SKYROUTE™

Wireless Communications

SG SECURITY COMMUNICATIONS™

A Division of Sur-Gard Security Systems Ltd.

Installation Manual

Version 1.O

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.

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 DSC / Sur-Gard. The use of any other type will invalidate the warranty and may be dangerous.

Customer Service

For customer support please call Sur-Gard technical support at 416-665-4494 ext. 1, toll free at 1-800-503-5869 ext. 1, or e-mail support@sur-gard.com.

Skyroute Transceiver Glossary of Terms

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

Electronic Serial Number (ESN)

The ESN is used to carry data information in a Cellemetry Network

Mobile Identification Number (MIN)

A 10 digit decimal number used for registrations and pages.

Page

A transmission that is sent from the Cellemetry Gateway to the Cellemetry radio.

Registration

A transmission that is sent from the Cellemetry radio to the Cellemetry Gateway.

System Identification Number (SID)

Identification of the Cellemetry Provider.

Switch Number (SNO)

Switch number the Cellemetry radio uses to transmit pages to the Cellemetry gateway.

Clearing House

The Clearinghouse is a routing center that automatically forwards data between Skyroute transmitters and central stations.

Introducing the Skyroute Transceiver

The Skyroute transceiver offers a new wireless communication method for the transmission of event information using the Cellemetry service. Events are transmitted from the Skyroute transceiver via the Cellemetry network to the Clearing House and then to the Central Station in a fast, reliable manner. Skyroute has been designed for simple and straightforward installation. Using the Keybus technology, wiring connections are made directly between Skyroute 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

- AMPS Control Channel

Dual Path Communications

- The system can be used as the sole method of communication to the monitoring station or as a dual transmission path with the standard land line. **Please contact your monitoring station on dual signal communication.**

Antenna

- 3 – 5 dB gain, TNC connector
- Extension Kits available:
  LAE – 3 The 3 Foot Antenna Kit for Skyroute Transceiver
  LAE – 15 The 15 Foot Antenna Kit for Skyroute Transceiver
  LAE – 25 The 25 Foot Antenna Kit for Skyroute Transceiver

RF Power Output

- 3.0 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)

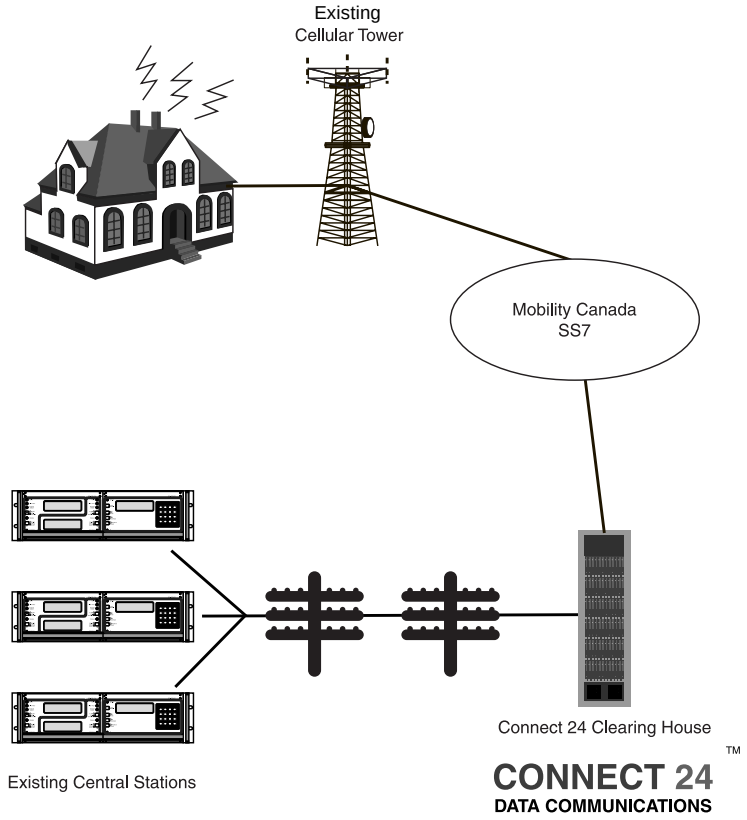
Weight

- 0.5 lbs. (0.2 kg)

How the Skyroute Transceiver Works

Cellemetry Communication

The Skyroute transceiver communicates using the control channel of the existing cellular network. Signals are routed to the Cellemetry gateway via the SS7 cellular network. A Clearing House then receives the signals which forwards the events to the central station. Upon receiving an acknowledgement signal from the central station, the Clearing House then returns a confirmation of delivery signal to the Skyroute transceiver over the network. For transmission sequence see drawing below:



Installation

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

Mounting the Skyroute Transceiver

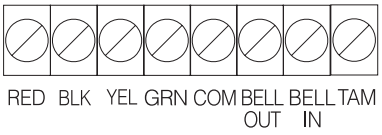
The Skyroute Transceiver can be mounted in the upper right hand corner of the panel's cabinet through the knock out. The Skyroute Transceiver case attaches to the panel's cabinet through the use of clips and two screws.

Mounting the Antenna

NOTE: The antenna should always be attached to the Skyroute Transceiver for proper operation. The unit will not function properly if the antenna is not installed.

The antenna attaches to the TNC connector of the Skyroute Transceiver. 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. The Skyroute Transceiver functions best when installed in an unobstructed "line of sight" to the cellular antenna site.

Wiring Connections



Keybus Connection

The Skyroute 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 cellemetry 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 throught the 5A fuse (F1) for protection of the radio transmitting power.

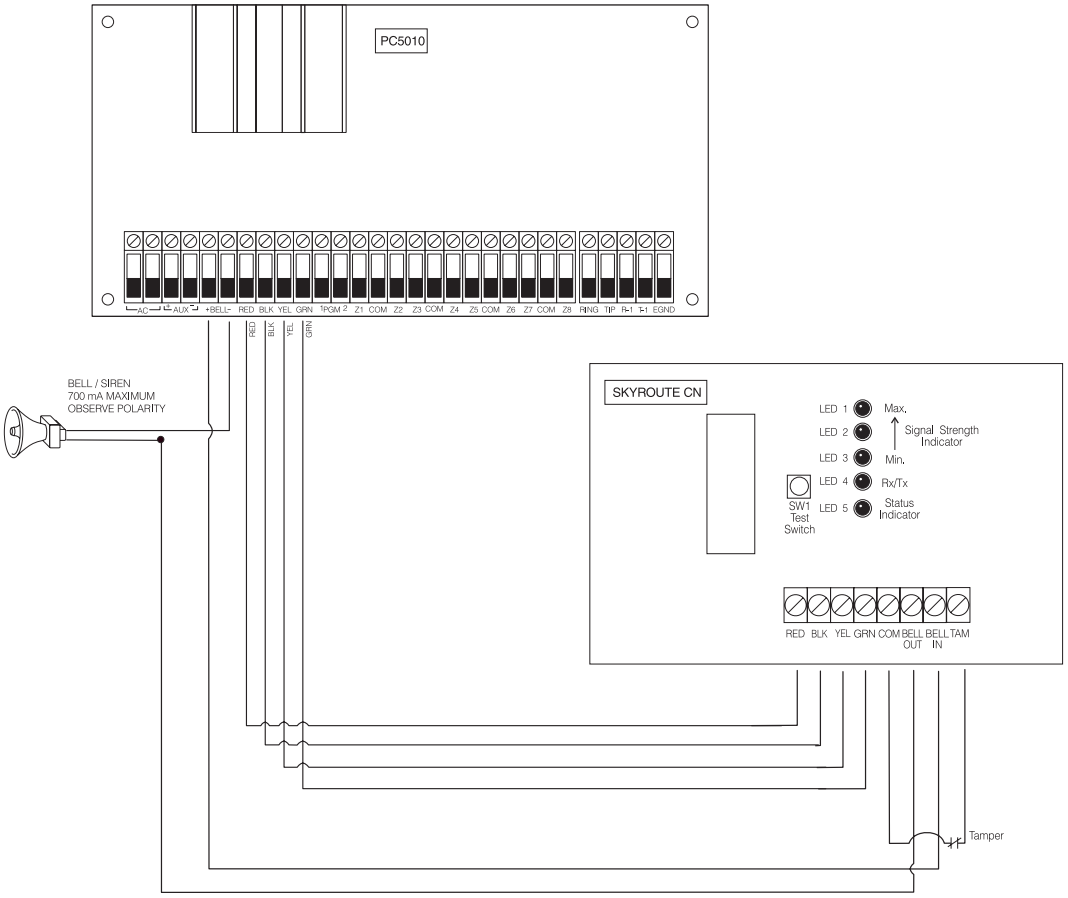
Tamper Terminal

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

Secure Installation

For a secure installation, the Skyroute Transceiver 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 TMP terminal of the Skyroute Transceiver is also suggested.

Connection Diagram



Relocating the Antenna

If a suitable location is not available for proper Cellemetry coverage, obtain an Antenna Extension Bracket kit from your DSC/Sur-gard 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 the Skyroute transceiver 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 Skyroute 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.

Relocating the Skyroute Transceiver

The Skyroute transceiver being a keybus accessory, it is possible to relocate the module up to 1000 feet from the main control panel when it is not located in a good cellemetry coverage. (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 Skyroute transceiver.
- A supervised power supply 12V@1A like the PC5204 must be used.
- The power supply (+ positive) is connected to the Skyroute transceiver (BELL IN) terminal and the power supply (–negative) to the Skyroute transceiver (COM) terminal.
- The cabinet must be installed in a secure location and should have a tamper circuit connected to the Skyroute (TMP and COM) terminals.

Programming Sections

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

Zone Definition……..Sections [01] to [05]

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

Configuration Options……Section [06]

Channel A enable/disable……option [1]

This option must be selected when the Cellemetry provider is a "A" side carrier.

Channel B enable/disable……option[2]

This option must be selected when the Cellemetry provider is a "B" side carrier. All Canadian providers are B carriers.

Home System only enable/disable…..option[3]

This option must be programmed to ensure that the Skyroute transceiver is communicating using the proper carrier. When selected, the transceiver will only use towers with the same SID. (As programmed in section [07]).

To Activate the Skyroute Module in Home Mode

1. Select a channel, A or B in address 06 (Option 1 or 2)
2. Wait for signal strength.
3. Enter in address 07 the Home SID number in Hexadecimal format.
4. Select Home Mode (Option 3) and deactivate A or B channel in address 06.

Skyroute Transceiver SID (System ID).....Section [07]

The chart below lists the different System ID for each of the territories. For proper activation of the Skyroute Transceiver the correct SID for the territory that you are in must be entered into section [07] in Hex.

System ID in		Memco	System ID in		Memco
Decimal	HEX		Decimal	HEX	
16420	4024	Bell Mobility (Ont.)	16408	4018	NBTel Mobility
16418	4022	TB Tel Mobility	16414	401E	NewTel Mobility
16420	4024	Bell Mobility (Quebec)	16430	402E	Island TelMobility
16458	404A	Quebec TelM	16410	401A	SaskTel Mobility
16422	4026	BCTEL Mobility	16384	4000	TELUS Mobility (Calgary)
16428	402C	MTS Mobility	16388	4004	TELUS Mobility (Edmonton)
16390	4006	MT & T Mobility	-	-	-

Skyroute Test Time.....Section [10]

Enter in this section the time of the day (Military Format) that you want the test transmission to be sent.

Test Transmission Day Mask.....Section [11]

Select in this section the day of the week you want the test transmission to be sent.

Skyroute Transceiver Test Rates.....Section [13]

Default			Option ON	Option OFF
OFF	I___I	Option 1	Industrial	Disabled
OFF	I___I	Option 2	Commercial and Business	Disabled
ON	I___I	Option 3	Residential and Retail	Disabled
OFF	I___I	Option 4	Keybus Tests Enabled	Keybus Tests Disabled
OFF	I___I	Options 5 to 8	For Future Use	

Transmission Options.....Section [22]

This section will enable sections of reporting codes. (See Table for different service plans.)

ON	I___I	Option 1	Alarms/Restores	Disabled
ON	I___I	Option 2	Tamper Restoral/Restores	Disabled
ON	I___I	Option 3	Supervisory/Restores	Disabled
ON	I___I	Option 4	Low Battery/Restores	Disabled
OFF	I___I	Option 5	Opening/ Closing	Disabled
OFF	I___I	Option 6	Maintenance	Disabled
OFF	I___I	Options 7 & 8	Not Used	

Table: Service Plans

Option	Default	Residential and Retail Plan	Commercial and Business Plan	Industrial Plan
1	ON	ON	ON	ON
2	ON	ON	ON	ON
3	ON	ON	ON	ON
4	ON	ON	ON	ON
5	OFF	OFF	ON	ON
6	ON	ON	ON	ON

Individual Event - Transmission Toggle.....Sections [30] to [78]

These sections are used to determine if an event will be transmitted by the Skyroute transceiver. 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 the Skyroute Transceiver

Before activating the Skyroute transceiver, ensure that the control panel is wired, programmed and operating properly. Make sure that the Skyroute transmitter is properly connected to the keybus and to the bell positive circuit. When power is applied to the system, the Skyroute 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 Skyroute module should always be performed before any other programming is done. Enter'00'in section '99'to perform the default.**

Calling Connect24

Once the Skyroute transceiver is indicating the signal strength of the network and that the status indicator (LED5) is blinking 6 times (not connected to the clearing house) you are ready to call Connect 24's Voice Response Unit. Follow the voice prompt and when asked to perform a test, press on SW1 on the Skyroute transceiver to transmit a test signal. When transmitting, LED4 blinks once. If the test is successful, the VRU will give you a confirmation and LED5 will then blink steady every half-second. Refer to Connect24 information package for more information on the activation process.

NOTE: The confirmation of a successful test from Connect24 does not guarantee proper transmission of event to your central station. You must perform normal test with your monitoring station after activation with Connect 24.

Transmitting and Receiving

LED 4 on the Skyroute module will blink once (1) to indicate the Cellular Tower has received and acknowledged the signal. It will blink twice (2) to indicate the Alarm Central Station has received and acknowledged the signal.

Skyroute Transceiver Trouble Supervision

The Skyroute Transceiver automatically monitors its operation and indicates trouble conditions by flashing LED5 on the circuit board. LED5 normally flashes once every second when the Skyroute Transceiver is on stand-by (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.

Number of Flashes	Function of Flashes
2	Radio is not powered, or not responding
4	Service is not available
6	Not connected to clearing house
5	failure to communicate
3	Failed self test
1	Radio is operating normally

(2) Radio not powered or not responding: Skyroute Transceiver initialisation of Cellemetry modem has failed.

(4) Service not available: The Cellemetry modem has failed to register with the cellular network.

(6) Not connected to Clearinghouse: The Skyroute Transceiver has not been activated.

(5) Failure to communicate: A signal has not been successfully communicated to the central station.

(3) Failed self-test: A self-test of the Cellemetry module has failed.

(1) Radio is operating normally: Skyroute Transceiver is ready to transmit.

Skyroute Transceiver Trouble Shooting

1. **Check all wiring**
   A. Make sure all the keybus connections are correct.
   B. Make sure Bell + is connected to the BELL IN of the Skyroute module.
2. **Check the LED5**
   A. Check number of flashes on LED5. If LED flashes more than once every half a second refer to table 2
   B. 6 flashes means not connected to the Clearinghouse. A failed activation attempt. Re-activate.
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 (option 24 = 60).
4. **If LED5 flashes once every half a second,** yet Skyroute Transceiver does not communicate to clearinghouse call Sur-Gard Technical support at 1-800-503-5869 ext.1 or 416-665-4494 ext.1.
5. **Before contacting technical support,** please have the following information ready: MIN number of the Skyroute unit; SID and Installer ID numbers.

[803] Skyroute Programming (PC5010/580/1555/5015)

Zone Definitions

00 Null Zone (No Alarm)	09 24 Hour Supervisory (LINKS)	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 Hold-up	21 24 Hour Latching Tamper Restoral
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	I___I___I	Zone 1	00	I___I___I	Zone 5
00	I___I___I	Zone 2	00	I___I___I	Zone 6
00	I___I___I	Zone 3	00	I___I___I	Zone 7
00	I___I___I	Zone 4	00	I___I___I	Zone 8

[02] Zone 9-16 Definitions

00	I___I___I	Zone 9	00	I___I___I	Zone 13
00	I___I___I	Zone 10	00	I___I___I	Zone 14
00	I___I___I	Zone 11	00	I___I___I	Zone 15
00	I___I___I	Zone 12	00	I___I___I	Zone 16

[03] Zone 17-24 Definitions

00	I___I___I	Zone 17	00	I___I___I	Zone 21
00	I___I___I	Zone 18	00	I___I___I	Zone 22
00	I___I___I	Zone 19	00	I___I___I	Zone 23
00	I___I___I	Zone 20	00	I___I___I	Zone 24

[04] Zone 25-32 Definitions

00	I___I___I	Zone 25	00	I___I___I	Zone 29
00	I___I___I	Zone 26	00	I___I___I	Zone 30
00	I___I___I	Zone 27	00	I___I___I	Zone 31
00	I___I___I	Zone 28	00	I___I___I	Zone 32

[05] PGM2 Definition

00 I___I___I If PGM2 is used as 2 wire smoke

[06] Skyroute Configuration Options

Default			Option ON	Option OFF
OFF	I___I	Option 1	A Channel Selected	A Channel Not Selected
ON	I___I	Option 2	B Channel Selected	B Channel Not Selected
OFF	I___I	Option 3	Home System Only	Not in Home System Operation
OFF	I___I	Options 4 to 8	For Future Use	

[07] Home SID Number

0000 I___I___I___I___I

This is the SID (in Hex) of the cellular service that is available on the current channel. See page 4 for more details.

[10] Skyroute Test Time

9999 I___I___I___I___I 0000-2359 (in Military Time)

[11] Test Transmission Day Mask

Default			Option ON	Option OFF
OFF	|___|	Option 1	Test on Sunday	Disabled
OFF	|___|	Option 2	Test on Monday	Disabled
OFF	|___|	Option 3	Test on Tuesday	Disabled
OFF	|___|	Option 4	Test on Wednesday	Disabled
OFF	|___|	Option 5	Test on Thursday	Disabled
OFF	|___|	Option 6	Test on Friday	Disabled
OFF	|___|	Option 7	Test on Saturday	Disabled
OFF	|___|	Option 8	For Future Use	

[13] Skyroute Test Rates

OFF	|___|	Option 1	Industrial	Disabled
OFF	|___|	Option 2	Commercial and Business	Disabled
ON	|___|	Option 3	Residential and Retail	Disabled
OFF	|___|	Option 4	Keybus Tests Enabled	Disabled
OFF	|___|	Options 5 to 8	For Future Use	

[22] Transmission Options

ON	|___|	Option 1	Alarms/Restores	Disabled
ON	|___|	Option 2	Tamper Restoral/Restores	Disabled
ON	|___|	Option 3	Supervisory/Restores	Disabled
ON	|___|	Option 4	Low Battery/Restores	Disabled
OFF	|___|	Option 5	Opening/ Closing	Disabled
ON	|___|	Option 6	Maintenance	Disabled
OFF	|___|	Options 7 & 8	For Future Use	

[23] Number of attempts

03 |_____| 00 – FF (in HEX)

[24] Response Wait Time

19 |_____| 00 – FF (in HEX) x10 seconds

Sections [30] to [78], if '00' is entered, then that reporting code is disabled. If 'FF' is in the section, then the default reporting code is enabled. 'FF' is the default value.

[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 Reporting Codes, Zones 1-8

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 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

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

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

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 248 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

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

[75] Maintenance Alarm Reporting Codes

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

[76] Maintenance Restoral Reporting Codes

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

[77] Miscellaneous Maintenance Restoral Reporting Codes

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

[78] Test Transmission Reporting Codes

FF	|__|__|	Periodic Test Transmission	FF	|__|__|	Skyroute Test TX Code
FF	|__|__|	System Test			

[99] Section [99] is for software defaulting of the Skyroute

CO \|__\|__\|

Entering 00 will cause a software default of the Skyroute. Entering 01-FF will cause restart of the Skyroute Transceiver. Entering any other value will not cause a default or a restart.

For Your Records

Location _____

_____

_____

_____

Skyroute MIN Number _____

Rate Plan _____

Central Station _____

Account Number _____

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 a its data transmission. Below are the Zone Alarms & Alarm Restores (Zones 01-32) as well as any additional codes that can be transmitted;

Terms:

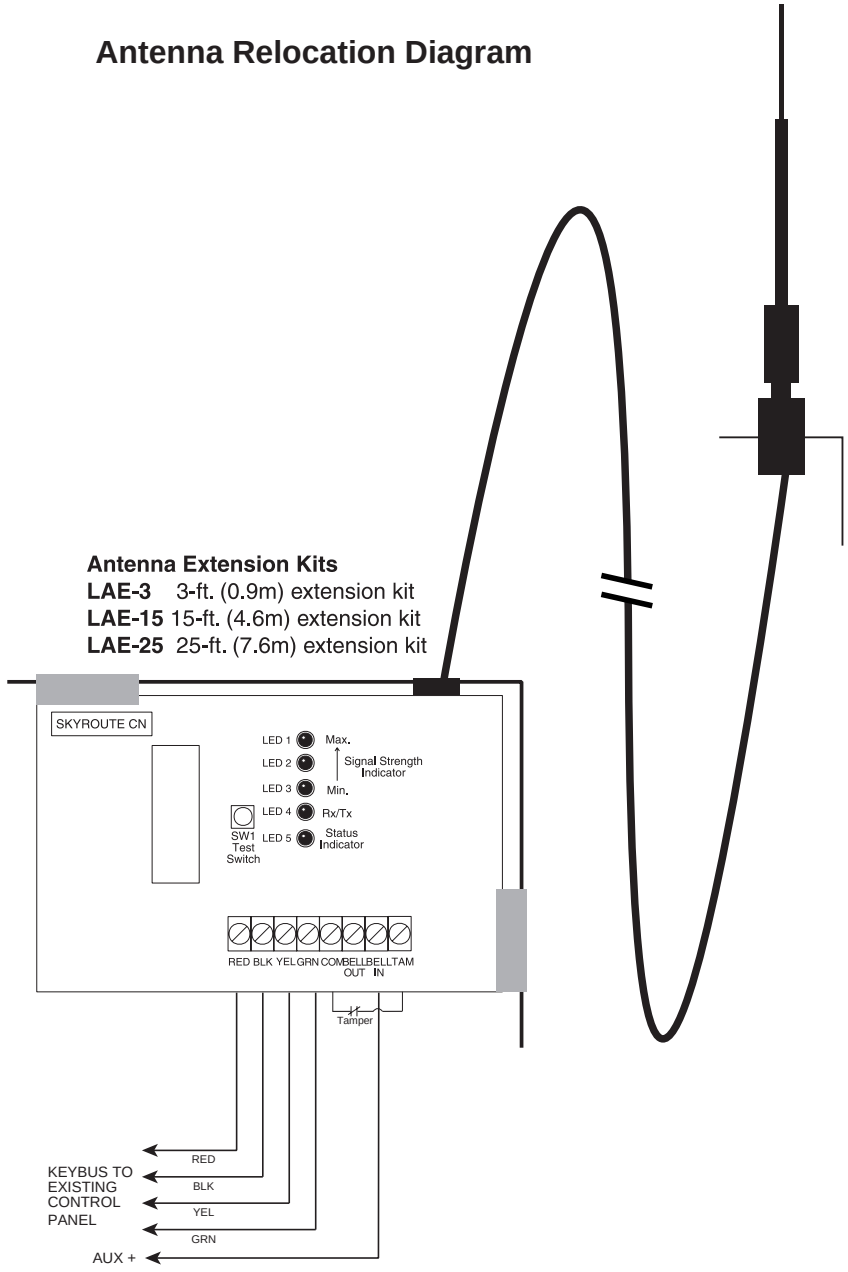
Code	Description
—	Not used
zz	Zone #
us	User #
ln	Line
ex	Expander #

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 (LINKS)	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
Momentary Keyswitch Arm	BAzz/BHzz	Yes
Maintained Keyswitch Arm	BAzz/BHzz	Yes

Event Description	SIA Message	Zone# Identified
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
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 Skyroute)	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	
System Test	RX00	
Skyroute Test Transmission Code	TX00	Signal Strength
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)	CLus	Yes (User)
Special Opening (DLS, Keys, Maint)	OPus	Yes (User)
DLS Lead In	RB00	
DLS Lead Out (Successful)	RS00	
Auto-Arm Cancellation	CE00	
Late to Close	CI00	
Skyroute Tamper Cut	TAzz/TRzz	Yes
Keybus Cut	USzz/URzz	Yes
Telephone Line Cut	LTln/LRln	
Expansion Device	ETex/ERex	

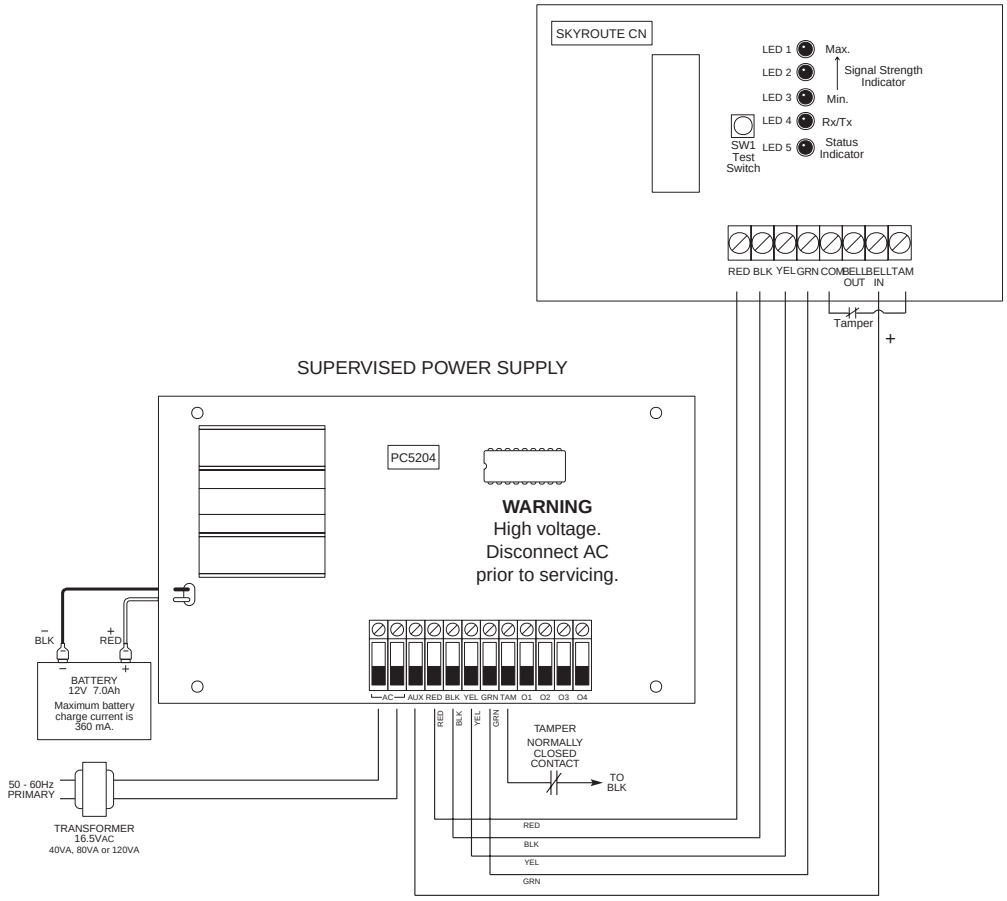
Antenna Relocation Diagram



Skyroute Antenna Cable Installation.

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

Supervised Power Supply Connection

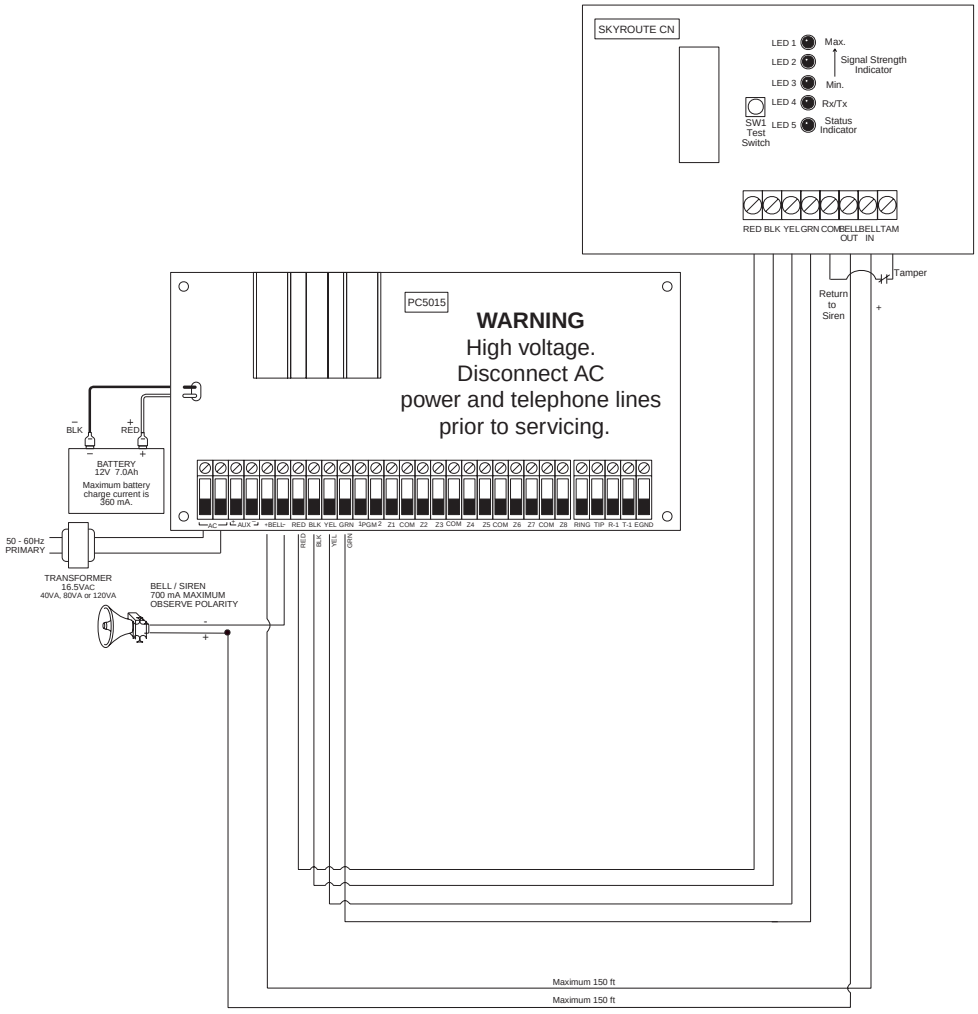


POWER REQUIREMENTS
The PC5204 requires a 16V, 40VA transformer and a 12V, 7 Ah battery.
Note: If a battery is not connected to the PC5204 an expansion trouble and a restoral will be generated every time a signal is transmitted.

CONNECTIONS
The keybus from the panel is connected to both the PC5204 and the Skyroute.
A wire is connected from the AUX terminal on the PC5204 to the BELL IN of the Skyroute.
A jumper or a normally closed switch is required between the TAM and the COM on the Skyroute.
A jumper or a normally closed switch is required between the TAM and the BLK for the Tamper of the PC5204.
Wire the positive lead of the device to the AUX + terminal.

For secure installation a tamper switch must be installed on the SKYROUTE unit.

Standard Connection with DSC Control



Skyroute Wiring to a DSC Control Panel.

- Remove the circular knock out in the top left-hand corner of the control cabinet, and mount the Skyroute unit in its place.
- Secure the Skyroute module to the cabinet using the supplied screws.
- Attach the Skyroute antenna to the unit.
- With both AC and battery disconnected removed from the DSC control panel, wire the Skyroute to the panel using 4 wires from the keybus of the panel to the RED, BLK, YEL and GRN terminals of the Skyroute unit.
- Wire a Normally Closed tamper switch between the COM and TAM terminals of the Skyroute 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 Skyroutes BELL IN terminal. This wire run must not exceeded 150ft.
- 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 Skyroutes BELL OUT terminal.
- Apply AC and DC to the main control panel. Both the Skyroute and the panel should power up.
- Do the necessary programming that is required.
- Call Connect 24's VRU to activate your Skyroute account.

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

Limited Warranty

Sur-Gard Ltd. warrants that for a period of sixty months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Sur-Gard Ltd. 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 Sur-Gard Ltd., 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 Sur-Gard Ltd. This warranty contains the entire warranty. Sur-Gard 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 Sur-Gard Ltd. be liable for any direct, 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

Sur-Gard Ltd. 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: 1-800-418-7618, 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 1-800-503-5869 ext.1. If you are outside these areas, please call (416) 665-4494 ext.1, or e-mail us at support@sur-gard.com.

Internet

Visit our new Sur-Gard WWW site. You will be able to search the Sur-Gard technical information database and read information about new products. You will also be able to send us your questions. Our World Wide Web address is http://www.sur-gard.com.

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