

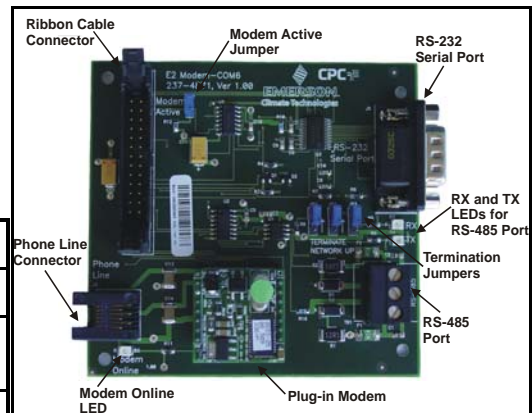
## Installation Instructions: E2 Modem/Communication Expansion Card

### Scope

For E2 control installations that require a modem connection for remote dial-out of alarms and dial-in via UltraSite, CPC has available a 33.6Kbaud modem communication expansion card that mounts above the PIB inside the E2 enclosure box.

<b>Baud Rate</b>	33.6Kbaud
<b>Size</b>	3.75in x 3.5in (9.5mm x 9mm)
<b>Operating Temp Specifications</b>	-40°F to +149°F (-40°C to +65°C)
<b>Storage Temp Specifications</b>	-40°F to +185°F (-40°C to +85°C)
<b>Operating and Storage Humidity</b>	10-95% RH, noncondensing


**Table 1 - Expansion Card Specifications**



### Introduction

Unlike previous generation modem cards that plugged into the PC-104 slot in the main processor board of the E2 controller, the E2 modem/communication expansion card mounts inside the E2 enclosure above the PIB and uses the same mounting platform as the internal E2 repeater card.

The E2 modem/communication expansion cards are not backwards compatible with previous generation E2 processor boards (*PCB P/N 237-4800*) that contained the PC-104 slot. Check the E2 processor board number designated in the lower left corner of the board to ensure compatibility. These modem/communication expansion cards are for use with current E2 processor boards (*PCB P/N 237-4801*) that now contain the ribbon cable connector (as shown in *Figure 1*).

 **NOTE:** Because the modem/communication expansion card and Echelon internal repeater card share the same mounting platform, they must be used separately.

## **Installation**

### **Step 1: Power Down and Jumper Setup**

To power down the E2, flip the POWER switch on the PIB to the OFF position. If the RS-485 port is used and it is one end of the daisy chain, set jumpers JP1, JP2, and JP3 to the UP position for termination. RS-485 Networks should be a daisy chain configuration and terminated at both ends.

The “Modem Active” jumper (JP4) on the card must be jumpered. (JP4 should be pre-set. If not already jumpered, contact CPC for technical assistance at 1-800-829-2724.)

### **Step 2: Mounting**

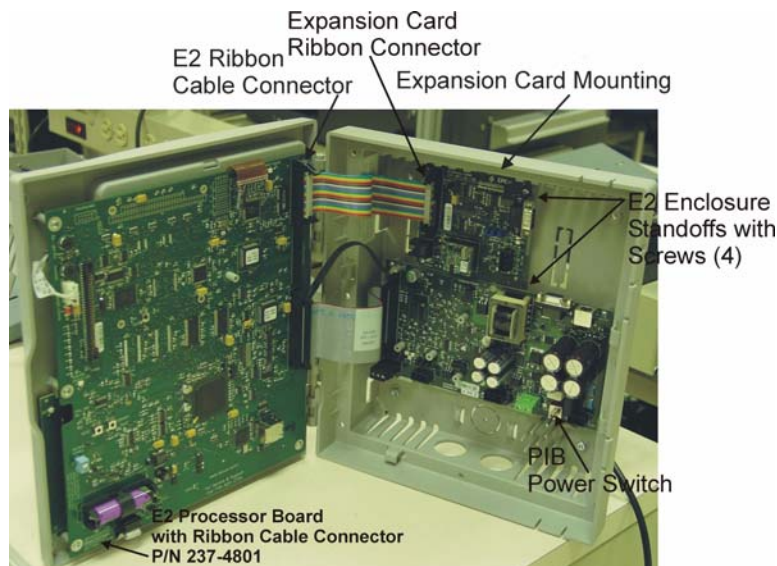
After powering down the E2 unit, mount the card onto the four standoffs located on the back of the E2 enclosure above the PIB, and use the provided screws to secure the card to the back of the enclosure (as pictured in *Figure 1*).



**CAUTION! Power down the E2 before mounting or removing any device. Failure to do so will damage the board.**

### **Step 3: Ribbon Cable Connections and Power Up**

Plug the ribbon cable into the connectors on the modem card and E2 main processor board and flip the POWER switch to the ON position to cycle power to the E2 unit. When the E2 is powered up, the “Modem Online” LED on the expansion card will illuminate.



*Figure 1 - E2 Modem/Communication Expansion Card Mounting*

## Step 4: Phone Line Connection

Plug a standard phone cable into the J3 phone jack on the modem card. The E2 unit should detect the modem as present and ready for use.

## Step 5: Software Setup

Logon to the E2 and go to the Modem Setup screen by pressing Alt + M:

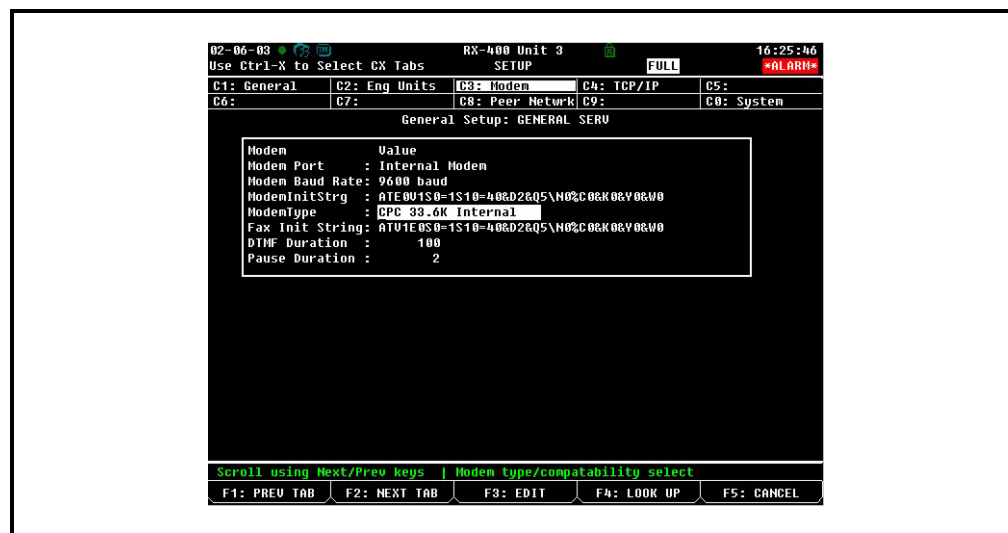


Figure 2 - E2 Modem Setup Screen

Adjust the modem settings and baud rate from this screen. **Modem Port** should be set to **Internal Modem**, and **ModemType** to **CPC 33.6K Internal**.

### FCC Part 68 Labeling and User Information:

#### Part 68 Labeling Requirements:

- Complies with FCC Part 68 Rules
- Registration Number: 3A4M500BHM-T-W
- Ringer Equivalence: 0.0B

Repair Information - According to the FCC, only Radicom Research (or an authorized repair facility) is allowed to service the modems. Repairs require the modem be removed from the finished product and returned to Radicom Research. (Contact Radicom for an RMA number. DO NOT RETURN MATERIAL WITHOUT AN AUTHORIZED RMA NUMBER.)

The Federal Communication Commission (FCC) has established rules, which permits this device to be directly connected to the telephone network. If this device is malfunctioning, it may also be causing harm to the telephone network; this device should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service. The telephone company may make changes in its technical operations and procedures; if such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes. If the telephone company requests information on what equipment is connected to their lines, inform them of the following:

- The telephone number of the device it connected to
- The ringer equivalence number (REN)
- The device uses an RJ11 type jack
- The FCC Registration Number

The REN (Ringer Equivalence Number) is used to determine the number of devices that may be connected to the telephone line. Excessive RENs on a telephone line may result in devices not ringing in response to an incoming call. In most, but not all areas, the sum of the REN should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or any other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time, it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any number for which charges exceed local or long distance transmission charges.)