

If Power over Ethernet (PoE) is used to power the device, then 24 VDC power must <u>not</u> also be connected to the device, (or conversely if 24 VDC is used to power the Midas®, then electrical power via the Ethernet port must not be applied). Failure to observe this requirement may cause damage to the gas detection system and will not be covered by the standard warranty.

When connecting the wires ensure that the power switch is in the off position.

<u>Diagram 4-5</u> shows the terminal module layout and terminal identification as well as the jumper locations.

### **Note: Earthing Requirements**

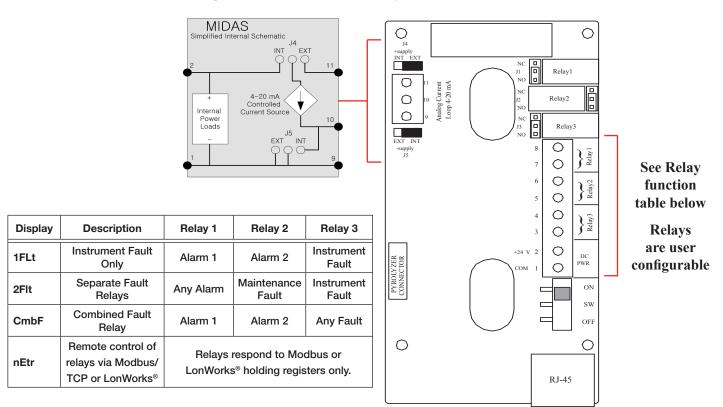
If the Midas® unit's metal chassis is not connected directly to a metal surface for earthing purposes, an additional earth wire will be required. Connect a wire via the PG16 gland to the dedicated earth tag (screw terminal) located on the bottom bracket and connect the other end of the wire to a dedicated external earthing point.

If Power over Ethernet (PoE) power supply is being used, shielded CAT5 Ethernet cable is recommended.

Please ensure that your wiring avoids earth ground loops that may affect the performance of your equipment



## Diagram 4-6. Midas® terminal layout and identification



### Note

The 3 relays onboard the Midas<sup>®</sup> unit can be controlled remotely from a separate controller system using Modbus/TCP commands (or via LonWorks<sup>®</sup> if the optional interface is used). In this remote mode, the relays cannot be controlled by the Midas<sup>®</sup> itself and only by the remote controller device (PLC, SCADA, etc.)

# Honeywell

## Midas® Gas Detector

## 4.7 Electrical Connections

Midas® can be powered by either 24 VDC via traditional discrete wiring or by approximately 48 VDC delivered through the Ethernet cable from a PoE source. In either case the 4-20 mA analog output can be used. This can be configured for fully isolated operation. With 24 VDC power the 4-20 mA output can be configured for sink, source or isolated output operations. Below are some schematic diagrams of typical electrical connection

Diagram 4-7. Generic Example Midas® 4-Wire Isolated Output

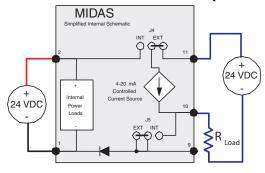
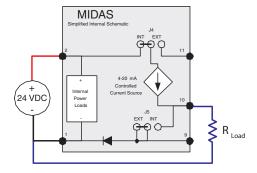


Diagram 4-8. Generic Example Midas® 3-Wire Sourcing



configurations. Specific wiring instructions for connecting a Midas to a Honeywell Analytics Sieger System- $57^{TM}$  are provided on pages 4-12 to 4-16. Specific instructions for connection to a Honeywell Analytics TouchPoint<sup>TM</sup> are provided on pages 4-17 and 4-18 and the HA71 on pages 4-19 and 4-20.

#### Note:

When wiring the Midas Transmitter to a controller, program the controller for a 1-2 second delay before reporting to prevent false alarms.

Diagram 4-9. Generic Example Midas® 3-Wire Sinking Output

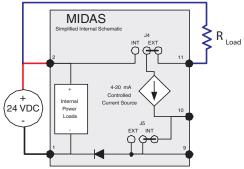


Diagram 4-10. Generic Example Midas® Isolated 4-20 mA Output w/PoE Power

