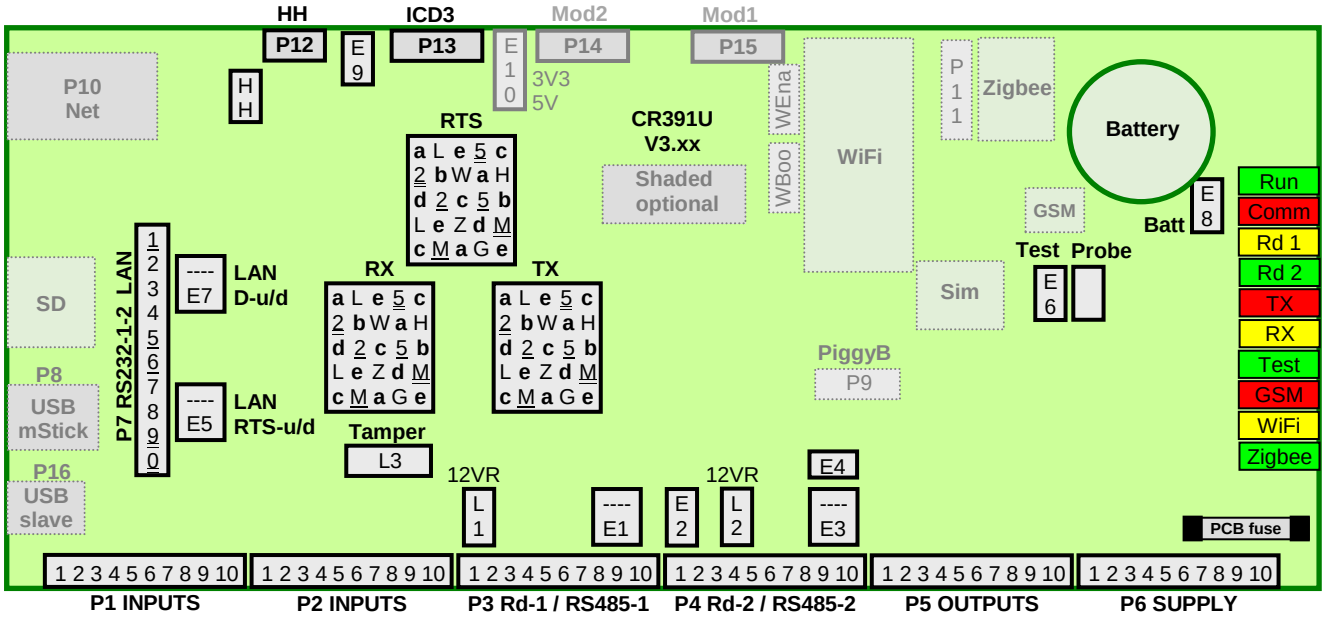
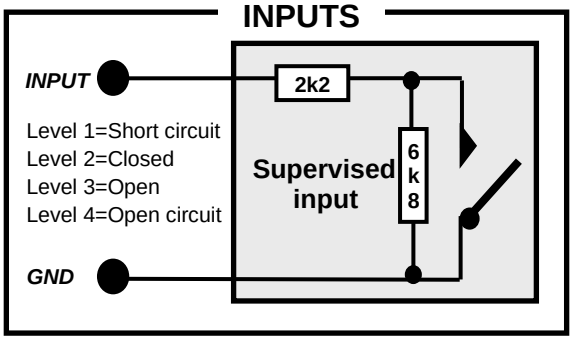
CR391U CONNECTIONS

Revision 03.01



The CR391U (universal) is the updated CR391 with added comms memory options.
These additional options require FW version 10.100 or later and requires the Type=Universal selection.
Please see document SCS_CR391.lid.pdf for PCB V1.x and V2.x versions.

LINK	REFERENCE	FUNCTION
E1	P3 RS485-1	Data Pull-up Pull-down resistors
E2	P3 RS485-1	End Of Line resistor
E3	P4 RS485-2	Data Pull-up Pull-down resistors
E4	P4 RS485-2	End Of Line resistor
E5	P7 LAN	RTS Pull-up Pull-down resistors
E6		RAM Drop / Factory Reset / Test
E7	P7 LAN	Pull-up Pull-down resistor
E8	Battery	In=memory and RTC backup
E9	P12 HH	End Of Line resistor
E10	P14 Mod2	1-2=3V3, 2-3=5V
HH		Handheld programmer mode
WEna	WiFi	WiFi into bootloader (removed with Wboot in)
Wboot	WiFi	WiFi into bootloader (in when WEna removed)
L1 L2		Reader 12V (out=current limit via resistor)
L3		1-2=Input 16, 2-3=Tamper
L4		Comms test



LED	COLOUR	FUNCTION
LED1	Green	Zigbee
LED2	Red	WiFi, Blue-Tooth
LED3	Yellow	GSM
LED4	Green	Test
LED5	Red	Comms RX
LED6	Yellow	Comms TX
LED7	Green	Reader 2
LED8	Red	Reader 1
LED9	Yellow	Comms
LED10	Green	Run

P3	READER 1, RS485 1
1	Reader: 12V via L1
2	Reader: Data/LO/Touch
3	Reader: Clock/HI
4	Reader: GND
5	Reader: Green LED
6	Reader: Yellow LED
7	Reader: Red LED
8	RS485: Data
9	RS485: /Data
10	GND

P4	READER 2, RS485 2
1	Reader: 12V via L2
2	Reader: Data/LO/Touch
3	Reader: Clock/HI
4	Reader: GND
5	Reader: Green LED
6	Reader: Yellow LED
7	Reader: Red LED
8	RS485: Data
9	RS485: /Data
10	GND

P1	PORT	INPUTS (supervised)*
1		Ground
2	1	Input 1 (Egress 1)
3	2*	Input 2 (Action complete 1)
4	3	Input 3 (Egress 2)
5	4*	Input 4 (Action complete 2)
6		Ground
7		Input 5 (Booth occupied)
8		Input 6 (Capture monitor)
9		Input 7 (Reader 1 enable)
10		Input 8 (Reader 2 enable)

P2	PORT	INPUTS (supervised)**
1		Ground
2		Input 9 (APB reader 1)
3		Input 10 (APB reader 2)
4		Input 11 (APB reset)
5		Input 12 (Input CR355 mode)
6		Ground
7	5	Input 13 (Aux input 1)
8	6	Input 14 (Aux input 2)
9	7	Input 15 (Aux input 3)
10	8	Input 16 (Aux input 4)

COMMS	TYPE
a	Com A
b	Com B
c	Com C
d	Com D
e	Com E
H	HH
M M	Mod1, 2
2 2	RS232 1, 2
5 5	RS485 1, 2
G	GSM
W	WiFi, BT
Z	ZigBee

*Note: Levels of input 1=closed, 2=open, 3=illegally open, 4=open long, 5=not opened.
Supervised input 1=SS, 2=closed, 3=open, 4=OC, 5=illegally open, 6=open long, 7= not opened.
** Reserved port allocations are for CR351-4 mode. Port allocations are configurable in other modes.

P5	PORT	OUTPUTS**
1	12VR	
2	1-Wire	
3	4	Relay 4 NC (Capture)
4		Relay 4
5	3	Relay 3 NC (Aux output 1)
6		Relay 3
7	2*	Relay 2 NO (Latch 2)
8		Relay 2
9	1*	Relay 1 NO (Latch 1)
10		Relay 1

P6	POWER
1	Vin
2	GND
3	GND
4	GND
5	GND
6	12VDC (user power)
7	12VDC (user power)
8	12VDC (user power)
9	12VDC (user power)
10	12VDC (user power)

P9	COMMS
1	RS232-1 RTS
2	GND
3	LAN data
4	LAN /data
5	RS232-1 RX
6	RS232-1 TX
7	LAN rts
8	LAN /rts
9	RS232-2 TX
10	RS232-2 RX

*Note: Levels set-up of output 1=closed, 2=open, 3=open permanently (unlocked), 4=closed permanently (locked).
** Reserved port allocations are for CR351-4 mode. Port allocations are configurable in CR355 mode.

P9	PIGGY BACK
1	GND
2	TX
3	RTS
4	RX
5	5V
6	12V

P12	HH
1	Ground
2	Data.
3	/Data.
4	5V

P13	ICD
1	/MCLR
2	3V3
3	GND
4	PGED
5	PGEC
6	NC

P14	MOD2
1	GND
2	TX
3	RTS
4	RX
5	3V3/5V via E10
6	12V

P15	MOD1
1	GND
2	TX
3	RTS
4	RX
5	5V
6	12V

CR Name / NODE	name			node	
CR type / PC type	CR			PC	
IP / MASK	ip			mask	
Gate / MAC	gate			mac	
Front / Serial	front	type	baud	bits	parity
***Prev/Next CR**	previous			next	

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