

# 16-Channel SPST Relay Board

## For IBM PC/XT/AT and Compatibles



**\$299**



Optional STA-U Termination Panel (\$120) and C-1800 Cable (\$30)

REL-16

- ✓ 16 SPST Electromechanical Reed Relays
- ✓ 500 mA (Model REL-16) or 1 A (Model REL-16W) Contacts
- ✓ Mercury Amalgam (REL-16) or Mercury Wetted (REL-16W) Contacts
- ✓ Easy to Program

The OMEGA REL-16 is a 16-channel SPST relay board for use with IBM PC/XT/AT and compatibles. There are two Models available: REL-16 features mercury amalgam relays, rated to 500 mA (resistive), and REL-16W features wetted mercury relays, which offer a lower contact resistance and are rated up to 1 A (resistive). The REL-16 can be mounted in any orientation, but the REL-16W MUST be mounted vertically.

The REL-16 is configured as two independent 8-bit ports. Controlling the output relays is as simple as writing an 8-bit word to either of the ports. All relays stay in their power OFF (open) state when power is first applied to the host computer. Each channel offers 500 Vdc of isolation from the I/O connections to the PC (excluding power supply connections). Five V power is brought out by the computer, and can be used to power external devices.

All external I/O is connected through a standard male 37-pin "D" connector. Connections to the board may be made through a mating "D" connector, or through the optional C-1800 cable and the STA-U screw terminal board.

The REL-16 is easy to program. The board occupies two consecutive addresses in the PC's I/O address space. The base address is selected via a 9-position DIP switch located on the board itself. Data is written to all 8 relays in a port as a single byte, and all relays in a port are updated simultaneously. Writing a low (0) to a relay within a port de-activates the relay, while writing a high (1) to a relay activates it.

### Specifications

**Number of Outputs:** 16 SPST relays

**Isolation:** 500 Vdc

**Operation Time:** 2.0 ms max

#### RELAYS

**Isolation Resistance:** 10<sup>9</sup> ohms @ 100 Vdc

**Voltage Holdoff:** Coil-contact 1500 Vdc, 25°C @ 40% RH

**Contact Types:** REL-16: mercury amalgam; REL-16W: mercury wetted (position sensitive, board must be mounted ±30 degrees of vertical)

**Contact Rating:** REL-16: 10 W @ 0.5 A or 200 Vdc (resistive); REL-16W: 50 W @ 1 A or 500 Vdc (resistive)

**Contact Resistance:** 50 milliohms max

**Contact Life:** 10<sup>7</sup> operations at rated load

**Operating Temperature:** 32 to 140°F (0 to 60°C)

**Relative Humidity:** 0 to 90% non-condensing

**Mounting:** REL-16W must be mounted with ±30 degrees of vertical; REL-16 can be mounted at any angle

**Power Consumption:** +5 V: 510 mA + 22 mA per activated relay max.; +12 V: not used

To Order ( <i>Specify Model Number</i> )		
Model	Price	Description
REL-16	\$299	16-Channel SPST relay board with mercury amalgam relays
REL-16W	399	16-Channel SPST relay board with mercury wetted relays
SFC-37	15	Mating 37-pin connector
STA-U	120	Screw terminal board
C-1800	30	18" 37-pin mating cable with connectors

REL-16 and REL-16W come with a complete operator's manual.

**Ordering Example:** REL-16W, with a STA-U and a C-1800, is a 16-channel SPST relay board with mercury wetted relays, and the optional screw terminal board and optional 18" 37-pin mating cable, \$399 + 120 + 30 = **\$549**.