

Martin DMX Interface user manual

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INTRODUCTION

The Martin DMX Interface converts DMX data into Martin data to allow you to control an older, Martin-protocol-only fixture with a DMX controller. The DMX Interface supports the following Martin products:

Fixture Type	Fixtures per Interface
RoboColor MSD	8
RoboColor	8
RoboColor II	8
RoboScan 804/805	8
RoboScan 1004/1005	8
RoboScan 1016	8
RoboScan 1020	4
RoboScan Pro 218	8
RoboScan Pro 1220	4
RoboScan Pro 1220 II	4
RoboScan Pro 1220 IIR	4
RoboZap	8
RoboZap MSR 1200	8
Centrepiece	8

Table 1: Supported fixtures

Note! *A separate DMX Interface is required for each type of fixture.*

The DMX Interface operates only one type of fixture at a time. It can operate multiple fixtures of the same type. The table above shows the maximum number of each fixture type that can be operated with a single DMX Interface.

PACKAGE CONTENTS

Please make sure that you received the following with your DMX Interface:

- 1 X Martin Professional DMX Interface
- 1 X Terminator Plug

AC POWER CONNECTION

Warning! *For safe operation, the DMX Interface must be grounded (earthed).*

Important! *Check voltage setting before applying power.*

Before use verify that the fixture's voltage switch is set correctly for the local AC voltage. The switch can be set for 115 or 230 V: use the setting that is closest to the local supply voltage.

Do not connect the DMX Interface to an electrical dimmer system: doing so can damage the electronics.

To install a plug on the mains lead

The fixture's mains lead must be fitted with a grounding-type cord cap that fits your power distribution cable or outlet. Consult a qualified electrician if you have any doubts about proper installation.

- Following the cord cap manufacturer's instructions, connect the yellow and green wire to ground (earth), the brown wire to live, and the blue wire to neutral. The table below shows some pin identification schemes.

Wire	Pin	Marking	Screw color
brown	live	"L"	yellow or brass
blue	neutral	"N"	silver
yellow/green	ground		green

Table 2: Plug markings

This section describes how to place the DMX Interface in the data link between the DMX controller and the Martin fixtures.

RECOMMENDED CABLE

Reliable data communication begins with the right cable. Standard microphone cable cannot transmit DMX data reliably over long runs. For best results, use cable specifically designed for RS-485 applications. Your Martin dealer can supply high quality cable in various lengths.

CONNECTIONS

The DMX IN and DMX OUT sockets are wired for DMX data with pin 1 to ground, pin 2 to signal - (cold), and pin 3 to signal + (hot). This is the standard pin assignment for DMX devices.

One or more adaptor cables may be required to connect the DMX Interface because many devices have 5-pin connectors and others may have reversed signal polarity, that is, pin 2 hot and pin 3 cold.

5-pin to 3-pin Adaptor	
Male	Female
1	1
2	2
3	3
4	
5	
P/N 11820005	

3-pin to 5-pin Adaptor	
Male	Female
1	1
2	2
3	3
	4
	5
P/N 11820004	

3-pin to 3-pin Phase-Reversing Adaptor	
Male	Female
1	1
2	2
3	3
P/N 11820006	

To connect the DMX Interface to the DMX link

Up to 32 devices may be connected to the DMX link. The DMX Interface and all fixtures connected to the Martin link count as just 1 device.

- 1 Connect the data cable coming from the controller output to the DMX IN socket on the DMX Interface. If you are using 5-pin XLR connectors, you will need to insert a 5-pin male to 3-pin female adaptor cable such as P/N 11820005.
- 2 If connecting additional DMX fixtures to the DMX link after the DMX Interface, connect DMX OUT on the DMX Interface to the input of the next device. If the device has a 5-pin XLR input, insert a 3-pin to 5-pin adaptor cable such as P/N 11820004. If the device has reversed polarity (pin-3 cold), use a phase-reversing adaptor such as P/N 11820006.
- 3 Terminate the DMX link. If the DMX Interface is the last device on the link, simply set pin-9 of the DMX-Link DIP-switch to the ON position (down). Otherwise, insert a male termination plug (P/N 91613017) into the DMX output of the last fixture on the DMX link. A termination plug is simply an XLR connector with a 120 ohm, 0.25 W resistor soldered across pins 2 and 3.

Male Termination Plug
Male XLR
1 2 ~ 120 3 ~
P/N 91613017

To connect Martin fixtures to the DMX Interface

All fixtures connected to the DMX Interface must be of the same type.

- 1 Connect a data cable to the Martin Link output socket on the front panel of the DMX Interface and the data input of the first Martin fixture. Use a 3-pin XLR cable wired with pin 1 to pin 1, pin 2 to pin 2, and pin 3 to pin 3.
- 2 Connect the output of the Martin fixture closest to the DMX Interface to the input of the next Martin fixture. You can connect up to 4 or 8 identical fixtures depending on type. See Table 1 on page 4 for the number that can be connected.
- 3 Terminate the Martin link by inserting a male termination plug (P/N 91613017) into the data output of the last fixture on the Martin link.

DIP-SWITCH SETTINGS

The DMX Interface has 2 DIP-switches on the front panel that must be set before operating. The 10-position DIP-switch is for selecting the first DMX address, DMX mode, and link termination. The 6-position DIP-switch is for selecting the type of product that is used with the interface.

DMX ADDRESS AND MODE SETTING

Some fixtures can be operated in 2 modes: reduced DMX or full DMX. Full DMX mode provides greater control but requires more DMX channels. The mode is set using pin 10 of the 10-position DIP-switch on the front panel of the DMX Interface.

See the protocol for your fixture to see which modes are available and the number of DMX channels required.

To set the 10-position DIP-switch

Important! The DMX address assigned (on the controller) to the first fixture connected to the DMX Interface must be an odd-numbered DMX channel. Consecutive, uninterrupted DMX channels must be assigned to all additional fixtures.

- 1 On the controller, assign an odd-numbered DMX address to the first Martin fixture connected to the DMX Interface.
- 2 Find the address in the table below. Read the settings for pins 1 - 4 to the left and read the settings for pins 5 - 8 above the address. "0" means OFF and "1" means ON.
- 3 Flip pins 1 - 8 ON (down) or OFF (up) as required. Flip pin 9 OFF for reduced DMX mode or, if available, ON for full DMX mode operation.
- 4 Flip pin 10 OFF if additional DMX fixtures or interfaces are connected after the DMX Interface. Flip pin 10 ON to terminate the DMX link only if the DMX Interface is the last device.
- 5 In the DMX protocol for your fixture, find the number of DMX channels required for the selected DMX mode.

- 6 If the next fixture is connected to the same DMX Interface, assign it to the first available DMX address on the controller. For example, if the first fixture is at address 11 and uses 7 channels, then address the next fixture to channel 18.
- 7 If the next fixture is connected to a different DMX Interface, assign it to the first available odd-numbered DMX channel on the controller. For example, if the first fixture is at address 11 and uses 7 channels, then address the next fixture to channel 19. Set the DMX address of the second interface to this channel.
- 8 If the next fixture is not connected to a DMX Interface, you may assign it to any convenient DMX address.

DIP-Switch Setting 0 = OFF 1 = ON				#8	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	
				#7	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	1	1
				#6	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	1	1
				#5	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4																			
0	0	0	0	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481			
1	0	0	0	3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483			
0	1	0	0	5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485			
1	1	0	0	7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487			
0	0	1	0	9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489			
1	0	1	0	11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491			
0	1	1	0	13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493			
1	1	1	0	15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495			
0	0	0	1	17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497			
1	0	0	1	19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499			
0	1	0	1	21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501			
1	1	0	1	23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503			
0	0	1	1	25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505			
1	0	1	1	27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507			
0	1	1	1	29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509			
1	1	1	1	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511			

Table 3: DMX address settings

To set the 6-position DIP-switch

Every Martin product supported by the DMX Interface has a Product Select code that must be set on the 6-position DIP-switch as shown below.

Product	Product Select	DIP-switch setting
RoboColor MSD 200	1	
RoboColor (1st version)	2	
RoboColor II	3	
RoboScan 804/805	5	
RoboScan 1004/1005	6	
RoboScan 1016	7	
RoboScan 1020	10	
RoboScan Pro 218	11	
RoboScan Pro 1220	12	
RoboScan Pro 1220 II	13	
RoboScan Pro 1220 IIR	14	
RoboZap	15	
RoboZap MSR 1200	16	
Centrepiece	17	

Table 4: Product select settings

MARTIN ADDRESS SETTING

The DIP-switch on each fixture connected to the DMX Interface must be set to a Martin address from 1 to 8.

Important! The Martin address of the first fixture connected to the DMX Interface is always 1.

If the fixture uses 1 Martin channel, the next address is 2; if it uses 2 Martin channels, the next address is 3.

Please refer to the fixture's user guide for address settings.

Once you have connected the devices and set all the DIP-switches you are ready to operate the Martin fixtures with your DMX controller. The protocols at the back of this manual describe how each fixture responds to DMX commands.

STATUS LEDS

The LEDs on the front panel indicate the system's status. When you first apply power to the DMX Interface, the green LED blinks approximately once per second to show that it is sending a default signal and waiting for DMX data from the controller. Both LEDs blink rapidly when data is received.

If the DMX signal fails the red LED lights for approximately two seconds and then goes out. The green LED flashes as on power up, indicating that a default reset signal is being sent to all units.

DMX PROTOCOLS

The following section includes the DMX protocol for every Martin product supported by the DMX Interface. The protocols list the ways the fixtures respond to DMX commands sent from the controller.

The protocols are also available from the Service and Support area of the Martin web site at <http://www.martin.dk>.

ROBOCOLOR MSD 200

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
4	7	1	1

Channel	Value	Effect
1	0 - 5 6 - 120 121 - 252 253 - 255	Shutter / Reset Unit Shutter Closed (Light off) Shutter Open (Light on) Strobe on (Fast -> Slow) Reset Unit
2	0 - 10 11 - 168 169 - 255	Dimmer Dimmer full ON (no light) Dimmer (ON -> Off) Dimmer full OFF (Light)
3	0 - 4 55 - 59 110 - 114 165 - 169 220 - 255	Color 1 White Red Blue Green Yellow
4	0 - 4 55 - 59 110 - 114 165 - 169 220 - 255	Color 2 White Orange Pink Mauve Cyan
5 (F)	0 - 255	Color 1 Speed Speed (fast -> slow)
6 (F)	0 - 255	Color 2 Speed Speed (fast -> slow)
7 (F)	0 - 255	Dimmer Speed Speed (fast -> slow)

(F) Full DMX mode only

ROBOCOLOR

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
5	6	1	2

Channel	Values	Effect
1	0 - 5 6 - 120 121 - 252 253 - 255	Shutter / Reset Unit Shutter Closed (Light off) Shutter Open (Light on) Strobe on (Fast -> Slow) Reset Unit
2-5	0 - 2 45 - 47 90 - 92 135 - 137 180 - 182 225 - 255	Color (Head 1-4) White Red Blue Green Yellow Blackout
6 (F)	0 - 255	Color Speed (All heads) (Speed fast -> slow)

(F) Full DMX mode only

Note: When using the strobe the color function will be suspended. The colors will reappear when strobe is deselected.

ROBOCOLOR II

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
5	6	1	3
Channel	Values	Effect	
1	0 - 5 6 - 40 41 - 80 81 - 120 121 - 252 253 - 255	Shutter / Reset Unit Lamp off Lamp on Stand-alone, music trigger Stand-alone, auto trigger Strobe on (Fast -> Slow) Reset Unit	
2-5	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109 110 - 119 120 - 129 130 - 139 140 - 149 150 - 159 160 - 169 170 - 179 180 - 189 190 - 199 200 - 209 210 - 219 220 - 229 230 - 239 240 - 255	Color (Head 1-4) Black Black / White White White / Magenta Magenta Magenta / Pink Pink Pink / Red Red Red / Orange Orange Orange / Dark Yellow Dark Yellow Dark Yellow / Yellow Yellow Yellow / Light Green Light Green Light Green / Green Green Green / Cyan Cyan Cyan / Light Blue Light Blue Light Blue / Dark Blue Dark Blue	
6 (F)	0 - 255	Color Speed (All heads) (Speed fast -> slow)	

(F) Full DMX mode only

Note: The fixture strobes between the current color and the one before it. To strobe with white, set all heads to white. Color positioning while strobing is disabled in full DMX mode.

ROBOSCAN 804/805

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
5	N/A	1	5
Channel	Values	Effect	
1	0 - 5 6 - 252 253 - 255	Power / Reset Unit Power Off Power On Reset Unit	
2	0 - 50 51 - 100 101 - 150 151 - 200 201 - 255	Color White Red Blue Green Yellow	
3	0 - 63 64 - 127 128 - 191 192 - 255	Gobo (805 only) Open Holes Star Circle	
4	0 - 30 31 - 223 224 - 255	Pan Max Left Left --> Right (127 Neutral) Max Right	
5	0 - 12 13 - 241 242 - 255	Tilt Max Up Up --> Down (127 Neutral) Max Down	

ROBOSCAN 1004/1005

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
5	N/A	1	6
Channel	Values	Effect	
1	0 - 5 6 - 120 121 - 252 253 - 255	Shutter / Reset Unit Shutter Closed (Light off) Shutter open (Light on) Strobe on (Fast -> Slow) Reset Unit	
2	0 - 18 19 - 72 73 74 - 127 128 129 - 182 183 184 - 237 238 - 255	Color White White --> Red Red Red --> Blue Blue Blue --> Green Green Green --> Yellow Yellow	
3	0 - 12 13 - 88 89 90 - 165 166 167 - 242 243 - 255	Gobo Open Open --> Holes Holes Holes --> Star Star Star --> Cone Cone	
4	0 - 30 31 - 223 224 - 255	Pan Max Left Left -> Right (127 = Neutral) Max Right	
5	0 - 12 13 - 241 242 - 255	Tilt Max Up Up--> Down (127 = Neutral) Max Down	

ROBOSCAN 1016

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
5	N/A	1	7
Channel	Values	Effect	
1	0 - 5 6 - 120 121 - 252 253 - 255	Shutter / Reset Unit Shutter closed (Light off) Shutter open (Light on) Strobe on (Fast -> Slow) Reset unit	
2	0 - 38 50 62 74 86 98 110 122 134 146 158 170 182 194 206 218 - 255	Color White Flame Red Light Blue Fern Green Yellow Primary Green Mauve Medium Blue Cyan Primary Red Orange Light Green Amber Pink Dark Lavender Deep Orange	
3	0 - 38 50 62 74 86 98 110 122 134 146 158 170 182 194 206 218 - 255	Gobo Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Gobo 11 Gobo 12 Gobo 13 Gobo 14 Gobo 15 Gobo 16	
4	0 - 30 31 - 223 224 - 255	Pan Max Left Left --> Right (127 = Neutral) Max Right	
5	0 - 12 13 - 241 242 - 255	Tilt Max Up Up --> Down (127 = Neutral) Max Down	

ROBOSCAN 1020

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
12	N/A	2	10

Channel	Values	Effect
1	0 - 5 6 - 120 121 - 252 253 - 255	Shutter / Reset Unit Shutter closed (Light off) Shutter open (Light on) Strobe on (Fast -> Slow) Reset unit
2	0 - 10 11 - 220 221 - 255	Dimmer Dimmer full on (No Light) Dimmer (On -> Off) Dimmer full off (Light)
3	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Color 1 White R61 B51 G51/56 Y52 G50/55 M47/63 B42 C54 R65
4	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Color 2 White O56 G49/59 Y54 Y52 P47/58 M47/63 M49/65 C54 T48/53
5	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Gobo 1 Open Stars Star Dots Cone Pling Dot-Circle Bells Flower Turbine

6	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Gobo 2 Open Logo Triangle Sun Holes Raster Bars Turbine Flash Star
7	0 -10 11 - 239 240 - 255	Focus Default Min. --> Max (140 = Default) Default
8	0 -48 49 -205 206 -255	Iris Default Full open -> Full Close Full Close
9	0 - 10 43 76 109 142 175 - 255	Prism Open 3 Facet Open 5 Facet Open 9 Facet
10	0 - 255	Pan Left --> Right (127 = Neutral)
11	0 - 255	Tilt Up -- > Down (127 = Neutral)
12	0 - 255	Movement Speed (Speed fast -> slow)

ROBOSCAN PRO 218

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
7	N/A	1	11

Channel	Values	Effect
1	0 - 5 6 - 120 121 - 252 253 - 255	Shutter / Reset Unit Shutter Closed (Light off) Shutter Open (Light on) Strobe on (Fast -> Slow) Reset Unit
2	0 - 10 11 - 168 169 - 255	Dimmer Dimmer full ON (no light) Dimmer (ON -> Off) Dimmer full OFF (Light)
3	0 - 34 45 56 67 78 89 100 111 122 133 144 155 166 177 188 199 210 221 - 255	Color White R61 B51 G51/56 Y52 G50/55 M47/63 B46 C54 R65 O56 G49/59 Y54 P47/58 M49/65 O59 MultiColor 1 MultiColor 2
4	0 - 34 45 56 67 78 89 100 111 122 133 144 155 166 177 188 199 210 221 - 255	Gobo Open Half Dot Vertical Bar Horizontal Bar Arrow Fat Cone Triangle Star Dots Bells Cone Flash Raster Dot Circle Bars Window Turbine
5	0 - 255	Pan Left --> Right (127 = Neutral)

6	0 - 255	Tilt Up -- > Down (127 = Neutral)
7	0 - 255	Movement Speed Speed (fast -> slow)

ROBOSCAN 1220

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
12	15	2	12

Note: The original 1220 has a separate shutter and dimmer. The 1220 II has a combined shutter and dimmer. Neither the 1220 nor the 1220 II has rotating gobos.

ROBOSCAN 1220 II

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
12	15	2	13

Channel	Values	Effect
1	0 - 5 6 - 115 116 - 247 248 - 251 252 - 255	Shutter / Reset Unit / Power Shutter Closed (Light off) Shutter open (Light on) Strobe on (Fast --> Slow) Reset Unit Lamp On (Power on)
2	0 - 10 11 - 220 221 - 255	Dimmer Dimmer full on (No Light) Dimmer (On -> Off) Dimmer Full Off (Light)
3	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Color 1 White R61 B51 G51/56 Y52 G50/55 M47/63 B42 C54 R65
4	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Color 2 White O56 G49/59 Y54 Y52 P47/58 M47/63 M49/65 C54 T48/53

5	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Gobo 1 Open Stars Star Dots Cone Pling Dot-Circle Bells Flower Turbine
6	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Gobo 2 Open Logo Triangle Sun Holes Raster Bars Turbine Flash Star
7	0 -10 11 - 239 240 - 255	Focus Default Min. --> Max (140 = Default) Default
8	0 -48 49 -205 206 -255	Iris Default Full open --> Full Close Full Close
9	0 - 10 43 76 109 142 175 - 255	Prism Open 3 Facet Open 5 Facet Open 9 Facet
10	0 - 255	Pan Left --> Right (127 = Neutral)
11	0 - 255	Tilt Up --> Down (127 = Neutral)
12	0 - 255	Pan/Tilt Speed (Speed fast -> slow)
13 (F)	0 - 255	Color Speed (Speed fast -> slow)
14 (F)	0 - 255	Gobo Speed (Speed fast -> slow)
15 (F)	0 - 255	Focus/Iris/Dimmer Speed (Speed fast -> slow)

(F) Full DMX mode only

ROBOSCAN 1220 IIR

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
12	16	2	14

Note: The 1220 IIR has a combined shutter and dimmer and rotating gobos.

Channel	Values	Effect
1	0 - 5 6 - 115 116 - 247 248 - 251 252 - 255	Shutter / Reset Unit / Power Shutter Closed (Light off) Shutter open (Light on) Strobe on (Fast --> Slow) Reset Unit Lamp On (Power on)
2	0 - 10 11 - 220 221 - 255	Dimmer Dimmer full on (No Light) Dimmer (On -> Off) Dimmer Full Off (Light)
3	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Color 1 White R61 B51 G51/56 Y52 G50/55 M47/63 B42 C54 R65
4	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Color 2 White O56 G49/59 Y54 Y52 P47/58 M47/63 M49/65 C54 T48/53
5	0 - 37 57 77 97 117 137 157 177 197 217 - 255	Gobo 1 Open Stars Star Dots Cone Pling Dot-Circle Bells Flower Turbine

6 (Reduced mode only)	0 - 15 16 - 44 45 - 46 47 - 75	Rotating Gobo Selection and Rotation: Reduced mode only Open Gobo - No Rotation Gobo 1 - CW Rotation Fast --> Slow Gobo 1 Stop Gobo 1 - CCW Rotation Slow --> Fast
	76 - 104 105 - 106 107 - 135	Gobo 2 - CW Rotation Fast --> Slow Gobo 2 Stop Gobo 2 - CCW Rotation Slow --> Fast
	136 - 164 165 - 166 167 - 195	Gobo 3 - CW Rotation Fast --> Slow Gobo 3 Stop Gobo 3 - CCW Rotation Slow --> Fast
	196 - 224 225 - 226 227 - 255	Gobo 4 - CW Rotation Fast --> Slow Gobo 4 Stop Gobo 4 - CCW Rotation Slow --> Fast
6 (F)	0 - 3 4 - 7 8 - 11 12 - 15 16 - 19	Rotating Gobo Selection, Index and Rotation: Full mode only Open Gobo - No Rotation Gobo 1 - indexed (set index on ch. 16) Gobo 2 - indexed (set index on ch. 16) Gobo 3 - indexed (set index on ch. 16) Gobo 4 - indexed (set index on ch. 16)
	20 - 48 49 50 - 78	Gobo 1 - CW Rotation Fast -> Slow Gobo 1 Stop Gobo 1 - CCW Rotation Slow -> Fast
	79 - 107 108 109 - 137	Gobo 2 - CW Rotation Fast -> Slow Gobo 2 Stop Gobo 2 - CCW Rotation Slow -> Fast
	138 - 166 167 168 - 196	Gobo 3 - CW Rotation Fast -> Slow Gobo 3 Stop Gobo 3 - CCW Rotation Slow -> Fast
	197 - 225 226 227 - 255	Gobo 4 - CW Rotation Fast -> Slow Gobo 4 Stop Gobo 4 - CCW Rotation Slow -> Fast
7	0 -10 11 - 239 240 - 255	Focus Default Min. --> Max (140 = Default) Default
8	0 -48 49 -205 206 -255	Iris Default Full open --> Full Close Full Close
9	0 - 10 43 76 109 142 175 - 255	Prism Open 3 Facet Open 5 Facet Open 9 Facet
10	0 - 255	Pan Left --> Right (127 = Neutral)

11	0 - 255	Tilt Up --> Down (127 = Neutral)
12	0 - 255	Pan/Tilt Speed (Speed fast -> slow)
13 (F)	0 - 255	Color Speed (Speed fast -> slow)
14 (F)	0 - 255	Gobo Speed (Speed fast -> slow)
15 (F)	0 - 255	Focus/Iris/Dimmer Speed (Speed fast -> slow)
16 (F)	0 - 119 120 121 - 239	Rotating Gobo Orientation - 216° --> Default Index Default Index Default Index --> 214.2 degrees Gobos are reindexed whenever a new gobo is selected or the current gobo has been rotating continuously.

(F) Full DMX mode only

ROBOZAP

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
4	N/A	1	15

Channel	Values	Effect
1	0 - 5 6 - 120 121 - 252 253 - 255	Shutter / Reset Unit Shutter Closed (Light off) Shutter Open (Light on) Strobe on (Fast -> Slow) Reset Unit
2	0 - 2 48 - 50 96 - 98 144 - 146 192 - 194 240 - 255	Color Right White Red Blue Green Yellow Blackout
3	0 - 2 48 - 50 96 - 98 144 - 146 192 - 194 240 - 255	Color Left White Red Blue Green Yellow Blackout
4	0 - 123 124 - 131 132 - 255	Rotation Rotate Right (Slow -> Fast) Stop Rotate Left (Slow -> Fast)

Note: When using the strobe the color function will be suspended. The colors will reappear when strobe is deselected.

ROBOZAP MSR 1200

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
6	N/A	1	16

Channel	Values	Effect
1	121 - 252 253 - 255	Shutter / Reset Unit Strobe on (Fast -> Slow) Reset Unit
2&3	0 - 37 57 77 97 117 137 157 197 217 237 - 255	Color Right & Left Primary Red White Flame Red Light Blue Fern Green Yellow Primary Green Mauve Dark Blue Cyan
4&5	0 - 37 57 77 97 117 137 157 197 217 237 - 255	Gobo Right & Left Black Out Open Stars Star Dots Cone Pling Dot-Circles Bells Flower
6	0 - 123 124 - 131 132 - 255	Rotation Rotate Right (Fast -> Slow) Stop Rotate Left (Slow -> Fast)

As the Zap MSR uses it's gobo wheels to perform blackout there is no light on function on this channel. You must use channels 4 and 5 to move the gobos from their blackout positions. Also please note when using the strobe function the gobo function will be suspended. The gobos will reappear when strobe is deselected.

CENTREPIECE

DMX channels, reduced mode	DMX channels, full mode	Martin channels	Product select
7	N/A	1	17

Channel	Values	Effect
1	0 - 49 50 - 99 100 - 149 150 - 199 200 - 247 248 - 252 253 - 255	Reset Fixture, Stand-Alone, Lamp On Manual Control Stand-Alone Random Music Stand-Alone Random Auto Stand-Alone Music Stand-Alone Auto Reset Fixture Lamp On When running stand-alone, the Centrepiece will not respond to any other commands.
2 - 5	0 - 198 199 - 255	Tilt 1-4 Full Closed --> Full Open Full Open
6	0 - 123 124 - 131 132 - 255	Color Carousel Rotate Right (Fast --> Slow) Stop Rotate Left (Slow --> Fast)
7	0 - 123 124 - 131 132 - 255	Mirror Rotation Rotate Right (Fast --> Slow) Stop Rotate Left (Slow --> Fast)

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