

Quick Install Guide
Please see page 1

SKYROUTETM *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 1.1

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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-SKYROUTE1

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.

IC: 160A-182355A

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.



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

IMPORTANT: 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.

NOTE: In the US both Side A and Side B carriers may be used. Changes can be made in option [006] (see Section 8.1) of the Skyroute programming.

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 1.1

2.1 Downloading Support

- Downloading is supported using DLS-3 v1.3. the skyroute max v1.1 driver must be installed. (It can be obtained from the DSC website at www.dsc.com.)
- Default changes

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
 - SKR – 025 The 25 Foot External Antenna Kit for Skyroute *max* Transceiver

3.2.5 RF Power Output

- 3.0 Watts maximum

3.2.6 Power Supply Ratings

- 12 V_{DC} @30mA, from panel Combus, DSC Combus control panel required (PC4020 v3.2 and higher)
- 12 V_{DC}, 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

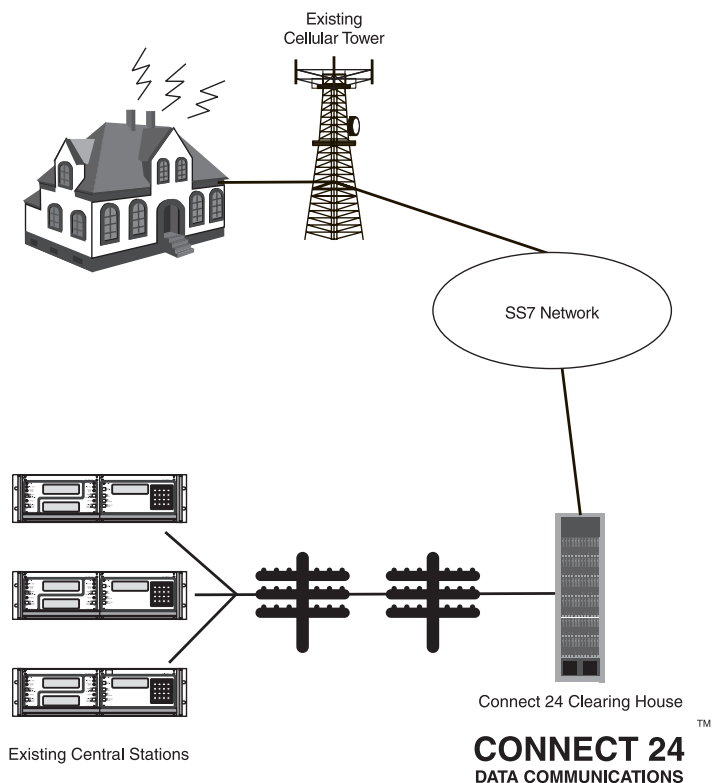
- 0°C - 49°C (32°F - 120°F)
- 85% humidity, non-condensing

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 at 877-759-7688 (Canada) or 888-251-7554 (USA)**. 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.

Section 6 - Installing a Skyroute *max* transceiver

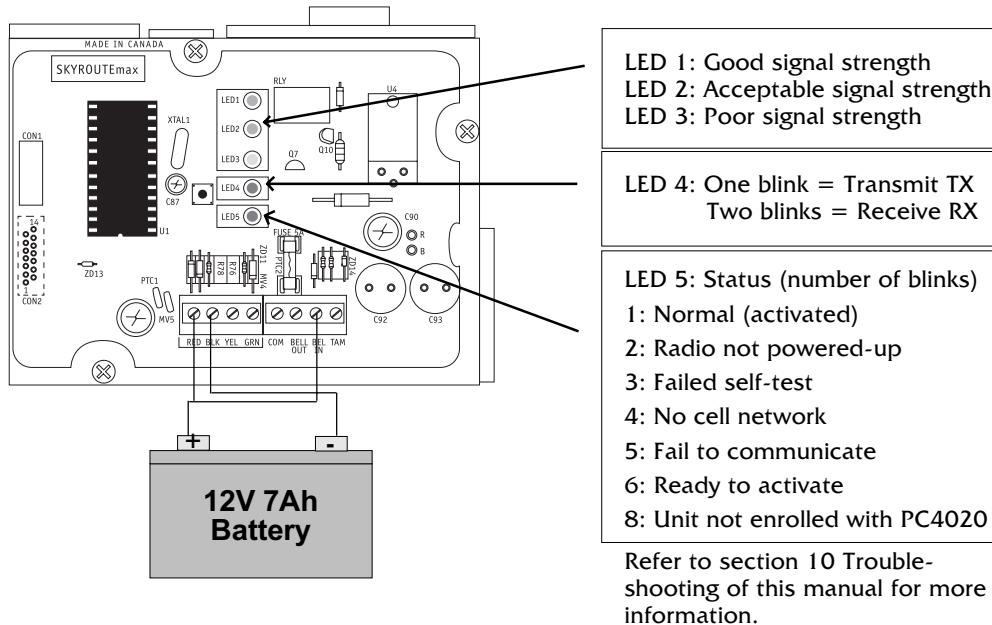
Time-Saving Tips: By powering up the Skyroute *max* on a battery alone (battery red to Bell and Combus red, battery black to Combus black), you can quickly determine a location where your signal strength is strong prior to installing the unit. The Skyroute *max* does not have to be active to show signal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

6.1 Location of the Skyroute *max* Unit

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

NOTE: In the US both Side A and Side B carriers may be used. Changes can be made in option [006] (see Section 8.1) of the Skyroute programming.

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 these 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 12V@1.5A (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.

NOTE: For Side A Carriers the Skyroute Max will need to be programmed first to look at the Side A. Refer to Programming option 006.

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:

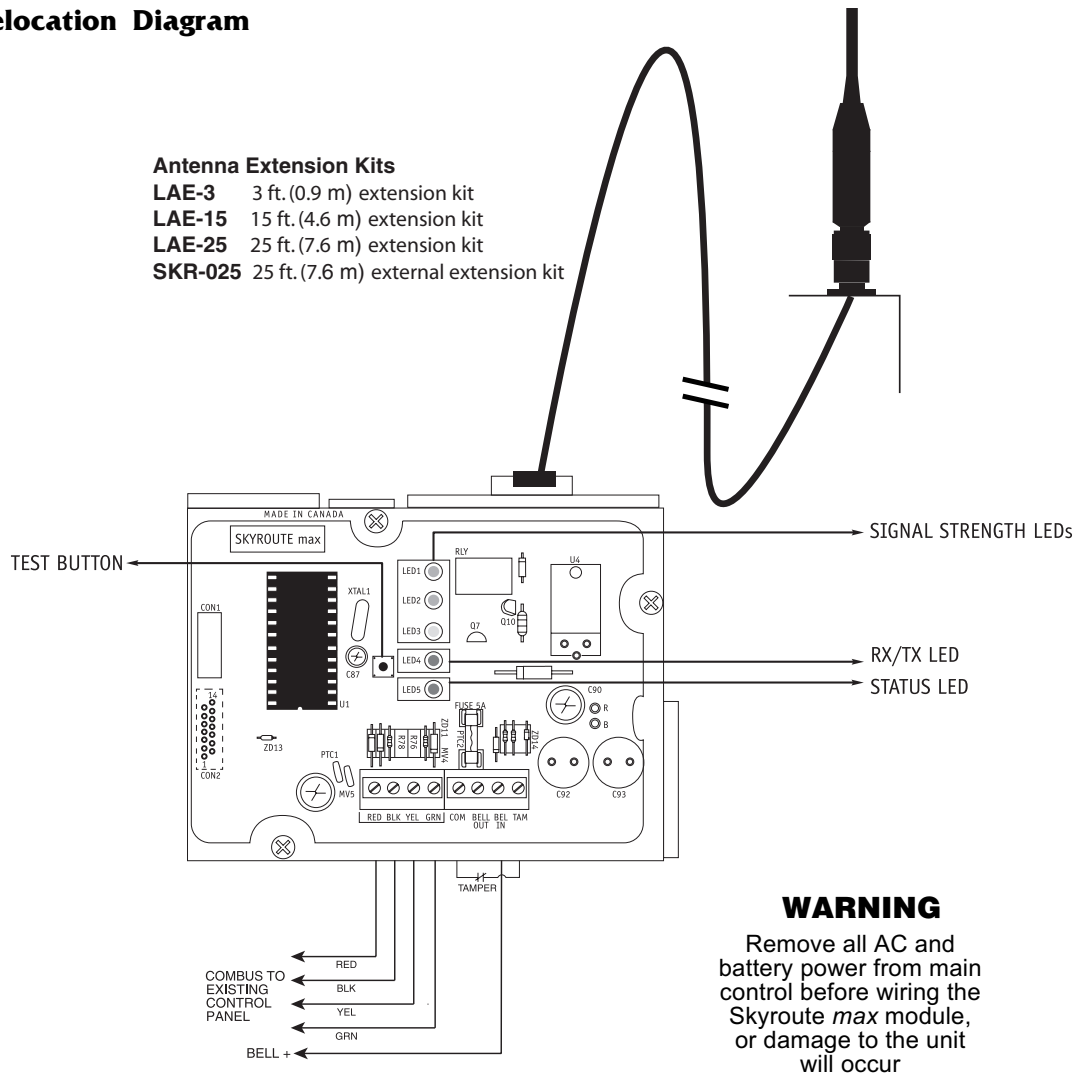
Extension Kit	Length of cable
LAE-3	3 feet (0.91 m)
LAE-15	15 feet (4.57 m)
LAE-25	25 feet (7.62 m)
SKR-025	25 feet (7.62 m)

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 or SKR-025 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 Service, Residential Fire and Burglary Installations

- Programming [013] - Option 2 Test Rates must be “ON”.
- Every 24 hours a check-in 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 (primary).

2. Skyroute *max* transmission through Cellemetry to the clearing house (Connect 24) (secondary).

- DACT must be enabled for Listed compatible control unit.

6.4.2 Police Station Connect with Basic Line Security

- Same as Grade A Central Station Installations.

6.4.3 Commercial Fire Installations

- Same as Grade A Central Station Installations.
- The BELL+ and BELL- terminals on the control panel shall not power other devices. The DSC Listed model PC4702BP bell/siren module shall be used. Refer to compatible Listed control unit installation instructions for wiring and programming.

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 will not function properly if the antenna is not installed.

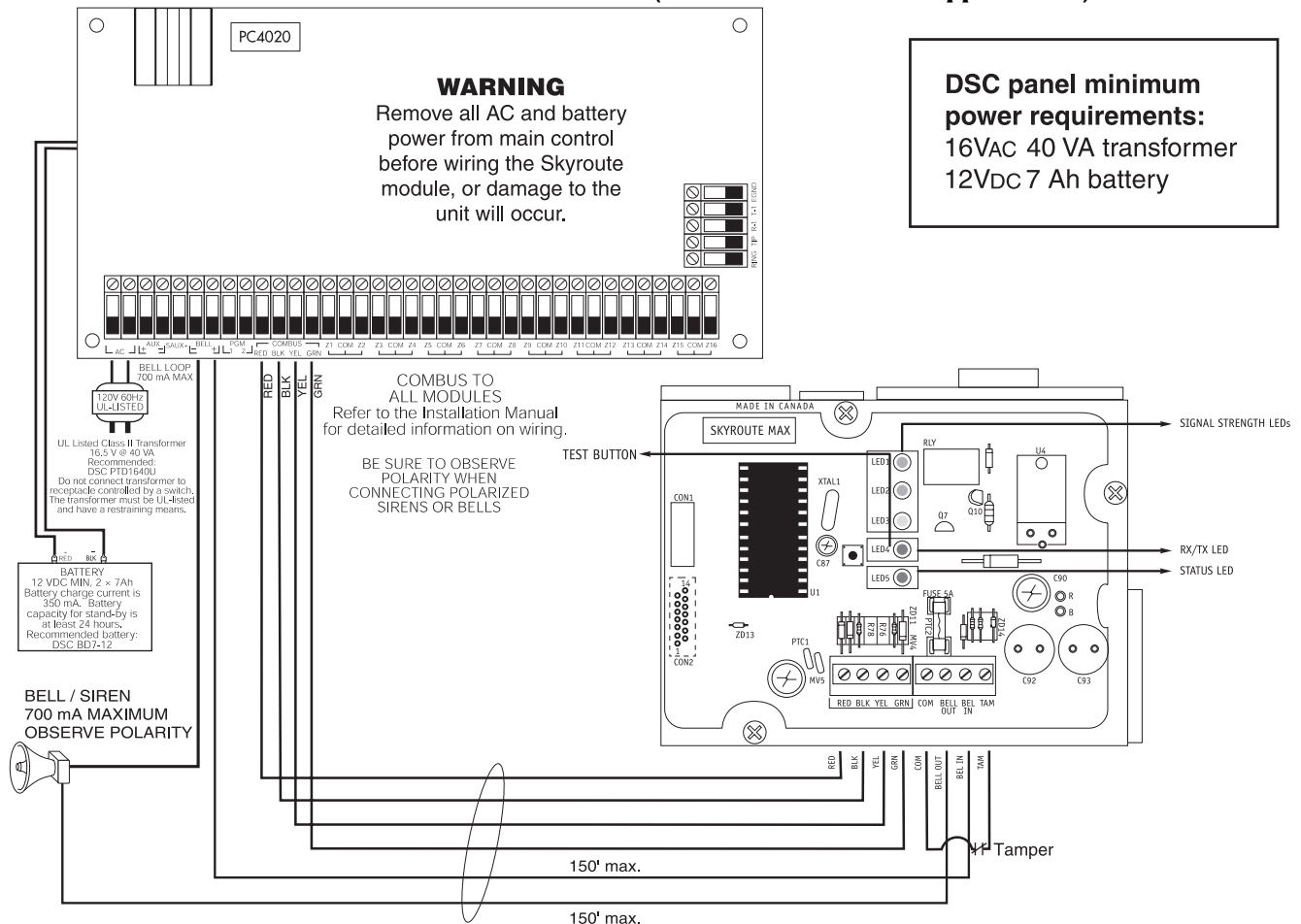
The antenna attaches to the TNC connector of the Skyroute *max* transceiver. The antenna should be mounted as high above ground level as possible while at the same time should be taken care not to place the antenna under a radio frequency shield of any kind. For example, do not mount the antenna directly 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 Combust 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 Combust (red, black, yellow and green).

6.13 Connection Diagrams

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



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.

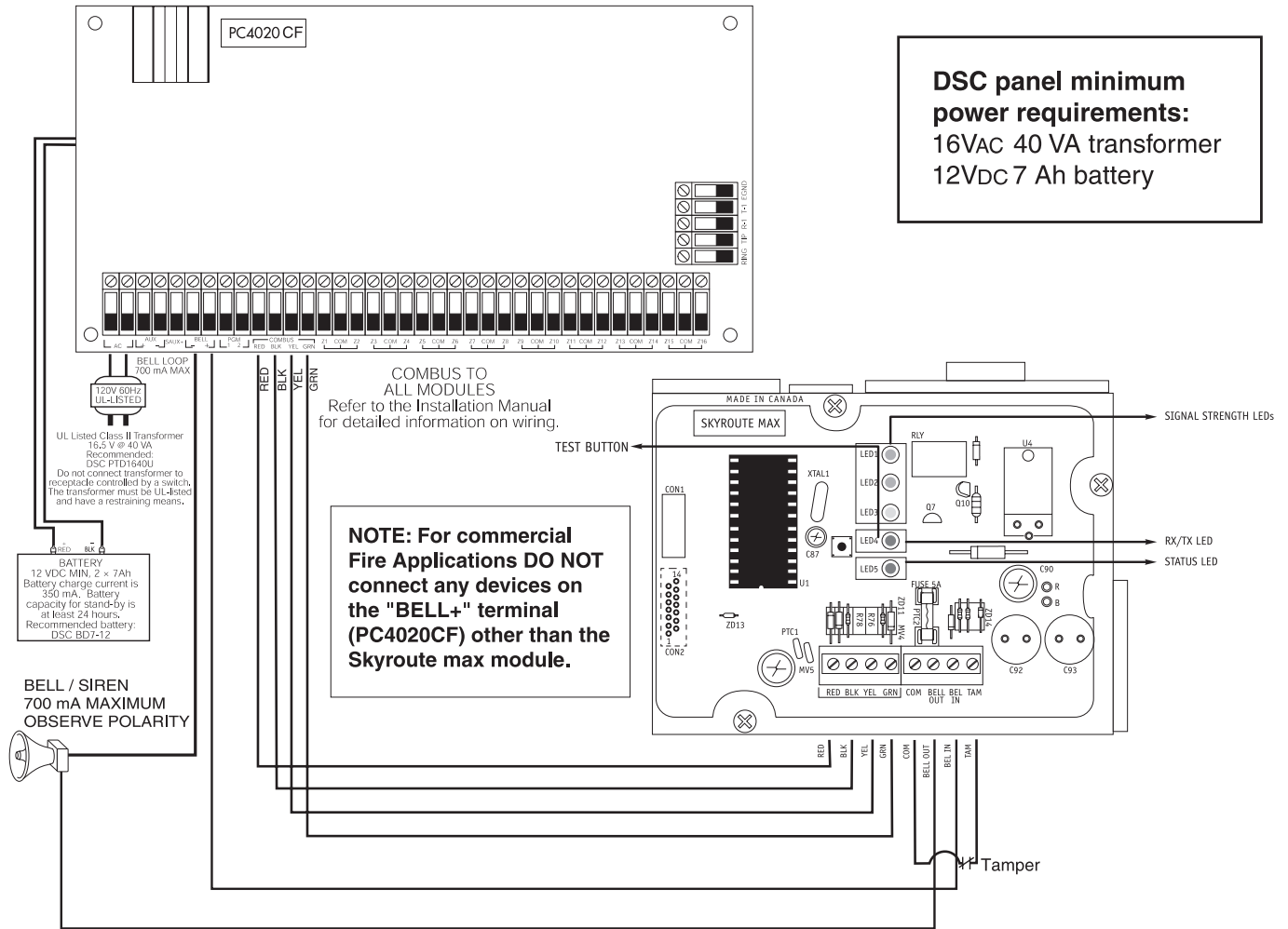
Standard Connection with PC4020CF / Partner P-16128 (Commercial Fire Applications)

WARNING!

All connections to the Skyroute 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.



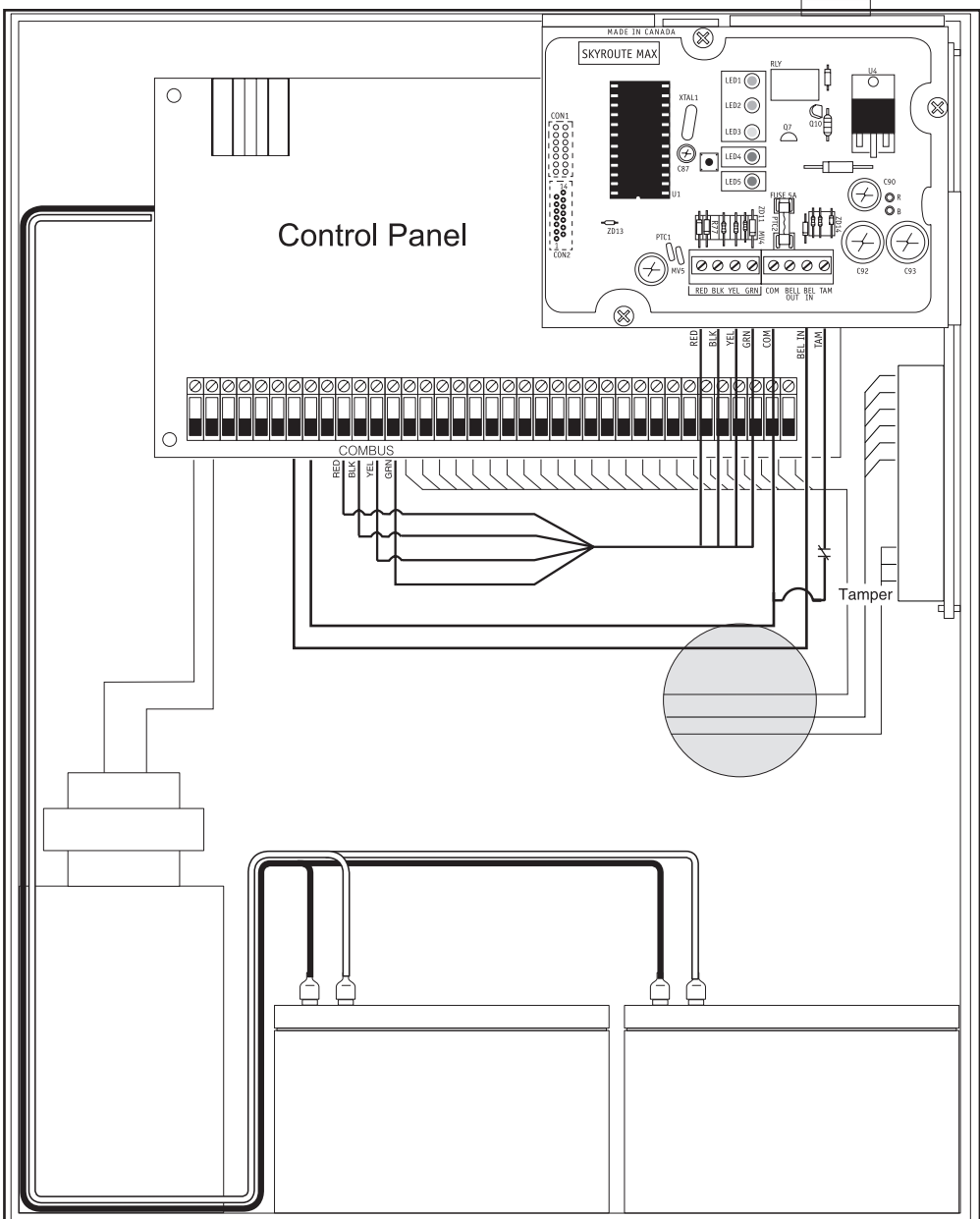
Wiring Skyroute max to a DSC PC4020CF

- 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 1KΩ 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



INSTALL BATTERY AND AC WIRING AS SHOWN ABOVE
IMPORTANT: A minimum 1/4" (7mm) separation must be maintained at all points between battery/primary AC wiring and all other wiring and connections.

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

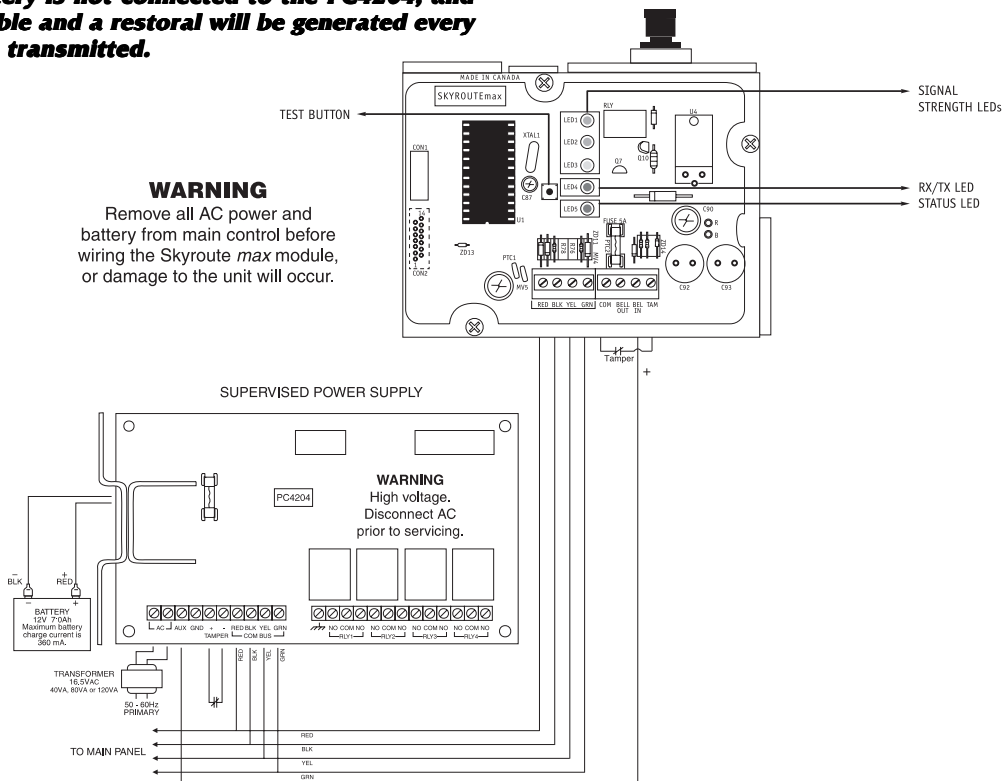
Power Requirements

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.

WARNING

Remove all AC power and battery from main control before wiring the Skyroute *max* module, or damage to the unit will occur.



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.

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*

IMPORTANT PROGRAMMING INFORMATION:

1. Regardless of which communication format is being used by the PC4020 for landline communications, 'Auto Report SIA' and 'Auto Contact' ID must both be set to YES (in the PC4020 COMMS Toggles).
2. If SIA or Contact ID is to be used for land line communications by the PC4020, all events that you want communicated must be programmed with a reporting code of 'FF' and all events that you do not want communicated must be programmed with a reporting code of '00' (the only exception to this is if you have a PC4020CF – see #3).
3. If the panel is a PC4020, Rule #3 is irrelevant. If the panel is a PC4020CF and Contact ID is being used for landline communications, rule #3 applies. The reporting codes listed are programmed as (99) at default in the PC4020CF panel and the panel will not allow you to program them as (00) or (FF). In order for the listed events to report properly, every reporting code listed below must be manually re-programmed by the installer with the appropriate Contact ID Reporting Code (See Appendix A at the back of the manual).
 - 2-wire smoke alarm circuit alarm and restoration
 - 2-wire smoke alarm circuit trouble and trouble restoration
 - Waterflow alarm circuit alarm and restoration
 - Waterflow alarm circuit trouble and trouble restoration
 - System ground fault alarm and restoration
 - Battery trouble and trouble restoration
 - AC line trouble and trouble restoration
 - Main bell trouble and trouble restoration
 - Main AUX supply trouble and trouble restoration
 - TLM (telephone line monitor) failure and restoration (line 1)
 - TLM failure and restoration (line 2)
 - Periodic test transmission
 - Periodic test transmission UL
 - [F] key alarm and restoration
4. If any communication format other than SIA or Contact ID is to be used for land line communications, reporting codes can only be programmed using the following digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A. (Hexadecimal B, C, D, E and F are not supported).

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]. A complete default of the Skyroute Max is performed and most options are turned on in sections [030] through [047].
- This enables the Skyroute Max to send all Alarm, Alarm Restoral, Tamper, Tamper Restoral, Maintenance Alarm, Maintenance Alarm Restoral, Trouble, Trouble Restoral, Supervisory Alarm, Supervisory Restoral and Miscellaneous events received from the panel via the Combus for partitions (0-8).
- To disable groups of events from reporting via the Skyroute Max, turn off the associated transmission option in sections [030] through [047]. See Appendices A, B, C & D for information on which transmission option each reporting code belongs to.

7.1.2 Generic Reporting

- Entering 22 in subsection [099]. A complete default of the Skyroute Max is performed and only option 1 is turned on in sections [030] through [047].
- Generic reporting only applies to certain types of zone alarms. While in Generic mode, the panel will group the following zone types together on each partition: Standard Delay, Auxiliary Delay, Instant, Interior, Interior Delay, Interior Stay/Away, Delay Stay/Away, 24 Hour Bell, 24 Hour Bell/Buzzer, 24 Hour Buzzer, Latching 24 Hour. When an alarm occurs on any of these zone types on a partition, the Skyroute Max will send a generic signal which will be received at the central station as a BA999 (if using SIA) or a 130-999 (if using Contact ID). When the generic signal is sent, the Skyroute Max starts a 5-minute timer for the partition that went into alarm. If during this 5-minute time another alarm occurs on any of the listed burglary zone types on that partition, the Skyroute Max will not send a generic signal. This is used to decrease the zone alarm signal traffic via the Skyroute Max when multiple alarms occur within short time frames on each partition.
- All events received from the panel via the Combus that are not included in Generic reporting can still be fully reported by the Skyroute Max. Simply turn on the associated transmission option in sections [030] through [047]. See Appendices A, B, C & D for information on which transmission option each reporting code belongs to.
- When Generic reporting is being used on the system, Generic reporting signals are generated by partition. Each partition has its own 5-minute timer for Generic reporting. For instance, if 2 partitions have a burglary alarm occur within 2 minutes of each other, a total of two Generic signals will be sent (one when the zone went into alarm on the first partition and the other when the zone went into alarm on the other partition 2 minutes later).
- When one of these alarms occur, the Skyroute will send the associated alarm reporting code for the category the alarm belongs to – and then start a timer for that category (5 minutes at default programmed in section [21]).

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]

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 does not guarantee proper transmission of the event to your central station. You must perform normal tests with 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

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* to Full reporting.

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

*Entering FF will cause a restart of the Skyroute *max* transceiver.

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

[006] Skyroute *max* Configuration Options

Default

OFF

Option 1

Option ON

A Channel Selected

Option OFF

A Channel Not Selected

ON

Option 2

B Channel Selected

B Channel Not Selected

OFF

Option 3

Home System Only

Not in Home System Operation

OFF

Options 4 to 8

For system use; do not modify.

[007] Home SID Number

Default

0000

This is the SID (in Hex) of the cellular service that is available on the current channel.

[010] Skyroute *max* Test Time

Default

9999

Valid entries: 0000-2359 (in 24 hour time)

NOTE: Keypad will display ENT HEX. To disable this Test Time feature, enter 9999.

[011] Test Transmission Day Mask

Default

OFF

Option 1

Option ON

Test on Sunday

Option OFF

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

[013] Skyroute *max* Test Rates

Default

OFF

Option 1

For Future Use

OFF*

Option 2

Daily Test

Disabled

ON

Option 3

Weekly Test

Disabled

OFF

Options 4 to 8

For Future Use

* **Option 2 must be ON for UL Listed applications.**

[020] Communication Mode

This section will display the mode in which the Skyroute operates. To change the mode refer to section [099].

- 00 - Skyroute module is in Full Reporting Mode
- 11 - Skyroute module is in Generic Reporting with fall-back to Full Reporting if TLM or FTC trouble occurs
- 12 - Skyroute module is in Generic Reporting Mode

[021] Generic Signal timer

Default

1E

(number x 10 seconds in Hex)

8.2 Advanced Programming

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

Default 22 - Generic, Default 00 - Full

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

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[031] System Events (Partition 0) Transmission Options Section B

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
OFF	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

[032] Partition 1 Transmission Options Section A

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[033] Partition 1 Transmission Options Section B

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
OFF	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

[034] Partition 2 Transmission Options Section A

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[035] Partition 2 Transmission Options Section B

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
OFF	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

[036] Partition 3 Transmission Options Section A

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON*	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[037] Partition 3 Transmission Options Section B

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
OFF	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

[038] Partition 4 Transmission Options Section A

Generic Reporting	Full Reporting		Option ON	Option OFF	
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[039] Partition 4 Transmission Options Section B

Generic Reporting	Full Reporting		Option ON	Option OFF	
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
OFF	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

[040] Partition 5 Transmission Options Section A

Generic Reporting	Full Reporting		Option ON	Option OFF	
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[041] Partition 5 Transmission Options Section B

Generic Reporting	Full Reporting		Option ON	Option OFF	
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
OFF	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

[042] Partition 6 Transmission Options Section A

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[043] Partition 6 Transmission Options Section B

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
ON	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

[044] Partition 7 Transmission Options Section A

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[045] Partition 7 Transmission Options Section B

Generic Reporting	Full Reporting			Option ON	Option OFF
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
OFF	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

[046] Partition 8 Transmission Options Section A

Generic Reporting	Full Reporting		Option ON	Option OFF	
ON	ON	<input type="checkbox"/>	Option 1	Alarms	Disabled
OFF	ON*	<input type="checkbox"/>	Option 2	Alarm Restorals	Disabled
OFF	ON*	<input type="checkbox"/>	Option 3	Tampers	Disabled
OFF	ON*	<input type="checkbox"/>	Option 4	Tamper Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 5	Closings	Disabled
OFF	OFF	<input type="checkbox"/>	Option 6	Openings	Disabled
OFF	ON	<input type="checkbox"/>	Option 7	Maintenance Alarms	Disabled
OFF	ON	<input type="checkbox"/>	Option 8	Maintenance Alarm Restorals	Disabled

[047] Partition 8 Transmission Options Section B

Generic Reporting	Full Reporting		Option ON	Option OFF	
ON	ON	<input type="checkbox"/>	Option 1	Trouble	Disabled
OFF	ON	<input type="checkbox"/>	Option 2	Trouble Restorals	Disabled
OFF	OFF	<input type="checkbox"/>	Option 3	Bypass	Disabled
OFF	OFF	<input type="checkbox"/>	Option 4	Unbypass	Disabled
OFF	ON*	<input type="checkbox"/>	Option 5	Supervisory Alarm	Disabled
OFF	ON*	<input type="checkbox"/>	Option 6	Supervisory Restoral	Disabled
OFF	OFF	<input type="checkbox"/>	Option 7	Access Control	Disabled
OFF	ON*	<input type="checkbox"/>	Option 8	Miscellaneous	Disabled

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: • LED5 is blinking 2 times - *Radio is not powered*

Solution: • Make sure that BELL(+) on the panel is connected to BELL IN on the Skyroute *max* module.
• Perform a default on the Skyroute *max* module.

Problem: • LED5 is blinking 4 times - *No service*

Solution: • Relocate either the Skyroute *max* 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 *max* transmitter from any environmental interference such as AC power lines or large pieces of metal duct work, water heater, electrical box, etc.

Problem: • LED5 is blinking 5 times - *Failure to communicate*

Solution: • 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: • LED5 is blinking 6 times - *Skyroute max transceiver is not activated with Connect 24*

Solution: • 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: • LED5 is blinking 8 times - *Skyroute max is not enrolled with PC4020*

Solution: • Enter programming mode. Go to Add/Edit Modules, select Alternate Communicator. Create a tamper on Skyroute *max*. Exit programming.

Problem: • Skyroute *max* unit displays poor signal strength.

Solution: • Relocate either the Skyroute *max* 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 *max* transmitter from any environmental interference such as AC power lines or large pieces of metal duct work, water heater, electrical box, etc.
Service may only be available on an A side carrier. Refer to option 006 to change the the Skyroute Max to Side A.

Problem: • Skyroute *max* transmitter unit has good signal strength but it is not transmitting the signals.

Solution: • Make sure that the Skyroute *max* 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 *max* 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 *max* module from scratch. You will notice that LED5 is blinking 6 times. Please see the following problem for solution.

Problem: • The Skyroute *max* 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 *max* module will restart. Your LED5 should be blinking once.

For Your Records

Location _____

Skyroute *max* MIN Number _____

Rate Plan _____

Central Station _____

Account Number _____

Test Time and Day _____

Additional Notes _____

Appendix A - Reporting codes for SIA and Contact ID

Reporting Code	Full/Generic Reporting		Skyroute <i>max</i> Transmission Option
	Contact ID	SIA	
Zone Alarms			See Appendix B
Zone Restorals			
Zone Trouble/Tamper			See Appendix C
Zone Trouble/Tamper Rest.			
Zone Fault			See Appendix D
Zone Fault Rest.			
[F] Key Alarm/Rest.	110	FA-000/FH-000	* Partition (0-8) Alarms / Partition (0-8) Alarm Restorals
[A] Key Alarm/Rest.	100	MA-000/MH-000	* Partition (0-8) Alarms / Partition (0-8) Alarm Restorals
[P] Key Alarm/Rest.	120	PA-000/PH-000	* Partition (0-8) Alarms / Partition (0-8) Alarm Restorals
Duress Alarm	122	HA-000	* Partition (0-8) Alarms
Opening after alarm	458	OR-000	Partition (1-8) Alarm Restorals
Recent Closing	459	CR-000	Partition (1-8) Alarms
Cross Zone (Police Code) Alarm	139	BV-000	Partition (1-8) Alarms
Door Forced Alarm/rest.	423	DF-ZZZ/DR-ZZZ	Partition (1-8) Access Control
Door open too long alarm/rest.	426	DN-ZZZ/DH-ZZZ	Partition (1-8) Access Control
General system tamper/rest.	137	TA-000/TR-000	Partition 0 Tampers / Partition 0 Tamper Restorals
Keypad lockout	461	JA-000	Partition 0 Miscellaneous
2-wire alarm/rest.	110	FA-999/FH-999	Partition 0 Alarms / Partition 0 Alarm Restorals
Waterflow alarm/rest.	110	SA-998/SH-998	Partition 0 Alarms / Partition 0 Alarm Restorals
2-wire trouble/rest.	373	FT-999/FJ-999	Partition 0 Trouble / Partition 0 Trouble Restorals
Waterflow trouble/rest.	200	ST-998/SJ-998	Partition 0 Trouble / Partition 0 Trouble Restorals
Fire test begin	604	FI-000	Partition (1-8) Alarms
Fire test end	604	FK-000	Partition (1-8) Alarm Restorals
Fire bypass/unbypass	571	FB-ZZZ/FU-ZZZ	Partition (1-8) Bypass / Partition (1-8) Unbypass
Closings	401	CL-UUU	Partition (1-8) Closings
Closing 129-1000	401	CL-UUU	Partition (1-8) Closings
Partial Closing	450	CW-000	Partition (1-8) Closings
Automatic (Scheduled) Closing	403	CA-000	Partition (1-8) Closings
Auto Arm Cancellation	405	CE-000	Partition (1-8) Closings
Partial Closing	456	CG-PPP	Partition 0 Closings
Openings	401	OP-UUU	Partition (1-8) Openings
Opening 129-1000	401	OP-UUU	Partition (1-8) Openings
Special Opening	401	OP-000	Partition (1-8) Openings
Automatic (Scheduled) Opening	403	OA-000	Partition (1-8) Openings
Partition Opening	402	OG-PPP	Partition 0 Openings
Battery Trouble/Rest.	302	YT-000/YR-000	Partition 0 Trouble / Partition 0 Trouble Restorals
AC Line Trouble/Rest.	301	AT-999/AR-999	Partition 0 Trouble / Partition 0 Trouble Restorals
Panel Bell Trouble/Rest.	321	YA-999/YH-999	Partition 0 Trouble / Partition 0 Trouble Restorals
Panel Auxiliary Trouble/Rest.	312	YP-999/YQ-999	Partition 0 Trouble / Partition 0 Trouble Restorals
Combustion Trouble/Rest.	300	UT-999/UJ-999	Partition 0 Trouble / Partition 0 Trouble Restorals
TLM Failure/Rest.	351	LT-001/LR-001	Partition 0 Trouble / Partition 0 Trouble Restorals
TLM Line2 Failure/Rest.	351	LT-002/LR-002	Partition 0 Trouble / Partition 0 Trouble Restorals
FTC Restoral	354	YK-000	Partition 0 Trouble Restorals
Buffer Near Full	622	JL-000	Partition 0 Miscellaneous
User System Test	601	RX-000	Partition (1-8) Maintenance Alarms
Periodic Test	602	RP-000	Partition (0) Maintenance Alarms
Periodic Test with TBL	602	RP-001	Partition (0) Maintenance Alarms
LINKS Test	603	TX-000	Partition (0) Maintenance Alarms
Ground Fault/Rest.	140	US-000/UR-000	Partition 0 Supervisory Alarm / Partition 0 Supervisory Restoral
DLS Lead In	627	RB-000	Partition (0) Maintenance Alarms
DLS Lead Out	628	RS-000	Partition (0) Maintenance Alarms
Installer Lead In	458	LB-000	Partition (0) Maintenance Alarms
Installer Lead Out	458	LS-000	Partition (0) Maintenance Alarm Restoral
Closing Delinquency	654	CD-000	Partition (1-8) Closing
Walk Test Enabled	607	TS-000	Partition (1-8) Maintenance Alarms
Walk Test Disabled	607	TE-000	Partition (1-8) Maintenance Alarm Restorals
General System Trouble/Rest.	300	YX-000	Partition 0 Maintenance Alarms / Partition 0 Maintenance
General Device Low Battery/Rest.	302	XT/XR-ZZZ, XT/XR-901-904, XT/XR-921-936	Partition 0 Trouble / Partition 0 Trouble Restorals
Gen Module Comm Fault/Rest.	330	ET-000/ER-000	Partition 0 Trouble / Partition 0 Trouble Restorals

* Partition 0 if from a Global keypad.

Appendix B - Zone Alarms

Zone Definition	Full Reporting		Generic Reporting		Skyroute <i>max</i> Transmission Option
	Contact ID Alm/Rest	SIA Alm/Rest	Contact ID Alm/Rest	SIA Alm/Rest	
Standard Delay	130 (Identified by zone)	BA-ZZZ/BH-ZZZ	130 (Alarm identified as zone 999 / restoral identified by zone)	BA-999/BH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
Auxiliary Delay					
Instant					
Interior					
Interior Delay					
Interior Stay/Away					
Delay Stay/Away					
Standard Fire	110	FA-ZZZ/FR-ZZZ	110	FA-ZZZ/FR-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
Delayed Fire					
Auto Verify Fire					
Waterflow	110	SA-ZZZ/SH-ZZZ	110	SA-ZZZ/SH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
Fire Supervisory	380	US-ZZZ/UR-ZZZ	380	US-ZZZ/UR-ZZZ	Partitiion (1-8) Supervisory Alarm/Restoral
Links Supervisory	200	FS-ZZZ/FR-ZZZ	200	FS-ZZZ/FR-ZZZ	Partitiion (1-8) Supervisory Alarm/Restoral
24 Hour Bell	130 (Identified by zone)	BA-ZZZ/BH-ZZZ	130 (Alarm identified as zone 999 / restoral identified by zone)	BA-999/BH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Bell/Buzzer					
24 Hour Buzzer					
24 Hour Technical	140	UA-ZZZ/UH-ZZZ	140	UA-ZZZ/UH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Gas	151	GA-ZZZ/GH-ZZZ	151	GA-ZZZ/GH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Heat	158	KA-ZZZ/KH-ZZZ	158	KA-ZZZ/KH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Medical	100	MA-ZZZ/MH-ZZZ	100	MA-ZZZ/MH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Emergency	120	QA-ZZZ/QH-ZZZ	120	QA-ZZZ/QH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Water	154	WA-ZZZ/WH-ZZZ	154	WA-ZZZ/WH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Freeze	140	ZA-ZZZ/ZH-ZZZ	140	ZA-ZZZ/ZH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Hold up	122	HA-ZZZ/HH-ZZZ	122	HA-ZZZ/HH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
24 Hour Panic	120	PA-ZZZ/PH-ZZZ	120	PA-ZZZ/PH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals
Latching 24 Hour	130 (Identified by zone)	BA-ZZZ/BH-ZZZ	130 (Alarm identified as zone 999 / restoral identified by zone)	BA-999/BH-ZZZ	Partitiion (1-8) Alarms / Alarm Restorals

Appendix C - Zone Trouble/Tampers

Zone Definition	Full and Generic Reporting		Skyroute <i>max</i> Transmission Option
	Contact ID Alm/Rest	SIA Alm/Rest	
Standard Delay	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
Auxiliary Delay			
Instant			
Interior			
Interior Delay			
Interior Stay/Away			
Delay Stay/Away			
Standard Fire	373	FT-ZZZ/FJ-ZZZ	Partition (1-8) Trouble / Trouble Restorals
Delayed Fire			
Auto Verify Fire			
Waterflow	373	ST-ZZZ/SJ-ZZZ	Partition (1-8) Trouble / Trouble Restorals
Fire Supervisory	373	FT-ZZZ/FJ-ZZZ	Partition (1-8) Trouble / Trouble Restorals
Links Supervisory	380	US-ZZZ/UR-ZZZ	Partition (1-8) Supervisory Alarm/Restoral
24 Hour Bell	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Bell/Buzzer			
24 Hour Buzzer			
24 Hour Technical	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Gas	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Heat	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Medical	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Emergency	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Water	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Freeze	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Hold up	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
24 Hour Panic	383	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals
Latching 24 Hour	380	TA-ZZZ/TR-ZZZ	Partition (1-8) Tampers / Tamper Restorals

Appendix D - Zone Faults

Zone Definition	Full and Generic Reporting		Skyroute <i>max</i> Transmission Option
	Contact ID Alm/Rest	SIA Alm/Rest	
Standard Delay	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
Auxiliary Delay			
Instant			
Interior			
Interior Delay			
Interior Stay/Away			
Delay Stay/Away			
Standard Fire	373	FT-ZZZ/FJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
Delayed Fire			
Auto Verify Fire			
Waterflow	373	ST-ZZZ/SJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
Fire Supervisory	373	FT-ZZZ/FJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
Links Supervisory	380	US-ZZZ/UR-ZZZ	Partitiion (1-8) Supervisory Alarm/Restoral
24 Hour Bell	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Bell/Buzzer			
24 Hour Buzzer			
24 Hour Technical	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Gas	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Heat	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Medical	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Emergency	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Water	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Freeze	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Hold up	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
24 Hour Panic	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals
Latching 24 Hour	380	UT-ZZZ/UJ-ZZZ	Partitiion (1-8) Trouble / Trouble Restorals

WARNING Please Read Carefully

Note to Installers

This warning contains vital information. As the only individual in contact with system users, it is your responsibility to bring each item in this warning to the attention of the users of this system.

System Failures

This system has been carefully designed to be as effective as possible. There are circumstances, however, involving fire, burglary, or other types of emergencies where it may not provide protection. Any alarm system of any type may be compromised deliberately or may fail to operate as expected for a variety of reasons. Some but not all of these reasons may be:

■ Inadequate Installation

A security system must be installed properly in order to provide adequate protection. Every installation should be evaluated by a security professional to ensure that all access points and areas are covered. Locks and latches on windows and doors must be secure and operate as intended. Windows, doors, walls, ceilings and other building materials must be of sufficient strength and construction to provide the level of protection expected. A reevaluation must be done during and after any construction activity. An evaluation by the fire and/or police department is highly recommended if this service is available.

■ Criminal Knowledge

This system contains security features which were known to be effective at the time of manufacture. It is possible for persons with criminal intent to develop techniques which reduce the effectiveness of these features. It is important that a security system be reviewed periodically to ensure that its features remain effective and that it be updated or replaced if it is found that it does not provide the protection expected.

■ Access by Intruders

Intruders may enter through an unprotected access point, circumvent a sensing device, evade detection by moving through an area of insufficient coverage, disconnect a warning device, or interfere with or prevent the proper operation of the system.

■ Power Failure

Control units, intrusion detectors, smoke detectors and many other security devices require an adequate power supply for proper operation. If a device operates from batteries, it is possible for the batteries to fail. Even if the batteries have not failed, they must be charged, in good condition and installed correctly. If a device operates only by AC power, any interruption, however brief, will render that device inoperative while it does not have power. Power interruptions of any length are often accompanied by voltage fluctuations which may damage electronic equipment such as a security system. After a power interruption has occurred, immediately conduct a complete system test to ensure that the system operates as intended.

■ Failure of Replaceable Batteries

This system's wireless transmitters have been designed to provide several years of battery life under normal conditions. The expected battery life is a function of the device environment, usage and type. Ambient conditions such as high humidity, high or low temperatures, or large temperature fluctuations may reduce the expected battery life. While each transmitting device has a low battery monitor which identifies when the batteries need to be replaced, this monitor may fail to operate as expected. Regular testing and maintenance will keep the system in good operating condition.

■ Compromise of Radio Frequency (Wireless) Devices

Signals may not reach the receiver under all circumstances which could include metal objects placed on or near the radio path or deliberate jamming or other inadvertent radio signal interference.

■ System Users

A user may not be able to operate a panic or emergency switch possibly due to permanent or temporary physical disability, inability to reach the device in time, or unfamiliarity with the correct operation. It is important that all system users be trained in the correct operation of the alarm system and that they know how to respond when the system indicates an alarm.

■ Smoke Detectors

Smoke detectors that are a part of this system may not properly alert occupants of a fire for a number of reasons, some of which follow. The smoke detectors may have been improperly installed or positioned. Smoke may not be able to reach the smoke detectors, such as when the fire is in a chimney, walls or roofs, or on the other side of closed doors. Smoke detectors may not detect smoke from fires on another level of the residence or building.

Every fire is different in the amount of smoke produced and the rate of burning. Smoke detectors cannot sense all types of fires equally well. Smoke detectors may not provide timely warning of fires caused by carelessness or safety hazards such as smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches or arson. Even if the smoke detector operates as intended, there may be circumstances when there is insufficient warning to allow all occupants to escape in time to avoid injury or death.

■ Motion Detectors

Motion detectors can only detect motion within the designated areas as shown in their respective installation instructions. They cannot discriminate between intruders and intended occupants. Motion detectors do not provide volumetric area protection. They have multiple beams of detection and motion can only be detected in unobstructed areas covered by these beams. They cannot detect motion which occurs behind walls, ceilings, floor, closed doors, glass partitions, glass doors or windows. Any type of tampering whether intentional or unintentional such as masking, painting, or spraying of any material on the lenses, mirrors, windows or any other part of the detection system will impair its proper operation.

Passive infrared motion detectors operate by sensing changes in temperature. However their effectiveness can be reduced when the ambient temperature rises near or above body temperature or if there are intentional or unintentional sources of heat in or near the detection area. Some of these heat sources could be heaters, radiators, stoves, barbecues, fireplaces, sunlight, steam vents, lighting and so on.

■ Warning Devices

Warning devices such as sirens, bells, horns, or strobes may not warn people or waken someone sleeping if there is an intervening wall or door. If warning devices are located on a different level of the residence or premise, then it is less likely that the occupants will be alerted or awakened. Audible warning devices may be interfered with by other noise sources such as stereos, radios, televisions, air conditioners or other appliances, or passing traffic. Audible warning devices, however loud, may not be heard by a hearing-impaired person.

■ Telephone Lines

If telephone lines are used to transmit alarms, they may be out of service or busy for certain periods of time. Also an intruder may cut the telephone line or defeat its operation by more sophisticated means which may be difficult to detect.

■ Insufficient Time

There may be circumstances when the system will operate as intended, yet the occupants will not be protected from the emergency due to their inability to respond to the warnings in a timely manner. If the system is monitored, the response may not occur in time to protect the occupants or their belongings.

■ Component Failure

Although every effort has been made to make this system as reliable as possible, the system may fail to function as intended due to the failure of a component.

■ Inadequate Testing

Most problems that would prevent an alarm system from operating as intended can be found by regular testing and maintenance. The complete system should be tested weekly and immediately after a break-in, an attempted break-in, a fire, a storm, an earthquake, an accident, or any kind of construction activity inside or outside the premises. The testing should include all sensing devices, keypads, consoles, alarm indicating devices and any other operational devices that are part of the system.

■ Security and Insurance

Regardless of its capabilities, an alarm system is not a substitute for property or life insurance. An alarm system also is not a substitute for property owners, renters, or other occupants to act prudently to prevent or minimize the harmful effects of an emergency situation.

LIMITED WARRANTY

Digital Security Controls Ltd. warrants the original purchaser that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use. During the warranty period, Digital Security Controls Ltd. shall, at its option, repair or replace any defective product upon return of the product to its factory, at no charge for labour and materials. Any replacement and/or repaired parts are warranted for the remainder of the original warranty or ninety (90) days, whichever is longer. The original purchaser must promptly notify Digital Security Controls Ltd. in writing that there is defect in material or workmanship, such written notice to be received in all events prior to expiration of the warranty period. There is absolutely no warranty on software and all software products are sold as a user license under the terms of the software license agreement included with the product. The Customer assumes all responsibility for the proper selection, installation, operation and maintenance of any products purchased from DSC. Custom products are only warranted to the extent that they do not function upon delivery. In such cases, DSC can replace or credit at its option.

International Warranty

The warranty for international customers is the same as for any customer within Canada and the United States, with the exception that Digital Security Controls Ltd. shall not be responsible for any customs fees, taxes, or VAT that may be due.

Warranty Procedure

To obtain service under this warranty, please return the item(s) in question to the point of purchase. All authorized distributors and dealers have a warranty program. Anyone returning goods to Digital Security Controls Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatsoever for which prior authorization has not been obtained.

Conditions to Void Warranty

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

- damage incurred in shipping or handling;
- damage caused by disaster such as fire, flood, wind, earthquake or lightning;
- damage due to causes beyond the control of Digital Security Controls Ltd. such as excessive voltage, mechanical shock or water damage;
- damage caused by unauthorized attachment, alterations, modifications or foreign objects;
- damage caused by peripherals (unless such peripherals were supplied by Digital Security Controls Ltd.);
- defects caused by failure to provide a suitable installation environment for the products;
- damage caused by use of the products for purposes other than those for which it was designed;
- damage from improper maintenance;
- damage arising out of any other abuse, mishandling or improper application of the products.

Items Not Covered by Warranty

In addition to the items which void the Warranty, the following items shall not be covered by Warranty: (i) freight cost to the repair centre; (ii) products which are not identified with DSC's product label and lot number or serial number; (iii) products disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection or testing to verify any warranty claim. Access cards or tags returned for replacement under warranty will be credited or replaced at DSC's option. Products not covered by this warranty, or otherwise out of warranty due to age, misuse, or damage shall be evaluated, and a repair estimate shall be provided. No repair work will be performed until a valid purchase order is received from the Customer and a Return Merchandise Authorisation number (RMA) is issued by DSC's Customer Service. Digital Security Controls Ltd.'s liability for failure to repair the product under this warranty after a reasonable number of attempts will be limited to a replacement of the product, as the exclusive remedy for breach of warranty. Under no circumstances shall Digital Security Controls Ltd. be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, but are not limited to, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property. The laws of some jurisdictions limit or do not allow the disclaimer of consequential damages. If the laws of such a jurisdiction apply to any claim by or against DSC, the limitations and disclaimers contained here shall be to the greatest extent permitted by law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that the above may not apply to you.

Disclaimer of Warranties

This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose) and of all other obligations or liabilities on the part of Digital Security Controls Ltd. Digital Security Controls Ltd. 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. This disclaimer of warranties and limited warranty are governed by the laws of the province of Ontario, Canada.

WARNING: Digital Security Controls 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.

Out of Warranty Repairs

Digital Security Controls Ltd. will at its option repair or replace out-of-warranty products which are returned to its factory according to the following conditions. Anyone returning goods to Digital Security Controls Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatsoever for which prior authorization has not been obtained.

Products which Digital Security Controls Ltd. determines to be repairable will be repaired and returned. A set fee which Digital Security Controls Ltd. has predetermined and which may be revised from time to time, will be charged for each unit repaired.

Products which Digital Security Controls Ltd. determines not to be repairable will be replaced by the nearest equivalent product available at that time. The current market price of the replacement product will be charged for each replacement unit.



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