



333 Bayview Avenue Amityville, New York 11701
 For Sales and Repairs, (800) 645-9445
 For Technical Service, (800) 645-9440 or visit us at
<http://tech.napcosecurity.com/>
 (Note: Technical Service is for security professionals only)
 Publicly traded on NASDAQ Symbol: NSSC

© NAPCO 2022

StarLink™ Connect MAX Series

SLE-MAXA-CBTF-C

SLE-MAXV-CBTF-C

Multi-Function Alarm Communicator

INSTALLATION INSTRUCTIONS



WI2469LF 5/22

OVERVIEW

The StarLink™ Connect model **SLE-MAXA-CBTF-C** (AT&T Certified) and model **SLE-MAXV-CBTF-C** (Verizon Certified) are multi-function Commercial / Residential Burglary and Residential Fire alarm communicators and supervised system interface modules. These models provide several options to the subscriber:

1. A monitoring path to a central station through a digital CAT-M1 (AT&T or Verizon) communicator and optionally through a TCP/IP network to the Internet using a hard-wired 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. These notifications are enabled in the *iBridge Connected Home Services* website at <http://ibridge.napconoc2.com/>;
3. These communicator models are compatible with most 12VDC alarm control panels, including the NAPCO Gemini GEM-P816, P1632, P1664, P3200, P9600, X255, as well as Honeywell and DSC; see WI2470 for more information (always adhere to the manufacturer's documentation provided with the control panel). The *StarLink Connect* application can be accessed by the Windows System Tray icon allowing the use of your customary control panel communication software for remote programming and communication:

- **DSC DLS**
- **Honeywell Compass®**

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/>.

Mount the unit securely and route the wires through the back knockout(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 communicators 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 to the Napco Virtual IP Central Station Receiver (NCSR), 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, each communicator can be powered directly from the control panel. **Note:** UL Certified for UL 985 -Standard For Household Fire

Warning System Units, UL 1610 -Central-Station Burglar-Alarm Units, UL 1076 APOU Proprietary Alarm Systems and UL 365 APAW Police Connect when reporting to a UL Certified Central Station Receiver Certified for UL 1076 APOU Proprietary Alarm Systems or UL 365 APAW Police Connect, respectively. For TCP/IP only Bosch D6600 or D6100IPV6 for UL1076 and UL365 applications. For the Napco Virtual IP Central Station Receiver (NCSR), UL 864 -Control Units and Accessories for Fire Alarm Systems, UL 1076 -Standard for Proprietary Burglar Alarm Units and Systems and UL 1610 -Central-Station Burglar-Alarm Units.



The StarLink communicator model names are:

SLE-MAXA-CBTF-C - Commercial Burglary and Residential Fire Network Compatible CAT-M1 (AT&T) alarm capture communicator in white metal housing. Includes **SLE-ULPS-R** power supply and **TRF12/T123** plug-in 16.5V / 20VA transformer.

SLE-MAXV-CBTF-C - Commercial Burglary and Residential Fire Network Compatible CAT-M1 (Verizon) alarm capture communicator in white metal housing. Includes **SLE-ULPS-R** power supply and **TRF12/T123** plug-in 16.5V / 20VA transformer.

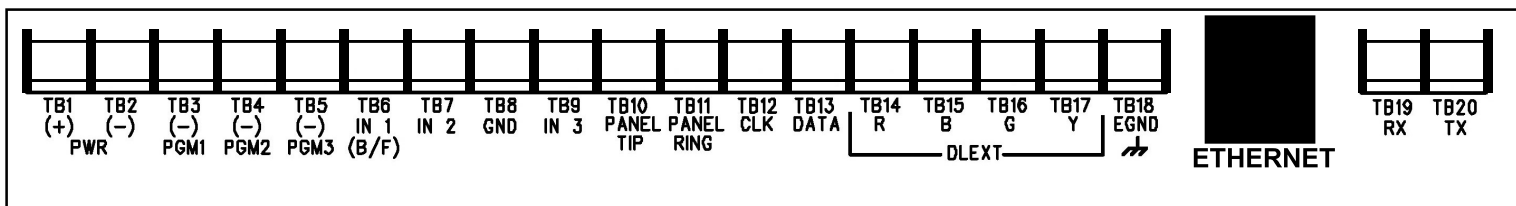
As these models include a **SLE-ULPS-R** power supply, the following features are included:

- Power limited output to the StarLink communicator PC board 12V input terminals
- Battery connection red and black flying leads
- Monitored battery charging and Active battery test circuits
- StarLink communicator trouble input (from StarLink communicator PC board **PGM1** terminal to detect StarLink communicator trouble)
- Requires a sealed lead acid min 4AH / max 7AH battery for minimum 24-hour standby time (maximum charge current 200mA)
- Trouble relay output (**C**, **N/O** and **N/C** terminals) to wire to a panel zone dedicated to "CAT-M1 Trouble" (dry contacts). Remove jumper "**J2**" to isolate common from ground
- Green **AC ON** LED visible from the exterior housing
- Yellow **TROUBLE** LED on PC board. Flashes signify:
 - One flash: AC fail / brownout (2 hour delay)
 - Two flashes: Low battery
 - Three flashes: Charging circuit trouble
 - Four flashes: StarLink communicator trouble

The SLE-MAXA and SLE-MAXV series communicators are provided with two antennas. Only one antenna is active at a



StarLink™ Connect MAXA Series Communicators are AT&T Certified
StarLink™ Connect MAXV Series Communicators are Verizon Certified



time, and should the communicator have a loss of adequate signal strength, the communicator will connect to the tower via the other antenna. If neither antenna can connect to the tower within 200 seconds, a trouble output will be activated. If using an external antenna such as from the NAPCO Star-Link **SLE-ANTEXTxxx** Series of Extended Antenna Kits, connect it to the left antenna connector.

ADDITIONAL COMPONENTS

SLE-ULPS-R - Power Supply. Required for installations where the control panel cannot provide the 135mA of Auxiliary power required to operate the StarLink communicator. Uses a standard 4AH / 12V minimum (7AH maximum) rechargeable battery to provide communicator standby power. Requires connection to either the model NAPCO **TRF12/T123** (16.5V / 20VA) external plug-in transformer or the chassis-mounted 16.5VAC / 20VA transformer affixed inside the housing (see wiring diagrams further in this manual). **Note:** For models without the **SLE-ULPS-R**, connect the communicator terminals 1 and 2 to the control panel Aux Power terminals (observing polarity).

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

SLE-DLCBL - Download Cable, 6 feet.

SLE-ANTEXT30 – Antenna kit* with 30 feet of LMR 300 cable.

SLE-ANTEXT50 - Antenna kit* with 50 feet of LMR 300 cable.

SLE-ANTEXT75 - Antenna kit* with 75 feet of LMR 400 cable.

SLE-ANTEXT100 - Antenna kit* with 100 feet of LMR 400 cable.

SLE-ANTEXT04 - Antenna kit* with 4 feet of LMR 300 cable. Ideal for installations that may require a few extras dBs of gain but running the external cable may not be practical.

SPECIFICATIONS

The following specifications apply to all StarLink communicator models in these installation instructions unless otherwise stated:

Electrical Ratings for +12V

- Input Voltage: 10-15VDC (Regulated power-limited output from control panel). Do **NOT** connect to full-wave rectified (FWR) power.
- Input Current:

SLE-MAXA-CBTF-C and **SLE-MAXV-CBTF-C** standby current:

Electrical Ratings for 120VAC, 60Hz For Models with Power Supply

- Input Voltage: 120VAC nominal
- Input Current: 150mA maximum
- Maximum Charging Current: 200mA
- For Wi-Fi add 45mA (use 7AH battery)

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)

- Metal Housing: 11½ x 9½ x 3½" (29.2 x 24.1 x 8.9cm)
- Mounting: Metal housing includes two keyhole slots for wall mounting (see measurements in WI2458)

Environmental

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

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 communicator PC board, the 20 terminals are described as follows:

TB1: **PWR (+)** +10 - 15VDC regulated. Do **NOT** connect to full-wave rectified (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 communicator 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 that goes active low when the dealer-defined option occurs; see the NAPCO NOC (www.NapcoNOC.com) to configure options for PGM activation.

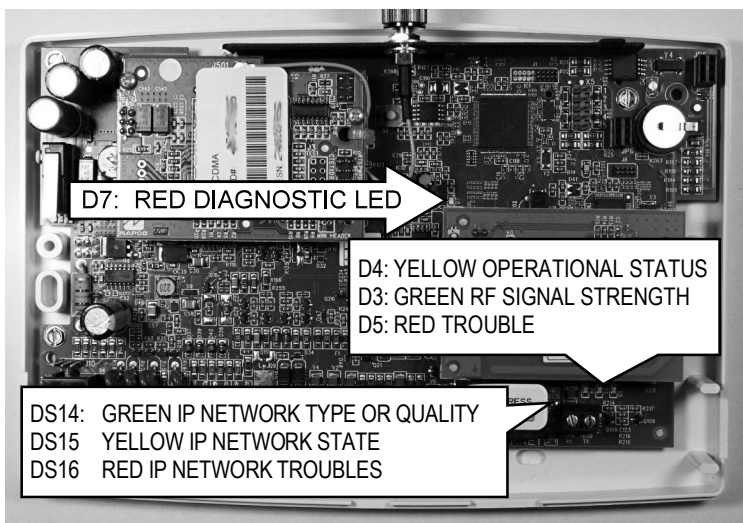
TB6: **IN 1:** Smart Channel input. Active high input for wiring to the control panel bell output. When this input detects a steady input, it sends a burglary alarm; a pulsing temporal 3 high, it sends a Fire alarm; a pulsing temporal 4 (CO Alarm), a CO alarm is sent. When used, these conductors must be run in conduit (max 3 feet for Residential Fire).

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

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

TB9: **IN 3:** Programmable input; see the NAPCO NOC (www.NapcoNOC.com) for program choices. Super-

*All antenna kits include high quality/low loss LMR 300 or 400 Coax Type N male to SMA male terminated cable, all mounting hardware and StarLink **SLE-ANTEXT-ISO** Commercial Fire Ground Fault Isolation Plate to ensure that the external antenna will not cause ground fault system troubles. (Any suitable external cellular antenna is permitted by UL). Always follow the manufacturer's installation instructions. **Note:** Antennas are not Certified by UL.



LED LOCATIONS

vision requires 10K EOL resistor; also install a jumper into "X5" terminals 4 and/or 5 to control supervision for IN3 and/or IN2, respectively.

- **TB10: PANEL TIP:** See wiring diagram(s).
- **TB11: PANEL RING:** See wiring diagram(s).
- **TB12: CLK:** See wiring diagram in WI2470, page 2.
- **TB13: DATA:** See wiring diagram in WI2470, page 2.
- **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).

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 communicator 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 8 times (with a short delay between blink cycles), providing a signal strength indicator that is updated constantly and is always displayed.

Acceptable power level is greater than or equal to 2 blinks.

YELLOW OPERATIONAL STATUS LED (COMMUNICATOR)

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, handshaking, data transmission, etc.).
- This yellow LED will light when communicating with the phone app and when notifications are transmitted.

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:** Check Input Power
- **3 Blinks:** Alarm report Failed to Communicate (will restore only when the communicator path is restored)
- **4 Blinks:** RF trouble (antenna connection or cellular registration)
- **5 Blinks:** Communicator poll or check-in failure (cellular and/or IP). Either or both paths will trigger the trouble, but for the trouble to clear, unit requires that the previously active path(s) must restore (i.e. cellular if used as a Sole Path communicator, and both cellular and IP if unit is used as a Dual Path communicator)
- **6 Blinks:** Unit disabled (reporting or control panel downloading not allowed). Power cycle the unit and if it does not clear, then call for Technical assistance.
- **7 Blinks:** Unit was shut down and has no functionality; requires a restart (full power down and full power up sequence) to restore operation
- **8 Blinks:** Line Cut; check Telco and input wiring

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 communicator 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 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
- 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 communicator 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 communicator is configured for only an Ethernet connection (no Wi-Fi) and the Ethernet cable is connected but the router is non-functional, the communicator 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 (communicator terminals 12 and 13)
- When **D606** (red) is flashing 2 = DSC download connection faulted (communicator terminals 19 and 20)

SUPPLYING POWER TO THE COMMUNICATOR

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 or Commercial / Resi-

dential Burglary power supply may be used (such as the model GEMC-12V2APS).

COMMUNICATOR INSTALLATION STEPS

STEP 1: ACCOUNT REGISTRATION

Create a new account and register specific StarLink communicator modules at www.NapcoComNet.com. Accounts and modules registered via the Internet are enabled for activation within 24 hours (usually within 30 minutes). **Note:** Activate radio before applying power.

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 the communicator in basements or below grade as unpredictable performance may result.
- DO NOT mount the communicator 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 communicator so as to achieve an optimal RF path. The installer should spend as much time as needed to obtain the highest signal level possible.

- Before applying power, be sure to connect the antenna.** Temporarily connect power to the communicator from a fully charged 12V (4AH minimum) battery. DO NOT mount the StarLink communicator at this time. Press **Tamper** switch to send a signal.
- 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 CAT-M1 (AT&T) 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**.
- 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 antennas before applying power !**
- Apply 12 VDC to terminals 1 and 2.

STEP 5: SIGNAL VERIFICATION

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

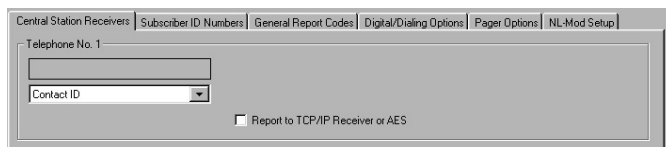
- **Verify Online:** To verify that the signals have been received by the StarLink communicator Network online, go to <http://NapcoNoc2.com>, log in with your Username and Password, enter your **Company ID** number and the StarLink **Radio Number**, then click **Signal Log**.

IMPORTANT: Verify that the signals transmitted by the StarLink communicator 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 communicator 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 communicator 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 6. **Note:** These event codes and zone numbers can be changed from the Management Center screen (located at <http://NapcoNoc2.com>).

Programming StarLink Communicator Troubles

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

When the StarLink communicator detects and sends a trouble to the control panel, the control panel must be programmed to annunciate this trouble. The communicator 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 communicator PGM1 output to a dedicated control panel zone (input) to annunciate 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.

For communicator models powered by the control panel Aux Power terminals, wire the communicator directly to the PGM1 output of the control panel (program the communicator 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 communicator trouble is detected, the communicator PGM activates the control panel zone, and the control panel generates a trouble.

StarLink Panel / Communicator Supervision of Tip/Ring Wiring

The StarLink communicator connection to the control panel shall 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 communicator 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 communicator trouble to the central station:

1. Program the unit (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 the supplied 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 communicator 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

The SLE series communicators are compatible with 4/2 Pulse Dialing formats with 10pps, 20pps, and 40pps with and without checksum, either 1400Hz or 2300Hz handshake / kissoff. See WI2470 (page 7) for table of formats.

Refer to WI2140 for selecting the required handshake / kissoff frequency in the NOC (<http://NapcoNoc2.com>) setup screens (as required by the control panel).

TELCO LINE TO ALARM PANEL SUPERVISION

A 10K ohm 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 communicator to supervise the connection between the alarm control panel telco circuit and the communicator.

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

STARLINK COMMUNICATOR RELATED EVENT REPORT CODES (Contact ID by default)

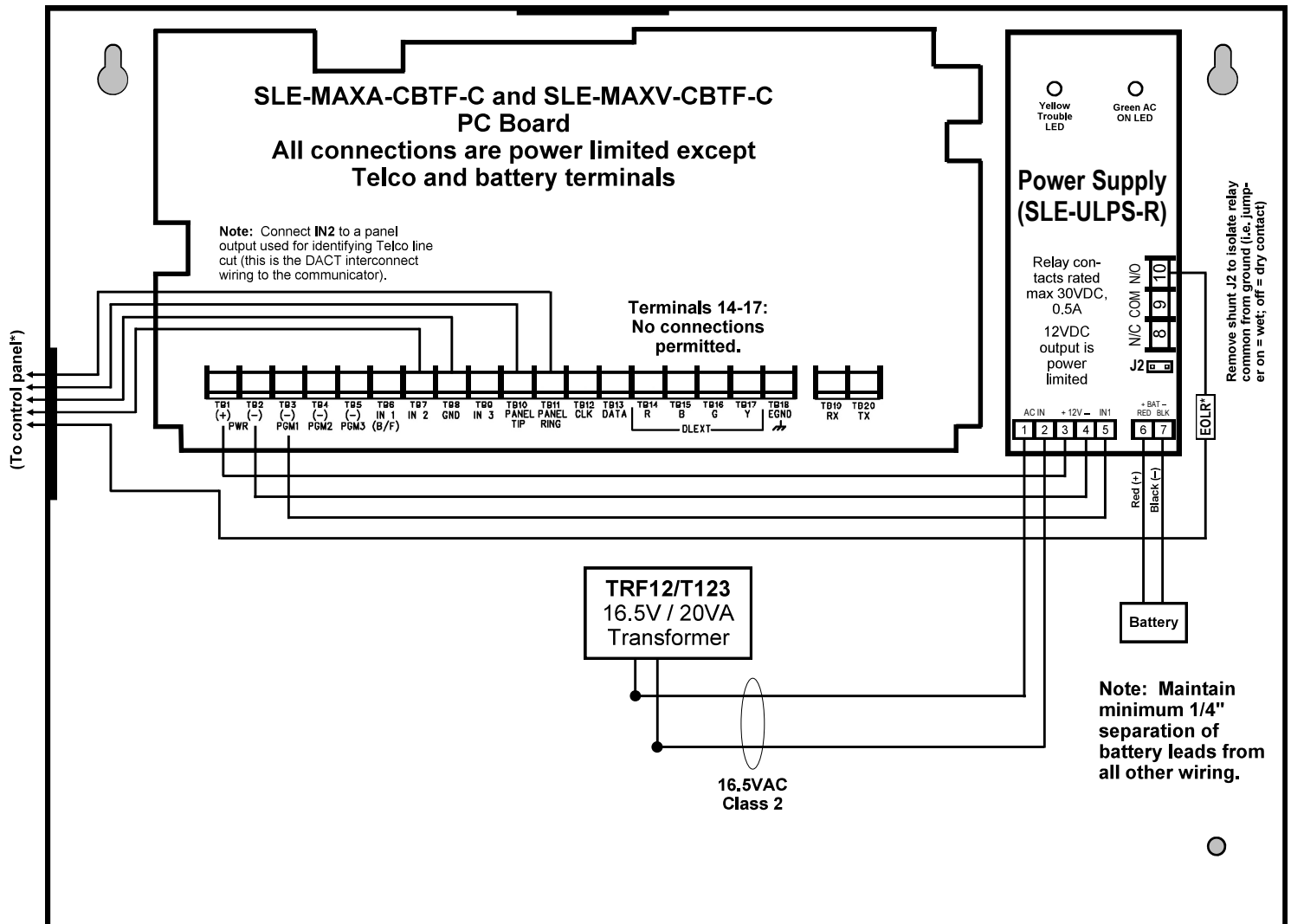
EVENT	AREA	CONTACT ID		PULSE 4/2
		CODE	ZONE #	
IN 1 Fire	0	E110	990	1A
IN 2 Panic	0	E120	992	22
IN 3 Trouble	0	E300	993	F3
Low Battery/Voltage	0	E302	994	F4
Tamper Trouble	0	E341	995	F5
Reboot	0	E625	997	F7
IN 1 CO (Carbon Monoxide)	0	E162	998	18
Panic Alarm*		E123		
Holdup Alarm*		E122		
Medical Alarm*		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	Zone 1 for radio/cell path fail. Zone 2 for IP path fail	D1 or D2
Tip/Ring Wiring Fault Report		E789	000	F2
Path Test Report		E602	890	77

*Not generated by the StarLink communicator.

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 communicator 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 Signal Log screen (located at http://NapcoNoc2.com). Sends test into CS receiver.	Same comment as above.
Press to Send Communicator Test	Not Applicable Nothing sent to CS receiver	Not Applicable	Manually by dealer from the Management Center Checkins screen (located at http://NapcoNoc2.com). Sends a command to the StarLink communicator to force a check-in to the NOC.	---

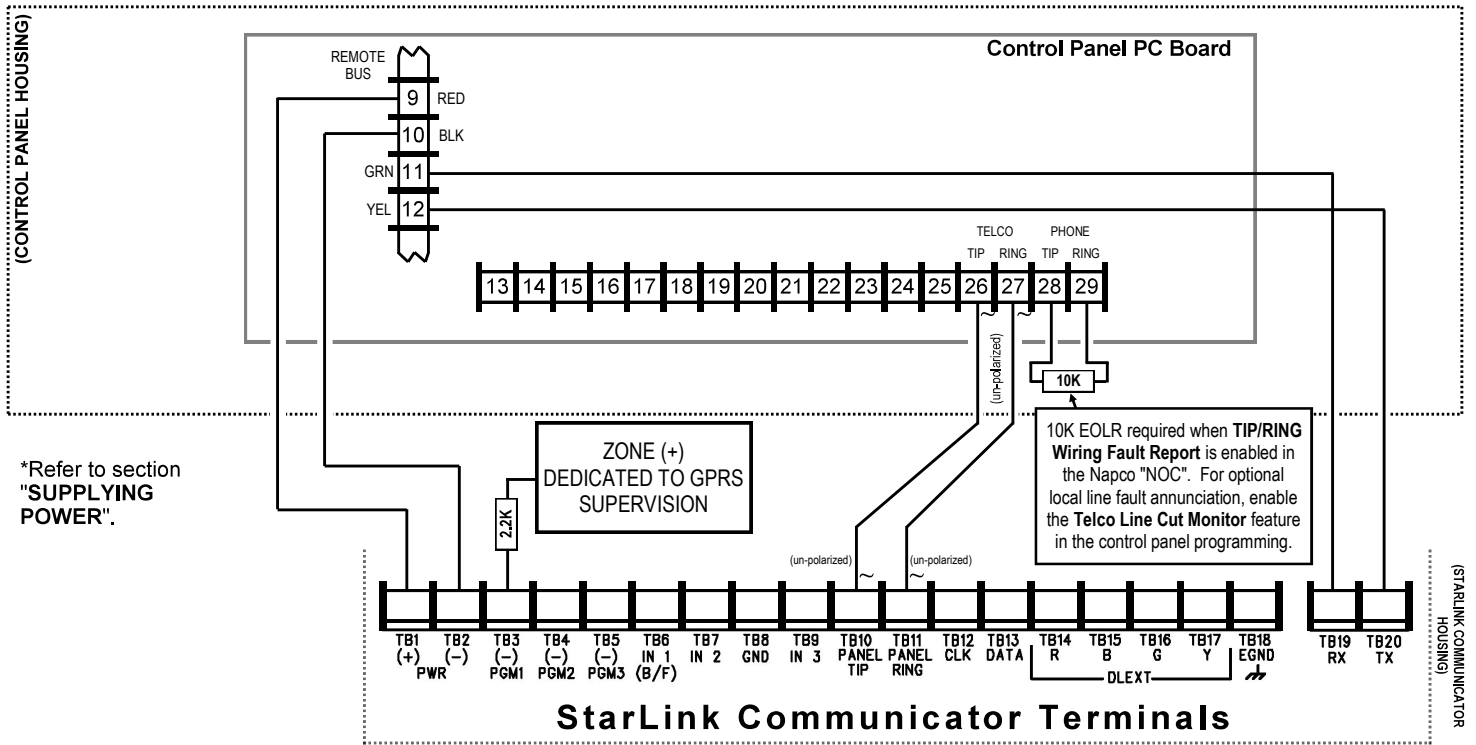
(Commercial Burglary and Residential Fire) SLE-MAXA-CBTF-C and SLE-MAXV-CBTF-C Wiring Diagram



*Notes:

- Connect the StarLink communicator to the control panel output for Telco Trouble (this is the DACT interconnect wiring to the communicator). Remember to program the StarLink communicator module to report this **IN2** Telco Trouble and for line cut (EOLR) to the central station. In addition, always add an EOLR at the control panel Telco Trouble Output (Fire Aux Relay for the GEMC control panels).
- Use EOLR value as specified by the control panel installation instructions.
- **IN1** not supervised. **IN2** and **IN3** can be supervised.
- Keep all non-power limited wiring separate from all power-limited wiring inside the housing by 1/4".
- Remove shunt **J2** to isolate relay common from ground (i.e. jumper on = wet (circuit common); off = dry contact). When wet, configuration is used; the power should be derived from the alarm control panel.
- StarLink module must be configured to trigger PGM1 on any trouble.
- PGM1 of the StarLink module must be wired to the trouble input (terminal 5) of the power supply.
- The Power Supply Trouble Output must be wired to a control panel zone dedicated to a communicator trouble; see control panel programming instructions and program to Report Alarm / Alarm Restore / Trouble / Trouble Restore.

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

