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<b>Change History</b>
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## The E2 Plug-In Digital I/O Network Card (P/N 537-4880)

### Overview

The E2 Plug-In Digital I/O Network Card (P/N 537-4880) is an expansion card for the CPC E2 controller that adds two digital inputs and two digital outputs to the E2 processor board. These inputs and outputs work the same as points on CPC's I/O network input and output boards, but they are controlled separate from the E2's I/O network and require no external wiring or powering to operate.

### Installation

The E2 Plug-In Digital I/O Network Card plugs into the E2's Power Interface Board (PIB). **Power down the E2 unit**, and then mount the card as shown in Figure 1. Make sure the 10-pin connector on the back of the card is seated correctly and firmly into the socket on the PIB. Secure the card to the PIB using the supplied mounting screws.

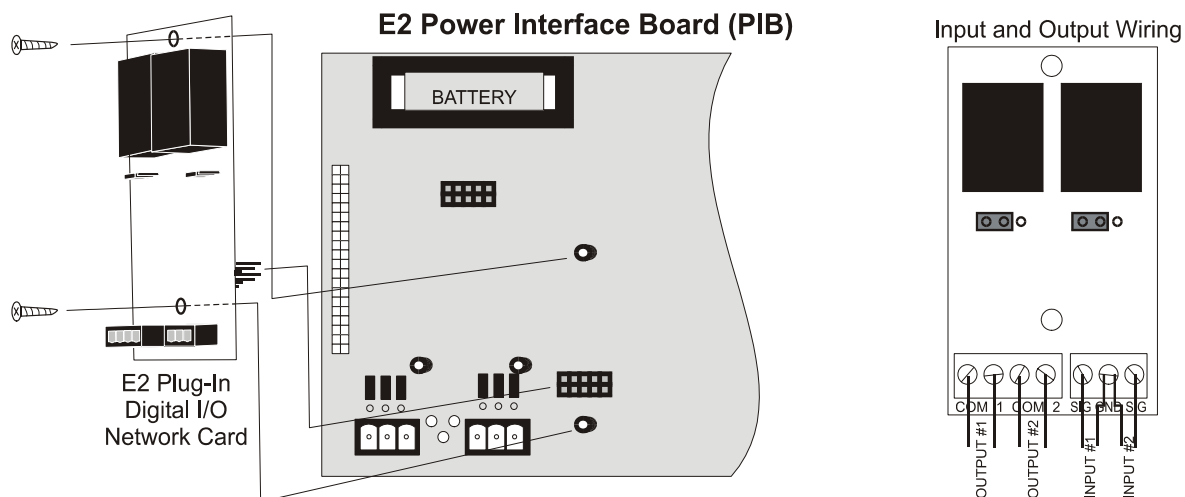


Figure 1 - E2 Digital Plug-In I/O Network Card Installation and Wiring

### Wiring

The connectors for the E2 Digital Plug-In I/O Network Card are on the bottom of the card. The relay output connector has four screw-type connection terminals for wiring output #1 and #2 to devices. The input connector has three terminals with a shared ground terminal for both inputs #1 and #2. See *Figure 1* for a wiring diagram.






### Relay Fail-Safe Jumper Wiring


The three-pin jumpers directly below each relay on the card set the behavior of that relay during power loss. Set the jumper LEFT to open the relay during power loss (N.O.), or RIGHT to close the relay (N.C.). See *Figure 1*.

## E2 Onboard I/O Setup

After installing the hardware, the E2 must be programmed to use the card. The E2 Plug-In Digital I/O Network Card is not set up the same way as other I/O Network boards such as MultiFlex. It is set up by creating an “Onboard IO” application in the system programming, and configuring this application to command the card’s relays and send the input values to other applications.



### To Create an Onboard IO Application:

1. Log in to the E2 with a high enough login level to change set points.
2. Press   (“Add/Delete Application”) and 1 to select “Add Application.”
3. In the Type field of the Add New Application screen, press  and select “Onboard IO” from the Look-Up Table.
4. Enter the number “1” in the “How Many?” field and press .
5. When the application is created, E2 will ask if you wish to edit the new application. Press  to enter the Onboard I/O setup screens.

After step 5, you will be taken to the Onboard IO setup screens. From here, you must tie the RELAY OUT 1 and RELAY OUT 2 outputs to the application outputs that will control the relays, and also define the DIG INPUT 1 and DIG INPUT 2 inputs to the application inputs that will use the card’s input points. Use the E2 on-line help at any time to assist you with setup (move the cursor to the field you wish to access help on, and press the  button).

## Checking Status and Troubleshooting

To ensure the E2 Plug-In Digital I/O Network Card is installed properly, navigate to the Onboard IO status screen:

1. Press   for a list of configured applications.
2. Select “Onboard IO.”

If the card is installed and configured correctly, the “BOARD STATE” field on the Onboard IO screen should read “ONLINE.” The ON/OFF state of all configured inputs and outputs will also be visible on this screen.

If the “BOARD STATE” says “OFFLINE,” check that the card is not damaged and is plugged into the PIB socket correctly.