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CCU/422 -IO Install Instructions

Part #: CCU422-IO

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

Supplied:

- | | | |
|---|---|---|
| 1 | x | CCU422-IO board with firmware for CCU-NET |
| 1 | x | Mounting Bracket |
| 1 | x | Power connector for CCU422-IO |
| 1 | x | Supervision relay connector for CCU422-IO |
| 4 | x | Network connectors for CCU422-IO |

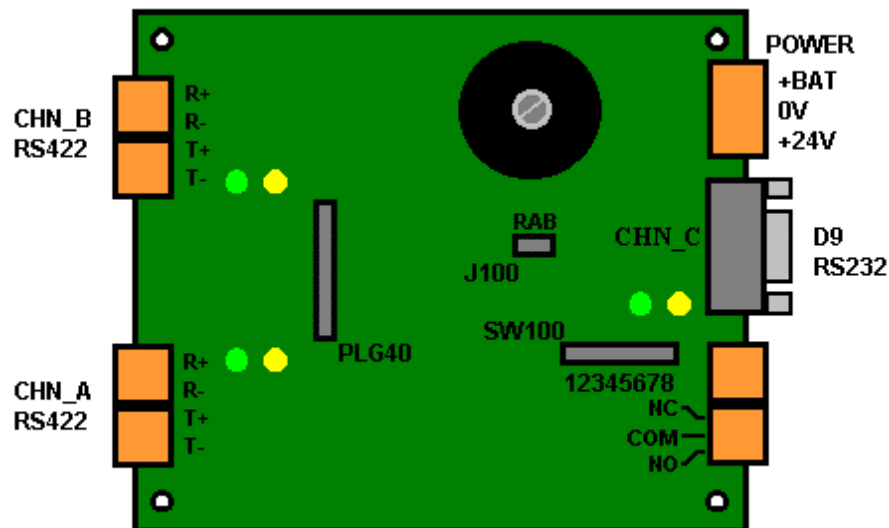
You will need:

- | | | |
|---|---|--|
| 1 | x | cable from 24V DC power source to CCU422-IO. Connector supplied. |
|---|---|--|

Power Requirements:

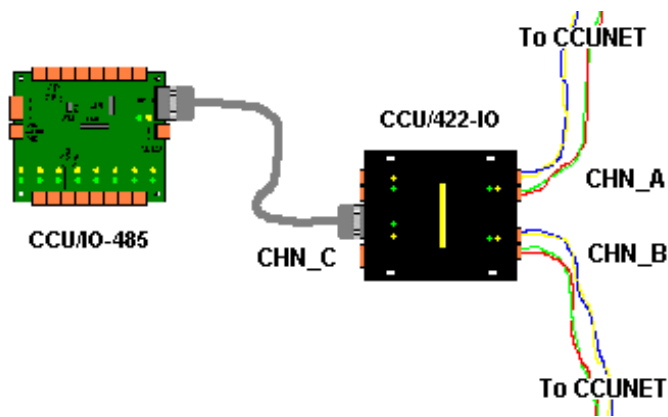
Typical: 200mA at 24VDC
Voltage Input: 20-30 VDC

Board Layout:



Installation of CCU/422-IO:

The CCU/422-IO is used for connecting between an RS422 CCUNET and CCU/IO-485.



- Connect the RS422 ports (CHN_A and CHN_B) of the CCU/422-IO to the RS422 CCUNET using the connection diagram in Appendix A. Note that both CHN_A and CHN_B can be connected, most likely to separate boards. The middle pins should be connected to the cable shield.

CCU/422-IO (CHN_A or CHN_B)	Other CCU/422 on the CCUNET (CHN_A or CHN_B)
R+	T+
R-	T-
T+	R+
T-	R-
Middle pin	Middle pin

- Connect the RS232 port (CHN_C) to a CCU/IO-485 using the following connection diagram.

CCU/422-IO CHN_C RS232 9PIN (DCE)	CCU/IO-485 CHN_A RS232 9PIN (DCE)
2	3
3	2
5	5

- For normal operation no jumpers should be in place on JP100.
- The relay output is unused in the CCU/422-IO and is reserved for future use.

- Connect the 24V DC power source to the supplied connector. The power connector is next to the CHN_C port. Pin connections are:

PWR (+24VDC) RETURN/COM(0V) BATTERY(24V)

These connections are written on the board. If the 24V power source is Uninterruptible, then there is no need to connect the BATTERY connection.

Pin number	Function
1	24V
2	COM
3	BAT

Operation of LEDs:

- Each port has a Green and a Yellow LED. When the Green light flashes the port is transmitting. The Yellow led glows when the port is not communicating with the adjoining device or there has been supervision failure on this port.

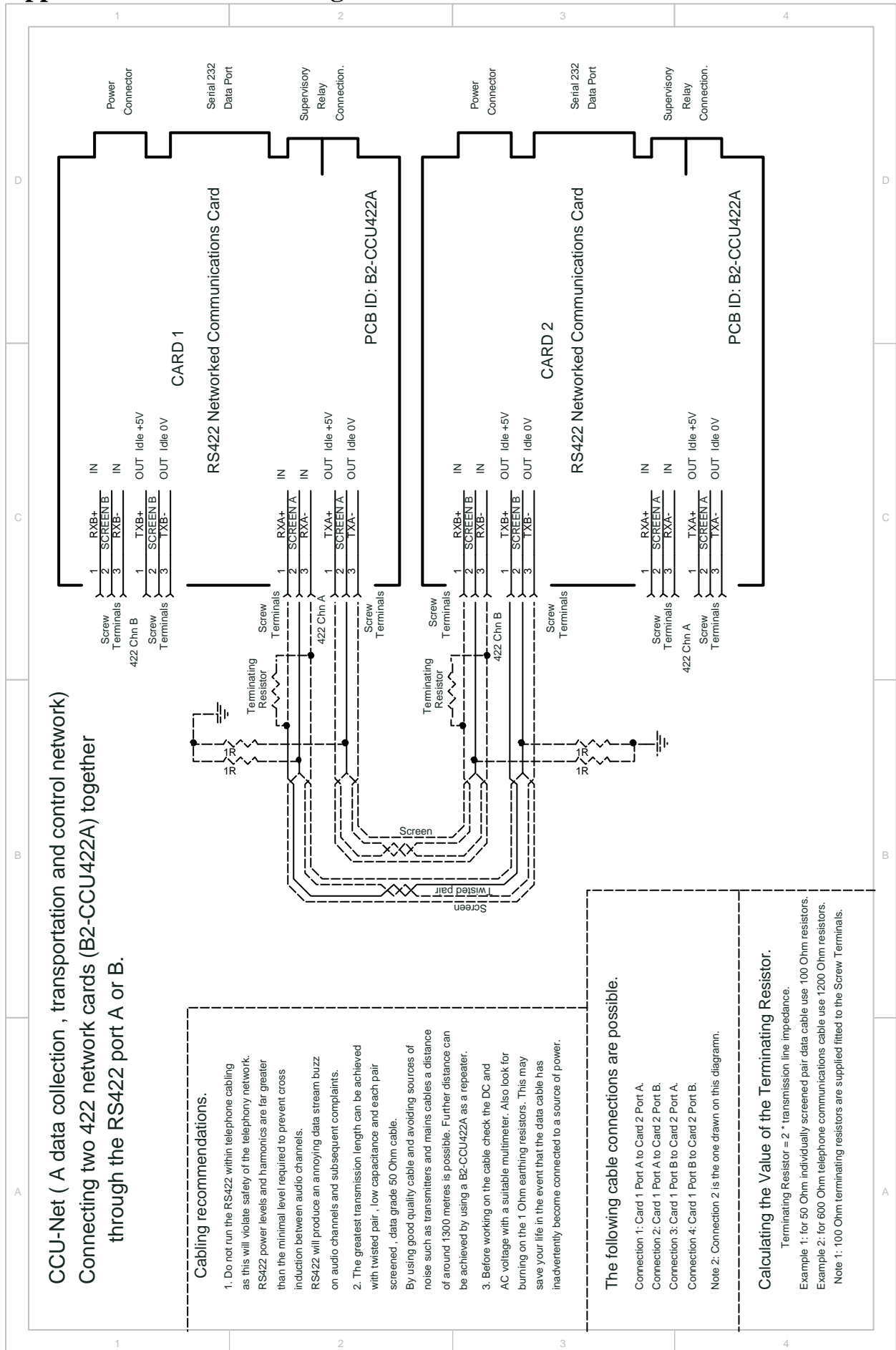
Configuration of CCU/422-IO:

- If your network has less than 254 CCU nodes, you can use the jumpers (IN1 to IN8) on the CCU/422-IO (labelled SW100) to configure the CCU Network address. Each CCU Node must have a unique address. Address 0 and 255 CANNOT BE USED. The jumpers represent a BINARY address. Note that the address of the board can be configured in software, in which case the address jumpers are ignored. See Appendix B for a complete list of address numbers and corresponding jumper positions.
- If you want to configure the address in software you can use any address from 1 to 65534 (except 255) (The CCU Network does not support more than 65534 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/Telix or Windows Terminal using VT100 emulation) can be used with communication parameters set to 19200,N,8,1. Power up the CCU. After approximately 3 seconds, all LEDS on the CCU will glow. While all of the leds are glowing you can type **MENU**, allowing programming of the CCU/422-IO.

CCU/422-IO CHN_C 9PIN (DCE)	PC/LAPTOP 25PIN	PC/LAPTOP 9PIN
2	3	2
3	2	3
5	7	5

- The menu gives an option to set a software address and an option to use the software address or the jumper address.

Appendix A: Connection diagram



Appendix B: Address jumpers

■ Jumper Shorted		□ Jumper Open					
	1		16		32		48
	2		17		33		49
	3		18		34		50
	4		19		35		51
	5		20		36		52
	6		21		37		53
	7		22		38		54
	8		23		39		55
	9		24		40		56
	10		25		41		57
	11		26		42		58
	12		27		43		59
	13		28		44		60
	14		29		45		61
	15		30		46		62
	15		31		47		63
	64		80		96		112
	65		81		97		113
	66		82		98		114
	67		83		99		115
	68		84		100		116
	69		85		101		117
	70		86		102		118
	71		87		103		119
	72		88		104		120
	73		89		105		121
	74		90		106		122
	75		91		107		123
	76		92		108		124
	77		93		109		125
	78		94		110		126
	79		95		111		127

	128		144		160		176
	129		145		161		177
	130		146		162		178
	131		147		163		179
	132		148		164		180
	133		149		165		181
	134		150		166		182
	135		151		167		183
	136		152		168		184
	137		153		169		185
	138		154		170		186
	139		155		171		187
	140		156		172		188
	141		157		173		189
	142		158		174		190
	143		159		175		191
	192		208		224		240
	193		209		225		241
	194		210		226		242
	195		211		227		243
	196		212		228		244
	197		213		229		245
	198		214		230		246
	199		215		231		247
	200		216		232		248
	201		217		233		249
	202		218		234		250
	203		219		235		251
	204		220		236		252
	205		221		237		253
	206		222		238		254
	207		223		239		