

# uplink®

# uplink® 4530EX

**4G PRIMARY CELLULAR  
ALARM COMMUNICATOR**



## **FOR SALES, PRODUCT INFORMATION & TECHNICAL SUPPORT**

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## **INSTALLATION & USER'S GUIDE**



# 4G PRIMARY CELLULAR ALARM COMMUNICATOR

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## INTRODUCTION

The Uplink<sup>®</sup> 4530EX 4G Primary Alarm Communicator is a GSM alarm communicator designed to be used with almost any manufacturer's alarm panels that incorporate a digital telephone dialer. The Uplink 4530EX provides a "Primary" wireless interface to the protected premises and replaces the phone line connection. The Uplink 4530EX unit will "intercept" the alarm panel's digital dialer output when the panel has an event to report, and communicate with the panel as if it were a central station alarm receiver. Once the 4530EX completes a communications session with the alarm panel, it will transmit the alarm information using the local GSM cellular communications network. The Model 4530EX is compatible with alarm systems and central stations using these formats: Contact ID (SIA-DC05), SIA (SIA-DC03), Modem IIe/IIIa/IIIa<sup>2</sup> or Pulse 4/2.

## KEY FEATURES

**A. FULL DATA Reporting.** Compatible with most alarm panels using Contact ID (SIA DC-05 Standard), SIA FSK Level 1 (SIA DC-03 Standard), Modem IIe/IIIa/IIIa<sup>2</sup> or Pulse 4/2 digital dialer formats. All information sent by the alarm panel in these formats (account number, zone information, User IDs, etc.) will be sent to the central station using the GSM network.

**B. Power Requirements:** Requires constant 12V DC power from a power supply, battery, or alarm panel with a constant 200 mA and a peak 600 mA for one second during transmission.

**C. Panel to 4530EX Cable Supervision.** Monitors continuity of the cable connecting the panel's telephone dialer to the 4530EX. This feature is activated through the website [www.uplink.com](http://www.uplink.com) or by calling Uplink Customer Service:

**1-888-9-UPLINK** (1-888-987-5465)

**D. Input.** The 4530EX has one programmable input. This input can be programmed to one of the following functions via the website:

- Standard Input
- Sampled Siren
- Pulse Counter
- Timed Bell

**E. Output.** The 4530EX has one programmable relay output. This output can be programmed to activate upon the occurrence of one or more of the following Trouble conditions:

- Cellular Network Loss
- No Central Station Acknowledgement
- Low DC input Voltage
- Panel/4530EX Cable Supervision Trouble
- Unit Disabled by Dealer Command
- Watchdog Circuit Activation

**F. Power Source Monitoring (Low DC Input Voltage Reporting).** The 4530EX can report a low input Voltage condition to the central station when its DC input voltage drops below 10.2V DC. It will report Low input Voltage Restoral at 11.4V DC.

## KEY FEATURES (cont.)

**G. Automated Testing.** The 4530EX can be programmed to send an automated test signal to the central station on a monthly, weekly or daily interval.

**H. GSM Network Supervision.** Supervises the local GSM network. If the unit no longer locates the local GSM Network, its output relay can be set up to report this trouble condition.

**I. Status/Received Signal Strength LEDs.** The five LEDs indicate the current operational status and are visible from outside the enclosure. These LEDs can be placed into Received Signal Strength Indication mode (RSSI) to assist in selecting the optimal mounting location for transmitting and receiving cellular radio signals.

**J. Easy Initiation.** Ships with a SIM card, with easy activations available via the website at [www.uplink.com](http://www.uplink.com) or by calling Uplink Customer Service:

**1-888-9-UPLINK** (1-888-987-5465)

Requires the central station receiver phone number and/or its IP address and Port number.

**K. Web-based Services.** Available at [www.uplink.com](http://www.uplink.com) and include:

- a. secure login for dealers
- b. immediate, real-time activation
- c. history of past event transmissions
- d. initiation of a test report
- e. the ability to query the unit and receive a real-time radio report status including a Received Signal Strength reading
- f. programming the output and other internally generated events

## **WARRANTY & LIMITATION OF LIABILITY**

### **Standard 12-Month Limited Warranty**

Uplink Security, LLC's limited product warranty extends only to commercial distributors who purchase products directly from Uplink. Uplink's warranty does not extend to end user consumers of Uplink products or to other parties not in privity of contract with Uplink and, to the maximum extent permissible under applicable law, Uplink expressly disclaims any warranty, express or implied, extending to such end user consumer or parties including without limitations, any implied warranties or merchantability and fitness for a particular purpose. End user consumers with questions concerning an Uplink product are directed to contact the alarm/ security system dealer or installer from whom they purchased the product.

Distributors, dealers and installers with questions about Uplink's warranty and returns process are directed to contact Uplink Order Entry; issuance of a Return Merchandise Authorization (RMA) number by Uplink is required as a condition prerequisite to the return of any Uplink products under the applicable product warranty.

IN NO EVENT SHALL UPLINK OR ANY OF ITS REPRESENTATIVES BE LIABLE TO ANY END USER CONSUMER OF AN UPLINK PRODUCT AND/OR SERVICE OR ANY OTHER PARTY NOT IN PRIVACY OF CONTRACT WITH UPLINK FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL OR PUNITIVE DAMAGES, INCLUDING ANY DAMAGES FOR BUSINESS INTERRUPTION, LOSS OF USE, DATA, REVENUE OR PROFIT, WHETHER ARISING OUT OF BREAK OF CONTRACT, TORT (INCLUDING NEGLIGENCE OR PRODUCT LIABILITY) OR OTHERWISE, REGARDLESS OF WHETHER SUCH DAMAGES WERE FORESEEABLE AND WHETHER OR NOT UPLINK WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## **WARRANTY & LIMITATION OF LIABILITY (cont.)**

IN NO EVENT SHALL UPLINK'S AGGREGATE LIABILITY TO ANY END USER CONSUMER OF AN UPLINK PRODUCT AND/OR SERVICE OR OTHER PARTY NOT IN PRIVACY OF CONTRACT WITH UPLINK ARISING OUT OF OR RELATED TO AN UPLINK PRODUCT AND/OR SERVICE, WHETHER ARISING OUT OF OR RELATED TO BREAK OF CONTRACT, TORT (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE OR PRODUCT LIABILITY) OR OTHERWISE, EXCEED THE TOTAL AMOUNT PAID OR PAYABLE TO THE ALARM/SECURITY DEALER OR INSTALLER BY THE END USER CONSUMER FOR SAID PRODUCT AND/OR SERVICE IN THE 12 MONTH PERIOD PRECEDING THE EVENT GIVING RISE TO THE CLAIM OR \$250, WHICHEVER AMOUNT IS GREATER.

## FCC & INDUSTRY CANADA REGULATORY COMPLIANCE

### Part 15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 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:

- Reorient or relocate 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 technician for help.

## FCC RF EXPOSURE INFORMATION

In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters. Those guide-lines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this module complies with the FCC guidelines and these international standards. The FCC ID of this unit is QIPPHS8-US. For more information about RF exposure, please visit the FCC website at [www.fcc.gov](http://www.fcc.gov).

The term "IC" before the certification/registration number only signifies that the Industry Canada Technical Specifications were met. The external antennas used for this module must provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

## TECHNICAL SUPPORT

Technical support is available **Monday through Friday, 8:00 AM to 8:00 PM ET** excluding holidays. Before calling technical support please ensure you have read the installation guide completely. Technical support requires the caller to provide:

- **Login name**
- **Password**
- **Serial number of the 4530EX**

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## INSTALLATION

### A. General Considerations

Determine where to mount the unit. Keep the following in mind:

- a. Where to obtain the best transmitted and received signal strength for the cellular radio. (If the installer does not have a very strong cellular signal in his area, he may want to first power the unit from a portable 12V DC source, switch on S4 and move the unit to a location that gives him the best signal strength.)
- b. Proximity to the alarm panel and where to route the 4530EX's relay output that connects to an alarm panel input.

### B. DIP Switch Settings

The 4530EX has a four-position dipswitch. The dipswitches function as follows:

| SWITCH NO.        | SETTING | FUNCTION                  |
|-------------------|---------|---------------------------|
| S1: Default Load  | OFF     | Normal Operations         |
|                   | ON      | Load Defaults             |
| S2: OTA Operation | OFF     | OTA configuration allowed |
|                   | ON      | OTA configuration blocked |
| S3: Reserved      | OFF     | N/A                       |
|                   | ON      | N/A                       |
| S4: LED Function  | OFF     | Normal Operations         |
|                   | ON      | RSSI Measurements         |

(INSTALLATION continued next page)

## INSTALLATION (cont.)

### C. LEDs

Normal Mode: Upon initial power up, the 5 LEDs on the 4530EX will begin to function as follows:

|   |  |                             |
|---|--|-----------------------------|
| UPLINK SECURITY, LLC.<br>3330 Cumberland Blvd<br>Suite 700<br>Atlanta, GA 30339<br>888-987-5465<br>www.uplink.com   |  | LED Status -<br>Normal Mode |
| LED1 <input type="radio"/> POWER<br>LED2 <input type="radio"/> PANEL HOOK STATUS<br>LED3 <input type="radio"/> TROUBLE<br>LED4 <input type="radio"/> GSM COMM<br>LED5 <input type="radio"/> HEARTBEAT | OFF <input type="radio"/><br>FLASH <input checked="" type="radio"/><br>ON <input checked="" type="radio"/>   |                             |
| POWER   | <input type="radio"/> OFF NO DC POWER<br><input checked="" type="radio"/> GREEN DC POWER PRESENT<br><input checked="" type="radio"/> RED DC POWER LOW  |                             |
| PANEL HOOK STATUS   | <input checked="" type="radio"/> GREEN PANEL ON-HOOK<br><input checked="" type="radio"/> GREEN PANEL OFF-HOOK  |                             |
| TROUBLE   | <input checked="" type="radio"/> GREEN OUTPUT RELAY NORMAL<br><input checked="" type="radio"/> RED OUTPUT RELAY OFF-NORMAL   |                             |
| GSM COMM  | <input checked="" type="radio"/> GREEN UNIT REGISTERED ON DATA NETWORK<br><input checked="" type="radio"/> GREEN WAITING FOR ACK FROM CS<br><input checked="" type="radio"/> RED UNIT NOT REGISTERED<br><input checked="" type="radio"/> RED UNIT REGISTERED ON SMS NETWORK ONLY |                             |
| HEARTBEAT   | <input checked="" type="radio"/> GREEN Normal Operation<br><input checked="" type="radio"/> RED S1 ON AFTER RESET  |                             |

## INSTALLATION (cont.)

RSSI Mode: When the 4530EX is placed in Received Signal Strength Indicator (RSSI) Mode by turning Dipswitch S4 to ON, the five LEDs indicate the follow signal strength information:

|  |  |  |
|--|--|--|
| RECEIVED SIGNAL STRENGTH<br>>=-60dBm<br>LED1 <input type="radio"/><br>LED2 <input checked="" type="radio"/> GREEN<br>LED3 <input checked="" type="radio"/> GREEN<br>LED4 <input checked="" type="radio"/> GREEN<br>LED5 <input checked="" type="radio"/> GREEN | OFF <input type="radio"/><br>FLASH <input checked="" type="radio"/><br>ON <input checked="" type="radio"/> | GOOD                                   |
| >=-70dBm<br>LED1 <input type="radio"/><br>LED2 <input type="radio"/><br>LED3 <input checked="" type="radio"/> GREEN<br>LED4 <input checked="" type="radio"/> GREEN<br>LED5 <input checked="" type="radio"/> GREEN  |  |  |
| >=-80dBm*<br>LED1 <input type="radio"/><br>LED2 <input type="radio"/><br>LED3 <input type="radio"/><br>LED4 <input checked="" type="radio"/> GREEN<br>LED5 <input checked="" type="radio"/> GREEN  |  |  |
| >=-90dBm<br>LED1 <input type="radio"/><br>LED2 <input type="radio"/><br>LED3 <input type="radio"/><br>LED4 <input type="radio"/><br>LED5 <input checked="" type="radio"/> GREEN  |  |  |
| >=-100dBm<br>LED1 <input type="radio"/><br>LED2 <input type="radio"/><br>LED3 <input type="radio"/><br>LED4 <input type="radio"/><br>LED5 <input checked="" type="radio"/> GREEN   |  |  |
| >=-110dBm<br>LED1 <input type="radio"/><br>LED2 <input type="radio"/><br>LED3 <input type="radio"/><br>LED4 <input type="radio"/><br>LED5 <input checked="" type="radio"/> RED<br>No Signal -All LED's Off<br>*Recommended RSSI                                |  | MINIMUM ACCEPTABLE<br><br>UNACCEPTABLE |

(INSTALLATION continued next page)



## INSTALLATION (cont.)

### D. Locating and Installing the 4530EX

The 4530EX is housed in a plastic enclosure. The installer needs to supply DC power from the panel via the AUX output, or battery, via a separate DC power source. Input DC current is listed on page 25.

After carefully considering all of the issues outlined in Installations - General Considerations, page 12, proceed as follows:

1. Separate the top and bottom of the enclosure by depressing the tab on the bottom of the unit and then tilting the bottom of the plastic top outward and up.
2. Connect the antenna that is supplied with the 4530EX. The Antenna supplied may differ from the ones depicted in the figures in this manual.
3. Go to the red, 4-position Dipswitch as shown in Figure 1 and set the dipswitch as appropriate for this installation. (See DIP Switch Settings, page 12.)
4. Place Dipswitch #4 (S4) in the ON position. The LEDs are now operating in RSSI Mode. Locate a good mounting position based on a good Received Signal Strength Indication (RSSI). **It is recommended that the installation location demonstrate an RSSI of at least -80 dBm (two solid green LEDs).** The minimum acceptable RSSI is -90 dBm (1 solid green LED).
5. Position the bottom of the 4530EX enclosure where it will be installed. Use four (4) #6 screws and mount the unit using the four holes in the enclosure's plastic bottom.
6. Make sure that the unit's antenna is connected.
7. Connect the positive (+) and negative (-) terminals of the 12V DC power supply to terminals DC+ and DC - respectively on the 4530EX.
8. Double check to make sure that the RSSI is still showing a good signal strength level.
9. Before connecting the alarm panel and the 4530EX, first:
  - a. Return Dipswitch #4 (S4) to the OFF position.
  - b. Disconnect the Positive and Negative connections to the DC power source.

## INSTALLATION (cont.)

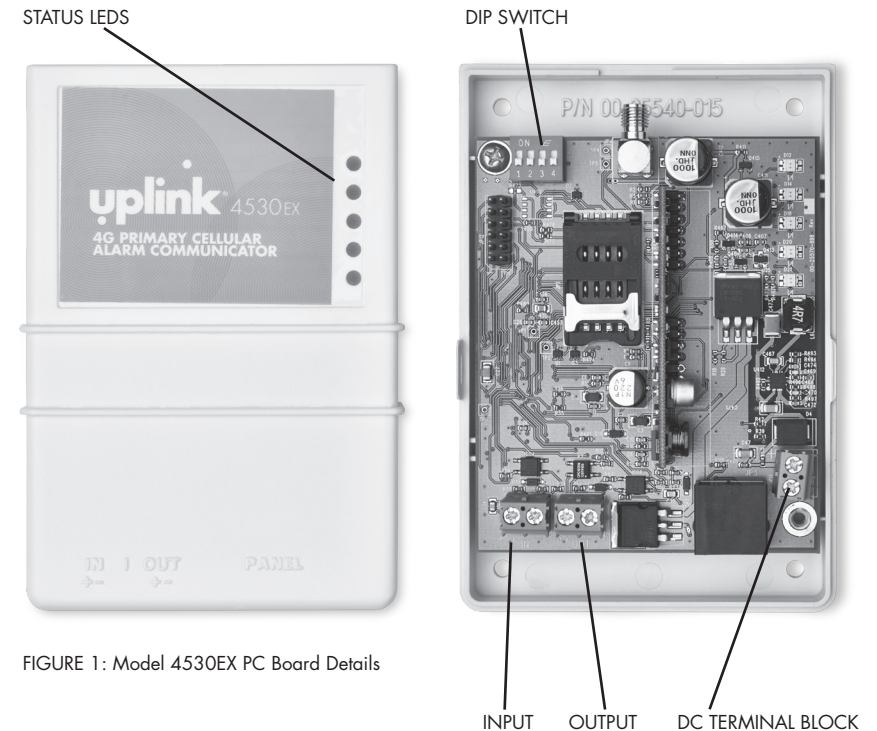


FIGURE 1: Model 4530EX PC Board Details

**CAUTION: Incorrect Connections May Result in Damage to the Unit**

(INSTALLATION continued next page)

## INSTALLATION (cont.)

### E. Connecting the 4530EX to the Alarm Panel

**IMPORTANT: Make all of the connections to the 4530EX in the powered down state. Once all of the connections have been established, turn power on.**

1. First, remove DC power from the 4530EX, and then proceed as follows:
2. Panel Connections  
Connect the alarm panel's telephone output to the 4530EX with an appropriate cable. On the 4530EX's side, the cable should use an RJ45 plug and be connected into Jack JP3.
3. Output  
The 4530EX has one relay output that can be used to activate an input on the alarm panel or for other local purposes. Decide on how to use this output (see section 6. Programming) then wire it from the terminal strip to the external panel or device:

Output #1 Terminals: OUT1+ and OUT1-

The default state for this Output is as follows:

| OUTPUT | DEFAULT STATE                  | DEFAULT DEFINITION       |
|--------|--------------------------------|--------------------------|
| #1     | Configurable - normally closed | Loss of cellular service |

See Figure 2 as an example of how to connect the 4530EX to the alarm panel.

## INSTALLATION (cont.)

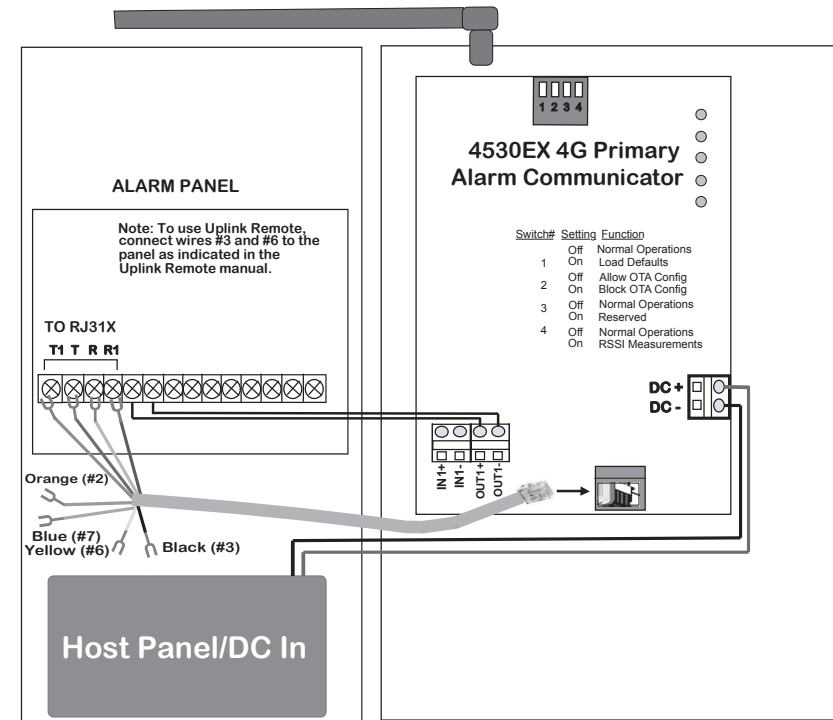


FIGURE 2: Connections between the 4530EX and the Alarm Panel

(INSTALLATION continued next page)

## INSTALLATION (cont.)

### F. Configuring Input 1 (Via Over the Air programming)

Input 1 can be configured to perform one of four functions and is programmable Over-The-Air via the Uplink Dealer web site.

1. **Standard Input** - (Default mode) This mode configures the unit to be tripped from a DC voltage ranging from 9 V DC to 12 V DC or an open collector.
2. **Timed Bell** - This mode configures the unit to be tripped from a DC voltage ranging from 9 V DC to 12 V DC. The unit reads a pulsed voltage as a fire signal and a steady voltage as a burglary signal. It may be necessary to place a 1K Ohm resistor in parallel to prevent false alarms when using panels with supervisory voltage on the bell circuit. Some panels with supervised bell circuits may require a 1K Ohm resistor in the circuit. Contact Technical Support for further details.
3. **Sampled Siren\*** - This mode configures the unit to be tripped from a siren driver or a panel with a built in siren driver. The unit reads a steady tone as a fire signal and a yelping tone as a burglary signal.

**\*NOTE:** The input assumes that a speaker is connected to the panel. If you are not using a speaker we recommend using a Timed Bell instead of Sample Siren. This is an option on most panels.

## INSTALLATION (cont.)

### Input 1 if Standard Type

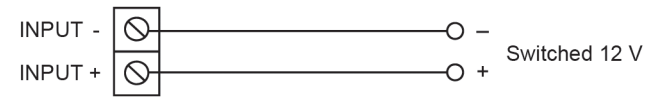


FIGURE 3: Wiring example for voltage trip

**Voltage Trip** - Input 1 if set for standard input can be tripped by applying 12 V to the + input and 0 V to the - input. A signal must be continuously present for 500 ms.

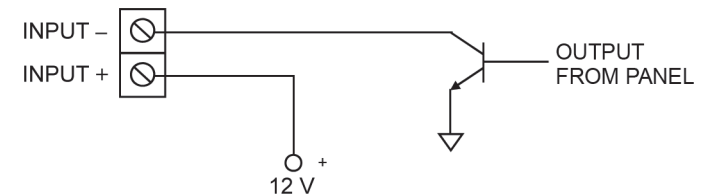


FIGURE 4: Wiring example for open collector trip

**Open Collector** - Inputs 1 if set for standard input can be tripped by applying 12 V to the + input and the Open Collector output of the panel to the - input. A signal must be continuously present for 500 ms.

(INSTALLATION continued next page)

## INSTALLATION (cont.)

### G. Activating the 4530EX

The 4530EX is programmed OTA (Over-the-Air) by accessing the Uplink Dealer website or by calling Uplink Customer Service at **1-888-9UPLINK** (1-888-987-5465).

#### New Dealer Enrollment:

For new dealers/customers, you must first establish an account with Uplink by visiting the Uplink website ([www.uplink.com](http://www.uplink.com)).

1. Enter the Login Name and Password. Wait about 20 seconds for the next web page to completely load.
2. Under the **Programming** Tab, select **“Activate Unit”** from the menu choices.
3. Answer **“Yes”** to the question **“I have read and I accept the terms of the Activation Agreement”**.
4. Enter the device serial number and select **“Activate”**.
5. If desired, enroll the unit in the Uplink Lifetime Guarantee program.
6. If you are offering Remote Services, enroll the unit in Uplink Remote.
7. You will be directed to the Edit Unit Settings page, where you will enter all appropriate customer information.
8. From the **Central Station Notification** drop down menu, select the appropriate format.
9. Enter the appropriate Central Station phone number and account number.
10. Configure the device to meet your install needs.
11. Select **“Update”**.
12. Unit must be powered to continue. From the **“Programming”** drop down menu, select **“Program Unit Over the Air”**.
13. Set the appropriate Dialer Protocol, select Send.
14. From the **“Test”** drop down menu, select **“Send Status Request Signal”**.
15. Activation is complete once a successful test message is displayed. From the **“Signal History”** drop down menu, select **“Events Received”**.

## INSTALLATION (cont.)

### H. Programming and Central Station Reporting

The following parameters can be configured from the dealer website **“Programming”** Menu:

#### 1. Automated and On Demand Test Signals (Default = Weekly)

The Automated Test signal interval can be changed from the dealer website to monthly, weekly, or daily. In addition, an immediate test signal can be generated.

#### 2. Activate/Deactivate Output Relay

Output relay #1 can be activated or deactivated from the dealer website.

This feature allows the installer to test the correct operation of this output when it is connected to the alarm panel.

#### 3. Normal State of Output Relay (Default = #1 Energized Closed)

The normal state of the Output Relay can be changed from the dealer website.

#### 4. Output Relay 1 Mapping (Default = #1 Loss of Cellular Service)

There are 6 Trouble states that can be declared by the 4530EX, and each of these states can be programmed from the dealer website to activate the Output Relay.

The 6 Trouble states are:

- Low DC Input Voltage
- Cable Supervision Trouble (Panel to 4530EX)
- Loss of Cellular Service
- 4530EX Disabled (via website command)
- Failure to receive ACK from Central Station
- Watchdog Circuit Trouble

#### 5. Send Trouble Condition to Central Station **“Specific Event Reporting”** (Default = Low DC Input Voltage)

Any or all of the Trouble Conditions detectable the 4530EX can be programmed to report that condition (and its Restoral) to the monitoring Central Station.

(INSTALLATION continued next page)

## INSTALLATION (cont.)

See Appendix A for a list of Contact ID format, SIA format and Modem I/e/Illa/Illa<sup>2</sup> event codes generated by the 4530EX that can be sent to the central station receiver.

See Appendix B for a list of the default event codes transmitted by the 4530EX.

The 4530EX supports Pulse 4/2 with any combination of :10, :20, or :40 PPS. Two round or checksum, 1400 Hz or 2300 Hz handshake.

### I. Default Event/Email Messages

Email and Text Messaging will only be available for Status events (e.g., Low DC input Voltage, Test, etc.). Events transmitted from the premises alarm panel via the 4530EX's Primary function will not be sent out by email or text messaging.

### J. Completing the Installation and Testing

Once the physical installation is completed, the unit is activated from the dealer website, and programming changes are made, test the 4530EX along with the alarm panel to ensure everything is functioning properly.

#### Test the following:

- a. Check to see that all 5 LEDs are green. The first 4 LEDs should be solid green, and the 5th LED should be flashing green.
- b. Trip an alarm on the alarm panel. Check that the 4530EX has correctly intercepted the panel's digital dialer output and reported the event to the central monitoring station.
- c. If using the Output Relay on the 4530EX go back to the dealer website and use the Switch Output Relay command to test the relay. Make sure the premises alarm panel properly detects the relay's change of state and that it reports the proper event to the monitoring central station.
- d. Finally, remove DC Power from the 4530EX and trip an alarm on the premises alarm panel. Confirm that the panel detects loss of its communication path and alarms appropriately (local).
- e. Reconnect DC Power to the unit and verify proper handling of the alarm from the panel.

## SPECIFICATIONS

| <b>DIGITAL DIALER INTERFACE</b>                                  |  |
|--|--|
| Format Compatibility   | Contact ID, SIA, Modem IIe/IIIa/IIIa <sup>2</sup> , Pulse 4/2 (:10, :20, or :40 PPS) |
| Connector  | RJ45 and screw terminals   |
| Simulated telco line voltage                                     | 48 V DC On-Hook  |
| Dial tone  | 350 + 440 Hz +/- 0.2%  |
| Receive level minimum  | - 45 dBm, 20 dBm S/N   |
| Line impedance   | 600 ohms   |
| Ringer Equivalence   | 0.3 REN  |
| Mode   | Loop start. 26 mA typical  |
| <b>POWER REQUIREMENTS</b>  |  |
| Input Voltage  | 12V DC   |
| Normal Current (On Hook)   | 125 mA   |
| Maximum Current (Off Hook)                                       | 600 mA   |
| Radio during Transmission<br>- Average Current<br>- Peak Current | 215 - 250 mA<br>1.3 - 1.5 A  |
| UL Power Requirements  | Uninterruptable Class 2 power supply<br>12V DC/1.2 A                                 |

## SPECIFICATIONS (cont.)

| <b>RADIO</b>         |                         |
|----------------------|-------------------------|
| Frequencies          | 850/1900 MHz            |
| Sensitivity          | -106 dB (typical)       |
| <b>ENVIRONMENTAL</b> |                         |
| Temperature Range    | -30° to +70° C          |
| Humidity             | 0 to 95% non-condensing |
| <b>PHYSICAL</b>      |                         |
| Height               | 2.5 inches              |
| Width                | 5.4 inches              |
| Depth                | 10.5 inches             |

## APPENDIX A: CONTACT ID, SIA EVENT, AND MODEM IIe/IIIa/IIIa<sup>2</sup> CODES

Following is a list of event codes that can be sent to the central station receiver for events generated by the 4530EX:

| EVENT DESCRIPTION         | CONTACT ID<br>EVENT CODE | SIA DC-03<br>EVENT CODE | MODEM IIe/<br>IIIa/IIIa <sup>2</sup> |
|---------------------------|--------------------------|-------------------------|--------------------------------------|
| AC Fail                   | E301                     | AT                      | 48                                   |
| AC Restoral               | R301                     | AR                      | 49                                   |
| Alarm (generic)           | E140                     | UA                      | 10                                   |
| Burglary Alarm            | E130                     | BA                      | 10                                   |
| Burglary Restoral         | R130                     | BR                      | 12                                   |
| Burglary Tamper           | E137                     | TA                      | 10                                   |
| Burglary Tamper Restoral  | R137                     | TR                      | 12                                   |
| Closing                   | R400                     | CL                      | 32                                   |
| Fire Alarm                | E110                     | FA                      | 0B                                   |
| Fire Restoral             | R110                     | FR                      | 0E                                   |
| Fire Supervisory          | E200                     | FS                      | 11                                   |
| Fire Supervisory Restoral | R200                     | FJ                      | 12                                   |
| High Temperature          | E158                     | KA                      | 10                                   |
| High Temperature Restoral | R158                     | KR                      | 12                                   |
| Holdup Alarm              | E122                     | HA                      | 10                                   |
| Holdup Restoral           | R122                     | HR                      | 12                                   |
| Low Battery               | E302                     | YT                      | 4B                                   |
| Low Battery Restoral      | R302                     | YR                      | 4C                                   |
| Low Temperature           | E159                     | ZA                      | 10                                   |

## APPENDIX A: CONTACT ID, SIA EVENT, AND MODEM IIe/IIIa/IIIa<sup>2</sup> CODES (cont.)

| EVENT DESCRIPTION                   | CONTACT ID<br>EVENT CODE | SIA DC-03<br>EVENT CODE | MODEM IIe/<br>IIIa/IIIa <sup>2</sup> |
|-------------------------------------|--------------------------|-------------------------|--------------------------------------|
| Low Temperature Restoral            | R159                     | ZR                      | 12                                   |
| Medical Alarm                       | E100                     | MA                      | 10                                   |
| Medical Restoral                    | R100                     | MR                      | 12                                   |
| Opening                             | E400                     | OP                      | 2F                                   |
| Panic Alarm                         | E120                     | PA                      | 10                                   |
| Panic Restoral                      | R120                     | PR                      | 12                                   |
| Phone Fail                          | E350                     | LT                      | 44                                   |
| Phone Restoral                      | R350                     | LR                      | 45                                   |
| Radio Supervision Lost              | E355                     | YC                      | 11                                   |
| Radio Supervision Restoral          | R355                     | YK                      | 12                                   |
| Restoral (generic)                  | R140                     | UR                      | 12                                   |
| Service Completed                   | R616                     | YZ                      | 12                                   |
| Service Required                    | E616                     | YX                      | 11                                   |
| Telco Line Fail                     | E350                     | LT                      | 44                                   |
| Telco Line Restoral                 | R350                     | LR                      | 45                                   |
| Test                                | E602                     | TX                      | 33                                   |
| Trouble (generic)                   | E300                     | UT                      | 11                                   |
| Trouble Restoral (generic)          | R300                     | UR                      | 12                                   |
| Trouble, System Peripheral          | E330                     | ET                      | 11                                   |
| Trouble Restoral, System Peripheral | R330                     | ER                      | 12                                   |

## APPENDIX B: 4530EX DEFAULT EVENT CODES

The 4530EX is defaulted to send both the Alarm/Trouble condition and the Restoral condition for all of the events listed below. Reporting of individual events can be controlled from the Dealer Website.

Following is a list of the default event codes sent by the 4530EX:

| EVENT DESCRIPTION          | CONTACT ID EVENT CODE | SIA DC-03 EVENT CODE | MODEM lle/llla/llla <sup>2</sup> | ZONE NO. REPORTED |
|----------------------------|-----------------------|----------------------|----------------------------------|-------------------|
| Low DC Voltage             | E302                  | YT                   | 4B                               | 240               |
| Low DC Restoral            | R302                  | YR                   | 4C                               | 240               |
| Cable Supervision Trouble  | E616                  | YX                   | 11                               | 242               |
| Cable Supervision Restoral | R616                  | YZ                   | 12                               | 242               |
| Cellular Service Loss      | E355                  | YC                   | 11                               | 243               |
| Cellular Service Restoral  | R355                  | YK                   | 12                               | 243               |
| 4530EX UNIT DISABLED       | E616                  | YX                   | 11                               | 245               |
| 4530EX UNIT RESTORAL       | R616                  | YZ                   | 12                               | 245               |
| WATCHDOG CIRCUIT TROUBLE   | E616                  | YX                   | 11                               | 246               |
| Watchdog Circuit Restoral  | R616                  | YZ                   | 12                               | 246               |
| Test                       | E602                  | TX                   | 33                               | 000               |

## UPLINK 4530EX 4G PRIMARY ALARM COMMUNICATOR INSTALLATION, OPERATION AND PROGRAMMING GUIDE

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