

## DMX 4-Ch Video Switch Board

Version 1.1 -2010  
WD1557

### Overview

The DMX video switcher board will switch up to 4 composite video input signals to a single video output channel under user control.

The board requires a single DMX channel and is addressable in the range 1 to 512.

Board Requires 9 VDC @ 0.5 Amp Supply.

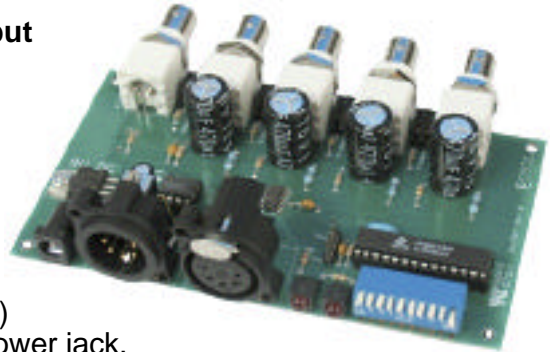
### Setup

#### Connection:

5 Pin XLR Connectors ( M / F - IN and Pass Through Out)

Power Supply: +9V DC via 2.1mm connector (center+) power jack.

BNC Video Connectors (4-IN and 1-OUT)



#### Video Connections:

Inputs: 4 x BNC 75 ohm ac coupled inputs. Standard composite signal levels either PAL or NTSC. Indicator LED by each input to show the live feed input. Output: 1 x BNC output

#### DMX Fault LED:

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 4-Ch DMX Video Switch board.

#### Address Selection:

The board base address may be set between 1 and 512 using the onboard DIP 9 switches on any standard DMX512 networks.

*The DMX Video Switch Board uses a 10 Position DIP switch block. Use caution when setting the addressing as the Switch Numbers do not relate to the standard DMX 512 value chart. Use actual Switch Value to calculate addressing.*

#### Power Supply:

Power Supply: +9V DC via 2.1mm connector (center+) power jack.

Power LED- **ON** when power is applied.

#### Settings - (See Pages on Control / Addressing for more details)

Set the start base address of the 4-Channel Video Switch Board as follows:

Select a valid DMX number for output channel-1 ( address range 1 to 512). Look up the DMX switch settings for the selected value from the DMX addressing chart and then move the onboard DIP switches to the correct matching position (On / Off) for the selected DMX value.

Example: DIP switch (6)=16 and DIP switch (5)=32 set to **ON** position, the start base address is now 48 for the board, (Add the value of the address DIP switches set to the **ON** position to calculate the start base address), this value is used to determine the address of the DMX Video Switch controller board.

#### Control Syntax: Channel-1 Control

DMX values **0 to 63** will switch video input Ch-1 to the video output channel.

DMX values **64 to 127** will switch video input Ch-2 to the video output channel.

DMX values **128 to 191** will switch video input Ch-3 to the video output channel.

DMX values **192 to 255** will switch video input Ch-4 to the video output channel.

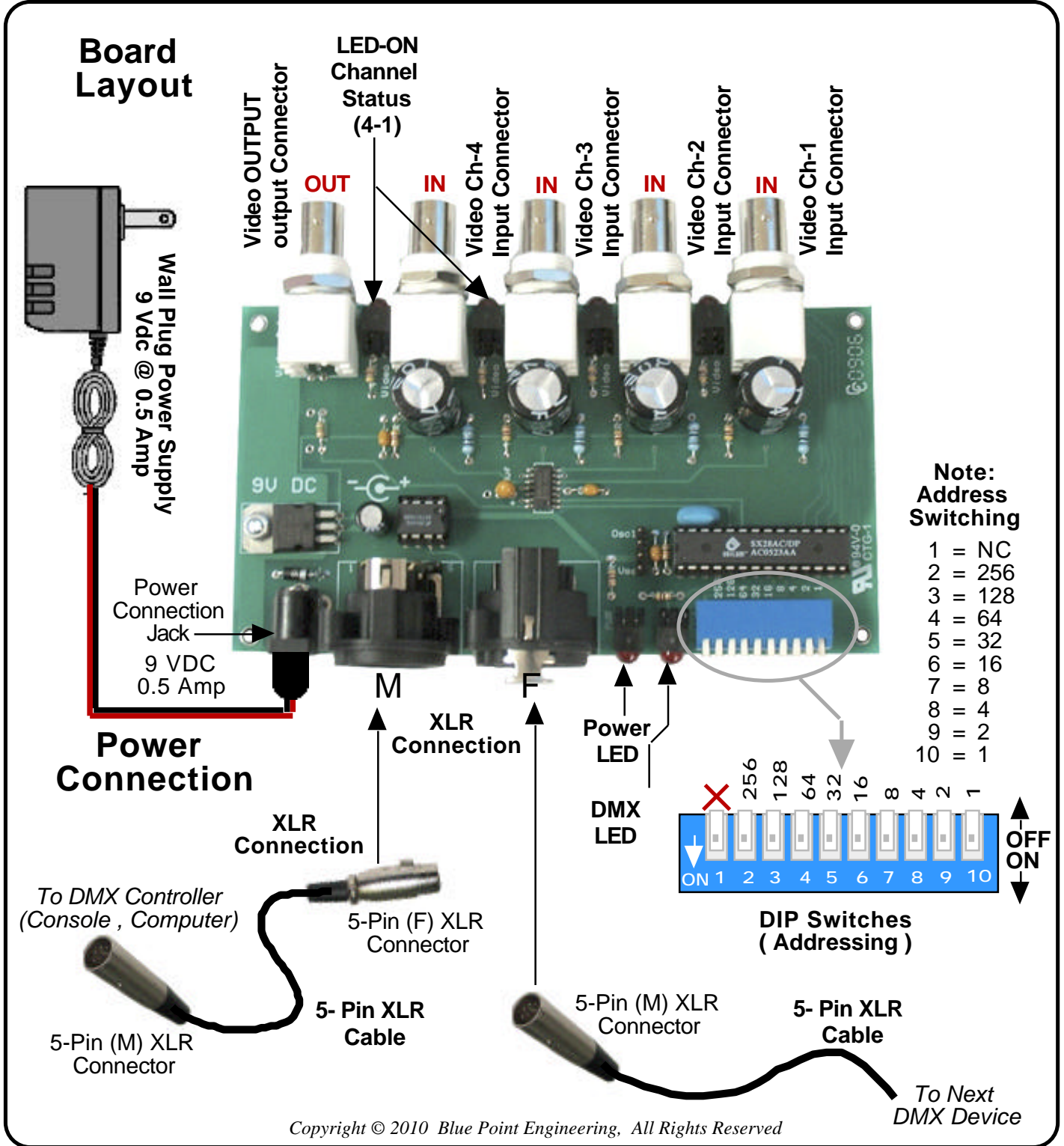
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## DMX 4-Ch Video Switch Board

### DMX Network Setup - 5 Pin Overview

#### USB to DMX Interface



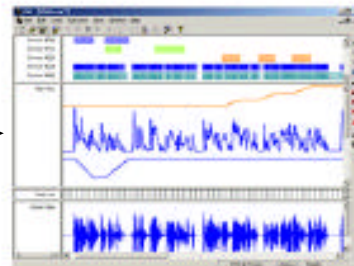
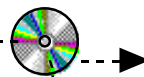
USB Cable

USB PORT

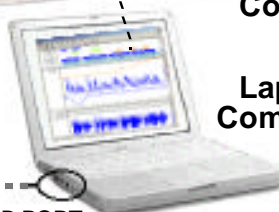


Computer

Software



Control Software (VSA)



Laptop Computer

USB Cable

USB PORT

- OR -

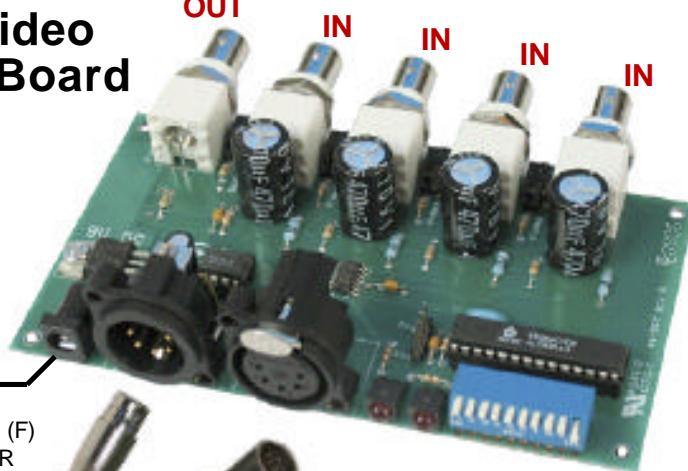
DMX Control Console



5-Pin (M) XLR Connector

- VIDEO -

### DMX Video Switch Board



9 VDC Power Supply

OUT

IN

IN

IN

IN

DMX - XLR Cables

5-Pin (F) XLR Connector

### DMX Network Connection

5-Pin (M) XLR Connector

DMX - XLR Cables

5-Pin (F) XLR Connector

To Next DMX Device

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## DMX 4-Ch Video Switch Board

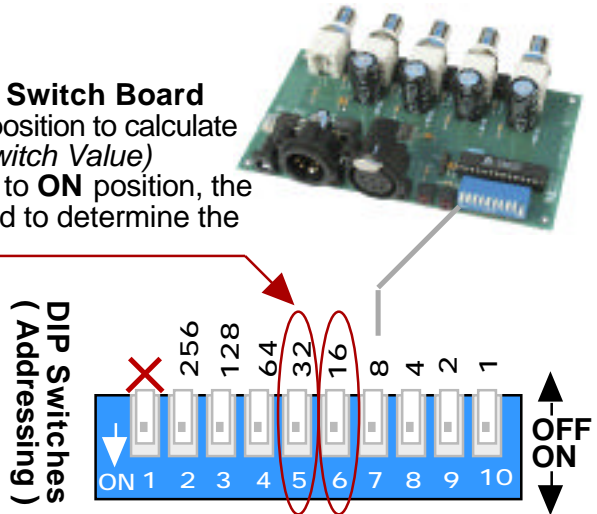
### Board Address DMX - Values

#### Setting the base address of the Channel-1 on Video Switch Board

Add the value of the address DIP switches set to the **ON** position to calculate the base address. (Note: Observe Switch position and Switch Value)

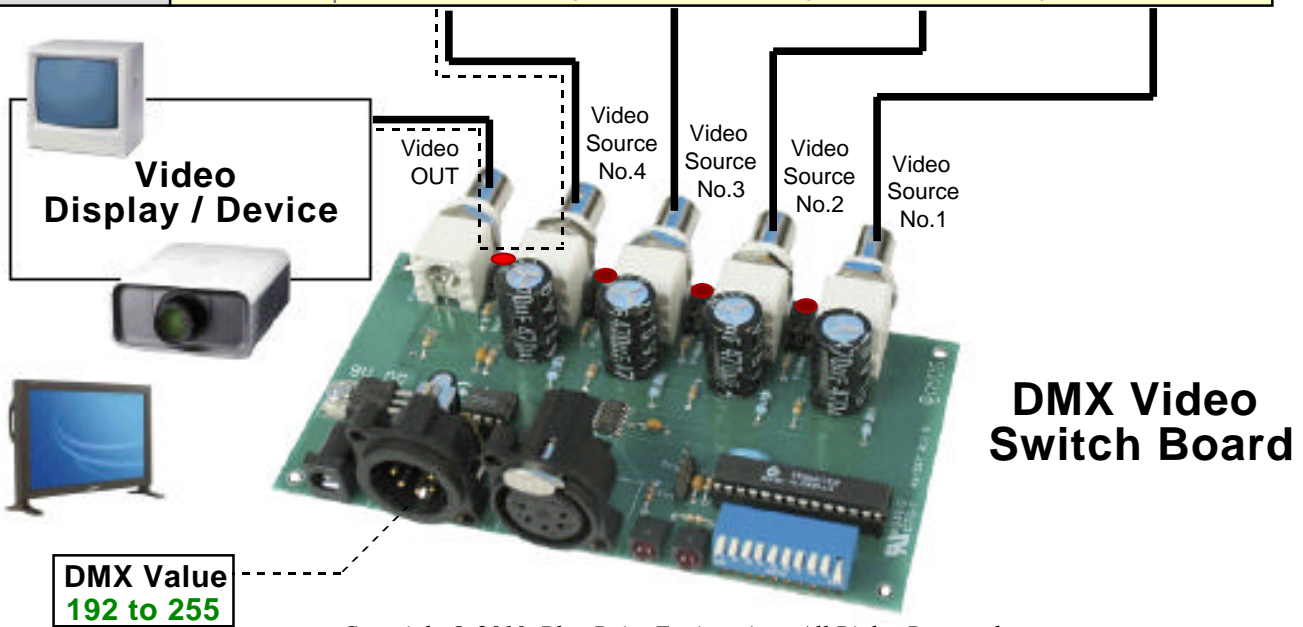
**Example:** DIP switches 6-(value 16) and 5-(value 32) set to **ON** position, the board base address is now 48, (16+32) this setting is used to determine the address of DMX Video Switch Board.

**NOTE:** The DMX Video Switch Board uses a 10 Position DIP switch block. Use caution when setting the addressing as the Switch Numbers do not relate to the standard DMX 512 value chart. Use actual Switch Value to calculate addressing.



**Example: Video Channel Switch**

DMX 4- Channel Video Switch Board					
DMX Channel-1	Video Input	Channel 4	Channel 3	Channel 2	Channel 1
					
	Value	192 to 255	128 to 191	64 to 127	0 to 63



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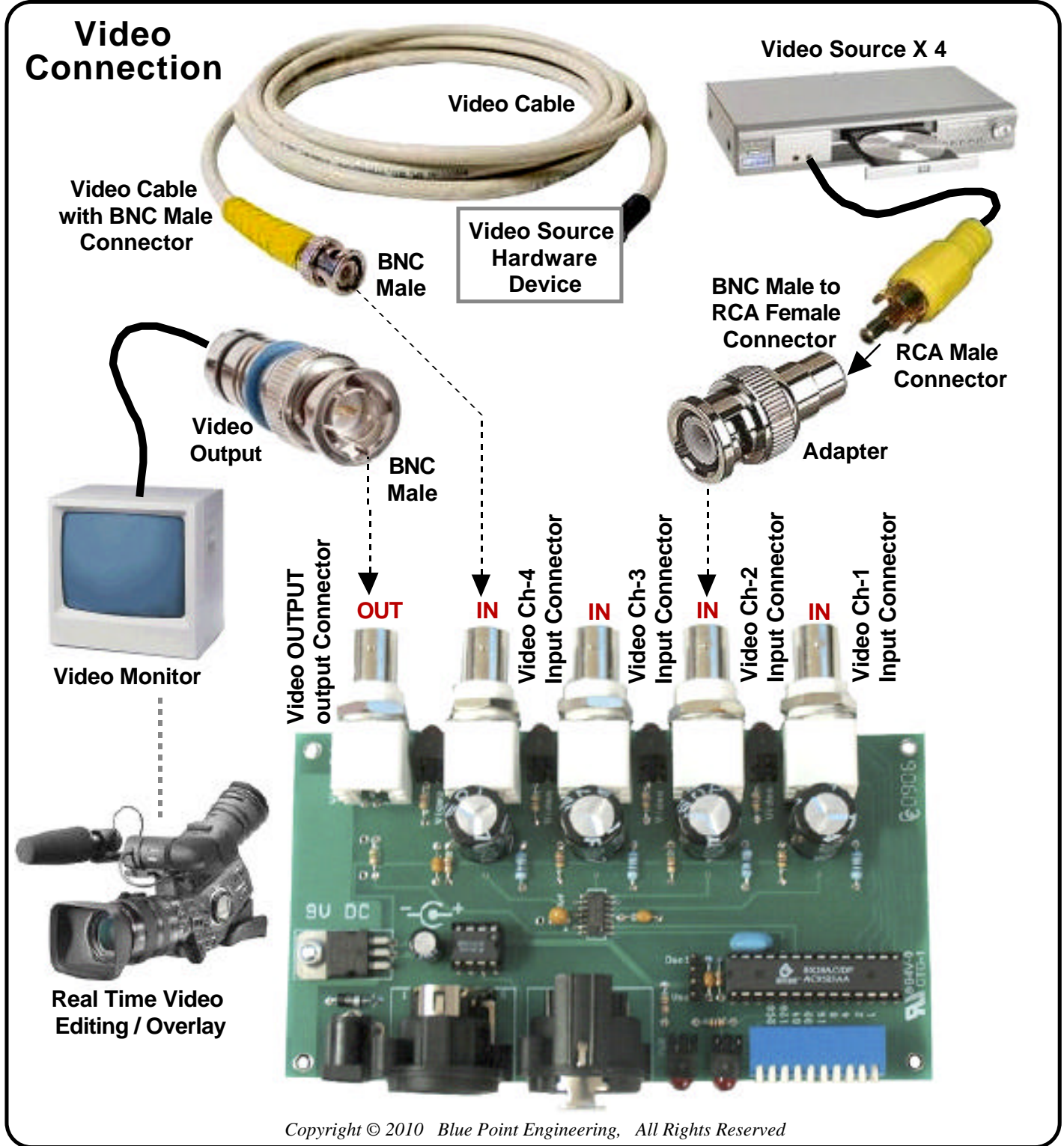
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## DMX 4-Ch Video Switch Board

### Video Connection

Application Example



Monitor / TV / Video Wall

- OR -



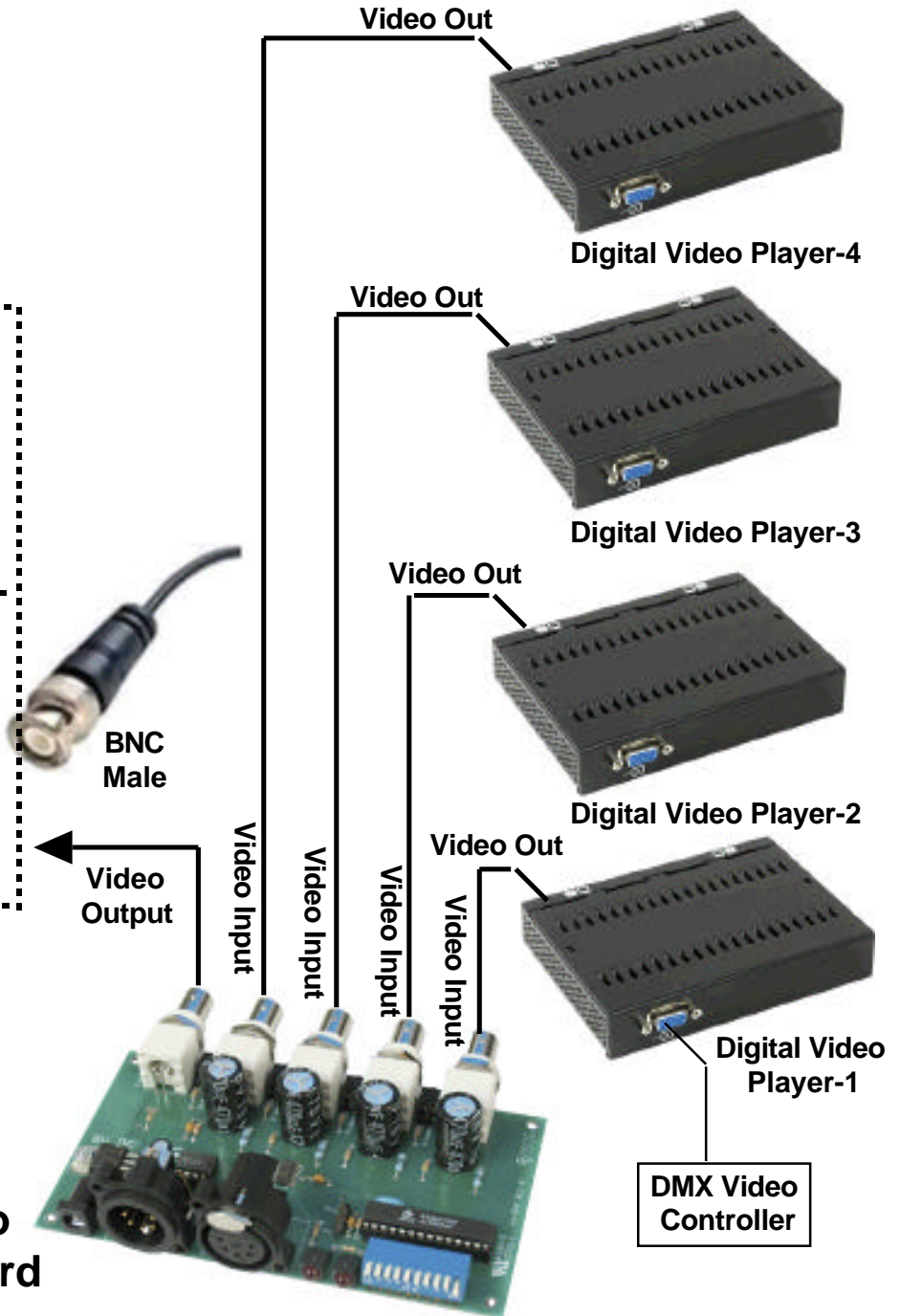
Projector / Screen

- OR -



Video Processor  
Editor / Playback

### DMX Video Switch Board



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## DMX 4-Ch Video Switch Board

### Video Connection

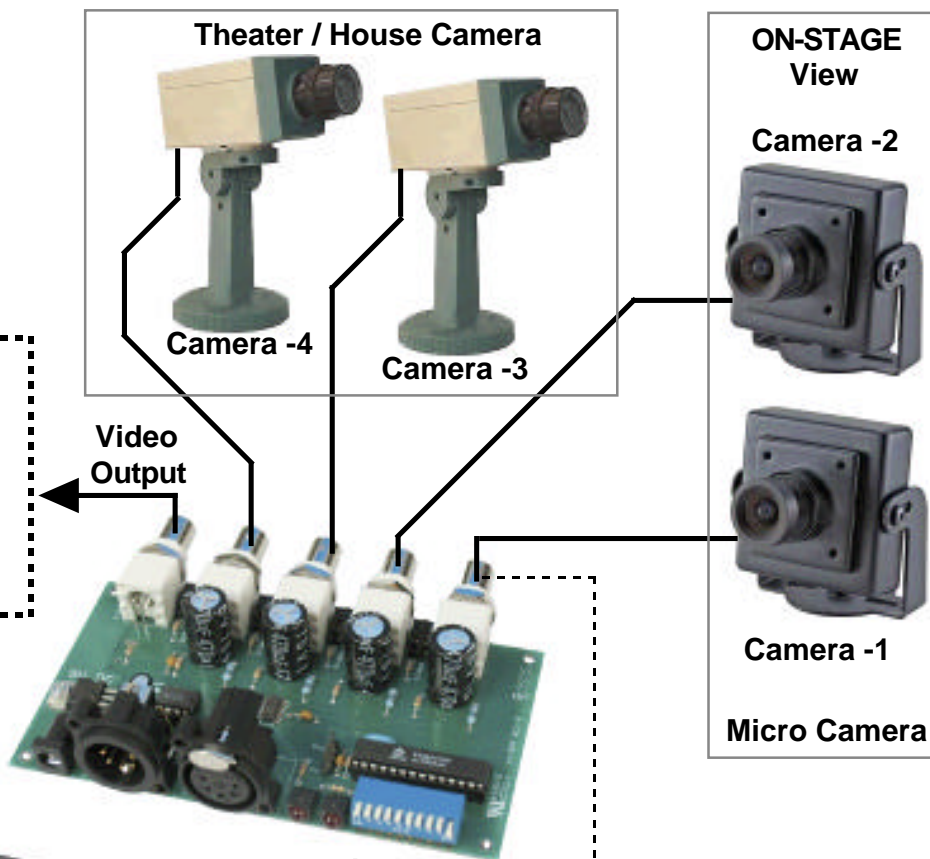
Application Example



- OR -



Monitor



Video Cable

BNC Male

RCA Male Connector To Camera Female Connector



Adapter

BNC Male to RCA Female Connector

RCA Male Connector

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## DMX 4-Ch Video Switch Board

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### Video Adapters



**BNC Male to  
RCA Female  
Connector**



**Wire  
Twisted Pair  
Adapter**



**RCA Male and  
Video Cable**



**BNC Male to  
Video Cable**



**BNC Male to  
Coaxial Cable**



**BMC Male to  
RCA Male**



**BMC Female  
to RCA Male**



**BNC Adapter  
2- Male Connector**



**BNC Adapter  
2- Female Connector**



**BNC Straight "TEE"  
2-Female and 1 Male  
Connector**



**BNC "TEE"  
2-Female and 1  
Male Connector**



**BNC "TEE"  
3-Female  
Connectors**



**Video  
Cable**



**BNC KIT  
(User Assemble)**

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## DMX 4-Ch Video Switch Board



Twist and Lock  
BNC - Male Connector

Coaxial Video Cable

Optional Cable / Connector Cover (Shrink Tube)

Plastic Jacket

Foil Shield

Braided Wire Shield

Plastic Insulation

Center Connector

Crimp Barrel

Center Pin

BNC - Male Connector

Crimp Barrel

Center Pin

BNC - Male Connector

(Shrink Tube)

Crimp Barrel

Optional Cable Cover (Shrink Tube)

BNC - Male Connector

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## DMX 4-Ch Video Switch Board

DMX 4-Ch Video Switch Board NO: \_\_\_\_\_

DMX 4-Ch Video Switch Board Application: \_\_\_\_\_

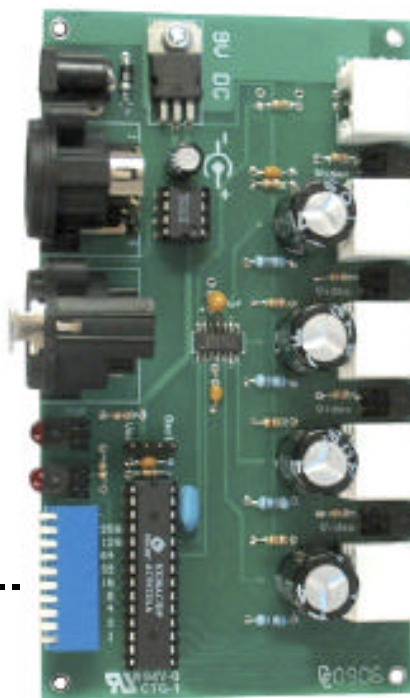
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**Addressing**

**Application**

VIDEO  
OUTPUT \_\_\_\_\_

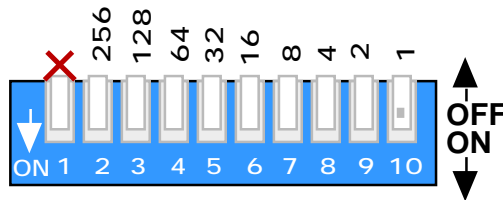
Ch -4  
INPUT \_\_\_\_\_

Ch -3  
INPUT \_\_\_\_\_

Ch 2  
INPUT \_\_\_\_\_

Ch -1  
INPUT \_\_\_\_\_

**Addressing**



DIP Switches  
( Addressing )

	0	1
Value	OFF	ON
SW-2	_____	_____
SW-3	_____	_____
SW-4	_____	_____
SW-5	_____	_____
SW-6	_____	_____
SW-7	_____	_____
SW-8	_____	_____
SW-9	_____	_____
SW-10	_____	_____

**BASE  
Addressing**

DMX	Position
_____	_____

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# DMX 512 Address Chart

Chart A - US  
Standard DMX 512

**Ch - Switches**

1 = 1  
2 = 2  
3 = 1, 2  
4 = 3  
5 = 1, 3  
6 = 2, 3  
7 = 1, 2, 3  
8 = 4  
9 = 1, 4  
10 = 2, 4  
11 = 1, 2, 4  
12 = 3, 4  
13 = 1, 3, 4  
14 = 2, 3, 4  
15 = 1, 2, 3, 4  
16 = 5  
17 = 1, 5  
18 = 2, 5  
19 = 1, 2, 5  
20 = 3, 5  
21 = 1, 3, 5  
22 = 2, 3, 5  
23 = 1, 2, 3, 5  
24 = 4, 5  
25 = 1, 4, 5  
26 = 2, 4, 5  
27 = 1, 2, 4, 5  
28 = 3, 4, 5  
29 = 1, 3, 4, 5  
30 = 2, 3, 4, 5  
31 = 1, 2, 3, 4, 5  
32 = 6  
33 = 1, 6  
34 = 2, 6  
35 = 1, 2, 6  
36 = 3, 6  
37 = 1, 3, 6  
38 = 2, 3, 6  
39 = 1, 2, 3, 6  
40 = 4, 6  
41 = 1, 4, 6  
42 = 2, 4, 6  
43 = 1, 2, 4, 6  
44 = 3, 4, 6  
45 = 1, 3, 4, 6  
46 = 2, 3, 4, 6  
47 = 1, 2, 3, 4, 6  
48 = 5, 6  
49 = 1, 5, 6  
50 = 2, 5, 6  
51 = 1, 2, 5, 6  
52 = 3, 5, 6

**Ch - Switches**

53 = 1, 3, 5, 6  
54 = 2, 3, 5, 6  
55 = 1, 2, 3, 5, 6  
56 = 4, 5, 6  
57 = 1, 4, 5, 6  
58 = 2, 4, 5, 6  
59 = 1, 2, 4, 5, 6  
60 = 3, 4, 5, 6  
61 = 1, 3, 4, 5, 6  
62 = 2, 3, 4, 5, 6  
63 = 1, 2, 3, 4, 5, 6  
64 = 7  
65 = 1, 7  
66 = 2, 7  
67 = 1, 2, 7  
68 = 3, 7  
69 = 1, 3, 7  
70 = 2, 3, 7  
71 = 1, 2, 3, 7  
72 = 4, 7  
73 = 1, 4, 7  
74 = 2, 4, 7  
75 = 1, 2, 4, 7  
76 = 3, 4, 7  
77 = 1, 3, 4, 7  
78 = 2, 3, 4, 7  
79 = 1, 3, 4, 7  
80 = 5, 7  
81 = 1, 5, 7  
82 = 2, 5, 7  
83 = 1, 2, 5, 7  
84 = 3, 5, 7  
85 = 1, 3, 5, 7  
86 = 2, 3, 5, 7  
87 = 1, 2, 3, 5, 7  
88 = 4, 5, 7  
89 = 1, 4, 5, 7  
90 = 2, 4, 5, 7  
91 = 1, 2, 4, 5, 7  
92 = 3, 4, 5, 7  
93 = 1, 3, 4, 5, 7  
94 = 2, 3, 4, 5, 7  
95 = 1, 2, 3, 4, 5, 7  
96 = 6, 7  
97 = 1, 6, 7  
98 = 2, 6, 7  
99 = 1, 2, 6, 7  
100 = 3, 6, 7  
101 = 1, 3, 6, 7  
102 = 2, 3, 6, 7  
103 = 1, 2, 3, 6, 7  
104 = 4, 6, 7

**Ch - Switches**

105 = 1, 4, 6, 7  
106 = 2, 4, 6, 7  
107 = 1, 2, 4, 6, 7  
108 = 3, 4, 6, 7  
109 = 1, 3, 4, 6, 7  
110 = 2, 3, 4, 6, 7  
111 = 1, 2, 3, 4, 6, 7  
112 = 5, 6, 7  
113 = 1, 5, 6, 7  
114 = 2, 5, 6, 7  
115 = 1, 2, 5, 6, 7  
116 = 3, 5, 6, 7  
117 = 1, 3, 5, 6, 7  
118 = 2, 3, 5, 6, 7  
119 = 1, 2, 3, 5, 6, 7  
120 = 4, 5, 6, 7  
121 = 1, 4, 5, 6, 7  
122 = 2, 4, 5, 6, 7  
123 = 1, 2, 4, 5, 6, 7  
124 = 3, 4, 5, 6, 7  
125 = 1, 3, 4, 5, 6, 7  
126 = 2, 3, 4, 5, 6, 7  
127 = 1, 2, 3, 4, 5, 6, 7  
128 = 8  
129 = 1, 8  
130 = 2, 8  
131 = 1, 2, 8  
132 = 3, 8  
133 = 1, 3, 8  
134 = 2, 3, 8  
135 = 1, 2, 3, 8  
136 = 4, 8  
137 = 1, 4, 8  
138 = 2, 4, 8  
139 = 1, 2, 4, 8  
140 = 3, 4, 8  
141 = 1, 3, 4, 8  
142 = 2, 3, 4, 8  
143 = 1, 2, 3, 4, 8  
144 = 5, 8  
145 = 1, 5, 8  
146 = 2, 5, 8  
147 = 1, 2, 5, 8  
148 = 3, 5, 8  
149 = 1, 3, 5, 8  
150 = 2, 3, 5, 8  
151 = 1, 2, 3, 5, 8  
152 = 4, 5, 8  
153 = 1, 4, 5, 8  
154 = 2, 4, 5, 8  
155 = 1, 2, 4, 5, 8  
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, 8  
192 = 7, 8  
193 = 1, 7, 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

**Ch - Switches**

209 = 1, 5, 7, 8  
210 = 2, 5, 7, 8  
211 = 1, 2, 5, 7, 8  
212 = 3, 5, 7, 8  
213 = 1, 3, 5, 7, 8  
214 = 2, 3, 5, 7, 8  
215 = 1, 2, 3, 5, 7, 8  
216 = 4, 5, 7, 8  
217 = 1, 4, 5, 7, 8  
218 = 2, 4, 5, 7, 8  
219 = 1, 2, 4, 5, 7, 8  
220 = 3, 4, 5, 7, 8  
221 = 1, 3, 4, 5, 7, 8  
222 = 2, 3, 4, 5, 7, 8  
223 = 1, 2, 3, 4, 5, 7, 8  
224 = 6, 7, 8  
225 = 1, 6, 7, 8  
226 = 2, 6, 7, 8  
227 = 1, 2, 6, 7, 8  
228 = 3, 6, 7, 8  
229 = 1, 3, 6, 7, 8  
230 = 2, 3, 6, 7, 8  
231 = 1, 2, 3, 6, 7, 8  
232 = 4, 6, 7, 8  
233 = 1, 4, 6, 7, 8  
234 = 2, 4, 6, 7, 8  
235 = 1, 2, 4, 6, 7, 8  
236 = 3, 4, 6, 7, 8  
237 = 1, 3, 4, 6, 7, 8  
238 = 2, 3, 4, 6, 7, 8  
239 = 1, 2, 3, 4, 6, 7, 8  
240 = 5, 6, 7, 8  
241 = 1, 5, 6, 7, 8  
242 = 2, 5, 6, 7, 8  
243 = 1, 2, 5, 6, 7, 8  
244 = 3, 5, 6, 7, 8  
245 = 1, 3, 5, 6, 7, 8  
246 = 2, 3, 5, 6, 7, 8  
247 = 1, 2, 3, 5, 6, 7, 8  
248 = 4, 5, 6, 7, 8  
249 = 1, 4, 5, 6, 7, 8  
250 = 2, 4, 5, 6, 7, 8  
251 = 1, 2, 4, 5, 6, 7, 8  
252 = 3, 4, 5, 6, 7, 8  
253 = 1, 3, 4, 5, 6, 7, 8  
254 = 2, 3, 4, 5, 6, 7, 8  
255 = 1, 2, 3, 4, 5, 6, 7, 8  
256 = 9  
257 = 1, 9  
258 = 2, 9  
259 = 1, 2, 9  
260 = 3, 9

# DMX 512 Address Chart Cont.

Ch - Switches	Ch - Switches	Ch - Switches	Ch - Switches	Ch - Switches
261 = 1, 3, 9	322 = 2, 7, 9	383 = 1, 2, 3, 4, 5, 6, 7, 9	444 = 3, 4, 5, 6, 8, 9	505 = 1, 4, 5, 6, 7, 8, 9
262 = 2, 3, 9	323 = 1, 2, 7, 9	384 = 8, 9	445 = 1, 3, 4, 5, 6, 8, 9	506 = 2, 4, 5, 6, 7, 8, 9
263 = 1, 2, 3, 9	324 = 3, 7, 9	385 = 1, 8, 9	446 = 2, 3, 4, 5, 6, 8, 9	507 = 1, 2, 4, 5, 6, 7, 8, 9
264 = 4, 9	325 = 1, 3, 7, 9	386 = 2, 8, 9	447 = 1, 2, 3, 4, 5, 6, 8, 9	508 = 3, 4, 5, 6, 7, 8, 9
265 = 1, 4, 9	326 = 2, 3, 7, 9	387 = 1, 2, 8, 9	448 = 7, 8, 9	509 = 1, 3, 4, 5, 6, 7, 8, 9
266 = 2, 4, 9	327 = 1, 2, 3, 7, 9	388 = 3, 8, 9	449 = 1, 7, 8, 9	510 = 2, 3, 4, 5, 6, 7, 8, 9
267 = 1, 2, 4, 9	328 = 4, 7, 9	389 = 1, 3, 8, 9	450 = 2, 7, 8, 9	511 = 1, 2, 3, 4, 5, 6, 7, 8, 9
268 = 3, 4, 9	329 = 1, 4, 7, 9	390 = 2, 3, 8, 9	451 = 1, 2, 7, 8, 9	
269 = 1, 3, 4, 9	330 = 2, 4, 7, 9	391 = 1, 2, 3, 8, 9	452 = 3, 7, 8, 9	
270 = 2, 3, 4, 9	331 = 1, 2, 4, 7, 9	392 = 4, 8, 9	453 = 1, 3, 7, 8, 9	
271 = 1, 2, 3, 4, 9	332 = 3, 4, 7, 9	393 = 1, 4, 8, 9	454 = 2, 3, 7, 8, 9	
272 = 5, 9	333 = 1, 3, 4, 7, 9	394 = 2, 4, 8, 9	455 = 1, 2, 3, 7, 8, 9	
273 = 1, 5, 9	334 = 2, 3, 4, 7, 9	395 = 1, 2, 4, 8, 9	456 = 4, 7, 8, 9	
274 = 2, 5, 9	335 = 1, 2, 3, 4, 7, 9	396 = 3, 4, 8, 9	457 = 1, 4, 7, 8, 9	
275 = 1, 2, 5, 9	336 = 5, 7, 9	397 = 1, 3, 4, 8, 9	458 = 2, 4, 7, 8, 9	
276 = 3, 5, 9	337 = 1, 5, 7, 9	398 = 2, 3, 4, 8, 9	459 = 1, 2, 4, 7, 8, 9	
277 = 1, 3, 5, 9	338 = 2, 5, 7, 9	399 = 1, 2, 3, 4, 8, 9	460 = 3, 4, 7, 8, 9	
278 = 2, 3, 5, 9	339 = 1, 2, 5, 7, 9	400 = 5, 8, 9	461 = 1, 3, 4, 7, 8, 9	
279 = 1, 2, 3, 5, 9	340 = 3, 5, 7, 9	401 = 1, 5, 8, 9	462 = 2, 3, 4, 7, 8, 9	
280 = 4, 5, 9	341 = 1, 3, 5, 7, 9	402 = 2, 5, 8, 9	463 = 1, 2, 3, 4, 7, 8, 9	
281 = 1, 4, 5, 9	342 = 2, 3, 5, 7, 9	403 = 1, 2, 5, 8, 9	464 = 5, 7, 8, 9	
282 = 2, 4, 5, 9	343 = 1, 2, 3, 5, 7, 9	404 = 3, 5, 8, 9	465 = 1, 5, 7, 8, 9	
283 = 1, 2, 4, 5, 9	344 = 4, 5, 7, 9	405 = 1, 3, 5, 8, 9	466 = 2, 5, 7, 8, 9	
284 = 3, 4, 5, 9	345 = 1, 4, 5, 7, 9	406 = 2, 3, 5, 8, 9	467 = 1, 2, 5, 7, 8, 9	
285 = 1, 3, 4, 5, 9	346 = 2, 4, 5, 7, 9	407 = 1, 2, 3, 5, 8, 9	468 = 3, 5, 7, 8, 9	
286 = 2, 3, 4, 5, 9	347 = 1, 2, 4, 5, 7, 9	408 = 4, 5, 8, 9	469 = 1, 3, 5, 7, 8, 9	
287 = 1, 2, 3, 4, 5, 9	348 = 3, 4, 5, 7, 9	409 = 1, 4, 5, 8, 9	470 = 2, 3, 5, 7, 8, 9	
288 = 6, 9	349 = 1, 3, 4, 5, 7, 9	410 = 2, 4, 5, 8, 9	471 = 1, 2, 3, 5, 7, 8, 9	
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295 = 1, 2, 3, 6, 9	356 = 3, 6, 7, 9	417 = 1, 6, 8, 9	478 = 2, 3, 4, 5, 7, 8, 9	
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307 = 1, 2, 5, 6, 9	368 = 5, 6, 7, 9	429 = 1, 3, 4, 6, 8, 9	490 = 2, 4, 6, 7, 8, 9	
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312 = 4, 5, 6, 9	373 = 1, 3, 5, 6, 7, 9	434 = 2, 5, 6, 8, 9	495 = 1, 2, 3, 4, 6, 7, 8, 9	
313 = 1, 4, 5, 6, 9	374 = 2, 3, 5, 6, 7, 9	435 = 1, 2, 5, 6, 8, 9	496 = 5, 6, 7, 8, 9	
314 = 2, 4, 5, 6, 9	375 = 1, 2, 3, 5, 6, 7, 9	436 = 3, 5, 6, 8, 9	497 = 1, 5, 6, 7, 8, 9	
315 = 1, 2, 4, 5, 6, 9	376 = 4, 5, 6, 7, 9	437 = 1, 3, 5, 6, 8, 9	498 = 2, 5, 6, 7, 8, 9	
316 = 3, 4, 5, 6, 9	377 = 1, 4, 5, 6, 7, 9	438 = 2, 3, 5, 6, 8, 9	499 = 1, 2, 5, 6, 7, 8, 9	
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320 = 7, 9	381 = 1, 3, 4, 5, 6, 7, 9	442 = 2, 4, 5, 6, 8, 9	503 = 1, 2, 3, 5, 6, 7, 8, 9	
321 = 1, 7, 9	382 = 2, 3, 4, 5, 6, 7, 9	443 = 1, 2, 4, 5, 6, 8, 9	504 = 4, 5, 6, 7, 8, 9	

