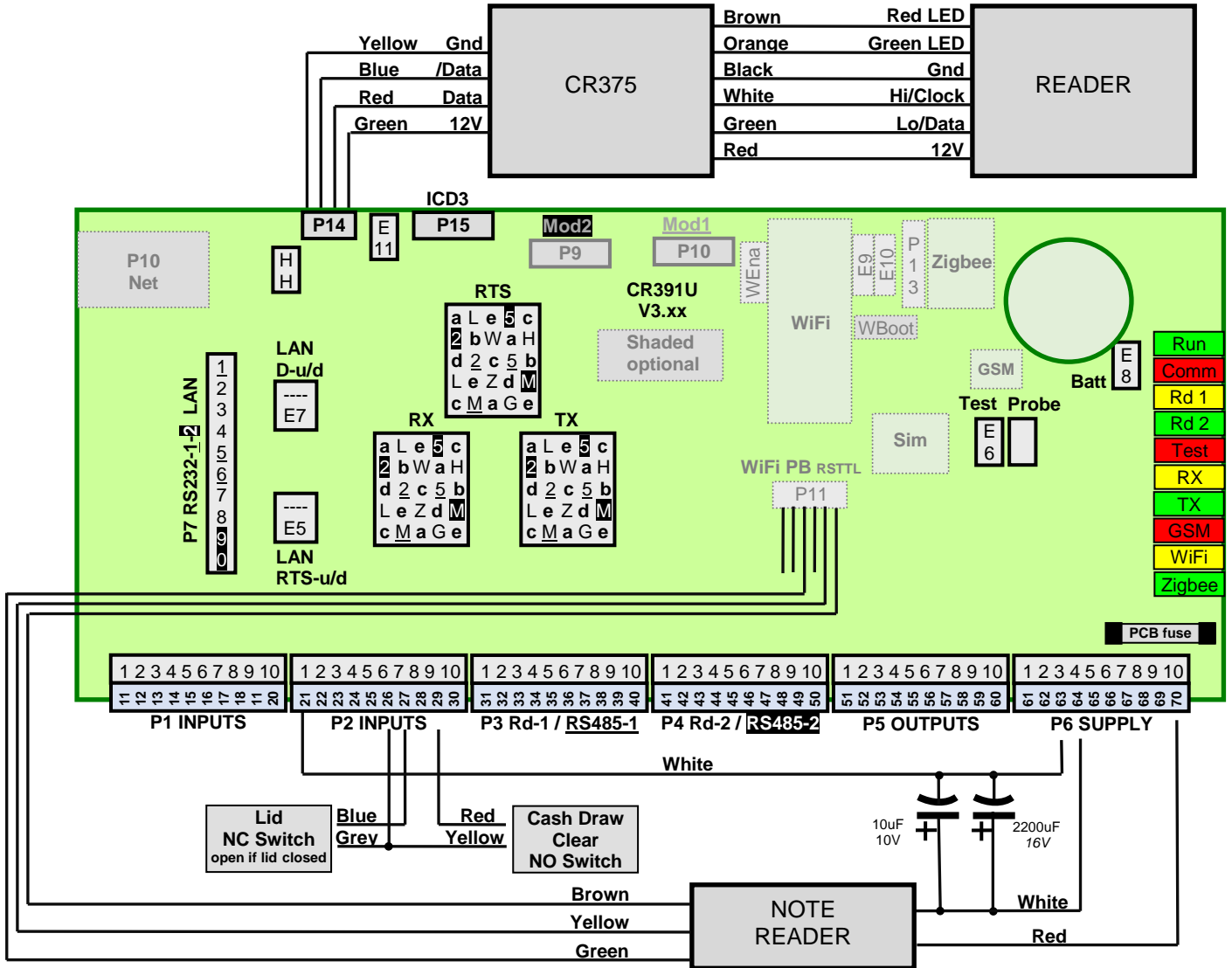


# CR391 CASH CONNECTIONS

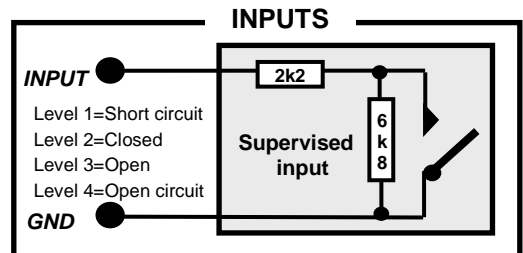
Revision 803.x PCB



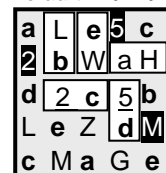
Set input types: 13 Tamper, 15 Cleared.  
Set ComE: Cash, 7 bit, 9600 baud, even parity.

Link ComE to WiFi Module (default).

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	P7 LAN	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 1, RS485 1
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
36	6	Reader: Yellow LED
37	7	Reader: Red LED
38	8	RS485: Data
39	9	RS485: /Data
30	10	GND

T	P4	READER 2, RS485 2
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
46	6	Reader: Yellow LED
47	7	Reader: Red LED
48	8	RS485: Data
49	9	RS485: /Data
50	10	GND

\*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.

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

T	P1	PORT	INPUTS (supervised)*
11	1		Ground
12	2	1**	Input 1 (Egress 1)
13	3	2**	Input 2 (Action complete 1)
14	4	3**	Input 3 (Egress 2)
15	5	4*	Input 4 (Action complete 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 (Aux input 3)
30	10	8**	Input 16 (Aux input 4)

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 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.

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

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

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