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# StarLink™ Connect LTE Series SLE-LTEV-C / SLE-LTEV-Z Multi-Function Alarm Communicators INSTALLATION INSTRUCTIONS



WI2307CLF 6/19

## OVERVIEW

The StarLink™ Connect models **SLE-LTEV-C** and **SLE-LTEV-Z** are multi-function Commercial Burglary and Residential Fire alarm radio communicators and supervised system interface modules. They provide several options to the home owner:

1. A monitoring path to a central station through a digital LTE (Verizon) radio and optionally through a TCP/IP network to the Internet using a hardwired Ethernet connection or optional Wi-Fi adapter (Wi-Fi not used for Commercial Burglary);
2. Notification alerts of alarm system changes to a mobile device. Notifications use *iBridge Messenger* SMS text messaging and/or emails to inform the user and/or dealer of system state changes. For this release, these notifications are enabled in the *iBridge Connected Home Services* website at <http://ibridge.napconoc2.com/>;

NAPCO control panels are programmed in the traditional way using PCD-Windows Quickloader software. The *StarLink Connect* application is available on the enclosed CD or can be downloaded from the Napco Technical Library at <http://tech.napcosecurity.com/>.

3. Allows users to control Z-WAVE devices in several ways:
  - a. Through the use of a mobile device app;
  - b. Through Z-Wave Schedules;
  - c. Through Z-Wave Scenes;

If required, mount the unit to a single-, dual-, or three-gang electrical box and route the wires through the back knock-out(s), or as specified by local codes. **See WI2140 for programming instructions** (all manuals are available for download at <http://tech.napcosecurity.com/>).

StarLink SLE Series radios use proprietary data-capture technology that captures the alarm report from the control panel and transmits the alarm signals to the SLE Control Center (the Napco "NOC"); the alarm signals are then forwarded to ANY central station via Contact ID or 4/2 via DACT from the NOC or Sur-Gard System II, Sur-Gard System V, Bosch D6100IPV6 or Bosch D6600 Receiver (with ITS-D6686 Ethernet Adapter) via TCP/IP using standard line security. The SLE Control Center reports a trouble signal in the event that the network does not receive the expected supervision signal from the wireless communicator. In addition, both StarLink radio models can be powered directly from the control panel.

The StarLink radio model names are as follows:

**SLE-LTEV-C** - Network Compatible LTE (Verizon) alarm capture radio communicator, SIM card included. White plastic enclosure.

**SLE-LTEV-Z** - Network Compatible LTE (Verizon) alarm capture radio communicator, SIM card included. Includes the **SLE-ZWAVE-MOD** Z-Wave module. White plastic enclosure.



For Commercial Burglary installations, under the armed condition, any loss of communication must be treated as a Burglary Alarm at the Central Station.

## ADDITIONAL COMPONENTS

In addition to the models listed above, the following sub-assemblies are available:

**SLE-WIFI-MODULE** - Allows your Napco iBridge® or StarLink™ device to connect to the Internet by means of a wireless (Wi-Fi) link, eliminating a wired Ethernet cable connection.

**SLE-ZWAVE-MOD** - Included with the **SLE-LTEV-Z** radio, the Z-Wave module (PC board) allows your Napco iBridge® or StarLink™ device to connect to your Z-Wave devices.

**SLE-DLCBL** - Download Cable, 6 feet.

**SLE-ANTEXT30** - Extended antenna with 30 feet of cable.

**SLE-ANTEXT50** - Extended antenna with 50 feet of cable.

**SLE-ANTEXT75** - Extended antenna with 75 feet of cable.

(Any suitable external cellular antenna is permitted by UL). Always follow the manufacturer's installation instructions. **Note:** Antennas are not Listed by UL.

## SPECIFICATIONS

The following specifications apply to all StarLink radio models unless otherwise stated:

**Electrical Ratings for +12V (both models powered by the control panel)**

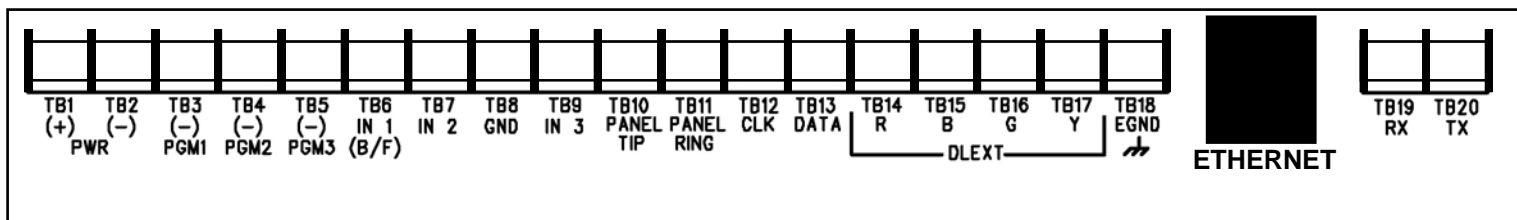
- Input Voltage: 10-15VDC (regulated power-limited output from control panel). Do NOT connect to full-wave rectified (FWR) power.
- Input Current:
  - SLE-LTEV-C** standby current: 126mA (135mA with telco EOLR)
    - For Z-Wave add 10mA; for Wi-Fi add 45mA
  - SLE-LTEV-Z** standby current: 135mA (145mA with telco EOLR)
    - Transmission current (both models): Add 135mA.



## AGENCY LISTINGS

- UL 1610 Standard For Central-Station Burglar-Alarm Units
- UL 985 Standard For Household Fire Warning System Units

LTEV models are Verizon® Network Certified



### Electrical Ratings for the IN 1 Burg/Fire Input:

- Input Voltage: 9-15VDC.
- Maximum Input Current: Up to 2mA from control panel supply circuit

### Electrical Ratings for IN 2 and IN 3:

- Maximum Loop Voltage: 15VDC max.
- Maximum Loop Current: 1.2mA
- End of Line Resistor (EOLR) Value: 10K

### Electrical Ratings for 3 PGM Outputs:

- Open Collector Outputs: Maximum Voltage 3V when active; 15V maximum when not active
- Maximum PGM Sink Current: 50mA (up to 15VDC)

### Physical (W x H x D)

- Plastic Housing: 8 x 5<sup>-29</sup>/<sub>64</sub> x 1½" (20.3 x 13.9 x 3.8cm)
- Mounting: Plastic housing includes three keyhole slots for triple gang boxes (see scale template in WI2336LF);

### Environmental

- Operating Temperature: 0°C - 49°C (32°F - 120°F)
- Humidity: Maximum 93% Non-Condensing
- Indoor / dry location use only

**TB7:** IN 2: See TB9, below.

**TB8:** GND: Common ground terminal.

**TB9:** IN 3: Both terminals IN 2 and IN 3 default to 'User Defined'; no end-of-line resistor supervision required. Wire the common ground terminal **GND** (terminal **TB8**) to the relay common. When used as arm/disarm status input, a low indicates "armed" and a high indicates "disarmed". For these inputs to report to a central station, the radio must be configured with the central station telephone number and correct reporting formats and codes.

**TB10:** PANEL TIP: See wiring diagram(s).

**TB11:** PANEL RING: See wiring diagram(s).

**TB12:** CLK: See wiring diagram(s).

**TB13:** DATA: See wiring diagram(s).

**Note:** TB14-TB17 no connections permitted by UL.

**TB14:** RTS (R): See TB17 below.

**TB15:** PANEL TX (B): See TB17 below.

**TB16:** PANEL RX (G): See TB17 below.

**TB17:** CTS (Y): No connections permitted.

**TB18:** EGND: Earth ground (optional)

**TB19:** RX: See wiring diagram(s).

**TB20:** TX: See wiring diagram(s).

## TERMINAL DESCRIPTIONS

Configure all inputs and outputs using the Management Center (the Napco "NOC" located at <http://NapcoNoc2.com>). Located at the bottom of the StarLink radio PC board, the 20 terminals are described as follows:

**Note:** All end-of-line resistors must be UL Listed EOLR for Residential Fire applications.

**TB1:** PWR (+) +12VDC nominal (10-15VDC regulated). Do NOT connect to FWR power.

**TB2:** PWR (-)

**TB3:** PGM1 (-): Open collector output. PGM1 is normally on (active low). When it is triggered (for example, a trouble is detected) it becomes open collector/high. To have a zone dedicated to an StarLink radio trouble, insert one side of the end of line resistor into this PGM1 terminal, and wire the other side of the resistor to the positive terminal of the zone.

**TB4:** PGM2 (-): Open collector output. This output is normally open collector / high. When a report fails to communicate anywhere in the communications path, the output is active low.

**TB5:** PGM3 (-): Open collector output. This output is normally open collector / high. Use the Napco "NOC" to configure options for PGM activation.

**TB6:** IN 1: Active high input for wiring to the control panel bell output. When this input detects a pulsing temporal 3 high, it sends a Fire alarm; a pulsing temporal 4 (CO Alarm), a CO alarm is sent. For this input to report to a central station, the StarLink radio must be configured with the central station telephone number and correct reporting formats and codes.

## LED DESCRIPTIONS

The PC board contains several LEDs, as follows:

### GREEN RF SIGNAL STRENGTH LED

Labeled "D3", this LED is located at the lower right corner of the PC board (see image).

Every 30 seconds, the StarLink radio receiver section turns on and listens to the cell tower. Depending on the signal strength detected, it will blink the Signal Strength LED from 1 to 5 times, providing a signal strength indicator that is updated constantly and is always displayed.

#### Green LED Operation

Signal strength (as received by the radio) is displayed by this LED blinking 1 to 5 times at a constant rate (with a short delay between blink cycles). Acceptable power level is greater than or equal to 2 blinks.

### YELLOW OPERATIONAL STATUS LED (Radio)

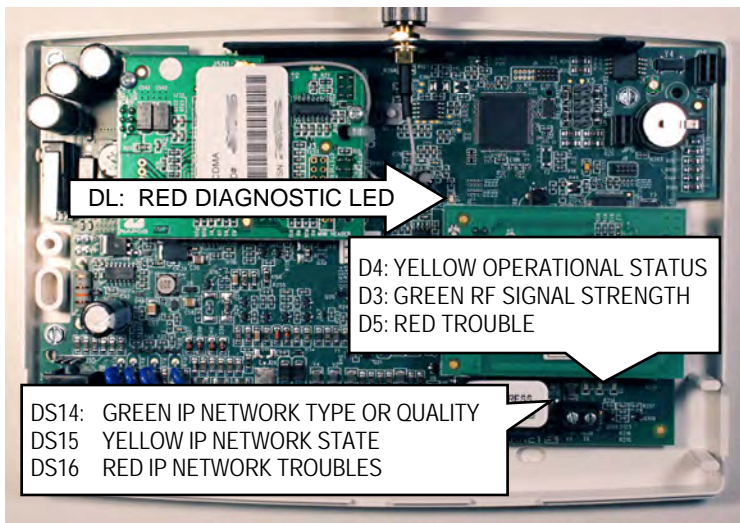
Labeled "D4", this yellow LED is located at the bottom right of the PC board. Operation is as follows:

#### Normal Standby Condition:

- **Blinks on momentarily every 10 seconds:** Unit is in standby waiting for an alarm to report.

#### Processing Alarm Conditions:

- When processing an alarm, this yellow LED will blink variably during each part of the process (dialing, hand-shaking, data transmission, etc.).
- This yellow LED will light when communicating with the phone app and when notifications are transmitted.



LED LOCATIONS

ty; requires a restart (full power down and full power up sequence) to restore operation.

### RED DIAGNOSTIC LED

Labeled "D7", this LED is located in the middle of the PC board. One blink indicates a weak or non-existent signal from the network (green LED is off). If this red LED is blinking in any other manner, please contact technical support.

### NETWORK CONNECTION LEDs

Labeled "DS14" (green), "DS15" (yellow) and "DS16" (red), these LEDs are located at the bottom right of the PC board.

The green LED labeled "DS14" describes the IP network connection type or the connection quality, as follows:

- When **DS14** is off = No network cable detected
- When **DS14** is flashing rapidly = No IP connection (occurs just after power on while trying to obtain an IP address; therefore has priority over any other green flashing LEDs)
- When **DS14** is flashing slowly = Normal operation:
  - **1 Slow Blink:** Static IP Address (as programmed by the NOC)
  - **2 Slow Blinks:** DHCP (default)
  - **3 Slow Blinks:** Auto IP (if unable to acquire DHCP address, after 5 minutes radio will convert to Auto IP.

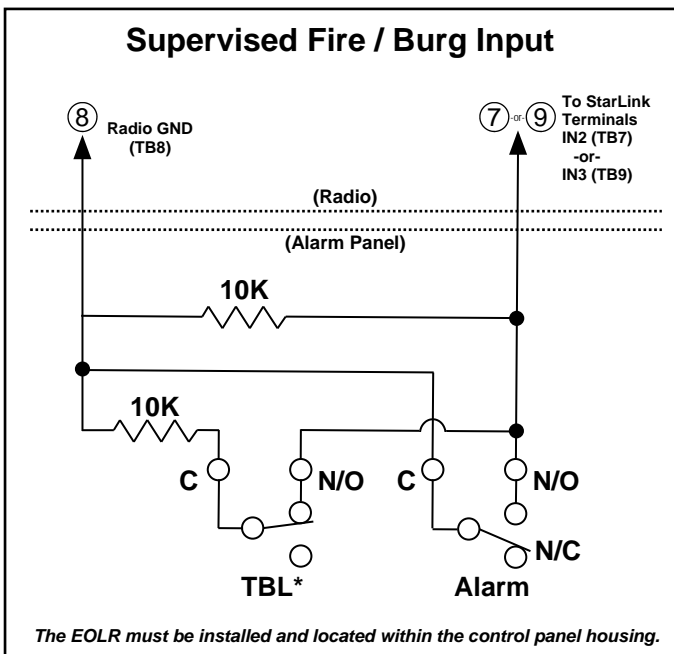
The Yellow LED labeled "DS15" describes the status of the IP network.

- When **DS15** is off = No power
- When **DS15** is on solid = IP reporting disabled
- When **DS15** is flashing rapidly = Push button on Wi-Fi module is being pressed
- When **DS15** is flashing steady with 1 quick blink off every 2 seconds = Reporting signal to NOC
- When **DS15** is flashing steady with 2 quick blinks off every 2 seconds = Downloading to control panel or the module

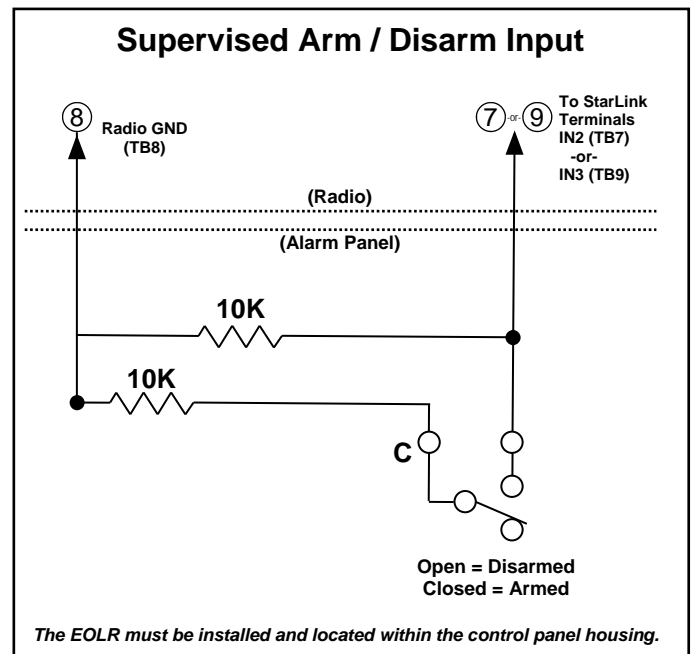
### RED TROUBLE LED

Labeled "D5", this LED is located at the bottom right of the PC board. Operation is as follows:

- **1 Blink:** Low Aux Power input voltage
- **2 Blinks:** Battery trouble
- **3 Blinks:** Alarm report Failed to Communicate (will restore only when both paths are operational)
- **4 Blinks:** RF trouble (antenna connection or cellular registration)
- **5 Blinks:** Radio poll or check-in failure (radio only). The unit must only fail on one path to trigger the trouble, but for the trouble to clear, unit requires both IP and radio polling / checks to be operational.
- **6 Blinks:** Unit disabled (reporting or control panel downloading not allowed)
- **7 Blinks:** Unit was shutdown and has no functionali-



\*Reverse polarity / energized state.





- When **DS15** is flashing slowly:
  - **1 Slow Blink:** Ethernet available (must detect that the CAT5 cable is connected and must be connected to the Internet via customer router, etc.)
  - **2 Slow Blinks:** Wi-Fi Station Mode
  - **3 Slow Blinks:** Wi-Fi APN Mode (Access Point)

The red LED labeled "**DS16**" describes the IP network troubles.

- When **DS16** is off = No network troubles detected
- When **DS16** is flashing rapidly = No IP connection (occurs just after power up while the radio tries to obtain a DHCP IP address)
- When **DS16** is flashing slowly:
  - **1 Slow Blink:** No network cable detected
  - **2 Slow Blinks:** No network cable access to the Internet (mutually exclusive with "**1 Blink**"). If the radio is configured for only an Ethernet connection (no Wi-Fi) and the Ethernet cable is connected but the router is non-functional, the radio will detect the loss of access to the Internet within a programmable amount of seconds. The default of 500 seconds (8-1/3 minutes) is intended to display a trouble to the installer sooner in case the account is set for 1-hour, 24-hour or 7-day Supervisory Failure
  - **3 Slow Blinks:** Ethernet failed to communicate
  - **4 Slow Blinks:** Ethernet poll / check-in failure
  - **5 Slow Blinks:** Wi-Fi enabled but the **SLE-WIFI-MODULE** is not detected
  - **6 Slow Blinks:** = No Wi-Fi access to the Internet. May occur when the Wi-Fi and the network cable each access the Internet via separate means (for example two different routers). **Note:** This indication may be combined with the "**2 Blinks**" indication if both the Wi-Fi and network cable use the same ISP.
  - **7 Slow Blinks:** Wi-Fi failed to communicate
  - **8 Slow Blinks:** Wi-Fi poll / checkin fail
  - **9 Slow Blinks:** Wi-Fi serial data error or no serial data response
  - **10 Slow Blinks:** Wi-Fi Security / Authentication failed

#### OTHER LEDs

Labeled "**D607**" (green) and "**D606**" (red), these LEDs indicate the status when connected to a DSC or Honeywell control panel (when connected to a NAPCO control panel, both LEDs remain off). The LED labeled "**D44**" is not used.

When connected to a Honeywell control panel, **D607** (green) flashes once every 5 seconds, and:

- When **D606** (red) is off = No troubles
- When **D606** (red) is flashing rapidly = Bootloader mode
- When **D606** (red) is flashing 1 = Keypad bus fault
- When **D606** (red) is flashing 3 = Configuration memory error

When connected to a DSC control panel, **D607** (green) flashes twice every 5 seconds and:

- When **D606** (red) is off = No troubles
- When **D606** (red) is flashing rapidly = Bootloader mode
- When **D606** (red) is flashing 1 = Keypad bus fault

(radio terminals 12 and 13)

- When **D606** (red) is flashing 2 = DSC download connection faulted (radio terminals 19 and 20)

## SUPPLYING POWER TO THE RADIO

Control panels can provide power through their Auxiliary Power terminals if the available standby current is reduced by the SLE standby power. If the control panel Auxiliary Power is insufficient to power the communicator, a suitably rated power limited Residential Fire / Commercial Burglary power supply may be used (such as the model GEMC-12V2APS).

## RADIO INSTALLATION STEPS

### STEP 1: ACCOUNT REGISTRATION

Create a new account and register specific StarLink radio modules at [www.NapcoComNet.com](http://www.NapcoComNet.com). Accounts and modules registered via the Internet are enabled for activation within 24 hours.

### STEP 2: SELECT A MOUNTING LOCATION

The mounting location should be indoors within the protected area and selected based on RF performance. It is HIGHLY recommended that the installer carefully adhere to the following recommendations BEFORE any wires are installed.

- Generally, high locations are best. DO NOT mount radio in basements or below grade as unpredictable performance may result.
- DO NOT mount the radio in non-climate controlled environments (i.e. attics may become extremely hot in summer, garages may become extremely cold in winter).
- Avoid mounting locations within 3 feet of AC power lines, fluorescent light fixtures, or large metal objects (air conditioners, metal garage doors, etc.) as these locations have been shown to have a detrimental effect on signal strength.
- A fair amount of care may be required to mount the radio so as to achieve an optimal RF path. The installer should spend as much time as needed to obtain the highest signal level possible.
  - a. **Before applying power, be sure to connect the antenna.** Temporarily connect power to the radio from a fully charged 12V (4AH minimum) battery. DO NOT mount the StarLink radio at this time. Press **Tamper** switch to send a signal.
  - b. Position the unit in the desired mounting location, with antenna oriented vertically. The signal strength is displayed by the Green "Signal Strength LED" labeled "D3" (located at the lower right corner of the PC board). The LTE (Verizon) radio tower signal strength may fluctuate from day to day, therefore it is best to try to find a mounting location where the LED provides a **minimum of 2 blinks**.
  - c. Once a location has been selected based on signal coverage, permanently secure the unit using #8 screws (not supplied) in the two mounting holes.

**WARNING:** To ensure user safety and to satisfy FCC RF exposure requirements, this unit must be installed so that a minimum separation distance of 60cm (24") is always maintained between the antenna of the transmitting device and nearby persons.

### STEP 3: WIRING

22-gauge wire may be used if mounted up to 50 feet from the control panel, and 18-gauge wire should be used for up to 100 feet. Reference the wiring diagrams further in this manual. All wiring methods must be performed in accordance with NFPA70, Articles 725, and 800

### STEP 4: APPLY POWER

- **Attach antenna before applying power !**
- Apply 12 VDC to terminals 1 and 2.

### STEP 5: SIGNAL VERIFICATION

After triggering channels, use the StarLink radio Signal Verification to ensure that the StarLink radio Network has properly received the signals.

- **Verify Online:** To verify that the signals have been received by the StarLink radio Network online, go to <http://NapcoNoc2.com>, log in with your Username and Password, enter your **Company ID** number and the StarLink **Radio Number**, then click **Signal Log**.

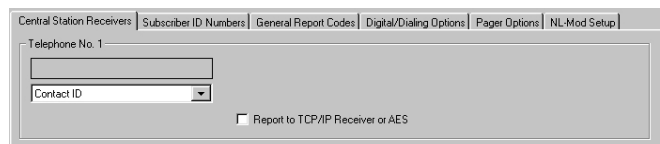
**IMPORTANT:** Verify that the signals transmitted by the StarLink radio have been properly received by your central station before leaving the premises.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B Unintentional Radiator, 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 Instruction Manual, 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 of more of the following measures: 1. Reorient or relocate the receiving antenna; 2. Increase the separation between the equipment and receiver; 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected; 4. Consult the dealer or an experienced radio/TV technician for help.

## NAPCO CONTROL PANEL PROGRAMMING

To program the central station receiver reporting format, use PCD-Windows Quickloader download software. Open the **Digital Communications** screen, **Central Station Receivers** tab, as shown in the following image:

A "Point ID" (also called "Contact ID") receiver format programming example:



The radio can transmit to any central station capable of receiving SIA Contact ID or 4/2 via DACR technology or the DSC Sur-Gard Model System II or Sur-Gard System V central station receivers, Bosch D6100IPV6 or Bosch D6600 Receiver (with ITS-D6686 Ethernet Adapter) via TCP/IP using standard line security.

**Note:** A receiver reporting format must be entered for each telephone number used, but each telephone number may be assigned a different format.

**CAUTION:** The installer should always be certain an area code is programmed into the control panel.

**Optional:** If you wish the StarLink radio to report a code and zone number (Contact ID by default) to the central station in response to a triggered input event, see the table on page 7. **Note:** These event codes and zone numbers can be changed from the Management Center screen (located at <http://NapcoNoc2.com>).

### Programming StarLink Radio Troubles

It is required that if a StarLink radio or control panel trouble is detected, that it is reported to the central station.

When the StarLink radio detects and sends a trouble to the control panel, the control panel must be programmed to announce this trouble. The radio can detect multiple troubles as indicated by the "Red Trouble LED" ("D5"). For these troubles to be annunciated at the control panel, there are several methods, some of them are configurable at the Management Center screen (<http://NapcoNoc2.com>):

Wire the radio PGM1 output to a dedicated control panel zone (input) to announce the trouble (activate a trouble sounder) when an open is detected. With Napco control panels, program a dedicated zone for Day Zone, Mini-sounder on Alarm and No bell on Alarm. Wire the zone as indicated in the wiring diagrams further in this manual.

### Telco Line to Alarm Panel Supervision

A UL Listed 10K ohm EOL resistor (5% tolerance) can be placed across the "house side" of the telephone line circuit (see wiring diagrams). Use this resistor instead of using a relay on the alarm control panel to trip an input on the radio to supervise the connection between the alarm control panel telco circuit and the radio.

**REMEMBER:** Enable the feature "**Tip / Ring Wiring Fault Report**" in the NOC ([www.NapcoComNet.com](http://www.NapcoComNet.com)) to supervise the telephone line connection to the control panel.

For radio models powered by the control panel Aux Power terminals, wire the radio directly to the PGM1 output of the control panel (program the radio to report all troubles on PGM1).

You can also wire to the positive terminal of the dedicated zone on a GEMC-EZM8. Thus when a radio trouble is detected, the radio PGM activates the control panel zone, and the control panel generates a trouble.

#### **StarLink Panel / Radio Supervision of Tip/Ring Wiring**

We recommend that the StarLink radio connection to the control panel be supervised with local trouble annunciation and report to the central station if the Tip/Ring wiring is cut or shorted.

For local annunciation of radio troubles, the control panel must be programmed for Telco line supervision that will produce a local trouble at the premises (refer to control panel programming).

To report the radio trouble to the central station:

1. Program the SLE-LTEV-C/Z (select "Y") for the "Tip/Ring Wiring Fault Report" feature located in the **Advanced Features** screen of the Napco "NOC" (at <http://NapcoNoc2.com>).
2. Install a UL Listed 10K EOLR across the control panel terminals normally intended to be wired to the home telephone if Telco service was used (shown in the wiring diagram examples).

**Note:** Some control panels may require a different duration than the default time of 3 minutes. See also the alternate supervision method described below, "**Telco Line to Alarm Panel Supervision (For Primary Mode Only)**".

#### **Supervision Time Schedule Considerations**

If a status change (alarm trouble, etc.) is transmitted, the radio supervision timer is restarted.

For example, if a status change is sent, the next regular supervision transmission will occur at the interval determined by your rate plan.

## JUMPER DESCRIPTIONS

Jumper block labeled "X5"; from top to bottom, as detailed in the following table. **Note:** Contact ID is always available in response to a Contact ID handshake.

Jumper Block "X5" Options		
Jumper block labeled "X5" contains 5 jumper terminals; from top (labeled "1") to bottom (labeled "5") as follows:		
Jumper ON	Jumper Number	Jumper OFF
Not used; do NOT install jumper	1	Not used; do NOT install jumper
4/2 with Checksum Pulse Format	2	Contact ID or 4/2 format without sum check
Not used; do NOT install jumper	3	Not used; do NOT install jumper
Supervised inputs. EOLR(s) required, see page 3	4 and 5	Not permitted by UL1610

The SLE series radios are compatible with 4/2 Pulse Dialing formats with 10pps, 20pps, and 40pps with and without checksum, either 1400Hz or 2300Hz handshake / kissoff. See W12336LF for table of formats.

Refer to W12140 for selecting the required handshake / kissoff frequency in the NOC (<http://NapcoNoc2.com>) setup screens (as required by the control panel).

## COVER TAMPER SWITCH

The SLE series radios in the plastic housings are provided with a front tamper switch. **Note:** The tamper switch on the radio PC board is always functional and requires no programming.

## STARLINK RADIO RELATED EVENT REPORT CODES (Contact ID by default)

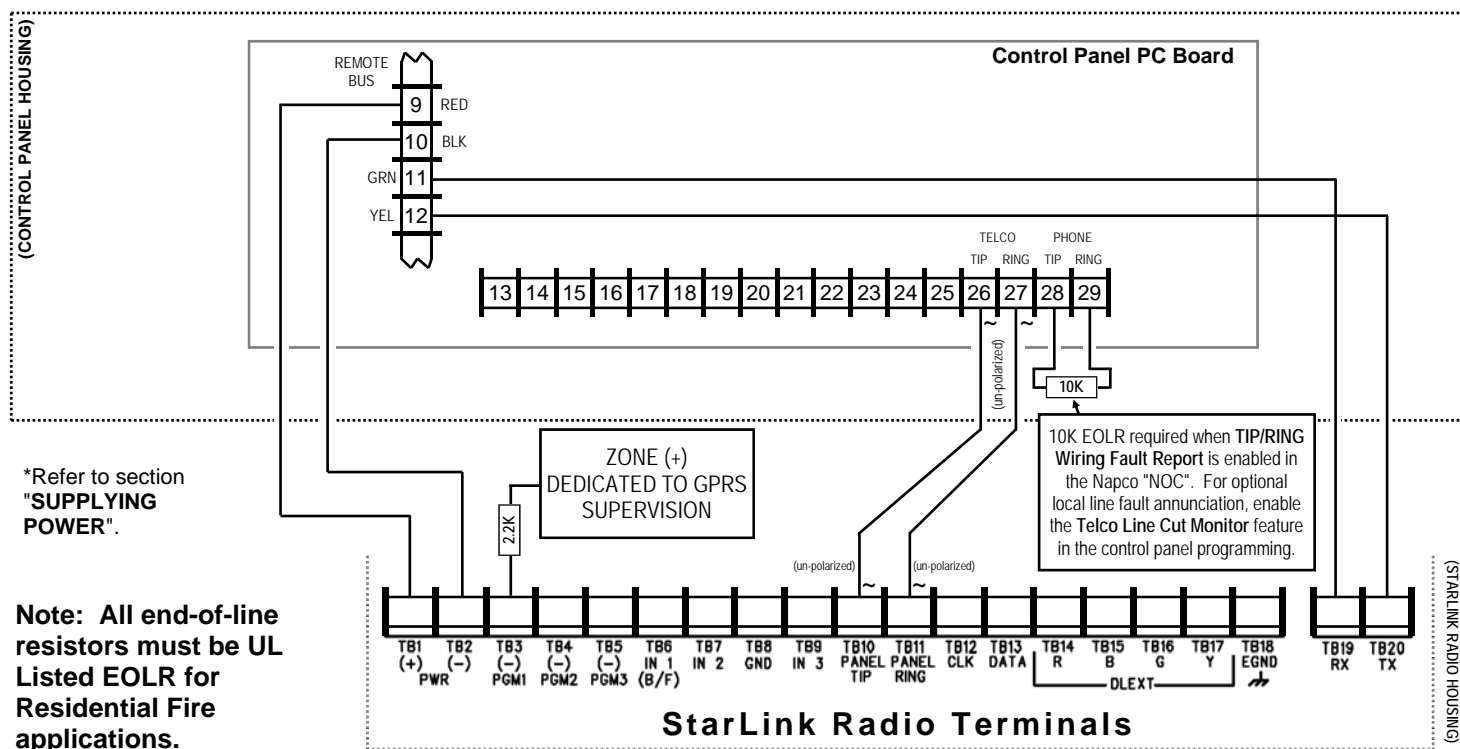
EVENT	AREA	CONTACT ID		PULSE 4/2
		CODE	ZONE #	
IN 1 Fire	0	E110	990	1A
IN 2 Panic	0	E120	992	22
IN 3 Trouble	0	E300	993	F3
Low Battery/Voltage	0	E302	994	F4
Tamper Trouble	0	E341	995	F5
Reboot	0	E625	997	F7
IN 1 CO (Carbon Monoxide)	0	E162	998	18
Panic Alarm*		E123		
Holdup Alarm*		E122		
Medical Alarm*		E100		
24 hour Aux. Alarm*		E150		
24 hour Aux. Restore*		R150		
Burg Perimeter Alarm*		E131		
Burg Interior Alarm*		E132		
Keypad Holdup Alarm (ambush)*		E121		
Keypad Panic Alarm*		E123		
Keypad Emergency Alarm*		E140		
Opening*		E401		
Closing*		R401		
A.C. Trouble*		E301		
Tel 1 Fail*		E351		
Fire Polling Report		E780	999	F9
Supv Failure Report		E788	000	D1 or D2
Tip/Ring Wiring Fault Report		E789	000	F2
Path Test Report		E602	890	77

\*Not generated by the StarLink radio.

## SIGNALS ORIGINATED AT THE NOC

NOC Originated Alarms	Contact ID Event Data Sent	Pulse Format Event Code Sent	Initiated By	Comments
Supervisory Fail	E356 A00 Zn000	99	Automatically by NOC if fail to receive any signal from StarLink radio within Supervisory Timeout duration.	For Auto Enroll, uses captured telephone number, Sub ID and format. For Dealer Programmed, uses entered telephone number, Sub ID and format.
Press to Send Test Signal	E601 A00 Zn000	98	Manually by dealer from the Management Center <b>Signal Log</b> screen (located at <a href="http://NapcoNoc2.com">http://NapcoNoc2.com</a> ). Sends test into CS receiver.	Same comment as above.
Press to Send Radio Test	Not Applicable Nothing sent to CS receiver	Not Applicable	Manually by dealer from the Management Center <b>Checkins</b> screen (located at <a href="http://NapcoNoc2.com">http://NapcoNoc2.com</a> ). Sends a command to the StarLink radio to force a check-in to the NOC.	----

## Wiring Diagram for PRIMARY Reporting Configuration GEM-P816 / GEM-P1632 / GEM-P1664 Control Panels



## Wiring Diagram for PRIMARY Reporting Configuration GEM-X255 / GEM-P9600 / GEM-P3200 Control Panels

