## **ELK-AEXRFA**

# Alarm Engine Bus Adapter for RF Receiver/Transceiver



## **APPLICATION:**

The ELK-AEXRFA is an adapter for connecting an Alarm Engine RF receiver/transceiver to the Alarm Engine RS-485 data bus. It accepts an ELK-AERF3 319.5MHz receiver or ELK-AERF9 Two-Way transceiver. Up to 4 AEXRFA adapters may be connected to the data bus.

## **SPECIFICATIONS:**

- Operating Power: 12 VDC
- Current draw: 27mA (board only), 79mA (with AERF3 installed). 112mA (with AERF9 installed)
- Board Size: 3.5" x 3.94" x 0.56" Housing Size: 4.25" x 6.36" x 2.13"

Features or Specifications subject to change without notice.



#### INSTALLATION INSTRUCTIONS:



# Before installing the RF Bus adapter, TURN THE E27 MASTER POWER SWITCH OFF.

## RECEIVER/TRANSCEIVER INSTALLATION

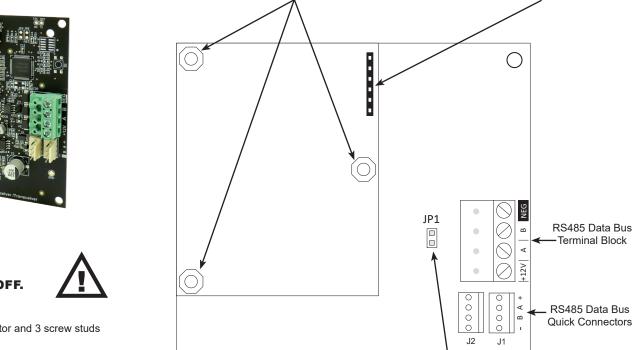
- Remove the cover from the AEXRFA housing and locate the 6-pin connector and 3 screw studs in the upper left corner.
- Carefully align the 6-pin male connector in the lower right corner of the AERF3 or AERF9 wireless receiver/transceiver with the 6-pin female connector on the AEXRFA board. Ensure wireless receiver/transceiver is fully seated into the connector.
- Install 3 screws (provided) through the wireless receiver/transceiver into the screw studs located on the AEXRFA board (see illustration).
- The AEXRFA adapter includes two offset antennas. When using the adapter with the AERF3, use the longer antenna. When using the adapter with the AERF9, use the shorter antenna. Install the appropriate antenna in the ANT terminal on the receiver/transceiver.



CAT5 or CAT6 wire (4 pair, 8 conductor) is highly recommended for all data bus cables and the extra wires may be required for data return paths where multiple home runs or devices are installed. Use 4 conductors to connect terminals BUS +12V, Data A, Data B, and Neg from control to terminals +12V, A, B, and Neg on the AEXRFA.

Refer to information in the E27 manual for important guidelines for proper termination and wiring of systems with multiple home run connections for data bus devices. Minimum conductor size is 22 or 24 gauge. Maximum resistance per wire is 25 Ohms. Device placement beyond 1000' is not recommended.

Please refer to the ElkConnect app instructions for details on enrolling the AEXRFA in the E27 system.



Receiver/Transceiver

Mounting Studs

#### LIMITED WARRANTY

The ELK-AEXRFA RF Bus Adapter 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 quarantee 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:

- Recrient 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:

6-Pin Connector

For Receiver/Transceiver

This device may not cause interference

**Terminating Jumper** 

for RS485 Data Bus

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 ra 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 suscepti
- ble d'en compromettre le fonctionnement.

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