

# UART 1 / 2 / 4

## MODEL 3000 / Access 4000

### SERIAL COMMUNICATIONS INTERFACE

#### Type 2

**995065 / 995066 / 995068**

## INSTALLATION GUIDE

### Overview:

The UART board provides up to 4 high speed, software configurable, serial ports to allow connection of peripheral serial devices to the Model 3000/4000 Type 2 Control Module. Specific cables are available for the connection of Printers, Personal Computers, Dialer modems and other serial devices including the GSM modem. The interface is available configured for 1, 2 or 4 ports. A supporting GAL (U5) administers the number of operational ports.

### IMPORTANT NOTES:

1) **COMPATABILITY.** This Type 2 UART Interface is only compatible with Type 2 (CE) Control Modules. **DO NOT** fit this board to a Type 0 or Type 1 Control Module, as this may result in damage to both the Control Module and the UART Interface.

(Controller PCB Type can be identified via the "System Info" screen at the LCD Terminal. Press <MENU>, 2 [or just <MENU> if V2 or earlier] without logging on.)

2) Although this board is designed for permanent installation, it may be fitted or removed without having to remove power from the Control Module.

However, if a temporary interface is required by the installer for Upload/Download connection to a PC, the manufacturers "Port 0" interface (P/N: 993030) should be used. The Port 0 interface cable connects to JP1 located next to the battery connections.

Note that Port 0 shares the on-board modem with the Telephone Line interface and therefore **MUST NOT** be used as a permanent connection.

### INSTALLING THE UART PCB

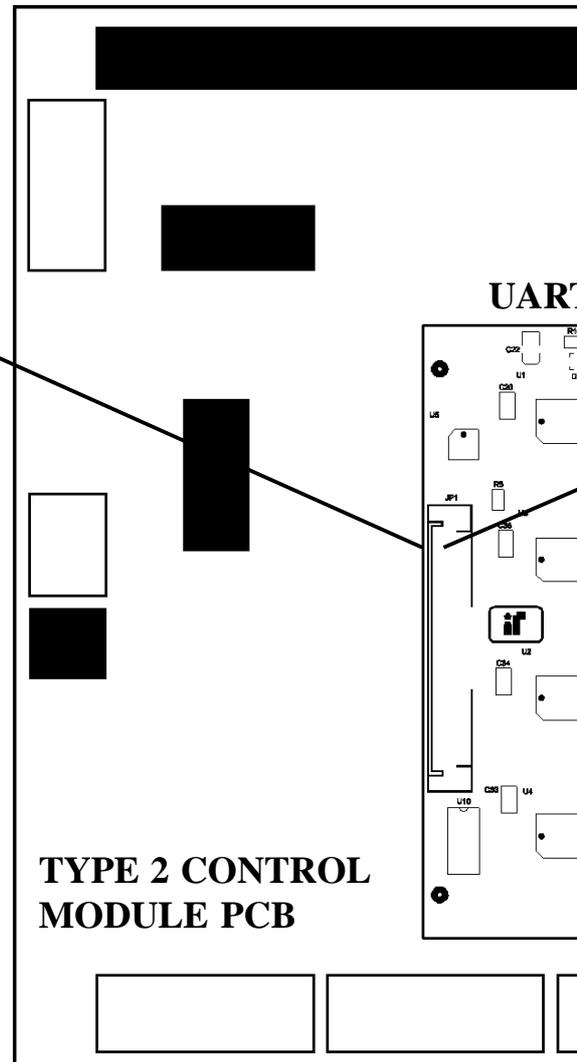
- 1) It is recommended that Power to the Control Module is disconnected. When doing this, ensure that both the AC Input AND Battery are disconnected.  
NOTE: While this is not mandatory in order to connect the UART board, it is recommended to avoid the possibility of installation hardware or tools causing short circuits if they make contact with components on the Control Module or UART PCBs during installation.
- 2) Remove the three PCB mounting screws located in the area between the three fuses and the Zone 9 to Zone 16 Inputs. DO NOT DISCARD.
- 3) Fit the three 16mm hex metal standoffs to the holes that the screws were removed from.  
NOTE: All three of the metal standoffs MUST BE FITTED to comply with regulations.

**JP2 on Control Module.**

The Illustration below shows the pin-out of Port 1 to 4 connectors if it is necessary to assemble your own cables. (Viewed from component side of PCB.)

**JP2 to JP5**

Pin	1. DCD	<input type="checkbox"/> <input type="checkbox"/>	2. DSR
	3. RXD	<input type="checkbox"/> <input type="checkbox"/>	4. RTS
	5. TXD	<input type="checkbox"/> <input type="checkbox"/>	6. CTS
	7. DTR	<input type="checkbox"/> <input type="checkbox"/>	8. RI
	9. GND	<input type="checkbox"/> <input type="checkbox"/>	10. n.c

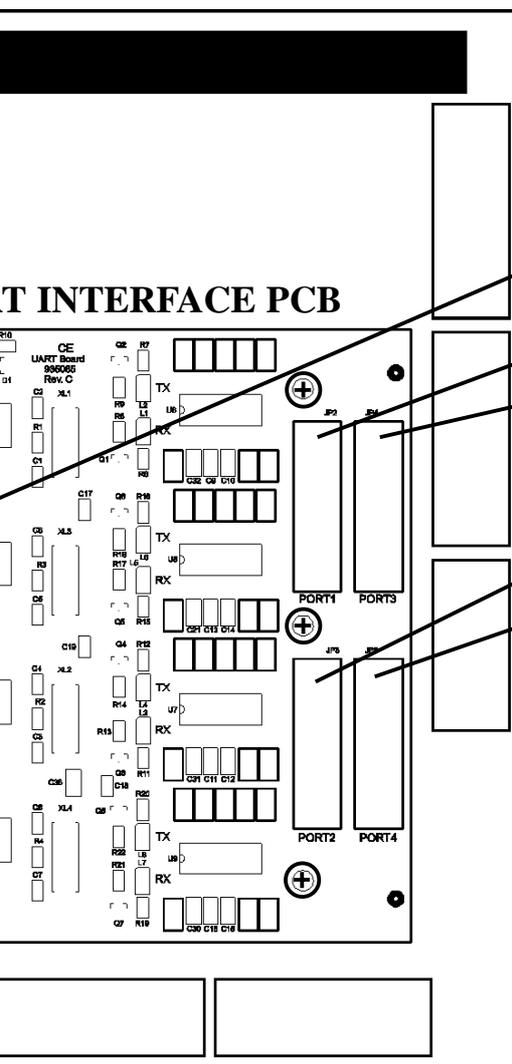


- 4) Fit the UART board by plugging **JP1** directly onto the controller expansion port marked **JP2**, and secure the board with the three screws into the new standoffs. **IMPORTANT:** Before fitting, check the Power Transistors, Q9 & Q10 on the controller.

These devices should be bent over toward the inside of the PCB so that they do not short to the bottom of the UART PCB.

- 5) Connect the required Port/s to the Serial Port on the external equipment. A range of pre-assembled cables are available for most applications. *See page 4 for details.*

If it is necessary to assemble your own cable, note that shielded RS232 data cable must be used. The cable should not exceed 15 metres in length, and the shield should only be connected to ground at one end.



**JP1** on UART PCB.

**JP2.** Port 1 connection.

**JP4.** Port 3 connection.

**JP3.** Port 2 connection.

**JP5.** Port 4 connection.

## Programming

Programming of the individual Ports is accomplished via the “Comms Task” Menu.

For example:

- a) Access Comms Task programming. - <MENU>, 7, 3, 1.
- b) Press <OK> to select Comms Task 1 (or select another if CT001 is already used)
- c) Use Right Arrow key to scroll through comms formats until desired format is shown.
- d) Press <HELP>, 9 to set Port number (1 to 4), baud rate and other options.  
(In some formats, <HELP>, 9 must be pressed again to program extra options.)
- e) Press <HELP> 0 to return to format selection screen, and press <9> to set the Comms Task to “Active”.
- f) Press <OK> to select another Comms Task to program, <MENU> to continue with other programming, or <END> to finish the programming session.

*See Programmer’s manual for details of Comms Task formats that may utilize a UART connection:*

*e.g.*

<i>PCDirect</i>	<i>Securitel</i>	<i>External Modem</i>	<i>ACCEPT</i>
<i>Printer</i>	<i>SpreadNet</i>	<i>GSM</i>	<i>etc.</i>

Pre-assembled cables:

- 993009: Laptop computer interface cable. (DB9)
- 993025: Computer interface cable. (DB25)
- 993026: Serial Printer interface cable. (DB25)
- 993027: Modem interface cable. (DB25)
- 993035: Securitel / Spreadnet interface cable. (Flying leads)

### **Disclaimer:**

1. The manufacturer &/or it’s agents take no responsibility for any damage, financial loss or injury caused to any equipment, property or persons resulting from the correct or incorrect use of the Model 3000/4000 system or it’s peripherals. The purchaser assumes all responsibility in the use of the Model 3000/4000 system and it’s peripherals.
2. While every effort has been made to ensure the accuracy of this manual, the manufacturer and/or its agents assume no responsibility or liability for any errors or omissions. Due to ongoing development, this manual is subject to change without notice.