



# MOTOQ3 DMX Mapping

Firmware Version : **MOTOQ3 V4.0 or newer**

## MOTOQ3 Modes

<b>Control</b> The Control Channel consolidates extraneous parameters in all non-EZ modes	
DMX Value	Parameter
0 - 9	Keep current settings. No change
10 - 19	Motor Enable (default) (20 packets)
20 - 29	Motor Disable (20 packets)
30 - 39	Motor speed slow (default) (20 packets)
40 - 49	Motor speed fast (20 packets)
50 - 59	Step Motor position calibration (40 packets)
60 - 69	Reserved TBD
70 - 79	Screen Flip Up (default) (20 packets)
80 - 89	Screen Flip Down (20 packets)
90 - 99	Reserved TBD
100 - 109	Reserved TBD
110 - 119	Reserved TBD
120 - 129	Intensity Curve Gamma (default) (20 packets)
130 - 139	Intensity Curve Linear (20 packets)
140 - 149	Dimming Smooth (20 packets)
150 - 159	Dimming Sharp (20 packets)
160 - 169	White point 6500K (default) (20 packets)
170 - 179	White point 5600K (20 packets)
180 - 189	White point 3200K (20 packets)
190 - 199	Reserved TBD
200 - 209	Fan Silent
210 - 219	Fan Auto (Fixture auto adjusts)
220 - 229	Fan Full Speed
230 - 239	Fan Off
240 - 249	Reserved TBD
250 - 255	Reserved TBD

## Standard Modes

Mode	8-bit ( DMX Footprint )	16-bit ( DMX Footprint )	Page
MOTO	N/A	Mode 200 ( 8 )	<a href="#">4</a>
MOTO CCT	Mode 201 ( 12 )	Mode 209 ( 15 )	<a href="#">4</a>
MOTO HSI *	Mode 202 ( 12 )	Mode 210 ( 15 )	<a href="#">5</a>
MOTO RGBW *	Mode 203 ( 14 )	Mode 211 ( 19 )	<a href="#">5</a>
MOTO CIExy	Mode 206 ( 12 )	Mode 214 ( 15 )	<a href="#">6</a>
MOTO GEL	Mode 207 ( 12 )	Mode 215 ( 13 )	<a href="#">7</a>
MOTO RGB *	Mode 240 ( 12 )	Mode 245 ( 15 )	<a href="#">8</a>

## CCT Modes

CCT modes allow white point adjustment using the “CCT” and “Green Adjust” parameters.

Mode	8-bit ( DMX Footprint )	16-bit ( DMX Footprint )	Page
MOTO CCTHSI **	Mode 204 ( 15 )	Mode 212 ( 21 )	<a href="#">9</a>
MOTO CCTRGBW **	Mode 205 ( 17 )	Mode 213 ( 25 )	<a href="#">10</a>
MOTO CCTxy ***	Mode 241 ( 15 )	Mode 246 ( 21 )	<a href="#">11</a>

## ICT Modes

ICT modes allow white point adjustment like CCT+ modes, without a “Crossfade” parameter.

Mode	8-bit ( DMX Footprint )	16-bit ( DMX Footprint )	Page
MOTO ICTHS **	Mode 242 ( 14 )	Mode 247 ( 19 )	<a href="#">12</a>
MOTO ICTRGBW **	Mode 243 ( 16 )	Mode 248 ( 23 )	<a href="#">13</a>
MOTO ICTxy ***	Mode 244 ( 14 )	Mode 249 ( 19 )	<a href="#">14</a>

## EZ Modes

EZ modes include no “Strobe Frequency” or “Control” parameters, shortening the DMX footprint.

Mode	8-bit ( DMX Footprint )	16-bit ( DMX Footprint )	Page
MOTO EZ CCT	Mode 250 ( 9 )	Mode 263 ( 12 )	<a href="#">15</a>
MOTO EZ HSI *	Mode 251 ( 9 )	Mode 264 ( 12 )	<a href="#">15</a>
MOTO EZ RGBW *	Mode 252 ( 11 )	Mode 265 ( 16 )	<a href="#">15</a>
MOTO EZ CCTHSI **	Mode 253 ( 12 )	Mode 266 ( 18 )	<a href="#">16</a>
MOTO EZ CCTRGBW **	Mode 254 ( 14 )	Mode 267 ( 22 )	<a href="#">16</a>
MOTO EZ CIExy	Mode 255 ( 9 )	Mode 268 ( 12 )	<a href="#">17</a>
MOTO EZ RGB *	Mode 256 ( 9 )	Mode 269 ( 12 )	<a href="#">17</a>
MOTO EZ CCTxy **	Mode 257 ( 12 )	Mode 270 ( 18 )	<a href="#">17</a>
MOTO EZ ICTHS **	Mode 258 ( 11 )	Mode 271 ( 16 )	<a href="#">18</a>
MOTO EZ ICTRGBW **	Mode 259 ( 13 )	Mode 272 ( 20 )	<a href="#">18</a>
MOTO EZ ICTxy ***	Mode 260 ( 11 )	Mode 273 ( 16 )	<a href="#">19</a>
MOTO EZ 3200K	Mode 261 ( 7 )	Mode 274 ( 8 )	<a href="#">19</a>
MOTO EZ 5600K	Mode 262 ( 7 )	Mode 275 ( 8 )	<a href="#">19</a>

## ALL Modes

Mode	8-bit ( DMX Footprint )	16-bit ( DMX Footprint )	Page
ALL MODES	Mode 276 ( 17 )	Mode 277 ( 25 )	<u>20</u>

### Notes

\* HSI, RGBW and RGB modes are based on a white point of 6500K. For instance, in HSI mode, when "Saturation"=0%, the fixture produces 6500K white.

\*\* In CCTHSI, CCTRGBW, ICTHS and ICTRGBW modes, the white point is determined and can be adjusted by the "CCT" and "Green Adjust" parameters. This applies at any "Crossfade" value in CCTHSI and CCTRGBW modes. The following scenarios illustrate how white point is determined by the "CCT" parameter, given all other parameters being the same.

**Scenario 1:** In CCTRGBW modes, the following settings produce 3200K white. Notice that "Crossfade" has no effect on the white point

CCT=3200K, Xfade=0%

CCT=3200K, Xfade=100%, W=100%

CCT=3200K, Xfade=100%, RGB=100%

CCT=3200K, Xfade=100%, RGBW=100%

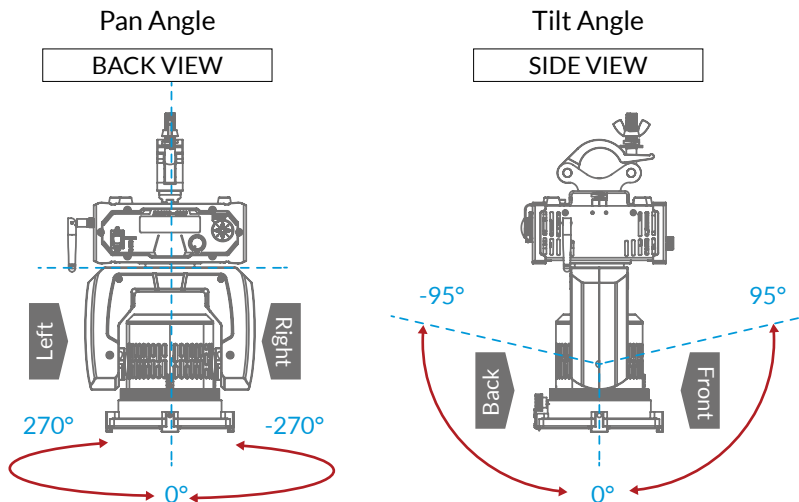
**Scenario 2:** In CCTHSI modes, the following settings produce 2800K and 5600K white respectively. Notice "CCT" is the differentiating parameter.

(3200K output) CCT=3200K, RGBW=100%

(5600K output) CCT=6500K, RGBW=100%

\*\*\* In CCTxy and ICTxy modes, the "CCT" and "Green Adjust" parameters allow slight adjustment of the color temperature and tint for the selected "CIEx" and "CIEy" coordinates. To produce an output true to the CIEx and CIEy coordinates, set "CCT"=6500K and "Green Adjust"=0.00.

### Pan & Tilt Angle Definition



## Mode 200: MOTO, 16-bit

16-bit DMX	Function	16-bit Value	Range
1 - 2	PAN	0 - 65,535	-270° - +270°
3 - 4	TILT	0 - 65,535	-95° - +95°
5 - 6	ZOOM (Not supported)	0 - 65,535	0 - 100 (%)
7	Control	See <a href="#">control table</a>	
8	Reserved for future use	TBD	

## Mode 201 (8-bit) / Mode 209 (16-bit) : MOTO CCT

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
5-6	8-9	PAN	0 - 65,535		-270° - +270°
7-8	10-11	TILT	0 - 65,535		-95° - +95°
9-10	12-13	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
11	14	Control	See <a href="#">control table</a>		
12	15	Reserved for future use	TBD		

## Mode 202 (8-bit) / Mode 210 (16-bit) : MOTO HSI

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	Hue	0 - 255	0 - 65,535	0° - 360°
3	5-6	Saturation	0 - 255	0 - 65,535	0% - 100%
4	7	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
5-6	8-9	PAN	0 - 65,535		-270° - +270°
7-8	10-11	TILT	0 - 65,535		-95° - +95°
9-10	12-13	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
11	14	Control	See control table		
12	15	Reserved for future use	TBD		

## Mode 203 (8-bit) / Mode 211 (16-bit) : MOTO RGBW

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	Intensity Red	0 - 255	0 - 65,535	0% - 100%
3	5-6	Intensity Green	0 - 255	0 - 65,535	0% - 100%
4	7-8	Intensity Blue	0 - 255	0 - 65,535	0% - 100%
5	9-10	Intensity White	0 - 255	0 - 65,535	0% - 100%
6	11	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
7-8	12-13	PAN	0 - 65,535		-270° - +270°
9-10	14-15	TILT	0 - 65,535		-95° - +95°
11-12	16-17	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
13	18	Control	See control table		
14	19	Reserved for future use	TBD		

## Mode 206 (8-bit) / Mode 214 (16-bit) : MOTO CIExy

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	x	0 - 255	0 - 65,535	0.0 - 0.8
3	5-6	y	0 - 255	0 - 65,535	0.0 - 0.8
4	7	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
5-6	8-9	PAN	0 - 65,535		-270° - +270°
7-8	10-11	TILT	0 - 65,535		-95° - +95°
9-10	12-13	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
11	14	Control	See <a href="#">control table</a>		
12	15	Reserved for future use	TBD		

## Mode 207 (8-bit) / Mode 215 (16-bit) : MOTO GEL

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3	Gel Filter	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 - 255	None Bastard Amber Straw Light Amber Light Flame Golden Amber Light Red No Color Pink Middle Rose Light Rose Purple Surprise Pink No Color Blue Daylight Blue Primary Blue Moss Green Blue Green Gel 1 Gel 2 Gel 3 Gel 4 Gel 5 Reserved	
3	4	CCT (Disabled for Gel 1-5)	0 - 99 100 - 255		3200K 6500K
4	5	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
5-6	6-7	PAN	0 - 65,535		-270° - +270°
7-8	8-9	TILT	0 - 65,535		-95° - +95°
9-10	10-11	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
11	12	Control	See <a href="#">control table</a>		
12	13	Reserved for future use	TBD		

## Mode 240 (8-bit) / Mode 245 (16-bit) : MOTO RGB

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Intensity Red	0 - 255	0 - 65,535	0% - 100%
2	3-4	Intensity Green	0 - 255	0 - 65,535	0% - 100%
3	5-6	Intensity Blue	0 - 255	0 - 65,535	0% - 100%
4	7	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
5-6	8-9	PAN	0 - 65,535		-270° - +270°
7-8	10-11	TILT	0 - 65,535		-95° - +95°
9-10	12-13	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
11	14	Control	See <a href="#">control table</a>		
12	15	Reserved for future use	TBD		



## Mode 204 (8-bit) / Mode 212 (16-bit) : MOTO CCTHSI

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Crossfade	0 - 255	0 - 65,535	0% - 100%
5	9-10	Hue	0 - 255	0 - 65,535	0° - 360°
6	11-12	Saturation	0 - 255	0 - 65,535	0% - 100%
7	13	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
8-9	14-15	PAN	0 - 65,535		-270° - +270°
10-11	16-17	TILT	0 - 65,535		-95° - +95°
12-13	18-19	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
14	20	Control	See <a href="#">control table</a>		
15	21	Reserved for future use	TBD		

## Mode 205 (8-bit) / Mode 213 (16-bit) : MOTO CCTRGBW

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Crossfade	0 - 255	0 - 65,535	0% - 100%
5	9-10	Intensity Red	0 - 255	0 - 65,535	0% - 100%
6	11-12	Intensity Green	0 - 255	0 - 65,535	0% - 100%
7	13-14	Intensity Blue	0 - 255	0 - 65,535	0% - 100%
8	15-16	Intensity White	0 - 255	0 - 65,535	0% - 100%
9	17	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
10-11	18-19	PAN	0 - 65,535		-270° - +270°
12-13	20-21	TILT	0 - 65,535		-95° - +95°
14-15	22-23	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
16	24	Control	See <a href="#">control table</a>		
17	25	Reserved for future use	TBD		

## Mode 241 (8-bit) / Mode 246 (16-bit) : MOTO CCT<sub>xy</sub>

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Crossfade	0 - 255	0 - 65,535	0% - 100%
5	9-10	x	0 - 255	0 - 65,535	0.0 - 0.8
6	11-12	y	0 - 255	0 - 65,535	0.0 - 0.8
7	13	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
8-9	14-15	PAN	0 - 65,535		-270° - +270°
10-11	16-17	TILT	0 - 65,535		-95° - +95°
12-13	18-19	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
14	20	Control	See <a href="#">control table</a>		
15	21	Reserved for future use	TBD		

## Mode 242 (8-bit) / Mode 247 (16-bit) : MOTO ICTHS

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Hue	0 - 255	0 - 65,535	0° - 360°
5	9-10	Saturation	0 - 255	0 - 65,535	0% - 100%
6	11	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
7-8	12-13	PAN	0 - 65,535		-270° - +270°
9-10	14-15	TILT	0 - 65,535		-95° - +95°
11-12	16-17	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
13	18	Control	See <a href="#">control table</a>		
14	19	Reserved for future use	TBD		

## Mode 243 (8-bit) / Mode 248 (16-bit) : MOTO ICTRGBW

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Intensity Red	0 - 255	0 - 65,535	0% - 100%
5	9-10	Intensity Green	0 - 255	0 - 65,535	0% - 100%
6	11-12	Intensity Blue	0 - 255	0 - 65,535	0% - 100%
7	13-14	Intensity White	0 - 255	0 - 65,535	0% - 100%
8	15	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
9-10	16-17	PAN	0 - 65,535		-270° - +270°
11-12	18-19	TILT	0 - 65,535		-95° - +95°
13-14	20-21	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
15	22	Control	See <a href="#">control table</a>		
16	23	Reserved for future use	TBD		

## Mode 244 (8-bit) / Mode 249 (16-bit) : MOTO ICTxy

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	x	0 - 255	0 - 65,535	0.0 - 0.8
5	9-10	y	0 - 255	0 - 65,535	0.0 - 0.8
6	11	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
7-8	12-13	PAN	0 - 65,535		-270° - +270°
9-10	14-15	TILT	0 - 65,535		-95° - +95°
11-12	16-17	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
13	18	Control	See <a href="#">control table</a>		
14	19	Reserved for future use	TBD		

## Mode 250 (8-bit) / Mode 263 (16-bit) : MOTO EZ CCT

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4-5	7-8	PAN	0 - 65,535		-270° - +270°
6-7	9-10	TILT	0 - 65,535		-95° - +95°
8-9	11-12	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 251 (8-bit) / Mode 264 (16-bit) : MOTO EZ HSI

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	Hue	0 - 255	0 - 65,535	0° - 360°
3	5-6	Saturation	0 - 255	0 - 65,535	0% - 100%
4-5	7-8	PAN	0 - 65,535		-270° - +270°
6-7	9-10	TILT	0 - 65,535		-95° - +95°
8-9	11-12	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 252 (8-bit) / Mode 265 (16-bit) : MOTO EZ RGBW

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	Intensity Red	0 - 255	0 - 65,535	0% - 100%
3	5-6	Intensity Green	0 - 255	0 - 65,535	0% - 100%
4	7-8	Intensity Blue	0 - 255	0 - 65,535	0% - 100%
5	9-10	Intensity White	0 - 255	0 - 65,535	0% - 100%
6-7	11-12	PAN	0 - 65,535		-270° - +270°
8-9	13-14	TILT	0 - 65,535		-95° - +95°
10-11	15-16	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 253 (8-bit) / Mode 266 (16-bit) : MOTO EZ CCTHSI

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Crossfade	0 - 255	0 - 65,535	0% - 100%
5	9-10	Hue	0 - 255	0 - 65,535	0° - 360°
6	11-12	Saturation	0 - 255	0 - 65,535	0% - 100%
7-8	13-14	PAN	0 - 65,535		-270° - +270°
9-10	15-16	TILT	0 - 65,535		-95° - +95°
11-12	17-18	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 254 (8-bit) / Mode 267 (16-bit) : MOTO EZ CCTRGBW

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Crossfade	0 - 255	0 - 65,535	0% - 100%
5	9-10	Intensity Red	0 - 255	0 - 65,535	0% - 100%
6	11-12	Intensity Green	0 - 255	0 - 65,535	0% - 100%
7	13-14	Intensity Blue	0 - 255	0 - 65,535	0% - 100%
8	15-16	Intensity White	0 - 255	0 - 65,535	0% - 100%
9-10	17-18	PAN	0 - 65,535		-270° - +270°
11-12	19-20	TILT	0 - 65,535		-95° - +95°
13-14	21-22	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)



## Mode 255 (8-bit) / Mode 268 (16-bit) : MOTO EZ CIExy

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	x	0 - 255	0 - 65,535	0.0 - 0.8
3	5-6	y	0 - 255	0 - 65,535	0.0 - 0.8
4-5	7-8	PAN	0 - 65,535		-270° - +270°
6-7	9-10	TILT	0 - 65,535		-95° - +95°
8-9	11-12	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 256 (8-bit) / Mode 269 (16-bit) : MOTO EZ RGB

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Intensity Red	0 - 255	0 - 65,535	0% - 100%
2	3-4	Intensity Green	0 - 255	0 - 65,535	0% - 100%
3	5-6	Intensity Blue	0 - 255	0 - 65,535	0% - 100%
4-5	7-8	PAN	0 - 65,535		-270° - +270°
6-7	9-10	TILT	0 - 65,535		-95° - +95°
8-9	11-12	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 257 (8-bit) / Mode 270 (16-bit) : MOTO EZ CCTxy

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Crossfade	0 - 255	0 - 65,535	0% - 100%
5	9-10	x	0 - 255	0 - 65,535	0.0 - 0.8
6	11-12	y	0 - 255	0 - 65,535	0.0 - 0.8
7-8	13-14	PAN	0 - 65,535		-270° - +270°
9-10	15-16	TILT	0 - 65,535		-95° - +95°
11-12	17-18	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 258 (8-bit) / Mode 271 (16-bit) : MOTO EZ ICTHS

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Hue	0 - 255	0 - 65,535	0° - 360°
5	9-10	Saturation	0 - 255	0 - 65,535	0% - 100%
6-7	11-12	PAN	0 - 65,535		-270° - +270°
8-9	13-14	TILT	0 - 65,535		-95° - +95°
10-11	15-16	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 259 (8-bit) / Mode 272 (16-bit) : MOTO EZ ICTRGBW

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	Intensity Red	0 - 255	0 - 65,535	0% - 100%
5	9-10	Intensity Green	0 - 255	0 - 65,535	0% - 100%
6	11-12	Intensity Blue	0 - 255	0 - 65,535	0% - 100%
7	13-14	Intensity White	0 - 255	0 - 65,535	0% - 100%
8-9	15-16	PAN	0 - 65,535		-270° - +270°
10-11	17-18	TILT	0 - 65,535		-95° - +95°
12-13	19-20	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 260 (8-bit) / Mode 273 (16-bit) : MOTO EZ ICTxy

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3-4	CCT	0 - 255	0 - 65,535	2000K - 10000K
3	5-6	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta ~ Full green (-1.0 ~ +1.0)
4	7-8	x	0 - 255	0 - 65,535	0.0 - 0.8
5	9-10	y	0 - 255	0 - 65,535	0.0 - 0.8
6-7	11-12	PAN	0 - 65,535		-270° - +270°
8-9	13-14	TILT	0 - 65,535		-95° - +95°
10-11	15-16	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 261 (8-bit) / Mode 274 (16-bit) : MOTO EZ 3200K

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2-3	3-4	PAN	0 - 65,535		-270° - +270°
4-5	5-6	TILT	0 - 65,535		-95° - +95°
6-7	7-8	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 262 (8-bit) / Mode 275 (16-bit) : MOTO EZ 5600K

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2-3	3-4	PAN	0 - 65,535		-270° - +270°
4-5	5-6	TILT	0 - 65,535		-95° - +95°
6-7	7-8	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)

## Mode 276 (8-bit) / Mode 277 (16-bit) : ALL MODES

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
1	1-2	Master Intensity	0 - 255	0 - 65,535	0% - 100%
2	3	Color Mode Selection	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 - 255		CCT HSI RGBW CCTHSI CCTRGBW CIExy GEL EFFECT RGB CCTxy ICTHS ICTRGBW ICTxy Reserved
3	4-5	Color Parameter 1	See table below		
4	6-7	Color Parameter 2			
5	8-9	Color Parameter 3			
6	10-11	Color Parameter 4			
7	12-13	Color Parameter 5			
8	14-15	Color Parameter 6			
9	16-17	Color Parameter 7			
10	18	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
11-12	19-20	PAN	0 - 65,535		-270° - +270°
13-14	21-22	TILT	0 - 65,535		-95° - +95°
15-16	23-24	ZOOM (Not supported)	0 - 65,535		0 - 100 (%)
17	25	Control	0 - 255		N/A

		CCT				HSI			
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range	Function	8-bit/16-bit Value		Range
3	4-5	CCT	0 - 255	0 - 65,535	2000K - 10000K	Hue	0 - 255	0 - 65,535	0° - 360°
4	6-7	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta - Full green (-1.0 ~ +1.0)	Saturation	0 - 255	0 - 65,535	0% - 100%
		RGBW				RGB			
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range	Function	8-bit/16-bit Value		Range
3	4-5	INT Red	0 - 255	0 - 65,535	0% - 100%	INT Red	0 - 255	0 - 65,535	0% - 100%
4	6-7	INT Green	0 - 255	0 - 65,535	0% - 100%	INT Green	0 - 255	0 - 65,535	0% - 100%
5	8-9	INT Blue	0 - 255	0 - 65,535	0% - 100%	INT Blue	0 - 255	0 - 65,535	0% - 100%
6	10-11	INT White	0 - 255	0 - 65,535	0% - 100%				
		CCTRGBW				CCTHSI			
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range	Function	8-bit/16-bit Value		Range
3	4-5	CCT	0 - 255	0 - 65,535	2000K - 10000K	Hue	0 - 255	0 - 65,535	0° - 360°
4	6-7	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta - Full green (-1.0 ~ +1.0)	Saturation	0 - 255	0 - 65,535	0% - 100%
5	8-9	Crossfade	0 - 255	0 - 65,535	0% - 100%	Crossfade	0 - 255	0 - 65,535	0% - 100%
6	10-11	INT Red	0 - 255	0 - 65,535	0% - 100%	Hue	0 - 255	0 - 65,535	0° - 360°
7	12-13	INT Green	0 - 255	0 - 65,535	0% - 100%	Saturation	0 - 255	0 - 65,535	0% - 100%
8	14-15	INT Blue	0 - 255	0 - 65,535	0% - 100%				
9	16-17	INT White	0 - 255	0 - 65,535	0% - 100%				
		CCTxy				ICTHS			
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range	Function	8-bit/16-bit Value		Range
3	4-5	CCT	0 - 255	0 - 65,535	2000K - 10000K	CCT	0 - 255	0 - 65,535	2000K - 10000K
4	6-7	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta - Full green (-1.0 ~ +1.0)	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta - Full green (-1.0 ~ +1.0)
5	8-9	Crossfade	0 - 255	0 - 65,535	0% - 100%	Hue	0 - 255	0 - 65,535	0° - 360°
6	10-11	x	0 - 255	0 - 65,535	0.0 - 0.8	Saturation	0 - 255	0 - 65,535	0% - 100%
7	12-13	y	0 - 255	0 - 65,535	0.0 - 0.8	Reserved	TBD		TBD

		GEL							
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value			Range			
3	4	Gel Filter	0 - 9			None			
			10 - 19			Bastard Amber			
			20 - 29			Straw			
			30 - 39			Light Amber			
			40 - 49			Light Flame			
			50 - 59			Golden Amber			
			60 - 69			Light Red			
			70 - 79			No Color Pink			
			80 - 89			Middle Rose			
			90 - 99			Light Rose Purple			
			100 - 109			Surprise Pink			
			110 - 119			No Color Blue			
			120 - 129			Daylight Blue			
			130 - 139			Primary Blue			
			140 - 149			Moss Green			
			150 - 159			Blue Green			
			160 - 169			Gel 1			
			170 - 179			Gel 2			
			180 - 189			Gel 3			
			190 - 199			Gel 4			
200 - 209			Gel 5						
210 - 255			Reserved						
4	6-7	CCT	0 - 99			3200K			
			100 - 255			6500K			
		ICTRGBW				ICTxy			
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range	Function	8-bit/16-bit Value		Range
3	4-5	CCT	0 - 255	0 - 65,535	2000K - 10000K	Hue	0 - 255	0 - 65,535	0° - 360°
4	6-7	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta - Full green (-1.0 ~ +1.0)	Green Adjust	0 - 9 10 - 255	0 - 9 10 - 65,535	Neutral (0) Full magenta - Full green (-1.0 ~ +1.0)
5	8-9	INT Red	0 - 255	0 - 65,535	0% - 100%	x	0 - 255	0 - 65,535	0.0 - 0.8
6	10-11	INT Green	0 - 255	0 - 65,535	0% - 100%	y	0 - 255	0 - 65,535	0.0 - 0.8
7	12-13	INT Blue	0 - 255	0 - 65,535	0% - 100%	Reserved	TBD	-	TBD
8	14-15	NT White	0 - 255	0 - 65,535	0% - 100%				
9	-	Reserved	TBD	-	TBD				
		CIExy							
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range				
3	4-5	x	0 - 255	0 - 65,535	0.0 - 0.8				
4	6-7	y	0 - 255	0 - 65,535	0.0 - 0.8				

		Candle			Fireworks			Television		
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value	Range	Function	8-bit/16-bit Value	Range	Function	8-bit/16-bit Value	Range
4	6-7	Color	0 - 9 10 - 19 20 - 29	Warmer Neutral Cooler	Color	0 - 9 10 - 19 20 - 29	Color White Color + White	Mode	0 - 9 10 - 19 20 - 29 30 - 39	Action Horror News Romance
5	8-9	Speed	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49	Slowest Slower Medium Faster Fastest	Speed	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49	Slowest Slower Medium Faster Fastest			
		Club Light			Lightning			Cop Car		
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value	Range	Function	8-bit/16-bit Value	Range	Function	8-bit/16-bit Value	Range
4	6-7	Color	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69	Red Green Blue Cyan Magenta Yellow All colors	Color	0 - 9 10 - 19 20 - 29	Warmer Neutral Cooler	Color	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109	B (Blue) R (Red) A (Amber) W (White) RB RA BA BW AW RBW BRA
5	8-9	Speed	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49	Slowest Slower Medium Faster Fastest	Speed	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49	Slowest Slower Medium Faster Fastest	Flash Pattern	0 - 9 10 - 19 20 - 29 30 - 39	Single Double Quad Quint
		Color Chase			Paparazzi			Strobe		
8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value	Range	Function	8-bit/16-bit Value	Range	Function	8-bit/16-bit Value	Range
4	6-7	Saturation	0 - 255	0% -100%	Color	0 - 9 10 - 19 20 - 29	Warmer Neutral Cooler	Hue	0 - 255	0 - 360°
5	8-9	Speed	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49	Slowest Slower Medium Faster Fastest	Speed	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49	Slowest Slower Medium Faster Fastest	Saturation	0 - 255	0% - 100%
6	10-11							Speed	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49	Slowest Slower Medium Faster Fastest