

# Memo

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**To** : All C-Bus Users

**From** : Brett Coppins **Pages** : 1 of 4

**Date** : 23/09/2003 **Ref** :

**Subject** : 5504RVFC sample wiring methods

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## C-Bus Change-over Relay Application Notes

Following the release of the Change-over relay unit ( 5504RVFC ) we have released some application notes for some possible wiring methods.

### NOTE:

As there are many and varied wiring methods for different products on the market we strongly recommend that you first contact the manufacturer of the product you are attempting to control and obtain their specific wiring requirements. Failure to configure the C-bus product or wire the controlled product accordingly may result in damage to the controls or the blinds.

Some examples of how the Key Input units and Changeover Relay Output units may be programmed are included.

There are certain functions that can be achieved as depicted, however, please note the limitations that may apply to each example.

**Regards**

### **BRETT COPPINS**

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## Three Speed Motor

Suitable for ceiling sweep fans and similar  
Uses level ranges on one group address



	Key 1	Key 2	Key 3	Key 4
Short Press	UPKEY	RECALL1	RECALL2	OFFKEY
Short Release	IDLE	IDLE	IDLE	IDLE
Long Press	IDLE	IDLE	IDLE	IDLE
Long Release	IDLE	IDLE	IDLE	IDLE

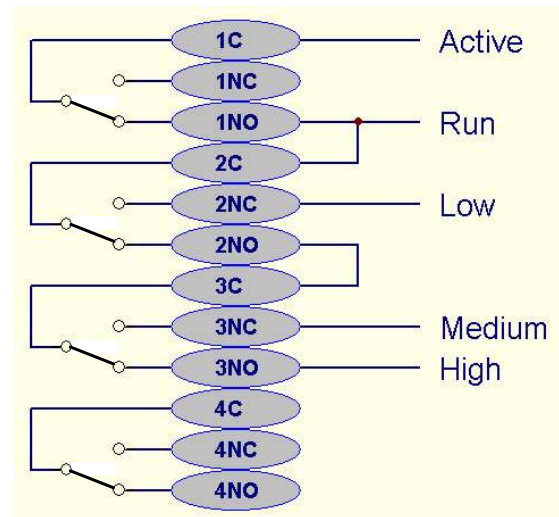
**Sundry Parameters**

DeBounce:  ms Ramp1:  s CheckSum:

LongPress:  ms Ramp2:  s SR Interval:  s

Keys								Indicators								Groups			
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21			
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24			

Timer	Expiry			Store %		Groups	
	Hrs	Min	Sec	Command	1		2
1	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	OFFKEY	<input type="text" value="66"/>	<input type="text" value="33"/>	21



**Channel Setup Options**

Channel	Group	Channel	Group
1	<input type="text" value="21"/>	2	<input type="text" value="21"/>
3	<input type="text" value="21"/>	4	<input type="text" value="Unused"/>

Channel Setup | Logic | Turn on | Recovery | Delays | Global | Status

**Channel Turn On Levels**

Set Interlock Channels   Synchronise Sliders

0% 50% 100% 0%

Set On Threshold Channels turn on when levels reach these thresholds.

1 2 3 4

Channel Setup | Logic | Turn on | Recovery | Delays | Global | Status

### PROBLEMS

All key unit indicators will be on for any speed selection  
Switching order of relays not determined, short period of odd speed possible (<50ms)

## Two winding / motor Shutter

Suitable for two winding or two motor shutters / curtains  
 Shutter will move while key is being pressed, no LED indication

	Key 1	Key 2	Key 3	Key 4
Short Press	RECALL1	UPKEY	RECALL1	UPKEY
Short Release	OFFKEY	OFFKEY	OFFKEY	OFFKEY
Long Press	IDLE	IDLE	IDLE	IDLE
Long Release	OFFKEY	OFFKEY	OFFKEY	OFFKEY

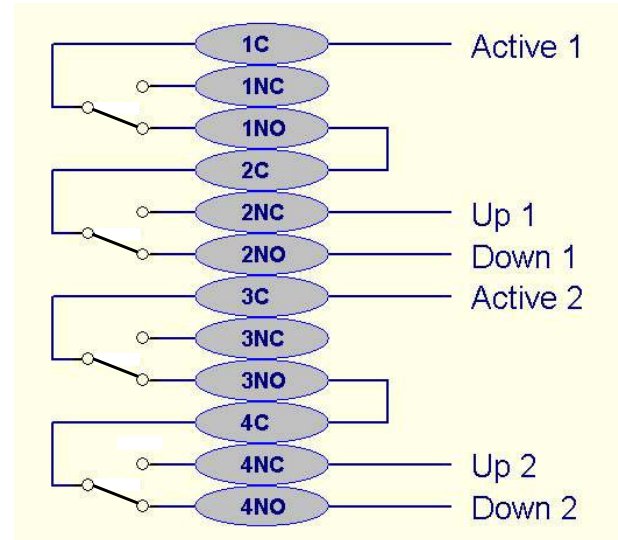
**Sundry Parameters**

DeBounce:  ms Ramp1:  s CheckSum:

LongPress:  ms Ramp2:  s SR Interval:  s

Keys								Indicators								Groups	
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	21	22
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Timer			Expiry Command	Store %		Groups
	Hrs	Min	Sec		1	2	
1	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	OFFKEY	<input type="text" value="50"/>	<input type="text" value="100"/>	21
2	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	OFFKEY	<input type="text" value="100"/>	<input type="text" value="100"/>	Unused
3	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	OFFKEY	<input type="text" value="50"/>	<input type="text" value="100"/>	22
4	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	OFFKEY	<input type="text" value="100"/>	<input type="text" value="100"/>	Unused



**Channel Setup Options**

Channel	Group	Channel	Group
1	<input type="text" value="21"/>	2	<input type="text" value="21"/>
3	<input type="text" value="22"/>	4	<input type="text" value="22"/>

Channel Setup | Logic | Turn on | Recovery | Delays | Global | Status

**Channel Turn On Levels**

Set Interlock Channels:   Synchronise Sliders

0% 100% 0% 100%

Set On Threshold Channels turn on when levels reach these thresholds.

1 2 3 4

Channel Setup | Logic | Turn on | Recovery | Delays | Global | Status

### PROBLEMS

All key unit indicators will be off regardless of selection  
 Switching order of relays not determined, short period of odd direction possible (<50ms)

## Two winding / motor Shutter with timer

Suitable for two winding or two motor shutters / curtains  
 Short Press will move shutter full travel with 2 minute timeout  
 Long Press will move shutter until key released



	Key 1	Key 2	Key 3	Key 4
Short Press	RECALL1	UPKEY	RECALL1	UPKEY
Short Release	START	START	START	START
Long Press	IDLE	IDLE	IDLE	IDLE
Long Release	OFFKEY	OFFKEY	OFFKEY	OFFKEY

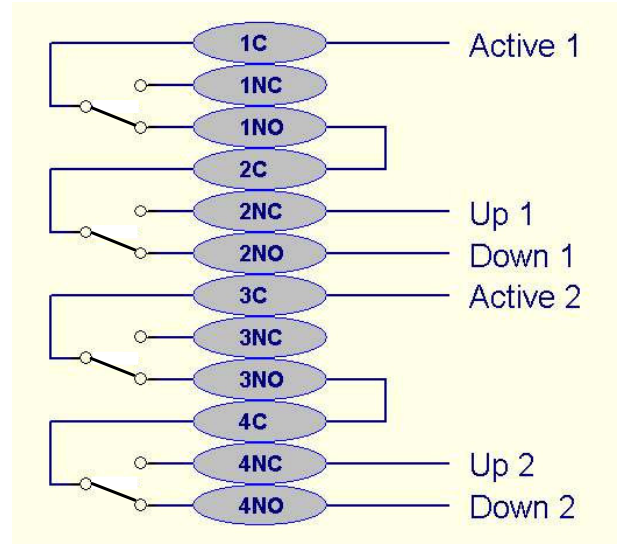
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LongPress:  ms Ramp2:  s SR Interval:  s

Keys								Indicators								Groups	
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21	
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unused	

	Timer			Expiry Command	Store %		Groups
	Hrs	Min	Sec		1	2	
1	0	2	0	OFFKEY	50	100	21
2	0	0	0	OFFKEY	100	100	Unused
3	0	2	0	OFFKEY	50	100	22
4	0	0	0	OFFKEY	100	100	Unused



**Channel Setup Options**

Channel	Group	Channel	Group
1	<input type="text" value="21"/>	2	<input type="text" value="21"/>
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Channel Setup | Logic | Turn on | Recovery | Delays | Global | Status

**Channel Turn On Levels**

Set Interlock Channels:   Synchronise Sliders

0% 100% 0% 100%

Set On Threshold ..Channels turn on when levels reach these thresholds..

1 2 3 4

Channel Setup | Logic | Turn on | Recovery | Delays | Global | Status

### PROBLEMS

All key unit indicators will be off regardless of selection  
 Switching order of relays not determined, short period of odd direction possible (<50ms)

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