# Honeywell

# 4229 Wired Zone Expander/Relay Module – Installation Instructions

## **GENERAL INFORMATION**

The ADEMCO 4229 Wired Zone Expander/Relay Module adds up to eight normally closed or eight end-of-line resistor supervised zones and two dry form C (SPDT) relay outputs to compatible control communicators via the control's keypad wiring.

The module may be mounted within the control's cabinet (if room permits), or remotely. If mounted remotely, there are provisions to tamper-protect the unit. Communication to the module is supervised so that it cannot be disconnected from the keypad wiring without detection by the control. If the wiring is cut, a tamper or alarm signal will result, to indicate that this device (and possibly other similarly connected devices) has become inoperative.

IMPORTANT: Some carbon monoxide detectors may not be compatible with the ADEMCO 4229 hardwire zone expanders. When using carbon monoxide detectors in systems that support the 4229 zone expanders, install the detectors only on the basic hardwire zones of the system control panel, and NOT on the zone expanders.

# **INSTALLATION**

When the module is to be mounted inside the control's cabinet, it should be mounted horizontally. Insert self-tapping screws (provided) in two adjacent raised tabs at the back of the cabinet. Leave the heads projecting 1/8". Hang the module on the screw heads via two of the slotted holes on the back of its housing. In this case, the module's cover need not be tamper protected. See the control's instructions for additional information.

When the module is to be mounted remotely, holes on its back permit it to be mounted horizontally or vertically. Wires can exit from the side or the breakout on the back of its housing. Place DIP switch #8 in the OFF position and, when the installation is completed, the module's cover put on. A magnet in the cover, positioned near a reed switch in the unit, will cause a tamper signal to be sent to the control if the cover is removed.

**NOTE:** For EN50131-3 compliance a tie-wrap must be secured around the case of a remotely mounted 4229. Apply tie-wrap around the case to the right of the large zone wire opening (4-inch case width). This is in opposition of the tamper switch and magnet.

Affix the connections label that accompanies the unit to the inside of the module's cover (if the cover is to be used)) or to the inside of the control's cover

#### CONNECTIONS AND SETTINGS

See the table and the diagram on the reverse side.

## **Zone Connections**

Make protection zone connections to 12-position terminal block TB1. Set DIP switch 7 for the desired zone operation (NC or EOLR):

OFF = End of line resistor operation. Each zone that is used must have a **2K-ohm end-of-line resistor** connected across the end of its loop, as shown in Figure 2.

UL: Set to OFF (EOLR)

ON = Normally closed operation

The method of programming each zone for type of alarm and reporting code to the central monitoring station varies with the control to which the module is connected. Refer to the installation instructions for that control unit.

#### **Module Address**

Set the module address using DIP switches 2-6.

Select one of 31 addresses, as shown in the table on the reverse side, so the control can identify the module and communicate with it properly. The address to be set is determined by the particular control to be used, and the control's installation instructions must be consulted.

# Normal/Fast Response Time for Zone A

Use DIP switch 1 to select normal or fast response time for zone A:

OFF = fast response time of 10ms to an open circuit

ON = normal response time of 300ms. All other module protection zones have a nominal response time of 300ms.

# **Relay Connections**

Connect the module's two relays to the appropriate devices via the 7-conductor cord provided. Refer to the control's installation instructions for specific information on how to program the control's various activation options for the relays.

# **Connection to the Control Panel**

Connect the module to the control panel's keypad (ECP) terminals via4-terminal block TB2 or the 4-pin plug (wire color connections are the same).

# **SPECIFICATIONS**

**Physical** 6-7/16"W x 4-1/4"H x 1-1/4"D

(163mm x 108mm x 32mm)

#### **Electrical**

Input Voltage: 12VDC (from control's remote keypad

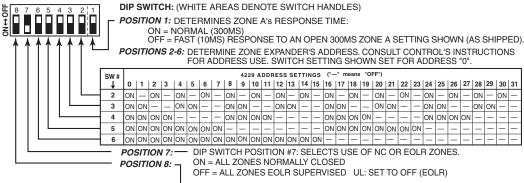
connection points)

Input Current: 30mA (relays off)

100mA (relays on)

Relay Contact

Rating: 2A max. at 28VDC/AC



DIP SWITCH POSITION #8: CASE TAMPER ON = DISABLED OFF = ENABLED

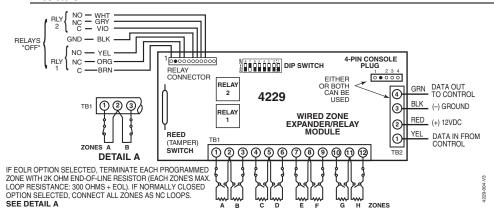
NOTE: ADDRESSES 16-31 MAY NOT BE AVAILABLE; CONSULT THE HOST CONTROL PANEL INSTALLATION INSTRUCTIONS. ADDRESS "0" SETTING SHOWN.



#### EOLR value is 2K ohms.



For UL, use 14-22AWG wire, and no more than one wire may be connected per terminal. Use UL Listed EOL resistors.



FOR LIMITATIONS OF THE ENTIRE ALARM SYSTEM, REFER TO THE INSTALLATION AND SETUP GUIDE FOR THE CONTROL PANEL WITH WHICH THIS DEVICE IS USED.

For the latest warranty information, please go to: http://www.security.honeywell.com/hsc/resources/wa

# Federal Communications Commission (FCC) Part 15

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Manual. Unauthorized changes or modifications could void the user's authority to operate the equipment.

#### FCC CLASS B STATEMENT:

This equipment has been tested to FCC requirements and has been found acceptable for use. The FCC requires the following statement for your information:
This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.
However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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 or more of the following measures:

- If using an indoor antenna, have a quality outdoor antenna installed.
- Reorient the receiving antenna until interference is reduced or eliminated.
- Move the radio or television receiver away from the receiver/control.
- · Move the antenna leads away from any wire runs to the receiver/control.
- Plug the receiver/control into a different outlet so that it and the radio or television receiver are on different branch circuits.
- Consult the dealer or an experienced radio/TV technician for help.

## FCC/IC STATEMENT

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with Part 15 of the FCC rules and RSS 210 of Industry Canada. 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.

Cet appareil est conforme à la partie 15 des règles de la FCC & de RSS 210 des Industries Canada. Son fonctionnement est soumis aux conditions suivantes: (1)

Cet appareil est conforme à la partie 15 des règles de la FCC & de RSS 210 des Industries Canada. Son fonctionnement est soumis aux conditions suivantes: (1) Cet appareil ne doit pas causer d'interférences nuisibles. (2) Cet appareil doit accepter toute interférence reçue y compris les interférences causant une réception indésirable.

