



P1/P9 Series DMX / RDM Mapping

Firmware Version

- P1 Series – CB 5.0 or newer

- P9 Series – CB 5.0 or newer

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DMX Modes

Standard Modes

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CCT Modes

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

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ICT Modes

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

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EZ Modes

EZ modes do not include “Strobe Frequency” or “Control ” parameters, shortening the DMX footprint.

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ALL Modes

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Notes

- * HSI, RGBW, and RGB modes are based on a white point in the fixture menu (factory default at 6500K). For instance, with this option at its default, in HSI mode at 0% saturation or RGB mode with equal parts R,G, and B, the fixture produces 6500K white.
- ** Cross-fade enabled modes allow for fading between a white point (at 0% "XFADE") and another point in color space (at 100% "XFADE"). The "WP xFADE" option allows for these two points to be set to different white points.
 - Scenario 1:** With the "WP xFADE" setting disabled, the white point at all "XFADE" values share the same white point, set within the present mode via "CCT" and "Green Adjust" parameters.
 - Scenario 2:** With the "WP xFADE" setting enabled, the white point at 100% "XFADE" is set as the fixture white point, 0% "XFADE" is set within the present mode via "CCT" and "Green Adjust" parameters, and all intermediate points blend the two.
- *** 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
- **** The **Power On (PWR ON)** setting determines a fixture's output behavior when it is powered on without a DMX signal.
 - If **Power On** is *Disabled*, the fixture will output according to the Intensity Knob and On/Off Toggle.
 - If **Power On** is *Enabled*, the fixture will output its last received DMX* value until an onboard control is adjusted (D-Pad, Knobs, etc.).

*Note that if DMX is disconnected, then an onboard control is adjusted prior to power off the fixture, no DMX value will be saved. The fixture will output according to the Intensity Knob and On/Off Toggle.

Example A: A P1L is controlled via DMX, with "Power On" enabled. The fixture is disconnected from DMX, then power to the stage is cut and the fixture returned to the rental house. When the P1L is powered on at the rental house with no DMX connected, it will output the last DMX value received on-set, as there has been no other control input received while powered.

Example B: A P1L is controlled via DMX, with "Power On" enabled. The fixture is disconnected from DMX but remains powered on. The Best Boy adjusts the intensity knob, then the power is disconnected, and the fixture returned to the rental house. When the P1L is powered on at the rental house with no DMX connected, it will output according to the Intensity Knob and On/Off Toggle, due to the manual input overwriting the last saved DMX value.

Control 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 (20 packets)
40 - 49	*Motor speed fast (default) (20 packets)
50 - 59	*Step Motor position calibration (40 packets) (Moto-Q3 Only)
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	*seq_px_dim Enable (20 packets)
110 - 119	*seq_px_dim Disable (default) (20 packets)
120 - 129	Intensity Curve Gamma (default) (20 packets)
130 - 139	Intensity Curve Linear (20 packets)
140 - 149	Dimming Smooth (default) (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 (20 packets)
210 - 219	Fan Auto (default) (20 packets) (Fixture auto adjusts)
220 - 229	Fan Full (20 packets)
230 - 239	Fan Off (20 packets)
240 - 249	Reserved TBD
250 - 255	Reserved TBD

Mode 401 (8-bit) / Mode 409 (16-bit) : 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	8	Control	See control table		
6	9	Reserved	TBD		

Mode 402 (8-bit) / Mode 410 (16-bit) : 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	8	Control	See control table		
6	9	Reserved	TBD		

Mode 403 (8-bit) / Mode 411 (16-bit) : 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	12	Control	See control table		
8	13	Reserved	TBD		

Mode 406 (8-bit) / Mode 414 (16-bit) : CIE_{xy}

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	8	Control	See control table		
6	9	Reserved	TBD		

Mode 407 (8-bit) / Mode 415 (16-bit) : 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	Control	See control table		
6	7	Reserved	TBD		

Mode 440 (8-bit) / Mode 445 (16-bit) : 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	8	Control	See control table		
6	9	Reserved	TBD		

Mode 404 (8-bit) / Mode 412 (16-bit) : 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	14	Control	See control table		
9	15	Reserved	TBD		

Mode 405 (8-bit) / Mode 413 (16-bit) : 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	18	Control	See control table		
11	19	Reserved	TBD		

Mode 441 (8-bit) / Mode 446 (16-bit) : 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	13	Strobe Frequency	0 - 9 10 - 255		Strobe off 1Hz - 25Hz
8	14	Control	See control table		
9	15	Reserved	TBD		

Mode 442 (8-bit) / Mode 447 (16-bit) : 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	12	Control	See control table		
8	13	Reserved	TBD		

Mode 443 (8-bit) / Mode 448 (16-bit) : 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	16	Control	See control table		
10	17	Reserved	TBD		

Mode 444 (8-bit) / Mode 449 (16-bit) : 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	12	Control	See control table		
8	13	Reserved	TBD		

Mode 450 (8-bit) / Mode 463 (16-bit) : 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)

Mode 451 (8-bit) / Mode 464 (16-bit) : 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%

Mode 452 (8-bit) / Mode 465 (16-bit) : 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%

Mode 455 (8-bit) / Mode 468 (16-bit) : EZ CIE_{xy}

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

Mode 453 (8-bit) / Mode 466 (16-bit) : 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%

Mode 454 (8-bit) / Mode 467 (16-bit) : 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%

Mode 457 (8-bit) / Mode 470 (16-bit) : 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

Mode 458 (8-bit) / Mode 471 (16-bit) : 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%

Mode 459 (8-bit) / Mode 472 (16-bit) : 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%

Mode 460 (8-bit) / Mode 473 (16-bit) : 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

Mode 456 (8-bit) / Mode 469 (16-bit) : 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%

Mode 461 (8-bit) / Mode 474 (16-bit) : 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%

Mode 462 (8-bit) / Mode 475 (16-bit) : 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%

Mode 476 (8-bit) / Mode 477 (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 DEMO 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	19	Control	See control table		
12	20	Reserved	TBD		

Mode 476 (8-bit) / Mode 477 (16-bit) : ALL MODES (continued 1)

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
		CCT			
3	4-5	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)
		HSI			
3	4-5	Hue	0 – 255	0 – 65,535	0° – 360°
4	6-7	Saturation	0 – 255	0 – 65,535	0% – 100%
		CIExy			
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
		RGBW			
3	4-5	INT Red	0 – 255	0 – 65,535	0% – 100%
4	6-7	INT Green	0 – 255	0 – 65,535	0% – 100%
5	8-9	INT Blue	0 – 255	0 – 65,535	0% – 100%
6	10-11	INT White	0 – 255	0 – 65,535	0% – 100%
		RGB			
3	4-5	INT Red	0 – 255	0 – 65,535	0% – 100%
4	6-7	INT Green	0 – 255	0 – 65,535	0% – 100%
5	8-9	INT Blue	0 – 255	0 – 65,535	0% – 100%
		CCTHSI			
3	4-5	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)
5	8-9	Crossfade	0 – 255	0 – 65,535	0% – 100%
6	10-11	Hue	0 – 255	0 – 65,535	0° – 360°
7	12-13	Saturation	0 – 255	0 – 65,535	0% – 100%
		ICTHS			
3	4-5	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)
5	8-9	Hue	0 – 255	0 – 65,535	0° – 360°
6	10-11	Saturation	0 – 255	0 – 65,535	0% – 100%

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value		Range
		CCTRGBW			
3	4-5	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)
5	8-9	Crossfade	0 – 255	0 – 65,535	0% – 100%
6	10-11	INT Red	0 – 255	0 – 65,535	0% – 100%
7	12-13	INT Green	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%
		ICTRGBW			
3	4-5	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)
5	8-9	INT Red	0 – 255	0 – 65,535	0% – 100%
6	10-11	INT Green	0 – 255	0 – 65,535	0% – 100%
7	12-13	INT Blue	0 – 255	0 – 65,535	0% – 100%
8	14-15	INT White	0 – 255	0 – 65,535	0% – 100%
		CCTxy			
3	4-5	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)
5	8-9	Crossfade	0 – 255	0 – 65,535	0% – 100%
6	10-11	x	0 – 255	0 – 65,535	0.0 – 0.8
7	12-13	y	0 – 255	0 – 65,535	0.0 – 0.8
		ICTxy			
3	4-5	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)
5	8-9	x	0 – 255	0 – 65,535	0.0 – 0.8
6	10-11	y	0 – 255	0 – 65,535	0.0 – 0.8

8-bit DMX	16-bit DMX	Function	8-bit/16-bit Value	Range
		GEL		
3	4-5	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
		DEMO		
3	4-5	Demo Selection	0 – 9	No effect(Stop Effect)
			10 – 19	Candle
			20 – 29	Club light
			30 – 39	Color chase
			40 – 49	Cop car
			50 – 59	Fireworks
			60 – 69	Lightning
			70 – 79	Paparazzi
			80 – 89	Strobe
			90 – 99	Television
			100 – 109	Circular
				(Only for PIX mode)
			110 – 119	Vertical
				(Only for PIX mode)
			120 – 129	Horizontal
				(Only for PIX mode)
			130 – 139	Diagonal
				(Only for PIX mode)
			140 – 255	Reserved for future use
4	6-7	Function 1	See table below	
5	8-9	Function 2		
6	10-11	Function 3		

Mode 476 (8-bit) / Mode 477 (16-bit) : ALL MODES (continued 2)

		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		
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		
4	6-7	Saturation	0 - 255/ 0 - 65,535	0% -100%	Color	0 - 9 10 - 19 20 - 29	Warmer Neutral Cooler	Hue	0 - 255 / 0 - 65,535	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 - 65,535	0% - 100%
6	10-11							Speed	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49	Slowest Slower Medium Faster Fastest

RDM Commands

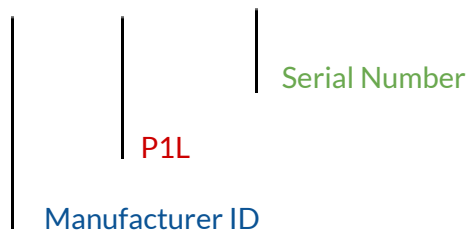
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RDM Identification

Manufacturer ID	Device Model ID	Device Label Device	Model Name
6124	48	CXP1L-PSP	P1L, Side Mount
	4A	CXP1X-PSP	P1X, Side Mount
	50	CXP1L-PST	P1L, Top Mount
	51	CXP1X-PST	P1X, Top Mount

UID Example

612448010002



DMX Personality Identification

Personality Description	Description [Decimal Data: Mode Description (Footprint)]
1	401: CCT 8-bit (Footprint 6)
2	402: HSI 8-bit (Footprint 6)
3	403: RGBW 8-bit (Footprint 8)
4	404: CCTHSI 8-bit (Footprint 9)
5	405: CCTRGBW 8-bit (Footprint 11)
6	406: CIExy 8-bit (Footprint 6)
7	407: GEL 8-bit (Footprint 6)
8	409: CCT 16-bit (Footprint 9)
9	410: HSI 16-bit (Footprint 9)
10	411: RGBW 16-bit (Footprint 13)
11	412: CCTHSI 16-bit (Footprint 15)
12	413: CCTRGBW 16-bit (Footprint 19)
13	414: CIExy 16-bit (Footprint 9)
14	415: GEL 16-bit (Footprint 7)
15	440: RGB 8-bit (Footprint 6)
16	441: CCTxy 8-bit (Footprint 9)
17	442: ICTHS 8-bit (Footprint 8)
18	443: ICTRGBW 8-bit (Footprint 10)
19	444: ICTxy 8-bit (Footprint 8)
20	445: RGB 16-bit (Footprint 9)
21	446: CCTxy 16-bit (Footprint 15)
22	447: ICTHS 16-bit (Footprint 13)
23	448: ICTRGBW 16-bit (Footprint 17)
24	449: ICTxy 16-bit (Footprint 13)
25	450: EZ CCT 8-bit (Footprint 3)
26	451: EZ HSI 8-bit (Footprint 3)
27	452: EZ RGBW 8-bit (Footprint 5)
28	453: EZ CCTHSI 8-bit (Footprint 6)
29	454: EZ CCTRGBW 8-bit (Footprint 8)
30	455: EZ CIExy 8-bit (Footprint 3)
31	456: EZ RGB 8-bit (Footprint 3)
32	457: EZ CCTxy 8-bit (Footprint 6)
33	458: EZ ICTHS 8-bit (Footprint 5)

DMX Personality Identification

Personality Description	Description [Decimal Data: Mode Description (Footprint)]
34	459: EZ ICTRGBW 8-bit (Footprint 7)
35	460: EZ ICTxy 8-bit (Footprint 5)
36	461: EZ 3200K 8-bit (Footprint 1)
37	462: EZ 5600K 8-bit (Footprint 1)
38	463: EZ CCT 16-bit (Footprint 6)
39	464: EZ HSI 16-bit (Footprint 6)
40	465: EZ RGBW 16-bit (Footprint 10)
41	466: EZ CCTHSI 16-bit (Footprint 12)
42	467: EZ CCTRGBW 16-bit (Footprint 16)
43	468: EZ CIExy 16-bit (Footprint 6)
44	469: EZ RGB 16-bit (Footprint 6)
45	470: EZ CCTxy 16-bit (Footprint 12)
46	471: EZ ICTHS 16-bit (Footprint 10)
47	472: EZ ICTRGBW 16-bit (Footprint 14)
48	473: EZ ICTxy 16-bit (Footprint 10)
49	474: EZ 3200K 16-bit (Footprint 2)
50	475: EZ 5600K 16-bit (Footprint 2)
51	476: ALL MODES 8-bit (Footprint 12)
52	477: ALL MODES 16-bit (Footprint 20)
53	DEMO 16-bit (Footprint 17)
54	Preset A
55	Preset B

Network Management

Command	PID	Description
DISC UNIQUE BRANCH	0x0001	Devices respond to discovery messages.
DISC MUTE	0x0002	Mute the device.
DISC UNMUTE	0x0003	Unmute the device.

Status Collection (For Art-Net)

Command	PID	Description
QUEUED MESSAGE	0x0020	The QUEUED_MESSAGE parameter shall be used to retrieve a message from the responder's message queue.

RDM Information

Command	PID	Description
SUPPORTED PARAMETERS	0x0050	Support required only if supporting parameters beyond the minimum required set.
PARAMETER DESCRIPTION	0x0051	Retrieves a list of all manufacturer commands ($\geq 0x8000$).

Product Information

Command	PID	Description
DEVICE INFO	0x0060	This parameter is used to retrieve a variety of information about the device that is normally required by a controller
DEVICE MODEL DESCRIPTION	0x0080	This parameter provides a text description of up to 32 characters for the device model type.
MANUFACTURER LABEL	0x0081	This parameter provides an ASCII text response of up to 32 characters with the Manufacturer name for the device. The Manufacturer name must be consistent between all products manufactured within an ESTA Manufacturer ID.
DEVICE LABEL	0x0082	This parameter provides a means of setting a descriptive label for each device.
SOFTWARE VERSION LABEL	0x00C0	This parameter is used to get a descriptive ASCII text label for the device's operating software version.

DMX512 Setup

Command	PID	Description
DMX PERSONALITY	0x00E0	This parameter is used to set the responder's DMX512 Personality.
DMX PERSONALITY DESCRIPTION	0x00E1	This parameter is used to get a descriptive ASCII text label for a given DMX512 Personality.
DMX START ADDRESS	0x00F0	This parameter is used to set or get the DMX512 start address.

Sensors

Command	PID	Description
SENSOR_DEFINITION	0x0200	This parameter is used to get a descriptive ASCII text label for the device temperature.
SENSOR_VALUE	0x0201	Retrieve or set the temperature from the controller PCBA, driver1-8 PCBAs and Array1-8.

Dimmer Settings (not yet supported) RDM ANSI E1.37 version

Command	PID	Description
CURVE	0x0343	Retrieve or set a dimmer curve. 1 : Linear 2 : Gamma
CURVE DESCRIPTION	0x0344	This parameter is used to get a descriptive ASCII text label for a given curve.

Power/Lamp Settings

Command	PID	Description
DEVICE HOURS	0x0400	This parameter is used to retrieve or set the number of hours of operation the device has been in use.
LAMP HOURS	0x0401	This parameter is used to retrieve the number of lamp hours or to set the counter in the device to a specific starting value.

Control

Command	PID	Description
IDENTIFY DEVICE	0x1000	This parameter is used for the user to physically identify the device represented by the UID.

Manufacturer Command (not yet supported)

Command	PID	Description
WHITE POINT	0x8001	GET/SET Range 2000 ~ 10000 Kelvin Applies to HSI, RGBW and RGB modes
FIILEX_FAN	0x8002	GET/SET 0:Silent, 1:Auto, 2:Full speed, 3:OFF
FIILEX_ERROR	0x8003	GET Fiilex error code
FIILEX_CIEXY	0x8004	GET Format: (X, Y) Range: X: 0~0.8 Y: 0~0.8