

Scan the code to visit the Alarm Engine Knowledge Center for setup videos and detailed instructions.

HARDWARE GUIDE



LIMITED WARRANTY

The E27 Alarm Engine (ELK-E27CB) is warranted to be free from defects and workmanship for a period of 2 years from date of manufacture. Elk makes no warranty, express or implied, including that of merchantability or fitness for any particular purpose with regard to batteries used with wireless devices. Refer to Elk's website for full warranty statement and details.

FCC AND IC COMPLIANCE STATEMENT:

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 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 radio/TV technician for help.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- L'appareil ne doit pas produire de brouillage;
- L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3 (B)/NMB-3(B)



PO Box 100 3266 US Hwy 70 West
Hildebran, NC 28637
Phone 828-397-4200 <https://www.elkproducts.com>

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E27 Alarm Engine®

About This Guide

This quick start guide will provide a basic overview of the E27 Alarm Engine hardware. Please refer to the E27 Knowledge Center for detailed installation instructions.

Specifications

- Input capacity: 128 Total, hardwired, wireless or hybrid; 16 hardwired on-board zones
- Supports up to 3 two-wire smoke detector zones
- On-Board Outputs: 2 Alarm speaker outputs, 1 Form "C" Relay, and 10 Voltage Outputs (12VDC, 50 mA)
- Partitions: Up to 8
- User Codes: Up to 199 with assignable authority levels
- Maximum Keypads allowed: 8
- 2.5 Amp power supply with master cutoff switch and low battery cutoff

Getting Started

Before proceeding with product installation, please review the checklist below:

- Do you have an account/login for the ElkConnect cloud portal?
 - E27 controls must be registered and assigned through the ELK Connect cloud portal. You must complete the ELK Connect account application to setup your account.
- Have you downloaded the ElkConnect App?
 - The ELK Connect app is used to configure the E27 control. The app is available for Android and iOS devices. Search app store for ElkConnect

Wiring & Hookup Overview



**Before making any connections,
TURN THE E27 MASTER POWER SWITCH OFF.**



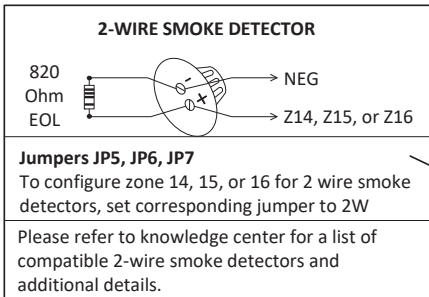
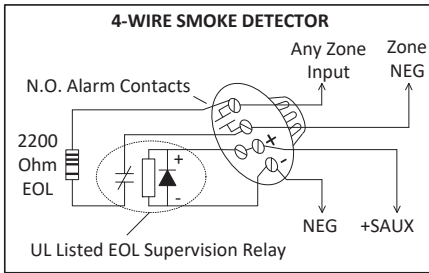
Refer to the E27 Board Layout Diagram in this guide.

- Connect sensors to hardwired zone inputs. Default zone configuration requires 2.2K Ohm EOL resistors. For sensors that require power (motion detectors, etc.), use VAUX auxiliary power terminals (observe polarity).
- The E27 control must be connected to a Wi-Fi enabled network to connect with ElkConnect app. There are three methods to connect E27 to the LAN:
 - Connect Ethernet port to Wi-Fi enabled router/switch using standard network patch cable.
 - Connect Wi-Fi adapter to E27 board and use Wi-Fi Access Point Mode to configure E27 to connect to client's Wi-Fi network.
 - Connect Wi-Fi adapter to E27 board and use WPS to connect to client's Wi-Fi Network.
- If desired, connect interior speaker negative to ALRM 1 and speaker positive to +12V ALRM.
- Connect standby battery to battery leads (observe polarity).
- Connect 14 VDC power supply to DC input terminals (observe polarity).
- Turn E27 on using master power switch. Status display should display A. followed by IP address. After displaying IP address, display should show E.no (no errors). If any error codes are displayed, power down and refer to E27 Knowledge Center for troubleshooting guidelines.

E27 Board Layout Diagram

Testing of this system should be performed regularly with the primary DC power de-energized.

Control panel specifications are subject to change without notice.



Smoke Detector covers should be kept free from dust and dirt by use of a dry or damp (water) cloth as needed. When necessary, clean the detector interior and/or replace the optical chamber according to instructions provided by the Smoke Detector Manufacturer.

Switched Auxiliary 12VDC Power Output
1.25 Amp PTC Protected

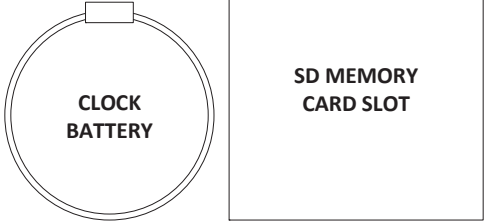
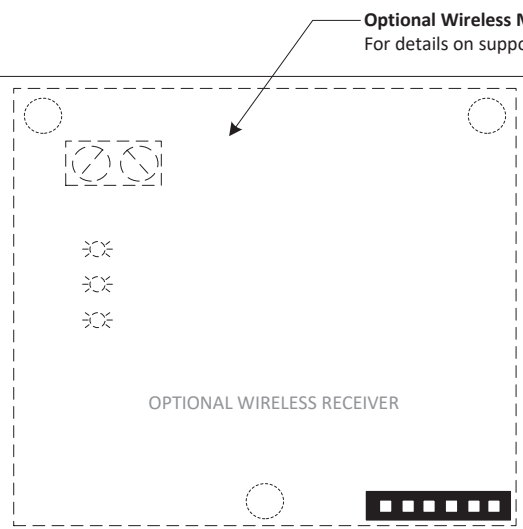
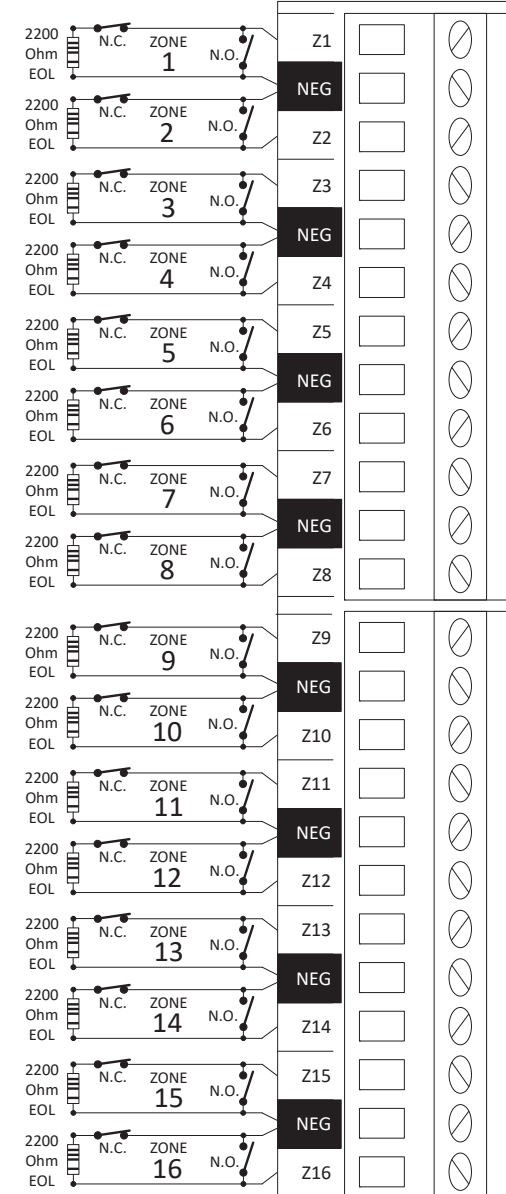
Auxiliary 12VDC Power Output
1.25 Amp PTC Protected

3V Lithium Clock Battery (CR2032)
Battery has a life expectancy of 10 years. Replace only with exact model available at most electronics and camera retailers. **CAUTION: Lithium Battery May Explode if Mistreated. Do Not Recharge, Disassemble, or Dispose Of In Fire.**

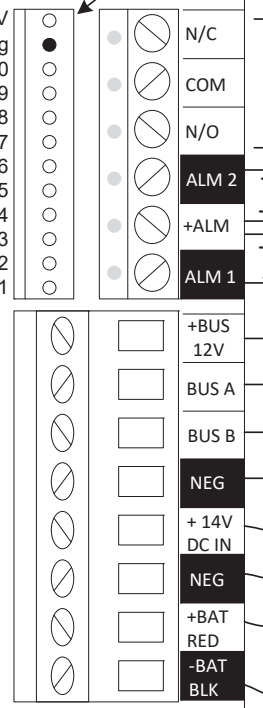
Slot for Optional SD Memory Card
Provides additional storage for event log data. SD memory cards are available from most electronics and camera retailers.

Configuration Switch
For details on functions of the configuration switch, please refer to the E27 product manual.

J6 – Temporary Connection “Plug-in Jacks” for RS-485 Data Bus
Local connection for data bus devices (keypad, expander, etc.) for testing purposes only



J16 OUTPUTS



J16 – Programmable Outputs 1-10
12 VDC switched positive general purpose outputs rated at 50mA

Output 11 – Programmable General Purpose Relay
Rated at 4 Amps@ 12-24 VDC (Dry Contacts)

Supervised ALARM Outputs
For speakers only (4 to 8 ohms)
If not used, install a 2.2K Ohm resistor to avoid Alarm Output Trouble.
NOTE: Do not place a Direct Short across Alarm output terminals.

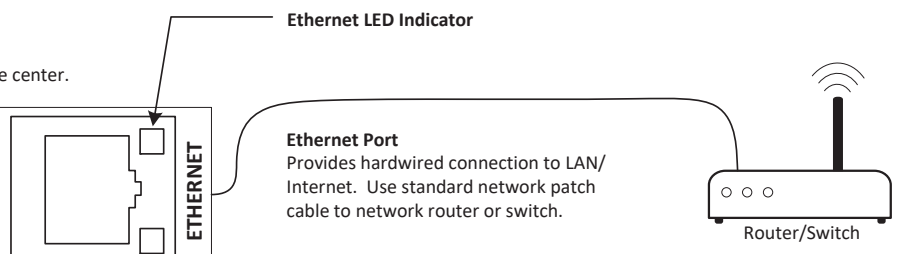
RS-485 Data Bus
For connection of peripheral devices including keypads, expanders, etc.
Total length of 2 home runs must not exceed 4000ft.

14 VDC Power Supply – ELK-P1426
DO NOT CONNECT TO AC TRANSFORMER!
DO NOT CONNECT TO SWITCHED OUTLET
Observe Polarity. 18 AWG Minimum.

Standby Battery
Replace battery every 3-5 years. Use ELK-1280 (12V 8 Ah) or ELK-12180 (12V 18 Ah) or equivalent.

Master Power Switch
Disconnects DC power supply and standby battery from control.

JP1 – Terminating Jumper for RS-485 Data Bus



Connector for Optional Z-Wave Module
For more information, please refer to installation instructions for the ELK-AEZW Z-Wave Module.

Connector for Optional Wi-Fi Adapter
For more information, please refer to installation instructions for the ELK-AEWF Wi-Fi Adapter.

Output 11 (Relay) LED Indicator

Status/Diagnostic Display
Normal status display is **E no**
Displays error codes and other diagnostic information. For more information, please refer to E27 product manual.

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