



DMX 8-Channel Relay Board

Version 1.0 -2009 WD1563

Overview

The DMX Relay board provides up to 8- programmable Digital Outputs channels when connected to a DMX controlled network. The board Base Address may be set between 1 and 505. Board can operate Mechanical or Solid State Relays Board Requires 12 VDC @ 0.5 Amp Supply.

No Relay



The board requires a 12V DC supply at 0.5 Amps

Connect the relay board to the DMX network using 5-pin XLR connectors. If the DMX Relay board is the last item on the network, place a jumper over the pins marked TRM. This will improve the performance of the DMX network, acting as a DMX Network Termination.

Attach Mechanical or Solid State Relays to relay section.

NOTE: jumper next to the input power socket should be set to the V position when using mechanical relays and set to the 5 position when using Solid State relays.

Recommended Solid State Relays

Crydom - CMX60D5 (0-60 V DC @ 5 Amp) Crydom - CMX60D10 (0-60 V DC @ 10 Amp)

Crydom - CX240D5 . (0-240 V AC@ 5 Amp) - USE CAUTION AC VOLTAGE

Recommended Standard Mechanical Relays = OMI-SH-112D (30 V DC @10 Amp)

Settings - (See Pages on Control / Addressing)

Set the base address of Relay Output - No. 1 as follows: (when not in byte mode - see below) Add the value of the address DIP switches set to the **ON** position to calculate the base address. Example: DIP switches 16 and 32 set to **ON** position, the base address is now 48, this setting is used to determine the starting address output of Relay 1, in DMX Multiple Channel Control, the next relay would be address 49 for Relay 2, and the next 50 for Relay 3, etc. Use this same process for setting the base address in Single Channel Control but Byte Output Switch 10 is set to ON and a Control Byte Value Number is added to the DMX output for control of all the 8 Relays. (see pages on Addressing for more details on Byte - Binary addressing)

Control Syntax - (See Pages on Control / Addressing)

Byte Output switch (DIP Switch 10) set to **OFF**: (Multiple DMX control channels) The output on a particular channel will go high (ON) when the DMX transmitted value for that channel

exceeds 224. (243= OFF, 0% and 244= ON, 100%). Each relay 1-8 has it's own channel assigned with the base number + a relay position number added to determine the address for each relay output.

Byte Output switch (DIP Switch 10) set to **ON**: (Single DMX control channel)

The relay outputs act as a binary representation of the data on the base address channel -example, if the base address is set to 33 and the dmx value on channel 33 is 240 (ie 11110000 in binary) then relays 5 through 8 would be energized and relays 1 through 4 off. If the value on channel 33 was 15 (00001111) then relays 1 through 4 would be on and relays 5-8 off. 1 or more relays can be grouped as a base start address and a single binary value added for each relay output control.

DMX LED- **ON** when a suitable DMX signal is being received or a flashing LED when **NO** valid DMX signal stream is being received by the 8-Ch DMX relay board.

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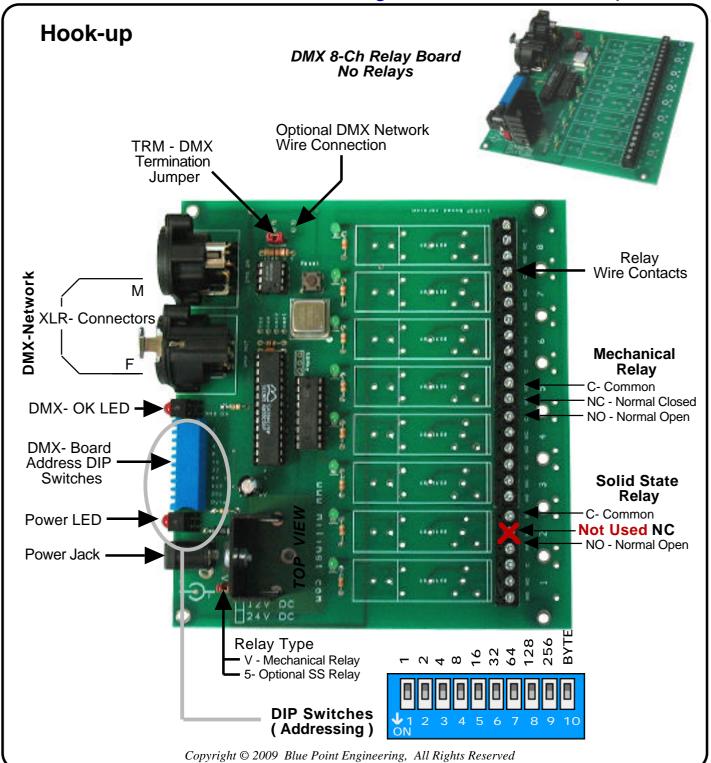
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DMX 8-Channel Relay Board

No Relay

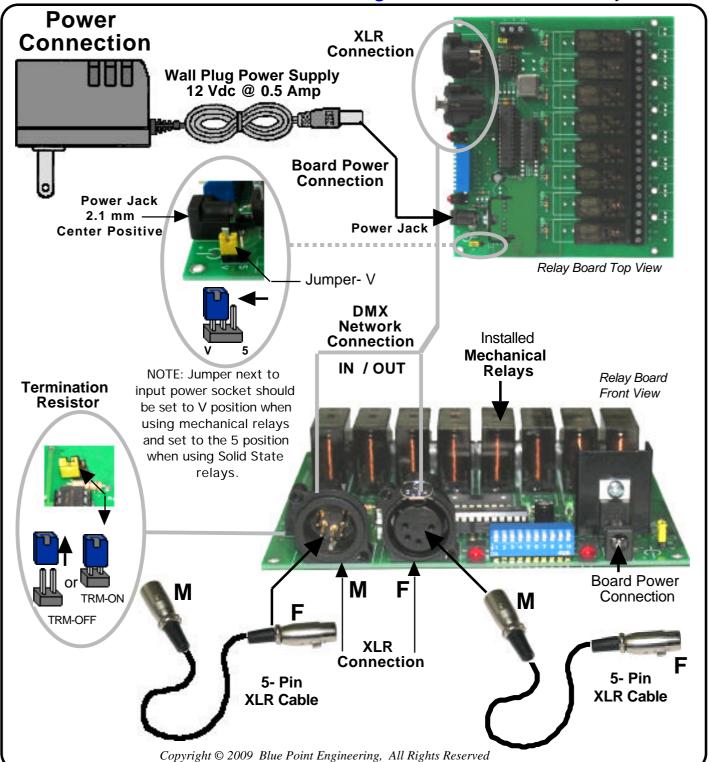






DMX 8-Channel Relay Board

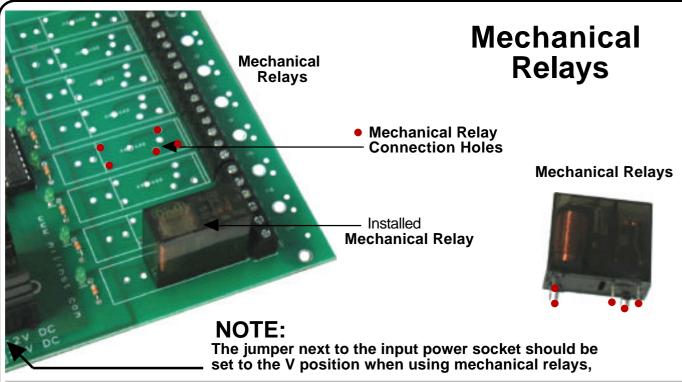
No Relay

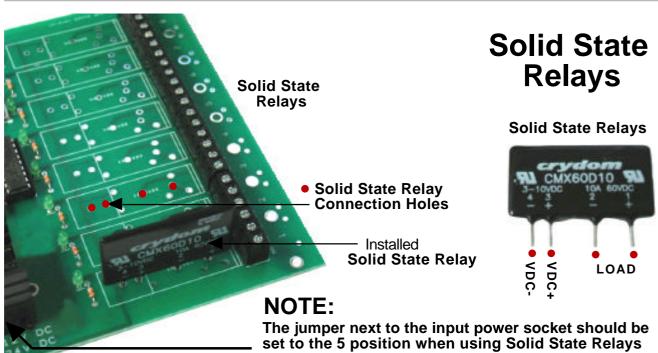




DMX 8-Channel Relay Board

No Relay

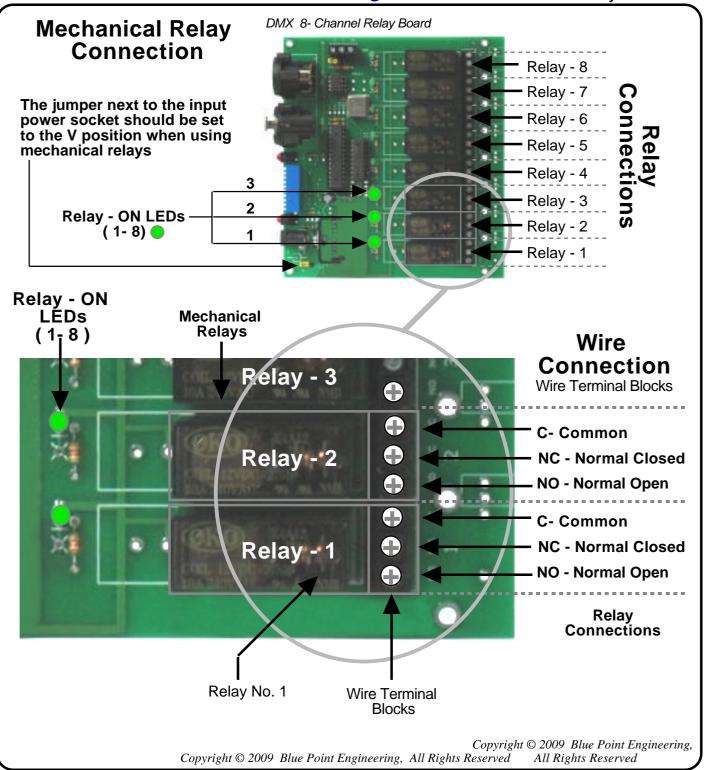






DMX 8-Channel Relay Board

No Relay

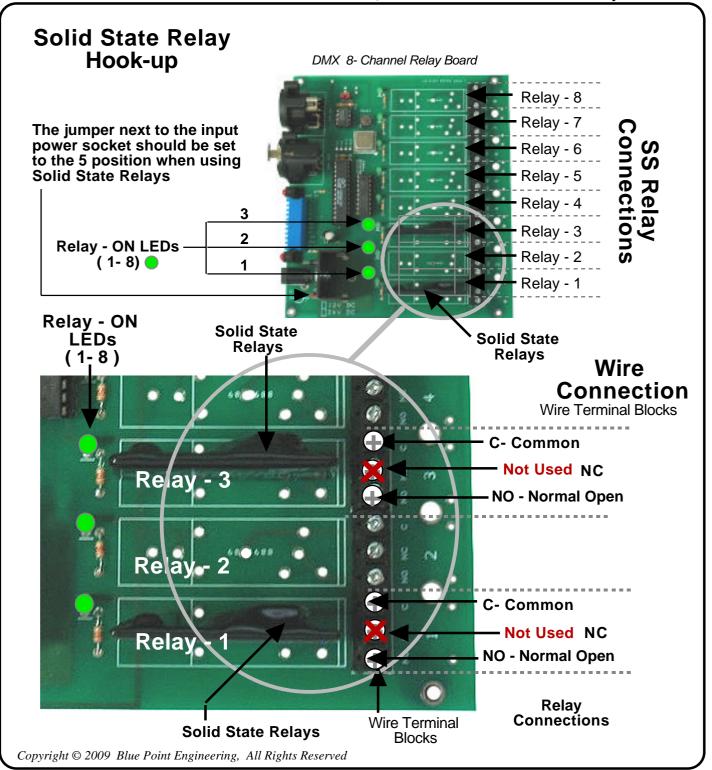






DMX 8-Channel Relay Board

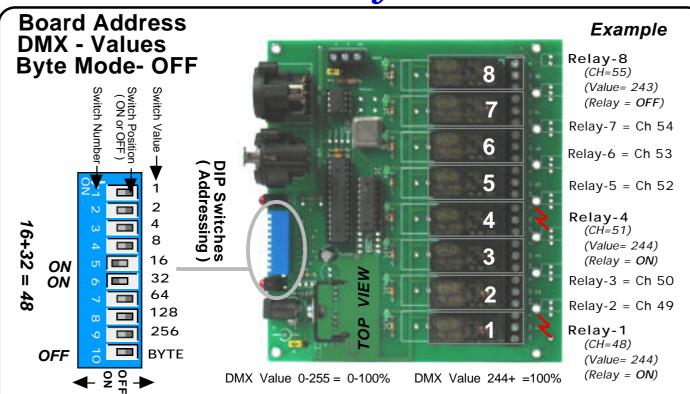
No Relay







DMX 8-Channel Relay Board



Setting the base address of Relay Outputs when not in byte mode - Switch 10 set to OFF Add the value of the address DIP switches set to the ON position to calculate the base address.

Example(**CH**): DIP switches 5 and 6 set to **ON** position, the base address is now 48, (16+32) this setting is used to determine the starting address output of Relay 1, the next relay would be address 49 for Relay 2, and the next 50 for Relay 3, 51 for Relay 4, 52 for Relay 5, etc.

Control Syntex - (See DMX512 Chart Chart for Values)

Byte Output switch (DIP Switch 10) set to OFF: (Multiple DMX control channels)

The output on a particular channel will go high (ON) when the DMX transmitted value for that channel exceeds 224. 0= OFF (0%) and 244= ON (100%)

Example

Dlp Switch 5 and 6 ON = Base Address 48 = Relay No.1 (Relay 1- Base Address starting at 48)

Byte Output Switch 10 = OFF

Relay 1 ON at DMX value 244+ RELAY - 1

Relay 1 OFF at DMX value 243-

Dlp Switch 5 and 6 ON = Base Address 48 + 3 = 51 = Relay No.4 (Relay 1- Base Address Plus next 3 Relays)

Byte Output Switch 10 = OFF

Relay 4 ON at DMX value 244+ RELAY - 4

Relay 4 OFF at DMX value 243-

Dlp Switch 5 and 6 ON = Base Address 48 + 7 = 55 = Relay No.8 (Relay 1- Base Address Plus next 7 Relays)

Byte Output Switch 10 = OFF

Relay 8 ON at DMX value 244+ RELAY - 8

Relay 8 OFF at DMX value 243-

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Ch - Switches

Pointing the Way to Solutions!

DMX 512 Chart - US Standard

Chart A - US Standard DMX 512

Ch - Switches	Ch - Switches	Ch - Switches
1 = 1	53 = 1, 3, 5, 6	105 = 1, 4, 6, 7
2 = 2	54 = 2, 3, 5, 6	106 = 2, 4, 6, 7
3 = 1, 2	55 = 1, 2, 3, 5, 6	107 = 1, 2, 4, 6, 7
4 = 3	56 = 4, 5, 6	108 = 3, 4, 6, 7
5 = 1, 3 6 = 2, 3	57 = 1, 4, 5, 6	109 = 1, 3, 4, 6, 7
6 = 2, 3 7 = 1, 2, 3	58 = 2, 4, 5, 6 59 = 1, 2, 4, 5, 6	110 = 2, 3, 4, 6, 7 111 = 1, 2, 3, 4, 6, 7
8 = 4	60 = 3, 4, 5, 6	112 = 5, 6, 7
9 = 1, 4	61 = 1, 3, 4, 5, 6	113 = 1, 5, 6, 7
10 = 2, 4	62 = 2, 3, 4, 5, 6	114 = 2, 5, 6, 7
11 = 1, 2, 4	63 = 1, 2, 3, 4, 5, 6	115 = 1, 2, 5, 6, 7
12 = 3, 4	64 = 7	116 = 3, 5, 6, 7
13 = 1, 3, 4	65 = 1, 7	117 = 1, 3, 5, 6, 7
14 = 2, 3, 4	66 = 2, 7	118 = 2, 3, 5, 6, 7
15 = 1, 2, 3, 4	67 = 1, 2, 7	119 = 1, 2, 3, 5, 6, 7
16 = 5	68 = 3, 7	120 = 4, 5, 6, 7
17 = 1, 5	69 = 1, 3, 7	121 = 1, 4, 5, 6, 7
18 = 2, 5	70 = 2, 3, 7	122 = 2, 4, 5, 6, 7
19 = 1, 2, 5	71 = 1, 2, 3, 7	123 = 1, 2, 4, 5, 6, 7
20 = 3, 5	72 = 4, 7	124 = 3, 4, 5, 6, 7
21 = 1, 3, 5 22 = 2, 3, 5	73 = 1, 4, 7	125 = 1, 3, 4, 5, 6, 7
23 = 1, 2, 3, 5	74 = 2, 4, 7 75 = 1, 2, 4, 7	126 = 2, 3, 4, 5, 6, 7 127 = 1, 2, 3, 4, 5, 6, 7
24 = 4, 5	76 = 3, 4, 7	128 = 8
25 = 1, 4, 5	77 = 1, 3, 4, 7	129 = 1, 8
26 = 2, 4, 5	78 = 2, 3, 4, 7	130 = 2, 8
27 = 1, 2, 4, 5	79 = 1, 3, 4, 7	131 = 1, 2, 8
28 = 3, 4, 5	80 = 5, 7	132 = 3, 8
29 = 1, 3, 4, 5	81 = 1, 5, 7	133 = 1, 3, 8
30 = 2, 3, 4, 5	82 = 2, 5, 7	134 = 2, 3, 8
31 = 1, 2, 3, 4, 5	83 = 1, 2, 5, 7	135 = 1, 2, 3, 8
32 = 6	84 = 3, 5, 7	136 = 4, 8
33 = 1, 6	85 = 1, 3, 5, 7	137 = 1, 4, 8
34 = 2, 6	86 = 2, 3, 5, 7	138 = 2, 4, 8
35 = 1, 2, 6 36 = 3, 6	87 = 1, 2, 3, 5, 7 88 = 4, 5, 7	139 = 1, 2, 4, 8 140 = 3, 4, 8
37 = 1, 3, 6	89 = 1, 4, 5, 7	141 = 1, 3, 4, 8
38 = 2, 3, 6	90 = 2, 4, 5, 7	142 = 2, 3, 4, 8
39 = 1, 2, 3, 6	91 = 1, 2, 4, 5, 7	143 = 1, 2, 3, 4, 8
40 = 4, 6	92 = 3, 4, 5, 7	144 = 5, 8
41 = 1, 4, 6	93 = 1, 3, 4, 5, 7	145 = 1, 5, 8
42 = 2, 4, 6	94 = 2, 3, 4, 5, 7	146 = 2, 5, 8
43 = 1, 2, 4, 6	95 = 1, 2, 3, 4, 5, 7	147 = 1, 2, 5, 8
44 = 3, 4, 6,	96 = 6, 7	148 = 3, 5, 8
45 = 1, 3, 4, 6	97 = 1, 6, 7	149 = 1, 3, 5, 8
46 = 2, 3, 4, 6	98 = 2, 6, 7	150 = 2, 3, 5, 8
47 = 1, 2, 3, 4, 6	99 = 1, 2, 6, 7	151 = 1, 2, 3, 5, 8
48 = 5, 6 49 = 1, 5, 6	100 = 3, 6, 7 101 = 1, 3, 6, 7	152 = 4, 5, 8 153 = 1, 4, 5, 8
49 = 1, 5, 6 50 = 2, 5, 6	101 = 1, 3, 6, 7	154 = 2, 4, 5, 8
51 = 1, 2, 5, 6	102 = 2, 3, 6, 7	155 = 1, 2, 4, 5, 8
52 - 3 5 6	104 = 4 6 7	156 = 3 4 5 8

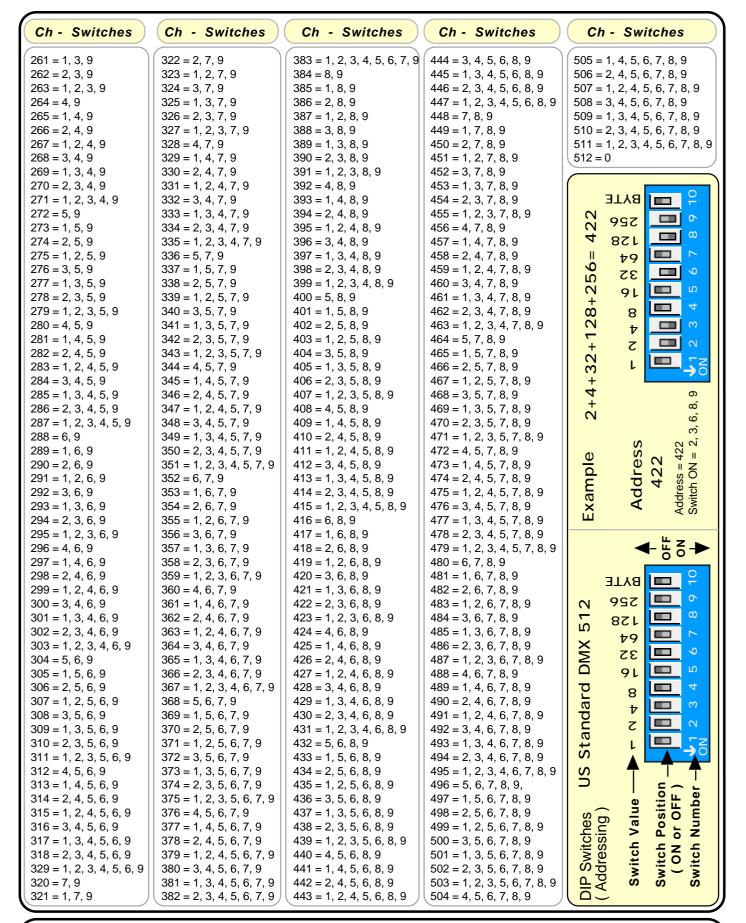
Ch - Switches	
157 = 1, 3, 4, 5, 8 158 = 2, 3, 4, 5, 8 159 = 1, 2, 3, 4, 5, 8 160 = 6, 8	
161 = 1, 6, 8 162 = 2, 6, 8 163 = 1, 2, 6, 8 164 = 3, 6, 8	
165 = 1, 3, 6, 8 166 = 2, 3, 6, 8 167 = 1, 2, 3, 6, 8 168 = 4, 6, 8	
169 = 1, 4, 6, 8 170 = 2, 4, 6, 8 171 = 1, 2, 4, 6, 8 172 = 3, 4, 6, 8	
173 = 1, 3, 4, 6, 8 174 = 2, 3, 4, 6, 8 175 = 1,2, 3, 4, 6, 8 176 = 5, 6, 8	
177 = 1, 5, 6, 8 178 = 2, 5, 6, 8 179 = 1, 2, 5, 6, 8 180 = 3, 5, 6, 8	
181 = 1, 3, 5, 6, 8 182 = 2, 3, 5, 6, 8 183 = 1, 2, 3, 5, 6, 8 184 = 4, 5, 6, 8	
185 = 1, 4, 5, 6, 8 186 = 2, 4, 5, 6, 8 187 = 1, 2, 4, 5, 6, 8 188 = 3, 4, 5, 6, 8 189 = 1, 3, 4, 5, 6, 8	
190 = 2, 3, 4, 5, 6, 8 191 = 1, 2, 3, 4, 5, 6, 192 = 7, 8 193 = 1, 7, 8,	8
194 = 2, 7, 8, 195 = 1, 2, 7, 8 196 = 3, 7, 8 197 = 1, 3, 7, 8	
198 = 2, 3, 7, 8 199 = 1, 2, 3, 7, 8 200 = 4, 7, 8, 201 = 1, 4, 7, 8	
202 = 2, 4, 7, 8 203 = 1, 2, 4, 7, 8 204 = 3, 4, 7, 8 205 = 1, 3, 4, 7, 8	
206 = 2, 3, 4, 7, 8 207 = 1, 2, 3, 4, 7, 8 208 = 5, 7, 8	

						\leq	
209 = 1, 5	. 7.	8					١
210 = 2, 5							П
211 = 1, 2			Ω				П
			O				П
212 = 3, 5			_				П
213 = 1, 3							П
214 = 2, 3	8, 5,	7,	8				П
215 = 1, 2	2, 3,	5,	7,	8			П
216 = 4, 5	, 7,	8					П
217 = 1, 4	, 5,	7,	8				П
218 = 2, 4							П
219 = 1, 2	. 4.	5.	7.	8			П
220 = 3, 4	5	7	8	-			П
221 = 1, 3				8			П
221 = 1, 3 222 = 2, 3							П
222 – 2, 3), 1 ,) つ	J, ⊿	, 5	7	0		П
223 = 1, 2	., J,	4,	ΰ,	Ι,	0		П
224 = 6, 7		c					П
225 = 1, 6							П
226 = 2, 6	, /,	8	_				П
227 = 1, 2	', 6,	7,	8				П
228 = 3, 6	5, 7,	8					П
229 = 1, 3							П
230 = 2, 3							П
231 = 1, 2	2, 3,	6,	7,	8			П
232 = 4, 6							П
233 = 1, 4			8				П
234 = 2, 4	, 6,	7,	8				П
235 = 1, 2	. 4.	6.	7.	8			П
236 = 3, 4	. 6.	7.	8				П
237 = 1, 3				8			П
238 = 2, 3	, ., l 4	6	7	8			П
239 = 1, 2	', ㄱ,)	٥, م	6	7	Q		П
239 = 1, 2 240 = 5, 6	., J,	σ,	Ο,	٠,	U		П
			0				П
241 = 1, 5	ο, ο,	7,	Ö				П
242 = 2, 5	, 6,	7,	8	_			П
243 = 1, 2	, 5,	6,	7,	8			П
244 = 3, 5				_			П
245 = 1, 3	5, 5,	6,	7,	8			П
246 = 2, 3	5, 5,	6,	7,	8			П
247 = 1, 2				7,	8		П
248 = 4, 5							П
249 = 1, 4	, 5,	6,	7,	8			П
250 = 2, 4 251 = 1, 2	, 5,	6,	7,	8			П
251 = 1, 2	2, 4,	5,	6,	7,	8		П
252 = 3, 4							
253 = 1, 3					8		
254 = 2, 3							П
257 = 2, 3 255 = 1, 2	, ,	4	5	6	7	8	П
256 = 1, 2 256 = 9	., 0,	т,	Ο,	Ο,	٠,	J	П
							П
257 = 1, 9							П
258 = 2, 9							П
259 = 1, 2							П
260 = 3, 9							ı

156 = 3, 4, 5, 8

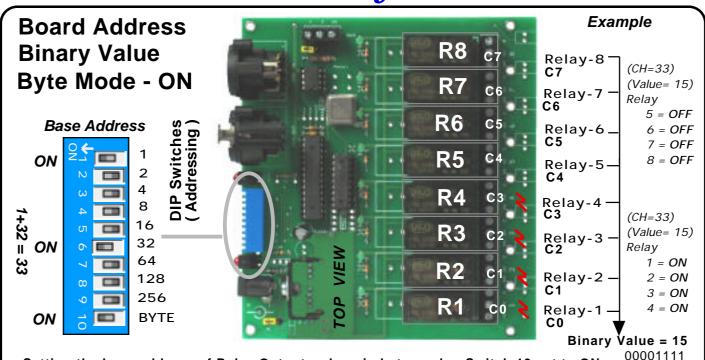
104 = 4, 6, 7

52 = 3, 5, 6





DMX 8-Channel Relay Board



Setting the base address of Relay Outputs when in byte mode - Switch 10 set to ON

Add the value of the address DIP switches set to the ON position to calculate the base address.

Example: DIP switches 6 and 1 set to ON position, the base address is now 33. (Single DMX control channel)

Control Syntex - (See Binary Chart for Values)

The DMX output values now act as a binary representation of the data on the base address channel. Example, if the base address is set to 33 and the value (Binary) on DMX channel 33 is 240 (Example: 11110000 in binary) then relays 5 through 8 would be energised and relays 1 through 4 OFF.

Example RELAY - 1-4 = ON, 5-8 = OFF

If the base address is set to 33 and the dmx value (Binary) on DMX channel 33 is15 then relays 1 through 4 would be ON and relays 5-8 OFF.

00001111

Binary Value

RELAY - 1,3,7 = ON, 2,4,5,6,8 = OFF

If the base address is set to 33 and the dmx value (Binary) on DMX channel 33 is 162 (10100010) then relays 1,3,7 would be ON and relays 2,4,5,6,8 OFF.

RELAY - 2,4,6,8 = ON, 1,3,5,7 = OFF

If the base address is set to 33 and the dmx value (Binary) on DMX channel 33 is 85 (01010101) then relays 2,4,6,8 would be ON and relays 1,3,5,7 OFF.

RELAY - 1-8 = ALL ON

If the base address is set to 33 and the dmx value (Binary) on DMX channel 33 is 255 (111111111) then relays 1 through 8 would be ON.

RELAYS - 1-8 = AII OFF

If the base address is set to 33 and the dmx value (Binary) on DMX channel 33 is 0 (00000000) then relays 1 through 8 would be OFF.

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DMX 8-Channel Relay Board

Binary Value Chart

8=R8 7=R7 6=R6 5=R5 4=R4 3=R3 2=R2 Page 1 of 2

CHANNELS 8-1 or RELAYS 8-1									
O=OFF	R8 R7 R6 R5 R4 R3 R2 R1								
1=ON	O or 1	O or 1	O or 1	O or 1	O or 1	O or 1	O or 1	O or 1	

| Channel 8-1 Digit |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| 00000000 = 0 | 00110011 = 51 | 01100110 = 102 | 10011001 = 153 | 11001100 = 204 |
| 00000001 = 1 | 00110100 = 52 | 01100111 = 103 | 10011010 = 154 | 11001101 = 205 |
| 00000010 = 2 | 00110101 = 53 | 01101000 = 104 | 10011011 = 155 | 11001110 = 206 |
| 00000011 = 3 | 00110110 = 54 | 01101001 = 105 | 10011100 = 156 | 11001111 = 207 |
| 00000100 = 4 | 00110111 = 55 | 01101010 = 106 | 10011101 = 157 | 11010000 = 208 |
| 00000101 = 5 | 00111000 = 56 | 01101011 = 107 | 10011110 = 158 | 11010001 = 209 |
| 00000110 = 6 | 00111001 = 57 | 01101100 = 108 | 10011111 = 159 | 11010010 = 210 |
| 00000111 = 7 | 00111010 = 58 | 01101101 = 109 | 10100000 = 160 | 11010011 = 211 |
| 00001000 = 8 | 00111011 = 59 | 01101110 = 110 | 10100001 = 161 | 11010100 = 212 |
| 00001001 = 9 | 00111100 = 60 | 01101111 = 111 | 10100010 = 162 | 11010101 = 213 |
| 00001010 = 10 | 00111101 = 61 | 01110000 = 112 | 10100011 = 163 | 11010110 = 214 |
| 00001011 = 11 | 00111110 = 62 | 01110001 = 113 | 10100100 = 164 | 11010111 = 215 |
| 00001100 = 12 | 00111111 = 63 | 01110010 = 114 | 10100101 = 165 | 11011000 = 216 |
| 00001101 = 13 | 01000000 = 64 | 01110011 = 115 | 10100110 = 166 | 11011001 = 217 |
| 00001110 = 14 | 01000001 = 65 | 01110100 = 116 | 10100111 = 167 | 11011010 = 218 |
| 00001111 = 15 | 01000010 = 66 | 01110101 = 117 | 10101000 = 168 | 11011011 = 219 |
| 00010000 = 16 | 01000011 = 67 | 01110110 = 118 | 10101001 = 169 | 11011100 = 220 |
| 00010001 = 17 | 01000100 = 68 | 01110111 = 119 | 10101010 = 170 | 11011101 = 221 |
| 00010010 = 18 | 01000101 = 69 | 01111000 = 120 | 10101011 = 171 | 11011110 = 222 |
| 00010011 = 19 | 01000110 = 70 | 01111001 = 121 | 10001100 = 172 | 11011111 = 223 |
| 00010100 = 20 | 01000111 = 71 | 01111010 = 122 | 10101101 = 173 | 11100000 = 224 |
| 00010101 = 21 | 01001000 = 72 | 01111011 = 123 | 10101110 = 174 | 11100001 = 225 |
| 00010110 = 22 | 01001001 = 73 | 01111100 = 124 | 10101111 = 175 | 11100010 = 226 |
| 00010111 = 23 | 01001010 = 74 | 01111101 = 125 | 10110000 = 176 | 11100011 = 227 |
| 00011000 = 24 | 01001011 = 75 | 01111110 = 126 | 10110001 = 177 | 11100100 = 228 |
| 00011001 = 25 | 01001100 = 76 | 01111111 = 127 | 10110010 = 178 | 11100101 = 229 |
| 00011010 = 26 | 01001101 = 77 | 10000000 =128 | 10110011 = 179 | 11100110 = 230 |
| 00011011 = 27 | 01001110 = 78 | 10000001 = 129 | 10110100 = 180 | 11100111 = 231 |
| 00011100 = 28 | 01001111 = 79 | 10000010 = 130 | 10110101 = 181 | 11101000 = 232 |
| 00011101 = 29 | 01010000 = 80 | 10000011 = 131 | 10110110 = 182 | 11101001 = 233 |
| 00011110 = 30 | 01010001 = 81 | 10000100 = 132 | 10110111 = 183 | 11101010 = 234 |
| 00011111 = 31 | 01010010 = 82 | 10000101 = 133 | 10111000 = 184 | 11101011 = 235 |
| 00100000 = 32 | 01010011 = 83 | 10000110 = 134 | 10111001 = 185 | 11101100 = 236 |
| 00100001 = 33 | 01010100 = 84 | 10000111 = 135 | 10111010 = 186 | 11101101 = 237 |
| 00100010 = 34 | 01010101 = 85 | 10001000 = 136 | 10111011 = 187 | 11101110 = 238 |
| 00100011 = 35 | 01010110 = 86 | 10001001 = 137 | 10111100 = 188 | 11101111 = 239 |
| 00100100 = 36 | 01010111 = 87 | 10001010 = 138 | 10111101 = 189 | 11110000 = 240 |
| 00100101 = 37 | 01011000 = 88 | 10001011 = 139 | 10111110 = 190 | 11110001 = 241 |
| 00100110 = 38 | 01011001 = 89 | 10001100 = 140 | 10111111 = 191 | 11110010 = 242 |



DMX 8-Channel Relay Board

Binary Value Chart - Cont. Page 2 of 2

00100111	= 39
00101000	= 40
00101001	= 41
00101010	= 42
00101011	= 43
00101100	= 44
00101101	= 45
00101110	= 46
00101111	= 47
00110000	= 48
00110001	= 49
00110010	= 50

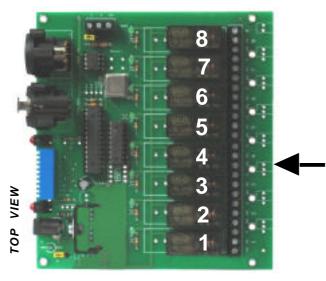
01011010	=	90
01011011	Ш	91
01011100		92
01011101	Ш	93
01011110	II	94
01011111	H	95
01100000	=	96
01100001	=	97
01100010	=	98
01100011	Ш	99
01100100	=	00
01100101	= 1	01

100	01101	=141
100	01110	=142
100	01111	=143
100	10000	=144
100	10001	=145
100	10010	=146
100	10011	=147
100	10100	=148
100	10101	=149
100	10110	=150
100	10111	=151
100	11000	=152

= 192 = 193 = 194 = 195 = 196
= 194 = 195
= 195
= 196
<u> 197</u>
= 198
= 199
= 200
= 201
= 202
= 203

8=R8 7=R7 6=R6 5=R5 4=R4	T TT TT
11110011	= 243
11110100	= 244
11110101	= 245
11110110	= 246
11110111	= 247
11111000	= 248
11111001	= 249
11111010	= 250
11111011	= 251
11111100	= 252
11111101	= 253
11111110	= 254
11111111	=255

	CHANNELS 7-0 or RELAYS 8-1								
	R8	R7	R6	R5	R4	R3	R2	R1	DMX - Relay
0=0FF - 1=0N	O or 1	O or 1	O or 1	O or 1	O or 1	O or 1	O or 1	O or 1	Binary Value
	С7	C6	C5	C4	С3	C2	C1	CO	Channel / Port
	128	64	32	16	8	4	2	1	Decimal Value
Channels / Ports Binary Action							Bina	ry Val	ue
0= Channel / Port / Relay OFF				0 = All Channels / Ports OFF					
1= Channel / Port / Relay ON					255 =	All Ch	annels	s / Ports ON	

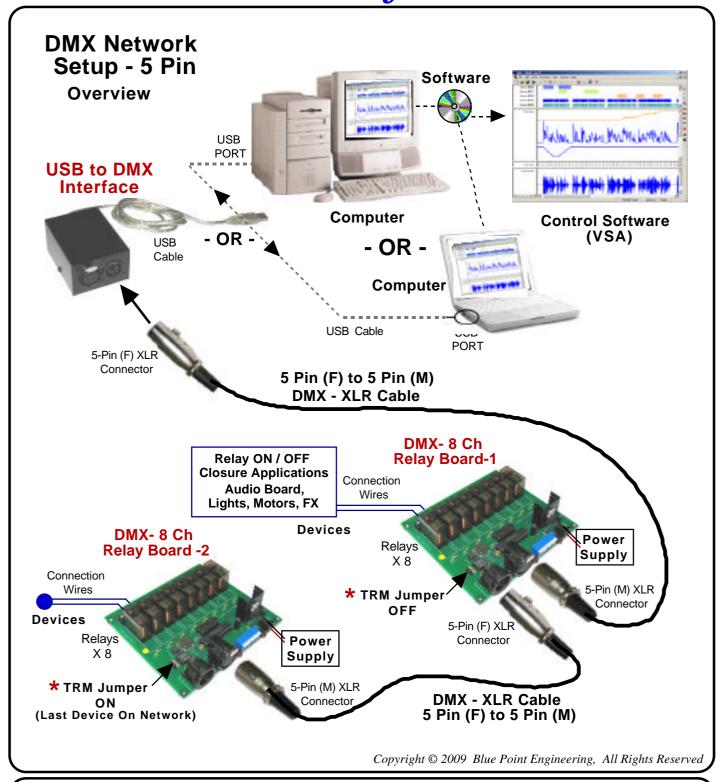


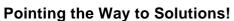
Relay No	Channel No	Decimal Value	Binary Value	Alpha Value
R-8	Ch7	128	0 or 1	Н
R-7	Ch6	64	0 or 1	G
R-6	Ch5	32	0 or 1	F
R-5	Ch4	16	0 or 1	Ε
R-4	Ch3	8	0 or 1	D
R-3	Ch2	4	0 or 1	С
R-2	Ch1	2	0 or 1	В
R-1	Ch0	1	0 or 1	Α





DMX 8-Channel Relay Board

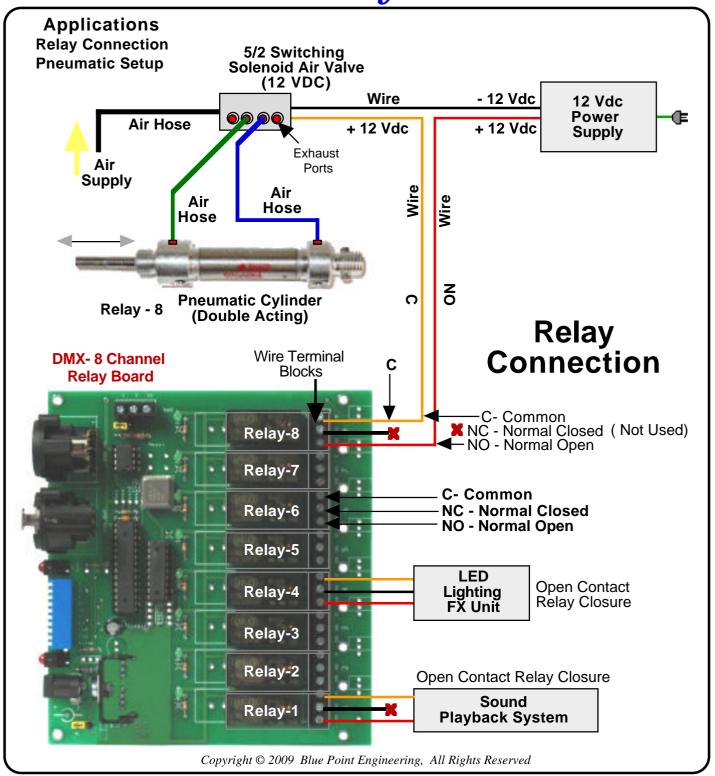






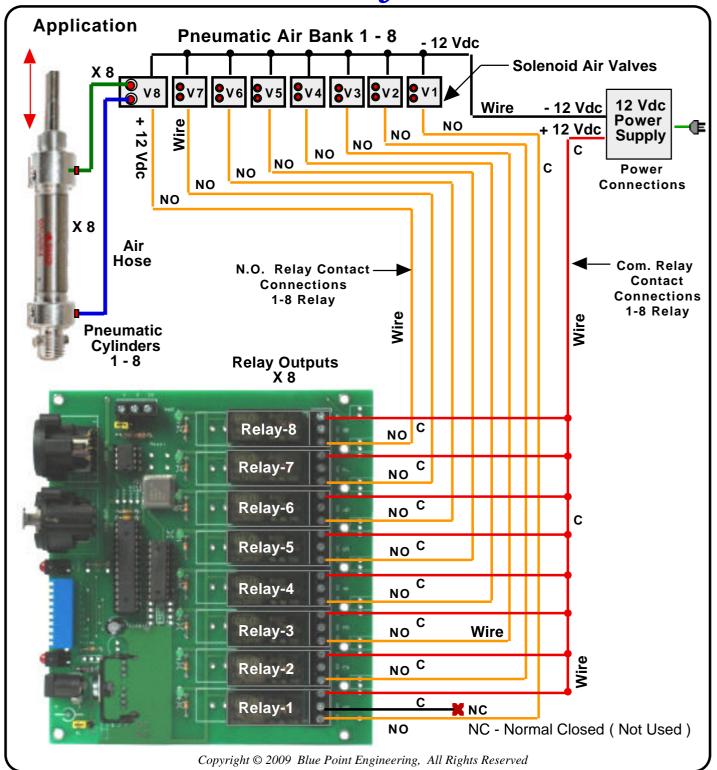


DMX 8-Channel Relay Board





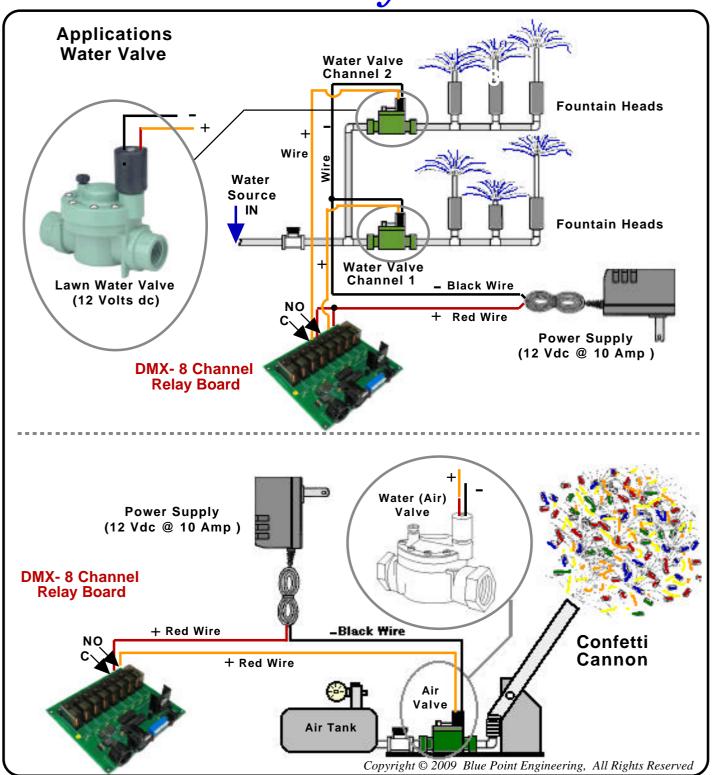
DMX 8-Channel Relay Board







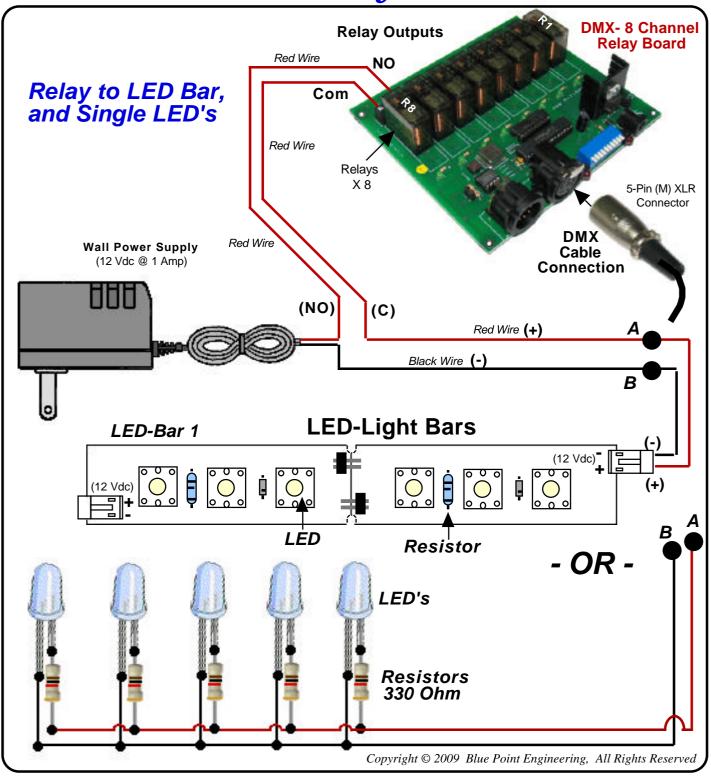
DMX 8-Channel Relay Board







DMX 8-Channel Relay Board







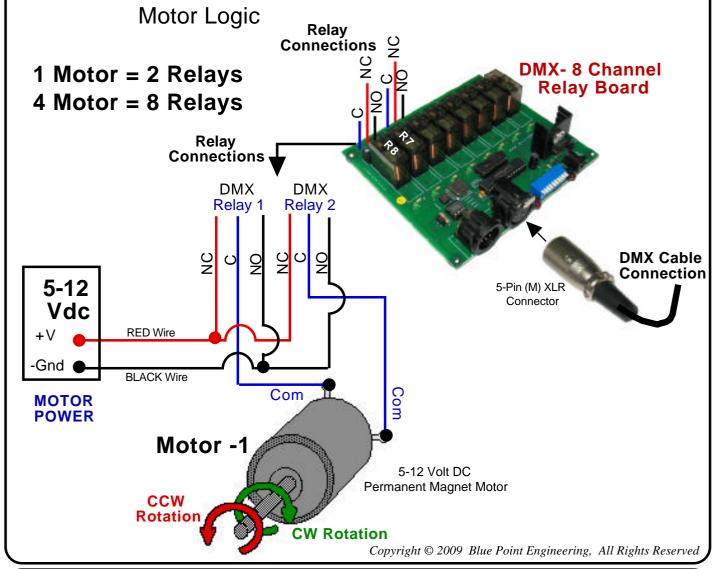
DMX 8-Channel Relay Board

DMX Relay / Switch Logic

	DMX Relay 1	DMX Relay 2	Motor Status
34 - 4	OFF	OFF	STOP
Motor No. 1	OFF	ON	CCW
	ON	OFF	CW
	ON	ON	STOP

Relay Motor Control

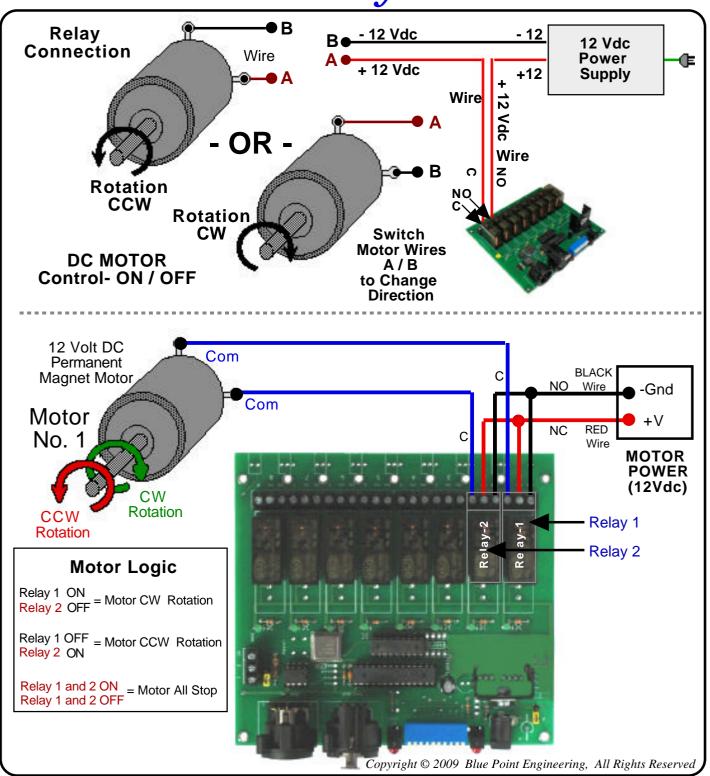
This design prevents the possibility of both relays from shorting back into the power supply when relays 1 and 2 are switched ON or OFF together at the same time.





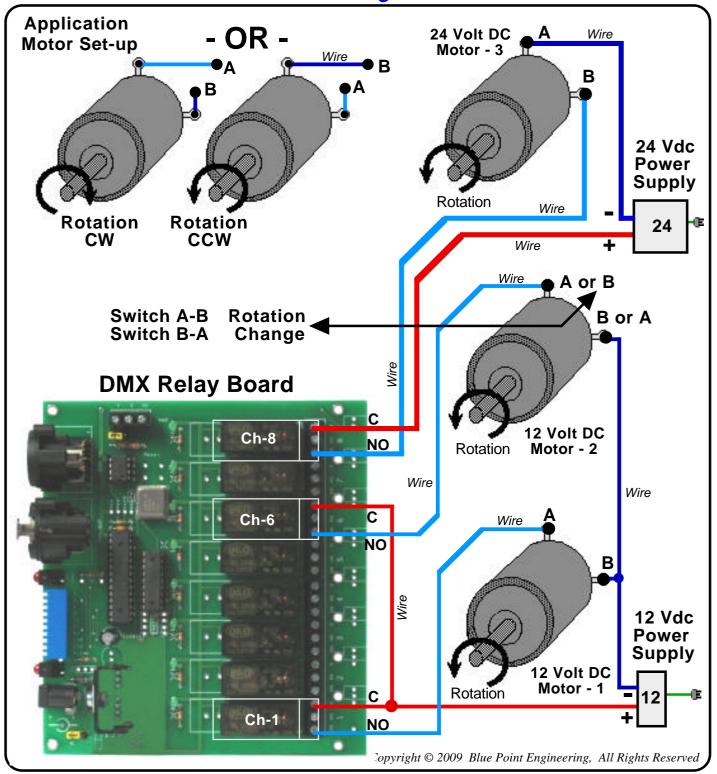


DMX 8-Channel Relay Board





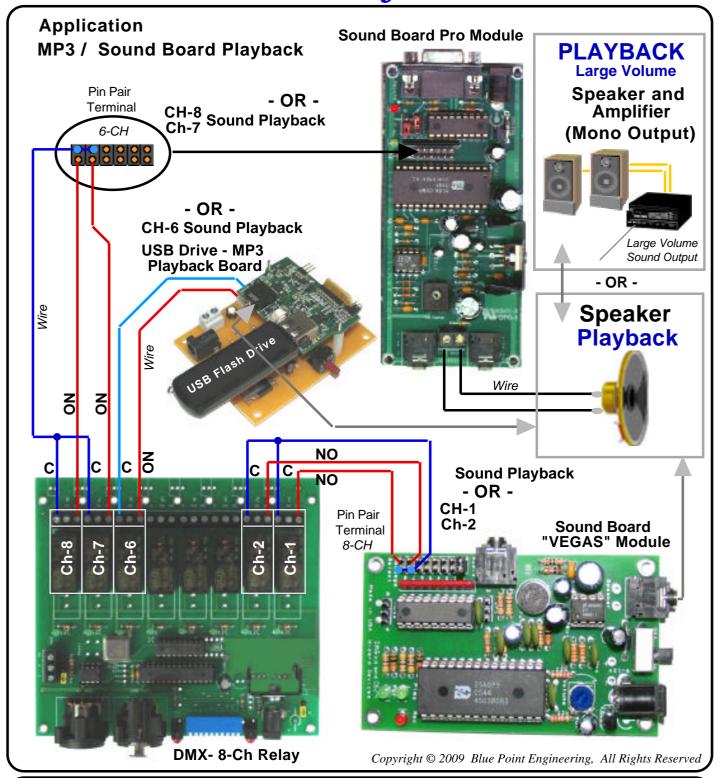
DMX 8-Channel Relay Board







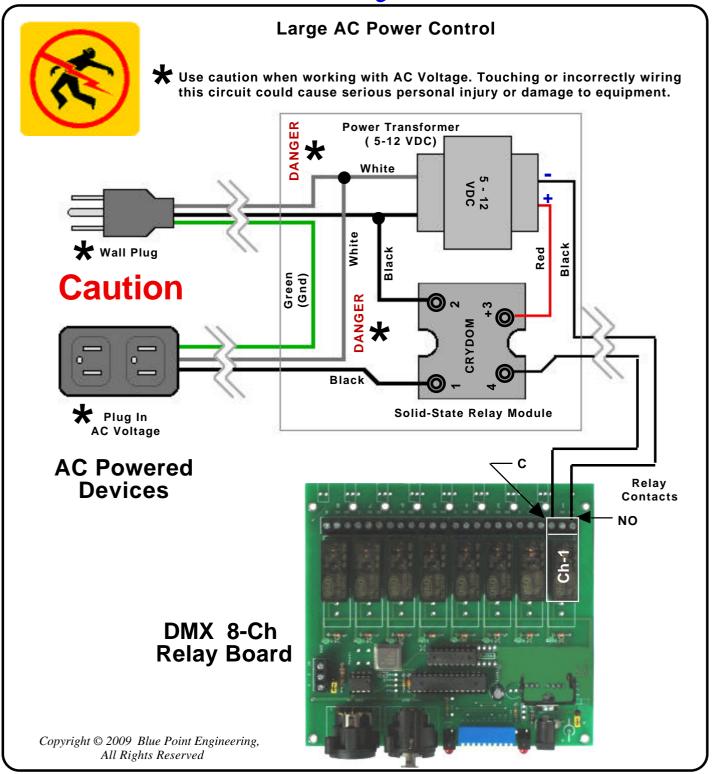
DMX 8-Channel Relay Board







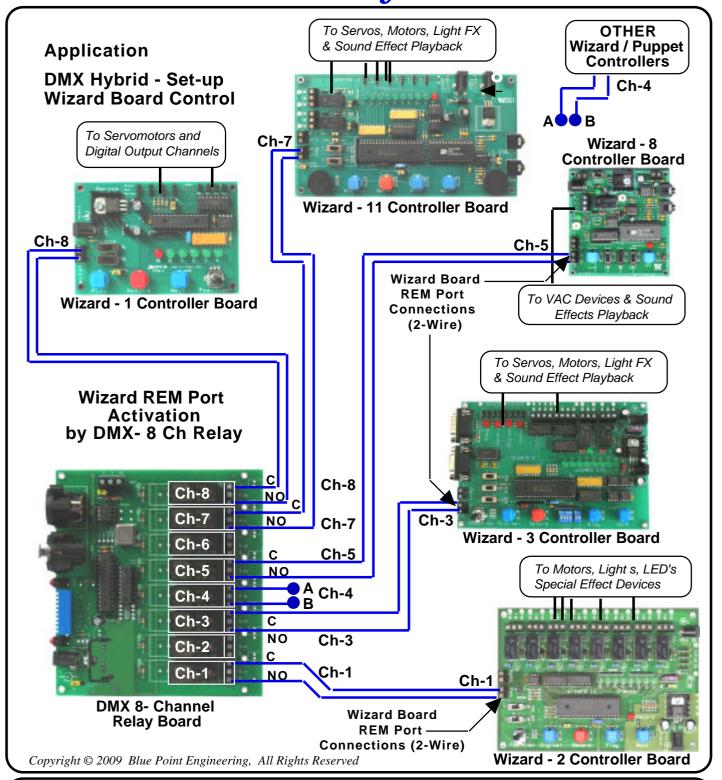
DMX 8-Channel Relay Board







DMX 8-Channel Relay Board







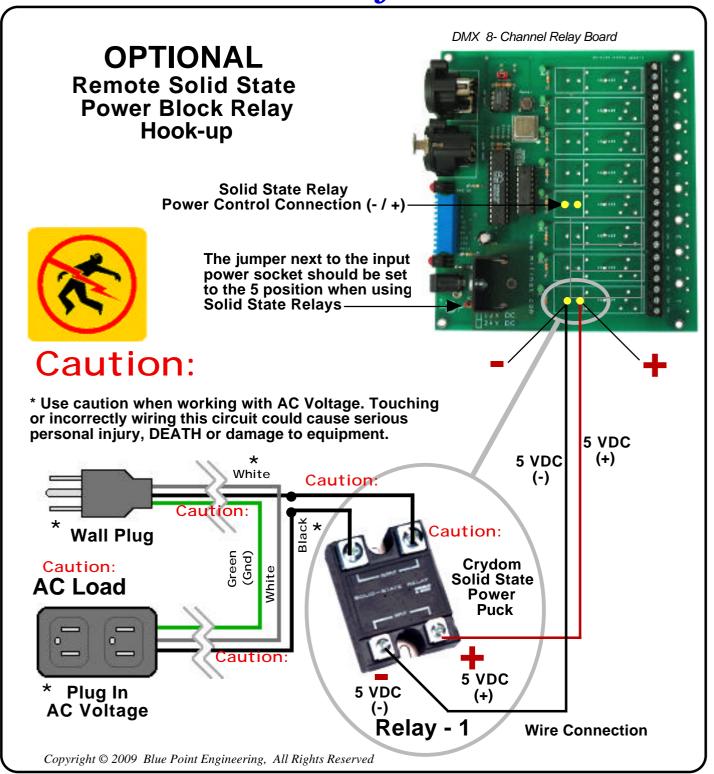
DMX 8-Channel Relay Board

MX RELAY BOARD NO: MX RELAY BOARD Application:			
TRM = (ON /OFF)			
1000	Addressing	Ou Ap	tput plication
Relay -8	Relay -8		
Relay -7	Relay -7		
Relay -6	Relay -6		
Relay -5	Relay -5		
Relay -4	Relay -4		
Relay -3	Relay -3		
Relay -2	Relay -2		
Relay -1	Relay -1		
	9 1	Value	O 1 OFF ON
Addressing Figure 4 8 7 8 9 7 8 9 7 8 9 7 8 9 8 9 8 9 8 9 8	IIIP SVV-Z		
	ON SW-4		
1 = Relay ON Switch Position (IJP / Down	— CIM E		
O = Relay ON (UP / Down	SW-8 SW-9		
	SW-10		
	Addressing	DMX	Position



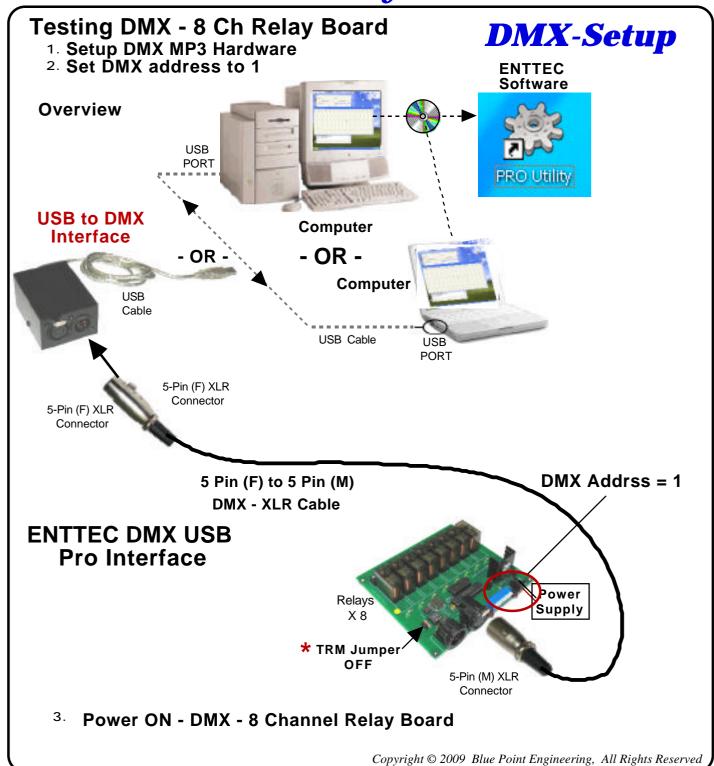


DMX 8-Channel Relay Board





DMX 8-Channel Relay Board







DMX 8-Channel Relay Board

ENTTEC DMX USB Pro Interface



Testing DMX - 8 Ch Relay Board

Launch Software Application (PRO Utility)

Launch

"PRO Utility" software

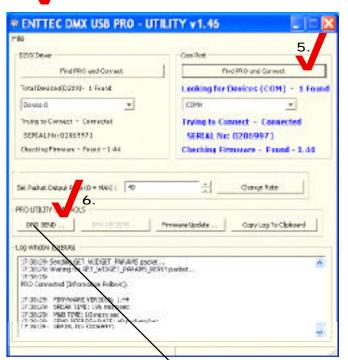
from the computer connected to the USB to DMX Interface

5.

Click on "Find PRO and Connect" Bar Button

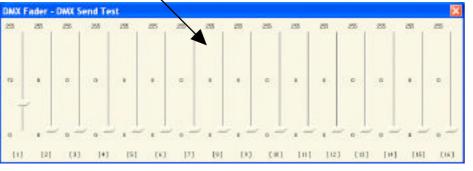
6.

Click on "DMX SEND..." bar button



ENTTEC DMX USBPro Interface

DMX Fader - DMX Send Test Control Panel

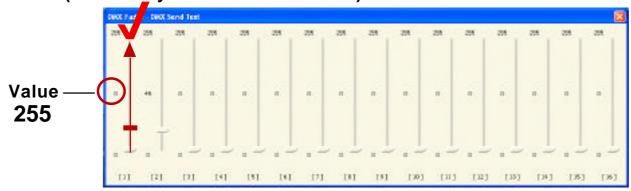




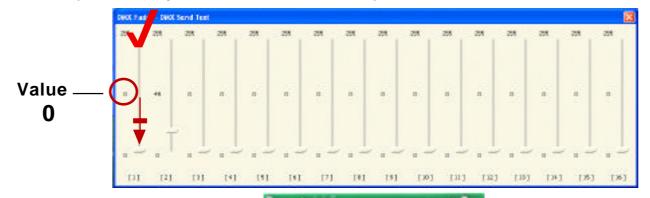
DMX 8-Channel Relay Board

Testing DMX - 8 Ch Relay Board

7. Slide Ch1 (1) Fader Up to Value 255 (DMX Relay Ch 1 should turn ON)



8. Slide Ch1 (1) Fader Down to Value 0 (DMX Relay Ch 1 should turn OFF)



(DMX Relay Ch 1)
Channel LED - On / Off

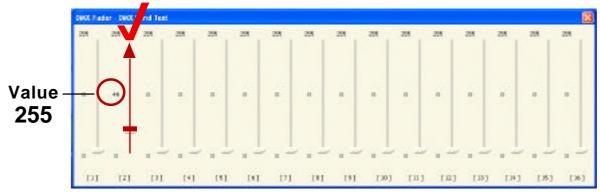
Relay - On / Off



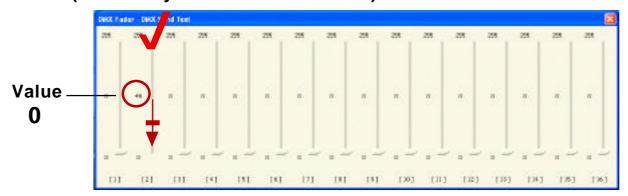
DMX 8-Channel Relay Board

Testing DMX - 8 Ch Relay Board

9. Slide Ch2 (2) Fader Up to Value 255 (DMX Relay Ch 2 should turn ON)



10. Slide Ch2 (2) Fader Down to Value 0 (DMX Relay Ch 2 should turn OFF)



11. Repeat Steps 9 to 10, for DMX Relays 3-8 (DMX Relay Channels should turn ON/OFF)

