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PRODUCT MANUAL

BAT LTE
SKU: IPD-BAT-LTE

Universal Internet & Cellular 4G LTE
Alarm Communicator

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4G LTE

ETHERNET

connected by
verizon✓

Technical Support Information

For Technical Support, call toll free: (888) 88-ALULA

alula.net

www.alarmdealer.com

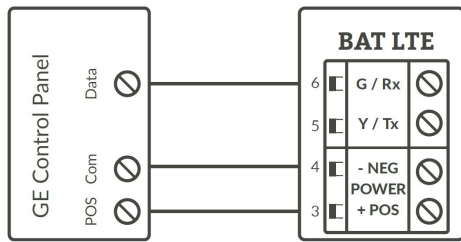setup.alarmdealer.com - Mobile Friendly

Alula Holdings, LLC
1402 Heggen St.
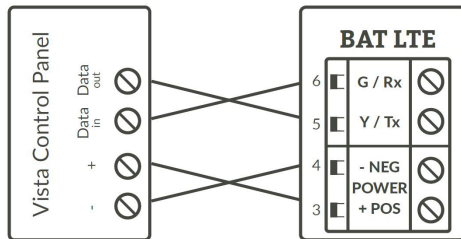Hudson, WI 54016

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QUICK REFERENCE

Programming on GE Network:

Dev~ice 0	BAT LTE as Sole Communicator
Location 0	Enter the Phone Number
Location 1	Enter Account Number
Location 2	Enter '13' for Contact ID

Programming on Vista:

	BAT LTE as Sole Communicator
*41	Enter Phone Number
*43	Enter Account Number
*193	Enter 1, 0. Enable to turn on Address 20
*48	Enter 7,7 for Contact ID
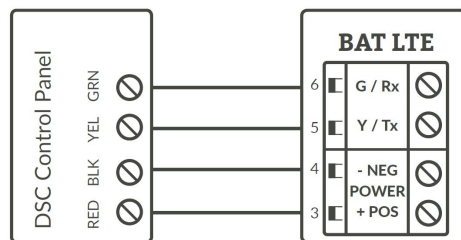
Programming on DSC:

Section	BAT LTE as Sole Communicator
301	Enter Phone Number
310	Enter Account Number
350	Enter '03' for Contact ID

BAT LTE

Universal Dual-Path Internet & Cellular 4G LTE Alarm Communicator

The BAT LTE, is a dual-path Internet & Cellular (4G LTE) alarm communicator offering redundant alarm communications with industry-leading remote service capabilities when connected via keybus to supported Honeywell, DSC and GE/Caddx panels.

Telco - Digital Dialer

The BAT LTE's signal collection expects Contact ID format from the digital dialer on the alarm panel. Most control panels made in the last decade can perform this function. Wire the Telco side of the alarm control's Tip & Ring to the Product's Tip & Ring.

Virtual Keypad Connection

The BAT LTE connects to most panels as a virtual keypad and allows the customer full virtual keypad access after they have authenticated using their username and password you have assigned them in the pre- installation phase. This allows the customer to use our Alula mobile phone and web interfaces. Refer to wiring diagram for your specific panel. Panel side of the virtual keypad connection will use various labels such as: Data in-Data out, YEL-GRN, or Data. This connects to the G/RX, Y/TX connections on the Product.

STOP! Before installing any alarm communicator you must first be a registered dealer with Alula and you must also register your device using our Dealer Portal – AlarmDealer.com. Please reference Alula's AlarmDealer.com Dealer User Guide for detailed information.

Installing BAT LTE

Test your device

- Power up your device using a 12-volt DC battery as a test with the back-up 12-volt battery from your alarm panel.

  . Connect the positive wire to Terminal 6-24 V on your device and then to the positive terminal on your panel battery.

  . Connect the negative wire to Terminal GND to the negative terminal on the panel battery.

  . Look for the green status light to verify that the unit is powering up.

Verify cellular signal strength

- Good signal strength is indicated with the 4 green signal strength lights on the top right corner of the device board.

  . One or two lights, indicate a weak signal.

. Three or four lights indicate a strong signal.

. It's recommended to keep a distance of twelve inches (12") between the communicator and the alarm panel.

- If cellular signal strength is good, mount the plastic enclosure with a screw.

- If you have a weak cellular signal, move the device until an adequate signal strength is found.

. Outer walls, higher up, often work best.

Connect the 6 wires from the device to the panel

- Terminal T connects to the Tip connector on the Panel (This is used for Communication).

- Terminal R connects to the Ring connector on the Panel (This is used for Communication).

- Terminal 6-24 V connects to the Positive connector on the Panel (This powers your device).

- Terminal GND connects to the Negative connector on the Panel (This powers your device).

- Terminal Y In connects to the Yellow/Tx connector on the Panel (This is used for Interactive Services).

- Terminal G In connects to the Green/Rx connector on the Panel (This is used for Interactive Services).

Program the panel to communicate alarm signals.

- Enter the Central Station phone number and account number using the alarm panel keypad.

. Make sure the panel is set to send in Contact ID mode.

. Please reference the alarm panel's guide for detailed panel programming information.

Transmit a test signal

- Before wiring the Ethernet to the router enter the test signal code on the alarm keypad.

Connect Ethernet

- Connect the Ethernet wire from the modem or router into the Ethernet port on the bottom right corner of the device.

. This step is optional, but highly recommended to maximize performance while providing redundant communications

Activate the virtual keypad (follow these steps on the alarm panel keypad)

- Vista panels - Enable Address 20 (Field 193) in panel programming.

- DSC panels – No further programming is required.

- GE panels - Enter & Exit programming at least 3 times to auto-enroll address 240.

Validate that your device is working correctly

- Go to SetUp.AlarmDealer.com on your Smartphone or tablet.

- Search by MAC ID, and click the Info tab to verify that your device is now online.

- All signals received by the unit will be recorded on the customer's event log within the AlarmDealer.com portal.

- Please reference Alula's AlarmDealer.com Dealer User Guide for detailed information.

Wiring & Programming for Popular Panels

- The following pages are organized by Alarm Panel type. Wiring and programming instructions are given for:

  . Digital Security Control (DSC) Alarm Panels

  . Ademco & Honeywell Vista Alarm Panels

  . GE NetworX Alarm Panels

DSC Panel Wiring and Programming

DSC Control Panel

RED BLK YEL GRN RING TIP

DSC Keybus & Tip/Ring Wiring

BAT LTE

10	
9	
8	
7	
6	G in / Rx
5	Y in / Tx
4	- NEG POWER
3	+ POS
2	RING
1	TIP
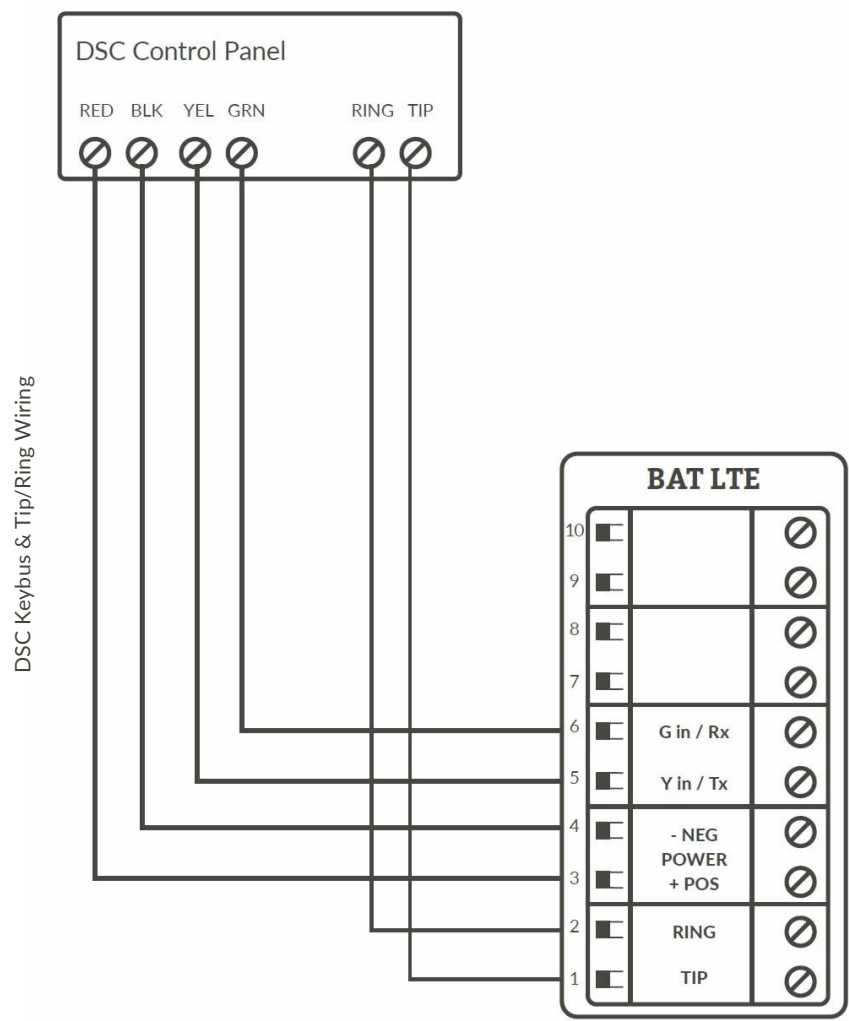
DSC Panel Programming

- Recommended Keybus with Tip & Ring

- (Keyswitch alternative programming see Page 17)

See Supported Panels section on page 18. Perform the TELCO Programming if Tip & Ring is being used.

TELCO Programming:

General Concept Programming on DSC (BAT LTE as Sole Communicator):

Section	As Sole Communicator	Code Summarization
301	Enter a Receiver Number	
310	Enter Account Number	
350	Enter '03' to send Contact ID	Panel default is '04', SIA

Note: Ensure All Report Codes are in, and signals can be sent.

DSC PC-Link connection

PC-Link connection should only be used when the communicator is being installed as a back-up or uploading/downloading using DLS V. Remote downloader functionality requires Alula's uDownloader software.

DSC PC-Link Wiring
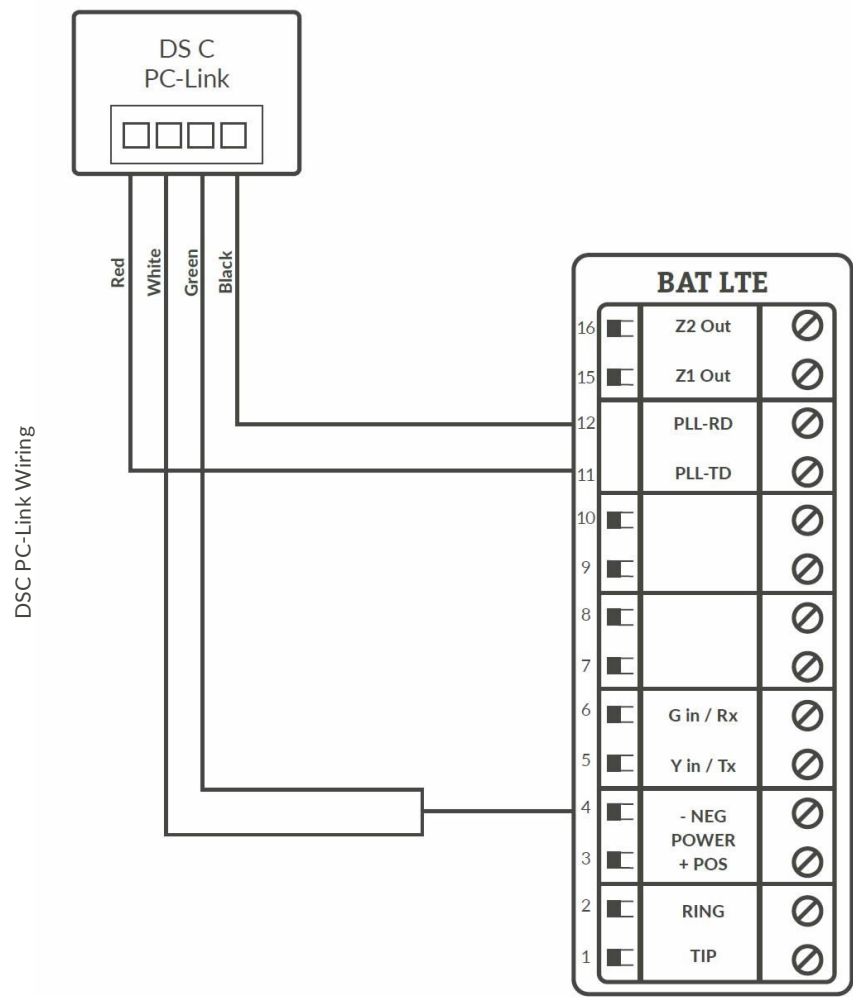
PC-Link Programming:

(Only needed if sending signals via PC-Link)

DSC Programming for Communications - GSM Emulation: If GSM is used, it must be in dialer capture mode.

Sec	BAT LTE as Sole Communicator	BAT LTE as Fail over w/Add'l Communication Device	BAT LTE as Dual Reporting w/Add'l Communication Device	Code Summarization
015	Disable Option 7	If GSM: Disable Option 7 If Phone Line, Enable Option 7	If GSM: Disable Option 7 If Phone Line, Enable Option 7	Option 7 turns on/off telephone line supervision.
167	Set '060' Seconds	Set '060' Seconds	Set '060' Seconds	Sets T-Link acknowledgment delay to 60 secs.
301	Set 'CAAF'	Set 'CAAF'	Set 'CAAF'	'CAAF' has to be set for the panel to send signals to the PC- Link
302	N/A	N/A	Set 'Central Station Receiver #'	Second telephone number goes here.
303	N/A	Set 'Central Station Receiver #'	Set 'Central Station Receiver #'	This section is the telephone backup of section 301.
350	Set '04'/'04'	Set '04'/'03 for Contact ID, 04 for SIA FSK' **	Set '04'/'03 for Contact ID, 04 for SAI FSK' **	Format sent as either contact ID (03), or SIA FSK (04). The PC-Link/BAT LTE can ONLY receive signals via SIA FSK (04).
351	Enable Option 1	Enable Option 1, 5	Enable Option 1, 2, 5	Options to turn on/off alarm/restore for telephone 1 (option 1), telephone 2 (option 2), and alternate communications (option 5).
359	Enable Option 1	Enable Option 1, 5	Enable Option 1, 2, 5	Options to turn on/off tamper/restore for telephone 1 (option 1), telephone 2 (option 2), and alternate communications (option 5).

367	Enable Option 1	Enable Option 1, 5	Enable Option 1, 2, 5	Options to turn on/off opening/closing for telephone 1 (option 1),telephone 2 (option 2), and alternate communications (option 5)
375	Enable Option 1	Enable Option 1, 5	Enable Option 1, 2, 5	Options to turn on/off maintenance for telephone 1 (option 1), telephone 2 (option 2), and alternate communications (option 5)
376	Enable Option 1	Enable Option 1, 5	Enable Option 1, 2, 5	Options to turn on/off testing for telephone 1 (option 1), telephone 2 (option 2), and alternate communications (option 5)
380	Enable Option 1	Enable Option 1, 5	Enable Option 1, 5	Option 1 turns on/off communications. Option 5 turns on/off 3rd phone number.
381	Disable Option 3, Enable Option 5	Disable Option 3, Enable Option 5, 6	Disable Option 3, Enable Option 5, 6	Option 3 turns on/off code reporting. Options 5 & 6 turns on/off communication with phone lines 1/3 & 2 respectively.
382	Enable Option 5	Enable Option 5	Enable Option 5	Option 5 enables/disables T-Link/PC-Link.
389	Set '003' Seconds	Set '003' Seconds	Set '003' Seconds	The time it will take to periodically check for faults on the T-Link/PC- Link.

Honeywell Vista Panel Wiring and Programming
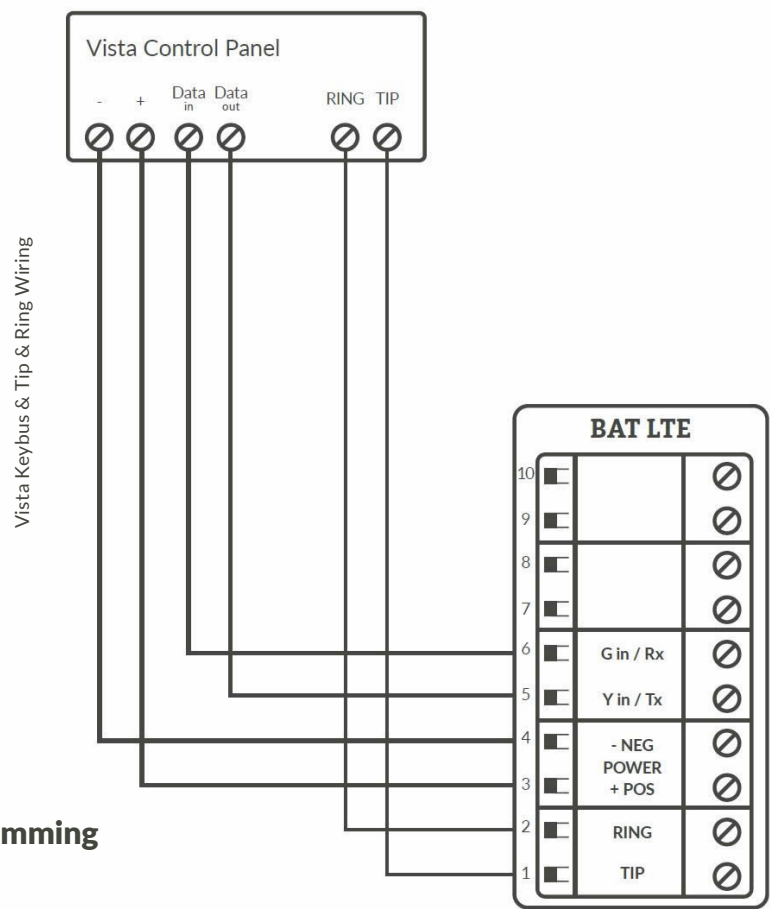
Honeywell Vista Panel Programming

- Recommended Keybus with Tip & Ring

- (Keyswitch alternative programming see Page 17)

See supported panels section on page 18. Perform the TELCO programming if Tip & Ring is being used. If for whatever reason you cannot use Tip & Ring to send signals then you can perform ecp bus programming. Otherwise, ALWAYS use TELCO programming.

TELCO Programming:

Programming on Vista (BAT LTE as Sole Communicator):

Section	BAT LTE as Sole Communicator	Code Summarization
*41	Enter Phone Number	
*43	Enter Account Number	
*49	Enter 5	For All Communications to BAT LTE
*54	Enter 0	No Delay Between Communicators
*55	Enter 0	Phone Line Communicates First
*65 & *66	Enter 1 till beep	If you want Opening/Closing Reports
*193	Enter 1, 0	Enable to turn on Address 20

| *48	7,7	Enables Contact ID
*47	Enter 1	

ECP Bus Programming:

ONLY NEEDED IF USING ECP TO SEND SIGNALS AND NOT TIP/RING

Vista Programming for Communications - GSM Emulation:

Sec	BAT LTE as Sole Communicator	BAT LTE in use with another Communication Device for Failover	For Dual Reporting	Code Summarization
*29	Enter 1	Enter 1	Enter 1	This enables GSM. The BAT LTE Emulates a GSM.
*42	N/A	Enter Central Station Receiver Number	Enter Central Station Receiver Number	Secondary Phone Number
*43	Enter Account Number	Enter Account Number	Enter Account Number	This is the central station account number
*49	Enter 5	Please refer to panel manual for your particular application requirements	Please refer to panel manual for your particular application requirements	Dual Reporting; Setting to 5 sends all reporting to both primary and secondary.
*54	Enter 0	Enter 2	Enter 0	The time it takes for the communicator to switch from primary to secondary.
*55	Enter 1	Enter 1	Enter 1 (BAT LTE is Primary Communicator)	Setting to 1 gives signal priority to GSM (BAT LTE).
*65	Enter 1	Enter 1 till beep	Enter 1	Report Code for Openings.
*66	Enter 1, 1	Enter 1, 1 till beep`	Enter 1, 1	Report Code for Arming in Away and Stay.
*193	Enter 1, 0	Enter 1, 0	Enter 1, 0	1 turns on/off keypad address. 0 sets sound to beep.
*48	7,7			Enables Contact ID

See Supported Panels section on pages 18-19 to verify your panel's revision number and GSM emulation programming.

GE Panel Wiring and Programming
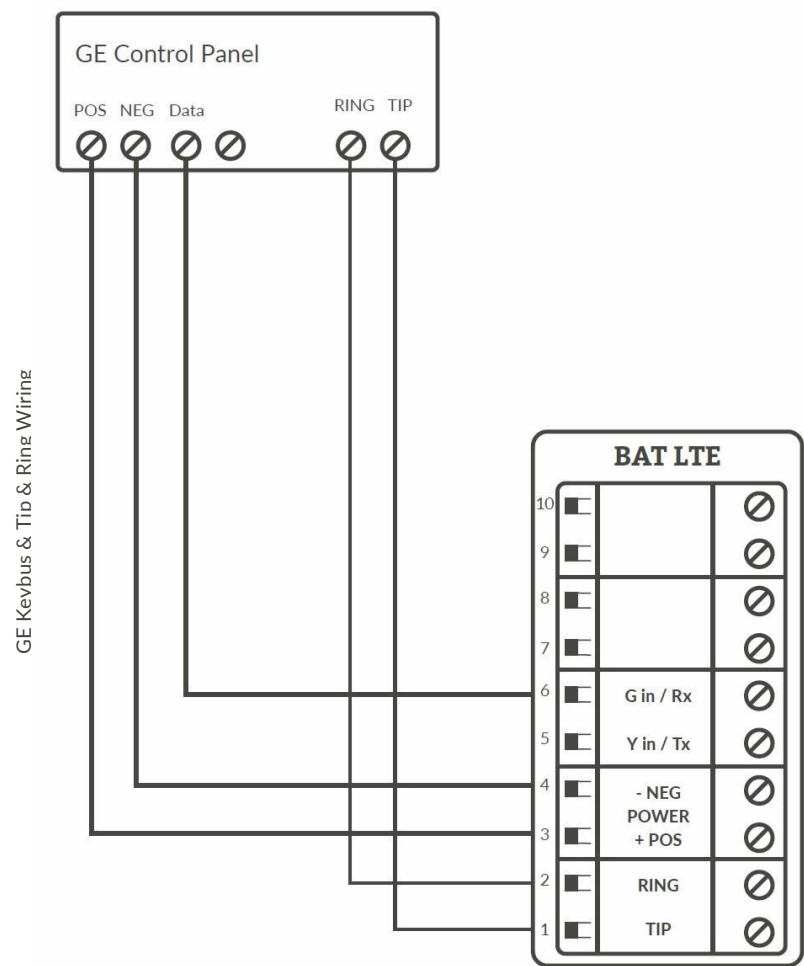
GE Panel Programming

- Recommended Keybus with Tip & Ring

- (Keyswitch alternative programming see Page 17)

TELCO Programming:

General Concept Programming on GE NetworX:

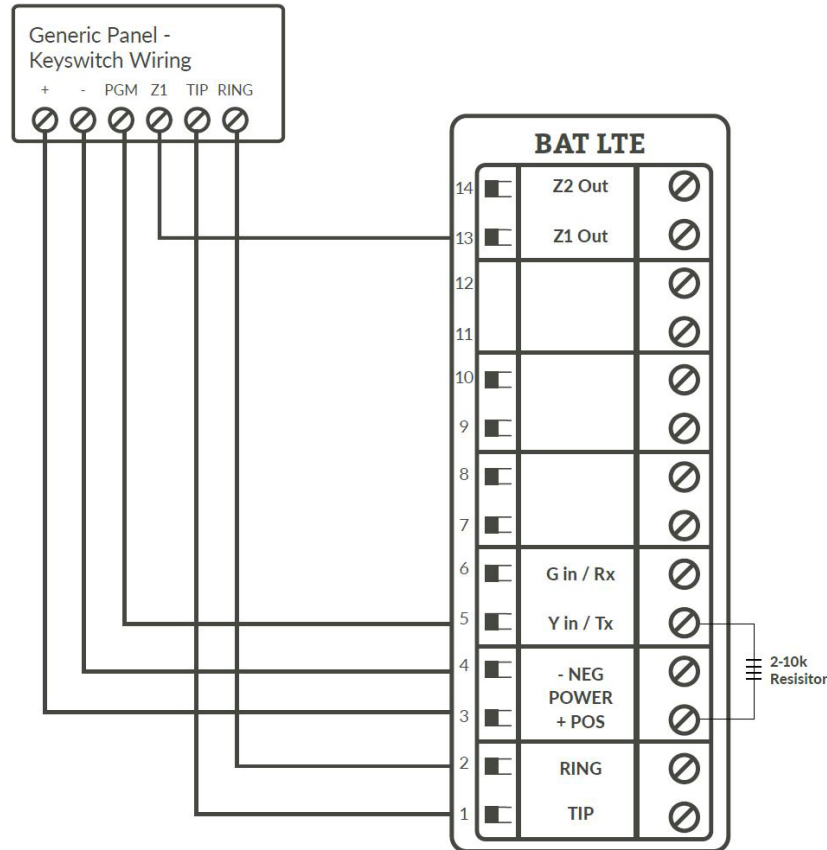| Section	BAT LTE as Sole Communicator	Code Summarization
Device 0, Location 0	Enter the Phone Number	
Device 0, Location 1	Enter Account Number	
Device 0, Location 2	Enter '13'	Contact ID

Generic Alarm Panel Wiring and Programming
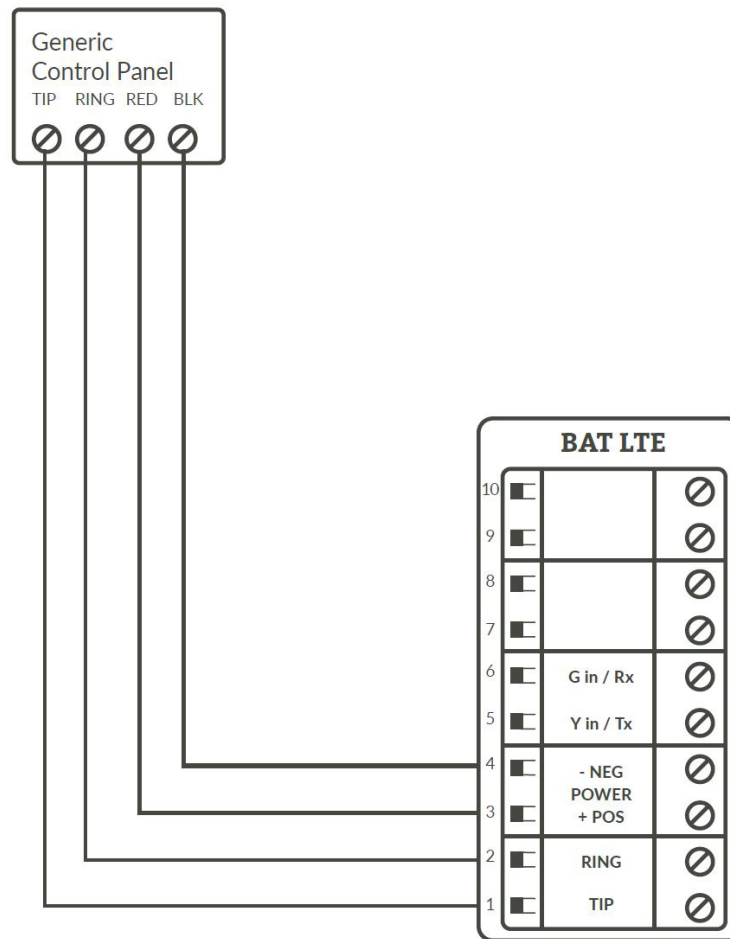
Generic Alarm Panel Programming

- Program the panel Phone Number into the panel

- Program the Customer Account Number into the panel

- Program Reporting codes into the panel

- Program panel to transmit in 10 digit CID format

Generic Keyswitch Wiring and Programming

Generic Panel -
Keyswitch Wiring

+   -   PGM Z1 TIP RING

BAT LTE

14	Z2 Out
13	Z1 Out
12	
11	
10	
9	
8	
7	
6	G in / Rx
5	Y in / Tx
4	- NEG
3	POWER
	+ POS
2	RING
1	TIP

2-10k
Resisitor

For basic keyswitch interactive services with the BAT LTE, the following alarm panel wiring is needed.

- A programmable output on the alarm panel will be used to signal to the Product (Y/Tx terminal) that the panel has entered Arm/Disarmed State.

- The Z1 output on the Product will be used as a key switch connecting to a 'zone' terminal on the alarm panel.

*Panel zone resistor placed on Terminal 3 to 5 to determine correct arm and disarm state.

Generic Keyswitch Programming

Keyswitch state programming examples for Ademco, Digital Security Controls, and GE NetworX for Keyswitch and panel state program output operations are given below.

Most alarm panel manufacturers will have the capability to configure a zone as a keyswitch and generally have at least one on-board programmable output that can be configured to activate on a number of different control state conditions. Reference the alarm panel installation manual for details on your specific installation.

Ademco/Honeywell Vista (General Concept)

- 56 program zone as type 77
  80 Menu LED Outs

- Program 17 and 18 zone type 78 and 79

DSC PowerSeries (General Concept)

- Program zone as '22' PGM Output '6'

DSC Alexor (General Concept)

- Wiring: Y/Tx -> I/01 Terminal 13 -> I/02

- 6.2k ohms resistor from + positive -> Y/Tx

Programming:

- Section 009 - '05'/'22'

- Section 013 - Enable 2 & Disable 1

- Section 134 - Enable 14 (Press 9, then 6) This makes it normally closed.

- Section 501 - Enable 3

GE NetworX (General Concept)

- Location 25 Program zone as '11' LED Status

- Location 47 Segment 1: Enter 21

- Location 47 Segment 2: Enter 0

Supported Panels

Honeywell

Panel	Revision	Digital Dialer	Full Interactive	GSM Emulator
Vista-10P	2.6+			
Vista-10PSIA	4.0+			
Vista-128BP	3.0+			
Vista-128BPE	1.0+			
Vista-128FB	1.0+			
Vista-128FBP	2.0+			
Vista-128FBPE	1.0+			
Vista-128SIA	2008+			
Vista-15	2+			
Vista-15CN	2.6+			
Vista-15P	2.6+			
Vista-15PCN	2.6+			
Vista-15PSIA	4.0+			
Vista-20P	2.6+			
Vista-20PCN	2.6+			
Vista-20PI	5+			
Vista-20PS	2.6+			
Vista-20PSIA	4.0+			
Vista-21IP	1.0+			
Vista-21IPSIA	1.0+			
Vista-32FB	1.0+			
First Alert FA130	2.6+			
First Alert FA148	2.6+			
First Alert FA168	2.6+			
ADT Safewatch Pro 3000/3000EN	2.6+			

DSC (Digital Security Control)

Panel	Revision	Digital Dialer	Full Interactive	GSM Emulator
PC5010	Any			
PC1616	4.13+			
PC1832	4.13+			
PC1864	4.13+			
Alexor	ALL			

GE NetworX

Panel	Revision	Digital Dialer	Full Interactive	GSM Emulator
NX-4V2	V2+			
NX-6V2	V2+			
NX-8V2	V2+			

For non-supported panels: Bridge 12 VDC to "Y/TX" Terminal with any type of radial resistor with a value of 2.0k to 10k as a weak "pull up".

Note: Any Control Panel NOT on this list is supported as long as it provides Tip & Ring and transmits Contact ID. If the panel has the ability to use a Dedicated Open Zone that acts as a Keyswitch, you can Arm/Disarm from the Website or Mobile Phone.

Specifications

Radio

- Frequencies LTE 1x   1900MHz, 1700MHz, 700MHz

Power

- Externally provided   12v DC
- Typical Current   130 mA
- Max Current   180 mA

Environmental

- Temperature Range
  - 30° to +70° C (- 22° to +158° F)
- Humidity
  0 to 95% non-condensing

Physical

- Height   7.05 inches
- Width   4.45 inches
- Depth   1.5 inches

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