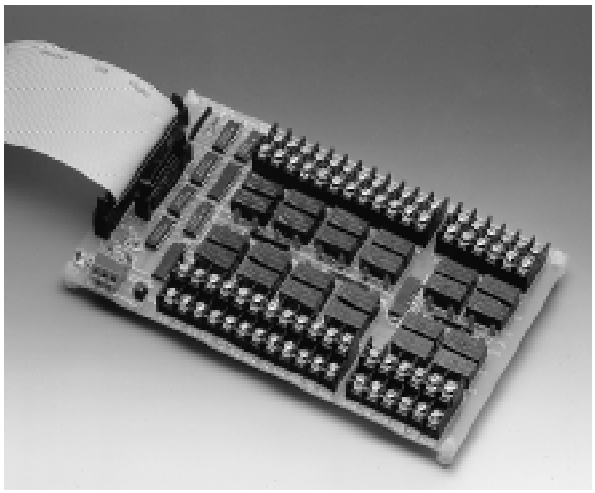
PCLD-785 / 785B

16/24-channel Relay Output Boards



Features

- Compatible with PC-LabCards with
  20-pin digital output connector (PCLD-785 & PCLD-785B)
  50-pin Opto-22 digital output connector (PCLD-785B only)
- Automatic selection of control logic (PLCD-785B only):
  Negative logic for the Opto-22 connector
  Positive logic for the 20-pin flat cable connector
- Relays:
  PCLD-785: 16 SPDT
  PCLD-785B: 16 or 24 SPDT
- On-board relay driver circuits
- Screw terminals for easy output wiring
- LED status indicators
- Cable and mounting accessories

Introduction

The PCLD-785 carries 16 SPDT electromechanical relays and a 20-pin flat cable connector compatible with the digital outputs of most PC-LabCards.

The PCLD-785B is a new expanded version of the PCLD-785 which features 24 SPDT electromechanical relays and an additional 50-pin Opto-22 compatible connector. The number of output channels available on the PCLD-785B depends on the connector you use. The new card's 50-pin connector accesses all 24 channels, while its 20-pin connector has access to 16 channels. The PCLD-785B automatically selects the correct control logic for the connector in use.

Both cards use identical relays with three contacts: common, normally open and normally closed. The contacts are electrically connected to easily accessible screw-connector strips on the board sides. An LED situated adjacent to each relay indicates its On/Off status.

Applications

- Signal switching
- On/Off control
- Valve/solenoid control
- External, high power relay control
- Alarm activation, annunciator control
- Test automation

Specifications

- **PCLD-785:** Input connector: 20-pin flat cable
  Channels: 16
- **PCLD-785B:**
  Input connectors: 50-pin Opto-22, 20-pin flat cable
  Channels: 24 (50-pin conn.), 16 (20-pin conn.)
- **Relay type**: SPDT (Single-Pole Double-Throw) Form C
- **Contact ratings** AC: 120 V @ 0.5 A
  DC: 30 V @ 1 A
- **Contact resistance**: < 100 mW
- **Operation time**: 5 msec. max.
- **Release time**: 5 msec. max.
- **Insulation resistance**: 100 mW
- **Life expectancy**:
  AC: 5 x 10^5 @ 110 V/0.3 A
  DC: 5 x 10^5 @ 24 V/1.25 A
- **Output connector**:
  Screw clamp terminal block (PCLD-785)
  Barrier strip terminal block (PCLD-785B)
- **Power requirements**:
  Using the 20-pin connector:
  +5 V_{DC}: Jumper select either PC bus or external supply
  +12 V_{DC}: Jumper select either PC bus or external supply
  You must use an external 12 V supply when you use the 50-pin connector.
- **Control logic**:
  20-pin flat cable conn.: Input TTL high (+5 V) = Relay on
  50-pin Opto-22 conn.: Input TTL low (0 V) = Relay on
- **Power consumption**:+5 V @ < 100 mA;
  +12 V @ 33 mA for each relay
- **Board dimensions**:
  PCLD-785: 114 mm x 220 mm (4.5" x 8.7")
  PCLD-785B: 132 mm x 220 mm (5.2" x 8.7")

Ordering Information

- ❑ **PCLD-785B**: 24-channel Relay Output Board, user's manual, 1 meter 20-pin flat cable assembly (P/N PCL-10120-1) and 1.2 meter 50-pin flat cable assembly (P/N PCL-10150-1.2)
- ❑ **PCLD-785**: 16-channel Relay Output Board, user's manual, 1 meter 20-pin flat cable assembly (P/N PCL-10120-1)
- ❑ **PCL-10120-1**: 20-pin flat cable assembly, 1 m
- ❑ **PCL-10120-2**: 20-pin flat cable assembly, 2 m
- ❑ **PCL-10150-1.2**: 50-pin flat cable, 1.2 m (connects the PCL-722 or 724 to the PCLD-885, 782B or 785B)