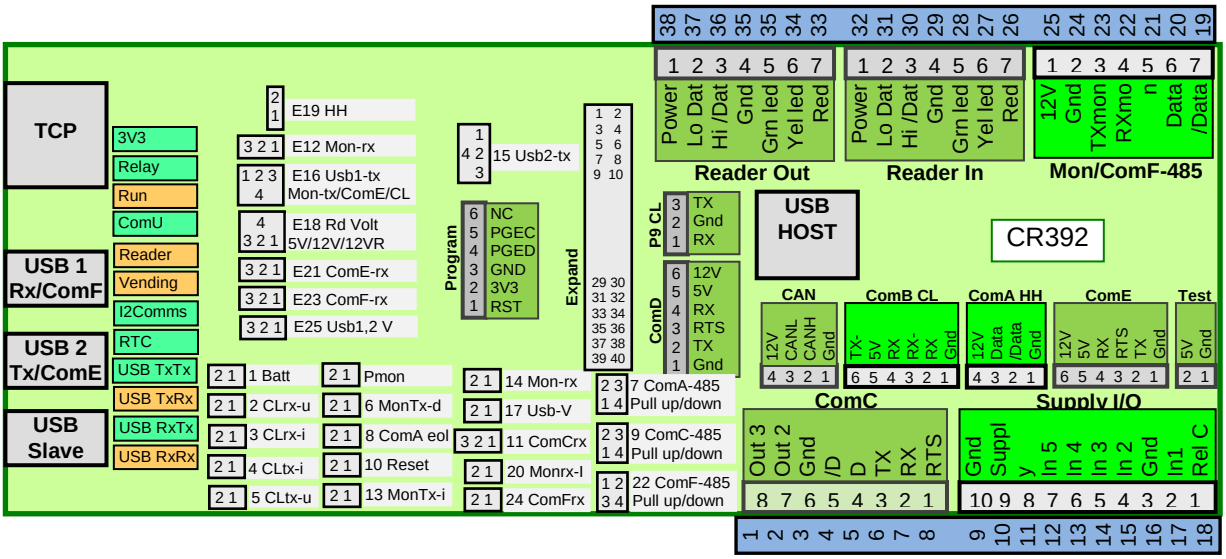
CR392 CONNECTIONS

Revision 01.02



Connectors and links populated as required

- Initial programming via Program connector using Microchip IDE programmers with cable are available from Softcon.
- Updates via TCP / USB and RS485 LAN.
- Latest FW versions are available on www.softconserv.com.
- The two LEDs on the TCP connector flash alternatively when the CR392 is attempting to connect to the Net and no connection is found. Once connected, the left LED flashes when data is received and the right when data is transmitted.
- **E19** enables HH – **HAND PROGRAMMER** (plugged in at **ComA**). Remove **E19** if no HH.
- **E1** links battery to RTC. When not in use, remove **E1**.
- Run LED ticking once a second indicates that the program is running.
- Comms LED indicates communication with the PC.
- Node address set with programmer.
- Front processors require the setting (with hand programmer).
- **ComB** is 20mA **C**urrent **L**oop. P9 is TTL of ComB and is used to monitor or can be used as TTL port when IC17 is removed.
- **ComC** is RS232 (**E11** 1-2) and requires IC8 or RS485 (**E11** 2-3) and requires IC10.
- **ComD** is TTL.
- **ComE** is TTL (**E21** 1-2, **E15** none) or USB-2 (**E21** 2-3, **E15** 1-2).
- **ComF** is RS485 (**E22** Pull-up/down, **E23** 1-2, **E24** none) and requires IC11 or USB-1 (**E23** 2-3, **E24** 1-2, **E16** 2-3)

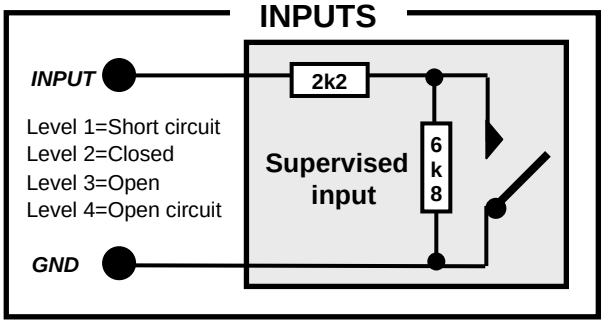
USB to Com convert (RX and TX)

- **USB-1**: **ComF** above.
- **USB-2**: **ComE** above.

USB RX as monitor

- **USB-1** monitor 20mA TX (**E16** 2-4), **USB-2** monitor 20mA RX (**E15** 2-4).
- **USB-1** monitor RS485-TX ComF **(E16** 2-3), **USB-2** monitor RS485-RX ComF (**E15** 2-3)**.**

LINK	DESCRIPTION
E1	Battery
E2	ComB-rx CL: pull-up
E3	ComB-rx CL: invert
E4	ComB-tx CL: invert
E5	ComB-tx CL: pull-up
E6	Mon-tx: pull-down
E7	ComA(HH): 1-2=pull-up. 3-4=pull-down
E8	ComA(HH): EOL
E9	ComC-485: 1-2=pull-up. 3-4=pull-down
E10	Reset link
E11	ComC-rx: 1-2=RS232. 2-3=RS485
E12	Mon-rx: 1-2=Compare Mon-tx. 2-3=Vref
E13	Mon-tx: Invert
E14	Mon-rx: pull-down
E15	Usb2-tx: 1-2=Mon-rx. 2-3=ComE. 2-4=CL
E16	Usb1-tx: 1-2=Mon-tx. 2-3=ComF. 2-4=CL
E17	Power from USB port
E18	Reader V: 1-2=5V. 2-3=12V. 2-4=12VR
E19	HH-FP link
E20	Mon-rx: Invert
E21	ComE-rx: 1-2=Mon-rx: 2-3=Usb2-rx
E22	ComF-485: 1-2=pull-up. 3-4=pull-down
E23	ComF-rx: 1-2=RS485. 2-2=Mon-tx
E24	ComF-rx: Usb1
E25	Usb1,2 5V: 1-2=Usb1. 2-3=PSU



EXPAND CONNECTOR	
PIN	FUNCTION
1	Gnd
3	Gnd
11	SPI DO
12	GPB0
13	SPI CLK
14	GPB1
15	SPI DI
16	GPB2
18	GPB3
19	I2C DAT
20	GPB4
21	I2C CLK
22	GPB5
24	GPB6

CR Name / NODE	Name		Node	
***Prev/Next CR**	Previous		Next	
CR type / PC type	CR		PC	
IP / MASK	Ip		Mask	
Gate / MAC	Gate		Mac	
SERIAL	**TYPE**	**BAUD**	**BITS**	**PARITY**
ComA				
ComB				
ComC				
ComD				
ComE				
ComF				

*Note: Only earth LAN segment to previous controller (towards Comms interface)