• W A R N I N G •

Please refer to the System Installation Manual for information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer.

Sure Signal
Sure Signal Max
Sure Signal CSR

SG WIRELESS
COMMUNICATIONS
A Division of the SpectraLink Corporation

Installation Manual
For U.L. Listed Applications

Version 1.0

FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved by Sur-Gard Security Systems Ltd. could void your authority to use this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 and Part 22 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

The user may find the following booklet prepared by the FCC useful: “How to Identify and Resolve Radio/Television Interference Problems”. This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345-4.

INDUSTRY CANADA COMPLIANCE STATEMENT

This Class B digital apparatus meets all requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences de règlement sur le matériel brouilleur du Canada.

WARNING: To satisfy FCC RF exposure requirements for transmitting devices, a separation distance of 30 cm or more must be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.

Table of Contents

Contents

Important Information

This manual is based on the production version of the included wireless device. Software changes may have occurred after the revision of this manual.

Caution

Any changes or modifications not expressly approved in this document could void your warranty for this equipment and void your authority to use this equipment.

Warning

Only use the antenna provided by SG Wireless Communications. The use of any other type will invalidate the warranty and may be dangerous.

Customer Service

For customer support please call SG Wireless Technical Support at 416-665-0051 ext. 1, toll free at 1-888-623-7873 ext. 1, or e-mail support@sur-gard.com.

Sure Signal Glossary of Terms

The following is a description of various terms used with regards to Sure Signal technology.

Electronic Serial Number (ESN)

The ESN is used to carry data information in a Mobitex Network.

Mobitex Access Number (MAN)

The MAN is equivalent to a phone number. It is a number used to contact a radio and to identify the sending radio.

Mobitex Packet (MPAK)

The MPAK is the Mobitex network protocol.

Radio Access Protocol (RAP)

The RAP is the protocol which is used to communicate between the receiver and the Sure Signal Radio.

Introducing the Sure Signal

Sure Signal offers a new wireless communication method for the transmission of event information using the Mobitex service. Events are transmitted from Sure Signal via the Mobitex network to the Sure Signal CSR at the central station in a fast, reliable manner. Sure Signal has been designed for simple and straightforward installation. Using the Keybus technology, wiring connections are made directly between the Sure Signal transceiver and the security control panel.

Specifications

Compatible Control Panels

- DSC PC5010 software version v1.XX; v2.02
- DSC PC1555 software version v2.XX
- DSC PC580 software version v2.XX
- DSC PC5015 software version v1.XX; v2.2X

Communication Method

- Mobitex Network

Simultaneous Communications

- The system can be used as the sole method of communication to the monitoring station or as a second transmission path in addition to the standard land line.

  Please contact your monitoring station on dual signal communication. For UL Listed applications the land line should be the primary communication channel and the RF way should be the secondary communication channel.

Antenna

- 3 dB gain, TNC Connector
- Extension kits available:
  LAE-3: 3-foot Antenna Kit for Sure Signal
  LAE-15: 15-foot Antenna Kit for Sure Signal
  LAE-25: 25-foot Antenna Kit for Sure Signal

RF Power Output

- 2.0 watts maximum

Power Supply

- 12 VDC @30mA, from panel Keybus, DSC Keybus control panel required
- 12 VDC, from bell circuit
  Current in standby 90mA
  Current when receiving 135mA
  Current when transmitting 1.3A

Dimension

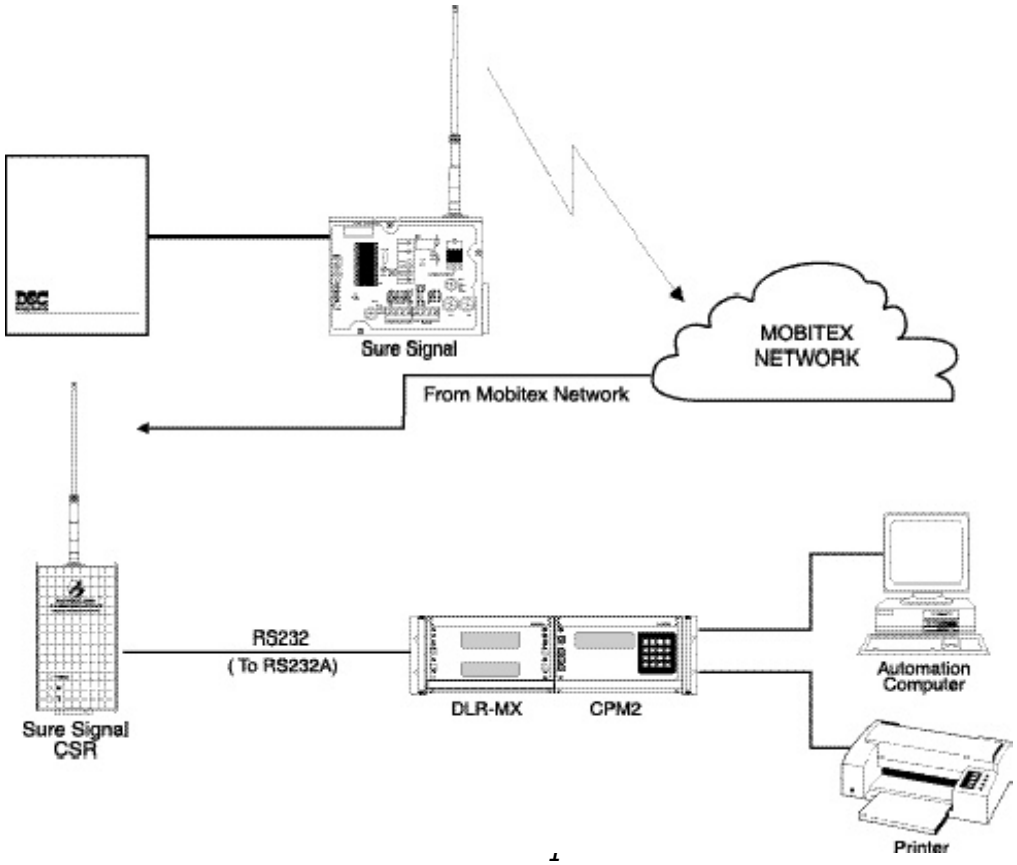
- 3.5" x 4.6" x 1.8" (85 mm x 115 mm x 45 mm)

Weight

- 0.5 lbs. (0.2 kg)

How Sure Signal Works

Sure Signal communicates using the Mobitex Digital Network. Signals are sent to the Mobitex Network and then forwarded to the central station. For every transmission sent to the receiver, there will be an acknowledgment transmission sent back to the Sure Signal radio. For transmission sequence see the drawing below:



Installation

It is mandatory that the power be removed from the system before any wiring changes are performed on the Sure Signal module. Neglecting to do so will result in damage to the radio modem.

Mounting the Sure Signal

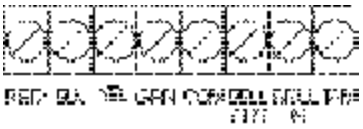
Sure Signal can be mounted in the upper right hand corner of the panel's cabinet through the knock out. The Sure Signal case attaches to the panel's cabinet through the use of clips and two screws.

Mounting the Antenna

NOTE: The antenna should always be attached to the Sure Signal unit for proper operation. The unit will not function properly if the antenna is not installed. Also note the 30cm distance.

The antenna attaches to the TNC connector of the Sure Signal module. The antenna should be mounted as high above ground level as possible while at the same time taking care not to place the antenna under a Radio frequency shield of any kind. For example do not mount the antenna directly below a metal roofing overhang. Sure Signal functions best when installed in an unobstructed "line of sight" to the Mobitex base station. The antenna should be located so that one of the two green LEDs is lit (LED1 or LED2).

Wiring Connections



Keybus Connection

The Sure Signal transmitter has 4 terminals marked red, black, yellow and green. Connect these four terminals to the 4 terminals on the main control panel marked Keybus (red, black, yellow and green).

Bell IN Terminal

This terminal is used to power the radio modem. This connects to the BELL + on the control panel. No other wire should be connected to the BELL + of the control panel.

An extra power supply can be used to power the modem if it is not located near the main control panel or where the system cannot provide enough power for the transmissions. Connect the positive of the power supply to the BELL IN and the negative to the COM to ensure proper grounding.

Bell OUT Terminal

This terminal is used to power the siren or any other devices that would usually connect to the control panel BELL + terminal. This output is powered through the 5A fuse (F1) for protection of the radio transmitting power.

Tamper Terminal

Connect TAM and COM to a normally closed switch that will be used to monitor tamper. If no tamper switch is desired place a wire between TAM and COM.

Secure Installation

For a secure installation, the Sure Signal module and its host panel must be locked and protected. An instant trip IR sensor would be the most appropriate for supervision of the panel. A cabinet tamper switch connected to the TAM terminal of the Sure Signal unit is also suggested.

UL Requirements

Installation-The product is intended to be installed in accordance with its installation instructions, the local authority having jurisdiction.

For Grade AA and A Central Station Service:

- The polling between the premise radio and the central station shall be such that a failure of the radio link shall be annunciated in 200 seconds at the central station. Programming006: Option 2 must be on and Option 3 must be off.
- The radio shall be mounted in an attack resistant enclosure.
- Simultaneous alarm signals shall be sent over the DACT line and radio.
- Failure of the premise radio shall be reported over the DACT line and annunciated at the central station within 200 seconds.
- Failure of the DACT line shall be reported over the radio and annunciated at the central station within 200 seconds.
- Opening and closing signals must be transmitted over the radio or the DACT line.

For Grade B central station service and grade A police station connect with high line security:

- The radio shall be mounted in an attack resistant enclosure.
- The system shall send a check-in signal to the central station every 24 hours.
- A listed compatible burglar alarm sounding device shall be used in conjunction with the system.
- Opening and closing signals are not required for Police station connect service.

For grade C central station service:

- The radio shall be mounted in an attack resistant enclosure.
- The system shall send a check-in signal to the central station every 24 hours.

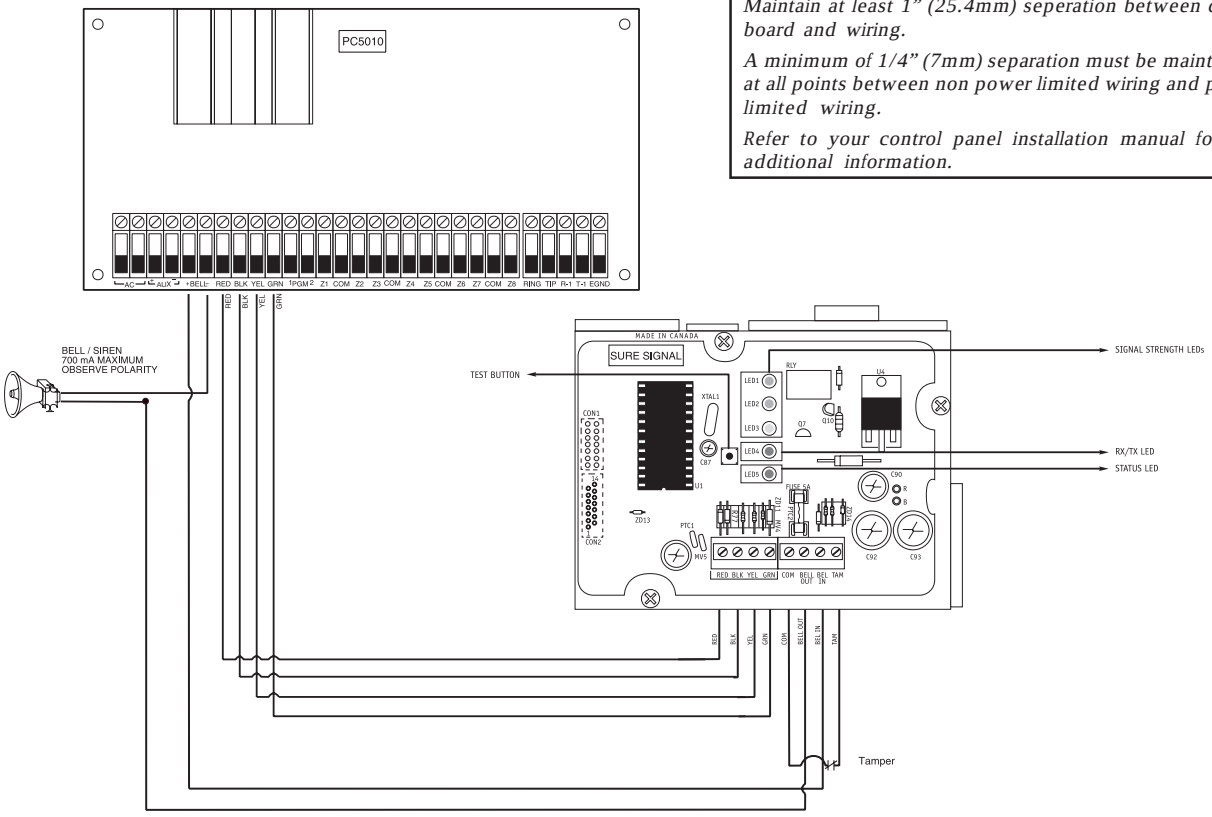
Connection Diagram

WARNING!

All connections to the Sure Signal module are power limited. Do not route any wiring over the circuit boards. Maintain at least 1" (25.4mm) seperation between circuit board and wiring.

A minimum of 1/4" (7mm) separation must be maintained at all points between non power limited wiring and power limited wiring.

Refer to your control panel installation manual for any additional information.



Enrolling the Sure Signal Radio

Before powering up the radio, information must be provided to Connect24 for the Sure Signal Radio. The radio information must be given to Connect24 on the service request form. Once the service has been set up by the provider, the installer will have to select the appropriate provider (from the predefined list in this manual) in the network connection selections section. The installer must ensure that the Mailbox section is disabled. Both the receiver radio and Sure Signal must be set up with the same provider in order to function.

When changing network providers, the subscription to the previous network should be cancelled. Otherwise, Sure Signal will remain connected to the previous network if it cannot find the new network.

Once the previous subscription is cancelled, the installer needs only to follow the enrollment procedure as described above.

Relocating the Antenna

If a suitable location is not available for proper Mobitex coverage, obtain an Antenna Extension Bracket kit from your SG Wireless Communications supplier. Each kit contains an extension cable, a mounting bracket, instructions, and all required hardware. Three lengths of extension cable are available:

Extension Kit	Length of cable
LAE-3	3 feet (0.91 m)
LAE-15	15 feet (4.57 m)
LAE-25	25 feet (7.62 m)

Only use the Extension Kits to extend the mounting range of the antenna. Do not cut or splice the extension cable. The maximum distance between Sure Signal and the antenna is 25 feet (7.62 m) as obtained by using the LAE-25 Extension Kit.

Make sure the antenna is in a physically secured location to avoid tampering.Secure the TNC connector from the Extension Kit to the mounting bracket, ensuring that the star washers make solid electrical contact with the mounting bracket.Remove the antenna from the Sure Signal module and connect the extension cable to the TNC connector on the module. Secure the antenna to the TNC connector mounted on the Extension Kit Mounting Bracket. Locate the mounting bracket and antenna away from possible sources of electrical interference. Moving the antenna just a short distance will likely be adequate. Temporarily secure the mounting bracket in the new location and proceed with testing. If the test is successful, permanently secure the mounting bracket and antenna at the new location.

Note: 30cm must be kept between antenna and a person/

Relocating the Sure Signal

Since Sure Signal is a Keybus accessory, it is possible to relocate the module up to 1000 feet from the main control panel when the panel is not located in a good Mobitex coverage area (a control panel installed in a vault for example). When relocating the module, follow theses rules:

- Maximum of 1000 feet from the main control. Keybus (Red, Black, Yellow, Green) from the panel to the Sure Signal.
- A UL1481 power supply 12V@1.5A must be used.
- The power supply (AUX+) is connected to the Sure Signal (BELL IN) terminal and the power supply (BLK) to the Sure Signal (COM) terminal.
- The cabinet must be installed in a secure location and should have a tamper circuit connected to the Sure Signal (TAM and COM) terminals.

Programming Sections

All programming on Sure Signal is done in the installer's programming mode. Refer to the control panel's Installation Manual for instructions on how to enter installer's programming. From installer's programming, enter section [803] to go to Sure Signal programming sections.

NOTE: Section [06], Option 1 (Radio Enable/Disable) must be ON before supervision of the module can occur.

[01]-[05] Zone Definition

These sections must be programmed exactly the same as the main control panel. This allows Sure Signal to translate information sent along the Keybus and identify the proper event.

[06] Configuration Options

Option [1] Radio Enable/Disable

Option [2] ULAA Supervision Enable/Disable. This option must be selected to disable ULAA supervision.

Option [3] Standard SIA Test TX / RSSI and Status in Test TX

[10] First Account Number

4-digit hex entry.

[11] Second Account Number

4-digit hex entry.

[15] First Receiver Man Number

Four 2-digit decimal entry.

[16] Second Receiver Man Number

Four 2-digit decimal entry.

Note: For 7-digit man numbers, the first digit must be 0.

[20] Communicator Format Options

2-digit entry.

01 = Condensed SIA without account number

02 = Condensed SIA with account numbers

[21] Network Connection Selections

2-digit entry.

00 = No network selected

01 = Connect to Cantel network

02 = Connect to Ram/Ardus network

03 = Connect to Ram/Aust network

[22] Transmission Options

This section will enable sections of reporting codes.

[23] Number of Attempts to Each Man

3-digit entry (001-255).

[24] Response Wait Time

3-digit entry (001-255) × 10 seconds.

[30]-[78] Individual Event - Transmission Toggle

These sections are used to determine if an event will be transmitted by Sure Signal. If '00' is entered, then that event will not be transmitted. If 'FF' is programmed, then the event will be transmitted. 'FF' is the default value.

Activating Sure Signal

Before activating Sure Signal, ensure that the control panel is wired, programmed and operating properly. Make sure that the Sure Signal transmitter is properly connected to the Keybus and to the bell positive circuit. When power is applied to the system, Sure Signal will perform self-diagnostics for a few seconds, before giving visual feedback by indicating signal strength on LED1, LED2 and LED3. **A complete default of the Sure Signal module should always be performed before any other programming is done. Enter '00' in section '99' to perform the default.**

Transmitting and Receiving

LED4 on the Sure Signal module will blink once (1) to indicate the radio has transmitted an event. It will blink twice (2) to indicate that an acknowledgement has been received from the alarm central station. Sure Signal will not follow Transmission Delay as programmed in Section [370] of the panel. Events will be transmitted immediately.

Test Transmissions

Sure Signal will send test transmissions as they come across the Keybus. All of the programming for timed test transmissions is done at the panel. When the test transmissions come across the Keybus, they will be transmitted as per SIA reporting codes (Appendix A).

Sure Signal can also be set up for ULAA Listed systems. When ULAA supervision is enabled (Section [06], bit 2 OFF), Sure Signal is responsible for test transmission times. A test transmission must be sent every 30 minutes if the panel is disarmed, and every 3 minutes if the panel is armed (either or both partitions on a partitioned system).

There is also a Sure Signal test transmission switch (SW1) located on its printed circuit board. None of the test transmissions are affected by transmission options (Section [803], Option [22]). They can only be enabled/disabled in the Test Transmission Reporting Codes section (Section [803], Option [78]).

Sure Signal Trouble Supervision

Sure Signal automatically monitors its operation and indicates trouble conditions by flashing LED5 on the circuit board. LED5 normally flashes once every second when Sure Signal is on standby (ready to transmit) mode. Troubles are indicated when LED5 flashes more than once every second. Shown below is the number of flashes used to indicate each trouble condition in order of importance:

2, 6, 3, 4, 5, 1

TABLE 1:

Number of flashes	Function of flashes
1	Radio is operating normally
2	Radio is not connected or not responding
3	Network is not available
4	FTC (Failure to Communicate) 1 - MPAK Flag reason
5	FTC (Failure to Communicate) 2 - Radio reason
6	No number programmed for Man Number 1 (Section [15])

Sure Signal Trouble Shooting

1. **Check all wiring**
   - Make sure all the Keybus connections are correct.
   - Make sure BELL+ is connected to the BELL IN of the Sure Signal module.
2. **Check the LED5**
   - Check number of flashes on LED5. If LED flashes more than once every half second refer to TABLE 1.
   - 6 flashes indicates no number programmed for Man Number 1 (Section [15]).
3. **If intermittent failure to communicate is seen (5 flashes),** number of attempts (option 23) should be increased to 10 and/or response wait time should be increased to 60 seconds (option 24=006).
4. **If LED5 flashes once every half second,** yet Sure Signal does not communicate, call SG Wireless Technical Support at 1-888-623-7873 ext.1 or 416-665-0051 ext.1.
5. **Before contacting Technical Support,** please have the following information ready: MAN number of the Sure Signal unit, ESN number of the Sure Signal unit and account number.

[803] Sure Signal Programming (PC5010/580/1555/5015)

Zone Definitions

00 Null Zone (No Alarm)	09 24 Hour Supervisory	18 24 Hour Sprinkler
01 Delay 1	10 24 Hour Supervisory Buzzer	19 24 Hour Water
02 Delay 2	11 24 Hour Burglary	20 24 Hour Freeze
03 Instant	12 24 Hour Holdup	21 24 Hour Latching Tamper
04 Interior	13 24 Hour Gas	22 Momentary Keyswitch Arm
05 Interior, Stay-Away	14 24 Hour Heat	23 Maintained Keyswitch Arm
06 Delay, Stay-Away	15 24 Hour Medical	24 LINKS Answer
07 Delayed 24 Hour Fire (Hardwired)	16 24 Hour Panic	87 Delayed 24 Hour Fire (Wireless)
08 Standard 24 Hour Fire (Hardwired)	17 24 Hour Emergency	88 Standard 24 Hour Fire (Wireless)

[01] Zone 1-8 Definitions

Default			Default		
00	|___|___|	Zone 1	00	|___|___|	Zone 5
00	|___|___|	Zone 2	00	|___|___|	Zone 6
00	|___|___|	Zone 3	00	|___|___|	Zone 7
00	|___|___|	Zone 4	00	|___|___|	Zone 8

[02] Zone 9-16 Definitions

00	|___|___|	Zone 9	00	|___|___|	Zone 13
00	|___|___|	Zone 10	00	|___|___|	Zone 14
00	|___|___|	Zone 11	00	|___|___|	Zone 15
00	|___|___|	Zone 12	00	|___|___|	Zone 16

[03] Zone 17-24 Definitions

00	|___|___|	Zone 17	00	|___|___|	Zone 21
00	|___|___|	Zone 18	00	|___|___|	Zone 22
00	|___|___|	Zone 19	00	|___|___|	Zone 23
00	|___|___|	Zone 20	00	|___|___|	Zone 24

[04] Zone 25-32 Definitions

00	|___|___|	Zone 25	00	|___|___|	Zone 29
00	|___|___|	Zone 26	00	|___|___|	Zone 30
00	|___|___|	Zone 27	00	|___|___|	Zone 31
00	|___|___|	Zone 28	00	|___|___|	Zone 32

[05] PGM2 Definition

00 \|___\|___\| If PGM2 is used as 2 Wire Smoke, Silent 24 Hour or Audible 24 Hour.

[06] Sure Signal Configuration Options

Default			Option ON	Option OFF
OFF	|___|	Option 1	Radio is Enabled	Disabled
ON	|___|	Option 2	ULAA Supervision is Disabled	Enabled
OFF	|___|	Option 3	Standard SIA	RSS1 and status with TX
	|___|	Option 4 to 8	For Future Use	

[10] Sure Signal First Account Number

FF FF \|___\|___\| - \|___\|___\| (00 00 - FF FF)

[11] Sure Signal Second Account Number

FF FF \|___\|___\| - \|___\|___\| (00 00 - FF FF)

[15] First Receiver Man Number

FF FF FF FF \|___\|___\|-\|___\|___\|-\|___\|___\|-\|___\|___\|

Valid entries for all 2-digit sections (00-99) decimal. NOTE: For most applications, first digit is '0'.

[16] Second Receiver Man Number (four 2-digit entries)

Default

FF FF FF FF |__|__|-|__|__|-|__|__|-|__|__|

Valid entries for all 2-digit sections (00-99) decimal. NOTE: For most applications, first digit is '0'.

[20] Communicator Format Options

Default

02 |__|__|

01 = Condensed SIA without transmitted account number
02 = Condensed SIA with 4-digit account number

[21] Network Connection Selections

|__|__|

00 = No network selected
01 = Connect to Cantel network
02 = Connect to Ram/Ardus network
03 = Connect to Ram/Aust network

[22] Transmission Options

Default			Option ON	Option OFF
ON	|__|	Option 1	Alarms/Restorals	Disabled
ON	|__|	Option 2	Tampers/Restorals	Disabled
ON	|__|	Option 3	Zone Supervisory Alarms/Restorals	Disabled
ON	|__|	Option 4	Low Battery Alarms/Restorals	Disabled
OFF	|__|	Option 5	Openings/Closings	Disabled
ON	|__|	Option 6	Maintenance Alarms/Restorals	Disabled
OFF	|__|	Option 7	For future use	Disabled
OFF	|__|	Option 8	For future use	Disabled

[23] Number of Attempts

003 |__|__|__| 001 – 255 (decimal)

[24] Response Wait Time

005 |__|__|__| 001 – 255 (decimal, × 10 seconds)

Note: Programming 000 in this section will be accepted as 001. (It will remain as 000 in the programming section.)

These are “ON” or “OFF” toggle options

Sections [30] to [78]: if ’00’ is entered, then that reporting code is disabled (“OFF”). If ‘FF’ is in the section, then the default reporting code is enabled (“ON”).

[30] Alarm Reporting Codes, Zones 1-8

Default			Default		
FF	|___|___|	Zone 1 Alarm	FF	|___|___|	Zone 5 Alarm
FF	|___|___|	Zone 2 Alarm	FF	|___|___|	Zone 6 Alarm
FF	|___|___|	Zone 3 Alarm	FF	|___|___|	Zone 7 Alarm
FF	|___|___|	Zone 4 Alarm	FF	|___|___|	Zone 8 Alarm

[31] Alarm Reporting Codes, Zones 9-16

FF	|___|___|	Zone 9 Alarm	FF	|___|___|	Zone 13 Alarm
FF	|___|___|	Zone 10 Alarm	FF	|___|___|	Zone 14 Alarm
FF	|___|___|	Zone 11 Alarm	FF	|___|___|	Zone 15 Alarm
FF	|___|___|	Zone 12 Alarm	FF	|___|___|	Zone 16 Alarm

[32] Alarm Reporting Codes, Zones 17-24

FF	|___|___|	Zone 17 Alarm	FF	|___|___|	Zone 21 Alarm
FF	|___|___|	Zone 18 Alarm	FF	|___|___|	Zone 22 Alarm
FF	|___|___|	Zone 19 Alarm	FF	|___|___|	Zone 23 Alarm
FF	|___|___|	Zone 20 Alarm	FF	|___|___|	Zone 24 Alarm

[33] Alarm Reporting Codes, Zones 25-32

FF	|___|___|	Zone 25 Alarm	FF	|___|___|	Zone 29 Alarm
FF	|___|___|	Zone 26 Alarm	FF	|___|___|	Zone 30 Alarm
FF	|___|___|	Zone 27 Alarm	FF	|___|___|	Zone 31 Alarm
FF	|___|___|	Zone 28 Alarm	FF	|___|___|	Zone 32 Alarm

[34] Alarm Restoral Reporting Codes, Zones 1-8

Default			Default		
FF	|___|___|	Zone 1 Alarm Restoral	FF	|___|___|	Zone 5 Alarm Restoral
FF	|___|___|	Zone 2 Alarm Restoral	FF	|___|___|	Zone 6 Alarm Restoral
FF	|___|___|	Zone 3 Alarm Restoral	FF	|___|___|	Zone 7 Alarm Restoral
FF	|___|___|	Zone 4 Alarm Restoral	FF	|___|___|	Zone 8 Alarm Restoral

[35] Alarm Restoral Reporting Codes, Zones 9-16

FF	|___|___|	Zone 9 Alarm Restoral	FF	|___|___|	Zone 13 Alarm Restoral
FF	|___|___|	Zone 10 Alarm Restoral	FF	|___|___|	Zone 14 Alarm Restoral
FF	|___|___|	Zone 11 Alarm Restoral	FF	|___|___|	Zone 15 Alarm Restoral
FF	|___|___|	Zone 12 Alarm Restoral	FF	|___|___|	Zone 16 Alarm Restoral

[36] Alarm Restoral Reporting Codes, Zones 17-24

FF	|___|___|	Zone 17 Alarm Restoral	FF	|___|___|	Zone 21 Alarm Restoral
FF	|___|___|	Zone 18 Alarm Restoral	FF	|___|___|	Zone 22 Alarm Restoral
FF	|___|___|	Zone 19 Alarm Restoral	FF	|___|___|	Zone 23 Alarm Restoral
FF	|___|___|	Zone 20 Alarm Restoral	FF	|___|___|	Zone 24 Alarm Restoral

[37] Alarm Restoral Reporting Codes, Zones 25-32

FF	|___|___|	Zone 25 Alarm Restoral	FF	|___|___|	Zone 29 Alarm Restoral
FF	|___|___|	Zone 26 Alarm Restoral	FF	|___|___|	Zone 30 Alarm Restoral
FF	|___|___|	Zone 27 Alarm Restoral	FF	|___|___|	Zone 31 Alarm Restoral
FF	|___|___|	Zone 28 Alarm Restoral	FF	|___|___|	Zone 32 Alarm Restoral

[38] Miscellaneous Alarm Reporting Codes

FF	|___|___|	Duress Alarm	FF	|___|___|	Zone Expander Supervisory Alarm
FF	|___|___|	Opening After Alarm	FF	|___|___|	Zone Expander Supervisory Restoral
FF	|___|___|	Recent Closing	FF	|___|___|	Cross Zoning (Burglary Verified) Alarm

[39] Priority Alarm and Restoral Reporting Codes

FF	|___|___|	Keypad [F]ire Alarm	FF	|___|___|	Keypad [F]ire Restoral
FF	|___|___|	Keypad [A]uxiliary Alarm	FF	|___|___|	Keypad [A]uxiliary Restoral
FF	|___|___|	Keypad [P]anic Alarm	FF	|___|___|	Keypad [P]anic Restoral
FF	|___|___|	PGM2 Alarm	FF	|___|___|	PGM2 Restoral

[40] Tamper Reporting Codes, Zones 1-8

FF	|___|___|	Zone 1 Tamper	FF	|___|___|	Zone 5 Tamper
FF	|___|___|	Zone 2 Tamper	FF	|___|___|	Zone 6 Tamper
FF	|___|___|	Zone 3 Tamper	FF	|___|___|	Zone 7 Tamper
FF	|___|___|	Zone 4 Tamper	FF	|___|___|	Zone 8 Tamper

[41] Tamper Reporting Codes, Zones 9-16

FF	|___|___|	Zone 9 Tamper	FF	|___|___|	Zone 13 Tamper
FF	|___|___|	Zone 10 Tamper	FF	|___|___|	Zone 14 Tamper
FF	|___|___|	Zone 11 Tamper	FF	|___|___|	Zone 15 Tamper
FF	|___|___|	Zone 12 Tamper	FF	|___|___|	Zone 16 Tamper

[42] Tamper Reporting Codes, Zones 17-24

FF	|___|___|	Zone 17 Tamper	FF	|___|___|	Zone 21 Tamper
FF	|___|___|	Zone 18 Tamper	FF	|___|___|	Zone 22 Tamper
FF	|___|___|	Zone 19 Tamper	FF	|___|___|	Zone 23 Tamper
FF	|___|___|	Zone 20 Tamper	FF	|___|___|	Zone 24 Tamper

[43] Tamper Reporting Codes, Zones 25-32

Default			Default		
FF	|___|___|	Zone 25 Tamper	FF	|___|___|	Zone 29 Tamper
FF	|___|___|	Zone 26 Tamper	FF	|___|___|	Zone 30 Tamper
FF	|___|___|	Zone 27 Tamper	FF	|___|___|	Zone 31 Tamper
FF	|___|___|	Zone 28 Tamper	FF	|___|___|	Zone 32 Tamper

[44] Tamper Restoral Reporting Codes, Zones 1-8

FF	|___|___|	Zone 1 Tamper Restoral	FF	|___|___|	Zone 5 Tamper Restoral
FF	|___|___|	Zone 2 Tamper Restoral	FF	|___|___|	Zone 6 Tamper Restoral
FF	|___|___|	Zone 3 Tamper Restoral	FF	|___|___|	Zone 7 Tamper Restoral
FF	|___|___|	Zone 4 Tamper Restoral	FF	|___|___|	Zone 8 Tamper Restoral

[45] Tamper Restoral Reporting Codes, Zones 9-16

FF	|___|___|	Zone 9 Tamper Restoral	FF	|___|___|	Zone 13 Tamper Restoral
FF	|___|___|	Zone 10 Tamper Restoral	FF	|___|___|	Zone 14 Tamper Restoral
FF	|___|___|	Zone 11 Tamper Restoral	FF	|___|___|	Zone 15 Tamper Restoral
FF	|___|___|	Zone 12 Tamper Restoral	FF	|___|___|	Zone 16 Tamper Restoral

[46] Tamper Restoral Reporting Codes, Zones 17-24

FF	|___|___|	Zone 17 Tamper Restoral	FF	|___|___|	Zone 21 Tamper Restoral
FF	|___|___|	Zone 18 Tamper Restoral	FF	|___|___|	Zone 22 Tamper Restoral
FF	|___|___|	Zone 19 Tamper Restoral	FF	|___|___|	Zone 23 Tamper Restoral
FF	|___|___|	Zone 20 Tamper Restoral	FF	|___|___|	Zone 24 Tamper Restoral

[47] Tamper Restoral Reporting Codes, Zones 25-32

FF	|___|___|	Zone 25 Tamper Restoral	FF	|___|___|	Zone 29 Tamper Restoral
FF	|___|___|	Zone 26 Tamper Restoral	FF	|___|___|	Zone 30 Tamper Restoral
FF	|___|___|	Zone 27 Tamper Restoral	FF	|___|___|	Zone 31 Tamper Restoral
FF	|___|___|	Zone 28 Tamper Restoral	FF	|___|___|	Zone 32 Tamper Restoral

[48] Miscellaneous Tamper Reporting Codes

FF	|___|___|	General System Tamper	FF	|___|___|	Keypad Lockout
FF	|___|___|	General System Tamper Rest.			

[49] Supervisory Reporting Codes, Zones 1-8

FF	|___|___|	Zone 1 Supervisory	FF	|___|___|	Zone 5 Supervisory
FF	|___|___|	Zone 2 Supervisory	FF	|___|___|	Zone 6 Supervisory
FF	|___|___|	Zone 3 Supervisory	FF	|___|___|	Zone 7 Supervisory
FF	|___|___|	Zone 4 Supervisory	FF	|___|___|	Zone 8 Supervisory

[50] Supervisory Reporting Codes, Zones 9-16

FF	|___|___|	Zone 9 Supervisory	FF	|___|___|	Zone 13 Supervisory
FF	|___|___|	Zone 10 Supervisory	FF	|___|___|	Zone 14 Supervisory
FF	|___|___|	Zone 11 Supervisory	FF	|___|___|	Zone 15 Supervisory
FF	|___|___|	Zone 12 Supervisory	FF	|___|___|	Zone 16 Supervisory

[51] Supervisory Reporting Codes, Zones 17-24

FF	|___|___|	Zone 17 Supervisory	FF	|___|___|	Zone 21 Supervisory
FF	|___|___|	Zone 18 Supervisory	FF	|___|___|	Zone 22 Supervisory
FF	|___|___|	Zone 19 Supervisory	FF	|___|___|	Zone 23 Supervisory
FF	|___|___|	Zone 20 Supervisory	FF	|___|___|	Zone 24 Supervisory

[52] Supervisory Reporting Codes, Zones 25-32

Default			**Default**		
FF	|___|___|	Zone 25 Supervisory	FF	|___|___|	Zone 29 Supervisory
FF	|___|___|	Zone 26 Supervisory	FF	|___|___|	Zone 30 Supervisory
FF	|___|___|	Zone 27 Supervisory	FF	|___|___|	Zone 31 Supervisory
FF	|___|___|	Zone 28 Supervisory	FF	|___|___|	Zone 32 Supervisory

[53] Supervisory Restoral Reporting Codes, Zones 1-8

FF	|___|___|	Zone 1 Supervisory Restoral	FF	|___|___|	Zone 5 Supervisory Restoral
FF	|___|___|	Zone 2 Supervisory Restoral	FF	|___|___|	Zone 6 Supervisory Restoral
FF	|___|___|	Zone 3 Supervisory Restoral	FF	|___|___|	Zone 7 Supervisory Restoral
FF	|___|___|	Zone 4 Supervisory Restoral	FF	|___|___|	Zone 8 Supervisory Restoral

[54] Supervisory Restoral Reporting Codes, Zones 9-16

FF	|___|___|	Zone 9 Supervisory Restoral	FF	|___|___|	Zone 13 Supervisory Restoral
FF	|___|___|	Zone 10 Supervisory Restoral	FF	|___|___|	Zone 14 Supervisory Restoral
FF	|___|___|	Zone 11 Supervisory Restoral	FF	|___|___|	Zone 15 Supervisory Restoral
FF	|___|___|	Zone 12 Supervisory Restoral	FF	|___|___|	Zone 16 Supervisory Restoral

[55] Supervisory Restoral Reporting Codes, Zones 17-24

FF	|___|___|	Zone 17 Supervisory Restoral	FF	|___|___|	Zone 21 Supervisory Restoral
FF	|___|___|	Zone 18 Supervisory Restoral	FF	|___|___|	Zone 22 Supervisory Restoral
FF	|___|___|	Zone 19 Supervisory Restoral	FF	|___|___|	Zone 23 Supervisory Restoral
FF	|___|___|	Zone 20 Supervisory Restoral	FF	|___|___|	Zone 24 Supervisory Restoral

[56] Supervisory Restoral Reporting Codes, Zones 25-32

FF	|___|___|	Zone 25 Supervisory Restoral	FF	|___|___|	Zone 29 Supervisory Restoral
FF	|___|___|	Zone 26 Supervisory Restoral	FF	|___|___|	Zone 30 Supervisory Restoral
FF	|___|___|	Zone 27 Supervisory Restoral	FF	|___|___|	Zone 31 Supervisory Restoral
FF	|___|___|	Zone 28 Supervisory Restoral	FF	|___|___|	Zone 32 Supervisory Restoral

[57] Low Battery Reporting Codes, Zones 1-8

FF	|___|___|	Zone 1 Low Battery	FF	|___|___|	Zone 5 Low Battery
FF	|___|___|	Zone 2 Low Battery	FF	|___|___|	Zone 6 Low Battery
FF	|___|___|	Zone 3 Low Battery	FF	|___|___|	Zone 7 Low Battery
FF	|___|___|	Zone 4 Low Battery	FF	|___|___|	Zone 8 Low Battery

[58] Low Battery Reporting Codes, Zones 9-16

FF	|___|___|	Zone 9 Low Battery	FF	|___|___|	Zone 13 Low Battery
FF	|___|___|	Zone 10 Low Battery	FF	|___|___|	Zone 14 Low Battery
FF	|___|___|	Zone 11 Low Battery	FF	|___|___|	Zone 15 Low Battery
FF	|___|___|	Zone 12 Low Battery	FF	|___|___|	Zone 16 Low Battery

[59] Low Battery Reporting Codes, Zones 17-24

FF	|___|___|	Zone 17 Low Battery	FF	|___|___|	Zone 21 Low Battery
FF	|___|___|	Zone 18 Low Battery	FF	|___|___|	Zone 22 Low Battery
FF	|___|___|	Zone 19 Low Battery	FF	|___|___|	Zone 23 Low Battery
FF	|___|___|	Zone 20 Low Battery	FF	|___|___|	Zone 24 Low Battery

[60] Low Battery Reporting Codes, Zones 25-32

FF	|___|___|	Zone 25 Low Battery	FF	|___|___|	Zone 29 Low Battery
FF	|___|___|	Zone 26 Low Battery	FF	|___|___|	Zone 30 Low Battery
FF	|___|___|	Zone 27 Low Battery	FF	|___|___|	Zone 31 Low Battery
FF	|___|___|	Zone 28 Low Battery	FF	|___|___|	Zone 32 Low Battery

[61] Low Battery Restoral Reporting Codes, Zones 1-8

Default			**Default**		
FF	|___|___|	Zone 1 Low Battery Restoral	FF	|___|___|	Zone 5 Low Battery Restoral
FF	|___|___|	Zone 2 Low Battery Restoral	FF	|___|___|	Zone 6 Low Battery Restoral
FF	|___|___|	Zone 3 Low Battery Restoral	FF	|___|___|	Zone 7 Low Battery Restoral
FF	|___|___|	Zone 4 Low Battery Restoral	FF	|___|___|	Zone 8 Low Battery Restoral

[62] Low Battery Restoral Reporting Codes, Zones 9-16

FF	|___|___|	Zone 9 Low Battery Restoral	FF	|___|___|	Zone 13 Low Battery Restoral
FF	|___|___|	Zone 10 Low Battery Restoral	FF	|___|___|	Zone 14 Low Battery Restoral
FF	|___|___|	Zone 11 Low Battery Restoral	FF	|___|___|	Zone 15 Low Battery Restoral
FF	|___|___|	Zone 12 Low Battery Restoral	FF	|___|___|	Zone 16 Low Battery Restoral

[63] Low Battery Restoral Reporting Codes, Zones 17-24

FF	|___|___|	Zone 17 Low Battery Restoral	FF	|___|___|	Zone 21 Low Battery Restoral
FF	|___|___|	Zone 18 Low Battery Restoral	FF	|___|___|	Zone 22 Low Battery Restoral
FF	|___|___|	Zone 19 Low Battery Restoral	FF	|___|___|	Zone 23 Low Battery Restoral
FF	|___|___|	Zone 20 Low Battery Restoral	FF	|___|___|	Zone 24 Low Battery Restoral

[64] Low Battery Restoral Reporting Codes, Zones 25-32

FF	|___|___|	Zone 25 Low Battery Restoral	FF	|___|___|	Zone 29 Low Battery Restoral
FF	|___|___|	Zone 26 Low Battery Restoral	FF	|___|___|	Zone 30 Low Battery Restoral
FF	|___|___|	Zone 27 Low Battery Restoral	FF	|___|___|	Zone 31 Low Battery Restoral
FF	|___|___|	Zone 28 Low Battery Restoral	FF	|___|___|	Zone 32 Low Battery Restoral

[65] Closing (Arming) Reporting Codes, Access Codes 1-8

FF	___	Closing By Access Code 1	FF	___	Closing By Access Code 5
FF	___	Closing By Access Code 2	FF	___	Closing By Access Code 6
FF	___	Closing By Access Code 3	FF	___	Closing By Access Code 7
FF	___	Closing By Access Code 4	FF	___	Closing By Access Code 8

[66] Closing (Arming) Reporting Codes, Access Codes 9-16

FF	___	Closing By Access Code 9	FF	___	Closing By Access Code 13
FF	___	Closing By Access Code 10	FF	___	Closing By Access Code 14
FF	___	Closing By Access Code 11	FF	___	Closing By Access Code 15
FF	___	Closing By Access Code 12	FF	___	Closing By Access Code 16

[67] Closing (Arming) Reporting Codes, Access Codes 17-24

FF	___	Closing By Access Code 17	FF	___	Closing By Access Code 21
FF	___	Closing By Access Code 18	FF	___	Closing By Access Code 22
FF	___	Closing By Access Code 19	FF	___	Closing By Access Code 23
FF	___	Closing By Access Code 20	FF	___	Closing By Access Code 24

[68] Closing (Arming) Reporting Codes, Access Codes 25-32

FF	___	Closing By Access Code 25	FF	___	Closing By Access Code 29
FF	___	Closing By Access Code 26	FF	___	Closing By Access Code 30
FF	___	Closing By Access Code 27	FF	___	Closing By Access Code 31
FF	___	Closing By Access Code 28	FF	___	Closing By Access Code 32

[69] Miscellaneous Closing (Arming) Reporting Codes

FF	___	Closing by Duress Code 33	FF	___	Closing by System Code 42
FF	___	Closing by Duress Code 34	FF	___	Partial Closing
FF	___	Closing by System Code 40	FF	___	Special Closing
FF	___	Closing by System Code 41			

[70] Opening (Disarming) Reporting Codes, Access Codes 1-8

Default			Default		
FF	___	Opening By Access Code 1	FF	___	Opening By Access Code 5
FF	___	Opening By Access Code 2	FF	___	Opening By Access Code 6
FF	___	Opening By Access Code 3	FF	___	Opening By Access Code 7
FF	___	Opening By Access Code 4	FF	___	Opening By Access Code 8

[71] Opening (Disarming) Reporting Codes, Access Codes 9-16

FF	___	Opening By Access Code 9	FF	___	Opening By Access Code 13
FF	___	Opening By Access Code 10	FF	___	Opening By Access Code 14
FF	___	Opening By Access Code 11	FF	___	Opening By Access Code 15
FF	___	Opening By Access Code 12	FF	___	Opening By Access Code 16

[72] Opening (Disarming) Reporting Codes, Access Codes 17-24

FF	___	Opening By Access Code 17	FF	___	Opening By Access Code 21
FF	___	Opening By Access Code 18	FF	___	Opening By Access Code 22
FF	___	Opening By Access Code 19	FF	___	Opening By Access Code 23
FF	___	Opening By Access Code 20	FF	___	Opening By Access Code 24

[73] Opening (Disarming) Reporting Codes, Access Codes 25-32

FF	___	Opening By Access Code 25	FF	___	Opening By Access Code 29
FF	___	Opening By Access Code 26	FF	___	Opening By Access Code 30
FF	___	Opening By Access Code 27	FF	___	Opening By Access Code 31
FF	___	Opening By Access Code 28	FF	___	Opening By Access Code 32

[74] Miscellaneous Opening (Disarming) Reporting Codes

FF	I___I___I	Opening by Duress Code 33	FF	I___I___I	Opening by System Code 42
FF	I___I___I	Opening by Duress Code 34	FF	I___I___I	Auto Arm Cancellation
FF	I___I___I	Opening by System Code 40	FF	I___I___I	Special Opening
FF	I___I___I	Opening by System Code 41			

[75] Maintenance Alarm Reporting Codes

FF	I___I___I	Battery Trouble Alarm	FF	I___I___I	Auxiliary Power Supply Trouble Alarm
FF	I___I___I	AC Failure Trouble Alarm	FF	I___I___I	TLM Trouble Code
FF	I___I___I	Bell Circuit Trouble Alarm	FF	I___I___I	General System Trouble
FF	I___I___I	Fire Trouble Alarm	FF	I___I___I	General System Supervisory

[76] Maintenance Restoral Reporting Codes

FF	I___I___I	Battery Trouble Restoral	FF	I___I___I	Auxiliary Power Supply Trouble Restoral
FF	I___I___I	AC Failure Trouble Restoral	FF	I___I___I	TLM Restoral
FF	I___I___I	Bell Circuit Trouble Restoral	FF	I___I___I	General System Trouble Restore
FF	I___I___I	Fire Trouble Restoral	FF	I___I___I	General System Supervisory Restore

[77] Miscellaneous Maintenance Reporting Codes

FF	I___I___I	Phone #1 FTC	FF	I___I___I	Event Buffer 75% Full
FF	I___I___I	Phone #2 FTC	FF	I___I___I	DLS Lead IN
FF	I___I___I	Phone #1 FTC Restore	FF	I___I___I	DLS Lead OUT
FF	I___I___I	Phone #2 FTC Restore	FF	I___I___I	Delinquency Reporting Code

[78] Test Transmission Reporting Codes

FF	I___I___I	Periodic Test Transmission	FF	I___I___I	Mobitex Test TX Code
FF	I___I___I	System Test			

[99] Section [99] is for software defaulting of Sure Signal

80 I___I___I

Entering 00 will cause a software default of Sure Signal. Entering 01-FF will cause restart of Sure Signal. Entering any other value will not cause a default or a restart.

[993] Inst. Code

Restore Sure Signal to factory default programming.

Note: Sure Signal must be defaulted if it is connected to PC5010 version 1.00.

For Your Records

Location _____

_____

_____

_____

Sure Signal Man Number _____

Rate Plan _____

_____

Central Station _____

Account Number 1 _____

Account Number 2 _____

Test Time and Day _____

Additional Notes _____

_____

_____

_____

Appendix A - SIA Reporting codes

SIA Communication Format

The SIA communication format used in this product follows the Level 2 specifications of the SIA Digital Communication Standard - February 1993. This format will send the Account Code along with its data transmission. Below are the Zone Alarms & Alarm Restores (Zones 01-32) as well as any additional codes that can be transmitted:

Terms

Code	Description
—	Not used
zz	Zone #
us	User #
ln	Line
ex	Expander #
xx	RSS and status

Alarms

Event Description	SIA Message	Zone# Identified
Null Zone (Not used)	-	-
Delay 1	BAzz/BHzz	Yes
Delay 2	BAzz/BHzz	Yes
Instant	BAzz/BHzz	Yes
Interior	BAzz/BHzz	Yes
Delay H.A.	BAzz/BHzz	Yes
Interior H.A.	BAzz/BHzz	Yes
24 Hr Burglary	BAzz/BHzz	Yes
Standard Fire	FAzz/FHzz	Yes
Delayed Fire	FAzz/FHzz	Yes
24 Hour Supervisory	UAzz/UHzz	Yes
24 Hr Supervisory Buzzer	UAzz/UHzz	Yes
24 Hr Supervisory	USzz/URzz	Yes
24 Hr Medical	MAzz/MHzz	Yes
24 Hr Panic	PAzz/PHzz	Yes
24 Hr Hold-up	HAzz/HHzz	Yes
24 Hr Gas	GAzz/GHzz	Yes
24 Hr Heat	KAzz/KHzz	Yes
24 Hr Emergency	QAzz/QHzz	Yes
24 Hr Sprinkler	SAzz/SHzz	Yes
24 Hr Water	WAzz/WHzz	Yes
24 Hr Freeze	ZAzz/ZHzz	Yes
24 Hr Latching Tamper	BAzz/BHzz	Yes
Duress Alarm	HA00	-
Opening After Alarm	OR00	-
Keypad [F]ire	FAzz/FHzz	Yes
Keypad [A]uxiliary	MAzz/MHzz	Yes
Keypad [P]anic	PAzz/PHzz	Yes

Event Description	SIA Message	Zone# Identified
PGM2:		
2 Wire Smoke	FA99/FH99	-
Audible 24 Hour	UA99/UH99	-
Silent 24 Hour	UA99/UH99	-
Zone Tamper (1-32)	TAzz	Yes
Zone Tamper Restorals (1-32)	TRzz	Yes
General System Tamper / Restore	TA00/TR00	-
Closing by Access Codes (1-32,33,34,40,41,42)	CLus	Yes
Partial Closing	CGus	Yes (using UBzz)
Opening by Access Codes (1-32,33,34,40,41,42)	OPus	Yes
Battery Trouble	YT00/YR00	-
AC Failure Trouble	AT00/AR00	-
Bell Circuit Trouble	UT99/UJ99	-
Fire Trouble	FT00/FJ00	-
Auxiliary Power Supply Trouble	YP00/YQ00	-
TLM Trouble Code (via Mobitex)	LT00	-
General System Supervisory / Restore	ET00/ER00	-
General System Trouble / Restore	YX00/YZ00	-
TLM Restoral	LR00	-
FTC Fail / FTC Restoral	YC00/YK00	-
Event Buffer 75% Full Since Last Upload	JL00	-
Periodic Test Transmission	RP00	-
Periodic Test Transmission Trouble	RP001	-
System Test	RX00	-
Mobitex Test Transmission Code (ULAA Supersion or Sure Signal test button)	TXxx	Signal Strength and Status
Zone Fault Alarm/Restoral	UTzz/UJzz	Yes
Burglary Verified	BV00	-
Delinquency Code	CD00	-
Zone Low Battery	XTzz/XRzz	Yes
Recent Closing	CR00	User NOT Identified
Zone Expander Supervisory	UA00/UH00	-
Keypad Lockout	JA00	-
Special Closing (DLS, Keys, Maint, Quick)	CL00	-
Special Opening (DLS, Keys, Maint)	OP00	-
DLS Lead In	RB00	-
DLS Lead Out (Successful)	RS00	-
Auto-Arm Cancellation	CE00	-
Mobitex Tamper Cut	TAzz/TRzz	Yes
Keybus Fault	ET00/ER00	-
Expansion Device	ETex/ERex	-

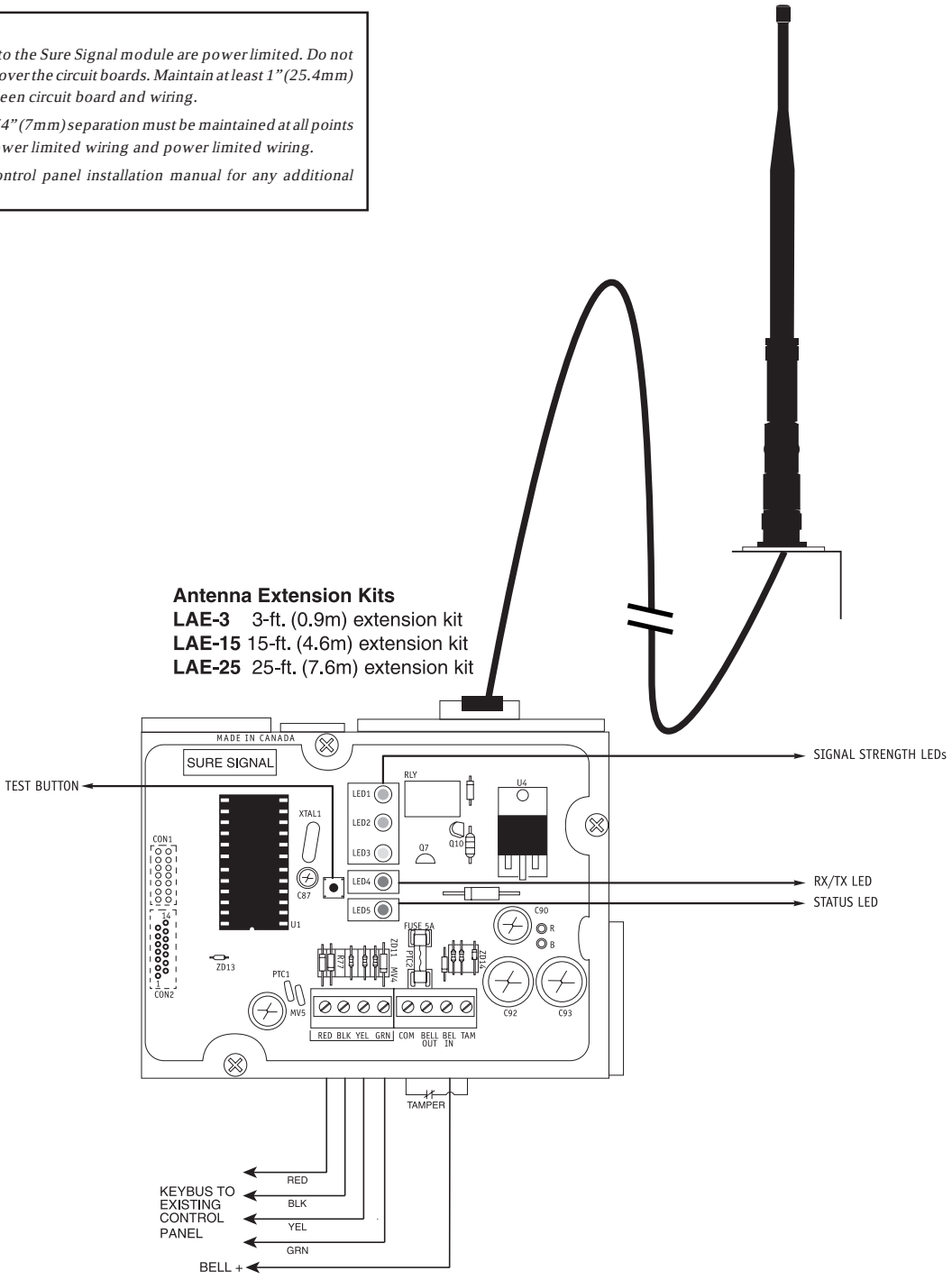
Antenna Relocation Diagram

WARNING!

All connections to the Sure Signal module are power limited. Do not route any wiring over the circuit boards. Maintain at least 1" (25.4mm) seperation between circuit board and wiring.

A minimum of 1/4" (7mm) separation must be maintained at all points between non power limited wiring and power limited wiring.

Refer to your control panel installation manual for any additional information.



Sure Signal Antenna Cable Installation.

- Power down the Sure Signal module, by removing both AC and DC power from the control panel.
- Attach one end of the extension cable to the Sure Signal unit, and attach the bracket and antenna to the other end.
- Reapply the AC and DC power to the Sure Signal unit. No reprogramming is necessary.
- Move the antenna and bracket around until you get good signal strength.
- Mount the antenna extension bracket at that location.

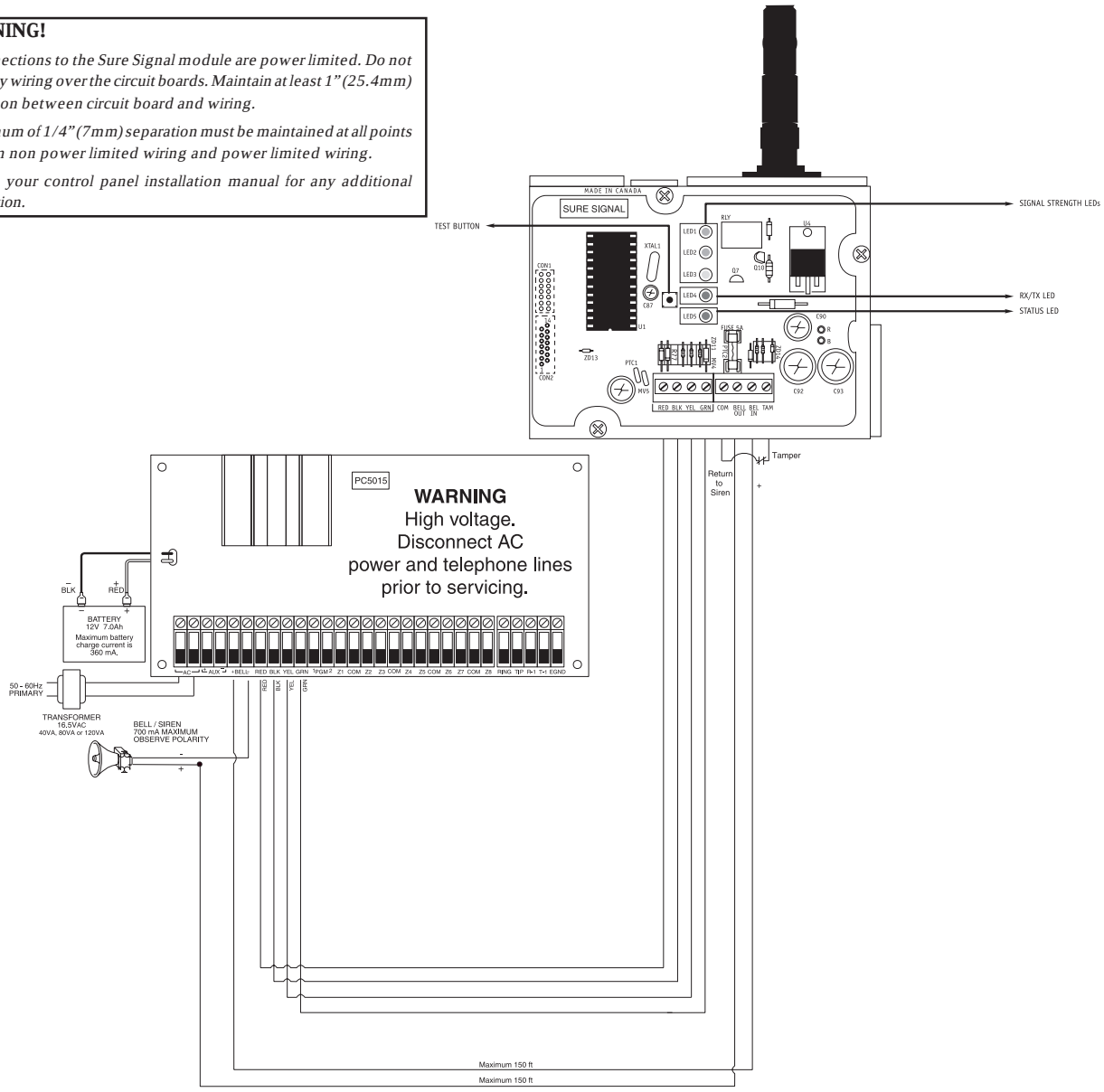
Standard Connection with DSC Control Panel

WARNING!

All connections to the Sure Signal module are power limited. Do not route any wiring over the circuit boards. Maintain at least 1" (25.4mm) seperation between circuit board and wiring.

A minimum of 1/4" (7mm) separation must be maintained at all points between non power limited wiring and power limited wiring.

Refer to your control panel installation manual for any additional information.



Sure Signal Wiring to a DSC Control Panel.

- Remove the circular knock out in the top left-hand corner of the control cabinet, and mount the Sure Signal unit in its place.
- Secure the Sure Signal module to the cabinet using the supplied screws.
- Attach the Sure Signal antenna to the unit.
- With both AC and battery disconnected removed from the DSC control panel, wire Sure Signal to the panel using 4 wires from the keybus of the panel to the RED, BLK, YEL and GRN terminals of the Sure Signal unit.
- Wire a Normally Closed tamper switch between the COM and TAM terminals of the Sure Signal unit. If a tamper switch is not going to be used place a jumper wire between the COM and TAM terminals.
- Wire the panel's BELL+ to the Sure Signal BELL IN terminal.
- Wire the panel's BELL- to the Negative (-) terminal of the Bell/Siren that is going to be used.
- From the Bell/Siren Positive (+) terminal, wire it to the Sure Signal BELL OUT terminal.
- Apply AC and DC to the main control panel. Both Sure Signal and the panel should power up.
- Do the necessary programming that is required.

NOTE: If a Bell/Siren is not going to be used, wire the Bell/Siren terminals on the panel with a 1K Ω resistor, and then only wire the BELL (+) to the BELL IN of the Sure Signal unit.

Limited Warranty

SG Wireless Communications warrants that for a period of twelve months from the date of purchase, the product shall be free from defects in materials and workmanship under normal use and that in fulfillment of any breech of such warranty, SG Wireless Communications shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of SG Wireless Communications, such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of SG Wireless Communications. SG Wireless Communications neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

In no event shall SG Wireless Communications be liable for any direct or indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

WARNING: SG Wireless Communications recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

How to Contact Us:

Sales

For information about additional products, please call our sales number: 1-888-623-7873, fax us at 1-416-665-4222 or e-mail us at sales@sur-gard.com.

Technical Support

If you have questions or problems when using Sur-Gard products, you can call technical support. If you are within the United States, Puerto Rico, the U.S. Virgin Islands or Canada, you can get support by dialing 1-888-623-7873 ext.1. If you are outside these areas, please call (416) 665-5501 ext.1, or e-mail us at support@sur-gard.com.

Internet

Visit our new Sur-Gard WWW site. You can search the Sur-Gard technical information database and read information about our new products as well as send us any questions or comments you may have. Our World Wide Web address is http://www.sur-gard.com.

A Division of the SafeLink Corporation
401 Magnetic Drive, Units #24-28
Downsview, Ontario, Canada M3J 3H9
Tel: (416) 665-0051
Fax: (416) 665-4222
Toll Free: 1-888-623-7873
www.sur-gard.com

29005740 R001
Printed in Canada