

SKYROUTE \max Wireless Communications

WARNING

You must be enrolled with Connect 24 before activating this unit. Call 1-888-251-7458 in the U.S. or 1-888-955-5583 in Canada





Installation Manual

Version 1.0

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FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved by SG Wireless Communications 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. FCC ID: PED-SKYROUTE MAX

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. CANADA: 363 182 256A



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

SKYROUTE MAX – QUICK INSTALL GUIDE

<u>IMPORTANT</u>: You must be enrolled with CONNECT 24 to activate a Skyroute max Transceiver. If you are not already enrolled, please call 1-888-955-5583 at least 24 hours prior to your first activation.

STEP 1 – DETERMINE BEST SIGNAL LOCATION (See Section 6.1)

Connect the Skyroute *max* to a 7 Ah battery, as described in Section 6.1. Determine the best location for signal strength. If good signal strength cannot be found, an antenna extension or relocation may be required.

STEP 2 - CONNECT THE SKYROUTE MAX TO THE PANEL (See Section 6.13)

- Mount and connect the Skyroute *max* to the control panel as shown in Section 6.13.
- Enroll Skyroute max onto the system (See section 6.15)

STEP 3 – PROGRAM THE SKYROUTE MAX (See Section 7)

Enter ***8** + **Installer Code** to enter Programming Mode. Go to section **[00][18]**, and program the following sections:

DEFAULT THE SKYROUTE MAX - Section [099]

Select the Default option as described in Section 7.1 of this manual:

- For FULL REPORTING.....enter 00 into Section [099]
- For GENERIC REPORTING.....enter 22 into Section [099]

The Skyroute max will automatically restart, and default to the new setting.

SELECT THE CELLULAR CHANNEL - Section [006]

The Skyroute *max* is defaulted for Channel B. If you require Channel A (see the SID List for the channel of the Cellular Service Provider in your area), perform the following:

• In Section [006], TURN OFF OPTION 2, and TURN ON OPTION 1 (Press # to exit section [006])

SELECT TEST TRANSMISSION TIME - Sections [010], [011], and [013]

- In Section [10], enter the transmission time-of-day in 24-hour format (HHMM).
 NOTE: Due to the volume of wireless traffic generated by test signals, please select a time which is NOT on the :30 minute marks (i.e. NOT 02:30, 04:00, etc. Select a time like 02:24, or 04:07, etc. wherever possible.
- In Section [11], select the transmission day-of-the-week. **NOTE**: This section is not to be used for UL Listed applications.
- In Section [13], select Daily or Weekly testing as required.
 NOTE: Select this option in conjunction with the CONNECT 24 Rate Plan you are using for this installation. The default setting is Weekly. For UL Listed applications Daily test reports are required.

STEP 4 – ACTIVATE THE SKYROUTE MAX WITH CONNECT 24 (See Section 7.3)

Call the Voice Response Unit (VRU) at the toll free number provided with your Dealer Confirmation.

Once activated, send two signals to your

Central Station to confirm proper operation.

YOUR SKYROUTE MAX INSTALLATION IS NOW COMPLETE. ALL OTHER PROGRAMMING SECTIONS IN THIS MANUAL ARE OPTIONAL.

Section 1 - Contents

1.1 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 technical support at 1-800-503-5869 or e-mail us at support@sur-gard.com.

1.2 Skyroute max 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 clearing house is a routing center that automatically forwards data between Skyroute *max* transmitters and central stations.

Section 2 - What's New on Version 2.1

2.1 Generic Reporting Method

2.1.1 Description

A system default must be performed before activation. This is necessary to configure the communication format. The unit can be set to Full Reporting or Generic Reporting. This is to be used on systems that have a telephone line as the primary means of communication and Skyroute *max* as a redundant. This option is not meant to make the Skyroute *max* a backup unit, but to avoid duplicate signals and large delays between signals at the central station.

2.1.2 Normal Alarm condition

(Enter 22 in Section 8.2, sub-section [099] 'Software Defaulting of the Skyroute *max*')

General reporting will send a generic alarm signal to the central station via the Cellemetry network when a zone or keypad alarm occurs. If multiple zones are activated, the first of each type will trigger the unit to transmit the generic signal. Once the Skyroute *max* has transmitted the generic signal it ignores all other zone or keypad alarms of the on the system for a programmable period. Any zone alarms of the type that trigger the general transmission during the period the timer is active will be ignored by the Skyroute *max* unit. After the timer has elapsed the unit will then resume standard operation. If a new zone alarm occurs after the timer has expired, the sequence restarts.

All other events will be transmitted via the unit if the appropriate toggle options or the reporting code are on (subsections [030] to [047].

Section 3 - What is it?

3.1 Introducing the Skyroute max Transceiver

The Skyroute *max* transceiver offers a new wireless communication method for the transmission of event information using the Cellemetry service. Events are transmitted from the Skyroute *max* transceiver via the Cellemetry network to the clearing house and then to the central station in a fast, reliable manner. Skyroute *max* has been designed for simple and straightforward installation. Using the Combus technology, wiring connections are made directly between Skyroute *max* and the security control panel.

3.2 Specifications

3.2.1 Compatible Control Panels

• DSC PC4020(CF) / Partner P-16128(CF) software version v3.2 and higher

3.2.2 Communication Method

• AMPS Control Channel

3.2.3 Dual Path Communications

• The system can be used as the sole method of communication to the central station or as a second transmission path in addition to the standard land line. **Please contact your central station on**

dual signal communication.

• Automation system at central station must be able to suppress redundant signals.

3.2.4 Antenna

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

LAE – 15 The 15 Foot Antenna Kit for Skyroute *max* Transceiver

LAE – 25 The 25 Foot Antenna Kit for Skyroute *max* Transceiver

3.2.5 RF Power Output

• 3.0 Watts maximum

3.2.6 Power Supply Ratings

- 12 VDC @30mA, from panel Combus, DSC Combus control panel required (PC4020 v3.2 and higher)
- 12 VDC, from bell circuit Current in standby 90 mA Current when receiving 135 mA Current when transmitting 1.3A
- For DSC control panels the required minimum transformer is a 16V_{AC} 40 VA. The minimum battery requirement is 12V_{DC} 7 Ah.

3.2.7 Dimension

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

3.2.8 Weight

• 0.5 lbs. (0.2 kg)

3.2.9 Operating Temperature

- 0°C 49°C (32°F 120°F)
- 85% humidity, non-condensing

Section 4 - How does it work?

4.1 Cellemetry Communication

The Skyroute *max* 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 and 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 *max* transceiver over the network. For transmission sequence see drawing below:

- The Skyroute *max* reads the system activity directly from the Combus. It also sends the corresponding signals over the cellular network, depending on what you have the Skyroute *max* programmed to send.
- The Skyroute *max* cannot be programmed as a land line backup communicator. It will transmit all signals to the central station in parallel with the land line communicator.
- Skyroute *max* can be reprogrammed for full or generic reporting (see Section 7.1 Defaulting).
- The Skyroute *max* does not consider the signal to be received at the central station until it receives confirmation from the clearing house. Relay between signals can be up to 60 seconds apart.



Section 5 - What do I do before installing a Skyroute *max* transceiver?

CONNECT 24 is your Skyroute max Cellemetry service provider.

If you have not yet enrolled as a Skyroute *max* dealer, you must do so at least 1 business day before your **first** Skyroute *max* installation. Note: If you do not have the numbers required below, please call Connect 24 at 1-888-251-7458 "Dealer Enrolment".

Activation of your Skyroute *max* transmitter can be accomplished in minutes, at any time 24 hours a day, 365 days a year, by calling our toll-free CONNECT 24 **Voice Response Unit**. This guide will provide you with an example of what to expect when you are using the VRU.

Before you begin, make sure you have all of the information that you will need to enter into the VRU system.

What you will need...

- The **Profile Number** for your installation The five digit Profile Number represents the Central Station Receiver/Rate Plan combination and the communication format you are using. **Make sure that** you know which profile number to use when doing an installation.
- Your Installer ID Number

Each individual installer who was listed on your Dealer Enrolment Form was given an eight or nine digit unique Installer ID Number. This number can be found on the Authorized Installer Card sent with the Dealer Confirmation Form.

Your Installer PIN

Each installer provided a four digit Personal Identification Number (PIN) on the Dealer Enrolment Form. If you have forgotten your PIN, please contact CONNECT 24. • The **Central Station Account Number** for the alarm system

This is the account number that you wish to be transmitted to the central station. If the profile is set to send SIA format, enter a maximum of six digits; if Contact ID format, enter a maximum of four digits.

- The **Skyroute max MIN** (Mobile Identification Number) The MIN identifies the Skyroute max transmitter. The 10 digit MIN is located on the label affixed to your Skyroute max transmitter.
- The **System ID Number** (SID) for the cellular provider in your area

The five digit System ID Number tells CONNECT 24 (and the cellular network) the **home area** in which your transmitter is installed. When you program this number into the DSC alarm panel, it is entered in HEX format. However, when entering this number into the CONNECT 24 VRU, it is entered in DECIMAL format.

Note: For US locations, please refer to the "U.S.A. SID List - By State" document which comes with each Skyroute max as a separate booklet.

Section 6 - Installing a Skyroute max transceiver

Time-Saving Tips: By powering up the Skyroute max on a battery alone (battery red to Bell and Combus red, battery black to Combus black), you can quickly determine a location where your signal strength is strong prior to installing the unit. The Skyroute max does not have to be active to show signal strength.

6.1 Location of the Skyroute *max* Unit

It is very important to determine the best location for maximum signal strength.

Verify signal strength prior to installation!



6.2 Relocating the Skyroute *max* Transceiver

Since the Skyroute *max* transceiver is a Combus 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 cellemetry 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. Combus (Red, Black, Yellow, Green) from the panel to the Skyroute *max* transceiver.
- A UL1481 Listed power supply <u>12V@1.5A</u> (PS4350) must be used for UL installations.
- The power supply (+ positive) is connected to the Skyroute *max* transceiver (BELL IN) terminal and the power supply (–negative) to the Skyroute *max* transceiver (COM) terminal.
- The cabinet must be installed in a secure location and should have a tamper circuit connected to the Skyroute *max* (TAM and COM) terminals.



6.3 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
_AE-3	3 feet (0.91 m)
_AE-15	15 feet (4.57 m)
_AE-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 *max* 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 *max* 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.

Antenna Relocation Diagram



Skyroute max Antenna Cable Installation.

• Power down the Skyroute max module, by removing both AC and DC

- power from the control panel.
- Attach one end of the extension cable to the Skyroute max unit,
- and attach the bracket and antenna to the other end. • Reapply the AC and DC power to the Skyroute max 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.

6.4 UL Requirements

6.4.1 Grade A - Central Station

- Programming [013] Option 2 Test Rates must be "ON".
- Every 24 hours a checking signal must be sent to the central station. Refer to compatible Listed control unit's installation instructions for programming.
- Dialing attempts must be programmed for 5 to 10 attempts. Skyroute max transmitter makes 4 attempts which is not programmable. Refer to compatible Listed control unit's installation instructions for programming.
- Alarm signals must be sent over both primary and secondary communication paths -
 - 1. Compatible Listed control unit's land line to central station.
 - 2. Skyroute max transmission through Cellemetry to the clearing house (Connect 24).

6.4.2 Police Station Connect with Basic Line Security

- Programming [013] Option 2 Test Rates must be "ON".
- Every 24 hours a checking signal must be sent to the central station. Refer to compatible Listed control unit's installation instructions for programming.
- Dialing attempts must be programmed for 5 to 10 attempt. Skyroute *max* transmitter makes 4 attempts which is not programmable. Refer to compatible Listed control unit's installation instructions for programming.
- Alarm signals must be sent over both primary and secondary communication paths -
 - 1. Compatible Listed control unit's land line to central station.
 - 2. Skyroute max transmission through Cellemetry to the clearing house (Connect 24).

6.5 Installation

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

6.6 Mounting the Skyroute **max** Transceiver

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

6.7 Mounting the Antenna

NOTE: The antenna should always be attached to the Skyroute max **transceiver for proper operation. The unit** <u>will not</u> **function properly if the antenna is not installed.**

The antenna attaches to the TNC connector of the Skyroute *max* transceiver. The antenna should be mounted as high above ground level as possible while at the same time should be taken 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 *max* transceiver functions best when installed in an unobstructed line of sight to the cellular antenna site.

6.8 Combus Connection

The Skyroute *max* transmitter has 4 terminals marked red, black, yellow and green. Connect these four terminals to the 4 terminals on the main control panel marked Combus (red, black, yellow and green).

6.9 Bell IN Terminal

This terminal is used to power the cellemetry modem of the Skyroute *max*. 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.

6.10 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 for protection of the radio transmitting power.

6.11 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.

6.12 Secure Installation

For a secure installation, the Skyroute *max* transceiver 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 Skyroute *max* transceiver is also suggested.

6.13 Connection Diagrams

Standard Connection with PC4020 / Partner P-16128 (Non-Commercial Fire Applications)



Standard Connection with PC4020CF / Partner P-16128 (Commercial Fire Applications)

WARNING!

All connections to the Skytoute max module are power limited. Do not route any wiring over the circuit boards. Maintain at least 1" (25.4mm) separation 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.



Wiring Skyroute max to a DSC PC4020 CF

- Remove the circular knock out in the top right -hand corner of the control cabinet,
- and mount the Skyroute max unit in its place.
- Secure the Skyroute max module to the cabinet using the supplied screws.
- Attach the Skyroute max antenna to the unit
- With both AC and battery disconnected removed from the DSC control panel, wire the Skyroute *max* to the panel using 4 wires from the combus of the panel to the RED, BLK, YEL and GRN terminals of the Skyroute *max* unit.
- Wire a Normally Closed tamper switch between the COM and TAM terminals of
- the Skyroute max 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 Skyroute max BELL IN terminal.
- Apply AC and DC to the main control panel. Both the Skyroute max and the panel should power up.
- Do the necessary programming that is required.
- Call Connect 24's VRU to activate your Skyroute max account.

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 Skyroute *max* unit. When a bell/siren is used in the application, it should be connected to the DSC module PC4702BP. Please refer to the PC4020 *Installation Manual*. The keypad or any other accessory connected to the Combus shall be connected within 3 feet and in conduit.

Battery Lead and AC Power Lead Routing for UL Listed Commercial Fire Systems



6.14 Wiring Skyroute *max* to a DSC/Partner Control Panel

- Remove the circular knockout in the top left corner of the control panel cabinet. Mount the Skyroute *max* unit in its place.
- Secure the Skyroute *max* module to the cabinet using the supplied screws.
- Attach the Skyroute max antenna to the unit.
- Disconnect and remove the AC and battery power from the control panel. Wire the red, black, yellow and green wires from the panel Keybus to the corresponding RED, BLK, YEL and GRN terminals on the Skyroute *max* transceiver.
- Wire a normally closed tamper switch between the COM and TAM terminals of the Skyroute *max* module. If a tamper switch is not going to be used, place a jumper wire between the COM and TAM terminals.
- Wire the BELL+ terminal of the panel to the BELL IN terminal of the Skyroute *max* unit. The wire run must not exceed 150 ft. / 45.5 m.
- Wire the BELL- terminal of the panel to the negative (-) terminal of the bell/siren.
- Wire the BELL+/SIREN+ terminal of the panel to the BELL OUT terminal of the Skyroute *max* transceiver.
- Apply AC and DC power to the control panel. Power up both the Skyroute *max* module and the panel.
- Do the programming if it is required.
- Call the Connect 24 VRU (Voice Response Unit) to activate your Skyroute *max* account.

NOTE: If a bell or siren is not going to be used in the system, wire the BELL/SIREN terminals on the panel with a 1000 Ohm resistor. Then wire only the BELL+ terminal of the panel to the BELL IN terminal of the Skyroute max module.

6.15 Supervised Power Supply Connection

Power Requirements

The PC4204 requires a 16V, 40 VA transformer and a 12V, 7 Ah battery.

NOTE: If a battery is not connected to the PC4204, and expansion trouble and a restoral will be generated every time a signal is transmitted.

Connections

- The Combus from the panel is connected to both the PC4204 and the Skyroute *max* transceiver.
- A wire is connected from the AUX terminal on the PC4204 to the BELL IN of the Skyroute *max* transceiver.
- A jumper or a normally closed switch is required between the TAM and the COM terminals on the Skyroute *max* transceiver.
- A jumper or a normally closed switch is required between the TAM and the BLK terminals for the tamper of the PC4204.
- Wire the positive lead of the device to the AUX+ terminal.
- Connect a 1000 Ohm resistor between AUX+ and O1 terminals.

NOTES: for secure installation a tamper switch must be installed on the Skyroute max module.

Using PC4204 power supply module for this configuration is not UL Listed. A UL1481 Listed power supply 12V/1.5A (e.g., PS4350) must be used for UL Listed applications.

6.16 Enroll Skyroute max onto the system

Once all the wiring is complete, you must enroll the module:

- Enter installer's programming by pressing [*] [8] [Installer's Code]
- Scroll to "Module Hardware" and press the [*] key.
- Scroll to "Enroll Module" and press the [*] key.
- Scroll through the different modules until "Alternate Comms" is displayed. Press the [*] key.
- The message "Create Tamper on Desired Unit" will be displayed. To create the required tamper, secure the tamper zone on the module and then open it. The transition from secure to violated enrolls the module. After this is done, the keypad will display the module number and confirm enrollment "Alternate Comms Mod 01 Enrolled".

For more information regarding module enrollment, see the control panel *Installation Manual*.



Section 7 - Programming and Activating a Skyroute max

7.1 Defaulting

This product must be defaulted BEFORE programming/ activating.

Select the type of default as follows:

7.1.1 Full Reporting

- Entering 00 in subsection [099]
 - 1. A complete default of the system is performed
 - 2. All group reporting sections, [030] through [047] are automatically programmed by the Skyroute *max* transceiver.

7.1.2 Generic Reporting with Fallback to Full Reporting NOTE: When the system is defaulted for Generic Reporting the transmission options are as follows. If a signal group is required, activate the corresponding option.

[030] System Events (Partition 0) Transmission Options Section A

Default	Option	ON	OFF
ON	1	Alarms	Disabled
OFF	2	Alarm Restorals	Disabled
OFF	3	Tampers	Disabled
OFF	4	Tamper Restorals	Disabled
OFF	5	Closings	Disabled
OFF	6	Openings	Disabled
OFF	7	Maintenance Alarms	Disabled
OFF	8	Maintenance Alarm Restorals	Disabled

[031] System Events (Partition 0) Transmission Options

Defaul	t	Option	ON	OFF
ON		1	Trouble	Disabled
OFF		2	Trouble Restorals	Disabled
OFF		3	Bypass	Disabled
OFF		4	Unbypass	Disabled
OFF		5	Supervisory Alarm	Disabled
OFF		6	Supervisory Restoral	Disabled
OFF		7	Access Control	Disabled
OFF		8	Miscellaneous	Disabled

7.2 Programming Options

All programming on the Skyroute *max* transceiver 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 [00][18] to go to the Skyroute *max* programming sections.

Sub-sections [006] to [013] apply to all installations.

Sub-sections [030] to [047] are only relevant when using the Skyroute *max* for Full Reporting. These sections are not relevant when using the Skyroute *max* for Generic Reporting only.

7.2.1 Basic Transceiver Programming (applies to all installation)

Configuration Options: Sub-section [006]

- Channel A enable/disable.....option [1] This option must be selected when the Cellemetry provider is an "A" side carrier.
- Channel B enable/disable.....option[2] This option must be selected when the Cellemetry provider is a "B" side carrier.
- Home system only enable/disable...option[3] This option must be programmed to ensure that the Skyroute max transceiver is communicating using the proper carrier. When selected, the transceiver will only use towers with the same SID (as programmed in section [007]).
 NOTE: For US locations please refer to 'U.S.A. SID List -By State'. For Canadian locations please select channel B.

- To activate the Skyroute *max* module in Home mode:
 - 1. Select a channel, A or B, in address [006] (Option 1 or 2) 2. Wait for signal strength.
 - 3. Enter in address [007] the Home SID number in hexadecimal format.
 - 4. Select Home mode (Option 3) and deactivate A or B channel in address [006].

NOTE: After changing sub-section [006] or [007] a restart is required. Enter [FF] in section [099]. Skyroute max transceiver SID (System ID): Sub-section

[007] [007]

Please refer to the SID table included with the Skyroute *max* module to find the SID number for your area.

Skyroute max Test Time: Sub-section [010] In this section enter the time of the day (24 hour format)

when you want the test transmission to be sent.

Test Transmission Day Mask: Sub-section [011]

In this section select the day of the week on which you want the test transmission to be sent.

NOTE: This option cannot be used for UL Listed installations.

7.2.2 Advanced Programming Individual Event - Transmission Toggle:

Sub-sections [030] to [047]

These sections are used to determine if an event will be transmitted by the Skyroute *max* transceiver. If toggled to OFF, that event will not be transmitted. If ON is programmed, the event will be transmitted.

7.3 Activating a Skyroute max Transceiver

Before activating the Skyroute *max* transceiver, ensure that the control panel is wired, programmed and operating properly. Make sure that the Skyroute *max* transmitter is properly connected to the Combus and to the bell (+ positive) circuit. When power is applied to the system, the Skyroute *max* will perform self-diagnostics for a few seconds, before giving visual feedback by indicating signal strength on LED1, LED2 or LED3.

7.3.2 Calling Connect 24

Once the Skyroute *max* transceiver is indicating the signal strength of the network, and the status indicator (LED5) is blinking 6 times (not connected to the clearing house), you are ready to call Connect 24 Voice Response Unit. Follow the voice prompt and when asked to perform a test, press SW1 on the Skyroute *max* 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 second. Refer to the Connect 24 information package for more information on the activation process. Phone number for VRU:

• CANADA: 1-877-759-7688 • U.S.: 1-888-251-7554

NOTE: The confirmation of a successful test from Connect 24 <u>does not guarantee</u> proper transmission of the event to your central station. <u>You must perform normal tests with</u> your central station after activation with Connect 24.

7.3.3 Transmitting and Receiving

LED4 on the Skyroute *max* module will blink once (1) to indicate the cellular tower has received the signal. It will blink twice (2) to indicate the alarm central station has received and acknowledged the signal.

7.3.4 Skyroute max Transceiver Trouble Supervision The Skyroute max transceiver automatically monitors its operation and indicates trouble conditions by flashing LED5 on the circuit board. LED5 normally flashes once every 2 seconds when the Skyroute max transceiver is on standby (ready to transmit) mode. Troubles are indicated when LED5 flashes more than once every 2 seconds. See 'Location of the Skyroute max Unit' section for the number of flashes used to indicate each trouble condition in order of importance.

Section 8 - Skyroute *max* Programming with PC4020/P-16128

8.1 Basic Programming ([00][18] Skyroute max Programming - Applies to all installations)

[006]	Skyro	ute max	Configuration C	Options	
Γ	Default		-	Option ON	Option OFF
C	OFF		Option 1	A Channel Selected	A Channel Not Selected
C	DN		Option 2	B Channel Selected	B Channel Not Selected
(OFF		Option 3	Home System Only	Not in Home System Operation
C	OFF	<u> </u>	Options 4 to 8	For system use; do not modify.	
[007]	Home	SID Nu	mber		
E	Default				
C	0000	<u> </u>	<u> </u>	This is the SID (in Hex) of the on the current channel.	cellular service that is available
[010]	Skyro	ute <i>max</i>	Test Time		
Γ	Defaul	t			
ç	9999			Valid entries: 0000-2359 (in	24 hour time)
				NOTE: Keypad will display EN enter 9999.	IT HEX. To disable this Test Time feature,
[011]	Test T	ransmis	sion Day Mask		
Γ	Default			Option ON	Option OFF
(OFF		Option 1	Test on Sunday	Disabled
C	OFF		Option 2	Test on Monday	Disabled
C	OFF		Option 3	Test on Tuesday	Disabled
C	OFF		Option 4	Test on Wednesday	Disabled
C	OFF		Option 5	Test on Thursday	Disabled
C	OFF		Option 6	Test on Friday	Disabled
C	OFF		Option 7	Test on Saturday	Disabled
C	OFF	LI	Option 8	For Future Use	
[013]	Skyrou	ute max	Test Rates		
Γ	Default				
C	OFF		Option 1	For Future Use	
(OFF*		Option 2	Daily Test	Disabled
(DN		Option 3	Weekly Test	Disabled
(OFF		Options 4 to 8	For Future Use	
•	' Optio	on 2 mus	t be ON for UL Lis	sted applications.	

8.2 Advanced Programming

Sub-sections [030] to [047] will disable groups of reporting codes.

[030] System Event (Partition 0) Transmission Options Section A

[]	Defeult		(
1		1 1	Option 1	Alarms	Disabled
	OFF	·	Option 7	Alarm Restorals	Disabled
	OFF	·	Option 3	Tampers	Disabled
	OFF		Option 4	Tamper Restorals	Disabled
	OFF	L!	Option 5		Disabled
			Option 5	Openings	Disabled
		<u></u>	Option 7	Maintonanco Alarmo	Disabled
				Maintenance Alarms	Disabled
	ON	L]	Option 8	Maintenance Alarm Restorais	Disabled
[031]	Systen	n Events	(Partition 0) Tra	ansmission Options Section B	
	OŇ		Option 1	Trouble	Disabled
(ON		Option 2	Trouble Restorals	Disabled
(OFF		Option 3	Bypass	Disabled
(OFF		Option 4	Unbypass	Disabled
(OFF		Option 5	Supervisory Alarm	Disabled
(OFF		Option 6	Supervisory Restoral	Disabled
(OFF		Option 7	Access Control	Disabled
	OFF	LI	Option 8	Miscellaneous	Disabled
[032]	Partiti	on 1 Tra	nemission Onti	one Section A	
	ON		Option 1	Alarms	Disabled
	OFF		Option 2	Alarm Restorals	Disabled
	OFF	 	Option 3	Tampers	Disabled
	OFF		Option 4	Tamper Restorals	Disabled
	OFF		Option 5	Closings	Disabled
	ON		Option 6	Openings	Disabled
	ON		Option 7	Maintenance Alarms	Disabled
	ON		Option 8	Maintenance Alarm Restorals	Disabled
		. –			
[033]	Partiti	on 1 Tra	Insmission Optio	DNS Section B	Dischlad
			Option 1	Trouble Destarals	Disabled
			Option 2	Provide Restorais	Disabled
			Option 3	bypass	Disabled
			Option 4		Disabled
			Option 5	Supervisory Alarm	Disabled
			Option 6	Supervisory Restoral	Disabled
			Option 7	Access Control	Disabled
	Orr	LJ	Option 8	Miscellaneous	Disabled
[034]	Partiti	on 2 Tra	Insmission Option	ons Section A	
	ON	<u> </u>	Option 1	Alarms	Disabled
(OFF		Option 2	Alarm Restorals	Disabled
	OFF		Option 3	Tampers	Disabled
(OFF		Option 4	Tamper Restorals	Disabled
(OFF		Option 5	Closings	Disabled
(ON		Option 6	Openings	Disabled
(ON		Option 7	Maintenance Alarms	Disabled
	ON		Option 8	Maintenance Alarm Restorals	Disabled

			4	
De	fault	Oration 1	Option ON	Option OFF
		Option 1		Disabled
		Option 2		Disabled
Or		Option 3	Bypass	Disabled
Or		Option 4	Unbypass Sum an is any Alama	Disabled
OF		Option 5	Supervisory Alarm	Disabled
Or		Option 6	Supervisory Restoral	Disabled
Or		Option 7	Access Control	Disabled
OF	r []	Option 8	Miscellaneous	Disabled
[036] Pa	artition 3 T	ransmission (Options Section A	
ON		Option 1	Alarms	Disabled
OF	F []	Option 2	Alarm Restorals	Disabled
OF	F []	Option 3	Tampers	Disabled
OF	F []	Option 4	Tamper Restorals	Disabled
OF	F []	Option 5	Closings	Disabled
ON		Option 6	Openings	Disabled
ON	N []	Option 7	Maintenance Alarms	Disabled
ON	N []	Option 8	Maintenance Alarm Restorals	Disabled
[037] P	artition 3 T	ransmission	Options Section B	
ON	N []	Option 1	Trouble	Disabled
ON	N []	Option 2	Trouble Restorals	Disabled
OF	F []	Option 3	Bypass	Disabled
OF	F []	Option 4	Unbypass	Disabled
OF	F []	Option 5	Supervisory Alarm	Disabled
OF	F []	Option 6	Supervisory Restoral	Disabled
OF	F []	Option 7	Access Control	Disabled
OF	F []	Option 8	Miscellaneous	Disabled
[038] P	artition 4 T	ransmission	Options Section A	
ON	N []	Option 1	Alarms	Disabled
OF	F []	Option 2	Alarm Restorals	Disabled
OF	F []	Option 3	Tampers	Disabled
OF	F []	Option 4	Tamper Restorals	Disabled
OF	F []	Option 5	Closings	Disabled
ON	N []	Option 6	Openings	Disabled
ON	N []	Option 7	Maintenance Alarms	Disabled
O	N []	Option 8	Maintenance Alarm Restorals	Disabled
[039] P	artition 4 T	ransmission	Options Section B	
ON	N []	Option 1	Trouble	Disabled
ON	N []	Option 2	Trouble Restorals	Disabled
OF	F []	Option 3	Bypass	Disabled
OF	F []	Option 4	Unbypass	Disabled
OF	F []	Option 5	Supervisory Alarm	Disabled
OF	F []	Option 6	Supervisory Restoral	Disabled
OF	F []	Option 7	Access Control	Disabled
OF	F []	Option 8	Miscellaneous	Disabled

[035] Partition 2 Transmission Options Section B

[040] Pá	artition 5 T	ransmission (Options Section A	
De	fault		Option ON	Option OFF
ON		Option 1	Alarms	Disabled
OF	F []	Option 2	Alarm Restorals	Disabled
OF	F []	Option 3	Tampers	Disabled
OF	F []	Option 4	Tamper Restorals	Disabled
OF	F []	Option 5	Closings	Disabled
ON		Option 6	Openings	Disabled
ON		Option 7	Maintenance Alarms	Disabled
ON		Option 8	Maintenance Alarm Restorals	Disabled
[041] Pa	artition 5	Fransmission	Options Section B	
ON		Option 1	Trouble	Disabled
ON		Option 2	Trouble Restorals	Disabled
OF	F []	Option 3	Bypass	Disabled
OF	F	Option 4	Unbypass	Disabled
OF	F []	Option 5	Supervisory Alarm	Disabled
OF	F []	Option 6	Supervisory Restoral	Disabled
OF	F	Option 7	Access Control	Disabled
OF	F []	Option 8	Miscellaneous	Disabled
[042] Pá	artition 6 T	ransmission (Options Section A	
ON		Option 1	Alarms	Disabled
OF	F []	Option 2	Alarm Restorals	Disabled
OF	F []	Option 3	Tampers	Disabled
OF	F []	Option 4	Tamper Restorals	Disabled
OF	F []	Option 5	Closings	Disabled
ON		Option 6	Openings	Disabled
ON		Option 7	Maintenance Alarms	Disabled
ON		Option 8	Maintenance Alarm Restorals	Disabled
[043] Pá	artition 6 T	ransmission (Options Section B	
ON		Option 1	Trouble	Disabled
ON		Option 2	Trouble Restorals	Disabled
OF	F []	Option 3	Bypass	Disabled
OF	F []	Option 4	Unbypass	Disabled
OF	F []	Option 5	Supervisory Alarm	Disabled
OF	F []	Option 6	Supervisory Restoral	Disabled
OF	F []	Option 7	Access Control	Disabled
OF	F []	Option 8	Miscellaneous	Disabled
[044] Pá	artition 7 T	ransmission (Options Section A	
ON		Option 1	Alarms	Disabled
OF	F []	Option 2	Alarm Restorals	Disabled
OF	F []	Option 3	Tampers	Disabled
OF	F []	Option 4	Tamper Restorals	Disabled
OF	F []	Option 5	Closings	Disabled
ON		Option 6	Openings	Disabled
ON		Option 7	Maintenance Alarms	Disabled
ON		Option 8	Maintenance Alarm Restorals	Disabled

[040] D ****i***i БΤ. JECI Onti Section A

Defa	ault		Option ON	Option OFF
ON		Option 1	Trouble	Disabled
ON		Option 2	Trouble Restorals	Disabled
OFF		Option 3	Bypass	Disabled
OFF		Option 4	Unbypass	Disabled
OFF		Option 5	Supervisory Alarm	Disabled
OFF		Option 6	Supervisory Restoral	Disabled
OFF		Option 7	Access Control	Disabled
OFF		Option 8	Miscellaneous	Disabled
[046] Pa	rtition 8 T	ransmission C	Options Section A	
Defa	ault		Option ON	Option OFF
ON		Option 1	Alarms	Disabled
OFF		Option 2	Alarm Restorals	Disabled
OFF		Option 3	Tampers	Disabled
OFF		Option 4	Tamper Restorals	Disabled
OFF		Option 5	Closings	Disabled
ON		Option 6	Openings	Disabled
ON		Option 7	Maintenance Alarms	Disabled
ON	LI	Option 8	Maintenance Alarm Restorals	Disabled
[047] Pa	rtition 8 T	ransmission C	Options Section B	
Defa	ault		Option ON	Option OFF
ON		Option 1	Trouble	Disabled
ON		Option 2	Trouble Restorals	Disabled
OFF		Option 3	Bypass	Disabled
OFF		Option 4	Unbypass	Disabled
OFF		Option 5	Supervisory Alarm	Disabled
OFF		Option 6	Supervisory Restoral	Disabled
OFF		Option 7	Access Control	Disabled
OFF		Option 8	Miscellaneous	Disabled

[045] Partition 7 Transmission Options Section B

NOTE: Default must be performed before activating the Skyroute max.

[099] Section [099] is for software defaulting of the Skyroute max.

- Default
- 63 |___|

*Entering 00 will cause a software default of the Skyroute max.

- *Entering 22 will cause a software default of the Skyroute *max* to Generic reporting.
- *Entering FF will cause restart of the Skyroute *max* transceiver.

Section 9 - Testing

Testing your control to the Central Station

Be sure to perform normal tests with your central station via the land line.

There is a 1-minute delay between each signal sent by the Skyroute *max* transmitter.

For example: If you trip 3 zones and you have the Skyroute *max* mode programmed to send the alarm and restoral reporting codes for each zone (6 signals in total), it will take about 5 minutes for all the signals to go through. The first signal goes through immediately. There will be a 1-minute delay before the second signal is sent and another 1-minute delay before the third signal is sent, etc.

Section 10 - Troubleshooting

Problem: Solution:	 LED5 is blinking 2 times - Radio is not powered Make sure that BELL(+) on the panel is connected to BELL IN on the Skyroute max
	 Perform a default on the Skyroute <i>max</i> module.
Problem: Solution:	 LED5 is blinking 4 times - <i>No service</i> Relocate either the Skyroute <i>max</i> transmitter or the antenna to a different location on the premise. Higher or closer to a window usually improves the signal strength. Remove the Skyroute <i>max</i> transmitter from any environmental interference such as AC power lines or large pieces of metal duct work, water heater, electrical box, etc.
Problem: Solution:	 LED5 is blinking 5 times - Failure to communicate This trouble means that the Skyroute max transceiver was not acknowledged from the central station. To clear this trouble, perform a reset: [*8] [Installer's code] [00] [18] [099] [FF]. To prevent this trouble in the future, make sure your signal strength is good.
Problem: Solution:	 LED5 is blinking 6 times - Skyroute max transceiver is not activated with Connect 24 Activate the Skyroute max transceiver with Connect 24. Please have your information ready when you call the VRU. If you do not have these numbers, please call 888-251-7458 (US) or 888-955-5583 (Canada).
Problem: Solution:	 LED5 is blinking 8 times - Skyroute max is not enrolled with PC4020 Enter programming mode. Go to Add/Edit Modules, select Alternate Communicator. Create a tamper on Skyroute max. Exit programming.
Problem: Solution:	 Skyroute <i>max</i> unit displays poor signal strength. Relocate either the Skyroute <i>max</i> transmitter or the antenna to a different location on the premise. Higher or closer to a window usually improves the signal strength. Remove the Skyroute <i>max</i> transmitter from any environmental interference such as AC power lines or large pieces of metal duct work, water heater, electrical box, etc.
Problem: Solution:	 Skyroute <i>max</i> transmitter unit has good signal strength but it is not transmitting the signals. Make sure that the Skyroute <i>max</i> transmitter is programmed for a proper channel (A or B). Correct channel for your area can be obtained from the SID list provided by Connect 24. The default channel is B.
Problem:	• My Skyroute <i>max</i> transmitter is sending Zone 999 when I wanted to send the actual zone numbers.
Solution:	• Enter the Installer's Programming (*8). Enter 00 in sub-section [099] of section [00] [18]. This will default all the programming back to factory setting. You will then have to program your Skyroute <i>max</i> module from scratch. You will notice that LED5 is blinking 6 times. Please see the following problem for solution.
Problem:	• The Skyroute <i>max</i> transmitter was activated, but a default was performed; now LED5 is blinking 6 times.
Solution:	 Enter the installer ID in Installers Programming (*8). Enter sub-section [06] of section [00] [18] and turn bit# 4 on. Enter FF (which is *66) in sub-section [099]. The Skyroute <i>max</i> module will restart. Your LED5 should be blinking once.

For Your Records

Location
Skyroute may MIN Number
Rate Plan
Central Station
Account Number
Test Time and Day
Additional Notes

Reporting Code	Contact ID	SIA Auto Rep Codes**	Reporting Code	Contact ID	SIA Auto Rep Codes**
Zone Alarms	see Appendix B "Zone Reporting Codes"		Openings	401	OP-UUU
Zone Restorals			Opening 129-1000	401	OP-UUU
Zone Trouble/Tamper			Special Opening	401	OP-000
Zone Trouble/Tamper Rest.			Automatic (Scheduled) Opening	403	OA-000
Zone Fault			Partition Opening	402	OG-PPP
Zone Fault Rest.			Battery Trouble/Rest.	302	YT-000/YR-000
[F] Key Alarm/Rest.	110	FA-000/FH-000	AC Line Trouble/Rest.	301	AT-999/AR-999
[A] Key Alarm/Rest.	100	MA-000/MH-000	Panel Bell Trouble/Rest.	321	YA-999/YH-999
[P] Key Alarm/Rest.	120	PA-000/PH-000	Panel Auxiliary Trouble/Rest.	312	YP-999/YQ-999
Duress Alarm	122	HA-000	Combus Trouble/Rest.	300	UT-999/UJ-999
Opening after alarm	458	OR-000	TLM Failure/Rest.	351	LT-001/LR-001
Recent Closing	459	CR-000	TLM Line2 Failure/Rest.	351	LT-002/LR-002
Cross Zone (Police Code) Alarm	139	BV-000	FTC Restoral	354	YK-000
Door Forced Alarm/rest.	423	DF-ZZZ/DR-ZZZ	Buffer Near Full	622	JL-000
Door open too long alarm/rest.	426	DN-ZZZ/DH-ZZZ	User System test	601	RX-000
General system tamper/rest.	137	TA-000/TR-000	Periodic Test	602	RP-000
Keypad lockout	461	JA-000	Periodic Test with TBL	602	RP-001
2-wire alarm/rest.	110	FA-999/FH-999	LINKS Test	603	TX-000
Waterflow alarm/rest.	110	SA-998/SH-998	Ground Fault/Rest.	140	US-000/UR-000
2-wire trouble/rest.	373	FT-999/FJ-999	DLS Lead in	627	RB-000
Waterflow trouble/rest.	200	ST-998/SJ-998	DLS Lead out	628	RS-000
Fire test begin	604	FI-000	Installer Lead In	458	LB-000
Fire test end	604	FK-000	Installer Lead Out	458	LS-000
Fire bypass.unbypass	571	FB-ZZZ/FU-ZZZ	Closing Delinquency	654	CD-000
Closings	401	CL-UUU	Walk Test Enabled	607	TS-000
Closing 129-1000	401	CL-UUU	Walk Test Disabled	607	TE-000
Partial Closing	450	CW-000	General System Trouble/Rest.	300	YX-000
Automatic (Scheduled) Closing	403	CA-000	General Device low Battery/Rest.	302	XT/XR-ZZZ XT/XR-901-904 XT/XR-921-936
Auto Arm Cancellation	405	CE-000	Gen Module Comm Fault/Rest.	330	ET-000/ER-000
Partition Closing	456	CG-PPP			

Appendix A - Reporting codes for SIA and Contact ID

* A/R = alarms/restorals; O/C = openings/closings; O = other

**PPP = partition number; UUU = user number (user 1000=999); ZZZ = zone number

Appendix B - Zone Reporting Codes

For notes on Contact ID and SIA reporting codes, see Appendix A.

Zone Definition	Contact ID Zone Alm/Rest.	SIA Auto Rep Codes** Zone Alm/Rest.	
Standard Delay, Auxillary Delay, Instant, Interior, Interior Delay, Interior Stay/Away, Delay Stay/Away	130	BA-ZZZ/BH-ZZZ	
Standard Fire, Delayed Fire, Auto Verify Fire	110	FA-ZZZ/FR-ZZZ	
Waterflow	110	SA-ZZZ/SH-ZZZ	
Fire Supervisory	200	FS-ZZZ/FR-ZZZ	
24 Hour Supervisory	140	US-ZZZ/UR-ZZZ	
24 Hour Bell, 24 Hour Bell/Buzzer, 24 Hour Buzzer	130	BA-ZZZ/BH-ZZZ	
24 Hour Technical	140	UA-ZZZ/UH-ZZZ	
24 Hour Gas	151	GA-ZZZ/GH-ZZZ	
24 Hour Heat	158	KA-ZZZ/KH-ZZZ	
24 Hour Medical	100	MA-ZZZ/MH-ZZZ	
24 Hour Emergency	120	QA-ZZZ/QH-ZZZ	
24 Hour Water	154	WA-ZZZ/WH-ZZZ	
24 Hour Freeze	140	ZA-ZZZ/ZH-ZZZ	
24 Hour Hold up	122	HA-ZZZ/HH-ZZZ	
24 Hour Panic	120	PA-ZZZ/PH-ZZZ	
Latching 24 Hour	130	BA-ZZZ/BH-ZZZ	

S** ZZZ = zones 001-128

Limited Warranty

SG Wireless Communications 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, 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. This warranty contains the entire warranty. SG Wireless Communications neither assumes responsibility for, 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, 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: 1-800-418-7618, fax us at 905-760-3030 or e-mail us at sales@sur-gard.com.

• Technical Support

If you have questions or problems when using this product, you can call Technical Support. If you are within the United States or Canada, you can get support by dialing 1-800-503-5869, or e-mail us at support@sur-gard.com.

Internet

Visit our new Sur-Gard web site. You can search the SG technical information database and read about our new products. You can also send us any questions you may have. Our address is www.dsc.com; click on the Sur-Gard logo to access sales, technical and general information.