Electrostatic Sensitive Device (ESD)

Electrostatic discharge (ESD) is the transfer, between bodies, of an electrostatic charge caused by direct contact or induced by an electrostatic field.

The most common cause of ESD is physical contact. Touching an object can cause a discharge of electrostatic energy—ESD! If the charge is sufficient and occurs near electronic components, it can damage or destroy those components.

In some cases, damage is instantaneous and an immediate malfunction occurs. However, symptoms are not always immediate—performance may be marginal or seemingly normal for an indefinite period of time, followed by a sudden failure.

To eliminate potential ESD damage, review the following guidelines:

- Handle boards by their edges, taking care not to touch electronic components
- Wear grounded wrist or foot straps, or ESD shoes or heel grounders to dissipate unwanted static energy
- Prior to handling boards, dispel any charge in your body or equipment
- Ensure components are transported and stored in static safe packaging
- When returning boards, carefully package in the original carton and static protective wrapping
- Ensure ALL personnel are educated and trained in ESD Control Procedures

In general, exercise accepted and proven precautions normally observed when handling electrostatic sensitive devices.

A warning label is placed on the packaging, identifying product using electrostatic sensitive semiconductor devices.
1 Modbus®

**NOTE**

This option is not available with the Relay or Foundation Fieldbus™ options.

*The termination required by Modbus® is provided by SW5 as shown below.*

Terminals 3-1 through 3-4 are provided to facilitate bus wiring; there is no internal connection to other XNX circuitry. Terminal 3-1 is connected internally to 3-2. Similarly, terminal 3-3 is connected to 3-4.

Figure 1. XNX Modbus® Option Board Terminal Block and Jumper Switch
2 Option Board Installation

**WARNING**

If you are retrofitting an option board into a previously installed unit, remove power from the XNX unit to prevent potential electric shock.

1. Release the cover locking screw with the provided 2mm hex key.
2. Unscrew, remove the cover and set it aside.
3. Using the handle provided, carefully slide the POD from the inside of the XNX Transmitter housing. If your XNX is currently in use, carefully unplug the terminal blocks from the rear of the POD.
4. Place the POD face down on a flat work surface taking care to not damage the LCD screen.
5. Remove the blank label from the POD and replace it with the label provided with the new Modbus® option board.
6. Remove the 6 case screws from the POD set them aside in a safe place.
7. Lift the back cover off the POD revealing the personality board and components inside.

8. Remove the option board from its packaging.

9. Install the option board onto the main board by carefully inserting the pins on the back of the option board into the connector on the main board.
10. Replace the back cover and screws, then wire accordingly or reconnect to existing wiring.

11. Slide the POD back into the XNX housing and replace the cover.

**NOTE:**
Before replacing the cover on the transmitter housing, coat the threads with anti-seize compound to prevent corrosion buildup.

12. When the XNX completes the startup routine, as it attempts to enter monitoring mode, the XNX will show Fault 152 signifying that the XNX must be configured to recognize the new option board.

Navigate the XNX to the Transmitter Data screens found under the Information Menu. In addition to displaying the current transmitter configuration, Transmitter Data is also used to update the configuration of the XNX when a new option board is added or removed. To add the new option, use the switches to navigate to the Option Revision screen, then swipe the magnetic switch on the front panel to display Accept New Option Screen. The screen will show the current option (if any) and the newly installed option. Use the switches to highlight the option then swipe the magnetic switch on the front panel to accept the change. The XNX will update the part number of the unit and the new option will be operational.
Figure 1. Updating The XNX for Option Boards Added or Removed
Find out more
www.honeywellanalytics.com

Contact Honeywell Analytics:

Europe, Middle East, Africa, India
Life Safety Distribution AG
Weiherallee 11a
CH-8610 Uster
Switzerland
Tel: +41 (0)44 943 4300
Fax: +41 (0)44 943 4398
gasdetection@honeywell.com

Americas
Honeywell Analytics Inc.
405 Barclay Blvd.
Lincolnshire, IL 60069
USA
Tel: +1 847 955 8200
Toll free: +1 800 538 0363
Fax: +1 847 955 8210
detectgas@honeywell.com

Asia Pacific
Honeywell Analytics Asia Pacific
#508, Kolon Science Valley (I)
187-10 Guro-Dong, Guro-Gu
Seoul, 152-050
Korea
Tel: +82 (0)2 2025 0300
Fax: +82 (0)2 2025 0329
analytics.ap@honeywell.com

Technical Services
EMEA: HAexpert@honeywell.com
US:     ha.us.service@honeywell.com
AP:     ha.ap.service@honeywell.com

Please Note:
While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards and guidelines.
This publication is not intended to form the basis of a contract.

1998-0750 Release 1
March 2009
MAN0883_EMEAI
© 2009 Honeywell Analytics