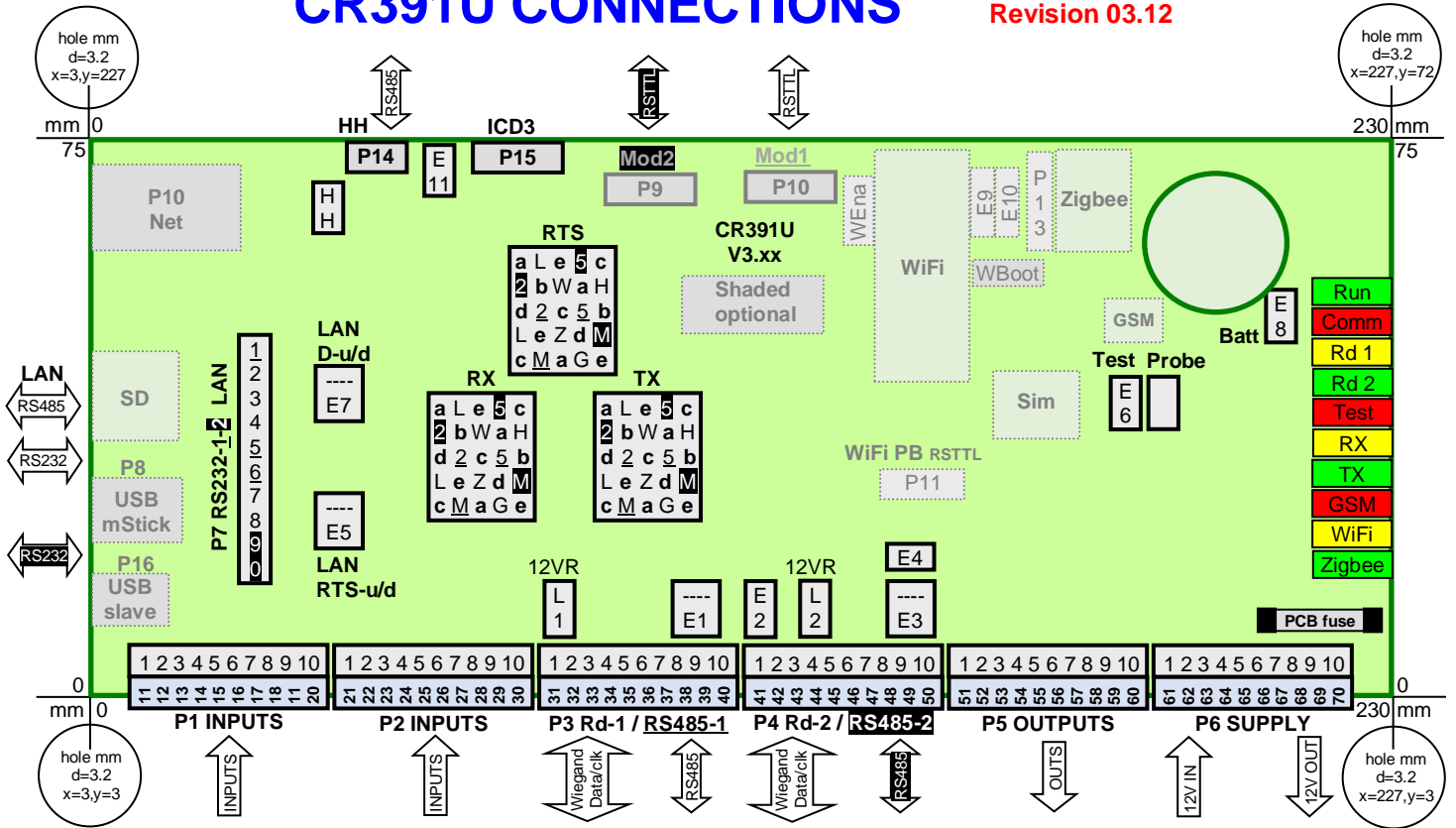


hole mm
d=3.2
x=3, y=227

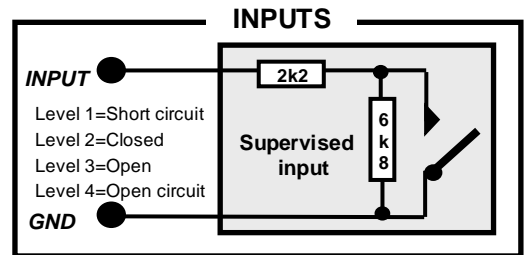
CR391U CONNECTIONS

Revision 03.12

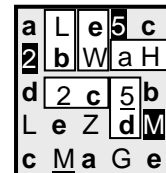


CR391U (universal) is the updated CR391 with added comms memory options. These additional options require FW version 10.100 or later and requires the Type=Universal selection. Please see document SCS_CR391.lid.pdf for PCB V1.x and V2.x versions.

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	Battery	RAM Drop / Factory Reset / Test
E7	P7 LAN	Pull-up Pull-down resistor
E8	Battery	In=memory and RTC backup
E9	WiFi TX	1-2 TX-1/RX-RS232-2, 2-3 TX-1, 3-4 TX-2
E10	WiFi RX	1-2 RX-1/TX-RS232-2, 2-3 RX-1, 3-4 RX-2
E11	P14 HH	End Of Line resistor
HH		Handheld programmer mode
WEna	WiFi	WiFi into bootloader (removed with Wboot in)
Wboot	WiFi	2-3 into bootloader (WEna in). 1-2 RTS
L1 L2		Reader 12V (out=current limit via resistor)



Default TX/RX/RTS



COMMS	INTERFACE
Com A	HH (RS465)
Com B	LAN (RS485)
Com C	RS232-1
Com D	RS485-1
Com E	WiFi (TTL)

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

T	P3	READER RS485 1	OUT PORT
31	1	Reader: 12V via L1	
32	2	Reader: Data/LO/Touch	
33	3	Reader: Clock/HI	
34	4	Reader: GND	
35	5	Reader: Green LED	7
36	6	Reader: Yellow LED	8
37	7	Reader: Red LED	9
38	8	RS485: Data	
39	9	RS485: /Data	
30	10	GND	

T	P4	READER 2, RS485 2	OUT PORT
41	1	Reader: 12V via L2	
42	2	Reader: Data/LO/Touch	
43	3	Reader: Clock/HI	
44	4	Reader: GND	
45	5	Reader: Green LED	10
46	6	Reader: Yellow LED	11
47	7	Reader: Red LED	12
48	8	RS485: Data	
49	9	RS485: /Data	
50	10	GND	

T	P1	PORT	INPUTS (supervised)*
11	1		Ground
12	2	1**	Input 1 (RTE Egress 1)
13	3	2**	Input 2 (Poral sence ActComp 1)
14	4	3**	Input 3 (RTE Egress 2)
15	5	4*	Input 4 (Poral sence ActComp 2)
16	6		Ground
17	7		Input 5 (Booth occupied)
18	8		Input 6 (Capture monitor)
19	9		Input 7 (Reader 1 enable)
20	10		Input 8 (Reader 2 enable)

T	P2	PORT	INPUTS (supervised)*
21	1		Ground
22	2		Input 9 (APB reader 1)
23	3		Input 10 (APB reader 2)
24	4		Input 11 (APB reset)
25	5		Input 12 (Input CR355 mode)
26	6		Ground
27	7	5**	Input 13 (Aux input 1)
28	8	6**	Input 14 (Aux input 2)
29	9	7**	Input 15 - Mains (Aux input 3)
30	10	Tamper***	Input 16 – Tamper on PCB

COMMS	DESCRIPTION
a	Com A
b	Com B
c	Com C
d	Com D
e	Com E
H	HH (RS485)
L	LAN (RS485)
G	GSM (TTL)
M	Mod1, 2 (TTL)
W	WiFi, BT (TTL)
Z	Zigbee (TTL)
2	RS232 1, 2
5	RS485 1, 2

*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.

Input 15 = mains monitor (wired from PSU on later productions). Input 16 = Tamper, PCB monitor Lid.

** Reserved port allocations are for CR351-4 mode. Port allocations are configurable in other modes.

*** Tamper = Open collector optical sensor on the PCB closes when lid opens. Multiple tamper sensors (closed on tamper) can be connected in parallel.

T	P5	PORT	OUTPUTS*
51	1	12VR	
52	2	1-Wire	
53	3	4	Relay 4 NC (Capture)
54	4		Relay 4
55	5	3	Relay 3 NC (Aux output 1)
56	6		Relay 3
57	7	2**	Relay 2 NO (Latch 2)
58	8		Relay 2
59	9	1**	Relay 1 NO (Latch 1)
60	10		Relay 1

T	P6	POWER
61	1	Vin
62	2	GND
63	3	GND
64	4	GND
65	5	GND
66	6	12VDC (user power)
67	7	12VDC (user power)
68	8	12VDC (user power)
69	9	12VDC (user power)
70	10	12VDC (user power)

T	P7	COMMS
1	1	RS232-1 RTS
2	2	GND
3	3	LAN data
4	4	LAN /data
5	5	RS232-1 RX
6	6	RS232-1 TX
7	7	LAN rts
8	8	LAN /rts
9	9	RS232-2 TX
10	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.

CR391U has no output ports 5 and 6.

P11	PIGGY BACK
1	GND
2	TX
3	RTS
4	RX
5	5V
6	12V

P14	HH
1	Ground
2	/Data
3	Data
4	12VR

P15	ICD
1	/MCLR
2	3V3
3	GND
4	PGED
5	PGEC
6	NC

P9	MOD2
1	GND
2	TX
3	RTS
4	RX
5	3V3/5V via E10
6	12V

P10	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)

CR391U ACCESS DEFAULT CONNECTIONS

