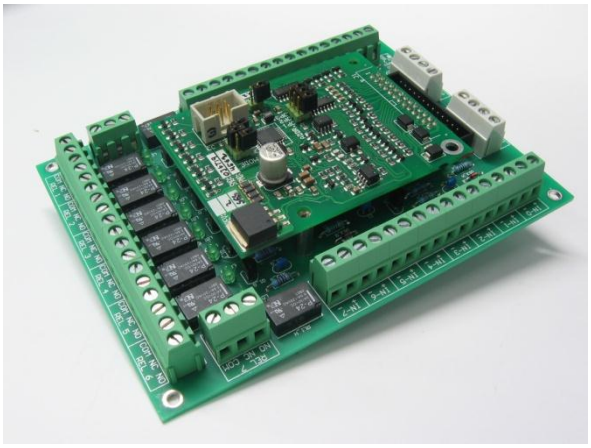


Addressable Multipurpose Remote Input / Output Unit 2210 / 2211

Description

The Addressable Multipurpose I/O Unit 2210 or 2211 is a generic remote unit, it can be used inside the CIE or remotely on a COM loop (requires 2 pairs, power and COM loop). The 2210 is designed to provide the following:

- 8 non-supervised programmable N/O or N/C clean contact inputs (16 for 2211).
- 8 programmable changeover relay contact outputs (16 for 2211).
- 8 non-supervised programmable LED outputs (16 for 2211).

It comprises the standard I/O Matrix board 4582 interfaced to the Relay and Termination Board SUB950A. The 2210 unit can be converted to 2211 by the addition of a second SUB950A interfaced to an existing 2210 to double the number of inputs / outputs. Refer to 2210 / 2211 Block Wiring Diagram in **Error! Reference source not found.**.

Inputs and Outputs

The 8 inputs in SUB950A are used with dry contact switch inputs (push buttons, key switches, relay contacts, etc.). Any programmable input trigger conditions in Win128, Win512 and Win1020G3 (Addressable CIEs) can be used.

External LED outputs are polarity conscious with an output of 5V, maximum 15 mA per LED pulsed at 2ms ON, 14ms OFF. Any programmable output trigger conditions from an Addressable CIE can be used to activate an output indication.

The relay outputs have a changeover contacts rated to 30V @ 1A. Any programmable output trigger conditions in an Addressable CIE can be used to trigger the output. When a relay is energised, a corresponding onboard LED will be lit.

Installation

- 2210 / 2011 fits onto a standard DIN rail PCB mount (e.g. Excel Controls type E107 and M107) or mounted directly using the 4 corner mounting holes with Φ3.5mm in each SUB950A, refer to
- Figure 3.
- A 4582 I/O Matrix board must be installed in J1 on the primary SUB950A board and secured by 2X 14mm M3 Hex Spacers. 2 central holes are provided on the SUB950A for these spacers indicated on
- Figure 3.
- 2211 requires a 26 way ribbon cable assembly connected between J2 on the primary SUB950A and J1 on the secondary.

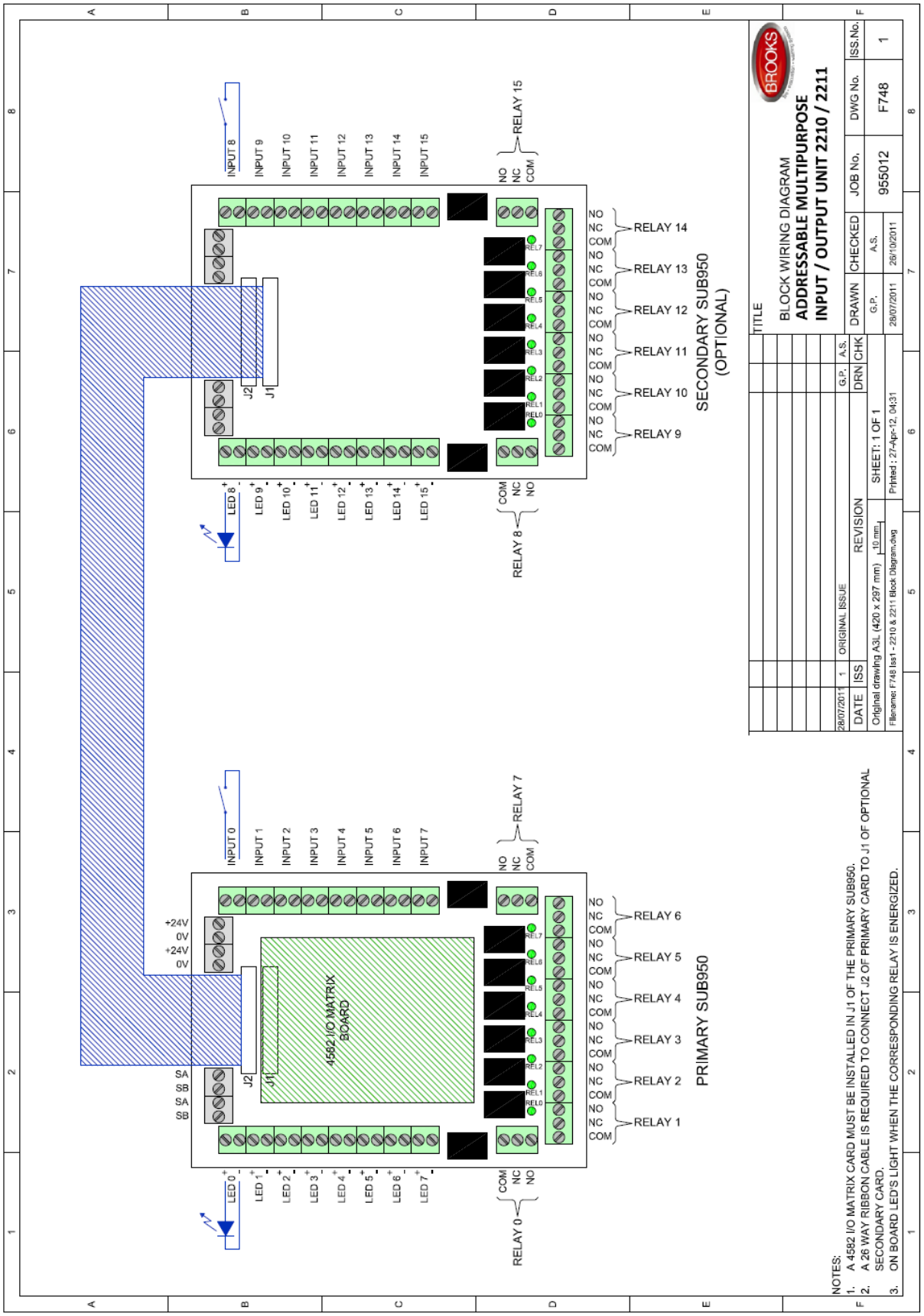
Applications

- Up to 16 remote programmable changeover relay contacts for remote interface to BMS or any other remote system.

			Title	Technical Datasheet			
			Addressable Multipurpose Input / Output Unit Model 2210 / 2211				
4/5/2012	2	Update & add applications		Created	Checked	TDS No.	Rev
30/4/2012	1	Original Issue		E.T./G.P.	A.S.	TDS013	2
Date	Rev	Description		30/04/2012	30/04/2012		

- In addition to the 16 relays, up to 16 programmable non-supervised inputs and 16 LED outputs can be configured.
- Can be used inside the CIE when a large number of relays is required e.g. EWIS interface.

Block Wiring Diagram



			Addressable Multipurpose Input / Output Unit Model 2210 / 2211	Technical Datasheet		BROOKS	
4/5/2012	2	Update & add applications		Created	Checked	TDS No.	Rev
30/4/2012	1	Original Issue		E.T./G.P.	A.S.	TDS013	2
Date	Rev	Description		30/04/2012	30/04/2012		

Figure 1 2210 / 2211 Block Wiring Diagram

Jumper Link Settings on 4582

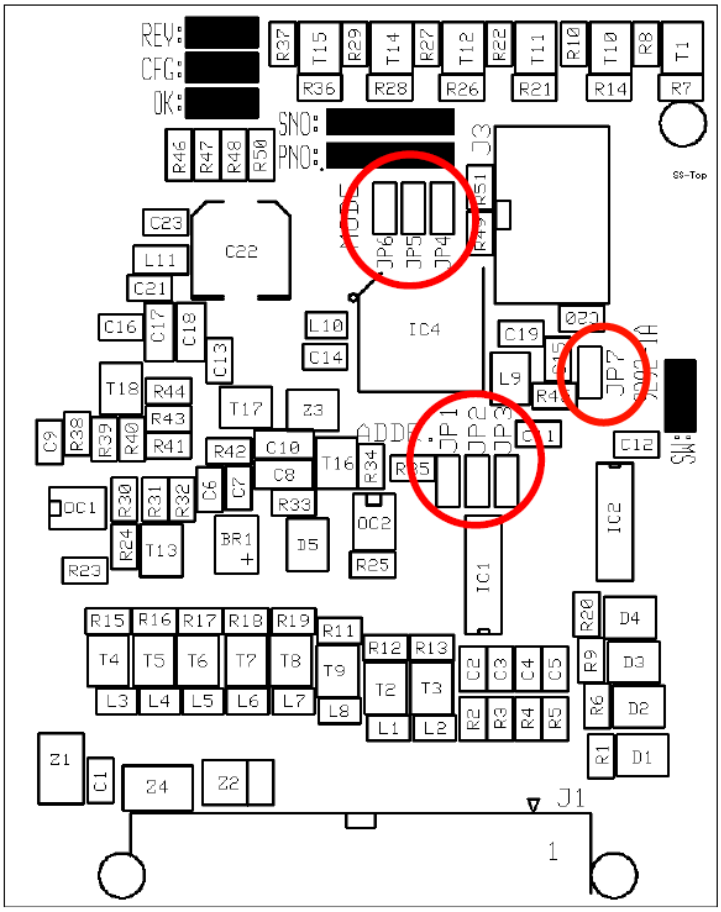


Figure 2 4582 I/O Matrix Board jumper locations

Table 1: 4582 I/O Matrix Board Address Setting (JP1-JP3)

4582 Address	JP1 – "1"	JP2 – "2"	JP3 – "3"
0			
1	X		
2		X	
3	X	X	
4			X
5	X		X

Jumpers JP1 to JP3 shown on Table 1 are used to set the address of the 4582 board. "X" indicates which jumpers should be shunted while empty spaces indicates those that are left not shunted.

NOTE! *Jumper "JP3" is only used in the Firetracker FT1020G3 – for the FT1020G3 the maximum number of 4582 boards per loop is 6, for the FT128 and FT512 the maximum number is 4 boards.*

Table 2: 4582 I/O Matrix Board Type (JP4-JP6)

4582 Type	JP4	JP5	JP6
Fan control			
Zone Control	X		
Generic		X	

Jumpers JP4 to JP6 on Table 2 are used to set the type of 4582 board application. For the 2210 the 4582 is used as a generic card, JP5 must be shunted while both JP4 and JP6 are not shunted.

Jumper JP7 is not shunted (used for factory setting).

Specifications

Function	Description	Notes
Power requirement	18-30V DC, Nominal 24V	
Quiescent Current	35 mA @ 24V DC	
Activation Current	100mA	All relays and LEDs are active, not including external LEDs
Input	8 x Inputs, N/O or N/C dry contact	Non-supervised
Output	8 x LED outputs of 5VDC, maximum 15mA per LED	2ms ON, 14ms OFF
Relay contact	8 x Relays 1A @ 30V DC	Changeover contacts
Expansion	1 only additional SUB950A	

(Due to the continual development Brooks Australia reserves the rights to change the product specifications)

Configuration of Inputs & Outputs

Basic Configuration:

The basic 2210 module consists of 1 x SUB950A & 1 x 4582 and configured as follow:

- 8 dry contact inputs IN 0 – IN 7, 4582 inputs 0 – 7
- 8 LED outputs LED 0 – LED 7, 4582 outputs 0-3 & 6-9
- 8 Relay outputs REL 0 – REL 7, 4582 outputs 12-15 & 18-21

See Table 3: Primary Input / Output Map

Extended Configuration:

The extended 2210 module consists of 2 x SUB950A connected together using a 26 way ribbon cable and a single 4582, enabling:

- 16 dry contact inputs IN 0 – IN 15, 4582 inputs 0 – 15
- 16 LED outputs LED 0 – LED 15, 4582 outputs 0-3, 6-9, 24-27 & 30-33
- 16 Relay outputs REL 0 – REL 15, 4582 outputs 12-15, 18-21, 36-39 & 42-45

See Table 3: Primary Input / Output Map and Table 4: Extended Input / Output Map

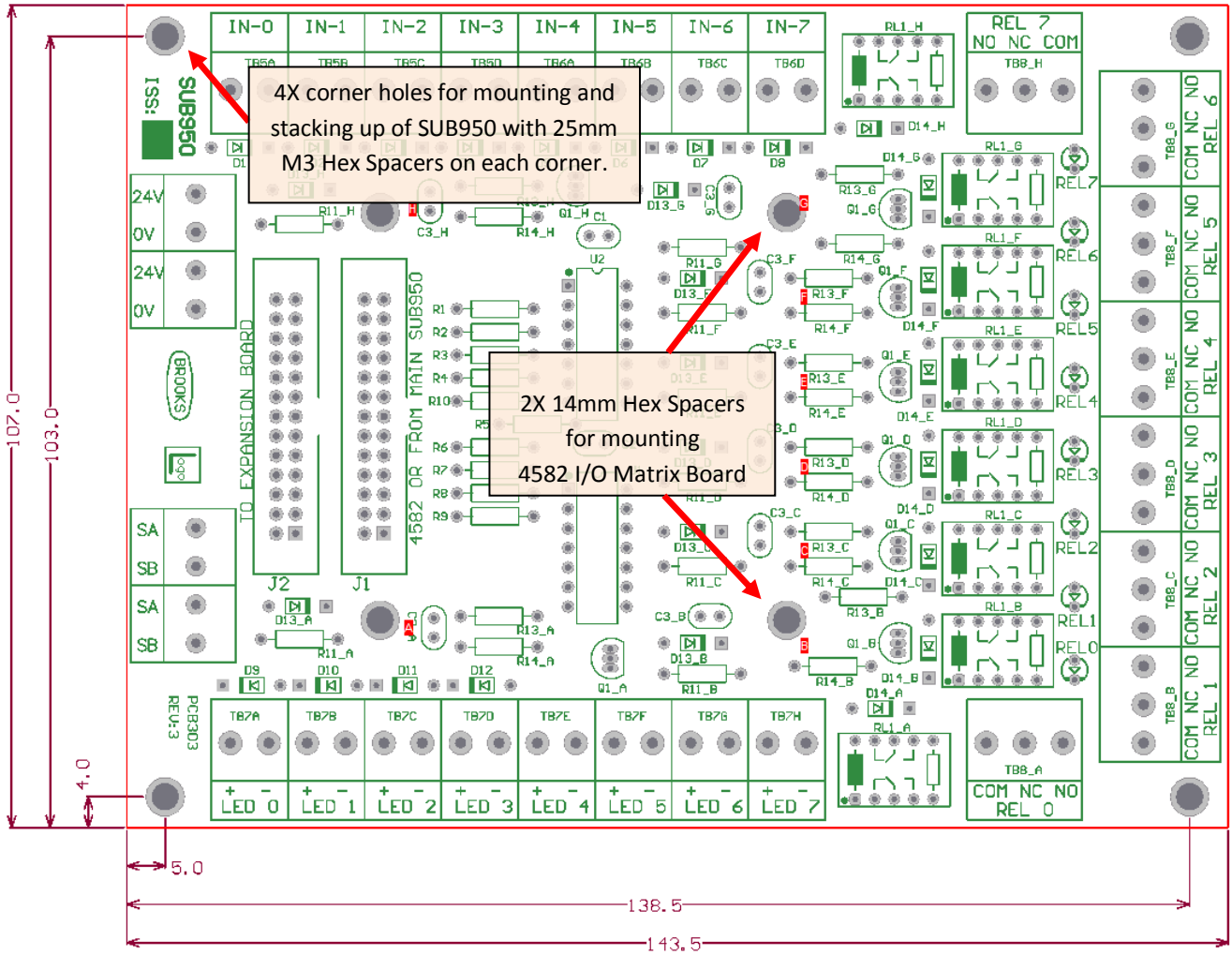
Table 3: Primary Input / Output Map

Inputs		Outputs			
4582 I/P	**SUB950**	**4582 O/P**	**LED**	**4582 O/P**	**Relay**
0	In 0	0	0	12	0
1	In 1	1	1	13	1
2	In 2	2	2	14	2
3	In 3	3	3	15	3
4	In 4	6	4	18	4
5	In 5	7	5	19	5
6	In 6	8	6	20	6
7	In 7	9	7	21	7

Table 4: Extended Input / Output Map

Inputs		Outputs			
4582 I/P	SUB950	4582 O/P	LED	4582 O/P	Relay
8	In 8	24	8	36	8
9	In 9	25	9	37	9
10	In 10	26	10	38	10
11	In 11	27	11	39	11
12	In 12	30	12	42	12
13	In 13	31	13	43	13
14	In 14	32	14	44	14
15	In 15	33	15	45	15

Figure 3 SUB950A PCB Layout



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			Addressable Multipurpose Input / Output Unit Model 2210 / 2211				
4/5/2012	2	Update & add applications		Created	Checked	TDS No.	Rev
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