needs of any particular installation. • The Control can also be pre-programmed by the installer with one of four standard communication default programming values, thus further saving time and effort.
User Codes	Supports up to 128 user codes, maximum of 99 per partition
Panic Keys	Provides 3 panic key functions.
Communication	Ademco low speed, SESCOA/RADIONICS, Ademco Express, Ademco High Speed, Ademco Contact ID

Before installing this partitioned system, become completely familiar with the partitioning concepts, including zone distribution (each zone can be assigned to only one partition), user code usage and authority levels, and the user-friendly menu mode of programming. In addition, become familiar with the scheduling and output relay features.

System Features

The following table lists the special system features of the 4140XMPT2 system.

Global Arming	<ul style="list-style-type: none"> Allows users to easily arm multiple partitions via console prompts.
Polling Loop	<ul style="list-style-type: none"> Built-in polling loop interface, with polling loop terminals located on the panel's terminal block, allows expansion up to 87 zones.
Glass Break Detector	<ul style="list-style-type: none"> Supports up to 50 latching type 2-wire glass break detectors on zone 8.
Quick Bypass (Forced Bypass)	<ul style="list-style-type: none"> Quick (forced) bypass feature bypasses all faulted zones with single key entry sequence.
Memory-Of-Alarm	<ul style="list-style-type: none"> Memory-of-alarm feature, which, upon disarming the system, automatically displays all zones that were in an alarm condition while the system was armed.
Circuit Breakers	<ul style="list-style-type: none"> Self resetting circuit breaker protection eliminates the need to replace blown cartridge fuses.
Built-in Users Manual	<ul style="list-style-type: none"> Built-in Users Manual (6139 only). By depressing and holding any of the function keys on the console for 5 seconds, a brief explanation of that function scrolls across the alpha-numeric display.
Descriptors	<ul style="list-style-type: none"> All programmed descriptors can be displayed (one at a time) by pressing and holding the READY key for 5 seconds, then releasing the key. This serves as a check for installers to be sure all descriptors are entered properly.
Cabinet	<ul style="list-style-type: none"> Large cabinet with removable door for easier installations.
Scheduling	<ul style="list-style-type: none"> Scheduling feature allows installer and/or user to automate system operation and/or turn on lights, etc. Auto-arm/disarm of system. Temporary schedules can be programmed by user. System operation can be restricted to certain times.
Wireless	<ul style="list-style-type: none"> Wireless support of 5700 or 5800 series transmitters using 4280, 4281 or 5881 type receivers.
Event Logging	<ul style="list-style-type: none"> Event Logging feature keeps record of all events, which can be printed automatically or on demand.
Access Control	<ul style="list-style-type: none"> Provides user activated access control command which pulses a relay output for controlled opening of access doors.

Programming Features

The following table lists the programming features of the 4140XMPT2 system.

User Codes	<ul style="list-style-type: none"> Up to 128 user security codes (max. 99 per partition) can be programmed, each with various levels of authority.
Installer Code	<ul style="list-style-type: none"> Installer code override feature. Installer code will disarm system only if it was used to arm the system.
Alpha Descriptors	<ul style="list-style-type: none"> All zones and partitions can be assigned alpha descriptions. The letter "s" or " 's " can be added to descriptors.
Custom Words	<ul style="list-style-type: none"> Up to 20 custom words can be added to the built-in vocabulary.
Comm. Fields	<ul style="list-style-type: none"> Easy programming for communication fields. Simply enter the report code for each zone.
Comm. Defaults	<ul style="list-style-type: none"> Communication default programming can be loaded anytime, and does not affect non-communication program fields.
Downloading	<ul style="list-style-type: none"> Direct wire downloading can be done without a modem, by using a PC or Laptop computer and 4100SM Serial Module.
#93 Menu Mode	<ul style="list-style-type: none"> Easy programming of zones using the user friendly #93 Menu Mode.
Scheduling Menus	<ul style="list-style-type: none"> Easy scheduling programming using the #80 Menu Mode.

Communication Features

The following table lists the communication features of the 4140XMPT2 system.

Zone Reports	<ul style="list-style-type: none"> All 87 zones can report to a central station using any reporting format.
Exception Reporting	<ul style="list-style-type: none"> Open/close reporting by exception means reports occur only if outside predetermined time windows.
Callback	<ul style="list-style-type: none"> Callback defeat option for downloading.
Real-Time Clock	<ul style="list-style-type: none"> Real-Time clock for time related functions. NOTE: 6139 alpha console must be used to set the real-time clock, or can be set using Downloader software.
AC Loss Reporting	<ul style="list-style-type: none"> Random AC Loss and AC Restore reporting option sends report randomly from 10-40 minutes after AC loss, to help prevent central stations from receiving an overload of reports due to area blackouts.
Test Reporting	<ul style="list-style-type: none"> Intelligent test reporting option means test reports will not be sent if any other report was sent within the programmed test report interval.
Split/Dual Reporting	<ul style="list-style-type: none"> Split/Dual reporting communicator options available.
Cancel Report	<ul style="list-style-type: none"> Option to allow a cancel report to be sent, even after Bell Time-out has ended.
Voltage Triggers	<ul style="list-style-type: none"> Used to interface with LORRA or other devices. PC Downloader can command output voltage triggers to pulse on for 2 seconds.
Phone Numbers	<ul style="list-style-type: none"> Primary and secondary phone number capability. Can program different formats for each phone number.

INTRODUCTION TO THE PARTITIONED SYSTEM

This section is intended to give you an overview of partitioning concepts. For specific questions on programming or using specific aspects of the panel, please refer to the SYSTEM OPERATION section of this manual and the PROGRAMMING GUIDE.

Introduction The partitioned system represents the latest in security protection technology. Combining wired, wireless and polling loop zones into one powerful control, this control communicator is capable of supporting a true "partitioned" environment. A partitioned environment is one whereby multiple unrelated users wish to be protected by a security system, yet each user requires the operational freedom to have the system behave as if it was theirs and theirs alone. This global definition implies a lot of things in terms of the required features of the equipment you will install. Some basic features are listed below:

Basic Partitioning Features The following table lists the partitioning features of the 4140XMPT2 system.

Simple	<ul style="list-style-type: none"> • Easy to use and program as the simplest alarm system.
Secure	<ul style="list-style-type: none"> • Integrity of security is not compromised for any users of the system.
Reliable	<ul style="list-style-type: none"> • Inherent reliability of the partitioned system is equal to a stand alone alarm system if purchased separately.
Consoles	<ul style="list-style-type: none"> • Flexible number of consoles per partition (up to a total of 16 in a system, anyway you want to assign them). • Appropriate sounds and messages to assigned consoles only (each system appears to be independent to users). • Ability to inhibit other consoles from using your partition (total security in a strip mall environment).
User Codes	<ul style="list-style-type: none"> • 128 User Codes assigned virtually anyway you want them (99 max. in any partition, otherwise no restrictions). Enough to handle the largest commercial jobs. • Multiple levels of authority per partition (allows key people in a partition to have complete control and limit system tampering by others).
Zones	<ul style="list-style-type: none"> • 87 zones employing wired, wireless or multiplex technology (install any mix for any type of construction challenges).
Partitions	<ul style="list-style-type: none"> • Any zone can be assigned to any particular partition (easy to install, allows logical assignment by the dealer). • "GOTO" function provides access to other partitions (ideal for executive access to factory for example). • Intelligent partition/zone menu programming help (simplifies the programming and reduces errors) • Programmable 4-character partition name displayed on alpha consoles when needed (no need to memorize numbers - name and number are shown for you).

Examples Of Partitioning

In surveying dealers throughout the country, we have learned of two global applications for partitioned control panels. One is a typical two family house (residential), the other a Factory/Office environment. These broad classifications can better be understood by way of examples.

Two Family House: You've just arrived at a job site to quote a security system. The owner wants an alarm system which he can use for his family (living upstairs) **and** he also wants to provide protection for the separate living quarters of his mother (living downstairs with separate entrance). The owner obviously wants to keep costs down yet provide protection and flexibility for his mother living downstairs. You could choose to install a traditional alarm panel to keep costs down, but the system would be very limiting for either the mother or the upstairs family. To meet the flexibility requirements as desired, you could install two traditional alarm panels, but the cost might cause you to lose the business. The 4140XMPT2 solves all these problems.

Factory/Office: You arrive at a small manufacturing concern looking to provide protection throughout their offices as well as their factory. The very nature of the business is such that factory workers come to work at 7:30AM and leave at 4PM, while the offices are open 8:30AM to 6:00PM. Some executives even want to stay late at night or come back to work after 6:00PM. Installing two panels (one for the factory, one for the offices) would certainly work at a cost premium, but think of all the complexity when owners tried to gain access to the factory after hours...two access codes to remember, accidental false alarms. Even the real frustration of not being able to properly program the two systems to allow easy access from the factory to office or vice versa! Install a partitioned system, your programming problems are over, and the owners of the business will appreciate its flexibility and ease of use!

Global Partitioning Features and Resources

In any system, certain physical system components and features are shared by all partitions or assigned to a specific partition. The following elements are shared or assignable to a specific partition:

	Shared By All Partitions	Assignable To One Partition
Dialer	✓	
Alarm Relay/Sounder	✓	✓ (using relay outputs)
Power Supply	✓	
Wireless Keypad		✓
Keyswitch Station		✓

In addition to the physical devices which are shared, the system shares some software features on a global basis as well. These include:

- Panic Code ReportsCommon code for any partition
- Low Battery ReportingReports as Partition 1
- AC Power Reporting OptionsReports as Partition 1
- Test Reporting IntervalGlobal for the Panel
- Download Phone NumberGlobal for the Panel
- Communication FormatGlobal for the Panel
- Rotary/Touch ToneGlobal for the Panel
- Download Callback defeatGlobal for the Panel
- Installer CodeGlobal for all Partitions

Partition Specific Features

Many devices and functions need to be reserved on a partition basis to provide proper operation and flexibility for installations. The items assignable on a per partition basis include:

- Consoles
- Entry and Exit Delays
- Console Sound during Exit Delay
- Primary Subscriber Number
- Secondary Subscriber Number
- Enable/Disable of Panic Keys
- Enable/Disable of Duress
- Multiple Alarm Reporting
- Quick Arm enable/disable
- Inhibit Bypass of one Zone
- Enable/Disable Chime Mode
- "Go To" Partition function
- Swinger Suppression
- Burglary Alarm Comm. Delay
- Open/close for Installer Code
- Confirmation of Arming Ding
- Alarm Sounder Duration
- User Codes

SCHEDULING OVERVIEW

Major Features Of Scheduling

Scheduling is an exciting new feature of the 4140XMPT2 and provides the following functions.

Arm/Disarm control

Scheduling can be used to automate some of the system operation:

- _ Auto arming and disarming at predetermined times.
- _ Auto-arm warning
- _ User option to delay auto arm
- _ Provision for temporary schedule of up to one week
- _ Provision for a holiday schedule
- _ Limitation of arming and disarming to specific times
- _ Control of when disarming will occur

Open/close by exception

Scheduling provides a means of reporting openings/closings by exception:

- _ sends report only if action does not occur.
- _ Inhibit opening/closing reports if within a Time Window
- _ Send early to open/close reports if done earlier than window
- Send late to open/close reports if window is missed.

Relay Control (Time Driven Events)

Scheduling can also automatically perform relay driven actions at predetermined times:

- _ Can turn lights or other devices on/off at specific times
- _ One shot action of light or other device
- _ X-10 control for the automation of lights and appliances

Daylight Savings Time

- _ Automatic time adjustment for daylight savings time

Scheduled events are programmed using a user friendly menu mode of programming (#80 mode), explained in detail in the separate PROGRAMMING GUIDE. This menu programming takes you step by step through the options.

The following overview will give you an understanding of the scheduling concepts. Refer to the PROGRAMMING GUIDE for detailed programming instructions.

Access Door Control

The system also provides a means of access control. Entry of USER CODE + 0 will cause a momentary trigger of a pre-set output device. Each partition can have its own output device. The trigger will occur on the device tied to the partition for the console on which the keys were pressed. The access control relay is programmed in partition-specific field 1*76.

Time-Driven Event Programming

This very powerful feature allows arming, disarming, relay modules or X-10 devices to be activated automatically, based on the time windows described previously. Time driven events can also be used to assign additional open/close window schedules, so that more than one schedule per day can be programmed. The system supports up to 20 time driven events. Refer to the PROGRAMMING GUIDE—Scheduling Programming for more detailed information.

End User Scheduling (#83 Menu Mode)

The system provides up to 20 "timers" available to the end user for the purpose of activating output devices at preset times and on preset days. These timers are analogous to the individual appliance timers that might be purchased at a department store. The typical uses for this feature could be control of lights or appliances, typically via X-10 modules. These modules are programmed into the system by the installer during #93 Menu Mode—Device Programming. The end user needs only to know the output device number (relay number) and its alpha descriptor, both programmed by the installer via Relay Programming and Alpha Programming respectively. To enter this mode, the user enters CODE + # + 83.

The installer may set certain relays to be "Restricted", since a system may have some devices (Relays or X-10) which are not intended to be under the control of end users, such as relays activating fire doors or relays activating certain machinery. This option, set during #93 Menu Mode—Relay Programming, will restrict operation by the end user.

Section 2. ZONE CONFIGURATIONS

ZONE TYPES & APPLICABLE SENSORS

The 4140XMPT2 supports up to 87 zones of hard-wire, polling loop and/or wireless protection, distributed among up to 8 partitions. The following table lists the zone numbers and the types of sensors that can be used with each in this system:

Zone	Sensors
1	2-wire smoke detectors (if used)
7	keyswitch (if used)
8	latching type glass break detectors (if used)
1-9	traditional hard-wired zones
1-63	5700 series wireless devices
1-87	5800 series wireless devices
10-87	polling loop devices
95	*/1 panic
96	#/3 panic
99	*/# panic

Each zone must be assigned to a zone type, which defines the way in which the system responds to faults in that zone. In addition, there are three keypad activated zones (PANIC keys, see note below) for each partition, a polling loop supervision zone, and four RF supervisory zones, two for each RF Receiver installed. Zone types are defined below.

Type 00
Zone Not Used

Program a zone with this zone type if the zone is not used.

Type 01
Entry/Exit #1 Burglary.

This zone type provides entry delay whenever the zone is faulted if the control is armed in the Away or Stay modes. When the panel is armed in the Instant or Maximum modes, no entry delay is provided. Exit delay begins whenever the control is armed, regardless of the arming mode selected. These delays are programmable. This zone type is usually assigned to sensors or contacts on doors through which primary entry and exit will take place.

Type 02
Entry/Exit #2 Burglary.

This zone type provides a secondary entry delay whenever the zone is faulted if the panel is armed in the Away and Stay modes. When the panel is armed in the Instant or Maximum modes, no entry delay is provided. Secondary exit delay begins whenever the control is armed, regardless of the arming mode selected. These delays are programmable. This zone type is usually assigned to sensors or contacts on doors through which secondary entry and exit will take place, and where more time might be needed to get to and from the console. Delay time must be greater than Zone type 1. (Ex.: a garage, loading dock, or basement door)

Type 03
Perimeter Burglary.

This zone type gives an instant alarm if the zone is faulted when the panel is armed in the Away, Stay, Instant or Maximum modes. This zone type is usually assigned to all sensors or contacts on exterior doors and windows.

Type 04
Interior, Follower.

This zone type gives a delayed alarm (using the programmed Entry/exit time) if the Entry/Exit zone is faulted first. Otherwise this zone type gives an instant alarm. This zone type is active when the panel is armed in the Away or maximum modes. Maximum mode eliminates the delay though. **This zone type is bypassed automatically when the panel is armed in the Stay or Instant modes.** This zone type is usually assigned to a zone covering an area such as a foyer, lobby, or hallway through which one must pass upon entry (After faulting the entry/exit zone to reach the console to disarm the system.) Since this zone type is designed to provide an instant alarm if the entry/exit zone is not violated first, it will protect an area in the event an intruder hides on the premises prior to the system being armed, or gains access to the premises through an unprotected area.

Type 05
Trouble by Day/Alarm by Night.

This zone type will give an instant alarm if faulted when armed in the Away, Stay, Instant or Maximum (night) modes. During the disarmed state (day), the system will provide a latched trouble sounding from the console (and a central station report, if desired). This zone type is usually assigned to a zone which contains a foil-protected door or window (such as in a store), or to a zone covering a "sensitive" area such as a stock room, drug supply room, etc. This zone type can also be used on a sensor or contact in an area where immediate notification of an entry is desired.

Type 06
24-hour Silent Alarm.

This zone type sends a report to the Central Station but provides no console display or sounding. This zone type is usually assigned to a zone containing an Emergency button.

Type 07
24-hour Audible Alarm.

This zone type sends a report to the Central Station, and provides an alarm sound at the console, and an audible external alarm. This zone type is usually assigned to a zone that has an Emergency button.

Type 08
24-hour Auxiliary Alarm.

This zone type sends a report to Central Station and provides an alarm sound at the console. **(No bell output is provided)**. This zone type is usually assigned to a zone containing a button for use in personal emergencies, or to a zone containing monitoring devices such as water sensors, temperature sensors, etc.

Type 09
Supervised Fire. (No Verification)

This zone type provides a fire alarm on short circuit and a trouble condition on open circuit. The bell output will pulse when this zone type is faulted. This zone type is always active and cannot be bypassed. **This zone type can be assigned to any wired zone, but only certain wireless systems zones.**

Type 10
Interior w/Delay.

This zone type gives entry delay (using the programmed entry time), if tripped when the panel is armed in the Away mode. This zone type is also active during maximum mode, but no delay is provided (alarms occur immediately if zone is tripped). **This zone type is bypassed when the panel is armed in the Stay or Instant modes.** Delay begins whenever sensors in this zone are violated, regardless of whether or not an entry/exit delay zone was tripped first.

Type 20
Arm-Stay*

This is a special purpose zone type used with 5800 series wireless pushbutton or contact closure or opening, and which will result in arming the system in the STAY mode when the zone is activated.

Type 21
Arm-Away*

This is a special purpose zone type used with 5800 series wireless pushbutton or contact closure or opening, and which will result in arming the system in the AWAY mode when the zone is activated.

Type 22
Disarm*

This is a special purpose zone type used with 5800 series wireless pushbutton or contact closure or opening, and which will result in disarming the system when the zone is activated.

Type 23
No Alarm Response

This zone type can be used on a zone when an output relay action is desired, but with no accompanying alarm (ex. lobby door access).

* Note that these zone types **are not for use** by 5700 series devices.

NOTE FOR PANIC KEYS

Keypad panic zones share the same zone response type for all 8 partitions, but panics may be individually enabled for each partition.

IMPORTANT! FAULT ANNUNCIATION

Polling loop and RF faults (zones 88-91 & 97) will report as trouble conditions only, and as such, should be assigned either zone type 00 if no annunciation is desired, or zone type 05 if annunciation as trouble condition is desired. See FAULT ANNUNCIATION notes in POLLING LOOP and WIRELESS EXPANSION sections for more information.

BASIC 9 HARD-WIRED ZONES

Zone 1 The following table summarizes zone 1 characteristics.

Applications	Can be used for EOLR supervised or closed circuit un-supervised devices. It is the only zone that supports 2-wire smoke detectors.
Zone Response Type:	Any
Response Time	350 msec
Max. Zone Resistance	100 ohms, excluding EOLR
Unsupervised Usage	<ul style="list-style-type: none"> • Cut red PCB jumper. • Only closed circuit devices can be used.
EOLR Supervised	<ul style="list-style-type: none"> • Leave red PCB jumper intact. • Supports both open circuit and closed circuit devices. • Connect open circuit device in parallel across the loop. The 2,000 ohm EOLR must be connected across the loop wires at the last device. • Connect closed circuit device in series with the loop.
EOLR Fire Zone:	<ul style="list-style-type: none"> • Leave red PCB jumper intact. • Assign zone type 09 (fire) • Supports up to sixteen (16) 2-wire smoke detectors. • Second CODE + OFF sequence momentarily interrupts power to reset the smoke detectors. • See table below for compatible detectors.

Compatible Smoke Detectors

Detector Type	Device Model #
Photoelectric w/heat sensor, direct wire.....	System Sensor 2300T
Photoelectric plug-in head.....	System Sensor 2600EC
Photoelectric, direct wire	System Sensor 2400
Photoelectric w/heat sensor, direct wire.....	System Sensor 2400TH
Photoelectric w/B401B base.....	System Sensor 2451
Photoelectric w/heat sensor & B401B base	System Sensor 2451TH
Ionization, direct wire	System Sensor 1400
Ionization w/B401B base	System Sensor 1451
Ionization plug-in head	System Sensor 1600EC
Photoelectric duct detector w/DH400 base	System Sensor 2451
Ionization duct detect. w/DH400 base	System Sensor 1451DH

Zone 1 Advisories

If the EOLR is not at the end of the loop, the zone is not properly supervised. The system may not respond to an open circuit within the zone.

The alarm current provided by this zone is sufficient to support operation of only one detector in the alarmed state.

UL NOTE: EOLR are required for UL installations.

Zone 9 The following table summarizes zone 9 characteristics.

Applications	This zone is un-supervised and is suitable for monitoring fast acting glass break sensors or vibration sensors when programmed for fast response.
Response Type	Any type except fire
Response Time	Normal (350 msec) or Fast (10msec) selected in field *14.
Max. Zone Resistance	300 ohms
Unsupervised Usage	<ul style="list-style-type: none"> • Only closed circuit devices can be used. • Connect these devices in series with one another between terminals 22 & 23.

Zone 9 Advisories

Avoid using mechanical magnetic or relay type contacts in this zone when programmed for fast response.

Zones 2 - 8 The following table summarizes zones 2-8 characteristics.

Applications	Can be used for EOLR supervised or closed circuit un-supervised devices. Can also support 4-wire smoke detectors. Zone 8 can support latching glass break detectors.
Zone Response Type	Any
Response Time	350 msec
Max. Zone Resistance	<ul style="list-style-type: none"> • Zones 1-7: 300 ohms, excluding EOLR • Zone 8: 100 ohms, excluding EOLR
Un-supervised Usage	<ul style="list-style-type: none"> • EOLR disabled in field *41 (enter 1). • Only closed circuit devices can be used.
EOLR Supervised	<ul style="list-style-type: none"> • EOLR enabled in field *41 (enter 0). • Supports both open circuit and closed circuit devices. • Connect open circuit devices in parallel across the loop. The 2,000 ohm EOLR must be connected across the loop wires at the last device. • Connect closed circuit devices in series with the loop.
Glass Break Devices on Zone 8	<ul style="list-style-type: none"> • Supports up to 50 2-wire latching type glass break detectors. • Configure as EOLR zone • Second CODE + OFF sequence momentarily interrupts power to reset the glass break detectors. • See table below for compatible detectors.
Smoke Detectors on Zones 2-8	<ul style="list-style-type: none"> • Supports as many 4-wire smoke detectors as can be powered • Assign zone response type 09 (fire). • The zones must be configured for EOLR supervision. • A normally-closed, momentary switch must be installed in series with the power to the detectors in order to allow reset of the smoke detectors after an alarm. • The detectors must be wired in parallel, with the EOLR at the last detector for full supervision. • To supervise power, a System Sensor No. A77-716 EOL Relay Module is recommended.

Compatible Glass Break Detectors

<p>Use detectors which are compatible with the following ratings:</p> <p>Standby Voltage: 5VDC - 13.8VDC</p> <p>Standby Resistance: Greater than 20k ohms (equivalent resistance of all detectors in parallel)</p> <p>Alarm Resistance: Less than 1.1k ohms (see note below)</p> <p>Alarm Current: 2 mA - 10 mA</p> <p>Reset Time: Less than 6 seconds</p> <p>The IEI 735L series detectors have been tested and found to be compatible with these ratings. Up to 50 IEI 735L detectors, connected in parallel, may be used (the alarm current provided by this zone is sufficient to support operation of only one detector in alarmed state). Follow the manufacturer's recommendations on proper installation.</p> <p>Detectors which exceed 1.1k ohms in alarm, but maintain a voltage drop in alarm of less than 3.8 volts can also be used.</p>

Zones 2-8 Advisories

If latching type devices are installed on both zones 1 & 8, and these zones are assigned to different partitions, there is a possibility that, if both devices go into alarm at the same time, the resetting of one device could cause the loss of alarm memory in the other device.

Use of N.O. or N.C. contacts on the same zone may prevent proper glass break detector operation.

2-WIRE POLLING LOOP EXPANSION (Zones 10 through 87)

General Information The following table summarizes polling loop expansion characteristics.

Applications	<ul style="list-style-type: none"> Built-in 2-wire polling loop interface allows the number of zones to be expanded from the basic 9 zones to up to 87 zones using various Remote Point Modules (RPMs). See ADVISORIES below. The polling loop provides power to sensors and serves as communication path between the panel and sensors. Refer to the list of compatible devices at the end of this section.
RPM Address (ID)	<ul style="list-style-type: none"> Each sensor must be assigned a unique address ID number (from 10-87) before being connected to the polling loop. Care must be taken to assign unique ID numbers to each sensor in order to allow the panel to supervise and provide console status indications for individual sensors. Most RPMs have DIP switches to set their addresses. The 4939SN and 4191SN have preprogrammed serial numbers which must be "learned" by the control via the #93 menu programming mode.
Connections	<ul style="list-style-type: none"> Connect RPM sensors to terminals 24 & 25. Sensors can be connected to a single run, or groups of sensors may be connected to separate wire runs without affecting the panel's ability to supervise individual sensors. Follow the wiring instructions provided with individual sensors. Be sure to observe sensor polarity when wiring. The maximum allowable wire run length between the panel and the last sensor on a given wire run is shown in the table below.

Maximum Polling Loop Wire Runs

Wire Gauge	Max. Length
#22 gauge (0.64mm)	650 feet (198m)
#20 gauge (0.8mm)	950 feet (290m)
#18 gauge (1.0mm)	1500 feet (457m)
#16 gauge (1.3mm)	2400 feet (732m)

Note: Twisted pair recommended for all normal wire runs.

IMPORTANT: The maximum combined polling loop run is 4000' (1220m). If using shielded wire, the maximum is 2000' (610m). If longer wire runs are needed, a 4297 Loop Extender Module must be used (see instructions included with the 4297).

Intercom Interference If an intercom system is being used, the polling loop wires must be as far from the intercom wiring as possible (minimum 6" [150mm]). If this spacing cannot be achieved, shielded wire must be used. If this is not done, interference on the intercom system might occur. Also note that the maximum total wire length supported is cut in half when shielded wire is used.

Advisories The built-in polling loop has two limitations that must be observed. First, the maximum allowable current draw from the polling loop is 64mA. Refer to the POLLING LOOP CURRENT DRAW WORKSHEET (found in the POWERING THE SYSTEM section of this manual) for current draws of various polling loop devices. Second, regardless of current draw, no more than 64 devices can be connected to this loop. Installations which require up to 87 zones will require the use of 4190WH RPMs (which offer 2-points – a right and a left loop – per device) or the use of a 4297 (which offers another polling loop supporting an additional 128mA). Make certain to include the total current drawn on the polling loop in the AUXILIARY CURRENT DRAIN WORKSHEET (see POWERING THE SYSTEM section) when figuring the total auxiliary load on the panel's power supply.

Important! Fault
Annunciation

Since the polling loop and the RF receiver(s) are shared among the 8 partitions, the scheme for annunciating their failure is as follows:

Respective faults (for zones 88-91 & 97) will report as trouble conditions only, and as such, should be assigned either zone type 00 if no annunciation is desired, or zone type 05 if annunciation as trouble condition is desired. If the polling loop or RF link fails, the corresponding zone number will display a trouble condition for each partition that uses the device that failed. In addition, all zones associated with that device will indicate a fault condition. The trouble condition will not interfere with the ability to arm the partition, but the faults must first be bypassed.

Compatible Polling Loop Devices

**4208
Eight Zone Polling
Loop Expansion
Module**

- Used to supervise up to 8 hard-wired devices via the polling loop. NOTE: Does not support 2-wire smoke detectors.
- Set DIP switches to identify 8 zones.
- The first two zones can be either normal or fast response (DIP switch selectable).
- All zones are EOLR supervised (first six zones = 4.7k ohms, last two zones = 30k ohms), provided with the 4208.

**4190WH
Two Zone Remote
Point Module**

- Used to supervise 2 hard-wired devices via the polling loop.
- DIP switch programmable.
- The left zone can be EOLR supervised, if necessary, and can accept either open or closed circuit sensors, and can be set for fast response. The right zone is unsupervised and can accept closed circuit sensors only.

**4278EX
Quad Element Polling
Loop PIR**

- Quad element PIR with built-in RPM which is DIP switch programmable and connects directly to the polling loop. Includes mirrors for both wide angle and curtain/long range applications. Features an auxiliary sensor loop that permits connection of another nearby closed circuit alarm sensor (reed contact, etc.).

**4275EX
Dual Element Polling
Loop PIR**

- Dual element PIR with built-in RPM which is DIP switch programmable. Includes mirrors for both wide angle and curtain/long range applications and can use the 1875PA Pet Alley mirror. Built-in selectable pulse count capability.

**4194
Surface Mounted Reed
Contact (Wide Gap)**

- Wide gap surface mounted reed contact with built-in RPM, which is DIP switch programmable.

**4297
Polling Loop Extender
Module**

- Can be used if the 2-wire polling loop must be greater than the recommended length (4000' [1220m] max). By installing a 4297 at the end of the first loop, the polling loop can be continued. If more than 64mA needs to be drawn from the polling loop to power RPMs, use of the 4297 provides another loop with 128mA available.
- Connects to the polling loop and is powered from auxiliary power.

**4192SD
Photoelectric Polling
Loop Smoke
Detector**

- One piece photoelectric smoke detector with built-in RPM which is DIP switch programmable.

**4192SDT
Photoelectric Polling
Loop Smoke Detector
w/Heat Detector**

- One piece photoelectric smoke detector with 135°F (57°C) heat detector, and built-in RPM which is DIP switch programmable.

**4192CP
Ionization Smoke
Detector**

- One piece products of combustion ionization detector with built-in RPM which is DIP switch programmable.

**4139SN
Auto Smart Surface
Mount Reed Contact**

- Compact surface mount magnetic reed contact with built-in RPM.
- Serial number ID "learned" by control panel.
- Check product availability.

**4191SN
Auto Smart Recessed
Reed Contact**

- Recessed (1/2" [13mm] dia.) magnetic reed contact with built-in RPM.
- Serial number ID "learned" by control panel.
- Check product availability.

WIRELESS EXPANSION (Zones 1-63)

General Information (Receivers)

The following table summarizes wireless expansion characteristics.

Transmitters Supported by various receivers

Receiver	Transmitter
4280	63
4280-8	8
4281H	63
4281M	8
4281L	4
5881H	64
5881M	16
5881L	8

Zones Supported	<ul style="list-style-type: none"> The system supports up to 63 wireless transmitters (5700 or 5800 series), plus a wireless keypad. To expand the system using wireless, one or two of the same type of RF Receivers can be used. Any zone from 1-63 can be used as a 5700 series wireless zone. The total number of transmitters supported by each receiver is shown in the transmitters supported table. Any zone from 1-87 can be used as a 5800 series wireless zone.
RF Receivers (General)	<ul style="list-style-type: none"> The 4140XMPT2 supports the 4280, 4281 and 5881 series RF receivers. Refer to the transmitters supported table for the number of zones supported by each receiver. The receivers respond to status and alarm signals from wireless transmitters (@345MHz USA; 315MHz Canada) within a nominal range of 200 feet (60m), and relay this information to the control. Two of the same type of receivers can be used to provide either a greater area of coverage, or to provide redundant protection. The type of receiver used is identified in program field 1*32. Receivers must be mounted externally to the control. The 4280 & 4280-8 receivers are connected to the polling loop. The 4281 and 5881 series receivers are connected to the console data lines.
Receiver Supervision	<ul style="list-style-type: none"> If the connection is broken between the receiver and the control panel, a TROUBLE will be displayed for zones 89 or 91 (if type 05 is assigned). In addition, all zones associated with the RF device will report a trouble condition. If, within a programmed interval of time, the receiver does not hear from <i>any</i> of its transmitters, a TROUBLE will appear for zones 88 or 90 (if type 05 is assigned). 4280 only: If the cover of the 4280 is removed, a TROUBLE will be displayed for zones 89 or 91 (if type 05 is assigned).
House Identification	<ul style="list-style-type: none"> Receivers respond only to transmitters set to the same house ID (01-31). This prevents system interference from transmitters in other nearby systems. Use Sniffer Mode (described later) to make sure you do not choose a House ID that is in use in a nearby system. 4280 house ID is set via DIP switches. 4281/5881 (for 5827) house ID is programmed via #93 Menu Mode, Device Programming.
Sniffer Mode For House Id (Code + [#] + [2])	<ul style="list-style-type: none"> To check for house IDs being used in nearby systems, set the receiver's House ID to "00", then enter your "Installer Code" + [#] + [2] The receiver will now "sniff" out any House IDs in the area and display them. Keeping the receiver in this mode for about 2 hours will give a good indication of the house IDs being used. To exit the Sniffer Mode, simply key your installer code + OFF, then set your house ID to one not displayed in the "Sniffer Mode". Important: Since Sniffer Mode effectively disables RF point reception, Sniffer Mode cannot be entered while any partition is armed.

The following table highlights the features of each receiver.

FEATURE	4280 series	4281 series	5881 series
Wiring	Connects to polling loop	Connects to console lines	Connects to console lines
House ID	set via DIP switches	programmed via #93 Menu Mode.	programmed via #93 Menu Mode.
Receiver Address	Set by cutting blue jumper in 2nd receiver. Enabled via fields 1*26 & 1*27.	Set via DIP switches. Enabled via #93 Device Programming.	Set via DIP switches. Enabled via #93 Device Programming.
Cover Removal	Causes alarm or trouble depending on response type assigned.	Does not cause alarm or trouble.	Does not cause alarm or trouble.
Go/No Go Mode	Requires cover removal.	Automatic upon entering test mode.	Automatic upon entering test mode.
Spatial Diversity	No. Requires 2 receivers for redundancy or to expand area of coverage.	Yes. Eliminates nulls and voids. 2nd receiver expands coverage area or provides additional redundancy.	Yes. Eliminates nulls and voids. 2nd receiver expands coverage area or provides additional redundancy.
Transmitter ID	Set via DIP switches.	Set via DIP switches.	Serial numbers are "learned" by the system.

4280 Series Receiver

4280 is not recommended for new installation; receiver is scheduled to be discontinued.

- **Important:** Note that if using two RF Receivers, one of them must be powered from auxiliary power, so as not to exceed the 64mA polling loop current rating.
- Set field 1*32 to 0.
- For more information regarding the 4280 installation, refer to the installation instructions provided with the 4280.
- If using a 4280-8, only up to 8 zones can be enabled as RF zones. If more than 8 zones are enabled, the message "SET-UP ERROR" (or E8 on non-alpha consoles) will be displayed.
- Refer to the maximum polling loop wire runs described in the POLLING LOOP section when connecting 4280s to the polling loop.
- **IMPORTANT:** The maximum combined polling loop run is 4000'. If using shielded wire, the maximum is 2000'.

4281 Series Receiver

- Set field 1*32 to 1.
- Using #93 Menu mode–Device Programming, select as RF device type.
- Set house ID via #93 Menu Mode.
- Set receiver's device address using its DIP switches. Lower numbered address is primary receiver (supervisory fault ID 90, 91). Higher numbered address is secondary receiver (receiver fault ID 88, 89).
- Important: 4281 microprocessor must have part number N5334Vx, where x is any number. The microprocessor is located just above the DIP switch on the PC board.

5881 Series Receiver

- Set field 1*32 to 2.
- Using #93 Menu mode–Device Programming, select as RF device type.
- Set house ID via #93 Menu Mode (needed for 5827 keypad only).
- Set receiver's device address using its DIP switches. Lower numbered address is primary receiver (supervisory fault ID 90, 91). Higher numbered address is secondary receiver (receiver fault ID 88, 89).

Transmitters

The following table summarizes wireless transmitter characteristics.

NOTE: After replacing a low or dead battery, activate the transmitter and enter the security code + OFF to clear its memory of the "Low Battery" signal.

Transmitters (General)	<ul style="list-style-type: none"> • Supports 5700 or 5800 series transmitters. • Each transmitter has its own unique transmitter ID number (Zone #). 5700 series transmitters use DIP switches to set the ID. 5800 series transmitters must have their ID numbers "learned" by the system. • 5700 series transmitters and the 5827 keypad must also be set for a house ID. Other 5800 series transmitters have built-in serial numbers and do not require a house ID to be set. After installation, check that all transmitters have been assigned the proper house ID by using the procedure described later.
Trans. Supervision	<ul style="list-style-type: none"> • Each transmitter (except 5701, 5727, 5802, 5802CP, 5803 & 5804) is supervised by a check-in signal that is sent to the receiver at 70-90 minute intervals. If at least one Check-in is not received from a transmitter within a programmed interval (field 1*31), the console will display the transmitter number and "CHECK" will be displayed. • Each transmitter (including 5701; 5727, 5802, 5802CP, 5803 & 5804) is also supervised for low battery conditions, and will transmit a low battery signal to the receiver when the battery has approximately 30 days of life remaining. The console will display the transmitter number and "LO BAT".
5800 Series "Learn"	<ul style="list-style-type: none"> • 5800 series transmitters have built-in serial numbers that must be "learned" by the system during programming. Refer to the PROGRAMMING GUIDE for details.
Checking Trans. Operation including DIP & serial number (Code + [#] + [3])	<ul style="list-style-type: none"> • To check that all transmitters have been set properly, set the receiver to the proper house ID and enter the Installer code + [#] + [3]. • All transmitters that have been enabled for the partition in which the test was initiated will be displayed. As each transmitter checks in (up to 2 hours), its ID number will disappear. A faster way to do this is to fault each transmitter, which causes a transmission to be sent to the receiver. When all transmitters have checked in, there should be no ID numbers displayed. • NOTE: Repeat this procedure for each partition that uses RF transmitters.
"Go/No Go" Test Mode (Patented)	<ul style="list-style-type: none"> • This mode helps determine the best location for each transmitter and is activated by putting the control panel in the TEST mode (4280 requires removing the its cover). • The receiver's sensitivity is reduced by half. Once transmitters are placed in their desired locations and the approximate length of wire to be run to sensors is connected to the transmitter's screw terminals, open circuit each transmitter. <i>Do not conduct this test with your hand wrapped around the transmitter.</i> • If a single receiver is used, the console will beep three times to indicate signal reception. If two receivers are used, the console will beep once if the first receiver received the signal, twice if the second receiver received the signal and three times if both receivers heard the signal (which is desirable for redundant configurations). • If the console does not beep, reorient or move the transmitter to another location. Usually a few inches in either direction is all that is required. • To exit this mode, enter the installer code and press OFF (replace the 4280's cover). Note that the Receiver's sensitivity is fully restored when this mode is exited.

Note On RF Keys
(5801, 5803, etc.)

5800 series RF keys can be used to arm and disarm the system. These transmitters include the 5801, 5803, 5804, and any other 5800 series transmitter if programmed for one of zone type responses 20-22. These transmitters are tied to a user in order to provide a record of who armed or disarmed the system. Because of this, an RF button will not arm or disarm a system unless it has been assigned to a user, which is done during the "add a user" function (see Add A User Code section). In addition, when the user is deleted from the system, the key is deactivated. To test whether the keys are assigned to users or not, use the test mode. When the appropriate button is pressed, the corresponding zone will be displayed on the console and will remain there until test mode is terminated.

Wireless Zone Types

Each RF zone can be programmed to respond as any zone type such as ENTRY/EXIT, INTERIOR, PERIMETER, etc. (see the ZONE TYPES section for a complete explanation of each zone type).

Desired alarm responses for 5700 series devices are as follows:

ZONE TYPE	TRANSMITTER ID #
Entry/Exit Burg	1 through 47 *
Perimeter Burg	1 through 47 *
Interior Burg	1 through 47 * 32 through 47 * (5775)
Fire	48 through 63 * 48 through 55 ** (5706)
24 Hour Panic (silent or audible)	48 through 63* 62 or 63 *** (5701)
Day/Night Burglary	1 through 47 *
24 Hour Auxiliary	1 through 47 *

NOTES:

- * Note that zones 1-63 can be used, but have the following limitations: Transmitters set for zones 48-55 will transmit once every 12 seconds while the zone is faulted. Transmitters set for zones 56-63 will transmit once every 3 seconds while faulted. These two ranges of zone numbers could adversely affect transmitter battery life. Transmitters set for an ID of 32 through 47 will have a 3 minute lock-out between transmissions. Use this last range of zone ID numbers for sensors protecting frequently used doors or windows to conserve battery life.
- ** Transmitter IDs 48 through 55 have highest signal priority.
- *** Transmitter IDs 62 and 63 are unsupervised to allow removal of the 5701 off premises -- signal priority is lower than that of fire, but higher than burglary.

Advisories

1. Do not place transmitters on or near metal objects. This will decrease range and/or block transmissions.
2. Place the receiver in a high, centrally located area for best reception. Do not place receiver on or near metal objects.
3. For maximum range, the RF receiver must be at least 10 feet (3m) from the Control panel or any remote consoles to avoid interference from their microprocessor.
4. If dual receivers are used:
 - A. Both must be at least 10 feet (3m) from each other, as well as from the Control panel and remote consoles.
 - B. The house IDs must be the same.
 - C. Using two Receivers *does not* increase the number of transmitters the system can support (63 transmitters, plus a wireless keypad).

Fault Annunciation

Since the polling loop and the RF receiver(s) are shared among the 8 partitions, the scheme for annunciating their failure is as follows:

Respective faults (for zones 88-91 & 97) will report as trouble conditions only, and as such, should be assigned either zone type 00 if no annunciation is desired, or zone type 05 if annunciation as trouble condition is desired. If the polling loop or RF link fails, the corresponding zone number will display a trouble condition for each partition that uses the device that failed. In addition, all zones associated with that device will indicate a fault condition. The trouble condition will not interfere with the ability to arm the partition, but the faults must first be bypassed.

NOTE: 5800 series transmitters have built-in tamper protection and will annunciate as a "CHECK" condition unless field *24 is disabled.

Important Battery Notice

The wireless transmitters are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4-7 years depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature may all reduce the actual battery life in a given installation. The wireless system can identify a true low battery situation, thus allowing the dealer or user of the system time to arrange a change of battery and maintain protection for that given point within the system.

Button type transmitters should be periodically tested by the installer for battery life (5701, 5802, 5802CP, 5803 & 5804).

Compatible 5700 Series Wireless Devices

- | | |
|---|--|
| <p>5701
Panic Transmitter</p> | <ul style="list-style-type: none">• Programmable for either silent or audible 24 hour alarm (can be DIP switch programmed for zones 62 or 63). |
| <p>5711
Slimline Door/Window Transmitter</p> | <ul style="list-style-type: none">• Can be used with any closed circuit sensor. Can be used on any zone 1-63 but, if set for zones 32-47, there will be a 3 minute lock-out between transmissions. |
| <p>5715WH
Universal Transmitter</p> | <ul style="list-style-type: none">• DIP switch selectable for fast response, open or closed circuit sensor usage, and has a tamper protected cover. Use in applications where open circuit heat detectors are needed or where fast response devices are needed. Can be used on any zone 1-63 but, if set for zones 32-47, there will be a 3 minute lock-out between transmissions. |
| <p>5727
Wireless Keypad</p> | <ul style="list-style-type: none">• Wireless keypad that can be used to turn the burglary protection on and off, and features the same built-in panic functions as wired consoles for either silent or audible 24 hour alarm. An LED indication lights each time a key is pressed to verify transmission (LED located in the [Q] READY key).• The keypad is identified as zone "00" when it transmits low battery messages. The keypad panics are identified in the same way as wired console keypad panics (i.e. 95, 96 & 99). |
| <p>5716
Door/Window Transmitter</p> | <ul style="list-style-type: none">• Can be used with any open or closed circuit sensor (DIP switch selectable), and features a built-in reed switch. Can be used on any zone 1-63 but, if set for zones 32-47, there will be a 3 minute lock-out between transmissions. |
| <p>5775
Wireless PIR</p> | <ul style="list-style-type: none">• The 5775 is a battery operated, wireless, dual element passive infrared motion detector with built-in selectable pulse count, that can be monitored by a 4280 (4280-8) wireless receiver, and is DIP switch programmable for zones 32-47. NOTE: There is a 3 minute lock-out between transmissions to preserve battery life. |
| <p>5706
Wireless Photoelectric Smoke Detector (System Sensor)</p> | <ul style="list-style-type: none">• One piece smoke detector with built-in transmitter (DIP switch programmable for zones 48-55). Built-in UL Listed 85 dB piezoelectric alarm sounder and audible low battery warning. |
| <p>5707
Wireless Photoelectric Smoke Detector (ESL)</p> | <ul style="list-style-type: none">• One piece, dual battery smoke detector with built-in transmitter (DIP switch programmable for zones 48-55). Built-in UL Listed 85 dB piezoelectric alarm sounder and audible low battery warning. |

Compatible 5800 Series Wireless Devices

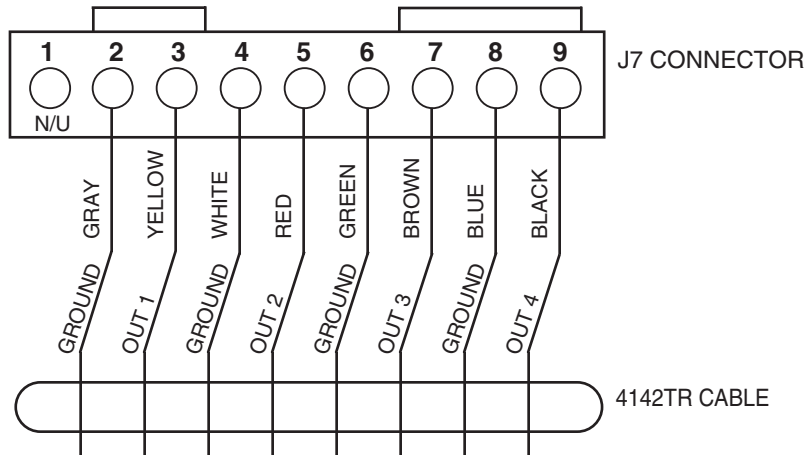
- 5801**
4-Button Transmitter
 - Four button hand held or wall mount transmitter.
 - Programmable functions
 - Includes one 466 battery
- 5802**
Pendant Panic Transmitter
 - Single button action
 - Press and hold to avoid accidental alarms
 - Splash resistant (sealed battery)
- 5802CP**
Belt Clip Panic Transmitter
 - Single button action
 - Press and hold to avoid accidental alarms
 - Splash resistant (sealed battery)
- 5802MN**
Belt Clip or Pendant Panic Transmitter
 - Single button action
 - Press and hold to avoid accidental alarms
 - Splash resistant
 - Replaceable battery
 - Supervised
- 5803**
3-Button Transmitter
 - Three button "key"
 - Programmable functions
 - Sealed battery
- 5804**
4-Button Transmitter
 - Four button "key"
 - Programmable functions
 - Replaceable battery
- 5806**
Photoelectric Smoke Detector
 - Includes two 9 volt alkaline batteries (464)
 - Optional tamper protection
- 5807**
Photoelectric Smoke Detector
 - Includes two 9 volt alkaline batteries (464)
- 5816**
Miniature Transmitter
 - NO/NC capability
 - Built-in reed contact
 - Tamper
 - Includes one 3 volt lithium battery (466)
- 5817**
3-Point Transmitter
 - Accepts 3 switches with 3 different addresses
 - NO/NC capability
 - Tamper
 - Includes one 3 volt lithium battery (466)
- 5818**
Recessed Transmitter
 - Built-in reed contact
 - Includes one 3 volt lithium battery (466)
- 5827**
Wireless Keypad
 - Use handheld or wall mounted
 - Provides almost complete system control capability
 - Raised dome keys and led for positive operation
 - No. 5634 belt clip available
 - Includes one 9 volt battery (464)
- 5849**
Glass Break Detector
 - Audio discriminator plus shock sensor
 - Tamper
 - Includes two 3 volt lithium batteries (466)
- 5890**
Dual Element PIR
 - Interchangeable lenses: long range, etc.
 - Built-in transmitter with battery saver circuit
 - 40' wide angle pattern
 - Tamper
 - Includes two 3 volt lithium batteries (466)

VOLTAGE TRIGGERS (Connector J7) (Ground Start Module, Keypad, Remote Console Sounder)

General Information

Connector J7, located on the right hand side of the main PCB provides 4 trigger outputs for operating the 675 Ground Start Module, the 4146 Keypad, a remote console sounding piezo, and for triggering auxiliary alarm signaling equipment. Note that these output triggers can be enabled by partition via programming field 2*20.

The pin assignments of this connector are shown below. Use only the 4142TR 9-wire cable (available as an option) for making connections to this connector.



- OUT 1: GROUND START OR OPEN/CLOSE
- OUT 2: FIRE OR KEYSWITCH ARMED LED
- OUT 3: BURGLARY/AUDIBLE PANIC/AUXILIARY
- OUT 4: SILENT PANIC/DURESS OR KEYSWITCH READY LED

- Output 1 Operates, by default, as a trigger for the 675 ground start module. This output may optionally be programmed to operate as an open/close trigger or as a remote console sounder output. Only one of these options may be used at any time.
Rating: When Activated: 10 - 13.8 VDC through 4K ohms (2.5mA max)
When De-activated: 100 ohms to ground
- Outputs 2 & 4 Operate, by default, as Fire and Silent Panic/Duress triggers respectively. These triggers may optionally be programmed to act as Arm and Ready status indicators when it is desired to use the 4146 keypad .
- Output 2,3 & 4 Rating: When Activated: 10 - 13.8 VDC through 5K ohms (2mA max)
When De-activated: 1k ohms to ground

Remote Keyswitch

If the keyswitch option is selected (field *15), the alarm trigger outputs are disabled.

An optional Remote Keyswitch can be used for remote arming and disarming of the system. **Note that keyswitch arming may only be used in one partition.**

If used, program field *15 must be set to the desired partition to enable the keyswitch option, and the 4146 keyswitch's normally open momentary switch and LEDs must be connected to Zone 7 and to the J7 connector trigger outputs respectively. A 2k EOL resistor must be connected across the switch regardless of whether or not zones 2-8 are selected to use EOL resistors. See diagram below.

Note that the system automatically assigns zone type 10 to zone 7 if keyswitch is used.

A momentary short across this zone will arm the system in the "AWAY" mode. If the short is held for more than 3 seconds, the system will arm in the "STAY" mode. (i.e. all zones designated as zone types 4 or 10 will be automatically bypassed). After the system has been armed, the next time zone 7 is shorted, the system will disarm.

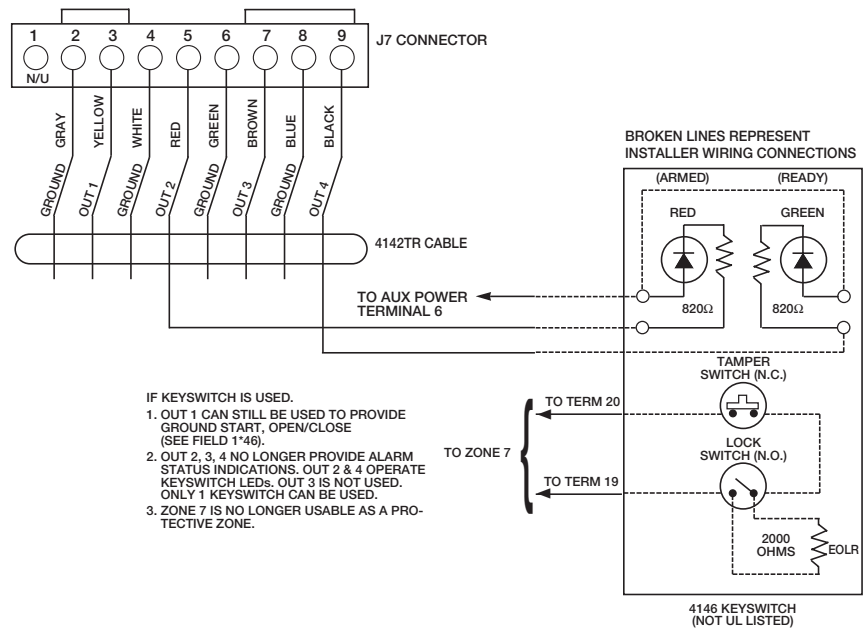
An optional closed-circuit tamper switch (model 112) can be wired in series with zone 7, so that, if the switchplate is removed from the wall, the tamper will open, disabling keyswitch operation until the system is next disarmed from the console.

Note: Only one keyswitch with LEDs can be supported by the system's power supply.

Note: Open/close reporting for keyswitch is enabled in field *40, and the keyswitch reports as user 0.

LED indications are defined as follows:

Green	Red	Meaning
Off	Off	Disarmed & Not Ready
On	Off	Disarmed & Ready
Off	On Steady	Armed Away
Off	Slow Flash	Armed Stay
Off	Rapid Flash	Alarm Memory

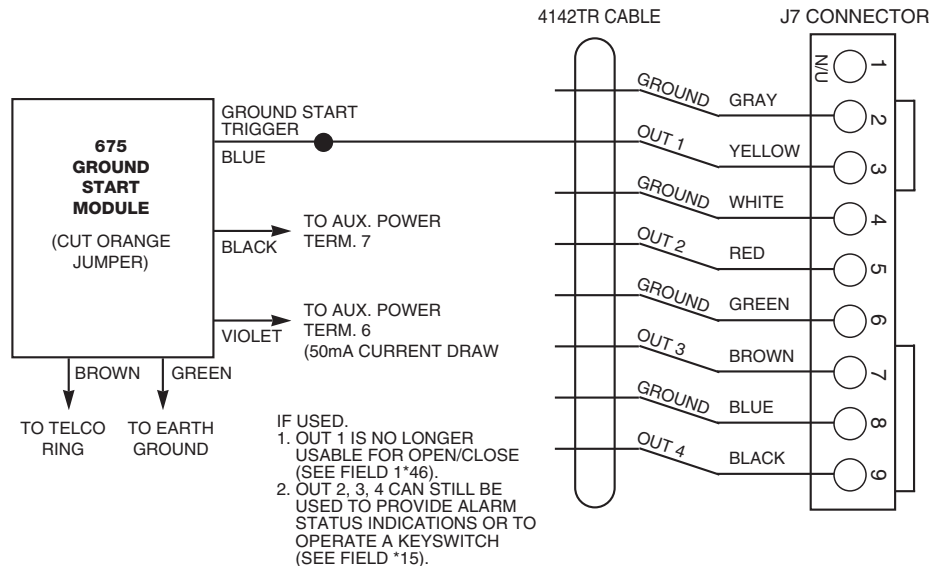


Ground Start Module

An optional 675 Ground Start module can be used for installations having telephone lines which require ground start instead of loop start operation to obtain dial tone from the telco central office. If used, program field 1*46 must be set to "0" (factory default) and the 675 Ground Start Module must be connected to the panel's J7 connector trigger output 1, to auxiliary power, and to the "RING" side of the telephone line as shown in the diagram below.

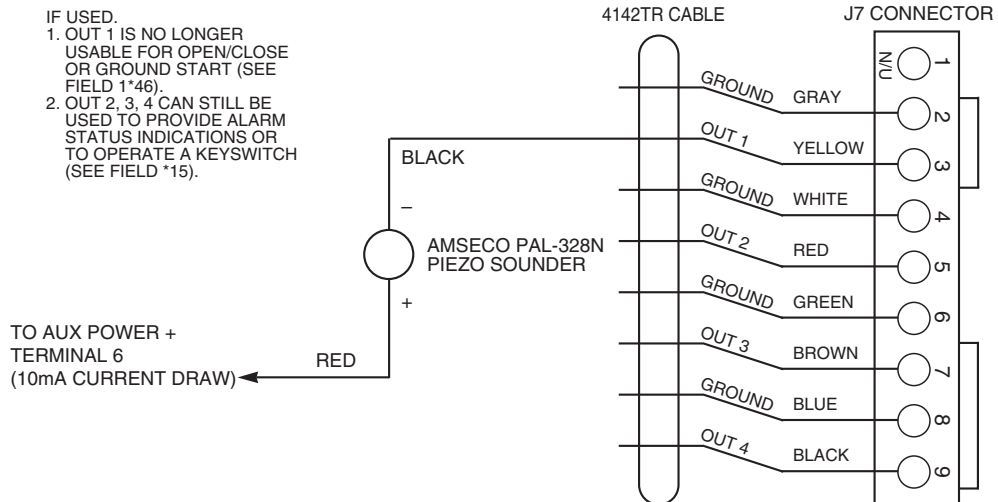
- Use the following procedure to determine the "RING" side of the telephone line:
- Connect the "+" lead of a DC voltmeter to earth ground, and the "-" lead to one side of the telephone line.
 - The wire which reads +50VDC is the "RING" side.

When the panel has a message to transmit to the central station, it will seize the line, go off hook, and then trigger the 675 module to connect the "RING" side of the telephone line to earth ground. The panel will cause the module to break the connection between "RING" and earth ground when a dial tone is obtained.



Remote Console Sounder Operation & Wiring

An optional Amseco PAL 328N can be used where it is desired to remote the sounds produced by the console's built-in piezo sounder for one partition. The panel will remote all sounds (i.e. alarm, trouble, chime, entry/exit, etc.) produced by the console's built-in sounder except for the short clicks associated with console key depression. One application of this feature might be to produce chime sounds in a location which is distant from the panel's consoles. This can also be accomplished using relay outputs (see Output Relay section). If used, set program field 1*46 to "2" to enable the remote console sounder option, and the Amseco piezo must be connected between the panel's auxiliary power and the J7 connector trigger output as shown below. In addition, field *15 must be used to select the partition whose console sounds are to trigger the sounder. Zone 7 **must** be assigned to be a keyswitch zone (even if keyswitch is not used).



OUTPUT CONTROL (4204 Relay Module/X-10 Devices)

General Information The 4140XMPT2 supports up to 16 relay outputs. These outputs may consist of relay outputs from the 4204 output relay module (4 relay outputs per module) or X-10 device outputs. Outputs can be activated and deactivated by predetermined events such as turning on lights in the event of an alarm condition and/or closing a fire door in the event of a fire alarm condition. Refer to the PROGRAMMING GUIDE for instructions on programming relay options.

There are many different uses for relays, some of which are shown at the end of this section.

4204 Relay Module The 4204 Relay Module has 4 form C (normally open and normally closed contacts) relays. Each relay can be used independently for different functions. The 4204 is wired to the control's console terminals 6-9. Use standard 4-conductor twisted cable (for long wire runs) or the connector supplied with the 4204. Each 4204 should be home run back to the panel. The maximum wire run length from the panel to the 4204 must not exceed:

Wire Gauge	Maximum Length
#22 (0.64mm)	125 feet (38m)
#20 (0.8mm)	200 feet (61m)
#18 (1.0mm)	300 feet (91m)
#16 (1.3mm)	500 feet (152m)

The 4204's DIP switch must be set for a device address and that address must be enabled in the control's Device Programming mode. (Note that some early units have only 4 DIP switches.)

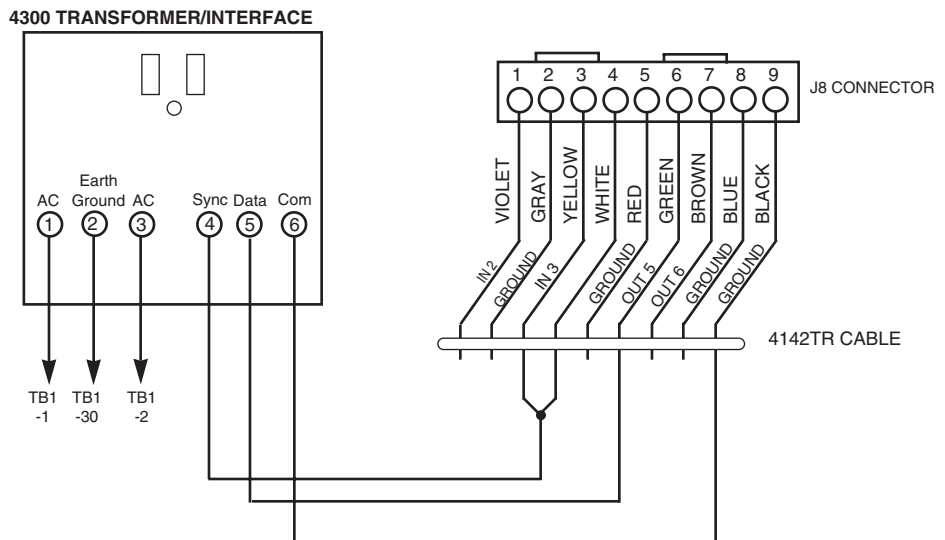
Program the output relays using the control's *93 Menu Mode. Refer to the PROGRAMMING GUIDE for details.

4300 Transformer & X-10 Devices When using X-10 devices, the 4300 60Hz/110VAC transformer must be used **instead of** the 1361 transformer shown on the Summary of Connections diagram. The 4300 provides AC power to the panel and relays signals from the panel through the premises AC wiring to X-10 devices.

Run a 3-conductor cable between the 4300 interface and the panel. Splice this cable to a 4142TR cable as shown in the diagram below. Note that the white and yellow wires of the 4142TR **must be spliced** together.

X-10 devices plug into standard AC outlets and can be used to perform various functions. Be sure to set the proper house and unit IDs when using X-10 devices.

UL NOTE: X-10 devices and the 4300 are not UL Listed for fire or burglary functions and are intended for home automation.



EXAMPLES OF USES FOR RELAYS

The following table lists examples of some possible uses for relays. Refer to the Relay Programming section of the PROGRAMMING GUIDE for detailed information.

LIST OF START AND STOP CHOICES

A = Action 0=No Response; 1=Close for 2 seconds; 2=Close and stay closed; 3=Pulse on and off
EV = Event 0=Not used; 1=Alarm; 2=fault; 3=Trouble; 4=Restore
ZL = ZONE List 1 to 8 (from Field *81) or 0=Not Used. Upon restore of all zones on RESTORE of ZONE LIST, relay action will STOP. It need not be same list as used for START
ZT = Zone Type/System Operation

Choices For Zone Types Are:

- 00 = No Response
- 01 = Entry/Exit
- 03 = Perimeter
- 04 = Interior Follower
- 05 = Trouble Day/Alarm Night
- 06 = 24 Hr Silent
- 07 = 24 Hr Audible
- 08 = 24 Hr Aux
- 09 = Fire
- 10 = Interior w/Delay

Choices For System Operation:

- 20 = Arming-Stay
- 21 = Arming-Away
- 22 = Disarming
- 31 = End of Exit Time
- 32 = Start of Entry Time
- 33 = Any Burglary Alarm
- 34 = Code + # + 7 + 1
- 35 = Code + # + 7 + 2
- 36 = At Bell Timeout***
- 37 = 2 Times Bell Timeout***
- 38 = **Chime
- 39 = Fire Zone Trouble
- 40 = Bypassing
- 41 = AC Power Failure
- 42 = System Battery Low
- 43 = Communication Failure
- 44 = RF Low Battery
- 45 = Polling Loop Failure
- 51 = RF Receiver Failure
- 52 = Kissoff
- 54 = Fire Zone Reset
- 58 = Duress
- 60 = Alarm Verification (use for both START and STOP)

** Should be used to start 2-second close of relay only
 ***Or at Disarming, Whichever occurs earlier

Additional Stop Choices:

- 55 = Disarm + 1 Minute
- 56 = XX Minutes (Enter XX at 1*74)
- 57 = YY Seconds (Enter YY at 1*75)

ACTION DESIRED	A	START				STOP		
		EV	ZL	ZT	P	ZL	ZT	P
TURN ON LIGHTS								
<i>On Entry:</i>								
Close relay at start of entry time and reset with key entry of security code + # + 7+1 *	2	0	0	32	X	0	34	X
Close relay at start of entry time and reset after 1 minute	2	0	0	32	X	0	55	X
Close relay after any burglary alarm and reset with key entry of security code + # + 7 + 2.**	2	0	0	33	X	0	35	X
<i>**Can be used to turn on lights in the event of a burglary alarm...(NOTE: Response types 06, 08, and 09 will not activate relay).</i>								
Turn All Lights off with entry of security code + # + 7 + 2*	2	0	0	00	X	0	35	X
<i>*Can be used to turn off all lights in on a given X-10 House and Unit Id</i>								
Pulse light on trouble condition to attract attention_	3	3	X	00	X	0	22	X
Pulse Light on alarm to attract attention_	3	1	X	00	X	0	22	X
Use a PIR to turn a light on for a pre-set time period*_	2	2	X	00	X	0	56	X

ACTION DESIRED	A	START				STOP		
		E V	Z L	Z T	P	Z L	Z T	P
= You must define a Start zone list (zl) for these applications to work properly. *Can be used to turn on lights in a specific room or area. For example you can automatically turn on the basement light on entry.								
CHIME								
Close relay for 2 seconds during chime. (Chime mode must be turned on at control)	1	0	0	38	X	0	00	X
<i>Chime on Specific zones:</i>								
Zones in zone list (x) close relay for 2 seconds on faults*	1	2	X	00	X	0	00	X
<i>*Will activate relay for any zone type plus panics on 5801 whether control is armed or disarmed. (Console panics will not activate a relay with the configurations above.)</i>								
Zones in zone list (x) close relay for 2 seconds on alarms	1	1	X	00	X	0	00	X
Zones in zone list (x) close relay for 2 seconds on troubles	1	3	X	00	X	0	00	X
BELL OUTPUT								
Zones in zone list (x) close relay on alarms and reset at bell timeout or when disarmed by any either partition.	2	1	X	00	X	0	36	X
Zones in zone list (x) pulse relay on alarms and reset at bell timeout or when disarmed by any partition.	3	1	X	00	X	0	36	X
Close relay after any burglary alarm and reset when disarmed by any partition.	2	0	0	33	X	0	22	X
Close relay after any burglary alarm and reset at bell timeout or when disarmed by any partition.	2	0	0	33	X	0	36	X
<i>*Response types 06,08, and 09 will not activate relay. If PULSE relay is desired, enter a 3 in A(action).</i>								
STROBE LIGHT								
Zones in zone list (x) close relay after alarms and reset when disarmed by either partition. (Latching relay for strobes)*	2	1	X	00	X	0	22	X
Zones in zone list (x) pulse a relay after alarms and reset when disarmed by either partition.*	3	1	X	00	X	0	22	X
<i>*Relay will activate for burglary, fire, and panic alarms if programmed into zone list.</i>								
Zones in zone list (x) close relay on alarms and reset with key entry of security code + # + 7 + 1	2	1	X	00	X	0	34	X
SYSTEM STATUS INDICATORS								
Close relay when ARMED-AWAY, reset when DISARMED. (Any partition)*	2	0	0	21	X	0	22	X
Close relay when ARMED-STAY, reset when DISARMED. (Any partition)*	2	0	0	20	X	0	22	X
<i>*If PULSED relay is desired, enter a 3 in A(action).</i>								
Bypassing a zone causes relay to close and will reset with a disarm sequence (code + off.)	2	0	0	40	X	0	22	X
CONFIRMATION OF ARMING DING								
Close relay for 2 seconds at end of exit delay time after system is armed	1	0	0	31	X	0	00	X

ACTION DESIRED	A	START				STOP		
		E V	Z L	Z T	P	Z L	Z T	P
UNLOCK EXIT DOORS								
Close relay on Burg alarm, reset with entry of security code + # + 7 + 1	2	1	X	33	X	X	34	X
Close relay on Fire alarm, reset with entry of security code + # + 7 + 1	2	1	X	09	X	X	34	X
TURN ON EMERGENCY LIGHTING								
An AC loss detection causes relay to close for 2 seconds.*	1	0	0	41	X	0	00	X
<i>*The relay will not reset on restoral of low battery or AC power. For this reason, using "close for 2 seconds" in A(action) is recommended.</i>								
SOUNDING FOR WIRELESS KEYPAD								
Pulse relay at start of entry time and reset when system is disarmed (entry warning)*	3	0	0	32	X	0	22	X
<i>*Relay can be used to turn on an external sounder placed where it can be heard by someone using the wireless keypad.</i>								

Section 3. REMOTE CONSOLES, SOUNDERS & PHONE CONNECTIONS

REMOTE CONSOLES

General The Control supplies up to 750 mA of auxiliary power for remote consoles, polling loop devices and/or other auxiliary devices such as motion detectors or 4-wire smoke detectors*.

The Controls support, independent of auxiliary power considerations, up to 16 addressable remote consoles (6128, 6139).

Up to sixteen (16) 6128 or seven (7) 6139 consoles can be powered from the auxiliary power output provided that the total current drawn from this output does not exceed 750 mA. Keep this in mind when adding remote consoles so you don't overdraw current from the panel. This would result in a battery which does not charge properly or possibly a tripped auxiliary solid state circuit breaker.

If the auxiliary load is determined to be greater than 750 mA, then additional consoles can be powered from a separate power supply. Refer to the POWERING ADDITIONAL CONSOLES paragraph for a diagram that shows how to make connections to the separate power supply.

6128 Addressable Fixed-Word Console

Equipped with a liquid crystal display (LCD) using 2-digit numerics for zone identification, and a set of pre-designated fixed-word prompts, such as "READY", "NOT READY", etc. for system status. Keys are backlit. A built-in warning sounder is also included, eliminating the need for a separate indoor sounder. DIP switch selectable ID number, which allows console to display status of the partition to which it is assigned. 25mA current drain.

6139 Addressable Alpha Console

The 6139 Remote Consoles are keypad addressable consoles, and feature a red "ARMED" LED which lights when the system is armed, and a green "READY" LED which lights when the system is ready to be armed (no zone faults present). This console also features display backlighting. The keypad on this console is located behind a decorative door, and is continuously backlit for ease in use. The keypad also features special panic keys, labeled A, B, & C (the D key is not used), which are the equivalent to the panic pairs of keys 1/*, */#, & 3/# respectively. Note that these keys must be held down for at least 2 seconds to activate an alarm.

The console can be surface mounted directly to a drywall, or to a single or double gang electrical box. For flush mounting to drywall, use the optional 6139TRK flush mount kit.
100mA current drain.

Programming The Consoles

The consoles can be set for an address of 0-30

IMPORTANT! You **must** select an address of 0, 1, 2, or 3 if standard defaults are to be programmed, since these are the only console addresses enabled by the standard default. Refer to the instructions provided with the 6128/6139 to set its ID number.

Do not use address 31 with the 4140XMPT2. Address 31 causes the console to operate in non-addressable mode (i.e. works like a standard, non-addressable console).

Consoles must also be programmed for type, partition number and console sounder suppression options. Refer to the PROGRAMMING GUIDE (#93 MENU MODE-DEVICE PROGRAMMING) for instructions.

Mounting The Consoles

Note that field wiring to the consoles must be completed before the consoles can be mounted.

The consoles can be either surface mounted or flush mounted (using an appropriate Trim Ring Kit: 6139TRK). Refer to the mounting instructions and template included with the console and/or trim ring kit for specific information.

Be sure to take the height of the users into account when mounting consoles.

Wiring Consoles

Consoles may be wired to a single wire run or individual consoles may be connected to separate wire runs. The maximum wire run length from the panel to a console which is homerun back to the panel must not exceed:

Wire Gauge	Maximum Length
#22 gauge (0.64mm)	450 feet (137m)
#20 gauge (0.80mm)	700 feet (213m)
#18 gauge (1.0mm)	1100 feet (335m)
#16 gauge (1.3mm)	1750 feet (534m)

NOTE: The length of all wire runs combined must not exceed 2000 feet (610m) when unshielded quad conductor cable is used (1000 feet [305m] if shielded cable is used.)

If more than one console is wired to a run, then the above maximum lengths must be divided by the number of consoles on the run (i.e. the maximum length would be 225 feet (69m) if two consoles are wired on a #22 gauge run).

Powering Additional Consoles

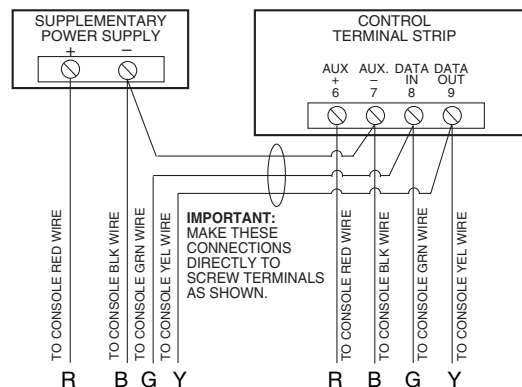
Up to sixteen 6128 or seven (7) 6139 consoles can be powered from the auxiliary power output provided that the 750mA rating is not exceeded. The backup battery will supply power to these consoles in the event that AC power is lost.

Additional consoles can be connected to the system by using a regulated, 12VDC power supply. Note that the maximum number of consoles supported by the system is 16.

Connect additional consoles as shown below, using the console wire colors shown. Make sure to observe the current ratings for the power supply used.

Wire run lengths from the 4140XMPT2 to consoles are listed in the WIRING CONSOLES paragraph (maximum combined wire run lengths for all consoles must not exceed 2000' [610m], or 1000' [305m] if shielded cable is used).

The power supplies have a backup battery which can power these consoles in the event of AC power loss. Note that consoles powered from supplies which do not have a backup battery **will not function** when AC power is lost. In this case, make sure to power at least one console from the Control's auxiliary power output.



IMPORTANT:
MAKE THESE CONNECTIONS DIRECTLY TO SCREW TERMINALS AS SHOWN.

IMPORTANT:

Make connections directly to screw terminals. Make no connection to the keypad **blue** wire (if present).

EXTERNAL SOUNDERS

Relay Output The Control provides a wet bell relay output which is used to power external alarm sounders. Connections are made to terminals 4 (positive output) and 5 (negative return). See SUMMARY OF CONNECTIONS Diagram.

The total current drawn from this output can be up to 2.8 amps. A battery must be installed since current in excess of 750mA is supplied by the battery. Up to two 702 sirens can be used, wired in series. Up to two 719 sirens can be used wired in parallel.

IMPORTANT: Going beyond the above mentioned limits will overload the power supply or may possibly trip the bell output circuit protector.

Compatible Sounders

702

**Outdoor Siren
(not CE approved)**

- Self-contained siren (driver built-in) and weatherproof for outdoor use. Can be wired for either a steady or yelp sound and is rated at 120 dB @ 10 feet (3m). This siren can also be tamper protected, or can be mounted in a metal cabinet (716), which can be tamper protected.

719

**Compact Outdoor
Siren (not CE
approved)**

- Compact, self-contained siren (driver built-in), and weatherproof for outdoor use. Can be wired for either a steady or yelp sound, and is rated at 90 dB @ 10 feet (3m). A 708BE cabinet is available, which can be tamper protected if necessary.

747

**Indoor Siren
(not CE approved)**

- Attractive, self-contained indoor siren (driver built-in), provides steady or warble tones and is rated at 95dB @ 10 feet (3m).

ABB1031

Motor Bell & Box

- AMSECO motor bell & box, rated at 81 dB @ 10 feet (3m).

PA400B

**(beige)/PA400R (red)
Indoor Piezo Sounder**

- System Sensor indoor piezo sounder (red or beige), rated at 90 dB @ 10 feet (3m).

PHONE CONNECTIONS

Phone Line Connections

Incoming phone line and handset wiring is connected to the main terminal block as follows (refer to SUMMARY OF CONNECTIONS Diagram):

TB1-26: Local Handset (TIP)

TB1-27: Local Handset (RING)

TB1-28: Incoming Phone Line (TIP)

TB1-29: Incoming Phone Line (RING)

If it is desired to connect the panel to phone lines that require ground start capability, then a 675 Ground Start Module must be used. This module is triggered by one of the outputs on the connector labeled J7 (see VOLTAGE TRIGGERS section).

Warning

To prevent the risk of shock, disconnect phone lines at telco jack before servicing the panel.

PABX

If the communicator is connected to a telephone line inside a PABX, be sure the PABX has a back-up power supply that can support the PABX for 24 hours. Many PABXs **are not** power backed up and connection to such a PABX will result in a communication failure if power is lost.

Section 4. MOUNTING THE CONTROL, PC BOARD & LOCK

General The 4140XMPT2 is supplied with a 12.5"W x 14.5"H x 3"D cabinet suitable for use in residential and non-certified commercial burglary installations.

Mount the Control cabinet to a sturdy wall using fasteners or anchors (not supplied) in a clean, dry area which is not readily accessible to the general public. The back of the Control cabinet has 4 holes for this purpose.

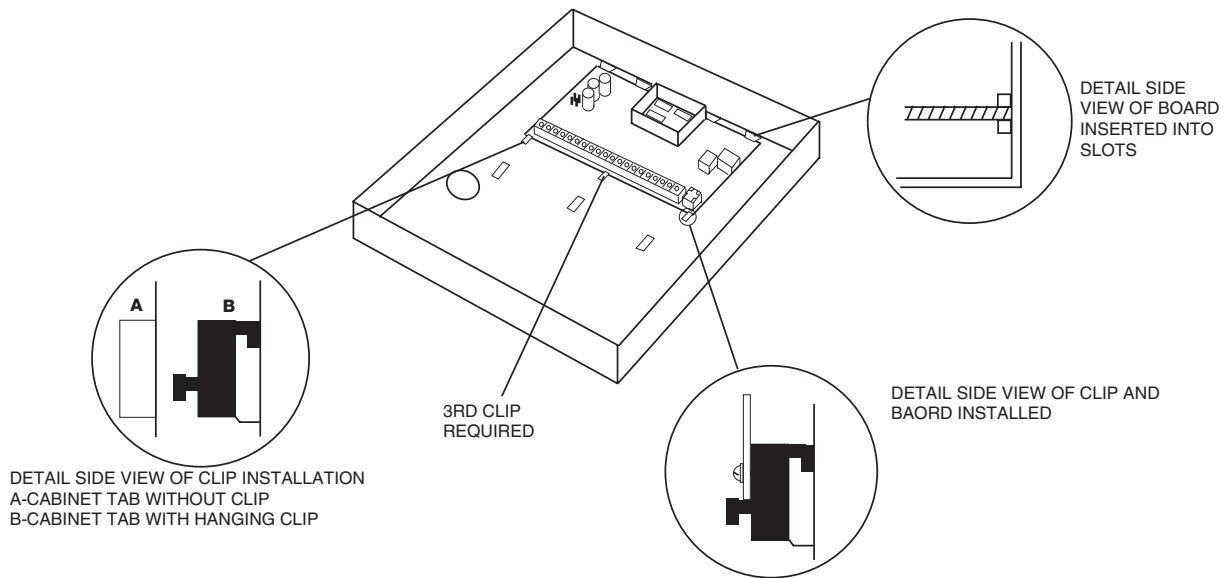
Follow the instructions below for mounting the 4140XMPT2 PC board into the cabinet and for mounting the Control's lock to its cabinet door.

Mounting The 4140XMPT2 PC Board

Before mounting the circuit board, be certain that the appropriate metal knockouts have been removed. **DO NOT ATTEMPT TO REMOVE THE KNOCKOUTS AFTER THE CIRCUIT BOARD HAS BEEN INSTALLED.**

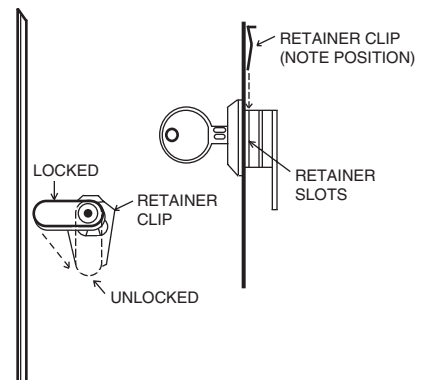
1. Hang the three mounting clips on the raised cabinet tabs. Observe proper clip orientation to avoid damage to the clip when mounting screws are tightened and to avoid problems with insertion and removal of the PC board.
2. Insert the top of the circuit board into the slots at the top of the cabinet. Make certain that the board rests in the slots as indicated in step 2 detail.
3. Swing the base of the board into the mounting clips and secure the board to the cabinet with the accompanying screws (as illustrated in step 3 detail).

Advisory Make certain that the mounting screws are reasonably tight to insure that there is a good ground connection between the PC board and the cabinet. Also, dress field wiring away from the microprocessor (center) section of the PC board. The cabinet provides 2 loops on its left and right sidewalls for anchoring field wiring using tie wraps. These steps are important to minimizing the risk of panel RF interference with television reception.



Mounting The Cabinet Lock

1. Remove the lock knockout on the control cabinet cover. Insert the key into the lock. Position the lock in the hole making certain that the latch will make contact with the latch bracket when the door is closed.
2. While holding the lock steady, insert the retainer clip into the retainer slots.



Section 5. POWERING THE SYSTEM

POWERING THE SYSTEM

Primary Power Power to the Control panel is supplied by model No. 1361* Plug-in Transformer which is rated at 16.5VAC, 40VA. Caution must be taken when wiring this transformer to the panel to guard against blowing the fuse inside the transformer (non-replaceable).

* NOTE: Use 1361CN Transformer in Canadian installations.

Back-Up Power In the event of an AC power loss, the Control panel is supported by a back-up, rechargeable gel cell battery. 467 (12V, 4AH) and 712BNP (12V, 7AH) batteries are recommended.

The standby battery is automatically tested every 24 hours, beginning 24 hours after exiting programming mode. In addition, entry into the test mode will cause a battery test to be initiated.

BATTERY STANDBY TABLE

AUX. STANDBY CURRENT DRAW				
AMP-HRS.	200mA	400mA	600mA	750mA
4.0	6 hrs.	4 hrs.	3 hrs.	2.5 hrs.
6.0-7.0	11 hrs.	7 hrs.	5.5 hrs.	4 hrs.

NOTE: These figures are approximate, and may vary depending upon the age, quality, and capacity of the battery at the time of the AC loss.

Earth Ground Connections In order for the lightning transient protective devices in this product to be effective, the designated earth ground terminal, must be terminated in a good earth ground. The following are examples of good earth grounds available at most installations:

Metal Cold Water Pipe: Use a non-corrosive metal strap (copper is recommended) firmly secured to the pipe to which the ground lead is electrically connected and secured.

AC Power Outlet Ground: Available from 3-prong, 120VAC, power outlets only. To test the integrity of the ground terminal, use a three-wire circuit tester with neon lamp indicators, such as the UL-Listed Ideal Model 61-035, or equivalent, available at most electrical supply stores.

Power-Up Procedure

1. Fill out the Polling Loop Current Draw and Auxiliary Device Current Draw Worksheets shown below. Make sure that the currents drawn from these outputs do not exceed their respective ratings.

CAUTION: Failure to observe the polling loop current rating will cause polling loop malfunction. Failure to observe the auxiliary output current rating will result in a battery which does not charge properly or possibly a tripped circuit breaker.

2. Wire the 110VAC 1361 transformer (1361CN in Canada) to the panel (before connecting the battery) as shown in the SUMMARY OF CONNECTIONS diagram. Do not plug in at this time.
3. Connect all polling loop and auxiliary devices, such as consoles, PIRs, etc.
4. Plug the 1361 into an 24 hour, uninterrupted AC outlet. After a few seconds, the green POWER LED on the console(s) should light and the console(s) should display "DISARMED READY TO ARM."
5. Connect the battery as shown in the SUMMARY OF CONNECTIONS diagram.

POLLING LOOP CURRENT DRAIN WORKSHEET

RPM DEVICE	CURRENT	# UNITS	TOTAL CURRENT
4194 Contact	1 mA		
4192SD Photo Smoke	0.4 mA		
4192SDT Smoke w/Heat	0.4 mA		
4192CP Ion Smoke	0.4 mA		
4275EX Dual PIR	1 mA		
4278EX Quad PIR	1 mA		
4190 2-Zone RPM	1 mA (LOW) 2 mA (HIGH)		
4208 8-Zone RPM	16 mA		
4280 63 Zone RF	40 mA		
4280-8 8 Zone RF	40 mA		
	TOTAL **		

** If the total current draw exceeds 64 mA, a 4297 Loop Extender module must be used.

** If using two 4280s or 4280-8s, you can power one of them from auxiliary power instead of using a 4297 loop extender module.

AUXILIARY DEVICE CURRENT DRAIN WORKSHEET

DEVICE	CURRENT	# UNITS	TOTAL CURRENT
6128 Console	25mA		
6139 Console	100mA		
675 Ground Start Module	50 mA		
4280 or 4280-8 Receiver	40 mA [†]		
Built-in Polling Loop	(total poll loop worksht)		
4281 RF Receiver	35mA		
5881 RF Receiver	50mA		
4297 Poll Loop Extender	160mA [†]		
*			
*			
*			
		TOTAL (750mA max)	

* If using hard-wire devices such as PIRs, refer to the specifications for that particular unit's current draw.

† Only applies if powered from Control's auxiliary power.

Section 6. SETTING THE REAL-TIME CLOCK

Procedure

Important:
This method is
different from the
previous method of
setting the clock.

NOTE: A 6139 alpha console must be used to set the real-time clock, or the clock can be set via the Downloader software. Only users with installer or master authority level can set the real-time clock.

To enter real-time clock mode, enter installer or master code + #63. A typical display will show:

```
TIME/DATE - THU
12:01 AM 01/01/90
```

The day of the week is automatically calculated based on the date entered. Time and date entries are made by simply entering the appropriate hour, minute, month, day and year. Pressing the [*] key accepts the entered value and moves the cursor to the right. Pressing the [#] key moves the cursor to the left of the display, to the previous position.

To set the time and date, simply enter the correct hour then press [*] to move to the minutes and make the correct entry.

Press [*] again, then toggle the AM/PM by pressing any key 0-9.

Press [*] to move cursor to the month position and enter the correct month using a 2-digit entry.

Press [*] and enter the correct date.

Press [*] and enter the correct year.

To exit clock mode, press the [*] key after the cursor is in the year position.

NOTE: The real-time clock can be synchronized to either 50Hz or 60Hz mains by the selection in program field 1*56. Failure to select the correct power source will result in inaccurate drifting of the time.

Section 7.

AUDIO ALARM VERIFICATION (AAV)

This section provides the following information:

- General information about the AAV option
- AAV operation
- Connecting an Eagle AAV Module
- AAV programming requirements

General Information

An Audio Alarm Verification (AAV) module (also known as two-way voice), such as the Eagle 1241, is an add-on accessory that permits voice dialogue between an operator at a central station and a person at the alarm installation, for the purpose of alarm verification. This feature is supported only if alarm reports are programmed to be sent to the primary phone number.

The AAV module connects from module terminals 7 & 8 to the control's zone 5 terminals 16 & 17. The purpose of this connection is to silence and restore the sounders at the premises. It is also used to postpone non-critical dialer reports while the AAV session is in progress. Note that zone 5 is then no longer available as a protection zone. When using the AAV, zone 5 must be assigned a zone response type (e.g. response type 10), and option 1*60 must be selected as **1**. In order to silence sounders on the premises, option 1*66 must be selected as **1**. If 1*66 is not enabled, conversation with the premises will be difficult (too much noise on the premises).

AAV Module Operation

After all messages have been sent during a reporting session to the primary phone number, the control will trigger the AAV if at least one of the messages was an alarm report. If Contact ID format is selected for the primary phone number, and the cancel report field *81 is programmed as non-zero, the control will send a "listen-in to follow" audio alarm verification message (event code 606), which signals the 685 (rev. 4.6 or higher) to hold the phone connection for 1 minute.

Once triggering occurs, the control will give-up the phone line to the AAV module, without breaking connection with the central station. During the time the AAV is active, all sirens and all continuous keypad sounds in all partitions will be shut off if field 1*66 is enabled. When the AAV indicates that the audio alarm verification session is completed, all keypad sounds will be restored. Sirens will be restored if the alarm timeout period has not expired.

As part of its fail-safe software, the control will limit all audio alarm verification sessions to 15 minutes (this is because once the session begins, the AAV module controls the duration). If a new fire alarm should occur during a session, the control will break phone connection and send the new fire alarm report, then re-trigger AAV mode. All other dialer messages triggered during on-going conversation will be held until either the AAV module signals that it is inactive, or the 15 minute timeout occurs.

One way to trigger the AAV module is by selecting option 3 in field 1*46 and make connections as shown in the *VOLTAGE TRIGGER* diagram. Field 1*46 can be used to set ground start, remote console sounding, or as an open/close trigger. If any one of these functions are absolutely necessary in a given installation, the alternative AAV trigger method is via the use of a 4204 relay as shown in the *RELAY TRIGGER* diagram. If this method is selected, the start and stop conditions for that relay must be set to choice 60 = "Audio Alarm Verification" during relay programming, via #93 menu mode.

Some AAV modules allow remote triggering by ring detection at the alarm installation. Please be advised that if this option is selected, it may defeat modem download. The DIP switch settings shown on the triggering diagrams disable remote AAV module trigger option. The control also requires that the AAV module trigger type is falling edge, which is set in DIP switch settings shown.

**Audio Alarm
Verification Module
Connections**

**Programming Audio
Alarm Verification
Module Options**

NOTES:

1. 685 Receiver software must be rev. 4.6 or higher. Earlier versions will not hold the phone line connection.
2. Contact ID code for "listen-in to follow" audio alarm verification is "606." Contact ID is the only reporting format that will send a "listen-in-to-follow."

Connect the Audio Alarm Verification module's falling edge trigger input (terminal 5 on Eagle model 1241) to J7 connector trigger output, *or* to a 4204 relay module, as shown in the various diagrams at the end of this section.

1. Enter data field programming mode: [Installer Code] + **8 + 0 + 0**.
Program the following data fields:
 - 1*46** AUXILIARY OUTPUT ENABLE: Set for 3 (unless using 4204 relay module).
 - 1*60** ALARM VERIFICATION: Set for 1.
 - 1*66** SILENCE BELLS DURING AAV: Set for 1.
 - *81** CANCEL REPORT: Set for non-zero digit.
 - *45** PRIMARY DIALER FORMAT: Set for 1 (Contact ID).

If you need more information about actual programming procedures, refer to the PROGRAMMING GUIDE.

2. Zone 5 must be programmed for response type 10 and **the EOLR must be removed**. Zone 5 is no longer available as a protection zone.
3. If using a 4204 relay instead of the J7 trigger, program the relay to trip on Zone Type/Sys. Op. 60--Audio Alarm Verification.
4. Press *99 to exit program mode.
5. Enter [Installer Code] + OFF to cancel the system's settling delay.

Section 8. VIDEO ALARM VERIFICATION (VAV)

This section provides only general information about the VAV option. Detailed information is contained in the manual provided with the VAV Transmitter.

General Information

A Video Alarm Verification (VAV) transmitter, such as the AT100 (or VT-1000), is an add-on accessory that permits video imagery of the area where an alarm was detected to be transmitted on standard switched network telephone lines to the monitoring location for the purpose of alarm verification. This transmission occurs on the same phone line and phone call on which the alarm is digitally communicated to the monitoring location.

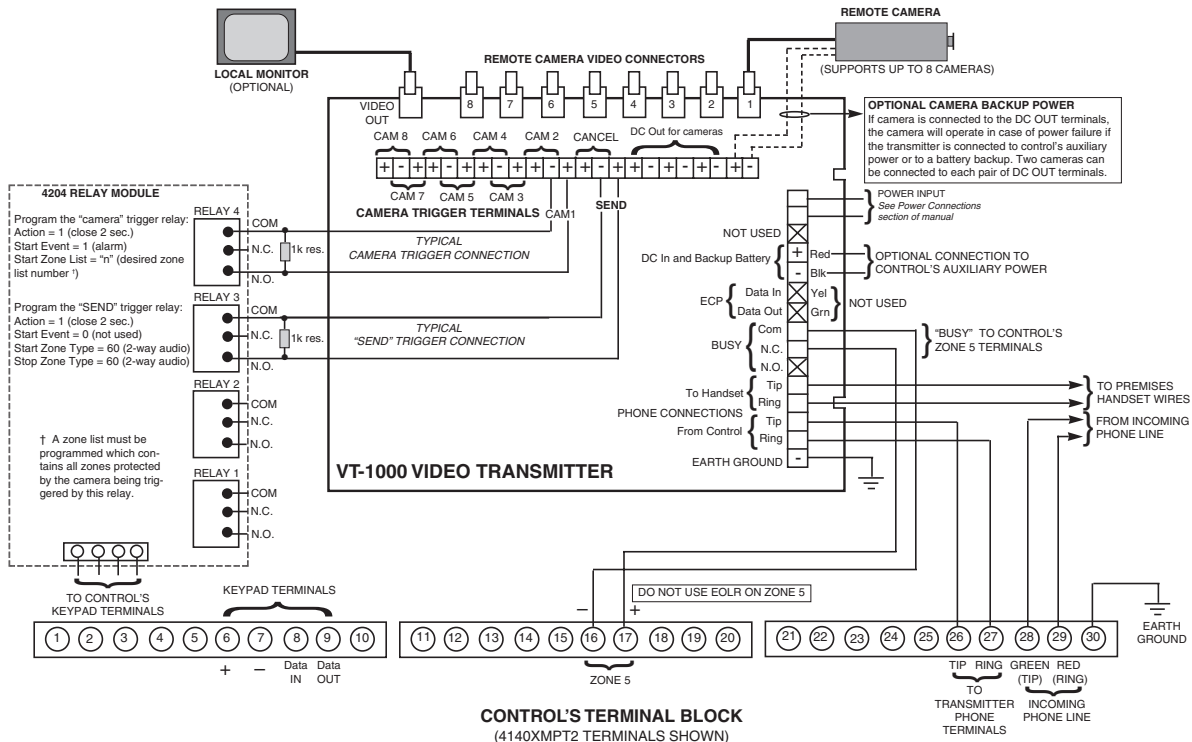
The VAV transmitter connects to the same telephone line as the control and it is linked to a 4204 Relay Module and to the control's zone 5. The purpose of the zone 5 connection is to postpone non-critical dialer reports while the VAV session is in progress. Note that zone 5 is then no longer available as a protection zone when using the VAV. Zone 5 must be assigned a zone response type (e.g. response type 10), and option 1*60 must be selected as 1. Option 1*67 must also be selected to assure that Contact ID report Event 609 will be transmitted to the monitoring location after the alarm transmission.

VAV Operation

As soon as an alarm is detected, a zone list should activate a 4204 relay that alerts the VAV transmitter to freeze the video for the time just prior to the alarm (pre-alarm) in its memory. After all messages have been sent to the primary phone number during a reporting session, the control will transmit the VAV report (609) to a 685 (revision 4.7 or higher) and then activate a second 4204 relay to activate the VAV transmitter's transmission mode.

Once this triggering occurs, the control gives up the phone line to the VAV transmitter without breaking connection with the central station. When the VAV indicates via its connection to zone 5 that the video alarm verification session is ended, dialer transmissions will be allowed to occur.

If a new fire alarm should occur during a session, the control will break the phone connection and send the new fire alarm report. All other dialer messages triggered during the session will be held until the session ends. It is imperative that the second relay be set to choice 60 = Alarm Verification during Relay Programming for both START and STOP conditions.



4140XMPT2 CONNECTIONS TO THE VT-1000 VIDEO TRANSMITTER

PART 2

PROGRAMMING GUIDE

Section 1. SYSTEM LAYOUT WORKSHEETS

As with any security system, you should first define the installation. This includes determining how many partitions will be used, how many zones per partition, and how many users per partition. You will also need to determine what peripheral devices will be needed, and basic system options such as exit/entry delays, etc. The control panel itself should be located in an area that will facilitate wire runs to all partitions, and will allow access to power and telephone circuits.

To help you layout a partitioned system, use the following worksheet. This will further simplify the programming process.

PARTITIONS					
Partition #	# of Users (99 max.*)	Descriptor (4 char max)	Prim. Sub. #	Sec. Sub. #	Alpha Default Message (32 character maximum)
Partition 1					
Partition 2					
Partition 3					
Partition 4					
Partition 5					
Partition 6					
Partition 7					
Partition 8					
Keyswitch Arming Partition Assignment (1-8):					
Wireless Keypad Partition Assignment (1-8):					
Use Partition Descriptor (yes/no)?					

* At least one user is assigned per partition, regardless of whether or not that partition is actually used. A maximum of 128 user codes can be programmed in the system.

COMMUNICATION OPTIONS BY PARTITION (enter yes/no)								
Option	part 1	part. 2	part. 3	part. 4	part. 5	part. 6	part. 7	part. 8
Swinger Suppression Count 00-15; 00=no suppression								
Cancel Report After Disarm								
Dialer Reports for Panic (* + 1)								
Dialer Reports for Panic (# + 3)								
Dialer Reports for Panic (* + #)								
Dialer Reports for Duress								
Burglary Alarm Communications Delay (16 sec.)								

SYSTEM DEFINITIONS BY PARTITION (enter values or yes/no)

Option	part 1	part. 2	part. 3	part. 4	part. 5	part. 6	part. 7	part. 8
Entry Delay #1 (15-225 seconds):								
Exit Delay #1 (15-225 seconds):								
Entry Delay #2 (15-225 seconds):								
Exit Delay #2 (15-225 seconds):								
Quick Arming								
Multiple Alarms per Arming								
Console Panic for zone 95 (* + 1)								
Console Panic for zone 96 (# + 3)								
Console Panic for zone 99 (* + #)								
Allow Sign-on (GOTO function)								
Non-Bypassable Zone*								
Sounder Timeout Duration (2 min. increments)								
Console Annunciation During Entry**								
Console Annunciation During Exit								
Confirmation of Arming (ding)								
Chime on External Siren								
Access Control Relay (field 1*76)								

*Can be any zone 1-64.

**no= 3 beeps yes=continuous

DEVICES (Consoles, 4204, etc.)

Device Address	Type	Home Partition	Sounder Option	Device Address	Type	Home Partition	Sounder Option
00				16			
01				17			
02				18			
03				19			
04				20			
05				21			
06				22			
07				23			
08				24			
09				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

Type:

- 0 = device not used
- 1 = alpha console
- 2 = fixed-word console
- 3 = RFreceiver
- 4 = Output Relay module

Console Sounder Options

- 00 = no suppression
- 01 = suppress arm/disarm and entry/exit beeps
- 02 = suppress chime mode beeps only
- 03 = suppress arm/disarm, entry/exit and chime mode beeps

ACCESS CODES & USER DEFINITIONS FOR PARTITIONS 1-3

4-digit Security Code	Access Group 0; 1-8	Partition 1				Partition 2				Partition 3			
		2-digit user #	Global Arm?	Auth. level	open/close	2-digit user #	Global Arm?	Auth. level	open/close	2-digit user #	Global Arm?	Auth. level	open/close

ACCESS CODES & USER DEFINITIONS FOR PARTITIONS 4-6

4-digit Security Code	Access Group 0; 1-8	Partition 4				Partition 5				Partition 6			
		2-digit user #	Global Arm?	Auth. level	open/close	2-digit user #	Global Arm?	Auth. level	open/close	2-digit user #	Global Arm?	Auth. level	open/close

ACCESS CODES & USER DEFINITIONS FOR PARTITIONS 7 & 8

4-digit Security Code	Access Group 0; 1-8	Partition 7				Partition 8				NOTES:
		2-digit user #	Global Arm?	Auth. level	open/close	2-digit user #	Global Arm?	Auth. level	open/close	

Authority Levels: 1=master (arm, disarm, bypass, and/or modify lower level users)
 2=manager (arm, disarm, bypass, and/or modify lower level users)
 3=operator A (arm, disarm, bypass)
 4=operator B (arm, disarm)
 5=operator C (arm, disarm only if system was armed with this code)
 6=duress code (arm, disarm, triggers silent panic alarm)

ZONE DEFINITIONS FOR ZONES 1-24

Zone No.	Zone Type	Parti- tion (1-8)	RF Trans. Type-			DIP RPM left loop	DIP RPM right loop	Ser. RPM-	Hard Wired	Report Code	<input type="text"/> Enter loop number on module <small>Loop number must be 1 for hardwire and DIP devices)</small> Zone Information (part numbers) & Alpha Descriptor (3 words max.)
			RF (3)	UR (4)	BR (5)						
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

ZONE DEFINITIONS FOR ZONES 25-48

Zone No.	Zone Type	Parti- tion (1-8)	RF Trans. Type-			DIP RPM left loop	DIP RPM right loop	Ser. RPM-	Hard Wired	Report Code	_ Enter loop number on module
			RF (3)	UR (4)	BR (5)						Loop number must be 1 for hardwire and DIP devices) Zone Information (part numbers) & Alpha Descriptor (3 words max.)
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											

ZONE DEFINITIONS FOR ZONES 49-72

Zone No.	Zone Type	Parti- tion (1-8)	RF Trans. Type-			DIP RPM left loop	DIP RPM right loop	Ser. RPM-	Hard Wired	Report Code	_ Enter loop number on module
			RF (3)	UR (4)	BR (5)						Loop number must be 1 for hardwire and DIP devices) Zone Information (part numbers) & Alpha Descriptor (3 words max.)
49											
50											
51											
52											
53											
54											
55											
56											
57											
58											
59											
60											
61											
62											
63											
64											
65											
66											
67											
68											
69											
70											
71											
72											

ZONE DEFINITIONS FOR ZONES 73-87

Zone No.	Zone Type	Parti-tion (1-8)	RF Trans. Type-			DIP RPM left loop	DIP RPM right loop	Ser. RPM-	Hard Wired	Report Code	<input type="text"/> Enter loop number on module Loop number must be 1 for hardwire and DIP devices) Zone Information (part numbers) & Alpha Descriptor (3 words max.)
			RF (3)	UR (4)	BR (5)						
73											
74											
75											
76											
77											
78											
79											
80											
81											
82											
83											
84											
85											
86											
87											

Zone Types: 00=zone not used 06=24 hour silent 20=arm stay
 01=entry/exit 1 07=24 hour audible 21=arm away
 02=entry/exit 2 08=24 hour auxiliary 22=disarm
 03=perimeter 09=supervised fire 23=no alarm response
 04=interior (follower) 10=interior (delay)

PRINTER OPTIONS	
12 or 24 hour Time format	
Printer On-Line (yes/no)	
1200 or 300 baud Printer Baud Rate	

REPORTS TO CENTRAL STATION		
Option (4)	No (4)	Yes
Armed Stay		
Time/Date & Log Reset		
Event Log 50% & 90% Full		
Event Log Overflow		

EVENT LOG TYPES		
Option	No (4)	Yes (4)
Alarm		
Trouble		
Bypass		
Open/Close		
System		

Section 2. GENERAL PROGRAMMING PROCEDURES

General Information

Review the global and specific partitioning features listed in the GENERAL INFORMATION section of the Installation Instructions before programming the system.

NOTE: A programming form has been included at the centerfold of this manual.

The system is shipped with a set of pre-programmed default values that are designed to meet the needs of many installations. These can be changed by the installer to suit specific needs if desired, by using a 6139 alpha console*. In addition, four sets of pre-programmed communication default values can also be loaded by the installer, each set designed for a specific communication format. These too can be changed to suit the needs of a particular installation.

Changes to these pre-programmed values can be programmed directly from the alpha console (6139) or from an IBM compatible computer either remotely (using an approved modem) or at the job site (using the 4100SM Serial Module). Both methods use the V-LINK Downloading software (be sure that the software version used includes a 4140XMPT with scheduling menu selection).

For alpha consoles, word descriptions of the zones and a custom installer message (which appears when the system is ready to arm) can be programmed using the built-in vocabulary of words (see #93 MENU MODE, ALPHA PROGRAMMING section).

* NOTE: The factory loaded defaults (*97) enable console addresses 00-03 only. A console with one of these addresses must be used to program the system.

User-Friendly Zone, Device & Alpha Programming (#93 Menu Mode)

To help set up a partitioned environment quickly and accurately, a user friendly menu mode has been added. Instead of the traditional method of programming all the fields associated with zones and the partitions they are associated with, you may now logically program a zone for all its characteristics as prompted by the console (refer to the #93 MENU MODE section for details). This ensures that you assign each zone to a partition and that a zone response type has been assigned.

This User Friendly Menu Mode steps you through the programming options by prompting you to answer simple yes/no questions. In addition to zone programming, this mode is also used for programming remote console characteristics, for entering alpha descriptors for wireless & polling loop module serial number "learning" and for relay programming.

Communication Default Programming

There are four sets of pre-programmed communication defaults available, including Low Speed, 4+2 Express, Ademco High Speed, and Ademco Contact ID. Loading one of these defaults automatically programs industry standard codes that will suit most of your needs. These codes can also be changed as required. Refer to the COMMUNICATION PROGRAMMING section for instructions.

Entering The Various Program Modes

Data Field Programming mode can be entered in one of two ways.

- A) By depressing the [*] and [#] keys at the same time within 30 seconds after power is applied to the Control.
- B) By keying the installer code, followed by depression of CODE (8)+ 0 + 0 keys. The factory installer code can be changed once in the program mode.

After entry into the program mode, the following will be displayed on a 6139:

```
Program Mode
* Fill # View - 00
```

Following this display, the system is ready to be programmed.

#93 Menu Mode is entered by pressing #93 while in data field programming mode.

#80 Scheduling Menu Mode, #81 Temporary Schedule Mode and #83 User Scheduling Menu Mode are entered by entering your security code, then pressing #80 or #81 or #83 respectively while in normal operating mode.

1. **Set the consoles to the appropriate addresses.**
2. **Set factory defaults by pressing *97.**
This will automatically enable console addresses 00-03, so be sure at least one console is set to one of these addresses.
3. **Program system-wide (global) data fields**
Using the programming form as a guide, enter program mode and program all system wide programming fields, including phone numbers, as well as any other programming fields required to customize the system to the needs of the installation. These options affect the entire system, regardless of partitions. They include control options, downloader and dialer options, RF options, event logging options, etc. Refer to the PROGRAMMING DATA FIELDS section for a listing of the program fields arranged by function.
Note that fields 1*26 & 1*27 (5700 RF device selection), field 2*00 (number of partitions), field 1*32 (RF expander type) must be programmed before continuing.
4. **Program partition-specific fields**
When the system-wide fields have been programmed, program all partition-specific programming fields by first pressing *91 to select a partition 1-8 (while still in data field program mode). Then enter the first partition-specific field number *09. The next partition-specific field will automatically be displayed when you are finished entering the value for field *09. Partition-specific fields can have different values for each partition. To program the fields for the next partition, press *91, enter the desired partition number, then enter field *09. Refer to the PROGRAMMING PARTITION SPECIFIC FIELDS section for instructions.
5. **Use #93 Menu Mode for device programming**
Refer to the DEVICE PROGRAMMING section to assign console ID numbers and default partitions for each console, and to selectively suppress certain console sounding. Use this mode to assign RF receivers as well.
6. **Use #93 Menu Mode for zone programming**
Refer to the ZONE PROGRAMMING section to program zone response types, assign right loop zones and wireless zones, and assign zones to partitions and program dialer reports.
7. **Use #93 Menu Mode for programming alpha descriptors**
Refer to the ALPHA PROGRAMMING section to enter zone and partition descriptors and a custom installer's message.
8. **Use #93 Menu Mode for programming relays**
8. **Set Communication Defaults**
Refer to the COMMUNICATION PROGRAMMING section for further instructions if one of the four communication default programming sets is to be used.
9. **Exit Programming Mode**
Exit programming mode by pressing either *98 or *99. A second entry of *99 is required if the exit is being done from fields 1*00 and above.
To prevent re-access to Programming mode using the Installer's code, use *98. The only way to re-access Programming mode is by depressing both the [*] and [#] keys at the same time within 30 seconds of power up.
Exiting by using *99 always allows reentry into Programming mode using the Installer's code. Either way of exiting will allow access via downloading. Note that if local programming lockout is set via downloading, programming mode cannot be entered at the console.
10. Use #80 and Scheduling Menu Mode and #81 Temporary Schedule mode to program open/close schedules and time driven events.
11. Use #83 User Scheduling Menu Mode to program end user relay or X-10 operation schedules.

Section 3. DATA FIELD PROGRAMMING

PROGRAMMING SYSTEM-WIDE (GLOBAL) DATA FIELDS

General Procedure The global (i.e. non partition-specific) programming fields are grouped into three sets (referred to as "pages"), as represented in the diagram below. The first page is accessed as soon as programming mode is entered. To access the other pages of fields (indicated on the programming form by a "1" or "2" in front of the 2-digit field address), press *94. Note that the alpha consoles display the words ALT PROGRAM MODE along with a "1" or "2", depending on which page of programming fields are accessed, to indicate the higher page of fields. To return to the previous page of fields, press *99.

**Enter programming mode
(installer code + 8 + 0 + 0)**

**Enter the first field number (ex. *00, installer's code)
to move to first page**

First Page of fields (*00-*90)

**press *99 or *98
to exit program
mode**

press *94 to move to 2nd page press *99 to move back to 1st page

second page of fields (1*01-1*76)

press *94 to move to 3rd page press *99 to move back to 2nd page

third page of fields (2*00-2*21)

To program specific data fields, press [*] plus the 2-digit field address, then make the required entry. The console will beep when a field has been completely programmed and will automatically display the next field in sequence. Partitioned programming fields are skipped (refer to PARTITIONING PROGRAMMING paragraph). If the number of digits that you enter in the data field is less than the maximum permitted (ex. phone number), the console displays the last entry and waits. To proceed, the next data field to be programmed must be entered manually (ex. press *05).

To view the contents of a data field, press [#] plus the 2-digit field address. The field's entries will be displayed, but no changes can be made.

In case of errors: If an address is improperly entered, the console will display FC. If a program entry is improperly entered (for example, a larger number than that which is permitted), the console display will go blank. In either case, simply re-enter the correct number.

SUMMARY OF DATA FIELD PROGRAMMING COMMANDS	
* 9 4	Next page of fields
* 9 9	Previous page of fields or exit programming mode with no installer lockout
* 9 1	Select partition for programming partition-specific fields
# 9 3	Enter Zone/Alpha/Device Programming mode
* 9 8	Exit programming mode with installer lock-out

INDEX TO PROGRAMMING FIELDS

In the following pages, the programming fields have been arranged by functional group. Use this index to cross reference the numerical ordered fields on the programming form with the text.

Field	Group	Field	Group	Field	Group
*00	Control	*64	Dialer	1*52	Partition-Specific
*02	#93 Menu Mode	*65	Dialer	1*53	Downloading
*03	#93 Menu Mode	*66	Dialer	1*55	Event Logging
*04	#93 Menu Mode	*67	Dialer	1*56	Event Logging
*05	#93 Menu Mode	*68	Dialer	1*57	Wireless
*09	Partition-Specific	*69	Dialer	1*58	Wireless
*10	Partition-Specific	*70	Dialer	1*60	Alarm Verification
*11	Partition-Specific	*71	Dialer	1*66	Alarm Verification
*12	Partition-Specific	*72	Dialer	1*67	Alarm Verification
*13	Partition-Specific	*73	Dialer	1*70	Event Logging
*14	Control	*74	Dialer	1*71	Event Logging
*15	Control	*75	Dialer	1*72	Event Logging
*16	Partition-Specific	*76	Dialer	1*73	Event Logging
*17	Control	*77	Dialer	1*74	Scheduling
*18	Control	*78	Dialer	1*75	Scheduling
*19	Control	*79	Dialer	1*76	Partition-Specific
*21	Control	*80	Dialer	2*00	Control
*22	Partition-Specific	*81	Dialer	2*01	Scheduling
*23	Partition-Specific	*82	Dialer	2*02	Scheduling
*24	Control	*83	Control	2*03	Scheduling
*25	Control	*84	Partition-Specific	2*04	Scheduling
*26	Control	*85	Partition-Specific	2*05	Partition-Specific
*27	Control	*86	Control	2*06	Partition-Specific
*28	Control	*87	Partition-Specific	2*07	Partition-Specific
*29	Partition-Specific	*88	Partition-Specific	2*08	Partition-Specific
*30	Dialer	*89	Dialer	2*09	Partition-Specific
*31	Dialer	*90	Partition-Specific	2*10	Partition-Specific
*32	Partition-Specific	1*01	#93 Menu Mode	2*11	Scheduling
*33	Dialer	1*02	#93 Menu Mode	2*13	Scheduling
*34	Dialer	1*03	#93 Menu Mode	2*14	Scheduling
*35	Downloading	1*04	#93 Menu Mode	2*17	Partitioning
*36	Downloading	1*05	#93 Menu Mode	2*18	Partition-Specific
*37	Downloading	1*06	#93 Menu Mode	2*19	Partitioning
*38	Partition-Specific	1*07	#93 Menu Mode	2*20	Partition-Specific
*39	Partition-Specific	1*08	#93 Menu Mode	2*21	Control
*40	Dialer	1*09	#93 Menu Mode		
*41	Control	1*26	Control		
*42	Dialer	1*27	Control		
*43	Dialer	1*28	Wireless		
*44	Dialer	1*29	Wireless		
*45	Dialer	1*30	Wireless		
*46	Dialer	1*31	Wireless		
*47	Dialer	1*32	Wireless		
*48	Dialer	1*33	Dialer		
*49	Dialer	1*34	Dialer		
*50	Dialer	1*35	Dialer		
*51	Dialer	1*36	Dialer		
*52	Dialer	1*37	Dialer		
*53	Dialer	1*38	Dialer		
*54	Dialer	1*39	Dialer		
*55	Dialer	1*40	Dialer		
*56	Dialer	1*41	Dialer		
*57	Dialer	1*43	Partition-Specific		
*58	Dialer	1*44	Wireless		
*59	Dialer	1*45	Partition-Specific		
*60	Dialer	1*46	Control		
*61	Dialer	1*47	Partition-Specific		
*62	Dialer	1*48	Wireless		
*63	Dialer	1*49	Wireless		

DATA FIELD DESCRIPTIONS

Refer to the programming form provided at the center of this manual while reviewing the following programming sections.

Control Options

The following section arranges the global (system wide) program fields into the following functional groups:

- Control Options
- Downloading Options
- Dialer Options
- Wireless Options
- Partitioning Options
- Event Logging Options

Note that zone response types can be programmed in fields *02-*05 & 1*01-1*09, but it is recommended that they be programmed via the #93 Menu Mode. For this reason, these fields are not discussed in this section.

*00 Installer Code

4-digit code reserved for installation company use, but can be used by the customer if needed. This is the only code that can be used to enter the Program mode from the console. This code cannot be used to disarm the system if not used to arm, or if Quick Arm was used to arm system. This code cannot reenter programming mode if exited by the *98 command.

*14 Zone 9 Fast/Slow Response

Enter **1** to set fast response mode (10msec) for appropriate devices wired to zone 9. Enter **0** for normal response, 350msec. Must be **0** for UL.

*15 Keyswitch Assignment

Enter the partition number **1-8** in which the keyswitch is being used; otherwise, enter **0**. Requires the use of zone 7 wired loop (zone 7 no longer available as protection zone when used for keyswitch operation). If the keyswitch is used, the fire and panic alarm voltage triggers automatically become ARMING and READY status outputs for support of the Keyswitch LEDs. NOTE: Zone type 10 is automatically assigned to zone 7 if a keyswitch is used. Reports openings/closing by user "0" if reporting is enabled in field *40.

*17 AC Power Loss Console Sounding

Entering **1** enables sounding at the console (rapid beeping) when AC power is lost is desired. Enter **0** if no AC power loss console sounding is desired.

*18 AC Power Loss External Alarm

Entering **1** enables the external alarm sound after AC power has been out for 4 hours; otherwise enter **0** (no alarm).

*19 Randomize AC Loss Report

Enter **1** to randomize AC loss reporting between 10-40 min. after an actual AC loss. Enter **0** for normal AC loss reporting (about 2 minutes after actual AC loss). Selecting this option helps prevent an overload of AC loss messages at the central station during a community blackout.

*20 Phone Module Phone Access Code

If a 4285 Phone Module is being used, enter the 2-digit phone code used to access the system. Enter 01-09 for the first digit, and enter 11 (for *) or 12 (for #) for second digit. To disable the phone module, enter 00 for the first digit and enter 11 for the second digit of the code.

*21 Disable Fire Time-Out

Enter **1** to disable (no timeout) the alarm sounder duration for any zone designated as a fire zone, regardless of partition, so that fire sounding continues until the system is reset. Enter **0** if the normal burglary alarm sounder duration (partition-specific field *13) should apply to fire alarms.

*24 Expansion Zone Tamper Disable

Only applicable if No. 4190WH RPMs are used on the polling loop or 5800 series transmitters are used. This option is used to disable this module's tamper detection. Enter **1** to disable. Enter **0** if tamper detection is desired.

*25 Burg. Trigger For Response Type 8

This field allows optional triggering of the voltage output on pin 7 of the J7 header for zone response type 8 (24hr. auxiliary). The **0** disable selection is useful if J7 header pin 7 is used for a panic trigger, and non-panic devices are used for all zones assigned to zone response type 8 (e.g. water sensor, temp. sensor). If disabled, only burglary or audible panic alarms will trigger pin 7. Otherwise, enter **1**.

Control Options
(continued)

*** 26 Intelligent Test Reporting**

Enter **1** if it is desired that no test report be sent if any other type of report was sent since the last test report. Enter **0** if test reports are to be sent at the set intervals, regardless of other reports having been sent.

*** 27 Test Report Interval**

Enter the test reporting interval in hours, **001-199**. Enter **000** if no test reporting is desired. If a test report is desired, enter a test code in fields *81 & *82, location 7. Max. 024 for UL.

***28 Power Up In Previous State**

Enter **1** if it is desired that upon power-up, the system will assume the system status prior to power down. Enter **0** if it is desired that the system will always power up in a disarmed state. When the system powers up armed, an alarm will occur 3 minutes after arming if a zone is faulted. When so armed, reports closing as User #0 if open/close reporting for installer was enabled in field *39. Note that if the previous state was armed AWAY or STAY, the system may not respond to sensor changes for a small period of time (1-3 min.), which allows time for sensors such as PIRs to stabilize. Must be **1** for UL applications. Note that authority levels 0 or 5 cannot be used to disarm the system if control powers up armed.

*** 41 EOLR Disable (Zones 2-8)**

Enter **0** if end-of-line resistors are to be used. Enter **1** if end-of-line resistors are not to be used (normally closed loops that detect only an open and do not require end-of-line resistors). Must be **0** for UL.

*** 83 First Test Report Time**

Enter the day (**01-07**) and time (**00-23 hours/00-59 min.**) that the first test report shall be transmitted. **00** entry in all locations signifies immediately upon exiting. Note that day 01=Monday. See fields *81 & *82 for assigning the Test Report code. Do not use "00" for the day unless the other locations are also "00".

***86 4208 Module Zone Assignment**

Entering **1** allows a single 4208 to be set to zone numbers 10-17 (all 8 loops using DIP setting for zones 9-16)), but precludes the use of any other polling loop expansion. Enter **1** only when the total polling loop expansion consists of a single 4208 module programmed for zones 10-17. No other polling loop expansion is supported with this setting. Enter **0** for all other configurations, such as no 4208, more than one 4208 or other polling loop expansion present. Note that the 4208 addresses must match the table to the left.

4208 Zone #s available when:	
*86=1	*86=0
10-17 Precludes use of any other polling loop expansion.	10-16 33-40 41-48 49-56 57-64 65-72 73-80 74-87

2nd page fields (press *94 to display "1" prefix)

1*26 First 4280 Receiver Select

Enter **1** if first Receiver is installed. Enter **0** if no Receiver is installed.

1*27 Second 4280 Receiver Select

Enter **1** if second Receiver is installed. Enter **0** if only one or no Receiver is installed. If second Receiver is installed, be sure to identify it as such at the receiver (cut Blue jumper on 2nd 4280).

1*46 Auxiliary Output Enable

Enter **0** if ground start output is required; enter **1** if the auxiliary output will be used to produce an open/close trigger (produced only if **all** partitions are armed); enter **2** if the auxiliary output will be used to produce console-like sounding at an auxiliary sounder (ex. 706-12) This option applies only to the partition set in field *15. NOTE: Only one of the above options can be active within a system.

3rd page field (press *94 to display "2" prefix)

2*00 Number Of Partitions

Enter the number of partitions 1-8 to be used in the system.

2*21 Supervision Pulses For LORRA Trigger Outputs

Used for supervised connection to 7920SE. Enter **1** to enable pulses for each type of LORRA triggers. This option causes the control to send periodic short pulses on the J7 radio triggers. These pulses are used by the 7920SE to determine that its connection to the control is still intact. Enter **0** if not desired.

Downloader Options

- *35 Download Phone No.**
This field is applicable only if downloading will be utilized. Enter the downloading phone number, up to 12 digits (0-9). Do not fill unused spaces.
- *36 Download ID No.**
Enter 00-09; A-F (10-15). Only applicable if downloading will be utilized. Make entries as 2-digit numbers as follows:
00=0 03=3 06=6 09=9 12=C 15=F
01=1 04=4 07=7 10=A 13=D
02=2 05=5 08=8 11=B 14=E
- *37 Download Command Enables**
Each of the various remote (from the central station) functions can either be enabled or disabled. Disabling a function means that the central station will not be able to perform that function with respect to this system. Enter **1** to enable a function, and **0** to disable a function. See field 1*53 for Callback disable option. For UL installations, all entries must be **0**.

2nd page field

- 1*53 Download Callback**
Enter **1** if callback is not required when downloading. Enter **0** if callback is required. Must be **0** for UL.

Dialer Options

- *30 Touch-Tone Or Rotary Dial**
Enter **1** if touchtone service is being used. Enter **0** if rotary phone service is used.
IMPORTANT!: Do not select a dialing method that is not legally permitted by the telephone company for the particular subscriber. If selecting touch-tone, make sure the subscriber has requested and is paying for touch-tone service. Note that whether or not touch-tone dialing for call placement is permitted, communication by the use of DTMF signaling (Ademco High Speed) will still take place. See field 1*33 for Touch-Tone w/Rotary backup.
- *31 PABX Access Code**
This field is used to enter up to four 2-digit numbers 00-09; B-F (11-15). If not required, enter nothing and proceed to next address; otherwise, enter prefix needed to obtain an outside Telco line. This field may be used alternatively to enter a prefix that can suppress the Telco's call waiting feature from interfering with outgoing transmissions. This prefix is only useful if the Telco option to suppress call waiting has been obtained by your customer. The prefix to be used is 01010700 if rotary dialing is being used or 140700 if touch-tone dialing is being used. Each entry is a 2-digit entry so as to allow use of hexadecimal digits (B-F). Do not use hexadecimal digit **A**. Only enter digits required. Do not fill unused spaces.
- *33 Primary Phone Number**
This field is used to enter the primary phone number, up to 12 digits, **0-9**. This is the phone number the control will use to transmit alarm and status messages to the central station. Do not fill unused spaces. Note that back-up reporting (8 calls are made to the secondary phone number if no acknowledgment is received after 8 attempts to the primary number) is automatic only if a secondary phone number is entered.
- *34 Secondary Phone Number**
This field is used to enter the secondary phone number, up to 12 digits, **0-9**. The secondary phone is the number that the control will use if communication on the primary number is unsuccessful. Do not fill unused spaces. If this field is programmed, a secondary subscriber account number (field *90) *must* also be programmed (can be the same as the primary account number).
- *40 Open/Close Reporting For Keyswitch**
Enter **1** if open/close reporting for the keyswitch is desired. Enter **0** if reporting is not desired.

Dialer Options
(continued)

***42 Dial Tone Pause**

This field sets the delay time for the Dial Tone Detect option, if true dial tone is not selected in that field. Enter the desired wait time for dial tone detection as follows: Enter single digit, **0** = 5 seconds; **1** = 11 seconds; or **2** = 30 seconds. Must be **0** for UL.

***43 Dial Tone Detection**

Determines whether the control will wait for a true dial tone before dialing, or if it will wait for a predetermined delay before dialing (delay is programmed in Dial Tone Pause field *42). The latter may be necessary in high-noise environment Telco networks where noise can be confused with dial tone, resulting in premature dialing. Enter **1** for true dial tone wait. If no dial tone is detected, will dial at end of pause programmed in field *42. Enter **0** to pause for seconds entered in field *42, then dial.

***44 Ring Detection Count**

Only applicable if central station initiated downloading will be used. Enter **00** to disable ring detection. Enter **01-14** for ring counts of 1-14. Enter **15** to select answering machine mode that allows the system to receive calls even when a telephone answering machines is connected to the same phone line. In the answering machine mode, the download caller should let the phone ring once, then hang up, then call again within 30 seconds. The system, upon hearing one ring followed by nothing, will not answer that call, but will ready itself to pick up on the first ring the next incoming call that is received within 30 seconds (the downloader calling again).

***45 Primary Format**

This field selects the reporting format for use on the primary telephone line. Enter the appropriate number for the primary format as follows: 0=Low Speed; 1=Contact ID; 2=Ademco High Speed; 3=Ademco Express

***46 Low Speed Format (Primary)**

Enter the appropriate value: **0**=Ademco Low Speed; **1**=Sescoa/Radionics

***47 Secondary Format**

This field selects the reporting format for the secondary telephone line. Enter the appropriate number for the secondary format as follows: 0=Low Speed; 1=Contact ID; 2=Ademco High Speed; 3=Ademco Express

***48 Low Speed Format (Sec.)**

Enter the appropriate value: **0**=Ademco Low Speed; **1**=Sescoa/Radionics

***49 Checksum Verification**

Enter **1** for either or both primary/secondary formats to send a verification digit to validate the message at the receiver without having to send two message rounds. Selection is valid for 3+1, 4+2, and Ademco High Speed reports. Enter **0** if not desired.

***50 Sescoa/Radionics Select**

Enter **0** if Radionics format is to be used with hexadecimal 0-9, B-F reporting. Enter **1** if SESCOA format is to be used with only numeric reporting (0-9). Note that selection applies to both primary and secondary phone numbers.

***51 Dual Reporting**

This field allows all reports to be sent to both primary and secondary phone numbers. Enter **1** if it is desired that all reports are sent to both primary and secondary phone numbers. If dual reporting is desired and Ademco High Speed format is to be used at all, it must be selected as **both** the primary and secondary transmission formats. If used with Split Reporting option **1** (1*34), alarms go to both primary & secondary numbers, while all other reports go to secondary only. If used with Split Reporting option **2**, open/close and test messages go to both lines, while all other reports go to primary.

Dialer Options
(continued)

- * 52 Standard/Expanded Report Primary**
Enter **0** for standard or **1** for expanded reporting for the primary phone line.
Note: Expanded overrides 4+2 format.
 - *53 Standard/Expanded Report Secondary**
Enter **0** for standard or **1** for expanded reporting for the secondary phone line. Note: Expanded overrides 4+2 format.
 - *54-*78 Report Codes For Zones 1-64 & 81-87**
Enter the appropriate report codes for each zone used in the system.
 - * 79 Zone Type Restores For Zone Types 1-8**
Enter **1** to enable restore reporting for individual zone types. Enter **0** if no restore report is desired for a zone type.
 - *80 Zone Type Restores For Types 9/10**
Enter **1** to enable restore reporting for individual zone types. Enter **0** if no restore report is desired for a zone type.
 - *81-*82 Non-Alarm Report Codes**
Enter the appropriate report codes as indicated on the programming form.
 - * 89 Restore Report Timing**
Enter **0** for instant restore report, as zone restores. Enter **1** for reporting after bell timeout if zone restored. Enter **2** for restore report when system is subsequently disarmed
- 2nd page fields**
- 1 * 33 Touch-Tone W/Rotary Backup**
Enter **1** to enable Rotary back-up dialing if communicator is not successful on dialing using touch-tone DTMF on first attempt. Enter **0** if this option is not to be used.
 - 1 * 34 Comm. Split Report Selection**
This field allows certain reports to be directed to either the primary or secondary phone number. Enter **0**, **1**, or **2**, in accordance with the following: **0** = split reporting disabled; **1** = alarm, alarm restore & cancel reports sent to primary Telco number, all others to secondary Telco number; **2** = open/close & test reports sent to secondary Telco number and all other reports to primary. See *51 for split/dual reporting comments.
 - 1*35-1*39 Report Codes For Zones 65-80**
Enter the appropriate codes as shown on the programming form.
 - 1*40-1*41 Event Logging Report Codes**
Enter the appropriate code as shown on the programming form.

- Wireless Options
- 1*28 RF TX Low Battery Annun.**
Enter **0** if audible beep and display annunciation upon RF transmitter low battery condition is desired only in disarmed state. Enter **1** if audible beep and display is desired in both armed and disarmed states. Must be **1** for UL.
 - 1*29 RF TX Low Battery Report Enable**
Enter **1** if a trouble message for RF transmitter low battery conditions is to be sent to the central station. Enter **0** if no report for transmitter low battery is desired. Note that a trouble message will be sent for a transmitter supervision failure independent of this selection. Must be **1** for UL.
 - 1*30 RF Rcvr Supervision Check-In Interval**
Enter the check-in monitoring interval in 2-hour increments. Enter **02-15** times 2 hours (4-30 hours). Failure of a receiver to receive any RF signal within the time entered will result in activation of the response type programmed for zone 90 for the first receiver and zone 88 for the second receiver and their related communication reports. Enter **00** to disable receiver supervision. Max. "6" (12 hr) for UL.
 - 1*31 RF Transmitter Check-In Interval**
Enter the check-in monitoring interval in 2-hour increments; enter **02-15** times 2 hours (4-30 hours). Failure of an individual transmitter to send a supervision signal within the time entered will result in a trouble response and related communication report. Entry **00** disables transmitter supervision. Max. "6" (12 hr) for UL.
 - 1*32 Receiver Type**
Enter **0** if using 4280 series Receivers. Enter **1** if using 4281 series receivers. enter **2** if using 5881 series receivers. Important: the 4281 microprocessor must have part number N5334Vx, where x is any number.
 - 1*44 Wireless Keypad Tamper Detect**
Enter **1** to enable tamper detection on wireless keypad. Enter **0** if tamper detection is not desired. If this feature is enabled, any attempt to tamper by means of many trial entries at a wireless keypad will be blocked by the control panel. If more than 40 key depressions are received without a valid sequence (arm, disarm, etc.), the Control panel will disable the wireless keypad. The inhibit is removed once a valid key sequence is received from a wired keypad.
 - 1*48 Wireless Keypad Assignment**
Enter the partition in which the RF keypad is used, **1-8**. Enter **0** if no RF keypad is used.
 - 1*49 Disable Trouble Sounder For RF Supervision**
Enter **1** to disable trouble sounding for transmitter check-in failure. Enter **0** if audible trouble sounding is desired. Must be "0" for UL.
 - 1*57 Enable 5800 RF Button Global Arm**
Enter **1** to have the system arm/disarm in accordance with the button's user's global arming settings. Enter **0** if the button is not to be used to global arm the system (however, home partition arming will still occur).
 - 1*58 Enable 5800 RF Button Force Bypass**
Enter **1** to allow the RF Button user to force bypass all faulted zones. When attempting to arm the system, the console will beep once after pressing the button, if any faulted zones are present. If this feature is enabled, the user should then press the button again within 4 seconds to force bypass those zones and arm the system.
- Partitioning Options
- 2*17 Number Of User Codes Per Partition**
Enter **01-99** for each partition used in the system. Enter **01** for unused partitions. Total number of user codes in the system must be less than or equal to 128. Note that one user number is automatically assigned to each partition, regardless of whether that partition has been enabled.

2*19 Use Partition Descriptors

Enter **1** if partition descriptors will be programmed. If enabled, the normal console display will include a partition number and the partition descriptor (if programmed in #93 Menu Mode). Entering **0** causes the consoles to display a non-partitioned system type of display (no partition no. appears).

Scheduling & Relay Output
Options

Second Page Fields

1*74 Relay Timeout XX Minutes

Enter the relay timeout, **0-127** in multiples of 2 minutes, desired for #80 Menu Mode time driven event relay command numbers "04/09" and #93 Menu Mode Relay Programming output command "56" (refer to #93 and #80 Menu Mode sections in this manual).

1*75 Relay Timeout YY Seconds

Enter the relay timeout, **0-127** seconds, desired for #80 Menu Mode time driven event relay command numbers "05/10" and #93 Menu Mode Relay Programming command "57" (refer to #93 and #80 Menu Mode sections in this manual).

Third Page Fields

2*01 Daylight Savings Time Start/End Month

Enter the months **00-12** in which daylight savings time starts and ends. Enter **00, 00** if daylight savings time does not apply to the user's region. Standard setting for U.S. is 04,10.

2*02 Daylight Savings Time Start/End Weekend

Enter the start and end weekends for daylight savings time as follows: **1**=first; **2**=second; **3**=third; **4**=fourth; **5**=last; **6**=next to last; **7**=third from last. Standard setting for U.S. is 01,05.

2*11 Allow Disarm Outside Window If Alarm Occurs

Used only if field 2*10 (partition-specific field) is set to **1**. Enter **1** if it is desired that the system can be disarmed outside the programmed disarm window if an alarm has occurred. Enter **0** if it is desired that disarming can only be done during the disarm window, regardless of system status. If field 2*10 is set to **0** for a partition, this field (2*11) has no effect for that partition.

2*13-2*14 Scheduling Related Dialer Reports

Enter the report codes for the scheduling related events as shown on the programming form.

Event Logging Options

1*55 Date Format Selection

Select the desired date format where **0** = mmddyy; **1** = ddmmyy

1*56 60Hz/50Hz Real Time Clock Synchronization

Enter the appropriate value where **0** = 60Hz Mains; **1** = 50Hz Mains.

1*70 Event Log Types

Enter **1** for each of the types of events for which event logging is desired, as shown on the programming form. Otherwise enter **0**.

1*71 12/24 Hour Time Stamp Format

Select the type of time stamping desired: **0**=standard 12 hour; **1**= 24 hour format.

1*72 Event Log Printer On-Line

Enter **1** to enable the printer to print events as they occur, or **0** to enable the printer such that the logs are only printed upon request.

1*73 Printer Baud Rate

Enter **0** if printer is configured for 1200 baud (preferred). Enter **1** if printer is configured for 300 baud.

Alarm Verification

1*60 Alarm Verification

Enter **1** if alarm verification is used. Otherwise enter **0**.

1*66 Silence Bells During Alarm Verification

Enter **1** if audio alarm verification is used. Otherwise enter **0**.

1*67 Video Alarm Verification Selection

Enter **1** if video alarm verification is used. Otherwise enter **0**.

PROGRAMMING PARTITION-SPECIFIC DATA FIELDS

General Procedure Values for some programming fields are system wide (global), and some can be different for each partition (partition-specific). Note that the partition-specific programming fields are automatically skipped when programming the global fields. The table below lists the partition-specific fields that can be defined for each partition.

To access partition-specific fields,

1. Press *91, which will prompt you for the partition number desired.
2. Enter a partition-specific field number (ex. *09) to begin programming. When the first field's entry is completed, the next partition-specific field will automatically be displayed. When all partition-specific fields are programmed, the system returns to the global programming fields (page 1 fields). To return to the global program fields before finishing all fields, enter any global field number.
3. Repeat this procedure for each partition in the installation.

PROGRAMMING PARTITION-SPECIFIC FIELDS
Press *91 to select a partition

Enter a Partition-Specific Field Number

**Selected Partition
Set of Fields**

Exits to global page 1 program fields
Press *91 to select next partition.
Enter any global field number to return to the global fields at any time.

Partition-Specific Field Descriptions

- *09 Entry Delay #1**
Entry delay defines the delay time which allows users to reenter the premises through a door that has been programmed as an entry delay door and disarm the system without sounding an alarm. The system must be disarmed within this period or an alarm will occur. Enter the entry delay time (01-15 times 15 seconds or 00 for no delay), up to a maximum delay of 225 seconds (entry 15 times 15 seconds), for the zone assigned to Entry Delay #1.
- *10 Exit Delay #1**
Exit delay defines the delay period that allows users to leave the premises through a door that has been programmed as an entry/exit delay door after arming the system without setting off the alarm. Enter the exit delay time (01-15 times 15 seconds or 00 for no delay), up to a maximum delay of 225 seconds, for the zone assigned to Exit Delay #1.
- *11 Entry Delay #2**
Entry Delay 2 is used for the zone assigned to Entry Delay #2 zone type. Note that this delay must be longer than Entry Delay #1.
- *12 Exit Delay #2**
Exit delay 2 is used for the zone assigned to Exit Delay #2. Note that this delay must be longer than Exit Delay #1.
- *13 Alarm Sounder Duration**
Defines the length of time an external sounder and the console's sounder will sound for all audible alarms (multiply entry 01-15 by 2 minutes for actual duration). This duration can be overridden by the Fire Timeout Disable option (field *21) for fire alarms. Minimum 4 minutes for UL.
- *16 Confirmation Of Arming Ding**
Enter 1 to enable 1/2 second external alarm sounding ("ding") at the end of exit delay #1. Otherwise enter 0.

**Partition-Specific Field
Descriptions
(continued)**

- * 22 Console Panic Enables**
Enter **1** to enable the appropriate console panics used in this partition. Otherwise enter **0**.
- * 23 Multiple Alarms**
Determines whether or not more than one alarm can be sounded in a given zone during an armed period. Note that multiple alarm soundings will not occur more frequently than allowed by the programmed alarm sounder duration. This selection applies to local sounding and has no impact on the number of communication messages transmitted. Refer to Swinger Suppression for limiting communication messages. Enter **1** if this feature is desired. Enter **0** if not desired.
- * 29 Quick Arm**
Enter **1** to enable arming of the burglary system in AWAY, STAY, INSTANT or MAXIMUM modes by using the # key instead of the security code. When armed, reports closing as User 0 if open/close reporting for User #2 (typically a master level user) was enabled for a given partition. Enter **0** if Quick Arm is not desired. (The security code must always be used to disarm the system.) Note that if quick arm is used, the installer code and authority level 5 code cannot disarm the system.
- * 32 Primary Subscriber Acct #**
Enter a 3 or 4 digit (depending on report format) primary subscriber account number 00-09; B-F (11-15). Each number requires a 2-digit entry so as to allow entry of hexadecimal digits (B-F). If a 3 digit account number is to be used, only enter data in the first 3 locations, leaving the last one unfilled, by entering a *.
- * 38 Inhibit Bypass Of A Zone**
Entering a zone number (01-87) prevents that zone from being bypassed by the user. Enter 00 if this feature is not desired (all zones can be bypassed). This selection does not affect fire zones, which the system prevents from being bypassed.
- * 39 Enable Open/Close Report For Installer Code**
Enter **1** if open/close reporting for the installer is desired. Otherwise enter **0**.
- * 84 Intermittent Sensor Suppression**
This option limits the number of messages (Alarms or Troubles) sent for a specific channel in an armed period (Intermittent Sensor Suppression). Enter **01-15**. If **00** is selected, all Alarm or Trouble codes are reported.
- * 85 Enable Dialer Reports For Panics & Duress**
Enter **1** for each panic/duress for which reporting is desired.
- * 87 Entry Warning**
Enter **0** for 3 short beeps, or **1** for slow beeps that continue for the entire entry delay period.
- * 88 Burg. Alarm Comm. Delay**
Enter **0** for no delay on burglary alarm communication, or **1** for 16-second delay (no delay on 24-hour reports).
- * 90 Secondary Subscriber Acct #**
Enter the 3 or 4 digit number (depending on report format) for the secondary subscriber account, 00-09; B-F (11-15). Each number requires a 2-digit entry so as to allow entry of hexadecimal digits (B-F). If a 3-digit number is to be used, only enter data in the first 6 locations, leaving the last two unfilled. Default=15 15 15 15. Erase the field by entering *90*. NOTE: This field *must* be programmed if a secondary phone number is used (field *34). This account number can be the same as the primary account number.

**Partition-Specific Field
Descriptions
(continued)**

2nd Page Fields

1*43 Enable Permanent Display Backlighting

Enter **1** if it is desired that backlighting for the console display remain on at all times. Enter **0** if the display should remain unlit unless a key is pressed. The backlighting then turns off again after a period of keypad inactivity. Note that when a key is pressed, display backlighting turns on for **all** consoles in that partition.

1*45 Enable Console Annun. During Exit Delay

Enter **1** if beeps from the consoles during exit delay is desired. Enter **0** for no console sound during exit delay.

1*47 Enable Chime Annun. On External Alarm Sounder

Enter **1** for chime annunciation using the external alarm sounder. If not desired, enter **0**.

1*52 Cancel Report Restriction

Enter **1** if no report restriction is desired. Enter **0** if cancel reports are to be sent within Bell Timeout period only.

1*76 Access Control Relay

The system can be programmed to provide user activated access control. If enabled, the assigned relay will pulse for 2 seconds when the user enters his code and presses "0". Enter the relay number (**00-16**) for the relay that will be used for access control. Enter **00** if not used in this partition.

3rd Page Fields

2*05 Auto-Arm Delay

Enter the time between the end of the arming window and the start of auto arm warning time in values of **01-14** times 4 minutes. Enter **00** if no delay is desired. Enter **15** if auto arming is not desired.

2*06 Auto-Arm Warning Period

Enter the time **01-15** in one minute increments during which the user is warned (ex. turn lights on/off, bell sounds, etc.) to exit the premises prior to auto arming of the system.

2*07 Auto-Disarm Delay

Enter the time between the end of the disarming window and the start of auto disarming of the system in values of **01-14** times 4 minutes. Enter **00** if no delay is desired. Enter **15** if auto disarming is not desired.

2*08 Enable Force Arm For Auto-Arm

Enter **1** if the system should automatically bypass any faulted zone when it attempts to auto arm. Otherwise enter **0**.

2*09 Enable Open/Close Reports By Exception

Enter **1** if it is desired that open/close reports be sent **only if** the open/close occurs **outside** the arm and disarm windows. Open reports will also be suppressed during the closing window in order to prevent false alarms if the user arms the system, then reenters the premises to retrieve a forgotten item. Note that openings and closings are still recorded in the event log though. Enter **0** if exception reporting is not desired. Note: This field **must** be set to 1 if late/early to open and late/early to close reports are to be sent.

2*10 Restrict Disarming Only During Arm/Disarm Windows

Enter **1** if disarming of the system should be allowed only during the arming/disarming windows, or if the system is in alarm (if 2*11 is set to "1"). Note that this applies **only** to operator level users. Installer, Master and manager level users can disarm the system at any time. Enter **0** if disarming can occur at any time.

2*18 Enable Goto For This Partition

Enter **1** if this partition is to be accessed by a GOTO command. Otherwise enter **0**.

2*20 Enable J7 Triggers By Partition

0=disable for displayed partition; **1**=enable for displayed partition

Section 4. PROGRAMMING WITH #93 MENU MODE

General Information

NOTE: The following fields should be preset before beginning: 1*26 First RF Expander; 1*27 Second RF Expander; 2*00 Number of Partitions; 1*32 receiver type. In addition, receivers should be programmed via Device programming.

After programming all system related programming fields in the usual way, press #93 while still in programming mode to display the first choice of the menu driven programming functions, which are as follows:

ZONE PROG? 1=Yes 0=No

For programming the following:

- Zone Number
- Zone Response Type
- RF Zone?
- Right Loop Zone?
- Partition Number for Zone
- Dialer report code for zone

SERIAL PROG? 1=yes 0=no

For entering 5800 transmitter & serial number polling loop device serial numbers into the system.

ALPHA PROG? 1=yes 0=no

For entering alpha descriptors for the following:

- Zone Descriptors
- Installer's Message
- Custom Words
- Partition Descriptors
- Relay Descriptors

DEVICE PROG? 1=yes 0=no

For defining the following device characteristics for addressable devices, including consoles, RF receivers (4281/5881) and 4204 output relay modules:

- Device Address
- Device Type
- Device's Home Partition
- Console Options

RELAY PROG? 1=yes 0=no

For defining output relay functions.

Press 0 (NO) or 1 (YES) in response to the displayed menu selection. Pressing 0 will display the next choice in sequence. Refer to the ZONE PROGRAMMING section for instructions for programming zone characteristics, the DEVICE PROGRAMMING section for instructions for programming addressable devices, and the ALPHA PROGRAMMING section for programming alpha descriptors. The following is a list of commands used while in the menu mode.

#93 Menu Mode Key Commands

#93	Enters Menu mode
[Q]	Serves as ENTER key. Press to have console accept entry.
[#]	Backs up to previous screen.
0	Press to answer NO
1	Press to answer YES
01-09	All entries are 2-digit entries.
00	Escapes from menu mode, back into field programming mode.

Zone Programming

Important!: Note that before programming zone characteristics, fields 1*26 & 1*27 (RF Expander Selects) and field 2*00 (number of partitions) and field 1*32 must be programmed. This identifies the use of RF Receivers and the number of partitions being used in the system.

Enter Programming mode, then press #93 to display "ZONE PROG?".

ZONE PROG?
1=Yes 0=No

Press 1 to enter ZONE PROGRAMMING mode. The following screens will appear. Press * to display the next screen. Press # to display a previous screen.

Enter Zn No.
00=QUIT 20

Enter the zone number to be programmed (01-87, 88-91, 95, 96, 97 or 99). Press [*] to accept entry.

Zn ZT P RC In:L
20 00 1 00 RF:N

A summary screen for that zone will appear.

20 Zone Type
Zone disabled 00

Each zone in a system must be assigned to a zone type, which defines the way in which the system responds to faults in that zone. Refer to the ZONE TYPE DEFINITIONS section of the Installation Instructions for definitions of each zone type. Enter the zone response type for each zone. The screen will automatically display the zone type for the number entered. Press [*] to accept entry. If a different zone response type is desired, enter a different number and press [*].

For UL applications, use of 1 or 2 RF RCVRs requires enabling their respective faults (88-91) as applicable (type 5). Zone Types are as follows:

- 00 Assign for unused zones
- 01 Entry/Exit #1, burglary
- 02 Entry/exit #2,
- 03 Perimeter, burglary
- 04 Interior, follower, burglary
- 05 Trouble by day/Alarm by night, burglary
- 06 24 hour silent alarm
- 07 24 hour audible alarm
- 08 24 hour auxiliary
- 09 Fire (without timeout for some controls)
- 10 Interior, delay, burglary
- 20 Arm-stay (not for 5700 transmitters)
- 21 Arm-away (not for 5700 transmitters)
- 22 Disarm (not for 5700 transmitters)
- 23 No alarm response

20 Partition

Enter the partition number (1-8) that this zone is located in.

20 Report Code

Enter the report code for this zone.

20 Input Device
RF Trans. RF:

Enter the device type as follows: 1=hardwired; 2=device not used; 3=supervised RF transmitter; 4=unsupervised RF transmitter; 5=RF button type transmitter; 6=serial number polling loop device; 7=DIP switch type polling loop device; 8=right loop of DIP switch type device.

Right loops refer to the use of the right loop on a 4190WH zone expander module and/or 4278 PIR, which allow hard-wired devices to be monitored by the polling loop.

After completing this entry, the summary display appears. The display will then repeat with the zone number question for programming the other zones in the system. Enter 00 to exit back to normal programming mode.

Serial Number
Learning/Deleting

SERIAL # PROG?
0=no 1=yes

To learn or delete a device's serial number, enter 1 (yes). Enter 0 to move to the **Device Programming** menu.

Enter zone no.
00=QUIT

Enter the zone number of the device to be learned or deleted. Press * to move to the next prompt. Enter 00 to quit Serial Number programming.

If the device for that zone number was not programmed as a serial number input device in the **Zone Programming** menus, a prompt indicating such will appear. Press * to return to the Enter Zone No. prompt.

10 PROG AS RF:2
A000-5372:2

If a serial number has already been learned for that device, a summary prompt will appear displaying the type of device and its serial number. Press * to continue to the Delete S/N prompt.

DELETE S/N?
0=No, 1=Yes

Enter 1 to delete the displayed serial numbered device. Enter 0 if this device should not be deleted.

Input type
Input = 0 or 3-6

If a serial number for that device has not been learned yet, and if the device assigned to that zone number has been programmed as a serial number input device in the **Zone Programming** menus, this prompt will appear. Enter the device input type as follows: 0=none, 3= supervised RF transmitter, 4= unsupervised RF transmitter, 5= RF button type, 6= serial polling loop device. Press * to move to the next prompt.

Learn S/N?
0=No, 1=Yes

If adding a new serial number device to the system, this prompt will appear after entering the input type.. Enter 1 to have the system learn the device's serial number. To learn the serial number at a later time but retain the zone programming information, enter 0. If 0 is entered, a zone summary screen appears (described later). Press * to return to the Enter Zone No. prompt to learn another device's serial number or to exit learn menus.

Input S/N:L
Axxxxxx -xxxxxxx:L

If 1 was entered at the Learn S/N? prompt, this screen will appear. The device's serial number can be manually entered, or it can be automatically learned by faulting the device at least twice (causing 2 transmissions). Two transmissions must be received. The console will beep with each transmission received. Press * to continue.

10 PROG AS RF:2
A000-5372:2

A summary screen will appear if the serial number was successfully learned. Press * to continue.

XX ZT P RC IN:L

A summary screen for the zone programming will appear showing the zone number, zone type (ZT), partition assignment (P), report code (RC), and input device type (IN:L). Press * to continue. The Enter Zone No. prompt will appear again.

Device Programming

This menu is used to program consoles, receivers and relay modules. From Data Field Programming mode, press #93 to display "ZONE PROG?". Press 0 repeatedly to display "DEVICE PROG?".

DEVICE PROG?
1=yes 0=no

Press 1 to enter DEVICE PROGRAMMING mode.

DEVICE ADDRESS?
01-31

Enter the 2-digit ID number as set by the device's DIP switches (01-31). Press [*] to accept entry.

DEVICE TYPE

Select the type of addressable device as follows:

- 00 = device not used
- 01 = alpha console (6139)
- 02 = fixed word console (6128)
- 03 = RF receiver (4281/5881)
- 04 = output relay module (4204)

Press [*] to accept entry.

RF EXPANDER
HOUSE ID XX

If device type 3 is selected, this prompt will appear. Enter the 2-digit house ID (00-31)

CONSOLE HOME
PART. (1-8) X

If device type 01 or 02 was selected this prompt will appear. Enter the addressable device's default partition number (01 to maximum number of partitions programmed for system in field 2*00). This is the primary partition for which the device is intended to be used. Press [*] to accept entry.

SOUNDER OPTION

Addressable consoles can be individually programmed to suppress arm/disarm beeps, entry/exit beeps and chime mode beeps. This helps prevent unwanted sounds from disturbing users in other areas of the premises.

Enter a number 00-03 for the console sounding suppression options desired for the console as follows:

- 00 = no suppression.
- 01 = suppress arm/disarm & entry/exit beeps.
- 02 = suppress chime mode beeps only.
- 03 = suppress arm/disarm, entry/exit **and** chime mode beeps.

The screen will display the next device number to be programmed.

Press 00 to exit Menu Mode.

NOTE: Console address 00 will always be set to an alpha console with no sounder suppression options.

These relay output actions are performed **in response** to a programmed condition. The system can also activate relays to **initiate** and action at programmed times by using the #80 Scheduling Menu Mode–Time Driven Events function.

The 4140XMPT2 supports up to sixteen (16) X-10 and/or relay outputs. The X-10 interface is made via a 4300 plug-in transformer. Relay and X-10 devices are interchangeable in functionality. Once a device is programmed into the system, the user sees no difference between an X-10 or a relay output device.

Relays can be used to perform many different function and actions. Each relay must be programmed to begin one of four types of ACTIONS at a designated START event and end that ACTION at a designated STOP event.

Action (A)

The "ACTION" of a relay is the way in which the relay will respond when activated by the "START" event. There are 4 different choices of actions:

- 1) **CLOSE for 2 Seconds....**The relay will activate for 2 seconds then reset. Because the relay resets on its own, "STOP" programming is not necessary
- 2) **CLOSE....**The relay will activate and remain activated until it is told to deactivate by the "STOP" programming.
- 3) **PULSE ON and OFF....**The relay will pulse (intermittent activation) until it is told to deactivate by the "STOP" programming.
- 4) **No Response....**Relay is not used.

START

The "START" programming determines when and under what conditions the relay will activate. There are 4 parts that must be programmed; Event, Zone List, and Zone type/System Operation. Each part is described below.

- 1) **EVENT (EV)....**The "EVENT" instructs the relay what condition must occur to the zone(s) programmed into the "ZONE LIST" in order to activate the relay. The "EVENT" and "ZONE LIST" work together. There are 5 different choices of events:
 - ALARM....An alarm condition occurring on any zone in the zone list will activate the relay.
 - FAULT....A fault condition (whether control is armed or disarmed) on any zone in the zone list will activate the relay.
 - TROUBLE....A trouble condition occurring on any zone in the zone list will activate the relay. (**A trouble condition can only occur on fire and day/night zones**).
 - NOT USED....Use when an "EVENT" is not needed. If a "ZONE LIST" is not being used because a "ZONE TYPE/SYSTEM OPERATION" is, it is not necessary to use an "EVENT" or a "ZONE LIST".
- 2) **ZONE LIST (ZL)....**A "ZONE LIST" is a list of zones selected by the installer via menu selection after relay programming is completed. When an event occurs as assigned by "EVENT" on any zone within that list, the relay will activate as selected in "ACTION". In this way many zones can be assigned to a single event very easily. For example: you may wish a relay to activate (perhaps to activate a strobe to get a visual indication) whenever one zone of a group of zones is faulted.
- 3) **ZONE TYPE/SYSTEM OPERATION (ZT)....**Instead of using a "ZONE LIST" and "EVENT", a specific zone response type or action can be selected to activate the relay. If a specific zone response type is chosen, any zone of that type going into alarm, trouble, or fault will cause the relay to activate as selected in "ACTION". Any zone of that type that restores will deactivate the relay. If a "SYSTEM OPERATION" is chosen, that operation will cause the relay to activate as selected in "ACTION".

The following is a list of choices for (ZT):

CHOICES FOR ZONE

TYPES:

- 00 = No Response (Not Used)
- 01 = Entry/Exit #1
- 02 = Entry/exit #2
- 03 = Perimeter
- 04 = Interior Follower
- 05 = Trouble Day/Alarm Night
- 06 = 24 Hr Silent
- 07 = 24 Hr Audible
- 08 = 24 Hr Aux
- 09 = Fire
- 10 = Interior w/Delay
- 23 = No alarm response

CHOICES FOR SYSTEM

OPERATION:

- 20 = Arming-Stay
- 21 = Arming-Away
- 22 = Disarming (Code+Off)
- 31 = End of Exit Time
- 32 = Start of Entry Time
- 33 = Any Burglary Alarm
- 34 = Code + # + 71 Key Entry
- 35 = Code + # + 72 Key Entry
- 36 = At Bell Timeout **
- 37 = 2 Times Bell Timeout**
- 38 = Chime
- 39 = Any Fire Alarm
- 40 = Bypassing
- 41 = AC Power Fail
- 42 = System Battery Low
- 43 = Communication failure
- 44 = RF low battery
- 45 = polling loop failure
- 51 = RF receiver failure
- 52 = kissoff
- 54 = fire zone reset
- 55 = disarm + 1 minute
- 56 = XX minutes (enter XX in field 1*74; stop condition only)
- 57 = YY seconds (enter YY in field 1*75; stop condition only)
- 58 = Duress
- 60 = Alarm Verification Usage (use for both START and STOP)

** Or at Disarming, whichever occurs earlier

STOP

The "STOP" programming determines when and under what conditions the relay will deactivate. There are 3 parts that must be programmed; Restore Zone List, Zone type/System Operation, and Partition. Each part is described below.

- 1) **RESTORE ZONE LIST (ZL)**....If a "RESTORE ZONE LIST" is used, the relay action will deactivate when all the zones in that list restore from a previous fault or alarm condition. This will occur regardless of what is programmed to start the relay, therefore, a "RESTORE ZONE LIST" would normally only be used when a "ZONE LIST" is used to start the relay.
- 2) **ZONE TYPE/SYSTEM OPERATION (ZT)**....Instead of using a "RESTORE ZONE LIST" , a specific zone response type or action can be selected to deactivate the relay. If a specific zone response type is chosen, any zone of that type that restores from a previous alarm, trouble, or fault condition will cause the relay to deactivate. If a "SYSTEM OPERATION" is chosen, that operation will cause the relay to deactivate.

Relay Programming Menus

From #93 Menu Mode, select Relay Programming Menu.

Press * to advance to next screen. Press # to backup to previous screen.

Enter Relay No.
(00=Quit) 01

Enter the relay (output device) identification number 1-16. This is a reference number only, for identification purposes. The actual module address and relay number on the module is programmed in the last two prompts.

02 A EV ZL ZT P
STT 0 0 0 00

The console will display a summary START screen.

02 A EV ZL ZT P
STOP 0 0 0 00

The console displays a summary STOP screen.

02 Relay Action
No Response

Enter the desired relay action as follows:
0=not used; 1=closed for 2 secs.; 2=stay closed;
3=pulse on/off

02 Start Event
Not used

Enter the event code to start the relay action as follows: 0=not used; 1=alarm; 2=fault; 3=trouble; 4=restore

02 Start: Zn LIST
No list

If a zone list is being used to start this relay action, enter the zone list number 1-8. If a zone list is not being used, enter 0.

02 Start: Zn Typ

If a zone type/system operation is being used to start the relay action, enter the 2-digit code as listed in the Zone Type/System Operation definitions section earlier.

02 Start Part

Enter 0 for any partition. Enter 1-8 for specific partition number.

02 Stop: Zn LIST
No list

If a zone list is being used to stop this relay action, enter the zone list number 1-8. If a zone list is not being used, enter 0.

02 Stop: Zn Typ

If a zone type/system operation is being used to stop the relay action, enter the 2-digit code as listed in the Zone Type/System Operation definitions section.

02 Stop Part

Enter 0 for any partition. Enter 1-8 for specific partition number.

Relay Group

Relays may be grouped for common activation by time driven events (commands 06-10). Enter 0 (no group) or 1-8 for specific partition number.

Restriction
1=yes 0=no

The system may have some devices which are not intended to be under end user control, such as relays activating fire doors or machinery. Enter 1 if the end user will be restricted from accessing this relay group.

Relay Type

Enter 1 for relays. Enter 2 for X-10 devices.

House Code

For X-10 devices, enter the letter house code. A=0, B=1, C=2, etc. (00-15)

Unit code

For X-10 devices, enter the numerical unit code (01-15)

ECP ADDRESS

For relay module (4204) outputs, enter the actual relay module's address set by its DIP switch (01-15). Up to 4 modules can be installed in a system.

MODULE RELAY #

For relay module (4204) outputs, enter the specific relay number on that module (1-4).

The console displays the two summary screens again.

Zone List Programming

After entering all relay menu items, up to eight (8) zone lists can be entered by entering 00 at the **ENTER RELAY No.** prompt.

Enter Zone LIST
00=QUIT 00

Enter the zone list number 1-8.

01 Enter Zn Num.
00=QUIT 00

Enter each zone to be included in this zone list, pressing * to enter each zone number.

01 Del Zn LIST?

Enter 0 to save the zone list entered. Enter 1 to delete that zone list.

01 Delete Zone?
0=No 1=Yes

Enter 1 to delete one or more zones in that zone list. Enter 0 if no changes are necessary. If 1 is entered, the following screen will appear, otherwise the zone list no. prompt will reappear.

01 Zn to Delete?
00=QUIT 00

Enter each zone number to be deleted from the zone list, pressing * after each number.

View Zn LIST
00=QUIT 00

This will appear if 00 is pressed at the ENTER ZONE LIST prompt. Enter the zone list number that you wish to view.

XX ASSIGNED ZONE
00=QUIT 00

Press * to scroll through all zones in that list. Enter 00 to quit.

If using a 6139 alpha console in the system, a user friendly word description/location of all protection zones, partitions' keypad panics, polling loop short and RF receiver supervision faults can be programmed into the system. Each description can be composed of a combination of words (up to a maximum of 3) that are selected from a vocabulary of 244 words stored in memory, and any word can have an "s" or " 's " added to it. In addition, up to 20 installer-defined words can be added to those already in memory. Thus, when an alarm or trouble occurs in a zone, an appropriate description for the location of that zone will be displayed at the console. An installer's message can also be programmed for each partition which will be displayed when the system is "Ready" (ex. THE PETERSON's).

To program alpha descriptors, enter Programming mode, then press #93 to display "ZONE PROG?". Press 0 (NO) to display "ALPHA PROG?". Press 1 to enter ALPHA PROGRAMMING mode. There are 6 sub-menu selections that will be displayed one at a time. Press 1 to select the mode desired. Press 0 to display the next mode available. The alpha sub menu selections are:

ZONE DESCRIP.?	for entering zone descriptors.
DEFAULT SCREEN?	for creating custom message; displayed when system ready.
CUSTOM WORD?	for creating custom words for use in descriptors.
PART DESCRIP?	for creating 4-character partition names.
RELAY DESCRIP?	for creating relay descriptors
EXIT EDIT MODE?	Press 1 to exit back to #93 Menu Mode.

Entering Zone Descriptors

1. Select ZONE DESCRIPTOR mode.

The console keys perform the following functions:

 - [3] Scrolls both alphabet and actual words in ascending alphabetical order.
 - [1] Scrolls both alphabet and actual words in descending alphabetical order.
 - [2] Adds or removes an "s" or " 's " to a vocabulary word.
 - [6] Toggles between alphabet and actual word list; used to accept entries.
 - [8] Saves the zone description in the system's memory.
 - [#] # plus zone number will display the description for that zone.
2. Key *01 to begin entering the description for zone 1, (key *02 for zone 2, *03 for zone 3 etc.). The following will be displayed: * ZN 01 A

Note that the first letter of the alphabet appears after the zone number, and that the zone number is automatically included with the description.
3. One of two methods of entering the words can now be used (*assume, for example that the desired description for zone 1 is BACK DOOR*):
 - a) Press [#] followed by the 3 digit number of the first word from the fixed dictionary shown on the next page (e.g., [0][1][3] for BACK). Press [6] in order to save the word and proceed, **or...**
 - b) Select the first letter of the desired description (note that "A" is already displayed). Use key [3] to advance through the alphabet and key [1] to go backward. For example, assume the desired description for zone 1 is BACK DOOR. Press key [3] repeatedly until "B" appears, then press key [6] to display the first available word beginning with B. Repeatedly press key [3] to advance through the available words until the word BACK is displayed. Press key [1] to move backward through the word list.

To add an "s" or " 's ", press the [2] key. The first depression adds an "s", the second depression adds an " 's ", the third depression displays no character (to erase the character), the fourth depression adds an "s", etc.

To accept the word, press the [6] key, which toggles back to alphabet list.
4. For selection of the next word (DOOR), repeat step 3, but press key [3] until the desired first letter of the next word appears (in this example, "D"). Then press key [6] to display the first available word beginning with "D". Press key [3] repeatedly until the desired word (DOOR) appears. To accept the word, press the [6] key, which again toggles back to alphabet list.

Entering Zone Descriptors (continued)

5. When all desired words have been entered, press key [8] to store the description in memory.
6. To review the zone descriptions, key [#] plus zone number (e.g., #01). To edit zone descriptions, key [*] plus zone number (e.g., *01)
7. To exit the zone description mode, key 00 then press *.

NOTE: Alpha descriptor entry can be entered locally at the alpha console or remotely using a V-LINK Downloader.

Adding Custom Words

Up to 20 installer-defined words can be added to the built-in vocabulary. Each of the 20 "words" can actually consist of several words, but bear in mind that a maximum of 10 characters can be used for each word string.

1. Select CUSTOM WORD mode. The keys perform the following functions:
 - [3] Advances through alphabet in ascending order.
 - [1] Advances through alphabet in descending order.
 - [6] Selects desired letter; moves the cursor 1 space right.
 - [4] Moves the cursor one space to the left.
 - [7] Inserts a space at the cursor location, erasing any character at that location.
 - [8] Saves the new word in the system's memory.
 - [*] Returns to description entry mode.
2. Key the number of the custom word or word string to be created (01-20). For example, if you are creating the first word (or word string), enter 01; when creating the second word, enter 02, and so on. A cursor will now appear at the beginning of the second line.
3. One of two methods of entering the custom word's characters can now be used (refer to the CHARACTER LIST of letters, numbers, and symbols on the next page):
 - a) Press the [#] key, followed by the two digit entry for the first letter you would like to display (e.g., [6][5] for "A"), or...
 - b) Use the [3] key to advance through the list of symbols, numbers, and letters. Use the [1] key to move back through the list.When zone descriptors are being entered as described in step 3a the custom word numbers are 250 to 269 for words 1 to 20 respectively. When being entered as described in step 3b, each word will be found at the end of the group of words that begin with the same letter as it does.

IMPORTANT: Custom words must begin with an alphabetic character. If numbers or symbols are used as the first character, the word will not be saved.
4. When you have reached the desired character, press the [6] key to select it. The cursor will then move to the right, in position for the next character.
5. Repeat steps 3 and 4 to create the desired word (or words). Note that the [4] key can be used to move the cursor to the left if necessary, and that key [7] can be used to enter a blank (or to erase an existing character). Each word or word string cannot exceed 10 characters.
6. Press the [8] key to save the custom word(s) and return to the CUSTOM WORD? display. The custom word (or string of words) will be automatically added to the built-in vocabulary at the end of the group of words beginning with the same letter.
7. Repeat steps 2 through 6 to create up to 19 additional custom words (or word strings).
8. Key 00 at custom word prompt then press * to exit the zone description programming mode.

Creating Partition Descriptors

1. Select "Part DESCRIPT." mode. The system will ask for the partition number desired. Enter the number as a single key.
2. Follow the same procedure as for CUSTOM WORDS, except that partition descriptors are limited to four (4) characters (ex. WHSE for warehouse).

Creating A Custom Message Display (Installer's Message)

Normally, when the system is in the disarmed state, the following display is present on the Console.

```
****DISARMED****  
READY TO ARM
```

Part or all of the above message can be modified to create a custom installer message for each partition. For example, ****DISARMED**** on the first line or READY TO ARM on the second line could be replaced by the installation company name or phone number for service. Note that there are only 16 character spaces on each of the two lines. To create a custom display message, proceed as follows:

1. Select DEFAULT SCREEN mode. The console will ask for the partition number for this message. Enter the partition number. Press [*] to accept entry.

The following will appear:

```
****DISARMED****  
READY TO ARM
```

A cursor will be present at the extreme left of the first line (over the first "star"). The [6] key is used to move the cursor to the right and the [4] key to move the cursor to the left. Key [7] may be used to insert spaces or erase existing characters.

2. For example, to replace READY TO ARM with the message SERVICE:424-0177, proceed as follows:

Press the [6] key to move the cursor to the right, and continue until the cursor is positioned over the first location on the second line.

Press the [3] key to advance through the alphabet to the first desired character (in this case, "S"). Use the [1] key to go backward, when necessary. When the desired character is reached, press [6]. The cursor will then move to the next position, ready for entry of the next character (in this example, "E"). When the cursor reaches a position over an existing character, pressing the [3] or [1] key will advance or back up from that character in the alphabet. Proceed in this manner until all characters in the message have been entered.

3. To store this new display message in memory, press the [8] key.
4. The system will ask for a new partition number. Enter 00 to quit or 1-8 for a new partition number.

Creating Relay Descriptors

Select relay descript mode. The system will ask for the relay number desired. Enter 01-16 (00 to quit). Follow the same procedure as for CUSTOM WORDS. Relay descriptors may have up to 10 characters.

ALPHA VOCABULARY

(For Entering Alpha Descriptors. To select a word, press [#] followed by the word's 3-digit number.)

000	(Word Space)	052	DETECTOR	102	INTERIOR	151	POLICE	202	TRANSMITTER
001	AIR	053	DINING	103	INTRUSION	152	POOL	203	TRAP
002	ALARM	054	DISCRIMINATOR			153	POWER		
003	ALCOVE	055	DISPLAY	104	JEWELRY			204	ULTRA
004	ALLEY	056	DOCK	105	KITCHEN	154	QUAD	205	UP
005	AMBUSH	057	DOOR					206	UPPER
006	AREA	058	DORMER	106	LAUNDRY	155	RADIO	207	UPSTAIRS
007	APARTMENT	059	DOWN	107	LEFT	156	REAR	208	UTILITY
008	ART	060	DOWNSTAIRS	108	LEVEL	157	RECREATION	209	VALVE
009	ATTIC	061	DRAWER	109	LIBRARY	158	REFRIG	210	VAULT
010	AUDIO	062	DRIVEWAY	110	LIGHT	159	REFRIGERATION	211	VIBRATION
011	AUXILIARY	063	DRUG	111	LINE	160	RF	212	VOLTAGE
		064	DUCT	112	LIQUOR	161	RIGHT		
012	BABY			113	LIVING	162	ROOM	213	WALL
013	BACK	065	EAST	114	LOADING	163	ROOF	214	WAREHOUSE
014	BAR	066	ELECTRIC	115	LOCK			215	WASH
015	BARN	067	EMERGENCY	116	LOOP	164	SAFE	216	WEST
016	BASEMENT	068	ENTRY	117	LOW	165	SCREEN	217	WINDOW
017	BATHROOM	069	EQUIPMENT	118	LOWER	166	SENSOR	218	WINE
018	BED	070	EXECUTIVE			167	SERVICE	219	WING
019	BEDROOM	071	EXIT	119	MACHINE	168	SHED	220	WIRELESS
020	BELL	072	EXTERIOR	120	MAGNETIC	169	SHOCK	221	WORK
021	BLOWER			121	MAIDS	170	SHOP		
022	BOILER	073	FACTORY	122	MAIN	171	SHORT	222	XMITTER
023	BOTTOM	074	FAILURE	123	MASTER	172	SHOW		
024	BOX	075	FAMILY	124	MAT	173	SIDE	223	YARD
025	BREAK	076	FATHERS	125	MEDICAL	174	SKYLIGHT		
026	BUILDING	077	FENCE	126	MEDICINE	175	SLIDING	224	ZONE (No.)
027	BURNER	078	FILE	127	MICROWAVE	176	SMOKE	225	ZONE
		079	FIRE	128	MONEY	177	SONIC		
028	CABINET	080	FLOOR	129	MONITOR	178	SONS	226	0
029	CALL	081	FLOW	130	MOTHERS	179	SOUTH	227	1
030	CAMERA	082	FOIL	131	MOTION	180	SPRINKLER	228	1ST
031	CAR	083	FOYER	132	MOTOR	181	STAMP	229	2
032	CASE	084	FREEZER	133	MUD	182	STATION	230	2ND
033	CASH	085	FRONT			183	STEREO	231	3
034	CCTV	086	FUR	134	NORTH	184	STORE	232	3RD
035	CEILING	087	FURNACE	135	NURSERY	185	STORAGE	233	4
036	CELLAR					186	STORY	234	4TH
037	CENTRAL	088	GALLERY	136	OFFICE	187	STRESS	235	5
038	CIRCUIT	089	GARAGE	137	OIL	188	STRIKE	236	5TH
039	CLIP	090	GAS	138	OPEN	189	SUMP	237	6
040	CLOSED	091	GATE	139	OPENING	190	SUPERVISED	238	6TH
041	COIN	092	GLASS	140	OUTSIDE	191	SUPERVISION	239	7
042	COLD	093	GUEST	141	OVERFLOW	192	SWIMMING	240	7TH
043	COATROOM	094	GUN	142	OVERHEAD	193	SWITCH	241	8
044	COLLECTION							242	8TH
045	COMBUSTION	095	HALL	143	PAINTING	194	TAMPER	243	9
046	COMPUTER	096	HEAT	144	PANIC	195	TAPE	244	9TH
047	CONTACT	097	HIGH	145	PASSIVE	196	TELCO	250	Custom Word 1
		098	HOLDUP	146	PATIO	197	TELEPHONE		to
048	DAUGHTERS	099	HOUSE	147	PERIMETER	198	TELLER	269	Custom Word 20
049	DELAYED			148	PHONE	199	TEMPERATURE		
050	DEN	100	INFRARED	149	PHOTO	200	THERMOSTAT		
051	DESK	101	INSIDE	150	POINT	201	TOOL		

CHARACTER (ASCII) CHART

(For Adding Custom Words)

32	(space)	42	*	52	4	62	>	72	H	82	R
33	!	43	+	53	5	63	?	73	I	83	S
34	"	44	,	54	6	64	@	74	J	84	T
35	#	45	-	55	7	65	A	75	K	85	U
36	\$	46	.	56	8	66	B	76	L	86	V
37	%	47	/	57	9	67	C	77	M	87	W
38	&	48	0	58	:	68	D	78	N	88	X
39	'	49	1	59	;	69	E	79	O	89	Y
40	(50	2	60	<	70	F	80	P	90	Z
41)	51	3	61	=	71	G	81	Q		

***Note:** This factory-provided vocabulary of words is subject to change.

Section 5. SYSTEM COMMUNICATION

COMMUNICATION FORMATS

Split/Dual Reporting Dual reporting (*51) sends **all** reports to both primary and secondary phone numbers. Split reporting allows reports to be divided between the phone numbers according to the field's (1*34) selections. Split/Dual reporting can be selected by enabling dual reporting **and** enabling one of the split reporting options in field 1*34. If option [1] is selected, all alarms, alarm restores and cancel reports will go to both phone numbers, while all other reports will go to the secondary phone number. If [2] is selected, open/close and test messages will go to both phone numbers, while all other reports will go to the primary phone number. Following are the Split/Dual Reporting options:

Reporting Format	Field Number		Where Reports Go
	*51	1*34	
Dual	1	0	All reports to both num.
Split	0	1 or 2	1=alarm, alarm restore & cancel to primary, all others to secondary. 2=open/close, test to secondary, all others to primary.
Split/Dual	1	1 or 2	1=alarm, alarm restore & cancel to both, all others to secondary only. 2=open/close to both, all others to primary only.

Ademco Low Speed ADEMCO LOW SPEED is a pulsed format which responds to a 1400 Hz handshake and kiss-off, and transmits data with 1900Hz pulse tones @ 10 pulses per second (pps). A typical message consists of two rounds which must be verified by the receiver. A complete standard report consists of either a 3 or 4-digit account number followed by a 1-digit alarm code. Though 2 rounds are sent, only the valid report is displayed.

In expanded reporting, two messages are sent, two rounds per message, the first being the account number and alarm code, the second being the zone ID code to which the alarm was assigned. A complete expanded report consists of a 3 or 4-digit account number followed by a 1-digit alarm code, then the alarm code is repeated, followed by the channel number.

EX. Standard: CCCC E where: CCCC = account number
 Expanded: CCCC E E = event code
 EEEE Z Z = zone ID code

Sescoa/Radionics Standard and expanded reporting in the SESCOA/RADIONICS format is virtually the same as ADEMCO Low Speed except for the following:

1. The handshake and kiss-off frequency is 2300 Hz.
2. The data is transmitted with 1800 Hz pulse tones.
3. The rate of transmission is 20 pps.

4+2 Reporting A 4+2 report consists of a 4-digit account number and a 2-digit alarm code, or event code. 4+2 reports can be accomplished either in ADEMCO Low Speed (10 pps), or SESCOA/RADIONICS (20 pps) format.

In 4+2 reporting a unique 2-digit code for each zone is reported. A 4-digit account number followed by a 2-digit code is sent, where the first digit is the actual event, such as in ALARM, RESTORE, or TROUBLE, etc., and the second digit of the code represents the "zone" where the event occurred. (but not necessarily the actual zone number). Each code in itself is unique to a specific zone. If desired, the actual zone number can be reported by entering the corresponding 2-digit zone number (ex. zone 1= [0] [1]; zone 63= [6] [3]). A report might appear as:

1 2 3 4 5 9 ("5 9" might be a unique "TROUBLE RESTORE, ZONE 25).

4+2 Express ADEMCO's Express format provides the same information as the 4+2 format, but with three differences:

1. The data is transmitted in DTMF (Dual Tone Multi-Frequency, known as "TouchTone", at the rate of 10 characters per second). This greatly decreases the time it takes a report to go through to central station. An average 4+2 Low Speed report might take as long as 20 seconds to complete its report, but 4+2 Express takes under 3 secs.
2. Two message rounds are eliminated by the use of a checksum digit. Instead of the communicator sending 2 rounds per report, it sends only 1 round with a checksum digit at the end. Doing this also helps in decreasing the time it takes for a report to be sent.
3. The handshake frequency is 1400 Hz followed by 2300 Hz, and the kiss-off frequency is 1400 Hz.

Ademco High Speed Reporting

ADEMCO's High Speed format transmits data in DTMF at a rate of 10 characters per second. The handshake frequency is 1400 Hz followed by 2300 Hz, and the kiss-off frequency is 1400 Hz. The message contains 13 digits as follows: A 4-digit account number + eight channels of zone information (1-8 or duress plus 9-15) + one status channel, which identifies the type of events being reported in the eight zone locations. A typical High Speed report will be kissed off in under 5 seconds.

Channels 1 through 8 could have one of the following conditions:

- 1 = NEW EVENT
- 2 = OPENING (Status Channel Always = 2)*
- 3 = RESTORE
- 4 = CLOSING (Status Channel Always = 4)*
- 5 = NORMAL, NO EVENT TO REPORT
- 6 = PREVIOUSLY REPORTED, NOT YET RESTORED

* NOTE: Channel 1 will contain the user ID 1-9, A-F if Open/Close reporting is enabled.

The status channel might have one of the following conditions:

- 1 = DURESS (For Duress Plus Channels 9-15 Only)
- 2 = OPENING
- 3 = BYPASS (For Channels 1-8 Only)
- 4 = CLOSING
- 5 = TROUBLE (For Channels 1-8 Only)
- 6 = SYSTEM STATUS: • AC LOSS in Channel 1
 - LOW BATTERY in Channel 2
 - PROGRAM TAMPER in Channel 3
 - POWER ON RESET in Channel 4
- 7 = NORMAL ALARM STATUS (Chnls 1-8 Only)
- 9 = TEST REPORT

A typical high speed report may look as follows:

1234 5115 5555 7 (Acct #1234 with alarms on channels 2 and 3)

High Speed Format Limitations

1. When using Ademco high speed, remember there are only 15 channels available, plus a duress channel. If more than 15 zones are being used, they will have to share channels.
2. With Ademco High Speed reporting, channels 9-15 cannot report troubles or bypasses. Use these channels for zones that will not report these conditions.

Contact ID Reporting This is the only format that can identify all 87 protection zones by their unique zone (Contact) ID numbers, and provides a 1-digit event qualifier and 3-digit, specifically defined event code which quickly identifies the condition being reported.

Contact ID reports in DTMF (Dual Tone Multi-Frequency @ 10 characters per second) and responds to a 1400 Hz followed by 2300 Hz handshake, and a 1400 Hz kiss-off. This format also uses checksum instead of two message verification. A complete report takes under 3 seconds.

Contact ID Reporting takes the format: CCCC Q EEE GG ZZZ where:

- CCCC = Customer (subscriber) number.
- Q = Event qualifier, where: E=new event (1) and R= restore (3)
- EEE = Event code (3 hexadecimal digits), defined in the table on the next page.
- GG = Partition number.
- ZZZ = Zone/contact ID number reporting the alarm (001-099), or user number (001-099) for open/close reports. System status messages (AC Loss, Walk Test, etc.) contain zeroes in the ZZZ location.

TABLE OF CONTACT ID EVENT CODES

Code	Definition	Code	Definition
110	Fire Alarm	401	O/C By User
121	Duress	403	Power-Up Armed
122	Silent Panic	406	Cancel by User
123	Audible Panic	407	Remote Arm/Disarm (Download)
131	Perimeter Burglary	408	Quick Arm
132	Interior Burglary	409	Keypad O/C
133	24 Hour Burglary	411	Call back Requested
134	Entry/Exit Burglary	441	Armed STAY
135	Day/Night Burglary	451	Early open/close
150	24 Hour Auxiliary	452	late open/close
301	AC Loss	453	Fail to open
302	Low System Battery	454	Fail to close
305	System Reset	455	Auto-arm fail
306	Program Tamper	570	Bypass
309	Battery Test Fail	602	Periodic Test
332	Poll Loop Short-Trouble	606	Audio Alarm Verification
333	RF Receiver Failure-Trouble	607	Walk Test Mode
373	Fire Loop Trouble	609	Video Alarm Verification
380	Trouble (global)	621	Event Log Reset
381	Loss of Supervision - RF	622	Event Log 50% Full
382	Loss of RPM Supervision	623	Event Log 90% Full
383	RPM Sensor Tamper	624	Event Log Overflow
384	RF Transmitter Low Battery	625	Time/Date Reset
		626	Time/date inaccurate
		631	Exception schedule change
		632	Access schedule change

ADVISORY: Ademco's Contact ID reporting is capable of uniquely reporting all 87 zones of information, as well as openings and closings for all 128 users, to central stations equipped with the Ademco 685 receiver using software level 4.4 or higher. Must be level 4.6 to fully support all new 4140XMPT2 report codes. 685 software levels below 4.4 cannot support Contact ID reporting. For information regarding updating the 685 receiver, contact the Technical Support group at 1-800-645-7492 (NY) or 1-800-458-9469 (CA)

General Information

To help expedite the installation, the system provides 4 different communication defaults (Low Speed, Ademco Express, Ademco High Speed & Ademco's new Contact ID). These defaults automatically program industry-standard code assignments for zones, keypad panics, non-alarm and supervisory conditions, and can be loaded at any time without affecting non-communication program fields.

Loading Communication Defaults

To load a communication default set, do the following:

While in programming mode, first change to the 1*xx set of fields (press *94), then enter one of the following field numbers to load the communication default set desired.

NOTE: Default communication commands are in second set of programming fields (fields 1*80, 1*81, 1*82 & 1*83).

TABLE OF DEFAULT PROGRAMMING COMMANDS

PRESS	TO LOAD THIS DEFAULT PROGRAMMING SET
*80	Low Speed communication defaults
*81	Ademco Express communication defaults
*82	Ademco High Speed communication defaults
*83	Contact ID communication defaults

These defaults load industry standard codes that will suit most of your needs. Program fields *54-*82 make up the communications portion of the programming, and can be changed as needed to suit special applications. A complete list of these default values is provided at the end of this section.

For detailed information about reporting formats, see the SYSTEM COMMUNICATION section in the Installation Instructions.

Making Changes To Communication Fields

If programming communication fields manually to change default values, simply enter whatever code (3+1, 4+1, 4+2 or Ademco Express) is to be sent for each zone (including panics, non-alarm codes and supervisory codes). NOTE: Enter "10" to transmit an "A", which appears as "0" at the receiver.

Report code entries for all zones are grouped into 8 zones per pair of program fields, with common restore, trouble and bypass codes for every 2 groups (16 zones). Refer to the programming form for clarification.

For 3+1, 4+1, 4+2 and Ademco Express, the first entry is the alarm code and swinger suppression channel for a standard report. The second entry is the ID digit for an expanded 3+1 or 4+1 report, or for a 4+2 or Ademco Express report. If the second digit is 0, only 3+1 or 4+1 (or 4+1 express) non-expanded messages will be sent.

For Ademco High Speed format, the first digit entry is the channel assignment for that zone, and the second digit is ignored, if entered. For Contact ID reporting, the first digit entry (any non zero entry) enables reporting for that zone and assigns the swinger suppression channel, and the second digit is ignored.

NOTE: Restoral reports for an event **will not** be sent if the event itself is not enabled, even if a restore code is programmed for that event.

Intermittent Sensor Suppression

This feature limits the number of alarm and trouble messages sent on a given channel during an armed period. Each channel has a separate counter for each message type (alarm, alarm restore, trouble, trouble restore). When the programmed swinger suppression value has been exceeded for a particular message, further messages of that type sent on that channel will be inhibited. This feature is intended to reduce intermittent sensor alarms/troubles from clogging the central station. To disable swinger suppression, enter 00 in field *84, which allows all alarm and trouble messages to be reported.

Enabling Of Dialer Reporting By Partition

In order to enable dialer reports for a partition, an account number (fields *32 & *90) must be programmed for that partition. The Control is shipped with an account number set for partition 1 only (set to FFFF). Partitions 2-8 have no account numbers pre-programmed.

In addition, in case of phone line failure, the "COMM. FAIL" message will not be displayed in partitions which do not have a primary account number programmed.

COMMUNICATION PROGRAMMING GUIDE

Field #	Low Speed	Contact ID	High Speed	Express
*46, *48	Choose transmission speed and frequency	No effect	No effect	No effect
*52, *53	Send as either 4+2 or expanded	No effect	No effect	No effect
*79, *80	Enables alarm restores	Enables alarm restores	Enables alarm restores	Enables alarm restores
*49	Add checksum digit	No effect	Add checksum digit	No effect
*81, *82	Define codes and selects 4+1 or 4+2	1st digit enables report if it is non-zero	1st digit enables report if it is non-zero	Define codes and selects 4+1 or 4+2
*54, *56, *59, *61, *64, *66, *69, *71, *74, *76	Defines alarm event code	Enables reports	Assigns reporting chnl for all reports from this zone. Enables alarm reporting	Defines alarm event code
*55, *57, *60, *62, *65, *67, *70, *72, *75, *77	Defines code and selects 4+1 or 4+2	No effect	No effect	Defines code and selects 4+1 or 4+2
*58, *63, *68, *73, *78	Enables report and selects code. Note: No restores if event not sent.	Enables report	Enables report Note: Alarm channel must be programmed. (01-15)	Enables report and selects 1st digit of the 2-digit event code. NOTE: No restores if event not sent.
*50	Sescoa/Radionics; Selects fixed digit time instead of fixed interdigit.	No effect	No effect	No effect
NOTES	Note: Low Speed will not send 3+2 messages. Zone ID digit is suppressed.			

Summary Of Default Consequences
Low Speed
(*94*80)

Loading communication defaults results in the following:

- Selects low speed, standard format with no checksum, for both phone numbers.
- Assigns the following report codes:
 - 03 for zones 2-47
 - 01 for zones 1 & 48-55 (fire zones)
 - 02 for zones 62,63 (panic trans), & 95, 96, 99 (keypad panics)
 - 09 for all alarm restores
- Enables all zone type restores.
- Selects Ademco express reporting format, with checksum, for both phone numbers.
- Report codes for zones 1-87, 4280s and keypad panics are sent as their respective zone ID numbers (01-87, 88-91, 95-99), Duress is sent as "DD". Alarm restore is "E" + 2nd digit.
- Enables all zone type restores.
- Selects Ademco High Speed format, with no checksum, for both phone numbers.
- Reporting is assigned to the following channels:
 - Channel 1 for zones 1 & 48-55 (Fire zones)
 - Channel 2 for zones 2-8
 - Channel 3 for zones 9-16
 - Channel 4 for zones 17-31
 - Channel 5 for zones 32-47 (RF interior zones)
 - Channel 6 for zones 56-61 & 87
 - Channel 9 for zones 62 & 63 (panic transmitter)
 - Channel 7 for 2nd 4280 (88 & 89) & polling loop short (97)
 - Channel 8 for first 4280 (90 & 91)
 - Channels 10, 11 & 12 for keypad panics 95, 96 & 99 respectively
- Enables all zone type restores.
- Enables Duress to be sent.
- Selects Contact ID format for both phone numbers.
- Reporting is enabled for all zones.
- Enables all zone type restores.
- Refer to the SYSTEM COMMUNICATION section for event code definitions.

ADEMCO Express
(*94*81)

ADEMCO High Speed
(*94*82)

ADEMCO's Contact ID
(*94*83)

COMMUNICATION DEFAULTS for LOW SPEED FORMAT (*94*80)

- | | | | | | | | | | | |
|--------------------------------|--------------------------------|--------------------------------|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------|
| *45 PRIMARY FORMAT | <input type="text" value="0"/> | Ademco Low Speed | *51 DUAL REPORTING | <input type="text" value="0"/> | no | | | | | |
| *46 LOW SPEED FORMAT (Primary) | <input type="text" value="0"/> | Ademco Low Speed | *52 STANDARD/EXPANDED REPORT FOR PRIMARY | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | standard |
| *47 SECONDARY FORMAT | <input type="text" value="0"/> | Ademco Low Speed | Alarm | Rstr | Bypass | Trbl | Opn/Cls | Low Bat | | |
| *48 LOW SPEED FORMAT (Sec.) | <input type="text" value="0"/> | Ademco Low Speed | *53 STANDARD/EXPANDED REPORT FOR SECONDARY | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | standard |
| *49 CHECKSUM VERIFICATION | <input type="text" value="0"/> | <input type="text" value="0"/> | Alarm | Rstr | Bypass | Trbl | Opn/Cls | Low Bat | | |
| No checksum | | Primary | Secondary | | | | | | | |
| *50 SESCOA/RADIONICS SELECT | <input type="text" value="0"/> | Radionics | | | | | | | | |

ALARM REPORT CODE & ID DIGITS FOR ZONES 1-32 & SUPERVISORY & RESTORE CODES

*54 CODE	*55 ID	*56 CODE	*57 ID	*58		*59 CODE	*60 ID	*61 CODE	*62 ID	*63					
1	<input type="text" value="011"/>	<input type="text" value="010"/>	9	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.	17	<input type="text" value="013"/>	<input type="text" value="010"/>	25	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.
2	<input type="text" value="013"/>	<input type="text" value="010"/>	10	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble	18	<input type="text" value="013"/>	<input type="text" value="010"/>	26	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
3	<input type="text" value="013"/>	<input type="text" value="010"/>	11	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.	19	<input type="text" value="013"/>	<input type="text" value="010"/>	27	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
4	<input type="text" value="013"/>	<input type="text" value="010"/>	12	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass	20	<input type="text" value="013"/>	<input type="text" value="010"/>	28	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
5	<input type="text" value="013"/>	<input type="text" value="010"/>	13	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypss Rst.	21	<input type="text" value="013"/>	<input type="text" value="010"/>	29	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypss Rst.
6	<input type="text" value="013"/>	<input type="text" value="010"/>	14	<input type="text" value="013"/>	<input type="text" value="010"/>			22	<input type="text" value="013"/>	<input type="text" value="010"/>	30	<input type="text" value="013"/>	<input type="text" value="010"/>		
7	<input type="text" value="013"/>	<input type="text" value="010"/>	15	<input type="text" value="013"/>	<input type="text" value="010"/>			23	<input type="text" value="013"/>	<input type="text" value="010"/>	31	<input type="text" value="013"/>	<input type="text" value="010"/>		
8	<input type="text" value="013"/>	<input type="text" value="010"/>	16	<input type="text" value="013"/>	<input type="text" value="010"/>			24	<input type="text" value="03"/>	<input type="text" value="010"/>	32	<input type="text" value="013"/>	<input type="text" value="010"/>		

ALARM REPORT CODE & ID DIGITS FOR ZONES 33-64 & SUPERVISORY & RESTORE CODES

*64 CODE	*65 ID	*66 CODE	*67 ID	*68		*69 CODE	*70 ID	*71 CODE	*72 ID	*73					
33	<input type="text" value="013"/>	<input type="text" value="010"/>	41	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.	49	<input type="text" value="011"/>	<input type="text" value="010"/>	57	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.
34	<input type="text" value="013"/>	<input type="text" value="010"/>	42	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble	50	<input type="text" value="011"/>	<input type="text" value="010"/>	58	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
35	<input type="text" value="013"/>	<input type="text" value="010"/>	43	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.	51	<input type="text" value="011"/>	<input type="text" value="010"/>	59	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
36	<input type="text" value="013"/>	<input type="text" value="010"/>	44	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass	52	<input type="text" value="011"/>	<input type="text" value="010"/>	60	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
37	<input type="text" value="013"/>	<input type="text" value="010"/>	45	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypss Rst.	53	<input type="text" value="011"/>	<input type="text" value="010"/>	61	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypss Rst.
38	<input type="text" value="013"/>	<input type="text" value="010"/>	46	<input type="text" value="013"/>	<input type="text" value="010"/>			54	<input type="text" value="011"/>	<input type="text" value="010"/>	62	<input type="text" value="012"/>	<input type="text" value="010"/>		
39	<input type="text" value="013"/>	<input type="text" value="010"/>	47	<input type="text" value="013"/>	<input type="text" value="010"/>			55	<input type="text" value="011"/>	<input type="text" value="010"/>	63	<input type="text" value="012"/>	<input type="text" value="010"/>		
40	<input type="text" value="013"/>	<input type="text" value="010"/>	48	<input type="text" value="011"/>	<input type="text" value="010"/>			56	<input type="text" value="013"/>	<input type="text" value="010"/>	64	<input type="text" value="013"/>	<input type="text" value="010"/>		

ALARM REPORT CODE & ID DIGITS FOR RF RCVRs & PANICS, & THEIR SUPV & RESTORE CODES

*74 CODE	*75 ID	*76 CODE	*77 ID	*78			
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	89	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="019"/>	Alarm Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	90	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	91	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	Dures	<input type="text" value="012"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	97	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypss Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	95	<input type="text" value="012"/>	<input type="text" value="010"/>		(1 + *)
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	96	<input type="text" value="012"/>	<input type="text" value="010"/>		(3 + #)
88	<input type="text" value="017"/>	<input type="text" value="010"/>	99	<input type="text" value="012"/>	<input type="text" value="010"/>		(* + #)

SYSTEM NON ALARM CODES

	*81	*82	
	First Digit	Second Digit	
Close	<input type="text" value="010"/>	<input type="text" value="010"/>	Second digit of each code applies only to 4+2 or expanded (fields *52 & *53) formats.
Open	<input type="text" value="010"/>	<input type="text" value="010"/>	
Low Battery	<input type="text" value="010"/>	<input type="text" value="010"/>	
Low Bat Res.	<input type="text" value="010"/>	<input type="text" value="010"/>	
AC Loss	<input type="text" value="010"/>	<input type="text" value="010"/>	
AC Restore	<input type="text" value="010"/>	<input type="text" value="010"/>	
Test	<input type="text" value="010"/>	<input type="text" value="010"/>	
Power	<input type="text" value="010"/>	<input type="text" value="010"/>	
Cancel	<input type="text" value="010"/>	<input type="text" value="010"/>	
Prog. Tamper	<input type="text" value="010"/>	<input type="text" value="010"/>	

NOTES: 97= Poll Loop Short; 88 & 90 = RCVR not receiving transmitter signals. 89 & 91 = RCVR not responding, bad conn. to panel.

ZONE TYPE RESTORE ENABLES

- *79 ZONE TYPES 1-8 All enabled
- | | | | | | | | |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
- *80 ZONE TYPES 9 & 10 All enabled
- | | |
|--------------------------------|--------------------------------|
| <input type="text" value="1"/> | <input type="text" value="1"/> |
| 9 | 10 |

COMMUNICATION DEFAULTS for ADEMCO EXPRESS FORMAT (*94*81)

- | | | | | | | | |
|-----|----------------------------|--------------------------------|--------------------------------|-----|--------------------------------------|--------------------------------|--------------------------------|
| *45 | PRIMARY FORMAT | <input type="text" value="3"/> | Ademco Express | *51 | DUAL REPORTING | <input type="text" value="0"/> | no |
| *46 | LOW SPEED FORMAT (Primary) | <input type="text" value="0"/> | | *52 | STANDARD/EXPANDED REPORT FOR PRIMARY | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *47 | SECONDARY FORMAT | <input type="text" value="3"/> | Ademco Express | | | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *48 | LOW SPEED FORMAT (Sec.) | <input type="text" value="0"/> | | | | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *49 | CHECKSUM VERIFICATION | <input type="text" value="0"/> | <input type="text" value="0"/> | | | <input type="text" value="0"/> | <input type="text" value="0"/> |
| | No checksum | Primary | Secondary | | | <input type="text" value="0"/> | <input type="text" value="0"/> |
| *50 | SESCO/RADIONICS SELECT | <input type="text" value="0"/> | Radionics | | | <input type="text" value="0"/> | <input type="text" value="0"/> |

ALARM REPORT CODE & ID DIGITS FOR ZONES 1-32 & SUPERVISORY & RESTORE CODES

*54 CODE	*55 ID	*56 CODE	*57 ID	*58	*59 CODE	*60 ID	*61 CODE	*62 ID	*63						
1	<input type="text" value="110"/>	<input type="text" value="011"/>	9	<input type="text" value="110"/>	<input type="text" value="019"/>	<input type="text" value="114"/>	Alarm Rst.	17	<input type="text" value="011"/>	<input type="text" value="017"/>	25	<input type="text" value="012"/>	<input type="text" value="015"/>	<input type="text" value="114"/>	Alarm Rst.
2	<input type="text" value="110"/>	<input type="text" value="012"/>	10	<input type="text" value="011"/>	<input type="text" value="110"/>	<input type="text" value="010"/>	Trouble	18	<input type="text" value="011"/>	<input type="text" value="018"/>	26	<input type="text" value="012"/>	<input type="text" value="016"/>	<input type="text" value="010"/>	Trouble
3	<input type="text" value="110"/>	<input type="text" value="013"/>	11	<input type="text" value="011"/>	<input type="text" value="011"/>	<input type="text" value="010"/>	Trble Rst.	19	<input type="text" value="011"/>	<input type="text" value="019"/>	27	<input type="text" value="012"/>	<input type="text" value="017"/>	<input type="text" value="010"/>	Trble Rst.
4	<input type="text" value="110"/>	<input type="text" value="014"/>	12	<input type="text" value="011"/>	<input type="text" value="012"/>	<input type="text" value="010"/>	Bypass	20	<input type="text" value="012"/>	<input type="text" value="110"/>	28	<input type="text" value="012"/>	<input type="text" value="018"/>	<input type="text" value="010"/>	Bypass
5	<input type="text" value="110"/>	<input type="text" value="015"/>	13	<input type="text" value="011"/>	<input type="text" value="013"/>	<input type="text" value="010"/>	Byps Rst.	21	<input type="text" value="012"/>	<input type="text" value="011"/>	29	<input type="text" value="012"/>	<input type="text" value="019"/>	<input type="text" value="010"/>	Byps Rst.
6	<input type="text" value="110"/>	<input type="text" value="016"/>	14	<input type="text" value="011"/>	<input type="text" value="014"/>			22	<input type="text" value="012"/>	<input type="text" value="012"/>	30	<input type="text" value="013"/>	<input type="text" value="110"/>		
7	<input type="text" value="110"/>	<input type="text" value="017"/>	15	<input type="text" value="011"/>	<input type="text" value="015"/>			23	<input type="text" value="012"/>	<input type="text" value="013"/>	31	<input type="text" value="013"/>	<input type="text" value="011"/>		
8	<input type="text" value="110"/>	<input type="text" value="018"/>	16	<input type="text" value="011"/>	<input type="text" value="016"/>			24	<input type="text" value="012"/>	<input type="text" value="014"/>	32	<input type="text" value="013"/>	<input type="text" value="012"/>		

ALARM REPORT CODE & ID DIGITS FOR ZONES 33-64 & SUPERVISORY & RESTORE CODES

*64 CODE	*65 ID	*66 CODE	*67 ID	*68	*69 CODE	*70 ID	*71 CODE	*72 ID	*73						
33	<input type="text" value="013"/>	<input type="text" value="013"/>	41	<input type="text" value="014"/>	<input type="text" value="011"/>	<input type="text" value="114"/>	Alarm Rst.	49	<input type="text" value="014"/>	<input type="text" value="019"/>	57	<input type="text" value="015"/>	<input type="text" value="017"/>	<input type="text" value="114"/>	Alarm Rst.
34	<input type="text" value="013"/>	<input type="text" value="014"/>	42	<input type="text" value="014"/>	<input type="text" value="012"/>	<input type="text" value="010"/>	Trouble	50	<input type="text" value="015"/>	<input type="text" value="110"/>	58	<input type="text" value="015"/>	<input type="text" value="018"/>	<input type="text" value="010"/>	Trouble
35	<input type="text" value="013"/>	<input type="text" value="015"/>	43	<input type="text" value="014"/>	<input type="text" value="013"/>	<input type="text" value="010"/>	Trble Rst.	51	<input type="text" value="015"/>	<input type="text" value="011"/>	59	<input type="text" value="015"/>	<input type="text" value="019"/>	<input type="text" value="010"/>	Trble Rst.
36	<input type="text" value="013"/>	<input type="text" value="016"/>	44	<input type="text" value="014"/>	<input type="text" value="014"/>	<input type="text" value="010"/>	Bypass	52	<input type="text" value="015"/>	<input type="text" value="012"/>	60	<input type="text" value="016"/>	<input type="text" value="110"/>	<input type="text" value="010"/>	Bypass
37	<input type="text" value="013"/>	<input type="text" value="017"/>	45	<input type="text" value="014"/>	<input type="text" value="015"/>	<input type="text" value="010"/>	Byps Rst.	53	<input type="text" value="015"/>	<input type="text" value="013"/>	61	<input type="text" value="016"/>	<input type="text" value="011"/>	<input type="text" value="010"/>	Byps Rst.
38	<input type="text" value="013"/>	<input type="text" value="018"/>	46	<input type="text" value="014"/>	<input type="text" value="016"/>			54	<input type="text" value="015"/>	<input type="text" value="014"/>	62	<input type="text" value="016"/>	<input type="text" value="012"/>		
39	<input type="text" value="013"/>	<input type="text" value="019"/>	47	<input type="text" value="014"/>	<input type="text" value="017"/>			55	<input type="text" value="015"/>	<input type="text" value="015"/>	63	<input type="text" value="016"/>	<input type="text" value="013"/>		
40	<input type="text" value="014"/>	<input type="text" value="110"/>	48	<input type="text" value="014"/>	<input type="text" value="018"/>			56	<input type="text" value="015"/>	<input type="text" value="016"/>	64	<input type="text" value="016"/>	<input type="text" value="014"/>		

ALARM REPORT CODE & ID DIGITS FOR RF RCVRs & PANICS & THEIR SUPV & RESTORE CODES

*74 CODE	*75 ID	*76 CODE	*77 ID	*78			
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	89	<input type="text" value="018"/>	<input type="text" value="019"/>	<input type="text" value="114"/>	Alarm Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	90	<input type="text" value="019"/>	<input type="text" value="110"/>	<input type="text" value="010"/>	Trouble
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	91	<input type="text" value="019"/>	<input type="text" value="011"/>	<input type="text" value="010"/>	Trble Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	Dures	<input type="text" value="113"/>	<input type="text" value="113"/>	<input type="text" value="010"/>	Bypass
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	97	<input type="text" value="019"/>	<input type="text" value="017"/>	<input type="text" value="010"/>	Byps Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	95	<input type="text" value="019"/>	<input type="text" value="015"/>	(1 + *)	
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	96	<input type="text" value="019"/>	<input type="text" value="016"/>	(3 + #)	
88	<input type="text" value="018"/>	<input type="text" value="018"/>	99	<input type="text" value="019"/>	<input type="text" value="019"/>	(* + #)	

SYSTEM NON ALARM CODES		
	*81 First Digit	*82 Second Digit
Close	<input type="text" value="010"/>	<input type="text" value="010"/>
Open	<input type="text" value="010"/>	<input type="text" value="010"/>
Low Battery	<input type="text" value="010"/>	<input type="text" value="010"/>
Low Bat Res.	<input type="text" value="010"/>	<input type="text" value="010"/>
AC Loss	<input type="text" value="010"/>	<input type="text" value="010"/>
AC Restore	<input type="text" value="010"/>	<input type="text" value="010"/>
Test	<input type="text" value="010"/>	<input type="text" value="010"/>
Power	<input type="text" value="010"/>	<input type="text" value="010"/>
Cancel	<input type="text" value="010"/>	<input type="text" value="010"/>
Prog. Tamper	<input type="text" value="010"/>	<input type="text" value="010"/>

Second digit of each code applies only to 4+2 or expanded (fields *52 & *53) formats.

NOTES: 97= Poll Loop Short; 88 & 90 = RCVR not receiving transmitter signals. 89 & 91 = RCVR not responding, bad conn. to panel.

ZONE TYPE RESTORE ENABLES

- *79 ZONE TYPES 1-8 All enabled

 1 2 3 4 5 6 7 8
- *80 ZONE TYPES 9 & 10 All enabled

 9 10

COMMUNICATION DEFAULTS for ADEMCO HIGH SPEED FORMAT (*94*82)

- | | | | | | | | | | | | | |
|-----|----------------------------|--------------------------------|--------------------------------|-----|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------|
| *45 | PRIMARY FORMAT | <input type="text" value="2"/> | Ademco High Speed | *51 | DUAL REPORTING | <input type="text" value="0"/> | no | | | | | |
| *46 | LOW SPEED FORMAT (Primary) | <input type="text" value="0"/> | | *52 | STANDARD/EXPANDED REPORT FOR PRIMARY | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | standard |
| *47 | SECONDARY FORMAT | <input type="text" value="2"/> | Ademco High Speed | | Alarm | Rstr | Bypass | Trbl | Opn/Cls | Low Bat | | |
| *48 | LOW SPEED FORMAT (Sec.) | <input type="text" value="0"/> | | *53 | STANDARD/EXPANDED REPORT FOR SECONDARY | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | standard |
| *49 | CHECKSUM VERIFICATION | <input type="text" value="0"/> | <input type="text" value="0"/> | | Alarm | Rstr | Bypass | Trbl | Opn/Cls | Low Bat | | |
| | No checksum | | Primary Secondary | | | | | | | | | |
| *50 | SESCO/RADIONICS SELECT | <input type="text" value="0"/> | Radionics | | | | | | | | | |

ALARM REPORT CODE & ID DIGITS FOR ZONES 1-32 & SUPERVISORY & RESTORE CODES

*54 CODE	*55 ID	*56 CODE	*57 ID	*58	*59 CODE	*60 ID	*61 CODE	*62 ID	*63						
1	<input type="text" value="011"/>	<input type="text" value="010"/>	9	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="011"/>	Alarm Rst.	17	<input type="text" value="014"/>	<input type="text" value="010"/>	25	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="011"/>	Alarm Rst.
2	<input type="text" value="012"/>	<input type="text" value="010"/>	10	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble	18	<input type="text" value="014"/>	<input type="text" value="010"/>	26	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
3	<input type="text" value="012"/>	<input type="text" value="010"/>	11	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.	19	<input type="text" value="014"/>	<input type="text" value="010"/>	27	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
4	<input type="text" value="012"/>	<input type="text" value="010"/>	12	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass	20	<input type="text" value="014"/>	<input type="text" value="010"/>	28	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
5	<input type="text" value="012"/>	<input type="text" value="010"/>	13	<input type="text" value="013"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.	21	<input type="text" value="014"/>	<input type="text" value="010"/>	29	<input type="text" value="014"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.
6	<input type="text" value="012"/>	<input type="text" value="010"/>	14	<input type="text" value="013"/>	<input type="text" value="010"/>			22	<input type="text" value="014"/>	<input type="text" value="010"/>	30	<input type="text" value="014"/>	<input type="text" value="010"/>		
7	<input type="text" value="012"/>	<input type="text" value="010"/>	15	<input type="text" value="013"/>	<input type="text" value="010"/>			23	<input type="text" value="014"/>	<input type="text" value="010"/>	31	<input type="text" value="014"/>	<input type="text" value="010"/>		
8	<input type="text" value="012"/>	<input type="text" value="010"/>	16	<input type="text" value="013"/>	<input type="text" value="010"/>			24	<input type="text" value="014"/>	<input type="text" value="010"/>	32	<input type="text" value="015"/>	<input type="text" value="010"/>		

ALARM REPORT CODE & ID DIGITS FOR ZONES 33-64 & SUPERVISORY & RESTORE CODES

*64 CODE	*65 ID	*66 CODE	*67 ID	*68	*69 CODE	*70 ID	*71 CODE	*72 ID	*73						
33	<input type="text" value="015"/>	<input type="text" value="010"/>	41	<input type="text" value="015"/>	<input type="text" value="010"/>	<input type="text" value="011"/>	Alarm Rst.	49	<input type="text" value="011"/>	<input type="text" value="010"/>	57	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="011"/>	Alarm Rst.
34	<input type="text" value="015"/>	<input type="text" value="010"/>	42	<input type="text" value="015"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble	50	<input type="text" value="011"/>	<input type="text" value="010"/>	58	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
35	<input type="text" value="015"/>	<input type="text" value="010"/>	43	<input type="text" value="015"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.	51	<input type="text" value="011"/>	<input type="text" value="010"/>	59	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
36	<input type="text" value="015"/>	<input type="text" value="010"/>	44	<input type="text" value="015"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass	52	<input type="text" value="011"/>	<input type="text" value="010"/>	60	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
37	<input type="text" value="015"/>	<input type="text" value="010"/>	45	<input type="text" value="015"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.	53	<input type="text" value="011"/>	<input type="text" value="010"/>	61	<input type="text" value="016"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.
38	<input type="text" value="015"/>	<input type="text" value="010"/>	46	<input type="text" value="015"/>	<input type="text" value="010"/>			54	<input type="text" value="011"/>	<input type="text" value="010"/>	62	<input type="text" value="019"/>	<input type="text" value="010"/>		
39	<input type="text" value="015"/>	<input type="text" value="010"/>	47	<input type="text" value="015"/>	<input type="text" value="010"/>			55	<input type="text" value="011"/>	<input type="text" value="010"/>	63	<input type="text" value="019"/>	<input type="text" value="010"/>		
40	<input type="text" value="015"/>	<input type="text" value="010"/>	48	<input type="text" value="011"/>	<input type="text" value="010"/>			56	<input type="text" value="016"/>	<input type="text" value="010"/>	64	<input type="text" value="016"/>	<input type="text" value="010"/>		

ALARM REPORT CODE & ID DIGITS FOR RF RCVRs & PANICS & THEIR SUPV & RESTORE CODES

*74 CODE	*75 ID	*76 CODE	*77 ID	*78			
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	89	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="011"/>	Alarm Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	90	<input type="text" value="018"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trouble
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	91	<input type="text" value="018"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Trble Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	Dures	<input type="text" value="011"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Bypass
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	97	<input type="text" value="017"/>	<input type="text" value="010"/>	<input type="text" value="010"/>	Byps Rst.
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	95	<input type="text" value="110"/>	<input type="text" value="010"/>		(1 + *)
NU	<input type="text" value="010"/>	<input type="text" value="010"/>	96	<input type="text" value="111"/>	<input type="text" value="010"/>		(3 + #)
88	<input type="text" value="017"/>	<input type="text" value="010"/>	99	<input type="text" value="112"/>	<input type="text" value="010"/>		(* + #)

SYSTEM NON ALARM CODES

	*81	*82
	First Digit	Second Digit
Close	<input type="text" value="010"/>	<input type="text" value="010"/>
Open	<input type="text" value="010"/>	<input type="text" value="010"/>
Low Battery	<input type="text" value="010"/>	<input type="text" value="010"/>
Low Bat Res.	<input type="text" value="010"/>	<input type="text" value="010"/>
AC Loss	<input type="text" value="010"/>	<input type="text" value="010"/>
AC Restore	<input type="text" value="010"/>	<input type="text" value="010"/>
Test	<input type="text" value="010"/>	<input type="text" value="010"/>
Power	<input type="text" value="010"/>	<input type="text" value="010"/>
Cancel	<input type="text" value="010"/>	<input type="text" value="010"/>
Prog. Tamper	<input type="text" value="010"/>	<input type="text" value="010"/>

Second digit of each code applies only to 4+2 or expanded (fields *52 & *53) formats.

NOTES: 97= Poll Loop Short; 88 & 90 = RCVR not receiving transmitter signals. 89 & 91 = RCVR not responding, bad conn. to panel.

ZONE TYPE RESTORE ENABLES

- *79 ZONE TYPES 1-8 All enabled
- | | | | | | | | |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> | <input type="text" value="1"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
- *80 ZONE TYPES 9 & 10 All enabled
- | | |
|--------------------------------|--------------------------------|
| <input type="text" value="1"/> | <input type="text" value="1"/> |
| 9 | 10 |

COMMUNICATION DEFAULTS for ADEMCO's CONTACT ID FORMAT (*94*83)

- | | |
|---|--|
| *45 PRIMARY FORMAT <input type="checkbox"/> 1 Ademco Contact ID | *51 DUAL REPORTING <input type="checkbox"/> 0 no |
| *46 LOW SPEED FORMAT (Primary) <input type="checkbox"/> 0 | *52 STANDARD/EXPANDED REPORT FOR PRIMARY |
| *47 SECONDARY FORMAT <input type="checkbox"/> 1 Ademco Contact ID | <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> 0 standard |
| *48 LOW SPEED FORMAT (Sec.) <input type="checkbox"/> 0 | Alarm Rstr Bypass Trbl Opn/Cls Low Bat |
| *49 CHECKSUM VERIFICATION <input type="checkbox"/> 0 <input type="checkbox"/> 0 | *53 STANDARD/EXPANDED REPORT FOR SECONDARY |
| No checksum Primary Secondary | <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> 0 standard |
| *50 SESCOA/RADIONICS SELECT <input type="checkbox"/> 0 Radionics | Alarm Rstr Bypass Trbl Opn/Cls Low Bat |

ALARM REPORT CODE & ID DIGITS FOR ZONES 1-32 & SUPERVISORY & RESTORE CODES

*54 CODE	*55 ID	*56 CODE	*57 ID	*58	*59 CODE	*60 ID	*61 CODE	*62 ID	*63	
1	<input type="checkbox"/> 011	<input type="checkbox"/> 010	9	<input type="checkbox"/> 019 <input type="checkbox"/> 010	<input type="checkbox"/> 011 Alarm Rst.	17	<input type="checkbox"/> 012 <input type="checkbox"/> 010	25	<input type="checkbox"/> 110 <input type="checkbox"/> 010	<input type="checkbox"/> 011 Alarm Rst.
2	<input type="checkbox"/> 012	<input type="checkbox"/> 010	10	<input type="checkbox"/> 110 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Trouble	18	<input type="checkbox"/> 013 <input type="checkbox"/> 010	26	<input type="checkbox"/> 111 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Trouble
3	<input type="checkbox"/> 013	<input type="checkbox"/> 010	11	<input type="checkbox"/> 111 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Trble Rst.	19	<input type="checkbox"/> 014 <input type="checkbox"/> 010	27	<input type="checkbox"/> 112 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Trble Rst.
4	<input type="checkbox"/> 014	<input type="checkbox"/> 010	12	<input type="checkbox"/> 112 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Bypass	20	<input type="checkbox"/> 015 <input type="checkbox"/> 010	28	<input type="checkbox"/> 113 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Bypass
5	<input type="checkbox"/> 015	<input type="checkbox"/> 010	13	<input type="checkbox"/> 113 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Bypss Rst.	21	<input type="checkbox"/> 016 <input type="checkbox"/> 010	29	<input type="checkbox"/> 114 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Bypss Rst.
6	<input type="checkbox"/> 016	<input type="checkbox"/> 010	14	<input type="checkbox"/> 114 <input type="checkbox"/> 010		22	<input type="checkbox"/> 017 <input type="checkbox"/> 010	30	<input type="checkbox"/> 115 <input type="checkbox"/> 010	
7	<input type="checkbox"/> 017	<input type="checkbox"/> 010	15	<input type="checkbox"/> 115 <input type="checkbox"/> 010		23	<input type="checkbox"/> 018 <input type="checkbox"/> 010	31	<input type="checkbox"/> 011 <input type="checkbox"/> 010	
8	<input type="checkbox"/> 018	<input type="checkbox"/> 010	16	<input type="checkbox"/> 011 <input type="checkbox"/> 010		24	<input type="checkbox"/> 019 <input type="checkbox"/> 010	32	<input type="checkbox"/> 012 <input type="checkbox"/> 010	

ALARM REPORT CODE & ID DIGITS FOR ZONES 33-64 & SUPERVISORY & RESTORE CODES

*64 CODE	*65 ID	*66 CODE	*67 ID	*68	*69 CODE	*70 ID	*71 CODE	*72 ID	*73	
33	<input type="checkbox"/> 01	<input type="checkbox"/> 010	41	<input type="checkbox"/> 111 <input type="checkbox"/> 010	<input type="checkbox"/> 011 Alarm Rst.	49	<input type="checkbox"/> 014 <input type="checkbox"/> 010	57	<input type="checkbox"/> 112 <input type="checkbox"/> 010	<input type="checkbox"/> 011 Alarm Rst.
34	<input type="checkbox"/> 01	<input type="checkbox"/> 010	42	<input type="checkbox"/> 112 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Trouble	50	<input type="checkbox"/> 015 <input type="checkbox"/> 010	58	<input type="checkbox"/> 113 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Trouble
35	<input type="checkbox"/> 01	<input type="checkbox"/> 010	43	<input type="checkbox"/> 113 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Trble Rst.	51	<input type="checkbox"/> 016 <input type="checkbox"/> 010	59	<input type="checkbox"/> 114 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Trble Rst.
36	<input type="checkbox"/> 01	<input type="checkbox"/> 010	44	<input type="checkbox"/> 114 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Bypass	52	<input type="checkbox"/> 017 <input type="checkbox"/> 010	60	<input type="checkbox"/> 115 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Bypass
37	<input type="checkbox"/> 01	<input type="checkbox"/> 010	45	<input type="checkbox"/> 115 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Bypss Rst.	53	<input type="checkbox"/> 018 <input type="checkbox"/> 010	61	<input type="checkbox"/> 011 <input type="checkbox"/> 010	<input type="checkbox"/> 010 Bypss Rst.
38	<input type="checkbox"/> 01	<input type="checkbox"/> 010	46	<input type="checkbox"/> 011 <input type="checkbox"/> 010		54	<input type="checkbox"/> 019 <input type="checkbox"/> 010	62	<input type="checkbox"/> 012 <input type="checkbox"/> 010	
39	<input type="checkbox"/> 01	<input type="checkbox"/> 010	47	<input type="checkbox"/> 012 <input type="checkbox"/> 010		55	<input type="checkbox"/> 110 <input type="checkbox"/> 010	63	<input type="checkbox"/> 013 <input type="checkbox"/> 010	
40	<input type="checkbox"/> 10	<input type="checkbox"/> 010	48	<input type="checkbox"/> 013 <input type="checkbox"/> 010		56	<input type="checkbox"/> 111 <input type="checkbox"/> 010	64	<input type="checkbox"/> 014 <input type="checkbox"/> 010	

ALARM REPORT CODE & ID DIGITS FOR RF RCVRs & PANICS & THEIR SUPV & RESTORE CODES

*74 CODE	*75 ID	*76 CODE	*77 ID	*78
NU	<input type="checkbox"/> 010	<input type="checkbox"/> 010	89	<input type="checkbox"/> 114 <input type="checkbox"/> 010 <input type="checkbox"/> 011 Alarm Rst.
NU	<input type="checkbox"/> 010	<input type="checkbox"/> 010	90	<input type="checkbox"/> 115 <input type="checkbox"/> 010 <input type="checkbox"/> 010 Trouble
NU	<input type="checkbox"/> 010	<input type="checkbox"/> 010	91	<input type="checkbox"/> 011 <input type="checkbox"/> 010 <input type="checkbox"/> 010 Trble Rst.
NU	<input type="checkbox"/> 010	<input type="checkbox"/> 010	Dures	<input type="checkbox"/> 012 <input type="checkbox"/> 010 <input type="checkbox"/> 010 Bypass
NU	<input type="checkbox"/> 010	<input type="checkbox"/> 010	97	<input type="checkbox"/> 013 <input type="checkbox"/> 010 <input type="checkbox"/> 010 Bypss Rst.
NU	<input type="checkbox"/> 010	<input type="checkbox"/> 010	95	<input type="checkbox"/> 014 <input type="checkbox"/> 010 (1 + *)
NU	<input type="checkbox"/> 010	<input type="checkbox"/> 010	96	<input type="checkbox"/> 015 <input type="checkbox"/> 010 (3 + #)
88	<input type="checkbox"/> 113	<input type="checkbox"/> 010	99	<input type="checkbox"/> 016 <input type="checkbox"/> 010 (* + #)

SYSTEM NON ALARM CODES		
	*81 First Digit	*82 Second Digit
Close	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Open	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Low Battery	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Low Bat Res.	<input type="checkbox"/> 010	<input type="checkbox"/> 010
AC Loss	<input type="checkbox"/> 010	<input type="checkbox"/> 010
AC Restore	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Test	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Power	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Cancel	<input type="checkbox"/> 010	<input type="checkbox"/> 010
Prog. Tamper	<input type="checkbox"/> 010	<input type="checkbox"/> 010

Second digit of each code applies only to 4+2 or expanded (fields *52 & *53) formats.

NOTES: 97= Poll Loop Short; 88 & 90 = RCVR not receiving transmitter signals. 89 & 91 = RCVR not responding, bad conn. to panel.

ZONE TYPE RESTORE ENABLES

- *79 ZONE TYPES 1-8 All enabled
- | | | | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
- *80 ZONE TYPES 9 & 10 All enabled
- | | |
|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| 9 | 10 |

Section 6 DOWNLOADING

What Is Downloading?

Downloading allows the operator to remotely access, program, and control the security system over normal telephone lines. Anything that can be done directly from the keypad can be done remotely, using DOWNLOADING.

UL NOTE: Downloading is not permissible for UL installations.

To Download, the following is required:

1. An IBM PC, or compatible computer with MS DOS 3.1 or higher, to run the DOWNLOADING program. MS DOS stands for: Microsoft Disk Operating System.
3. An Ademco identified compatible modem.
4. V-LINK DOWNLOADING software, from Ademco. This software is available in both 3-1/2" and 5-1/4" diskettes, and includes a complete User's Manual.

How Does Downloading Work?

At the protected premises, the Control panel must be connected to the existing telephone line (refer to the PHONE LINE CONNECTIONS section). No programming of the panel is required before downloading to an initial installation.

To download, do the following:

1. Enter the installer code + [#] + [5]. The panel temporarily enables a ring count of 5 and sets the Download Callback option to "1" (callback not required).
2. Call the panel using the downloader software set to "FIRST COMMUNICATION" mode.
3. The downloader will establish a session with no callback. The panel information can then be downloaded.

In order to remotely access, control, or program the alarm panel, a "link" must be established between the computer and the control panel, as follows:

1. The computer calls up the Control panel. (The phone number for each customer is entered into the customer's account file on the computer).
2. The Control panel "answers" at the pre-programmed ring count and executes a handshake with the computer.
3. The computer sends a request for call-back to the Control, unless call-back is not required.
4. The panel acknowledges the request and hangs up. During the next few seconds, the Control will process the request making sure certain encrypted information, received from the computer, matches its own memory.
5. Upon a successful match, the Control panel will seize the phone line and call the computer back, unless call-back is not required.
6. The computer answers, usually by the second ring, and executes a handshake with the panel.
7. The panel then sends other default information to the computer. If this information matches the computer's information, a successful link is established. This is known as being "ON-LINE".

ADVISORIES:

1. Alarm and trouble responses and reports are disabled during on-line time. Should an event occur during this time, the response will take place and the report will go through as soon as the remote access sequence is completed. Alarm and trouble conditions are not ignored, they are simply delayed.
2. The keypads are inactive during downloading communication, and resume normal functions after hang up. All keypad entries are ignored during on-line time.

What Can Be Done Once Panel Is "On-Line"?

- Arm the System in the Away Mode; Disarm the System
- Bypass a Zone
- Force the System to Accept a New Program Download
- Shut Down Communication (dialer) Functions (non-payment of monitoring fees in an owned system)
- Shut Down all Security System Functions (non-payment for a leased system)
- Inhibit Local Keypad Programming (prevents takeover of your accounts)
- Leave a message for customer (6139 ONLY)
- Command the System to Upload a Copy of its Resident Program to the office
- Read: Arming Status, AC Power Status, List of Faulted Zones, List of Bypassed Zones, 224 Event Log, List of Zones Currently in Alarm, List of Zones Currently in Trouble, List of RF sensors with low battery conditions
- Set the Real-Time clock.

How Secure Is Downloading?

Accessing the Control from a remote location is protected against compromise by the use of 4 levels of protection:

1. Security Code Handshake: The subscriber's account number as well as an 8-digit ID number (known only to the office) must be matched between the Control and computer.
2. Hang-Up and Call-Back: The Control panel will "hang-up" and call the computer back at the pre-programmed number only if the security codes match.
3. Data Encryption: All data that is exchanged between the computer and Control is encrypted to reduce the possibility of anyone "tapping" the line and corrupting data.
4. Operator Access Levels: Up to 15 operators can have access to the DOWNLOADER, each having their own log-on code. However, each operator can be assigned one of three levels of access in both FILE and COMMAND functions, as follows:

FILE ACCESS:

Read Only: able only to look at the database; cannot change any information, and cannot see the customer's access codes.

Part Read/Write: able to look at and change all information. except the customer's access codes.

Full Read/Write: able to look at and change any and all information in the database.

CONTROL/COMM ACCESS:

Read Only: able only to Upload and arm the system. Not able to DISARM, BYPASS, or change any information.

Part Read/Write: able to ARM, BYPASS, UPLOAD, DOWNLOAD but cannot shutdown the system.

Full Read/Write: able to perform all control and status commands, as well as shutdown all or part of the system.

NOTES:

1. Each time the Control panel is accessed (whether successful or unsuccessful), a PROGRAM TAMPER report (*40) is sent to central station, if programmed.
2. When downloading, the console will display "MODEM COMM".
3. Whenever a download or a save is done, an automatic time stamp is done, indicating the date and time of the last download (or save) and the operator ID number.
4. The average time for a complete download, including initial call-up, hang-up and call-back is under 4 minutes.
5. A complete hard copy of each individual account can be obtained by connecting a printer to the computer. Refer to your computer owner's manual or contact your dealer for printer recommendations.

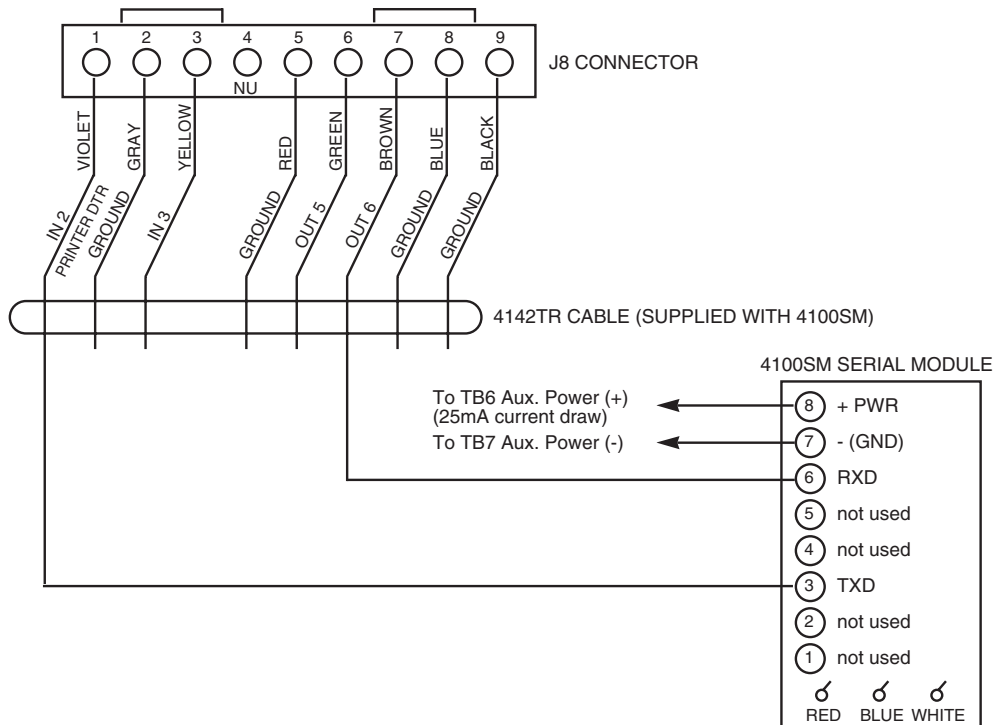
DIRECT WIRE DOWNLOADING

Direct Wire Downloading Connections

The 4140XMPT2 can be downloaded without using a modem or telephone line by using V-LINK Downloading Software and a 4100SM Serial Module. The direct wire downloading connection is to be temporary, and is not part of the permanent installation. Direct wire downloading is meant as a tool for the installer during the installation process.

IMPORTANT: The connections between the 4140XMPT2 and the 4100SM are different than those shown in the 4100SM Installation Instructions. See diagram below for correct connections. In addition, when the "green" wire is referred to in step 2 of the IN CASE OF DIFFICULTY section of the 4100SM Instructions, **use the "violet" wire.**

Connector J8, located above connector J7 on the right hand side of the main PC board, is intended to be interfaced to either a local serial printer (see EVENT LOGGING CONNECTIONS) or a computer. Make connections to a computer as shown below. **Note that the violet wire connection for a computer differs from that used when connecting a serial printer.**



Section 7. SCHEDULING PROGRAMMING

INTRODUCTION TO SCHEDULING

General Information

Scheduling allows the system to automate some of its operation, and provides a means of reporting openings and closings by exception. It can also activate relay outputs at pre-determined times (see Time Driven Events section). Scheduled events are based on time windows, which are simply periods of time during which an event may take place. The system can use normal schedules, holiday schedules and user defined temporary schedules. Scheduled events are programmed using user friendly menu modes of programming (#80, #81 & #83 modes), explained in detail in this section. These menus take you step by step through the options.

Arm/Disarm control

Scheduling can be used to automate the arming and disarming of the system.

UL Note for Auto-Arming: Program bypass reports and fields 2*13 & 2*14 auto-arm fail report for UL installations.

- Auto Arming: The system can automatically arm itself at the end of a pre-determined time window, if the system has not been armed manually. Auto arming can be delayed three ways: by use of the auto arm delay, the auto arm warning, or by manually extending the arming time window with a keypad command. The system can also automatically bypass any open zones when auto arming.
- Auto-Arm Delay: Auto-arm delay provides a delay (grace period) before auto arming. It starts at the end of the closing window . The delay is set in 4 minute increments, up to 56 minutes in partition-specific program field 2*05. The expiration of this delay causes the auto-arm warning to start.
- Auto-Arm Warning: The auto-arm warning causes the console sounder to warn the user of an impending auto-arm. The warning can be set to start 0 seconds to 15 minutes prior to arming in partition-specific program field 2*06. During this period the console will beep every 15 seconds and display "AUTO ARM ALERT" ("AA" on non-alpha consoles). The beeps may be silenced by hitting any key on a console. When the remaining time drops below 60 seconds, the consoles will begin to beep every 5 seconds. The panel will arm at the conclusion of the auto-arm warning period.
- Extend Closing Window: A user can manually extend the arm (closing) time window by up to 2 hours. This is done by entering a keypad command (security code + #82), which then prompts the user to enter the desired extension time of 1 or 2 hours (refer to the SYSTEM OPERATION section of the Installation Instructions). This feature is useful if a user must stay on the premises later than usual.
- Auto-Bypass Enable: The Auto-bypass option (enable force arm) causes the panel to attempt to bypass any faulted zones prior to auto-arming (panel will perform a force-arm). This option is set in partition-specific program field 2*08.
- Auto Disarming: The system can automatically disarm at the end of a pre-determined time window, if the system has not been disarmed manually. The disarming time can be delayed by using the auto disarm delay feature. In addition, the system can restrict disarming to a pre-determined time.
- Disarm Delay: Auto-disarm delay provides a delay before Auto disarming. This delay is added to the end of the disarm window. The delay is set in 4 minute increments, up to 56 minutes, in partition-specific program field 2*07.
- Restrict Disarming: This option, set in partition-specific field 2*10, allows disarming by operator level users only during the disarm time window, the arming window (in case user forgets an item after arming) or when the system is in alarm.

UL Note for Auto-Disarming: Auto-disarming not for use in UL installations.

**General Information
(continued)**

Open/close by exception

Scheduling provides a means of reporting openings/closings by exception, which means:

- _ The system sends open/close reports only if arming or disarming **does not** occur during the pre-determined time window.
- _ The system sends early to open/close reports if done earlier than window
- The system sends late to open/close reports if window is missed.

Time Driven Events (Relay Control)

Scheduling can automatically perform relay driven actions (4204 relay outputs or X-10 devices) at predetermined times:

- _ Can turn lights or other devices on/off at specific times, using the Time Driven Events programming options.
- _ The system can perform one shot actions of lights or other devices (i.e. turn on the porch light this wednesday at 8:00pm).
- _ X-10 control for the automation of lights and appliances.

End User Schedules

- _ The system provides up to 20 "timers" available to the end user for the purpose of activating output devices at preset times and on preset days.
- The typical uses for this feature could be control of lights or appliances , typically via X-10 modules.

Time Windows

Scheduled events are based on time windows, which are simply periods of time during which an event may take place. Time windows are defined by a start time and stop time. The system supports up to 20 Time Windows. The windows are shared by the 8 partitions, and the windows are used for open/close schedules as well as for time driven event control.

To understand time windows and scheduling, take for example a store that has the following hours:

Monday to Thursday:	9am to 6pm
Friday	9am to 9pm
Saturday	10am to 4pm
Sunday	Closed
Holidays	Closed

Assume the owner desires the following open and close time windows to allow time for employees to arm or disarm the system:

Monday to Thursday:	Open (disarm)	8am to 9am
	Close (arm)	6pm to 6:30pm
Friday	Open (disarm)	8am to 9am
	Close (arm)	9pm to 9:30pm
Saturday	Open (disarm)	9am to 10am
	Close (arm)	4pm to 4:30pm
Sunday & Holidays	Closed	

To provide these schedules, the following five time windows need to be programmed.

Window	Start Time	Stop Time	Purpose
Window 1	8am	9am	Monday-Friday open window
Window 2	9am	10am	Saturday open window
Window 3	4pm	4:30pm	Saturday close window
Window 4	6pm	6:30pm	Monday-Thursday close window
Window 5	9pm	9:30pm	Friday close window

Using the #80 Menu Mode (described in a later section), the installer can program open/close schedules by assigning each time window to a day of the week (windows are entered as 2-digit entries):

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Hol	Note
Op/Ci	Op/Ci	Op/Ci	Op/Ci	Op/Ci	Op/Ci	Op/Ci	Op/Ci	Note that 00 is entered for those days on which the store is closed.
01/04	01/04	01/04	01/04	01/05	02/03	00/00	00/00	

When programmed, employees can arm and disarm the system within the open and close time windows respectively without causing a report to be sent to the central station (reporting by exception). At the end of these windows, the system will automatically arm/disarm if an employee fails to arm/disarm manually (auto arm/auto disarm).

Time windows can also be used to program time driven relay output or X-10 device events. Time driven events can be activated at different times within a window as follows:

- _ At the beginning of a time window
- _ At the end of a time window
- _ During a time window active period only (On at beginning of window, off at end)
- _ At both the beginning and end of the time window (Ex: to sound a buzzer at the beginning and end of a coffee break)

Important: Since the time windows are shared among all partitions, it is important to make sure that changing a time window does not adversely affect desired actions in other partitions.

Limitation of access by Time

A user's access can be limited to a certain time period, during which he can perform system functions. Outside this time though, that user's code will be inactive. The system provides up to 8 Access Schedules, each of which consists of two Time Windows (one for opening, one for closing) for each day of the week and two time windows for holidays. The access schedules are programmed via #80 Menu Mode, and enabled for a given user when that user is added to the system.

Open/Close Schedules

The Open/Close scheduling is controlled by one of three individual schedules. Each schedule consists of one time window for openings and one time window for closings. There are three types of schedules available:

Temporary schedule The temporary schedule provides a method for the end user to override the daily and holiday schedules. It consists of one opening window and one closing window for each day of the week. The schedule automatically takes effect for up to one week, after which it is deactivated. This schedule is programmed using the #81 Temporary Schedule Menu Mode. Refer to that section for procedures.

Holiday schedule A holiday schedule will override the regular daily schedule on selected holidays throughout the year.

Daily schedule Each partition can have one daily schedule consisting of one opening window and one closing window per day.

Additional Schedules: Additional opening and closing schedules can be programmed using the **time-driven event** programming options. For example, a schedule for normal store opening/closing can be programmed with open/close schedules, and another open/close schedule for beginning and ending lunch hour can be programmed using the time driven event schedule programming. Refer to the Time Driven Events paragraph later in this section, and the Time Driven Events section in the PROGRAMMING GUIDE for detailed information.

Open/Close Reports by Exception

The system can help reduce communication traffic to the central station by using the exception reporting feature, set in partition-specific program field 2*09. The Open/Close by exception option suppresses these reports from being sent to central station if an arm or disarm is done within the expected time window. Reports are only sent if the open/close does not occur within the assigned time window. The system keeps a record of **all** openings/closings in its event log, however.

In the event an opening occurs immediately following a closing (a person who arms the system forgets something and has to reenter), the opening report (although outside of the opening window), will not be sent. (note that the reentering must occur within the closing window, otherwise a report **will** be sent). This feature is designed to prevent false alarms to central station.

The following diagram gives an example of how the open/close by exception reporting works.

Example of Open/Close Exception Reporting & Scheduling

6:01PM	5:59AM	6AM	9AM	9:01AM	3:59PM	4PM	6PM	6:01PM	5:59AM
"Early opening" reports will be sent if system is disarmed before opening window begins.		<div style="border: 1px solid black; padding: 2px; display: inline-block;">Opening Window</div> No reports sent if system disarmed during this time window.		Auto-disarm delay begins . Auto-disarm occurs after delay. (if auto-disarm is enabled) "Missed opening" reports will be sent if user disarming has not occurred at expiration of opening window. "Late opening" reports will be sent if disarm occurs after the opening window expires "Early closing" reports will be sent if user arming occurs before the closing window begins.		<div style="border: 1px solid black; padding: 2px; display: inline-block;">Closing Window</div> No reports sent if system armed* during this time window. * or disarmed if user reenters premises.		Auto-arm delay begins Auto-arm warning begins. Auto-arm occurs after warning expires. (if auto arm is enabled) "Missed closing" reports will be sent if user arming has not occurred at expiration of closing window. "Late closing" reports will be sent if system is armed after the closing window expires.	

#80 SCHEDULING MENU MODE

General Information The #80 Scheduling Menu Mode is used to program most of the scheduling and timed event options.

To enter this mode, the system must first be in normal operating mode. Enter installer code + # + 80.

The following can be programmed while in this mode:

- Define time windows
- Assign open/close schedules to each partition
- Assign holiday schedules
- Program time driven relay activated events
- Assign access control schedules

Some scheduling features are programmed in data field programming mode (installer code +800). The general programming mode scheduling fields are listed below.

System Wide Fields:	1*74 & 1*75	Relay timeout values
	2*01-2*04	Daylight savings time options
	2*11	Allow Disarming outside window if alarm
	2*13 & 2*14	Scheduling related report codes
Partition specific fields:	1*76	Access control relay partition assignment
	2*05	Auto-arm delay value
	2*06	Auto-arm warning time
	2*07	Auto-disarm delay value
	2*08	Force arm enable
	2*09	Open/close reporting by exception
	2*10	Restrict disarm only during windows

Event driven relay activation options are programmed using the #93 Menu Mode, Device Programming. These actions are in **response** to a programmed action. However, relay activation can also be time driven, and thus be used to **initiate** a desired action. Time driven relay activation options are programmed using the #80 Scheduling Menu Mode. Refer to the Timed Event Programming section for procedures.

In addition, time driven events can be programmed by the user using the #83 User Scheduling Menu Mode. These are options that allow the user to control output devices by setting built-in system timers. Refer to the END USER OUTPUT PROGRAMMING section for detailed information.

Steps To Programming Scheduling Options

To use #80 Scheduling Menu Mode, do the following:

Using the worksheets:

- Define time windows (up to 20)
- Define the holidays to be used by the system (up to 16)
- Define the daily open/close schedules (one schedule per day, per partition)
- Define the holiday schedules (up to 8, one per partition)
- Define temporary schedules
- Define limitation of access times (up to 8 schedules)
- Define the time driven events (up to 20)

Using #80 Scheduling Menu Mode:

- Program the time windows
- Program the open/close schedules
- Program the time driven events
- Program the access schedules

Using #81 Temporary Schedule Menu Mode:

- Show the user how to program a temporary schedule

Using #83 User Scheduling Menu Mode:

- Show the user how to program relay activated timed events (up to 20)

Time Windows Definitions
Worksheet

The system provides 20 time windows that are defined with start and stop times. These windows are used for open/close schedules, as well as for output controls, and are the basis of the scheduling system. These windows are shared among all 8 partitions. The following worksheets will help you define time windows and scheduling aspects of this system before programming the time window definitions for this installation. Note that time windows **can** span midnight.

Time Window Number	Start Time (HH:MM)	Stop Time (HH:MM)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

(Keep this worksheet handy, as you will be asked for a given time window number later in this section)

Open/Close Scheduling Worksheets

The Open/Close scheduling is controlled by one of three individual schedules. The list of schedules, in precedence order, is:

- a) Temporary schedule The temporary schedule provides a method for the end user to override the daily and holiday schedules. It consists of one opening window and one closing window for each day of the week. The schedule takes effect for up to one week, after which it is deactivated. This schedule is programmed using the #81 Temporary Schedule Menu Mode. Refer to that section for procedures.
- b) Holiday schedule A holiday schedule will override the regular schedule on selected holidays throughout the year.
- c) Daily schedule Each partition will have one daily schedule consisting of one opening window and one closing window per day.

In addition to these schedules, additional opening and closing schedules may be added using the time-driven event programming options. These schedules will be in effect regardless of whether or not a temporary schedule is in effect. Note that if a window overlaps another window, both windows must close before the panel will take any action related to the expiration of a window. Refer to the Time Driven Events sections for detailed information.

Holiday Definitions & Schedule Worksheet

The system provides up to 16 holidays that can be assigned for the system. Each holiday can be assigned to any combination of partitions. List the desired holidays on the following worksheet. Check the partitions for which these holidays apply.

Hol	Partition								
	Mon/Day	1	2	3	4	5	6	7	8
1	/								
2	/								
3	/								
4	/								
5	/								
6	/								
7	/								
8	/								
9	/								
10	/								
11	/								
12	/								
13	/								
14	/								
15	/								
16	/								

Daily Open/Close Worksheet

Write in the open & close time window numbers for each partition.

Part	Monday		Tuesday		Wed.		Thursday		Friday		Saturday		Sunday		Holiday	
	Op	Cl	Op	Cl	Op	Cl	Op	Cl	Op	Cl	Op	Cl	Op	Cl	Op	Cl
1																
2																
3																
4																
5																
6																
7																
8																

Limitation of Access by Time Worksheet

Limitation of access determines the times a particular user code is active in the system. The system provides 8 Access Schedules, each of which consists of two time windows for each day of the week and two time windows for holidays. If access schedules have been assigned, when a user is assigned, that user's access to the system can be limited by specifying an Access Schedule number in the range of 1-8. If no limitations apply, enter 0.

Enter the appropriate time window numbers for each partition.

Acc Sch	Monday		Tuesday		Wed.		Thursday		Friday		Saturday		Sunday		Holiday	
	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2
1																
2																
3																
4																
5																
6																
7																
8																

Time-Driven Event Worksheet

These are the schedules used to activate outputs, bypass zones, etc. based on a time schedule. There are 20 of these events that may be programmed for the system, with each event governed by the previously defined time windows.

The actions that can be programmed to automatically activate at set times are relay commands, arm/disarm and zone bypassing commands, and open/close access conditions.

To fill out the worksheet:

1) First enter the schedule number (1-20) and time window number (1-20), and note the day of the week the action is desired.

2) Enter the code for the desired action and action specifier. The action codes are the events that are to take place when the scheduled time is reached. Each action also requires an action specifier, which defines the action code. The action specifier varies, depending on the type of action selected.

The following is a list of the "Action" codes (i.e. desired action) used when programming time driven events. Note that these codes are independent of the "relay codes" programmed during the #93 Menu Mode-Relay Programming mode.

Relay commands

<u>Action Code</u>	<u>Action Specifier</u>
01 Relay On	Relay #
02 Relay Off	Relay #
03 Relay Pulse	Relay #
04 Relay Pulse XX minutes (set in field 1*74)	Relay #
05 Relay Pulse YY seconds (set in field 1*75)	Relay #
06 Relay Group On	Relay Group #
07 Relay Group Off	Relay Group #
08 Relay Group Pulse	Relay Group #
09 Relay Group Pulse XX minutes (set in field 1*74)	Relay Group #
10 Relay Group Pulse YY seconds (set in field 1*75)	Relay Group #

Arm/Disarm commands

NOTE: Activation times 1 (Begin), 2 (End), 3 (During) are the only valid choices for these commands.

"During" can be used to arm or disarm the control for specific time only. For example, if "during" is selected with arm-stay, the system will arm-stay at the beginning of the window and disarm at the end of the window.

<u>Action Code</u>	<u>Action Specifier</u>
20 Arm-Stay	Partition(s)
21 Arm Away	Partition(s)
22 Disarm	Partition(s)
23 Force Arm Stay (Auto-bypass faulted zns)	Partition(s)
24 Force Arm Away (Auto-bypass faulted zns)	Partition(s)

Bypass commands

NOTE: Activation times 1 (Begin), 2 (End), 3 (During) are the only valid choices for these commands. Note the following if 3-During activation time is selected: Auto bypass will bypass the zone(s) at the beginning of the window and unbypass the zone(s) at the end of the window. Auto unbypass will remove the bypass of the zone(s) at the beginning of the window and will restore the bypass of the zone(s) at the end of the window.

Action Code		Action Specifier
30	Auto bypass - Zone list	Zone list #
31	Auto unbypass - Zone list	Zone list #

Open/close / Access

NOTE: Activation time 3 (During) is the only valid choice for these commands.

Action Code		Action Specifier
40	Enable Opening Window by partition	Partition(s)
41	Enable Closing Window by partition	Partition(s)
42	Enable Access Window for Access group(s)	Group(s)

- 3) **Enter the desired Activation time**, which refers to when the action is to take place relative to the time window. Select from:

Activation Time	Description
1	Beginning of time window
2	End of time window
3	During time window active period only (On at beginning of window, off at end).This can be used in conjunction with the arm, disarm or bypass commands to control a part of the system during the window. For example, if bypass is selected to activate during the window, the zones in the zone list will be bypassed at the beginning of the window and unbypassed at the end of the window.
4	Beginning and end of time window (ex. -Coffee break buzzer). In this example, if relay pulse was selected, the relay would pulse for 2 seconds at the beginning of the window, signaling the beginning of the coffee break. At the end of the window it would pulse again, signaling the end of coffee break.

Time Driven Events Worksheet

Sched Num.	Time Window	Day(s)							Action Desired	Action Specifier	Activation Time	
		M	T	W	T	F	S	S				H
1												
2												
3												
.												
.												
20												

Basic Scheduling Menu Structure

To enter scheduling program mode, enter the installer code + # + 80.

Once the worksheets are completed, you can begin to program the scheduling features. There are 5 sets of scheduling menus as shown below. Entering "1" at a displayed main menu prompt will select that menu set. Prompts for programming that scheduling feature will then appear. Enter "0" to skip a menu screen and display the next menu.

Time Window ?
1 Yes 0 = No 0

Upon entering Schedule Menu Mode, this prompt will appear. Enter 1 to program time windows. Refer to the Programming Time Windows section for detailed procedures. Enter 0 to move to the Open/Close Schedules prompt.

O/C Schedules ?
1 Yes 0 = No 0

Enter 1 to program opening and closing schedules. Refer to the Programming Open/Close Schedules section for detailed procedures. Enter 0 to move to the Holidays prompt.

Holidays ?
1 Yes 0 = No 0

Enter 1 to program holiday schedules. Refer to the Holiday Programming section for detailed procedures. Enter 0 to move to the Timed Events prompt.

Timed Events ?
1 Yes 0 = No 0

Enter 1 to program timed events using relay outputs or X-10 devices. Refer to the Programming Timed Events section for detailed procedures. Enter 0 to move to the Access Schedule prompt.

Access Sched. ?
1 Yes 0 = No 0

Enter 1 to program access schedules. Refer to the Programming Access Schedules section for detailed procedures. Enter 0 to move to the Quit prompt.

Quit ?
1 Yes 0 = No 0

Enter 1 to quit #80 Scheduling Menu Mode and return to normal operating mode. Enter 0 to make any changes or review the scheduling programming options. If 0 is pressed, the TIME WINDOW menus are displayed.

Programming Time Windows

Enter Scheduling Mode by entering the installer code + # + 80. The console will display the Time Window programming prompt.

Time Window ?
1 Yes 0 = No 0

Enter 1 at this main menu prompt to program time windows.

Time Window # ?
01-20, 00 = Quit 01

Enter the 2-digit time window number to be programmed. Press * to accept the entry. Enter 00 then * at the "TIME WINDOW #" prompt to quit Time Window programming and display the Quit ? prompt.

Enter 0 at the Quit ? prompt to return to the main menu choices and continue programming. Enter 1 to quit Scheduling Menu Mode.

Quit ?
1 = YES 0 = NO 0

01 TIME WINDOW
00:00AM 00:00AM

If a time window number was entered, the cursor will be positioned on the tens of hours digit of the start of window entry. Enter the desired start of window hour and press *. The cursor moves to the minutes. Enter the desired minutes and press *. Toggle the AM/PM indication by pressing any key 0-9 while the cursor is under the letter A/P position. Repeat for the end of window time entry .

When the entry is completed, the "TIME WINDOW #" prompt is displayed again. Enter the next time window number to be programmed and repeat the procedure. Note: If a time window is not used, enter 00:00AM for the start and stop times.

When all time windows have been programmed, enter 00 at the TIME WINDOW # prompt to quit Time Window menus.

Open/Close Schedule

Each partition can be assigned one daily open/close schedule, plus a holiday open/close schedule. Temporary schedules are programmed separately, using the #81 Temporary Schedule Menu Mode. To program additional open/close schedules, see the Time Driven Events section.

After entering Scheduling Menu Mode, press 0 until the O/C Schedules prompt appears.

O/C Schedules ?
1 Yes 0 = No 0

Enter 1 to program opening and closing schedules.

Partition # ?
01-08, 00 = Quit 01

Enter the appropriate partition number to which the following open/close schedules will apply.

Enter 00 then * at the "PARTITION #" prompt to quit O/C Schedules programming and display the Quit ? prompt.

Enter 0 at the Quit ? prompt to return to the main menu choices and continue programming. Enter 1 to quit Scheduling Menu Mode.

Quit ?
1 = YES 0 = NO 0

Mon P1 OP WIND.?
00:00 00:00 00

For each day in which an opening or closing schedule is desired, beginning with Monday, enter a time window number (01-20) for the displayed day's opening schedule. Enter 00 if no schedule is desired for a particular day. As the number is keyed in, the actual time that has been stored for that window will be displayed as a programming aid. Press the * key to accept the entry.

Mon P1 CL WIND.?
00:00 00:00 00

Enter the time window number for the displayed day's closing schedule. As the number is keyed in, the actual time that has been stored for the window will be displayed. Press the * key to accept the entry.

Tue P1 OP WIND.?
00:00 00:00 00

The console will now prompt for Tuesday's open/close schedule, etc. Follow the procedure for Monday's prompts. When the last day of the week has been programmed, the holiday opening and closing window prompts are displayed.

Hol P1 OP WIND.?
00:00 00:00 00

Enter the holiday opening time window number. Press the * key to accept the entry.

Hol P1 CL WIND.?
00:00 00:00 00

Enter the holiday closing time window number. Press the * key to accept the entry.

When the entries are completed, the PARTITION # prompt is displayed again. Repeat this procedure for each partition in the system.

When all partitions have been programmed, enter 00 at the PARTITION # prompt to quit open/close schedules menus.

Holiday Programming

Up to 16 holidays can be defined for the system. After entering Scheduling Menu Mode, press 0 until the Holidays ? prompt appears.

Holidays ?
1 Yes 0 = No 0

Enter 1 to program holiday schedules.

HOLIDAY NUMBER ?
01-16,00=Quit 01

Enter the 2-digit holiday number to be programmed and press * to accept entry.

Enter 00 then * at the Holiday Number prompt to quit the Holiday menus and display the Quit ? prompt.

Enter 0 at the Quit ? prompt to return to the main menu choices and continue programming. Enter 1 to quit Scheduling Menu Mode.

Quit ?
1 = YES 0 = NO 0

01 ENTER DATE
00/00

The cursor will be positioned on the tens of months digit. Enter the appropriate month, then press * to proceed to the day field. Enter the appropriate day for the holiday and press * to accept the entry.

Part ? 12345678
Hit 0-8 x x

Holidays can be set for any partition as follows. Press 0 to turn all partitions on or off, or else use keys 1-8 to toggle the letter x under the partition to which this holiday will apply. Press the * key when all desired partitions have been assigned.

The Holiday Number prompt will be displayed again. Repeat the procedure for each holiday to be programmed.

When all holidays have been programmed, enter 00 at the HOLIDAY NUMBER prompt to quit the holiday menus.

Time-Driven Event Programming

The following schedules can be used to activate outputs, bypass zones, arm/disarm the system, etc. based on a time schedule. Up to 20 events can be programmed for the system.

Note that the following menu items must be programmed using #93 Menu Mode - Relay Programming:

- Enter Relay No. (reference identification number)
- Relay Group (if applicable)
- Restriction
- Relay Type (4204 or X-10)
- House code and Unit code if X-10 devices
- ECP address and specific Relay No. if 4204 relays

After entering Scheduling Menu Mode, press 0 until the Timed Events ? prompt appears.

Timed Events ?
1 Yes 0 = No 0

Enter 1 to program timed events using relay outputs or X-10 devices.

TIMED EVENT # ?
01-20,00=Quit 01

Enter the timed event number to be programmed (01-20) and press the * key. The system will then prompt the user to enter the desired action to be taken.

Enter 00 at the TIMED EVENT prompt to quit the timed event menus and display the Quit ? prompt.

Enter 0 at the Quit ? prompt to return to the main menu choices and continue programming. Enter 1 to quit Scheduling Menu Mode.

Quit ?
1 = YES 0 = NO 0

Time-Driven Event
Programming
(continued)

01 ACTION ?
none 00

Enter the action code for the desired action for this event number from the list at the left. This could be an output command, an arming command, or any other time-driven event. Press * to accept the entry and display the appropriate action specifier prompt as follows:

Action Codes:

01=relay on
02=Relay Off
03=Relay Pulse
04=Relay Pulse XX minutes
05=Relay Pulse YY seconds

06=Relay Group On
07=Relay Group Off
08=Relay Group Pulse
09=Relay Group Pulse XX minutes
10=Relay Group Pulse YY seconds

20=Arm-Stay
21=Arm Away
22=Disarm
23=Force Arm Stay
24=Force Arm Away
40=Enable Open Window by part
41=Enable Close Window by part

30=Auto bypass - Zone list
31=Auto unby pass - Zone list

42=Enable Access Window for
Access group(s)

Actions 01-05

Enter the relay number and press * to accept entry. The Time Window ? prompt appears.

01 RELAY # ?
00

Actions 06-10

Enter the relay group number and press * to accept entry. The Time Window ? prompt appears.

01 RELAY GRP # ?
00

Actions 21-24 and 40-41

Enter the partition to which the action applies. Enter 0 to select all partitions. Enter a partition number again to deselect it. Press * accept entry. The Time Window ? prompt appears.

PART? 12345678
HIT 0-8 X X

Actions 30-31

Enter the zone list number which contains the zones to be bypassed or unby passed. Press * to accept entry. The Time Window ? prompt appears.

01 ZONE LIST ?
ENTER 1-8 1

Action 42

Enter the group number to which the time window will apply. Press * to accept entry. The Time Window ? prompt appears.

GROUP ? 12345678
HIT 0-8 X

01 Time Window ?
00:00 00:00 01

Enter the time window number (01-20) for which this timed event is to occur. As the number is keyed in, the actual time that has been stored for the window will be displayed. Press the * to continue.

01 Active time ?
0

Enter the activation code number from 01-04 (listed below). As the number is keyed in, the activation time will be displayed. The choices are:

1. Trigger at the start of the window
2. Trigger at the end of the window
3. Take effect only for the duration of the window
4. Trigger at both the start and the end of the window.

Example - coffee break buzzer

Press the * key when the desired choice is showing.

Days ? MTWTFSSH
Hit 0-8 x x

The system will then ask for which days the event is to be activated. Press 0 to toggle all days on or off or else press keys 1-8 to toggle the letter x under the day on or off (Monday = 1, Holiday = H = 8).

When all entries have been made, the TIMED EVENT # prompt is displayed again. Repeat the procedure for each timed event required by the installation.

When all timed events have been programmed, enter 00 at the TIMED EVENT prompt to quit this set of menus.

Access Control Schedules

Access Control schedules are the schedules used to govern whether a given user may arm or disarm a system during a particular time window. Up to 8 schedules can be programmed, and up to 2 access control windows per day can be programmed (typically one for an opening time and the second for a closing time window). After entering Scheduling Menu Mode, press 0 until the Access Sched. ? prompt appears.

Access Sched. ?
1 Yes 0 = No 0

Enter 1 to program access schedules.

ACCESS SCHED # ?
01-08, 00 = Quit 01

Enter the access control schedule number between 01 and 08. Press * to accept entry.

Enter 00 at the Access Sched # prompt to quit the Access control menus and display the Quit ? prompt.

Enter 0 at the Quit ? prompt to return to the main menu choices and continue programming. Enter 1 to quit Scheduling Menu Mode.

Quit ?
1 = YES 0 = NO 0

MON A1 Window 1 ?
00:00 00:00 00

Enter the first time window number from 01-20 for which this access schedule applies for the displayed day. As the number is keyed in, the actual time that has been stored for the window will be displayed. Press * to continue.

MON A3 Window 2 ?
00:00 00:00 00

Enter the second time window number from 01-20 for which this access schedule applies for the displayed day. As the number is keyed in, the actual time that has been stored for the window will be displayed. Press * to continue.

TUE A1 Window 1 ?
00:00 00:00 00

Repeat the procedure for the other days of the week. When the last day of the week has been programmed, the holiday opening and closing windows may be entered.

Hol A1 Window 1 ?
00:00 00:00 00

Enter the first time window number for holidays for which this access schedule applies. As the number is keyed in, the actual time that has been stored for the window will be displayed. Press * to continue.

Hol A1 Window 2 ?
00:00 00:00 00

Enter the second time window number for holidays for which this access schedule applies. As the number is keyed in, the actual time that has been stored for the window will be displayed. Press * to continue.

When all access control schedules have been programmed, enter 00 at the Access Sched # prompt to quit this set of menus.

#81 TEMPORARY SCHEDULE MENU MODE

Temporary schedule
Worksheet

Each partition can be assigned a temporary schedule which will override the regular schedule (and the holiday schedule) for up to one week. This schedule takes effect as soon as it is programmed and remains active for up to one week.

To enter this mode, enter the security code and press # + 81.

Partition/Windows	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1 Disarm Window							
Start Time HH:MM							
Stop Time HH:MM							
Arm Window							
Start Time HH:MM							
Stop Time HH:MM							
2 Disarm Window							
Start Time HH:MM							
Stop Time HH:MM							
Arm Window							
Start Time HH:MM							
Stop Time HH:MM							
3 Disarm Window							
Start Time HH:MM							
Stop Time HH:MM							
Arm Window							
Start Time HH:MM							
Stop Time HH:MM							
4 Disarm Window							
Start Time HH:MM							
Stop Time HH:MM							
Arm Window							
Start Time HH:MM							
Stop Time HH:MM							
5 Disarm Window							
Start Time HH:MM							
Stop Time HH:MM							
Arm Window							
Start Time HH:MM							
Stop Time HH:MM							
6 Disarm Window							
Start Time HH:MM							
Stop Time HH:MM							
Arm Window							
Start Time HH:MM							
Stop Time HH:MM							
7 Disarm Window							
Start Time HH:MM							
Stop Time HH:MM							
Arm Window							
Start Time HH:MM							
Stop Time HH:MM							
8 Disarm Window							
Start Time HH:MM							
Stop Time HH:MM							
Arm Window							
Start Time HH:MM							
Stop Time HH:MM							

Programming Temporary Schedules

Temporary schedules override normal schedules.

Enter user code + # + 81 to enter this mode. Note that only users with authority level of manager or higher can program temporary schedules.

Temporary schedules only affect the partition from which it is entered.

Temporary schedules can also be reused at later dates simply by scrolling (by pressing #) to the DAYS? prompt (described below) and activating the appropriate days. This should be considered when defining daily time windows.

Mon DISARM WIND.
00:00AM 00:00AM

This prompt asks for the start and end time of disarm (opening) window. Upon entry of this mode, the cursor will be positioned on the tens of hours digit of the start time for Monday's disarm window. Enter the desired hour. Press * to move to the minutes field. The minutes are entered in the same manner. The AM/PM indication is toggled by hitting any key in the 0-9 range while the cursor is under the letter A/P position. Repeat for the stop time entry. Press the * key to move to the arming window for Monday. Press # if no changes are desired.

Mon ARM WINDOW
00:00AM 00:00AM

This prompt asks for the start and end time of arm (closing) window. The cursor will be positioned on the tens of hours digit of the start time for the arm window. Enter the desired hour. Press * to move to the minutes field. The minutes are entered in the same manner. The AM/PM indication is toggled by hitting any key in the 0-9 range while the cursor is under the letter A/P position. Repeat for the stop time entry.

After the windows for that day have been completed, the system will prompt for disarm and arm time windows for the next day.

Press # if no changes are desired.

Tue DISARM WIND.
00:00AM 00:00AM

Repeat the procedure described above for all days of the week.

When all of the days have been completed, the system will ask which days are to be activated.

Days? MTWTFSS
Hit 0-7 x x

This is the prompt that actually activates the temporary schedule, and allows the temporary schedule to be customized to a particular week's needs. To select the days which are to be activated, enter 1-7 (Monday = 1). An "X" will appear under that day, indicating the schedule for that day is active. Entering a day's number again will deactivate that day. Pressing 0 will toggle all days on/off.

The temporary schedule will only be in effect for the days which have the letter x underneath them. As the week progresses, the selected days are reset to the deactive state.

When completed, press * or # to exit the temporary schedule entry mode.

#83 USER SCHEDULING MENU MODE

General Information

The system provides up to 20 "timers" which will be available to the end user for the purpose of controlling output devices (4204 or X-10). These timers are analogous to the individual appliance timers that might be purchased at a department store. The typical uses for this feature could be control of lights or appliances, typically via X-10 modules. These modules are programmed into the system by the installer during #93 Menu Mode—Device Programming. The end user needs only to know the output device number and its alpha descriptor.

The installer may set certain relays to be "Restricted" during # 93 Menu Mode-Relay Programming. These relays may not be controlled by the end user. (Prevents end-user from controlling doors, pumps, etc.)

To enter this mode, the User enters CODE + # + 83

Output Timer # ?
01-20,00=Quit 01

Enter the output timer number to be programmed (1-20). Press * to accept entry and move to the next prompt.

Enter 00 to quit and return to normal mode.

06 07:00P 11:45P
PORCH LITE 04

If that timer number has already been programmed, a summary screen will appear. In this example:

06 = Timer #

04 = Output Device # affected by this timer

PORCH LITE = Output Descriptor for Device # 4

07:00PM = Start Time

11:45PM = Stop Time

Press * to continue.

06 ENTER OUTPUT#
PORCH LITE 04

Enter the desired output number (1-16)

As the number is entered, the descriptor changes to indicate which output device is being affected.

Note: 00 entered as the output # deletes the timer (Timer 06 in this example) and displays an output descriptor of "None". Devices are programmed via #93 Menu Mode.

06 ON TIME ?
07:00 PM

Enter the ON time in 00:01 - 11:59 format.

When the display shows the desired time, press the * key to go forward to the AM/PM field. In this field, any of the keys 0-9 may be used to toggle the AM/PM indication. Enter 00:00 to skip. Note: Could use 2 commands to perform an ON one day and an OFF another day

06 OFF TIME ?
11:45 PM

Enter the OFF time in 00:01 - 11:59 format.

When the display shows the desired time, press the * key to go forward to the AM/PM field. In this field, any of the keys 0-9 may be used to toggle the AM/PM indication. Enter 00:00 to skip.

Note: Could use 2 commands to perform an ON one day and an OFF another day

06 Days? MTWTFSS
Hit 0-7 x x

To select the days which are to be activated, enter 1-7 (Monday = 1). An "X" will appear under that day, indicating the output for that day is active. Entering a day's number again will deactivate that day. Pressing 0 will toggle all days on/off.

The outputs will only be in effect for the days which have the letter x underneath them. As the week progresses, the selected days are reset to the deactivate state, unless the permanent option is selected (next screen prompt).

When completed, press * to continue.

06 Permanent ?
0 = NO,1 = YES 0

Permanent means continue executing these commands on a continuous basis. An answer of 0 means execute each day's output only once. The letter "x" under the day will then be cleared.

Press * to accept entry. The system will quit scheduling mode and return to normal mode.

PART 3

SYSTEM OPERATION and TESTING

Section 1. SYSTEM OPERATION

SECURITY ACCESS CODES

General Information The System allows up to 128 security access codes to be assigned (maximum 99 per partition), each identified by a user ID number. In addition, the Quick Arm feature can also be programmed, which enables the [#] key to be pressed instead of entering the security code when arming the system. The code must still be entered when disarming the system.

Note that Open/Close reporting of Quick Arm is enabled if User 2 is enabled for Open/Close reporting, and that Quick Arm reports as User 0.

User Codes & Levels Of Authority Each user of the system can be assigned various levels of authority (tells system what system functions that user is authorized to do), and can have different levels of authority within each partition. Use the "View Capabilities" keypad function to view the partitions and authority levels for which a particular user is authorized. In highest to lowest ranking, these levels are described below.

Level	Title
0	Installer
1	Master
2	Manager
3	Operator level A
4	Operator level B
5	Operator level C
6	Duress

<p>Installer (Level 0) User 1</p>	<ul style="list-style-type: none"> • Programmed in field *00 (default=4-1-4-0). Can be changed by installer. • Can perform all system functions (arm, disarm, bypass, etc.) and is the only user that can enter program mode. • Only code that allows entry to program mode. • Installer code lockout if exit program mode via *98. This prevents installer from reaccessing program mode. The only way to access Programming mode once this feature is activated, is by powering down the system and powering up again, and then pressing both the * and # keys at the same time within 30 seconds of power up. • The installer must program at least one master code. Master codes are the codes intended for use by the primary users of the system. • Can add, delete, or change master, manager, or operator codes. • Can select open/close reports for any user. • Can perform normal system functions, but cannot disarm if armed by a code other than Installer's code (including Quick Arm). • Enable open/close reporting for installer in field *39.
<p>Master (Level 1)</p>	<ul style="list-style-type: none"> • The Master Code is the code intended for use by the primary users of the system when performing system functions, and can be changed by the Master User. • The master codes can be used to assign up to 99 lower level codes, which can be used by other users of the system who don't have a need to know the master code. • As shipped from the factory, there are no master or manager codes pre-programmed. The installer must program at least one master code during initial installation. • Master cannot assign anybody a level of 0 or 1. • Can change his own code. • Can add, delete, change manager or operator codes. Each user's code can be individually eliminated or changed at any time. • Open/close reporting of added users are same as that of the master or manager adding the new user. • Can perform all system functions.

User Codes & Levels Of Authority (cont.)

<p>Manager (Level 2)</p>	<ul style="list-style-type: none"> • Can perform all system functions (Arm, Disarm, Bypass, etc.) programmed by Master. • May create other users of the system below this level (Manager cannot assign anybody a level of 0, 1, or 2). • May change his own code. • May add, delete, change operators. • Open/close reporting of added users will be same as his own (enabled or disabled as assigned by installer or master). • May operate a partition. 												
<p>Operator (Levels 3-5)</p>	<ul style="list-style-type: none"> • Operators can arm and disarm the system to the authority assigned, but cannot add or modify any user code. • May operate a partition with one of the three OPERATOR authority levels A through C listed below. <table border="1"> <thead> <tr> <th>Level</th> <th>Title</th> <th>Functions Permitted</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>Operator A</td> <td>Arm, Disarm, Bypass</td> </tr> <tr> <td>4</td> <td>Operator B</td> <td>Arm, Disarm</td> </tr> <tr> <td>5</td> <td>Operator C</td> <td>Arm, Disarm only if armed with same code</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Operator C (sometimes known as Baby-sitter code), cannot disarm the system unless the system was armed with that code. This code is usually assigned to persons who may have the need to arm and disarm the system at specific times only (ex. a baby-sitter needs to control the system only when baby-sitting). 	Level	Title	Functions Permitted	3	Operator A	Arm, Disarm, Bypass	4	Operator B	Arm, Disarm	5	Operator C	Arm, Disarm only if armed with same code
Level	Title	Functions Permitted											
3	Operator A	Arm, Disarm, Bypass											
4	Operator B	Arm, Disarm											
5	Operator C	Arm, Disarm only if armed with same code											
<p>Duress (Level 6)</p>	<ul style="list-style-type: none"> • The duress code is a means of sending a silent alarm to a central monitoring station if the user is being forced to disarm (or arm) the system under threat. This feature is only useful if the system is connected to a central station. • When the system's Auxiliary Voltage Triggers are connected to another communication's media, note that duress is signaled on the same trigger that signals silent panic (whereas duress has its own unique report when digitally communicated). • The duress code is assigned on a partition by partition basis and can be any code desired. • When used, the system will disarm (or arm), but will also send a silent alarm to the central station (if service is connected). There will be no indication at the console that an alarm was sent.. • Duress Reporting Note: The Duress report triggering logic activates on the 5th key depression (such as OFF), not the 4th key depression (last digit of code). Duress reports will not be triggered if the 5th key is a [*], such as when performing a GOTO or viewing the capabilities of a user. 												

Open/Close Reporting Note: When adding a user, the system will only prompt for Open/Close report capability if the user is being added by the Installer. When a Master or Manager adds a new user, the new user's Open/Close reporting enable will be the same as that of the Master or Manager adding the user. If Open/Close reports are required to be selectable by the Master or Manager, the Installer should assign two Master or Manager user codes: one with Open/Close reporting enabled, and one without Open/Close reporting.

General Rules on Authority Levels and changes

The following rules apply to users when making modifications within the system based on the user code authority levels:

- Master Codes and all lower level codes can be used interchangeably when performing system functions within a partition (a system armed with a user's temporary code can be disarmed with the Master Code or another user's temporary code), except the Operator Level C Code described above.
- A user may not delete or change the user code of the SAME or HIGHER authority than which he is assigned.
- A user (levels 0, 1 & 2 only) may only ADD users to a LOWER authority level.
- A user may assign other users access to only those partitions to which he himself has access.
- A user can only be DELETED or CHANGED from within the partition he is assigned.
- User numbers must be entered as 2-digit entries. Single digit user numbers must, therefore, always be preceded by a "0" (example, 03, 04, 05, etc.). Make sure the end user understands this requirement. Temporary codes are entered as 4-digit numbers.

Important!: Unless Ademco Contact ID reporting is used, only user codes #1 - #15 can uniquely report to the central station using the communication formats provided. Users #16 - #99 will report as User #15, if enabled for open/close reporting, for the other reporting formats.

Multiple Partition Access
Examples
(GOTO Function)

To make a partitioned environment particularly useful, the system must allow for certain people to have access to other partitions. This is particularly true in the Factory/Office environment where the president of the company wants access to any area of his company. The 4140XMPT2 has total flexibility in supporting this requirement. On a USER basis, each user is programmed for a base partition (the one he normally is assigned) and one or more partitions which he can be authorized to access.

In addition, within each partition, each USER may be programmed to have different levels of authority. For example, User #3, the V.P. of Engineering, could be assigned to work within the Engineering Department (Partition 1) of ABC Manufacturing. Since he needs the full capabilities in his area, he is assigned as a MASTER with Level 1 authority. This means he may Arm, Disarm, Bypass, Add or Modify users in partition 1. It is also a requirement that he be able to gain access to the manufacturing area (partition 2) on an emergency basis. You can set this up easily with the 4140XMPT2 by now requesting that he also be assigned to partition 2, with a level of authority set lower, such as Level 4 (OPERATOR Level B) which allows him to Arm and Disarm, but nothing else. The control will automatically assign him the next available user number within partition 2 and does not require reprogramming of his already existing 4 digit security code! This type of setup can be done for each user of the system and for any combination of up to 8 partitions!

EXAMPLE OF MULTIPLE PARTITION ACCESS

Part 1	Part 2	Part 3	Part 4	Part 5	Part 6	Part 7	Part 8
User 3	User 5						
Level 1	Level 4						
Master	Oper B						

In the above example, User 3 has MASTER authority in partition 1 and OPERATOR B authority in partition 2. His user number in partition 2 is User 5 and his 4 digit code is the same for both partitions. Note that if a user number is already being used in a partition, the system will automatically assign an unused User number.

Assigning users to other partitions is one thing, but how about actually being a user and trying to "see" one of the other partitions? The 4140XMPT2 has developed a simple key sequence (code + [*] + partition number 0-8, partition 0 returns to the default partition for that console) scheme for a user to go to another partition.

Once there, the current display becomes attached to that partition and status requests, etc. are now displayed for that partition, unless a period of 120 seconds elapses with no key entries. To return to your original partition, you may enter the same key sequence and end it with your normal partition number or "0". You're now back to where you started. It's that simple! You may view this operation as a big selector switch and you are at the switch at the console.

EXAMPLE: User may be regularly assigned to partition 1. This would be the default display for this user, however he may "select" to go to partition 2 for example. (Assumes he has been programmed for access to partition 2) The user enters his normal access code and the proper sequence to select another partition followed by the number 2 for partition 2. The display will now select partition 2 information for view and further action. In the above example notice that no access is allowed for this user into partitions 3 - 8. Attempts to access these partitions would be denied automatically.

To ADD a Master, Manager or Operator code

Installer must program at least one Master code.

- Or Master or Manager code, but must be code with higher level of authority than the code being changed. (i.e. Master code can add a Manager or Operator level code, but cannot add another Master code; a Manager code can add an Operator level code, but cannot add a Master or another Manager code).

Important!: During user code entry, normal key depressions at other consoles in a partition will be ignored. However, panic key depression will cause an alarm and terminate user entry.

Enter Installer Code- + [8] + new User # (00-99) + new User's code
Console will prompt for the Authority Level for this user.

User Number = 03
Enter Auth.Level

Enter the level number as follows:

- 1= Master (Arm, Disarm, Bypass, add or modify lower level users)
- 2= Manager (Arm, Disarm, Bypass, add or modify lower level users)
- 3= Operator Level A (Arm, Disarm, Bypass)
- 4= Operator Level B (Arm, Disarm)
- 5= Operator Level C (Arm, Disarm only if system armed with this code)
- 6= Duress (Arm, Disarm, triggers silent panic alarm)

Console will then prompt for Open/Close reporting option for this user.

Open/Close Rep.?
0 = NO , 1 = YES

Press 0 (NO) or 1 (YES), depending on whether or not arming/disarming by this user will trigger opening & closing reports.

Access Group?
Enter 0-8

If access schedules have been programmed, this prompt appears. Enter the user's access group number (1-8) if this user should have limited access to the system. Enter 0 if no access group should be assigned.

RF Button ?
0=NO , 1=YES

If a 5800 series button transmitter has been enabled, and not assigned to a user, this prompt will appear.

Enter Button ZN #
(01-87)

If yes was given as the answer to the RF button question, the zone number for the button will be requested. Enter one of the zone numbers assigned to the button transmitter as AWAY, STAY or DISARM. The system will then assign any STAY, AWAY or DISARM buttons of the transmitter to this user number..

Multi-Access ?
0 = NO , 1 = YES

Press 0 (NO) or 1 (YES). If NO, the program exits this mode. If yes, the Console prompts for the Global Arm option for this user.

Global Arm ?
0 = NO , 1 = YES

Press 0 (NO) or 1 (YES), depending on whether or not this user will be allowed to arm more than one partition via Global Arm prompts (described in the KEYPAD FUNCTIONS section) .

If the Multi-Access option was selected for this user, the console now prompts for the user's access to the next partition.

Part. 2 – SHOP ?
0 = NO , 1 = YES

Press 0 (NO) or 1 (YES), depending on whether or not this user will have access to the displayed partition number. If NO, the console displays this prompt for the next partition number in sequence.

If YES, the console prompts for the following:

- User's authority level in the displayed partition (see Authority Level prompt above). Note that the user number in the displayed partition is automatically assigned.
- Open/Close option for this user in the displayed partition (see Open/Close prompt above).
- Global Arm option for this user in the displayed partition.

When all partitions have been displayed, the console will scroll through all partitions to which access has been assigned, and will display the user number, authority level, open/close and global arm options that were programmed for each partition the user was granted access. For example:

Part. 1 S WHSE
User 03 Auth=3G.

Note that the "G" following the authority level indicates that the global arm feature is enabled for this user in the displayed partition, and that the period at the end of the second line indicates open/close reporting is enabled for this user in the displayed partition. The "S" indicates the partition from which the user may be changed or deleted.

To CHANGE a Master,
Manager or Operator code

Enter Installer code* + [8] + User number (00-99) + new code for that user.

The system will detect that the user number is already assigned and will prompt if this is a new user. Press 0 (NO).

The system will then confirm that the change is allowed based on authorization level. If the user number is the same as the Installer's, the system will prompt for the new code to be reentered. This prevents accidentally changing a high level code.

* Or Master or Manager code, but must be code with higher level of authority than the code being changed. (i.e. Master code can change a Manager or Operator level code, but cannot change another Master code; a Manager code can change an Operator level code, but cannot change a Master or another Manager code).

To Delete a Master,
Manager or Operator code

Enter Installer code* + [8] + User number (00-99) + Installer code

The system will prompt if this code should be deleted. Press 0 (NO) or 1 (YES).

If yes, that user's code will be removed from all partitions to which it had been assigned, and all authorization levels and other information about that user will be deleted. Note that a user can only be deleted from the partition in which it was first assigned, and can only be deleted by a user with a higher authority level. A user cannot delete himself.

* Or Master or Manager code, but must be code with higher level of authority than the code being deleted. (i.e. Master code can delete a Manager or Operator level code, but cannot delete another Master code; a Manager code can delete an Operator level code, but cannot delete a Master or another Manager code).

To EXIT The User Code
Entry Mode

Press either [Q] or [#], or don't press any key for 10 seconds.

KEYPAD FUNCTIONS

General Information

Note that user related scheduling functions and programming is described in the Programming guide (setting temporary schedules, programming timed events, etc.)

The keypad allows the user to arm and disarm the system, and perform other system functions, such as bypassing zones, view messages from the central station and display zone descriptors. Zone and system conditions (alarm, trouble, bypass) are displayed in the Display Window.

When an alarm occurs, console sounding and external sounding will occur, and the zone(s) in alarm will be displayed on the console. Pressing any key will silence the console sounder for 10 seconds. Disarming the system will silence both console and external sounders. When the system is disarmed, any zones that were in an alarm condition during the armed period will be displayed (memory of alarm). To clear this display, simply repeat the disarm sequence (enter the security code and press the OFF key).

The consoles also feature chime annunciation, and 3 panic key pairs (for silent, audible, fire or personal emergency alarms) which can notify the central station of an alarm condition, if that service is connected.

Arming Functions

Note that if QUICK ARM is enabled (field *29), the [#] key can be pressed instead of entering the security code, for any of the arming procedures (Away, Stay, Instant, Maximum, etc.).

The following is a brief list of system commands. For detailed information concerning system functions, refer to the User's Manual.

Disarmed Not Ready Before arming, the system must be in the READY condition (all zones must be intact). If the "NOT READY" message appears, press the READY [*] key to display faulted zones.

Arming Away

Enter code + AWAY [2].

Arming Stay

Enter code + STAY [3].

Arming Instant

Enter code + INSTANT [7].

Arming Maximum

Enter code + MAXIMUM [4].

Global Arming

If enabled for the user, the console will display the following:

ARM ALL ?
0 = NO , 1 = YES

If NO, the console prompts for arming each partition individually. If YES, the system attempts to arm all partitions allowed by this user. If there are any faults (open doors, windows, etc.) the console will display them. See notes below. These faults must be corrected or the zone bypassed before arming will occur. When faults are corrected, repeat the arming procedure.

Global Arming Notes:

1. When using the Global Arm feature, if there are faults in any of the selected partitions, the system will enter a summary mode in which the faulted zones of all of the selected partitions will be displayed. These faults must be corrected or bypassed (code + BYPASS + [#] will attempt to bypass the faults in all of the selected partitions). This summary mode will end in approx. 120 seconds if no keys are pressed.
2. If, when disarming the system using a Global Disarm, any of the selected partitions has a condition which would cause the console to beep (such as alarm memory or a trouble condition), the system will cause the console to beep and will enter a summary mode in which the alarm memory or trouble conditions of all of the selected partitions will be displayed. This mode will continue until either approx. 120 seconds elapses or a second disarm occurs which clears the beeping condition.
3. Global arming cannot be performed from a wireless keypad or a non-alpha display console.

Disarming

Enter code + OFF [1].

Bypassing Zones

Enter code + BYPASS [6] + zone number. To automatically bypass all faulted zones, use "Quick Bypass" method: Enter code + BYPASS + [#].

Chime Mode

Enter code + CHIME [9]. To turn chime mode off, enter code + CHIME again.

SUMMARY OF ARMING MODES

Mode	Features For Each Arming Mode			
	Exit Delay	Entry Delay	Perimeter Armed	Interior Armed
AWAY	Yes	Yes	Yes	Yes
STAY	Yes	Yes	Yes	No
INSTANT	Yes	No	Yes	No
MAXIMUM	Yes	No	Yes	Yes

Access Control If programmed, one relay may be used for access control. To activate this relay, the user enters his user code + [0]. The relay will pulse for 2 seconds.

Delay Closing Time If open/close schedules are used, end users can manually extend the closing window by up to 2 hours. This is useful if a user must stay on the premises later than usual. User must have authority level of manager or higher.

To extend the closing window, enter user code + # +82. The following will be displayed.

Closing Delay ? Hit 0-2 Hours

Enter the number hours, 1 or 2, by which the end of the closing window should be delayed. Note that the delay is from the scheduled closing time, not from the current time. Press * to accept entry and exit this mode. Press # to exit this mode without changes.

The system will send a "Schedule Changed" message to the central station when the closing window is delayed. Important: The delay cannot be reduced once it is set. It can only be increased. This is to prevent the user from deleting the delay after the normal window expires, thereby missing the end of the window.

Partition "Goto" Commands Each console is assigned a default partition for display purposes, and will show only that partition's information. To see information for another partition, or perform system functions in another partition, use the GOTO command (code + [*] +partition number 0-8). The console will remain in the new partition until directed to go to another partition, or until 120 seconds has elapsed with no keypad activity.

View Capabilities Of A User The console will display the partitions that user is authorized for, the user number, and the authority level for all partitions authorized. Enter code + [Q] + [Q]. The user's capabilities in each authorized partition will typically be displayed as follows:

Part. 1 WHSE User 01 Auth.=1.

The user's Open/Close report capability is shown by the dot following the authority level. If Open/Close is not enabled for a user, the dot will not appear.

Viewing Downloaded Messages Users may occasionally receive messages on the console display from their installation company. When this occurs, the console will display "Message. Press 0 for 5 secs.". Instruct the user to press and hold the 0 key to display the central station's message. Note that the system must be in the READY state to view these messages.

Using The Built-In User's Manual An abbreviated User's Manual is stored in the system's memory, and can be particularly useful to the end user if the printed User's Manual is not conveniently accessible when the user needs to perform a seldom used and unfamiliar system procedure. The Built-in User's Guide is displayed by simply pressing any of the function keys (e.g., OFF, AWAY, STAY, MAXIMUM, BYPASS, INSTANT, CODE, TEST, READY, #, and CHIME) for approximately 5 seconds and then releasing it. Abbreviated instructions relative to the key that has been pressed will then be displayed (2 lines of text are displayed at a time). This function operates in either the armed or the disarmed state.

Displaying Descriptors The Alpha Consoles can display all programmed descriptors, which is useful to the installer when checking entries, and can be helpful to the user when there is a need to identify zones. To display descriptors, press and hold the READY key until the built-in instructions for that key appear, then release the key. The zone descriptors will appear one at a time, for about 2-3 seconds each. For faster viewing, press the READY key to display the next descriptor in numerical order and so on. When all descriptors have been displayed, the Control will exit display mode. To exit display mode before all descriptors have been displayed, enter the security code and press the OFF key.

Panic Keys There are three panic key pairs (shown below) that, if programmed, can be used to manually initiate alarms and send a report to the central station. Each key pair can be individually programmed for 24 Hour Silent, Audible or Auxiliary (Emergency) responses. The panic function is activated when the appropriate key pair is pressed at the same time.

The panic functions are identified by the system as follows:

PANIC	Displayed as Zone	
[*] + [1]	95	For 6139 consoles, these panic keys can also be programmed with an alpha descriptor.
[#] + [3]	96	
[*] + [#]	99	

IMPORTANT: For the Panic functions to be of practical value, the system must be connected to a central station.

Trouble Conditions The word "CHECK" on the Console's display, accompanied by a rapid "beeping" at the Console, indicates that there is a trouble condition in the system. The audible warning sound can be silenced by pressing any key. Instruct users to call for service immediately upon seeing any of the following messages.

- "Check" Messages
- A display of "CHECK" accompanied by a display of one or more zone descriptor(s) indicates that a problem exists with those zone(s). First, determine if the zone(s) displayed are intact and make them so if they are not. If the problem has been corrected, key an OFF sequence (Code plus OFF) to clear the display.
 - A display of the word "CHECK" accompanied by a numeric display of "97" indicates that a short exists on the Polling Loop and may eliminate some of the protection. Fault "97" can be assigned an alpha descriptor when using the 6139 console.
 - A display of the word "CHECK" accompanied by a numeric display of "88", "89", "90", or "91" indicates a 4280 Receiver problem. Faults "88", "89", "90" & "91" can be assigned alpha descriptors when using the 6139 console.

- Other Trouble Conditions
- A display of "COMM. FAILURE" (6139) or "FC" (6128) at the Console indicates that a failure occurred in the telephone communication portion of your system.
 - A display of "LO BAT" (6139) or "BAT" (6128) and a zone descriptor, accompanied by a once per minute beep at the Console indicates that a low battery condition exists in the wireless transmitter displayed. The audible warning sound may be silenced by pressing any key. A display of "SYSTEM LO BAT" (6139) or "BAT" with no zone number (6128) indicates that a low battery condition exists with the system's backup battery.
 - A display of "RCVR SET UP ERROR" (6139) or "E8" (6128) at the console indicates that the system has more RF zones programmed than the RF receiver can support. If this is not corrected, none of the zones in the system will be protected. If more than 8 RF zones are desired, use a Receiver that supports more than 8 zones (4280, 4281H, 5881H).
 - A display of "MODEM COMM" (6139) or "CC" (6128) indicates that the control is on-line with the remote computer and the control is not operating. Panel's response to alarm and trouble conditions will be delayed until on-line session is completed.

Power Failure If the POWER indicator is off, and the message "AC LOSS" (6139) or "NO AC" (6128) is displayed, the Console is operating on battery power only. Check to see that your system's plug-in transformer has not been accidentally pulled out. Instruct the user to call a service representative immediately if AC power cannot be restored.

Section 2. EVENT LOGGING (Connector J8)

Event Logging Printer Connections

UL NOTE: A UL Listed EDP printer must be used for UL installations.

Connector J8, located above connector J7 on the right side of the main PC board, is intended to be interfaced to a local serial printer via the 4100SM serial interface module, in applications where it is desired to print the event log on a local printer.

Mount the 4100SM using its clip bracket to attach it to the side wall of the control cabinet. Make connections between J8, the 4100SM module and the serial printer as shown below. Refer to the event logging commands paragraph for a description of the console commands which initiate event log printing.

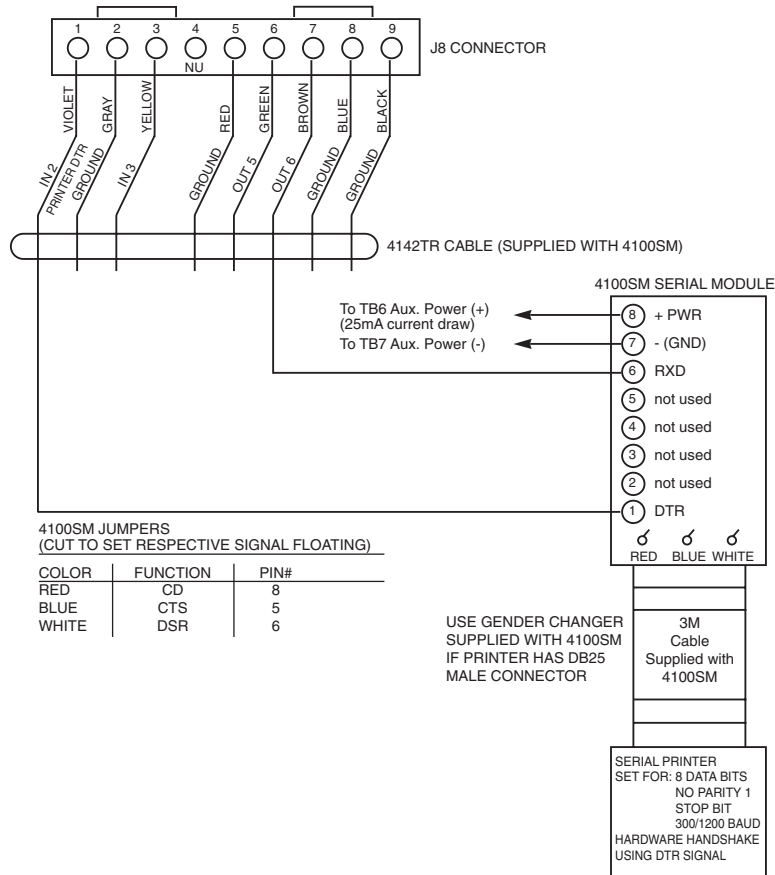
NOTE 1: Printer must be configured as follows:

- 8 data bits, no parity, 1 stop bit
- 300 or 1200 baud (1200 preferred)
- Hardware handshaking using DTR signal

NOTE 2: The 4100SM module is supplied with a 10 foot RS232 cable. A longer cable or an extension cable can be used if the 4140XMPT2 and serial printer are separated by more than 10 feet, but the total cable length should be less than 50'.

NOTE 3: Most printers either ignore the CTS, DSR and CD signals, or require them to be high (i.e. 3-15VDC as measured on RS232 DB25 connector pins 5, 6 & 8 respectively with respect to ground pin 7). The 4100SM module sets these pins high. If the printer being used will not operate with these pins high, then clip the blue (CTS), white (DSR) or red (CD) jumpers on the 4100SM module to set the corresponding signal floating. Important pins on the RS232C cable are pin 3 (data out), pin 7 (ground) and pin 20 (DTR - ready).

NOTE 4: The DTR signal, as measured at 4100SM TB1, should be high (9.5-14VDC) when the printer is powered, properly connected, on-line and ready to print. This signal will be low (0-1.5VDC) when the printer is not powered, not properly connected, off-line or out of paper. The 4140XMPT2 will not send printing data to the printer unless the DTR signal is high.



IMPORTANT: In order for time and date stamping to occur, the system's real-time clock must be set. Refer to the SETTING THE REAL TIME CLOCK section.

The system has the ability to record various events in a history log (224 event capacity) wherein each event is recorded in one of five categories (alarm, check, bypass, open & system), with the time and date of its occurrence (if real-time clock is set). The log may be viewed (Display Mode) using an alpha console, or can be printed (Print Mode) on a serial printer (connected to the system via a 4100SM Serial Module).

EVENT LOG MODE COMMANDS
Display Mode (installer or master): Enter CODE + [#] + [6] + [0]
Print Mode (installer only): Enter CODE + [#] + [6] + [1]
Clear Event Log (installer only): Enter CODE + [#] + [6] + [2]
To EXIT Event Log Mode: Press [Q] at any time.

Programming

The system can be configured for the following event log activities:

- To either record events but not print them unless commanded to do so, or to automatically print the events as they occur (field 1*72).
- Specific event categories to be logged can be selectively enabled (field 1*70).
- The time stamp can be programmed for either 12 or 24 hour formats (field 1*71).
- The date format can be programmed for either MMDDYY or DDMMYY (field 1*55).
- The printer baud rate can be set to either 300 or 1200 baud (field 1*73).
- Set event log time/date report enable (fields 1*40 & 1*41).
- Enable reporting of event log capacity (i.e.. 50% full, 90% full & overflow) programmed in fields 1*40 & 1*41.

Event Logging Display & Print Modes

After entering event log mode, the following will be displayed:

ENTER 0 = RECENT
1 = COMPLETE

The Event Log holds up to 224 events, and can display or print all events in a category (complete), or only those events in a category occurring since the last Clear Event Log command (recent). Note that once the Event Log is full, the oldest event will be erased upon the logging of any new event. Press the desired display mode key, 0 or 1.

SCAN LOG BY PART
0=NO 1-8=PART #

The system allows viewing of any partition's event log. Enter the partition number for the partition whose events are to be displayed. Entering 0 (NO) will display all events that occurred in the system regardless of partition.

For display and printing purposes, events are stored on a partition by partition basis (except system events), and are grouped into five categories as follows.

Use the [3] & [1] keys to scroll to the next or previous category screens respectively:

ALARM EVENT LOG
TYPE CCC UUU

Displays time/date for zones that have either caused an alarm or have been restored in selected partition.

CHECK EVENT LOG
TYPE CCC UUU

Displays time/date for zones that have caused a trouble or supervisory condition in selected partition.

BYPASS EVENT LOG
TYPE CCC UUU

Displays time/date for zones that have been bypassed in selected partition.

OP/CL EVENT LOG
TYPE CCC UUU

Displays time, date and user number for each arming and disarming of the system for the partition selected.

SYSTEM EVENT LOG
TYPE CCC UUU

Displays time/date for system problems, such as AC Loss, communication failure, etc., regardless of partition.

ALL EVENT LOG
TYPE CCC UUU

Displays all categories of events in chronological order, from most recent to oldest.

To display the events in a particular category, press [8] at the desired category screen.

If in Display Mode, events will appear one at a time from the most recent to the oldest. Press [8] again to display each subsequent event.

If in Print Mode, the first press of [8] will cause the printer to print all events in that category, with each event automatically scrolled on the display console. The following is a typical display:

P8 01/01	12:02AM
BURGLARY	C03

Shows burglary alarm occurred in zone 3 of partition 8, at 12:02AM on January 1.

After the last event in the selected category has been displayed, the following will appear for a few seconds:

END OF EVENT LOG
TYPE CCC UUU

The system will automatically return to the RECENT/COMPLETE selection screen described earlier.

Clear Event Log

To clear the Event Log, enter installer code + [#] + [6] + [2]

The following will appear:

CLEAR EVENT LOG
0=NO 1=YES

Press [1] if Event Log is to be cleared from memory. All events in the log will still be displayed if the COMPLETE option is selected. Only those events occurring from the time of the CLEAR command will be displayed if RECENT display option is selected. Press [0] if event log is **not** to be cleared at this time.

If [1] is pressed, the following will appear:

ARE YOU SURE?
0=NO 1=YES

Press [1] if it is desired to clear the event log. Press [0] if event log is not to be cleared.

Screen Definitions

RECENT	Events since last CLEAR
COMPLETE	Displays all events
TYPE	Type of event (Burg., Fire, etc.)
CCC	Zone (contact) number
UUU	User number

Section 3. TESTING THE SYSTEM

Using Test Mode After the installation is completed, the Security System should be thoroughly tested on a partition by partition basis as follows:

1. With the System in the disarmed state, check that all zones are intact. If DISARMED - Press [*] to show faults is displayed, press the [*] key to display the descriptors of the faulted zone(s). Restore faulted zone(s) if necessary, so that ****DISARMED*** READY TO ARM is displayed.
2. Enter the security code and press the TEST key. The external sounder (if used) should sound for 3 seconds and then turn off (the system is operating on the back-up battery only at this time).

NOTE 1. If the sounder does not sound, this may be an indication that the backup battery is discharged or missing.

NOTE 2. As a reminder that the system is in the Test mode, the Console will sound a single beep at 15-second intervals if no protection zones are violated.

NOTE 3. In the Test mode, no alarm reports will be sent to the central station. Also, the external sounder (if used) will not be activated.

Doors and Windows

Open and close each protected door and window in turn. Each action should produce three beeps from the Console. The descriptor for each protection zone will appear on the Console display.

Motion Detectors

Walk in front of any interior motion detectors. Listen for three beeps when the detector senses movement. While it is activated, its descriptor will remain displayed on the Console. Note that wireless PIRs will have a 3 minute lockout between transmissions to conserve battery life (remove cover for walk test to override the 3-minute lock-out).

Smoke Detectors

Follow the test procedure provided by the manufacturer of each smoke detector to ensure that all detectors are operational and are functioning properly.

NOTE: A 2-wire smoke detector display will not clear until the Test mode is exited.

Turning Off TEST mode

Enter the security code and press the OFF key.

Armed System Test **IMPORTANT!** A message will be sent to the central station during the following tests. Notify the central station that a test will be in progress.

NOTE: A display of "COMM. FAILURE" indicates a failure to communicate (no Kissoff by the receiver at the central station after the maximum number of transmission attempts is tried). If this occurs, verify that the phone line is connected, the correct report format is programmed, etc.

1. Arm the system and fault one or more zones. Silence alarm sounder(s) each time by entering the code and pressing OFF. Check that Entry/Exit delay zones provide the assigned delay times.
2. Check the keypad-initiated alarms, if programmed in field *05, by pressing the Panic key pairs ([*] + [1], [#] + [3], [*] + [#]). If the system has been programmed for audible emergency, the console will emit a loud, steady alarm sound. The word ALARM and a descriptor "99" will be displayed for [*] + [#]. (if [*] + [1] is pressed, a "95" will be displayed; if [#] + [3] is pressed, a "96" will be displayed). Silence the alarm by entering the security code and pressing OFF. If the system has been programmed for silent panic, there will be no audible alarms or displays. A report will be sent to the central station, however.
3. Notify the central station that all tests are finished and verify results with them.

Turning The System Over
To The User

1. Fully explain the operation of the system to the user by going over each of its functions as well as the User's Manual supplied.
2. In particular, explain the operation of each zone (entry/exit, perimeter, interior, fire, etc.). Be sure the user understands how to operate any emergency feature(s) programmed into the system.
IMPORTANT!: In the spaces provided in the User's Manual, record the Entry and Exit Delay times, and those functions that have been programmed into the available pairs of PANIC key pairs ([*] + [1], [#] + [3], [*] + [#]).
3. Make sure the user understands the importance of testing the system at least weekly, following the procedure provided in the User's Manual.

TO THE INSTALLER

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system.

The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing (at least weekly) to insure the system's proper operation at all times.

Section 4. REGULATORY AGENCY STATEMENTS

IN THE EVENT OF TELEPHONE OPERATIONAL PROBLEMS

In the event of telephone operational problems, disconnect the control panel by removing the plug from the RJ31X (CA38A in Canada) wall jack. We recommend that you demonstrate disconnecting the phones on installation of the system. Do not disconnect the phone connection inside the Control Panel. Doing so will result in the loss of your phone lines. If the regular phone works correctly after the Control Panel has been disconnected from the phone lines, the Control Panel has a problem and should be returned for repair. If upon disconnection of the Control Panel, there is still a problem on the line, notify the telephone company that they have a problem and request prompt repair service. The user may not under any circumstances (in or out of warranty) attempt any service or repairs to the system. It must be returned to the factory or an authorized service agency for all repairs.

CANADIAN DEPARTMENT OF COMMUNICATIONS (DOC) STATEMENT

NOTICE

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: User should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

AVIS

L'étiquette du ministère des Communications du Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme à certaines normes de protection, d'exploitation et de sécurité des réseaux de télécommunications. Le ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunications. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. Dans certains cas, les fils intérieurs de l'entreprise utilisés pour un service individuel à la ligne unique peuvent être prolongés au moyen d'un dispositif homologué de raccordement (cordon prolongateur téléphonique interne). L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations. Actuellement, les entreprises de télécommunications ne permettent pas que l'on raccorde leur matériel aux prises d'abonnés, sauf dans les cas précis prévus par les tarifs particuliers de ces entreprises.

Les réparations du matériel homologué doivent être effectuées par un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise en terre de la source d'énergie électrique, des lignes téléphoniques de réseau de conduites d'eau s'il y en a, soient raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

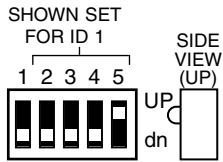
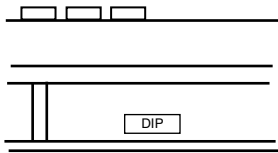
L'indice de charge (IC) assigné à chaque dispositif terminal pour éviter toute surcharge indique le pourcentage de la charge totale qui peut être raccordé à un circuit téléphonique bouclé utilisé par ce dispositif. La terminaison du circuit bouclé peut être constituée de n'importe quelle combinaison de dispositifs, pourvu que la somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100.

Section 5. SUMMARY OF SYSTEM COMMANDS

Event Logging Commands	Event Log Display=Code+[#] + 60 Event Log Print=Code + [#] +61 (installer only) Clear Event Log Code + # + 62 (Installer Only)
Wireless System Commands	House Id Sniffer Mode=Code + [#] + 2 (installer only) Transmitter Id Test= Code + [#] + 3 (installer only) Go/No Go Test=Code + 5 (Test Key)
User Code Commands	Add A User Code=User Code + 8+ New User Number + New User's Code Change A Code=User Code + 8 + User Number + New User's Code Delete A User's Code=Your User Code + 8 + User Number To Be Deleted + Your Code Again View User Capability= User's Code + * + * Set Real-Time Clock (Installer, Master Only)=Code + # +63
Keypad Functions	Arming Away Enter Code + Away [2]. Arming Stay Enter Code + Stay [3]. Arming Instant Enter Code + Instant [7]. Arming Maximum Quick Arm Enter Code + Maximum [4]. Global Arming Use # Key Instead Of User Code Followed By Any Of The Above Arming Mode Keys. If Enabled For The User, The Console Will Display A Prompt. Answer The Prompted Questions Disarming Enter Code + Off [1]. Bypassing Zones Enter Code + Bypass [6] + Zone Number. To Automatically Bypass All Faulted Zones, Use Quick Bypass Chime Mode "Quick Bypass" Method: Enter Code + Bypass + [#]. Enter Code + Chime [9]. To Turn Chime Mode Off, Enter Code + Chime Again. Partition Goto= User Code + * + Partition Number 0-8 Goto Home Partition=User Code + * + 0 Panics *+1 Zone 95 (A Key) *+# Zone 99 (B Key) #+3 Zone 96 (C Key) View Downloaded Messages= Press 0 For 5 Seconds Display All Zone Descriptors=Press * For 5 Seconds Display User Self Help= Hold Any Key For 5 Seconds
Programming Commands	Site Initiated Download=User Code + # + 1 Direct Wire Dowload Enable= User Code + # + 5 Enter Program Mode=Installer Code + 800 Exit Program Mode=*99 Or *98
Scheduling Commands	Installer Programmed Schedule Events=Installer Code + # + 80 Temporary Schedule Editing=User Code + # + 81 (Installer, Master, Manager Only) Extend Closing Window=User Code + # + 82 (Installer, Master, Manager Only) End User Output Device Programming=User Code + # + 83
Device Control (X-10 Or Relay)	Actviate Output Device As Programmed =User Code + # + 71 Actviate Output Device As Programmed =User Code + # + 72 Activate Access Relay For Current Partition=User Code + 0

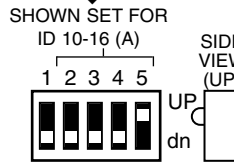
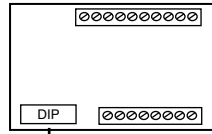
DIP SWITCH TABLES FOR ADDRESSABLE CONSOLES AND POLLING LOOP DEVICES

Addressable Consoles (e.g. 5137AD)



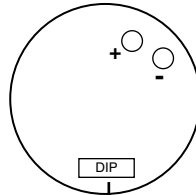
† **IMPORTANT:** USE ID 31 FOR APPLICATIONS NOT REQUIRING ADDRESSABLE CONSOLES.

4208 Zone Expander

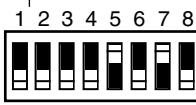


↑ POS. 1: LOOPS 1 & 2 RESPONSE TIME:
W/TABLE **FAST** **SLOW**
A UP dn
B dn UP

4192SD/4192SDT/ 4192CP Smoke Detectors

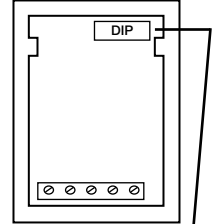


APPLIES TO TABLE A ONLY
SHOWN SET FOR ID 10

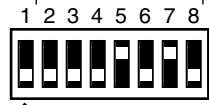


↑ POS. 1: MUST BE dn

4190WH Zone Expander



APPLIES TO TABLES A & B
SHOWN SET FOR ID 10(A)



WITH TABLE: A B
POS. 1 MUST BE: dn UP

DEVICE ID	DIP SWITCH POSITION				
	1	2	3	4	5
0	dn	dn	dn	dn	dn
1	dn	dn	dn	dn	UP
2	dn	dn	dn	UP	dn
3	dn	dn	dn	UP	UP
4	dn	dn	UP	dn	dn
5	dn	dn	UP	dn	UP
6	dn	dn	UP	UP	dn
7	dn	dn	UP	UP	UP
8	dn	UP	dn	dn	dn
9	dn	UP	dn	dn	UP
10	dn	UP	dn	UP	dn
11	dn	UP	dn	UP	UP
12	dn	UP	UP	dn	dn
13	dn	UP	UP	dn	UP
14	dn	UP	UP	UP	dn
15	dn	UP	UP	UP	UP
16	UP	dn	dn	dn	dn
17	UP	dn	dn	dn	UP
18	UP	dn	dn	UP	dn
19	UP	dn	dn	UP	UP
20	UP	dn	UP	dn	dn
21	UP	dn	UP	dn	UP
22	UP	dn	UP	UP	dn
23	UP	dn	UP	UP	UP
24	UP	UP	dn	dn	dn
25	UP	UP	dn	dn	UP
26	UP	UP	dn	UP	dn
27	UP	UP	dn	UP	UP
28	UP	UP	UP	dn	dn
29	UP	UP	UP	dn	UP
30	UP	UP	UP	UP	dn
31	UP	UP	UP	UP	UP
BIT VALUE:	16	8	4	2	1

THIS TABLE FOR DIPS WITH WORD "OFF" **A**

DEVICE ID	DIP SWITCH POSITION			
	2	3	4	5
10-16	—	—	—	UP
17-24	—	—	—	UP
25-32	—	—	UP	UP
33-40	—	UP	—	—
41-48	—	UP	—	UP
49-56	—	UP	UP	—
57-64	—	UP	UP	UP

THIS TABLE FOR DIPS WITH WORD "ON" **B**

DEVICE ID	DIP SWITCH POSITION			
	2	3	4	5
10-16	UP	UP	UP	—
17-24	UP	UP	—	UP
25-32	UP	UP	—	—
33-40	UP	—	UP	UP
41-48	UP	—	UP	—
49-56	UP	—	—	UP
57-64	UP	—	—	—

THIS TABLE FOR DIPS WITH WORD "OFF" **A**

DEVICE ID	DIP SWITCH POSITION							
	2	3	4	5	6	7	8	
10	—	—	—	UP	—	UP	—	
11	—	—	—	UP	—	UP	UP	
12	—	—	—	UP	UP	—	—	
13	—	—	—	UP	UP	—	UP	
14	—	—	—	UP	UP	UP	—	
15	—	—	—	UP	UP	UP	UP	
16	—	—	UP	—	—	—	—	
17	—	—	UP	—	—	—	UP	
18	—	—	UP	—	—	UP	—	
19	—	—	UP	—	—	UP	UP	
20	—	—	UP	—	UP	—	—	
21	—	—	UP	—	UP	—	UP	
22	—	—	UP	—	UP	UP	—	
23	—	—	UP	—	UP	UP	UP	
24	—	—	UP	UP	—	—	—	
25	—	—	UP	UP	—	—	UP	
26	—	—	UP	UP	—	UP	—	
27	—	—	UP	UP	—	UP	UP	
28	—	—	UP	UP	UP	—	—	
29	—	—	UP	UP	UP	—	UP	
30	—	—	UP	UP	UP	UP	—	
31	—	—	UP	UP	UP	UP	UP	
32	—	UP	—	—	—	—	—	
33	—	UP	—	—	—	—	UP	
34	—	UP	—	—	—	UP	—	
35	—	UP	—	—	—	UP	UP	
36	—	UP	—	UP	—	—	—	
37	—	UP	—	UP	—	UP	—	
38	—	UP	—	UP	UP	—	—	
39	—	UP	—	UP	UP	UP	—	
40	—	UP	—	UP	—	—	—	
41	—	UP	—	UP	—	—	UP	
42	—	UP	—	UP	—	UP	—	
43	—	UP	—	UP	—	UP	UP	
44	—	UP	—	UP	UP	—	—	
45	—	UP	—	UP	UP	—	UP	
46	—	UP	—	UP	UP	UP	—	
47	—	UP	—	UP	UP	UP	UP	
48	—	UP	UP	—	—	—	—	
49	—	UP	UP	—	—	—	UP	
50	—	UP	UP	—	—	UP	—	
51	—	UP	UP	—	—	UP	UP	
52	—	UP	UP	—	UP	—	—	
53	—	UP	UP	—	UP	—	UP	
54	—	UP	UP	—	UP	—	UP	
55	—	UP	UP	—	UP	UP	—	
56	—	UP	UP	UP	—	—	—	
57	—	UP	UP	UP	—	—	UP	
58	—	UP	UP	UP	—	UP	—	
59	—	UP	UP	UP	—	UP	UP	
60	—	UP	UP	UP	UP	—	—	
61	—	UP	UP	UP	UP	—	UP	
62	—	UP	UP	UP	UP	UP	—	
63	—	UP	UP	UP	UP	UP	UP	
64	UP	—	—	—	—	—	—	
BIT VALUE:	64	32	16	8	4	2	1	

THIS TABLE FOR DIPS WITH WORD "ON" **B**

DEVICE ID	DIP SWITCH POSITION							
	2	3	4	5	6	7	8	
10	UP	UP	UP	—	UP	—	UP	
11	UP	UP	UP	—	UP	—	—	
12	UP	UP	UP	—	—	UP	UP	
13	UP	UP	UP	—	—	UP	—	
14	UP	UP	UP	—	—	—	UP	
15	UP	UP	UP	—	—	—	—	
16	UP	UP	—	UP	UP	UP	UP	
17	UP	UP	—	UP	UP	UP	—	
18	UP	UP	—	UP	UP	—	UP	
19	UP	UP	—	UP	UP	—	UP	
20	UP	UP	—	UP	UP	UP	UP	
21	UP	UP	—	UP	UP	—	UP	
22	UP	UP	—	UP	UP	—	UP	
23	UP	UP	—	UP	UP	—	—	
24	UP	UP	—	UP	UP	UP	UP	
25	UP	UP	—	UP	UP	—	—	
26	UP	UP	—	UP	UP	UP	UP	
27	UP	UP	—	UP	UP	—	—	
28	UP	UP	—	UP	UP	—	UP	
29	UP	UP	—	UP	UP	—	UP	
30	UP	UP	—	UP	UP	—	UP	
31	UP	UP	—	UP	UP	—	—	
32	UP	—	UP	UP	UP	UP	—	
33	UP	—	UP	UP	UP	UP	UP	
34	UP	—	UP	UP	UP	—	UP	
35	UP	—	UP	UP	UP	—	—	
36	UP	—	UP	UP	—	UP	UP	
37	UP	—	UP	UP	—	UP	—	
38	UP	—	UP	UP	—	UP	—	
39	UP	—	UP	UP	—	UP	—	
40	UP	—	UP	—	UP	UP	UP	
41	UP	—	UP	—	UP	UP	—	
42	UP	—	UP	—	UP	UP	UP	
43	UP	—	UP	—	UP	—	—	
44	UP	—	UP	—	UP	UP	—	
45	UP	—	UP	—	UP	—	UP	
46	UP	—	UP	—	UP	UP	—	
47	UP	—	UP	—	UP	—	—	
48	UP	—	—	UP	UP	UP	UP	
49	UP	—	—	UP	UP	UP	—	
50	UP	—	—	UP	UP	UP	UP	
51	UP	—	—	UP	UP	—	—	
52	UP	—	—	UP	—	UP	UP	
53	UP	—	—	UP	—	UP	—	
54	UP	—	—	UP	—	UP	—	
55	UP	—	—	UP	—	UP	—	
56	UP	—	—	—	UP	UP	UP	
57	UP	—	—	—	UP	UP	—	
58	UP	—	—	—	UP	UP	UP	
59	UP	—	—	—	UP	UP	—	
60	UP	—	—	—	UP	UP	UP	
61	UP	—	—	—	UP	—	UP	
62	UP	—	—	—	—	—	UP	
63	UP	—	—	—	—	—	UP	
64	—	UP	UP	UP	UP	UP	UP	
BIT VALUE:	64	32	16	8	4	2	1	

DIP SWITCH TABLES FOR POLLING LOOP DEVICES

4275EX PIR

SHOWN SET FOR ID 10 (A)

SIDE VIEW (UP)

POS. 6: UP (A), DN (B) = INST. MODE
DN (A), UP (B) = PULSE COUNT

POS. 7: UP (A), DN (B) = WALK TEST
DN (A), UP (B) = W/T DISABLE

4278EX PIR

SHOWN SET FOR ID 10

SIDE VIEW (DN)

POS. 7: UP = NORMAL MODE
DN = INSTANT MODE

POS. 8: UP = W/T DISABLE
DN = WALK TEST

4194 REED CONTACT (SURFACE MOUNT)

SHOWN SET FOR ID 10

SIDE VIEW (DN)

THIS TABLE FOR DIPS WITH WORD "OFF"

A

DEVICE ID	DIP SWITCH POSITION				
	1	2	3	4	5
10	—	UP	—	UP	—
11	—	UP	—	UP	—
12	—	UP	UP	—	—
13	—	UP	UP	—	UP
14	—	UP	UP	UP	—
15	—	UP	UP	UP	UP
16	UP	—	—	—	—
17	UP	—	—	—	UP
18	UP	—	—	UP	—
19	UP	—	—	UP	UP
20	UP	—	UP	—	—
21	UP	—	UP	—	UP
22	UP	—	UP	UP	—
23	UP	—	UP	UP	UP
24	UP	UP	—	—	—
25	UP	UP	—	—	UP
26	UP	UP	—	UP	—
27	UP	UP	—	UP	UP
28	UP	UP	UP	—	—
29	UP	UP	UP	—	UP
30	UP	UP	UP	UP	—
31	UP	UP	UP	UP	UP

THIS TABLE FOR DIPS WITH WORD "ON"

B

DEVICE ID	DIP SWITCH POSITION				
	1	2	3	4	5
10	UP	—	UP	—	UP
11	UP	—	UP	—	UP
12	UP	—	—	UP	UP
13	UP	—	—	UP	—
14	UP	—	—	—	UP
15	UP	—	—	—	—
16	—	UP	UP	UP	UP
17	—	UP	UP	UP	—
18	—	UP	UP	—	UP
19	—	UP	UP	—	—
20	—	UP	—	UP	UP
21	—	UP	—	UP	—
22	—	UP	—	—	UP
23	—	UP	—	—	—
24	—	—	UP	UP	UP
25	—	—	UP	UP	—
26	—	—	UP	—	UP
27	—	—	UP	—	—
28	—	—	—	UP	UP
29	—	—	—	UP	—
30	—	—	—	—	UP
31	—	—	—	—	—
BIT VALUE:	16	8	4	2	1

DEVICE ID	DIP SWITCH POSITION					
	1	2	3	4	5	6
10	UP	UP	—	UP	—	UP
11	UP	UP	—	UP	—	—
12	UP	UP	—	—	UP	UP
13	UP	UP	—	—	UP	—
14	UP	UP	—	—	—	UP
15	UP	UP	—	—	—	—
16	—	—	UP	UP	UP	UP
17	UP	—	UP	UP	UP	—
18	UP	—	UP	UP	—	UP
19	UP	—	UP	UP	—	—
20	UP	—	UP	—	UP	UP
21	UP	—	UP	—	UP	—
22	UP	—	UP	—	—	UP
23	UP	—	UP	—	—	—
24	UP	—	—	UP	UP	UP
25	UP	—	—	UP	UP	—
26	UP	—	—	UP	—	UP
27	UP	—	—	UP	—	—
28	UP	—	—	—	UP	UP
29	UP	—	—	—	UP	—
30	UP	—	—	—	—	UP
31	UP	—	—	—	—	—
32	—	UP	UP	UP	UP	UP
33	—	UP	UP	UP	UP	—
34	—	UP	UP	UP	—	UP
35	—	UP	UP	UP	—	—
36	—	UP	UP	—	UP	UP
37	—	UP	UP	—	UP	—
38	—	UP	UP	—	—	UP
39	—	UP	UP	—	—	—
40	—	UP	—	UP	UP	UP
41	—	UP	—	UP	UP	—
42	—	UP	—	UP	—	UP
43	—	UP	—	UP	—	—
44	—	UP	—	—	UP	UP
45	—	UP	—	—	UP	—
46	—	UP	—	—	—	UP
47	—	UP	—	—	—	—
48	—	—	UP	UP	UP	UP
49	—	—	UP	UP	UP	—
50	—	—	UP	UP	—	UP
51	—	—	UP	UP	—	—
52	—	—	UP	—	UP	UP
53	—	—	—	UP	—	—
54	—	—	UP	—	—	UP
55	—	—	UP	—	—	—
56	—	—	—	UP	UP	UP
57	—	—	—	UP	UP	—
58	—	—	—	UP	—	UP
59	—	—	—	UP	—	—
60	—	—	—	—	UP	UP
61	—	—	—	—	UP	—
62	—	—	—	—	—	UP
63	—	—	—	—	—	—
BIT VALUE:	32	16	8	4	2	1

DEVICE ID	DIP SWITCH POSITION					
	1	2	3	4	5	6
10	—	—	UP	—	UP	—
11	—	—	UP	—	UP	UP
12	—	—	UP	UP	—	—
13	—	—	UP	UP	—	UP
14	—	—	UP	UP	UP	—
15	—	—	UP	UP	UP	UP
16	—	UP	—	—	—	—
17	—	UP	—	—	—	UP
18	—	UP	—	—	—	UP
19	—	UP	—	—	UP	UP
20	—	UP	—	UP	—	—
21	—	UP	—	UP	—	UP
22	—	UP	—	UP	UP	—
23	—	UP	—	UP	UP	UP
24	—	UP	UP	—	—	—
25	—	UP	UP	—	—	UP
26	—	UP	UP	—	—	UP
27	—	UP	UP	—	UP	UP
28	—	UP	UP	UP	—	—
29	—	UP	UP	UP	—	UP
30	—	UP	UP	UP	UP	—
31	—	UP	UP	UP	UP	UP
32	UP	—	—	—	—	—
33	UP	—	—	—	—	UP
34	UP	—	—	—	UP	—
35	UP	—	—	—	UP	UP
36	UP	—	—	UP	—	—
37	UP	—	—	UP	—	UP
38	UP	—	—	UP	UP	—
39	UP	—	—	UP	UP	UP
40	UP	—	UP	—	—	—
41	UP	—	UP	—	—	UP
42	UP	—	UP	—	UP	—
43	UP	—	UP	—	UP	UP
44	UP	—	UP	UP	—	—
45	UP	—	UP	UP	—	UP
46	UP	—	UP	UP	UP	—
47	UP	—	UP	UP	UP	UP
48	UP	UP	—	—	—	—
49	UP	UP	—	—	—	UP
50	UP	UP	—	—	UP	—
51	UP	UP	—	—	UP	UP
52	UP	UP	—	UP	—	—
53	UP	UP	—	UP	—	UP
54	UP	UP	—	UP	UP	—
55	UP	UP	—	UP	UP	—
56	UP	UP	UP	—	—	UP
57	UP	UP	UP	—	—	UP
58	UP	UP	UP	—	—	UP
59	UP	UP	UP	—	UP	UP
60	UP	UP	UP	UP	—	—
61	UP	UP	UP	UP	—	UP
62	UP	UP	UP	UP	UP	—
63	UP	UP	UP	UP	UP	UP
BIT VALUE:	32	16	8	4	2	1

DIP SWITCH TABLES FOR 5700 RF SYSTEM WIRELESS DEVICES

HOUSE ID SWITCH SETTING FOR ALL DEVICES EXCEPT 5716

DEVICE ID	DIP SWITCH POSITION				
	1	2	3	4	5
1	UP	UP	UP	UP	UP
2	UP	UP	UP	UP	UP
3	UP	UP	UP	UP	UP
4	UP	UP	UP	UP	UP
5	UP	UP	UP	UP	UP
6	UP	UP	UP	UP	UP
7	UP	UP	UP	UP	UP
8	UP	UP	UP	UP	UP
9	UP	UP	UP	UP	UP
10	UP	UP	UP	UP	UP
11	UP	UP	UP	UP	UP
12	UP	UP	UP	UP	UP
13	UP	UP	UP	UP	UP
14	UP	UP	UP	UP	UP
15	UP	UP	UP	UP	UP
16	UP	UP	UP	UP	UP
17	UP	UP	UP	UP	UP
18	UP	UP	UP	UP	UP
19	UP	UP	UP	UP	UP
20	UP	UP	UP	UP	UP
21	UP	UP	UP	UP	UP
22	UP	UP	UP	UP	UP
23	UP	UP	UP	UP	UP
24	UP	UP	UP	UP	UP
25	UP	UP	UP	UP	UP
26	UP	UP	UP	UP	UP
27	UP	UP	UP	UP	UP
28	UP	UP	UP	UP	UP
29	UP	UP	UP	UP	UP
30	UP	UP	UP	UP	UP
31	UP	UP	UP	UP	UP
BIT VALUE:	16	8	4	2	1

5701 PANIC TRANSMITTER

HOUSE ID (1 SHOWN)

POS.6 UP= XMTR ID 62
DN= XMTR ID 63

5706/5707 SMOKE DETECTOR/TRANSMITTER

HOUSE ID (1 SHOWN)

XMTR ID (48 SHOWN)

XMTR ID	DIP SWITCH POSITION	6	7	8
48	UP	UP	UP	UP
49	UP	UP	UP	UP
50	UP	UP	UP	UP
51	UP	UP	UP	UP
52	UP	UP	UP	UP
53	UP	UP	UP	UP
54	UP	UP	UP	UP
55	UP	UP	UP	UP

5775 PIR DETECTOR/TRANSMITTER

HOUSE ID (1 SHOWN)

XMTR ID (32 SHOWN) UP = PULSE COUNT
-- = INST. MODE

XMTR ID	DIP SWITCH POSITION			
	6	7	8	9
32	UP	UP	UP	UP
33	UP	UP	UP	UP
34	UP	UP	UP	UP
35	UP	UP	UP	UP
36	UP	UP	UP	UP
37	UP	UP	UP	UP
38	UP	UP	UP	UP
39	UP	UP	UP	UP
40	UP	UP	UP	UP
41	UP	UP	UP	UP
42	UP	UP	UP	UP
43	UP	UP	UP	UP
44	UP	UP	UP	UP
45	UP	UP	UP	UP
46	UP	UP	UP	UP
47	UP	UP	UP	UP

5727 KEYPAD

HOUSE ID (1 SHOWN)

XMTR ID FIXED AT "00"

5715 UNIVERSAL TRANSMITTER

POS.1: UP = NORMAL RESPONSE
DN = FAST RESPONSE

POS.2: UP = NO COVER TAMPER
DN = COVER TAMPER (use N.C. setting)

5711/5711WM DOOR/WINDOW TRANSMITTER

HOUSE ID (1 SHOWN)

XMTR ID (33 SHOWN)

POS.12: UP = N.O.
-- = N.C.
(Avoid ID 32-37 with N.O.)

XMTR ID	DIP SWITCH POSITION										
	6	7	8	9	10	11					
33	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
34	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
35	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
36	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
37	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
38	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
39	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
40	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
41	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
42	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
43	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
44	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
45	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
46	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
47	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
48	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
49	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
50	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
51	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
52	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
53	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
54	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
55	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
56	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
57	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
58	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
59	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
60	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
61	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
62	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
63	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP	UP
BIT VALUE:	32	16	8	4	2	1					

5716 DOOR/WINDOW TRANSMITTER

IMPORTANT SET SWITCHES WITH BATTERY REMOVED

SW4

SW3

POS.6: UP = N.O.
DN = N.C.

HOUSE ID	DIP SWITCH POSITION				
	5	4	3	2	1
1	UP	UP	UP	UP	UP
2	UP	UP	UP	UP	UP
3	UP	UP	UP	UP	UP
4	UP	UP	UP	UP	UP
5	UP	UP	UP	UP	UP
6	UP	UP	UP	UP	UP
7	UP	UP	UP	UP	UP
8	UP	UP	UP	UP	UP
9	UP	UP	UP	UP	UP
10	UP	UP	UP	UP	UP
11	UP	UP	UP	UP	UP
12	UP	UP	UP	UP	UP
13	UP	UP	UP	UP	UP
14	UP	UP	UP	UP	UP
15	UP	UP	UP	UP	UP
16	UP	UP	UP	UP	UP
17	UP	UP	UP	UP	UP
18	UP	UP	UP	UP	UP
19	UP	UP	UP	UP	UP
20	UP	UP	UP	UP	UP
21	UP	UP	UP	UP	UP
22	UP	UP	UP	UP	UP
23	UP	UP	UP	UP	UP
24	UP	UP	UP	UP	UP
25	UP	UP	UP	UP	UP
26	UP	UP	UP	UP	UP
27	UP	UP	UP	UP	UP
28	UP	UP	UP	UP	UP
29	UP	UP	UP	UP	UP
30	UP	UP	UP	UP	UP
31	UP	UP	UP	UP	UP
32	UP	UP	UP	UP	UP
33	UP	UP	UP	UP	UP
34	UP	UP	UP	UP	UP
35	UP	UP	UP	UP	UP
36	UP	UP	UP	UP	UP
37	UP	UP	UP	UP	UP
38	UP	UP	UP	UP	UP
39	UP	UP	UP	UP	UP
40	UP	UP	UP	UP	UP
41	UP	UP	UP	UP	UP
42	UP	UP	UP	UP	UP
43	UP	UP	UP	UP	UP
44	UP	UP	UP	UP	UP
45	UP	UP	UP	UP	UP
46	UP	UP	UP	UP	UP
47	UP	UP	UP	UP	UP
48	UP	UP	UP	UP	UP
49	UP	UP	UP	UP	UP
50	UP	UP	UP	UP	UP
51	UP	UP	UP	UP	UP
52	UP	UP	UP	UP	UP
53	UP	UP	UP	UP	UP
54	UP	UP	UP	UP	UP
55	UP	UP	UP	UP	UP
56	UP	UP	UP	UP	UP
57	UP	UP	UP	UP	UP
58	UP	UP	UP	UP	UP
59	UP	UP	UP	UP	UP
60	UP	UP	UP	UP	UP
61	UP	UP	UP	UP	UP
62	UP	UP	UP	UP	UP
63	UP	UP	UP	UP	UP
BIT VALUE:	1	2	4	8	16

Section 6. SPECIFICATIONS

4140XMPT2 CONTROL

Physical: 12-1/2"W X 14-1/2"H X 3"D (318mm x 368mm x 76mm)

Electrical:

VOLTAGE INPUT: From Ademco No. 1361 Plug-In Transformer (use 1361CN in Canada) or 4300 transformer (for X-10 installations) rated 16.5VAC, 40 VA.

ALARM SOUNDER OUTPUT: 10VDC-13.8VDC, 2.8 amps max. (UL1023, UL609 installations), 750mA less aux. current drain (UL985 installations).

AUXILIARY POWER OUTPUT: 9.6VDC-13.8VDC, 750mA max.

BACK-UP BATTERY: 12VDC, 4AH or 7AH gel cell. 467 (12V, 4AH) or 712BNP(12V, 7AH) recommended.

STANDBY: 4 hours min. with 750 mA aux. load using 7 AH battery.

CIRCUIT PROTECTORS: thermal circuit breakers are used on battery input to protect against reverse battery connections and on alarm sounder output to protect against wiring faults (Shorts).
A solid state circuit breaker is used on auxiliary power output to protect against wiring faults (shorts).

DIGITAL COMMUNICATOR

FORMATS SUPPORTED:

ADEMCO HIGH SPEED
ADEMCO 4+2 EXPRESS
ADEMCO LOW SPEED
ADEMCO CONTACT ID
SESCOA
RADIONICS LOW SPEED
LINE SEIZE: Double Pole
RINGER EQUIVALENCE: 0.7B
FCC REGISTRATION NO.: AC398U-68192-AL-E
DOC LOAD NO.: 5

6128 REMOTE CONSOLES

Physical:

Width: 5.75 inches (146mm)
Height: 4.75 inches (121mm)
Depth: 1 inches (26mm)

Electrical: Voltage Input: 12VDC
Current Drain: 25 mA

Interface Wiring:

RED (R): 12VDC input (+) auxiliary power
GREEN (G): Data to control panel
YELLOW (Y): Data from control panel
BLACK (B): Ground (-)

6139 Remote Console

Physical:

Width: 6.25 inches (159mm)
Height: 4.75 inches (121mm)
Depth: 1.25 inches (32mm)

Electrical: Voltage Input: 12VDC
Current Drain: 100 mA

Interface Wiring:

RED: 12VDC input (+) auxiliary power
BLUE: Not Used
GREEN: Data to control panel
YELLOW: Data from control panel
BLACK: Ground and (-) connection from supplemental power supply.

INDEX

- (ASCII) CHART 75
- 12/24 Hour Time Stamp Format 60
- 1361 36, 124
- 1361CN 36
- 24-hour Audible Alarm 14
- 4+1 80
- 4+2 80
- 4+2 Express 50, 77
- 4+2 Reporting 76
- 4100SM 7, 50, 87, 114
- 4137AD 7, 32, 37
- 4139SN 18
- 4142TR 28
- 4146 7
- 4190 37
- 4190WH 18
- 4191SN 18
- 4192CP 18, 37
- 4192SD 18, 37
- 4192SDT 18, 37
- 4194 18, 37
- 4197 18, 37
- 4204 7, 28
- 4208 18, 37
- 4208 Module Zone Assignment 55
- 4275 18, 37
- 4278 18, 37
- 4280 8, 19, 20, 37
- 4280 63 37
- 4280-8 19, 37
- 4281 8, 20
- 4281/5881 19
- 4281H 19
- 4281L 19
- 4281M 19
- 4300 28
- 464 24
- 5700 8
- 5701 23
- 5706 23
- 5707 23
- 5711 23
- 5715WH 23
- 5716 23
- 5727 23
- 5775 23
- 5800 8, 21
- 5801 24
- 5802 24
- 5802CP 24
- 5803 24
- 5806 24
- 5807 24
- 5816 24
- 5817 24
- 5827 24
- 5849 24
- 5881 8, 20
- 5881H 19
- 5881L 19
- 5881M 19
- 5890 24
- 6139 7, 9, 32, 37, 50, 72, 124
- 675 25, 37
- 702 34
- 719 34
- 747 34
- 7920SE 55
- AAV 39
- ABB1031 34
- AC Loss Reporting 9
- AC Outlet Ground 36
- AC Power Loss Console Sounding 54
- AC Power Loss External Alarm 54
- Access Control 8, 92, 112
- Access Control Relay 63
- access control schedules 92, 101
- Access Door Control 12
- Access Schedules 95
- ACTION 68
- ADEMCO 4+2 EXPRESS 124
- Ademco Contact ID 50, 124
- Ademco Contact ID reporting 108
- Ademco Express 57, 79
- Ademco Express communication defaults 79
- Ademco High Speed 50, 57, 79, 124
- Ademco High Speed communication defaults 79
- Ademco Low Speed 76, 124
- Ademco's new Contact ID 79
- Alarm Sounder Duration 11, 61
- Alarm Verification 60
- Allow Disarm Outside Window If Alarm Occurs 60
- Alpha Descriptors 9
 - entering 64
 - for programming 51
- Alpha Programming 72
- ALPHA VOCABULARY 75
- ALT PROGRAM MODE 52
- AMSECO motor bell & box 34
- Amseco PAL 328N 27
- answering machine mode 57
- Arm Window 102
- Arm-Away 14
- Arm-Stay 14
- Arm/Disarm commands 95
- Arming Away 111
- Arming Functions 111
- Arming Instant 111
- Arming Maximum 111
- Arming Stay 111
- arming window 63
- ATLIS-BBS 2
- Audio Alarm Verification 39
- Auto-arm 12
- Auto-Arm Delay 63, 92
- Auto-arm warning 92
- Auto-Arm Warning Period 63
- Auto-Disarm Delay 63, 92
- AUXILIARY DEVICE CURRENT DRAW WORKSHEET 37
- Auxiliary Output Enable 55
- B401B 15
- BACK-UP BATTERY 124
 - Back-Up Power 36
- Basic Scheduling Menu Structure 97
- BATTERY STANDBY 36
- Built-in Users Manual 8
- Burg. Alarm Comm. Delay 62
- Burg. Trigger For Response Type 8 54
- Bypass commands 96
- Bypassing Zones 111
- Cabinet 8
- call waiting 56
- Callback 9
- CANADIAN DEPARTMENT OF COMMUNICATIONS 119
- Cancel Report 9
- Cancel Report Restriction 63
- central station initiated downloading 57
- Check Messages 113
- checksum 77, 80
- Checksum Verification 57
- Chime Mode 11, 111
- Circuit Breakers 8
- CIRCUIT PROTECTORS 124
- CLOCK, Real Time
 - Setting the 38
- Cold Water Pipe 36
- Comm. Defaults 9
- COMM. FAIL 79
- COMM. FAILURE 117
- Comm. Fields 9
- Comm. Split Report Selection 58
- Communication 7
- Communication Default Programming 50
- Communication Defaults 51
- COMMUNICATION PROGRAMMING 79
 - computer 86
- Confirmation of Arming Ding 11, 61
- Console Panic Enables 62
- CONSOLES
 - Maximum wire length 33
 - Powering Additional 33
 - Programming 33
 - Remote 32
- Contact ID 57, 80
- Contact ID communication defaults 79
- CONTACT ID EVENT CODES
 - Table of 78
- Control Options 54
- CTS 114
- custom message 72
- Custom Words 9, 72
 - Adding 73
- Daily Open/Close Worksheet 94
- Daily schedule 94
- Data Encryption 86
- Daylight Savings Time 12
- Daylight Savings Time Start/End Month 60
- Daylight Savings Time Start/End Weekend 60
- DB25 114
- DEFAULT SCREEN 74
- Delay Closing Time 112
- Descriptors 8
- Device Programming 67
- DH400 base 15
- Dial Tone Detection 57
- Dial Tone Pause 57
- Dialer Options 56, 57
- Dialer Reporting By Partition Enabling 79
- DIGITAL COMMUNICATOR 124
- DIP SWITCH TABLES 121
- Disable Fire Time-Out 54
- Disable Trouble Sounder For RF Supervision 59
- Disarm 14
- Disarm Window 102
- Disarming 111
- Download Callback 56
- Download Command Enables 56
- Download ID No. 56
- Download Phone No. 56
- Downloaded Messages
 - Viewing 112
- DOWNLOADER 86
- Downloader Options 56
- Downloading 9, 51
 - ADVISORIES 85
 - Direct Wire 87
- Downloading Primer 85
- DSR 114
- Dual Tone Multi-Frequency,DTMF 58, 77
- DTR 114
- Dual reporting 57, 76
- Duress 11, 106
- E8 20
- Eagle 1241 39
- Earth Ground Connections 36
- ECP ADDRESS 70
- EDP printer 114
- EEROM 7
- Enable 5800 RF Button Force Bypass 59
- Enable 5800 RF Button Global Arm 59
- Enable Chime Annun. On External Alarm Sounder 63
- Enable Console Annun. During Exit Delay 63
- Enable Dialer Reports For Panics & Duress 62
- Enable Force Arm For Auto-Arm 63
- Enable Goto For This Partition 63
- Enable J7 Triggers By Partition 63
- Enable Open/Close Report For Installer Code 62
- Enable Open/Close Reports By Exception 63
- Enable Permanent Display Backlighting 63
- END USER OUTPUT PROGRAMMING 92
- End User Scheduling 12
- Entry and Exit Delays 11
- Entry Delay 1, 2
- Entry Warning 62
- Entry/Exit 13, 1, 2
- EOLR Disable (Zones 2-8) 55
- EOLR Fire Zone 15
- EOLR Supervised 15, 16
- ESL 23
- Event Log
 - Clearing 116
- Event Log Printer On-Line 60
- Event Log Types 60
- Event Logging 8
 - Display & Print Modes 115
 - Printer Connections 114
- Event Logging Options 60
- Event Logging Report Codes 58
- Event Programming 12
- Exception Reporting 9
- Exit Delay 11, 1, 2
- Exit Programming Mode 51

expanded reporting 76
 Express 80
 factory defaults 51
 FCC REGISTRATION NO 124
 First 4280 Receiver Select 55
 First Page of fields 52
 First Test Report Time 55
 Force arm 92
 form C 28
 Glass Break Detectors 8, 16
 Global Arming 8, 111
 Global Disarm 111
 Go To 11
 Go/No Go Mode 20, 21
 GOTO Function 10, 108, 112
 Ground Start Module 25, 27
 HARD-WIRED ZONES 15
 High Speed Reporting 77, 80
 Limitations 77
 Holiday Definitions & Schedule Worksheet 94
 Holiday Programming 99
 holiday schedules 92, 94
 House Code 70
 house ID 19, 20
 IBM 85
 IEI 735L 16
 Inhibit Bypass Of A Zone 62
 Installer 106
 Installer Code 9, 54
 Installer's Message 74
 instant restore report 58
 Intelligent Test Reporting 55
 Intercom Interference 17
 Interior w/Delay 14
 Interior, Follower 13
 J7 114
 J7 radio triggers 55
 J8 114
 Keyswitch 26
 Keyswitch Assignment 54
 kiss-off 76
 Level 0 106
 Level 1 106
 Level 2 107
 Levels 3-5 107
 Limitation of Access by Time Worksheet 95
 LIMITED WARRANTY 127
 LINE SEIZE 124
 Lock, Cabinet
 Mounting the 35
 LORRA 9
 Low Speed communication defaults 50, 79, 80
 Low Speed Format 57
 Manager 106, 109
 Master 106, 109
 Master Codes 108
 Max. Zone Resistance 16
 MENU MODE 64
 modem 87
 MODEM COMM 86
 MS DOS 3.1 85
 multiple alarm soundings 62
 MULTIPLE PARTITION ACCESS 108
 Non-Alarm Report Codes 58
 Not Ready 111
 NP4-12 36, 124
 NP7-12 36
 Number Of Partitions 55
 Number Of User Codes Per Partition 59
 Open/close 11, 76, 95
 Open/close / Access 96
 Open/close by exception 12
 Open/close reporting 92
 Open/Close Reporting For Keyswitch 56
 Open/Close Schedule 98
 open/close schedules 93
 Open/Close scheduling 94
 Open/Close Scheduling Worksheets 94
 Operator 107
 Operator Access Levels 86
 Operator code 109
 Operator level A 106
 Operator level B 106
 Operator level C 106
 Output Control 7, 28
 output controls 93
 PA400B 34
 PA400R 34
 PABX 34
 PABX Access Code 56
 Panic Keys 7, 11, 14
 Partition Descriptors
 Creating 73
 partition names 72
 Partition Specific Features 11
 Partition-Specific Field Descriptions 61, 63
 PARTITION-SPECIFIC PROGRAMMING 61
 Partitioning Features
 BASIC 10
 Partitioning Options 59
 PC Board
 Mounting the 35
 Perimeter Burglary. 13
 Phone Line Connections 34
 Phone Numbers 9
 Polling Loop 8, 17
 Extending 18
 POLLING LOOP ADVISORIES 17
 POLLING LOOP CURRENT DRAW
 WORKSHEET 37
 Polling Loop Extender 18
 Power Up In Previous State 55
 Power-Up Procedure 36
 Primary Format 57
 Primary Phone Number 56
 Primary Subscriber Number 11
 Printer Baud Rate 60
 Program Modes
 Entering the 50
 PROGRAM TAMPER 86
 PROGRAMMING FIELDS
 INDEX 53
 Programming Time Windows 97
 Quick Arm 11, 62, 111
 Quick Bypass 8
 RADIONICS LOW SPEED 124
 Randomize AC Loss Report 54
 Read/Write\
 Full 86
 Part 86
 Real-Time Clock 9
 Setting the 38
 Receiver Type 59
 Relay Action 70
 relay activated events 92
 relay commands 95
 Relay Control 12
 relay descriptors 72
 Creating 74
 Relay Group 70
 relay modules 12
 relay outputs 68
 Relay Programming 68
 Relay Programming Menus 70
 Relay Timeout XX Minutes 60
 Relay Timeout YY Seconds 60
 Relay Type 70
 RELAYS
 Examples of Users 29
 Remote Sounder 27
 Report Codes For Zones 1-64 & 81-87 58
 Report Codes For Zones 65-80 58
 Resistance 15
 Response Time 15, 16
 Restore Report Timing 58
 RESTORE ZONE LIST 69
 Restrict disarm 92
 Restrict Disarming Only During Arm/Disarm
 Windows 63
 Restriction 70
 RF Rcvr Supervision Check-In Interval 59
 RF Receivers 19
 RF Transmitter Check-In Interval 59
 RF TX Low Battery Annun. 59
 RF TX Low Battery Report Enable 59
 Ring Detection Count 57
 RINGER EQUIVALENCE 124
 RPM 17
 RS232 114
 schedule number 95
 Scheduling 8, 12
 Scheduling & Relay Output Options 60
 Scheduling Menu Mode 51
 Scheduling Menus 9
 Scheduling Options
 Programming 92
 Scheduling Related Dialer Reports 60
 Second 4280 Receiver Select 55
 Second Page Fields 60
 second page of fields 52
 Secondary Format 57
 Secondary Phone Number 56
 Secondary Subscriber 11
 Serial Number Learning/Deleting 66
 Serial numbers 20
 SESCOA 124
 SESCOA/Radionics 57, 76, 80
 SET-UP ERROR 20
 Smoke Detectors 15, 16
 Sniffer Mode 19
 SOUNDER OPTION 67
 SOUNDERS
 Compatible 34
 External 34
 Spatial Diversity 20
 SPECIFICATIONS 124
 split reporting 58, 76
 Split/Dual Reporting 9, 76
 Standard/Expanded Report 58
 STANDBY CURRENT DRAW 36
 START event 68, 70
 Start Time 93
 STOP 69, 70
 STOP event 68
 Supervised Fire 14
 Supervision Pulses For LORRA Trigger Outputs
 55
 Swinger Suppression 11, 62, 79
 SYSTEM FEATURES
 SUMMARY 7
 SYSTEM LAYOUT WORKSHEETS 43
 SYSTEM OPERATION 68, 69
 System Sensor 23
 System Sensor 1400 15
 System Sensor 1451 15
 System Sensor 1451DH 15
 System Sensor 2300T 15
 System Sensor 2400 15
 System Sensor 2400TH 15
 System Sensor 2451 15
 System Sensor 2451TH 15
 TECHNICAL SUPPORT
 CONTACT 2
 Temporary schedule 94
 Temporary Schedule Menu Mode 92
 Temporary schedule Worksheet 102
 Temporary Schedules
 Programming 103
 test 76
 Test Mode 117
 Test Report Interval 55
 Test Reporting 9
 Third Page Fields 60
 third page of fields 52
 Time Driven 68
 Time Window 93, 95
 Beginning 96
 During 96
 End 96
 time window number 95
 time windows 12, 92
 Time Windows Definitions Worksheet 93
 Time-Driven Event Programming 99
 Time-Driven Event Worksheet 95
 timers 104
 Touch-Tone Or Rotary Dial 56
 Touch-Tone W/Rotary Backup 58
 TouchTone 77
 Transmitter ID 20
 Transmitters 21
 TROUBLE 68
 Trouble by Day/Alarm by Night 13
 Trouble Conditions 113
 UL installations 15
 UL1023 124
 UL609 124
 Unit code 70
 Unsupervised 15, 16
 Use Partition Descriptors 60
 User Codes 7, 9, 11, 106, 107
 Adding a Master Manager or Operator 109
 Changing a Master Manager or Operator
 109

- Deleting a Master Manager or Operator 109
- General Information 106
- User Scheduling Menu Mode 92
- User's Manual
 - Using the Built-In 112
- Video Alarm Verification 41
- Voltage Triggers 9, 25
- Wireless 8
 - Advisories 22
- Wireless Keypad Assignment 59
- Wireless Keypad Tamper Detect 59
- Wireless Options 59
- X-10 7, 12, 28, 68, 104
- ZL 68, 69
- Zone 1 15
 - Zone 1 Advisories 15
- Zone 9 15
 - Zone 9 Advisories 15
 - Zone 9 Fast/Slow Response 54
- ZONE CONFIGURATION 13
 - Zone Cust
 - Deleting a zone in 71
- ZONE DESCRIPTOR 72
- ZONE LIST 68
 - Deleting 71
- Zone List Programming 71
- zone programming 51, 65
- Zone Reports 9
- Zone Type 65
 - Zone Type Restores For Types 9/10 58
 - Zone Type Restores For Zone Types 1-8 58
- ZONE TYPE/SYSTEM OPERATION 68
- ZONE TYPES 69
- Zones 2 - 8 16
 - Zones 2-8 Advisories 16
- ZT 68

NOTES

NOTES

WARNING!
THE LIMITATIONS OF THIS ALARM SYSTEM

While this System is an advanced wireless security system, it does not offer guaranteed protection against burglary, fire or other emergency. Any alarm system, whether commercial or residential, is subject to compromise or failure to warn for a variety of reasons. For example:

- Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.
- Intrusion detectors (e.g., passive infrared detectors), smoke detectors, and many other sensing devices will not work without power. Battery-operated devices will not work without batteries, with dead batteries, or if the batteries are not put in properly. Devices powered solely by AC will not work if their AC power supply is cut off for any reason, however briefly.
- Signals sent by wireless transmitters may be blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.
- A user may not be able to reach a panic or emergency button quickly enough.
- While smoke detectors have played a key role in reducing residential fire deaths, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires. Some of the reasons smoke detectors used in conjunction with this System may not work are as follows. Smoke detectors may have been improperly installed and positioned. Smoke detectors may not sense fires that start where smoke cannot reach the detectors, such as in chimneys, in walls, or roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Finally, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire every time. In general, detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending on the nature of the fire and/or location of the smoke detectors, the detector, even if it operates as anticipated, may not provide sufficient warning to allow all occupants to escape in time to prevent injury or death.
- Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in their installation manual. Passive Infrared Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams. They cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows. Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce their detection ability. Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of the protected area approaches the temperature range of 90° to 105°F (32° to 40°C), the detection performance can decrease.
- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers if they are located on the other side of closed or partly open doors. If warning devices are located on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled by noise from a stereo, radio, air conditioner or other appliance, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people.
- Telephone lines needed to transmit alarm signals from a premises to a central monitoring station may be out of service or temporarily out of service. Telephone lines are also subject to compromise by sophisticated intruders.
- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.
- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 20 years, the electronic components could fail at any time.

The most common cause of an alarm system not functioning when an intrusion or fire occurs is inadequate maintenance. This alarm system should be tested weekly to make sure all sensors and transmitters are working properly. The security console (and remote keypad) should be tested as well.

Wireless transmitters (used in some systems) are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature, may all reduce the actual battery life in a given installation. This wireless system, however, can identify a true low battery situation, thus allowing time to arrange a change of battery to maintain protection for that given point within the system.

Installing an alarm system may make the owner eligible for a lower insurance rate, but an alarm system is not a substitute for insurance. Homeowners, property owners and renters should continue to act prudently in protecting themselves and continue to insure their lives and property.

We continue to develop new and improved protection devices. Users of alarm systems owe it to themselves and their loved ones to learn about these developments.

WARNING: OWNER'S INSTRUCTION NOTICE NOT TO BE REMOVED WEEKLY TESTING IS REQUIRED TO ENSURE PROPER OPERATION OF THIS SYSTEM.

NOTES: 1. Zone 1 may be selected for EOLR supervised or normally closed (no EOLR) operation via cut jumper cut for normal closed operation. Do not cut for Zone 1-8. Zone 2-9 may be selected for either operation via program field '41'.

2. Zone 1 supports 2-wire smoke detectors, and maximum number of detectors supported, and maximum number of detectors supported.

3. Zone 7 may be used for remote keyswitch arming/disarming. See installation instructions for wiring instructions.

4. Zone 8 supports 2-wire latching type glass break detectors. See installation instructions for recommended type and maximum number of detectors supported.

J7 Header

- In 2
- Ground
- In 3 (4300 sync)
- In 4 (4300 sync)
- Ground
- Out 2 (fire)
- Ground
- Out 3 (burg/aud. panic)
- Out 6
- Ground
- Out 4 (silent panic/ address)

J8 Header

- In 2
- Ground
- In 3 (4300 sync)
- In 4 (4300 sync)
- Ground
- Out 2 (fire)
- Ground
- Out 3 (burg/aud. panic)
- Out 6
- Ground
- Out 4 (silent panic/ address)

Optional programming:
Out 1: Open/close or Keypad-like sounding
Out 2: Armed LED
Out 4: Ready LED

Ratings for OUT:
Active: 10VDC-13.8VDC through 4k OHMS
Active: 10VDC-13.8VDC through 5k OHMS
Active: 10VDC-13.8VDC through 5k OHMS
Not Active: 1k OHMS to ground

(Refer to installation instructions for information concerning Direct Wire Downloading using the 4100SM Serial Module.)

Jumper (note 1)

Connect to 24-hr, 120VAC, 60 Hz Outlet

TRANSFORMER
16.5VAC, 40VA
ADEMCO No. 1361
(IN CANADA USE No. 1361CN)
FORMERS V-10 DEVICES WILL BE USED

NOTE: WHEN POWERING UP THE PANEL, PLUG THE TRANSFORMER IN BEFORE CONNECTING THE BATTERY.

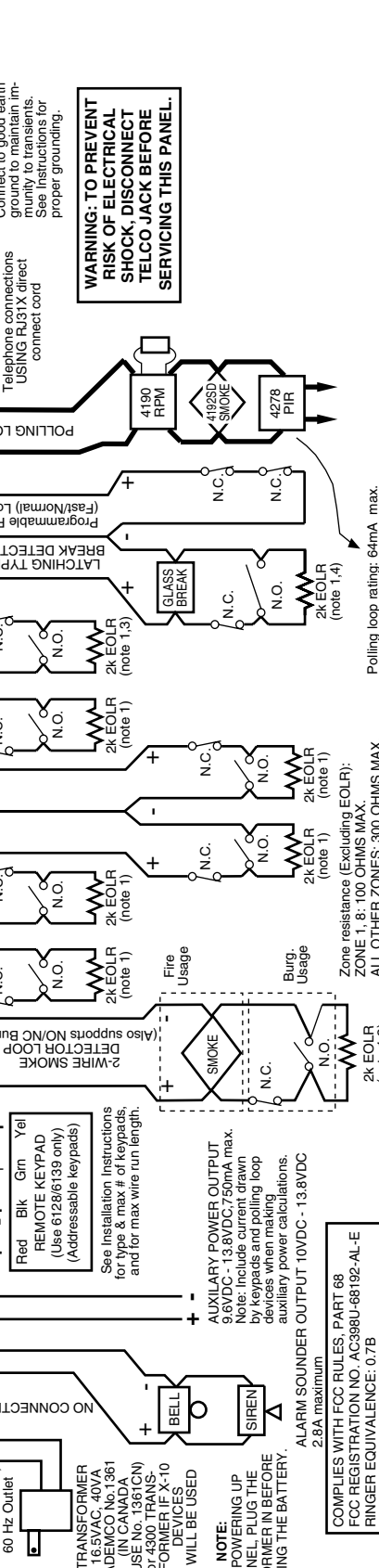
ALARM SOUNDER OUTPUT
9.6VDC - 13.8VDC; 750mA max.
Note: include current drawn by keypad and polling loop auxiliary power calculations. 2.8A maximum

RED BELL
24-hr. 120VAC, 60 Hz Outlet

GREEN SIREN
24-hr. 120VAC, 60 Hz Outlet

CONNECT TO
24-hr, 120VAC, 60 Hz Outlet

TRANSFORMER
16.5VAC, 40VA
ADEMCO No. 1361
(IN CANADA USE No. 1361CN)
FORMERS V-10 DEVICES WILL BE USED



CHARGING BATTERY
Connect to 12VDC, 4AH or 12VDC, 7AH GEL CELL BATTERY

CHARGING BATTERY
Connect to 12VDC, 4AH or 12VDC, 7AH GEL CELL BATTERY

INSTALLATION INSTRUCTIONS
See installation instructions for required battery capacity

Replace every 3 years

Zone resistance (Excluding EOLR):
ZONE 1, 8: 100 OHMS MAX.
ALL OTHER ZONES: 300 OHMS MAX.

Zone response time:
ZONES 1-8: 350mSec-500mSec
Zone 9: Programmable for Fast: 10mSec-15mSec Normal: 350mSec-500mSec (default response)

Polling loop rating: 64mA max. See installation instructions for maximum number of devices supported and maximum wire run length.

COMPLIES WITH FCC RULES, PART 68
FCC REGISTRATION NO. AC398U-68192-AL-E
RINGER EQUIVALENCE: 0.7B

THIS DEVICE COMPLIES WITH PART 15 OF 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 THAT MAY CAUSE UNDESIRABLE OPERATION.

Red Jumper (note 1)

Zone 1
2-WIRE SMOKE DETECTOR (N.C., N.O., 2k EOLR)
Also supports N/C Burg contacts

Zone 2
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 3
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 4
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 5
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 6
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 7
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 8
GLASS BREAK (N.C., N.O., 2k EOLR) (note 1,3)
LATCHING TYPE GLASS BREAK DETECTOR LOOP
PROGRAMMABLE RESPONSE (Fast/Normal) Loop

Zone 9
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 10
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 11
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 12
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 13
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 14
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 15
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 16
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 17
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 18
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 19
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 20
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 21
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 22
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 23
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 24
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 25
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 26
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 27
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 28
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 29
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 30
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 31
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

Zone 32
BURGLAR (N.C., N.O., 2k EOLR) (note 1)

4140XMPT2 SUMMARY OF CONNECTIONS
DOC LOAD NO.: 5

ADEMCO LIMITED WARRANTY

Alarm Device Manufacturing Company, a Division of Pittway Corporation, and its divisions, subsidiaries and affiliates ("Seller"), 165 Eileen Way, Syosset, New York 11791, warrants its products to be in conformance with its own plans and specifications and to be free from defects in materials and workmanship under normal use and service for 18 months from the date stamp control on the product or, for products not having an Ademco date stamp, for 12 months from date of original purchase unless the installation instructions or catalog sets forth a shorter period, in which case the shorter period shall apply. Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor, any product which is proved not in compliance with Seller's specifications or proves defective in materials or workmanship under normal use and service. Seller shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than Ademco factory service. For warranty service, return product transportation prepaid, to Ademco Factory Service, 165 Eileen Way, Syosset, New York 11791.

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