



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

CCU/232-HUB Install Instructions

HUB

Part #: CCU/232-

This equipment is designed to be installed and serviced by fully qualified field engineers. No user serviceable or installation parts inside.

Supplied:

- 1 x CCU/232 board with firmware for CCU-NET Hub
- 1 x Mounting Bracket
- 1 x Power connector for CCU/232
- 1 x Relay connector for CCU/232

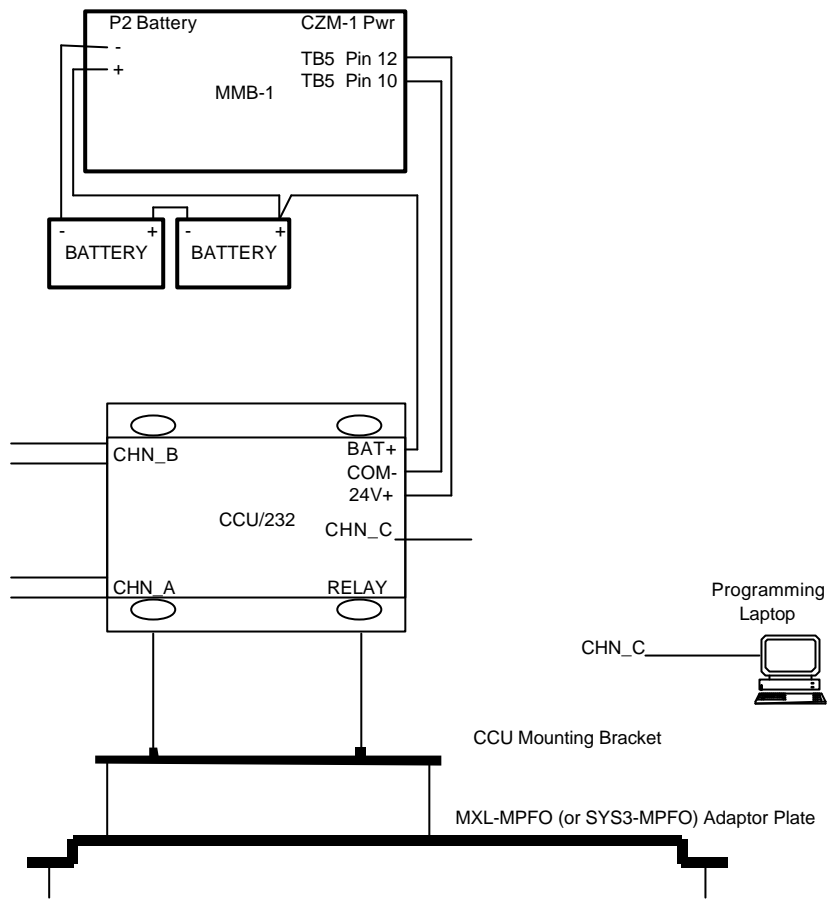
You will need:

- 1 x 24V Power Supply & Batt. to CCU/232. Connector supplied.
- 1 x Optional MXL-MPFO Adaptor plate (MXL installations)

Power Requirements:

- Typical: 200mA at 24VDC
- Voltage Input: 20-30 VDC

Installation of CCU/232 (Using MXL Fire indicator Panel for power):



- A PC can be temporarily connected to port CHN_C of CCU/232 for programming of CCU/232. Note that this is a straight through standard RS232 cable for laptops.

CCU/232 CHN_C 9PIN (DCE)	PC/LAPTOP 25PIN	PC/LAPTOP 9PIN
2	3	2
3	2	3
5	7	5

- If the relay output from the CCU/232 is to be used then there are two relay sockets located next to the D9 connector - these are IDENTICAL and either can be used.
- Connect the 24V DC power source to the supplied connector. The power connector is next to the CHN_C port. These connections are written on the board. Note that the BATTERY connection is not required if the 24V is uninterruptible. Pin connections are:

CCU/232
24V
COM
BAT

Connecting CCU/232 RS232 Ports A and B to the CCU network:

- First Determine which two ports you are connecting using the following table:

CCU BOARD	PORT A	PORT B	PORT C
CCU/232	DTE	DTE	DCE
CCU/M	DCE	DTE	DTE
CCU/F CCU/422	n/a	n/a	DCE

- Connecting a DTE to DCE uses a straight through cable. Connecting a DTE-DTE or DCE-DCE requires a null modem cable (pins 2 and 3 swapped on a D9 connector).
- If you are connecting to a PC COM port then this is a DTE port.

CCU/232 9PIN (DTE)	DCE port of a CCU Board	DTE Port of a CCU Board	PC COM 25PIN (DTE)	PC COM 9PIN (DTE)
2	2	3	2	3
3	3	2	3	2
5	5	5	7	5

Connecting the RS232 Port (CHN_C):

- This port is configured as a DCE port.
- If this port is to be connected to a DTE port (Example: PC or laptop, CCU/232 board CHN_A or B, CCU/M Board CHN_A or B), then a straight through cable can be used.
- If the port is to be connected to another DCE port (example: CCU/232-HUB, CCU/M, CCU/F, CCU/422), then a null modem cable is required.

CCU/232 CHN_C 9PIN (DCE)	RS232 CHN_A or B (DTE) of a CCU Board (CCU/232, CCU/M)	RS232 CHN_C (DCE) of a CCU Board (CCU/232, CCU/F, CCU/M, CCU/422)	PC COM Port 25PIN	PC COM Port 9PIN
2	2	3	3	2
3	3	2	2	3
5	5	5	7	5

Configuration of CCU/232:

- If your network has less than 256 CCU nodes, you can use the jumpers (IN1 to IN8) on the CCU/232 to configure the CCU Network address. Each CCU Node must have a unique address. Address 0 CANNOT BE USED. The jumpers represent a BINARY address. Example:

Addr	IN8	IN7	IN6	IN5	IN4	IN3	IN2	IN1
1								SHORT
2							SHORT	
3							SHORT	SHORT
4						SHORT		
5						SHORT		SHORT
6						SHORT	SHORT	
7						SHORT	SHORT	SHORT
8					SHORT			
9					SHORT			SHORT
10					SHORT		SHORT	
11					SHORT		SHORT	SHORT
12					SHORT	SHORT		
13					SHORT	SHORT		SHORT
14					SHORT	SHORT	SHORT	
15					SHORT	SHORT	SHORT	SHORT
16				SHORT				
255	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT

- If you need to use the jumpers as supervised inputs, or you need to program addresses from 256 to 65535 (The CCU Network supports up to 65535 nodes). You will need to use a laptop to program the network address.

Software configuration requires that a laptop be connected to port CHN-C using a straight through RS232 cable. A terminal program (such as Procom/Telnet or Windows Terminal using VT100 emulation) can be used with communication parameters set to 9600,N,8,1. Power up the CCU. After approximately 3 seconds, all LEDs on the CCU will indicate. BEFORE this happens you can type **MENU**, allowing programming of the CCU/232 using the default configuration.

- Type **MENU** to invoke the programming menu. There is no need to press <Enter>.
- Follow the menu options (detailed instructions follow) and set the:
 - ADDRESS** -Addresses from 1 to 65535 can be used.
 - INPUTS** - Specify whether you want to use the jumpers for the address (or the internal address). The CCU/232 is supplied with factory setting using the JUMPERS. So, on smaller networks there is no need to connect a laptop.

Operation of LEDs:

- Each port has a Green and a Yellow LED. Green means the port is operating OK. Yellow means that the port is not operating OK, or there has been supervision failure on this port.