

VESDA-E VEA Local Relay StaX Installation Instructions

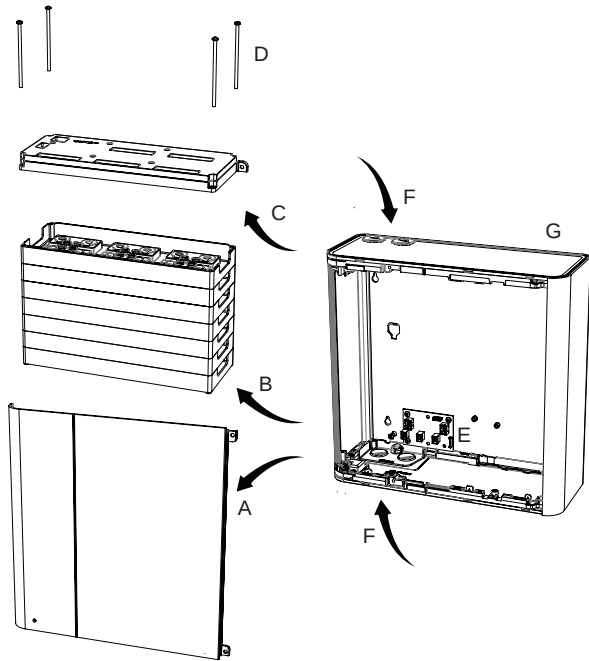
These installation instructions provide essential information for installing the VESDA-E Local Relay StaX, VER-A40-40-STX, in conjunction with a VESDA-E VEA Aspirating smoke detector, VEA-040-A00 or VEA-040-A10 in accordance with the system design. Additional installation and product documentation is listed below in the Reference Documents section.

Package Contents

The Local Relay StaX is shipped with the following components:

- 1 Local Relay StaX enclosure (P/N VER-A40-40-STX)
- 1 mounting bracket
- 1 mounting spacer
- 1 mounting template for directly mounting the Relay StaX to the mounting surface
- 1 installation instruction sheet (this sheet)

Relay StaX Components



A	Fascia
B	Trays
C	Relay PCA
D	Fixing Screws
E	Distribution Board
F	Cabling Inlets
G	Base

Prerequisites

- Screws and inserts that are appropriate for the mounting surface.
- Cable glands that are compliant with the IP rating of the detector.
- Conduit, as specified in the system design.
- 0.2 mm² to 1.5 mm² (24 -16 AWG) wiring for relay connectors.
- PC or laptop installed with Xtralis VSC for initial configuration.

Standards Compliance

EN 54-20

EN 54-20 compliant when used with an EN54-20 approved detector.


Xtralis Pty Ltd. 4 North Drive, Virginia Park 236-262 East Boundary Road Bentleigh East Victoria, 3165, Australia CE/UKCA DoP: 32560
EN 54-20: 2006 Aspirating smoke detectors for fire detection and fire alarm systems for buildings Classes: A, B and C For more technical information, refer to the product guides (Doc. No. 27034 & 27035)

Power Consumption (24 VDC Supply)

Model	Average Quiescent	Average Alarm
VER-A40-40-STX	0.02 A	0.25 A

Environmental Requirements

- **Ambient Temperature:** 0°C to 38°C (32°F to 100°F)
- **Humidity:** 5-95% RH, non-condensing

Reference Documents

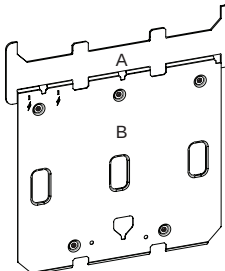
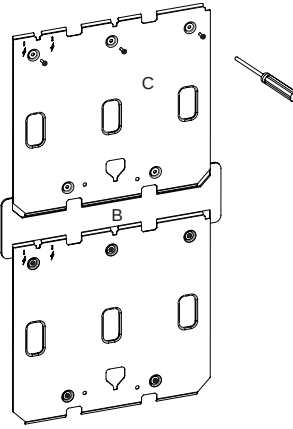
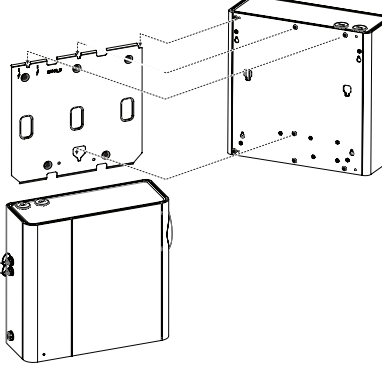
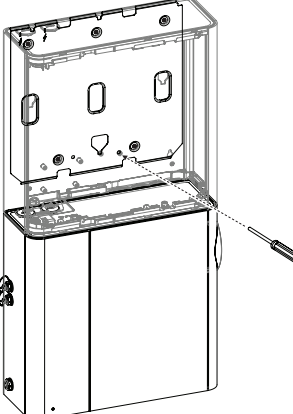
Additional installation and product information is contained in the following documents, which are available for download from Xtralis website (www.xtralis.com).

- 27034 - VESDA-E VEA-040-A00 Product Guide
- 27035 - VESDA-E VEA-040-A10 Product Guide
- 32407 - VESDA-E VEA Commissioning Guide

Installation Instructions

The Local Relay StaX can be mounted above or below the detector. A spacer has been provided to precisely align the Local Relay StaX mounting bracket with the detector mounting bracket.

Mounting the Local Relay StaX using the Mounting Bracket

Position the Mounting Bracket Spacer above or below the detector mounting bracket	
	• Position the mounting bracket spacer (A) immediately above or below the detector mounting bracket (B), which has been previously secured to the mounting surface. • If required, remove the detector first.
Position and secure the Local Relay StaX Mounting Bracket	
	• Align the Local Relay StaX Mounting Bracket (C) with the spacer (B), and secure it to the mounting surface, then remove the spacer. • Reattach and secure the Detector to its mounting bracket.
Fit the Local Relay StaX to its mounting bracket	
	• Fit the Local Relay StaX to its mounting bracket by aligning the four mounting studs to their respective recesses and sliding the unit into place. The top of the unit should be aligned with the top of the mounting bracket.
Secure the Local Relay StaX to its mounting bracket	
	• Secure the Local Relay StaX to its mounting bracket by inserting and tightening a retaining screw.

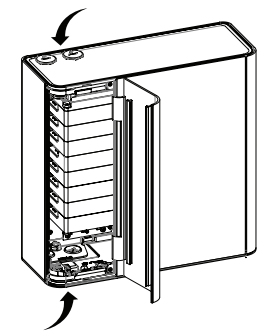
Mounting the Local Relay StaX directly to the mounting surface

Use the provided mounting template. Refer to the VEA Product Guide for further information.

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Prepare the Relay StaX: Wiring Inlets

Remove the appropriate plugs for electrical cable installation.

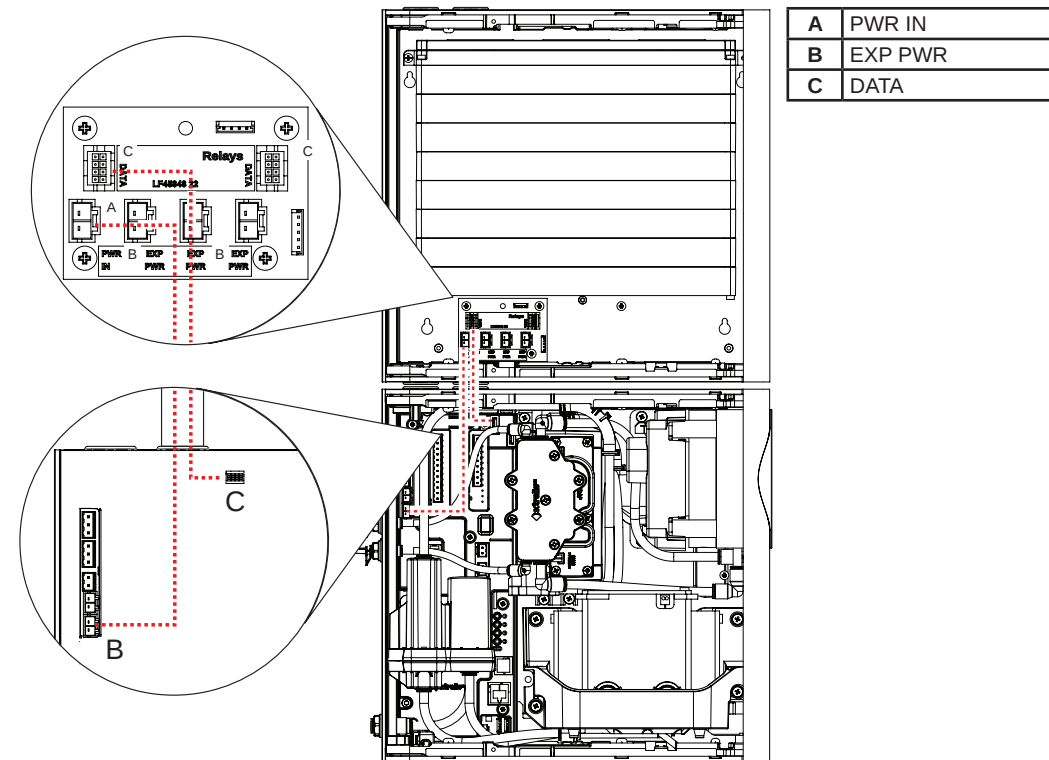


- Place a large screwdriver in the large slot and twist, or use a small screwdriver in the side slots to lever the plug out.
- Do not remove the plugs from holes that will not be used.
- Feed the electrical wiring connections through the cable entry ports.
- Use the correct cable gland size to fit into the 26 mm (1") cable entry port. Use correctly rated cable glands to maintain the required IP rating.

Wiring: Distribution Board

Warning: Always disconnect power before plugging/unplugging electrical or relay connections. Failure to do so may cause data corruption and/or component failure.

Avvertimento : Eteignez toujours détecteur avant de brancher/débrancher les relais électriques, ou de connexions réseau. Au cas contraire vous pouvez entraîner la défaillance corruption et/ou élément de données.



Power, Data and Relay Wiring

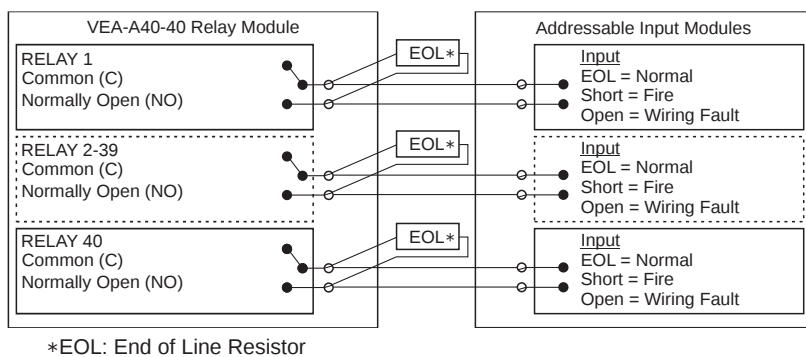
Data: Connect from the DATA connector on the detector to any DATA connector on the Local Relay StaX.

Power: Connect from the EXP PWR connector in the detector to the PWR IN connector in the Local Relay StaX.

Relays: The Relays interface to third party Addressable Input Modules to provide secondary address information, identifying which tubes of the associated detector generated the alarm condition. Relay contacts are rated 2 A @ 30 VDC, resistive. Connect as required by the system design. Use electrical wire sizes from 0.2 mm² to 1.5 mm² (24 -16 AWG).

Typical Wiring to Addressable Input Modules

The following example is for wiring the Relay StaX relay contacts to typical third party Addressable Input Modules.



To identify individual relay contacts on the Relay PCA, refer to the Relay StaX configuration diagram.

Refer to the appropriate product manual for the exact wiring details of the third party equipment.

Warning: Ensure that all wiring complies with manufacturer's instructions and local and national fire detection code requirements. Refer to Codes and Standards Information for Air Sampling Smoke Detection section of the detector product guide for further information on wiring compliance.

Avvertimento : Verifier que toute les cables ont passé au nombres d'instructions du fabricant et locaux et au feu national de securited'incendie sois exiger. Adresser aux codes informations sur les normes et reglementations de detection de fume par prelevement d'air par le notice descriptive du produit pour plus de renseignements au conformite du cablage.

Caution: DO NOT LOOP WIRE UNDER TERMINALS WHEN WIRING DETECTORS. BREAK WIRE RUNS TO PROVIDE SYSTEM SUPERVISION OF CONNECTIVITY.

Attention : NE PAS RALIER LES CABLES TERMINAUX PENDANT LES CABLAGES DES FILS. POUR TOUTES LES CONNEXIONS A RELAIS, INTERROMPRE LES FILS POUR PERMETTRE LA SUPERVISION DU CABLAGE.

Note: For information on wiring for other types of devices that may be required by the system design, refer to the detector Product Guide and documentation accompanying the device.

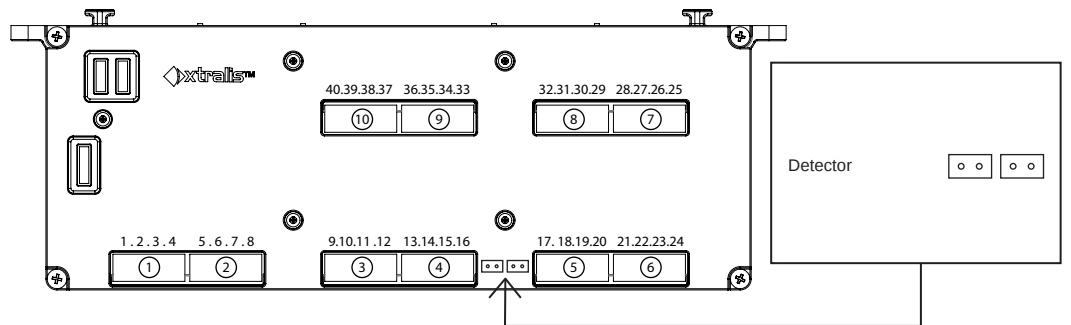
Power Up

Connect 24 VDC power to the Power In terminals (2). Close front door.

Configuration

Relay StaX:

- The relay PCA itself must be configured to signal smoke locations for the VEA-040-A00 detector.
- There are two jumpers, located on the Relay PCA. Refer to the below figure.
- Both jumpers are removed to use the Relay StaX with the detector.



Detector:

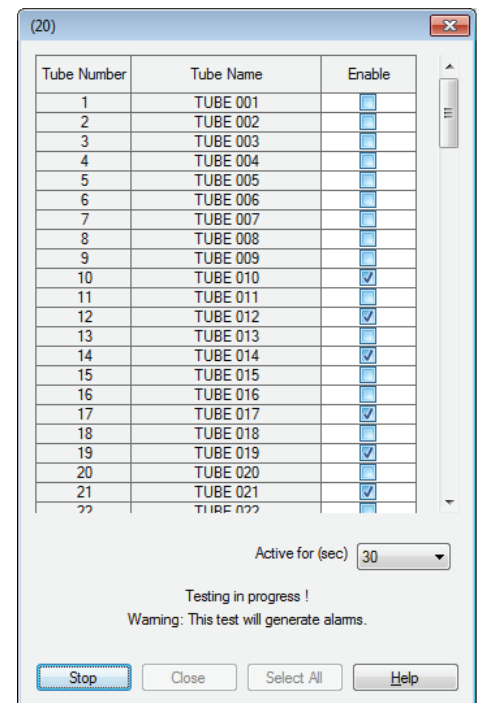
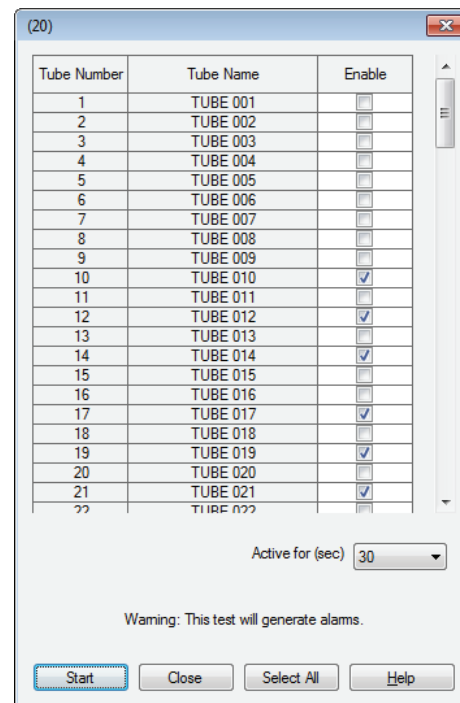
- The VESDA-E VEA detector must be configured to expect a connected Relay StaX.
- This is done by ticking a check box in the Relay column on the Module tab in Xtralis VSC.

Note: If the Relay Stax is configured but is not connected, a fault will be generated.

Commissioning

To test the relays, use the Alarm Test function in Xtralis VSC.

- Ensure that the fire alarm control panel is isolated.
- Select the Alarm Test command in the Device Menu.
- Select the relays to be tested and press "Start". The detector will stop normal smoke detection and will go into alarm with the selected relays turned on. (The main detector Alarm relays will also be turned on.) The alarm test function will stop automatically after the selected "Active for" time. Or the user can stop the function by selecting "Stop".



Note: This function will cause an alarm to be signaled via the relays in the Relay StaX and the VEA detector's own relays.

Refer to the VESDA-E VEA Commissioning guide (Doc. No. 32407) for further information.