



34 Corporate Drive
Southgate Corporate Park
CANNON HILL 4170
AUSTRALIA
Tel: +61 7 3318 6900
Fax: +61 7 3318 6905

CCU/E-HUB CCUNET Hub Install Instructions

Part #: CCU/E

This equipment is designed for installation and service by fully qualified field engineers. There are no user serviceable or installation parts inside.

Supplied:

1	x	Boxed CCU/E board with firmware for CCU-NET hub
1	x	Power connector for CCU/E
1	x	Relay connector for CCU/E
2	x	RS232 Network connectors
1	x	Earth strap

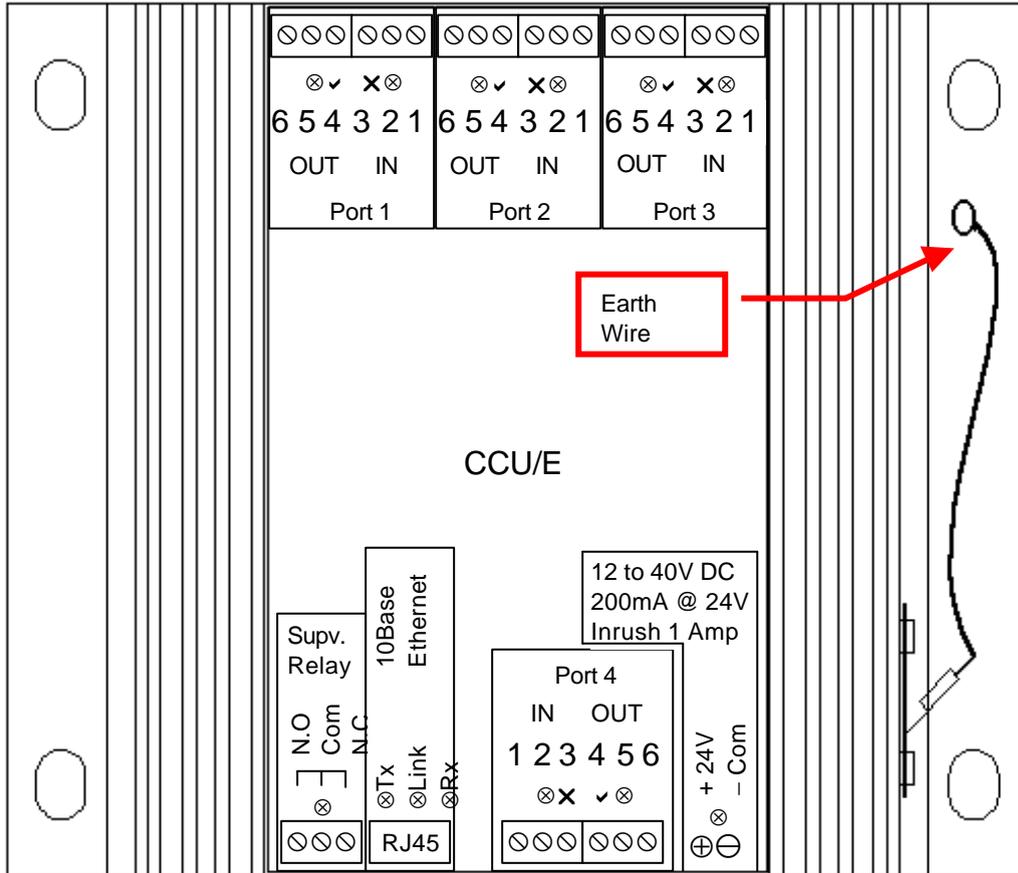
You will need:

1	x	24VDC Power Supply to CCU/E. Connector supplied.
---	---	--

Power Requirements:

Typical: 200mA at 24VDC
Voltage Input: 12-40 VDC

Board Layout:



Installation of CCU/E:

Connect the 24V DC power source to the supplied connector. These connections are marked on the faceplate. Pin connections are:

CCU/E
24V
COM

NOTE: For correct installation and protection of the CCU/E device the Earth Isolation Wire must be connected to an earthing point. Alternatively it can be connected to the mounting screws (of the CCU/E) if the CCU/E case is in direct contact with an earthing point. This is important for correctly dissipating any static discharge on the communication lines (as caused by an electrical storm) and thereby preventing damage to this unit.

Connection to the CCU network

There are 3 ports that communicate using the CCUNET protocol (Port 2, Port 3 and the Ethernet Port). Port 2 and 3 always communicate on an RS232 link.

An RS232 port can be connected to any RS232 CCUNET port on any other CCU board. Use the procedure below to make a cable for the RS232 ports.

- First determine which port you are connecting to using the following table:

CCU BOARD	PORT A	PORT B	PORT C
CCU/232	DTE	DTE	DCE
CCU/M	DCE	DTE	DTE
CCU/E (old)	DTE	DTE	n/a
CCU/F	n/a	n/a	DCE

- If you are connecting to a PC COM port then this is a DTE port.
- Use the following table to make the cable.

CCU/E (new) 6PIN	DCE port of a CCU Board	DTE Port of a CCU Board	PC COM 25PIN (DTE)	PC COM 9PIN (DTE)
3	2	3	2	3
4	3	2	3	2
2 & 5	5	5	7	5

CCU 6 Pin Port RS232 Cable Connection

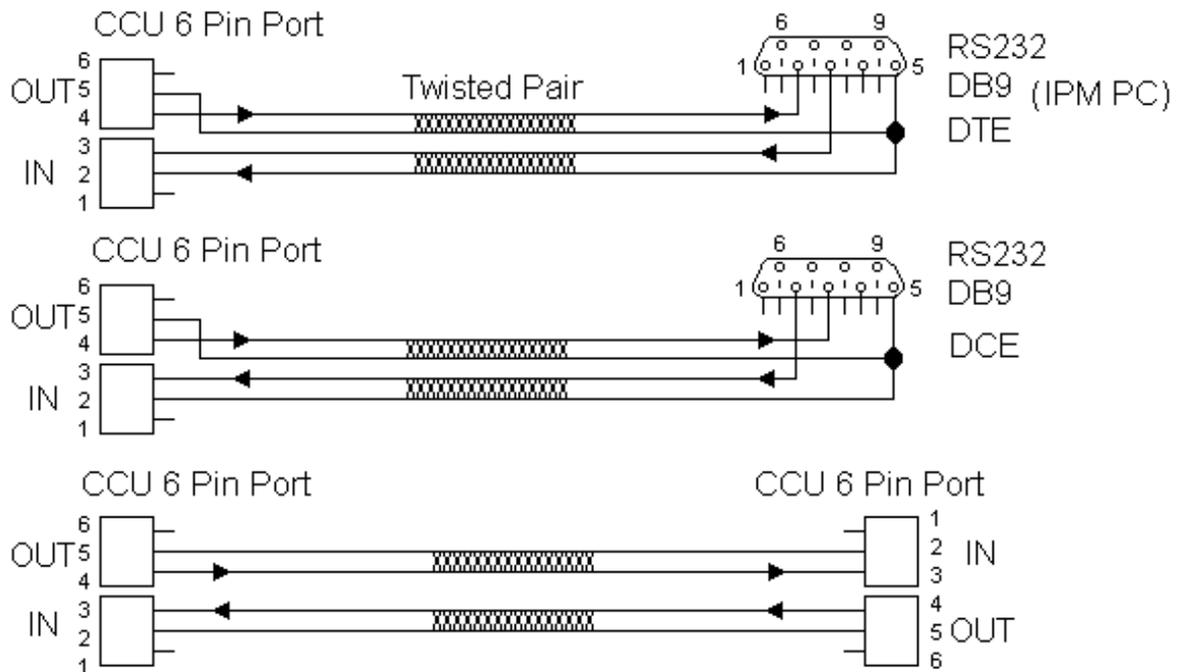


Figure 1.

Connecting the Ethernet Port:

The ethernet port is connected to the desired network using a twisted pair ethernet cable. To connect to a 10BaseT HUB use a straight through (normal) patch lead.

Operation of LEDs:

Each port has a Green LED on the output port and a Yellow LED on the input port. The green led for each port flashes when data is transmitted. Yellow means that the input port is not receiving data correctly, or there has been supervision failure on this port.

Operation of Relay:

There is a supervision relay on each board which is reserved for future use.

Configuration of CCU/E-HUB:

Each CCU node must have a unique address between 1 and 65534. Addresses 0, 255 and 65535 are reserved and **CANNOT BE USED**.

The CCU Node address on the CCU/E board must be set by software as there are no address jumpers as on most other CCUs.

The CCU node address and all other configuration parameters can be changed using the CCUNET program.

Reprogramming Procedure

In the event the CCU has to be reprogrammed please follow the instructions below.

1. Unzip the supplied files into the same directory as ccunet.exe. Overwrite any files already there.
2. Connect the CCU into the network. Make sure it has been given a unique address.
3. Run ccunet.exe. This is a windows program and must be run on an XL Graphics computer connected to the ccunet. XL Graphics **MUST** be shutdown before running this program.
4. The Comms button allows you to change the COM port to which the ccunet is connected.
5. Press firmware button. A list of all the CCUs connected to the network will display. The new CCU should appear in this list.
6. Left click in the program column. A green dot will show.
7. Press Program. When the prompt appears verify the address is that of the board you want to program. If so press Yes.
8. Wait until Success message or timeout message.
9. Press Close.
10. Choose Main/Clear List then press scan button.
11. Make sure CCU is in new list.