Kino Flo True Match Firmware 5.0 RDM

DMX Protocol Specifications and
RDM Protocol Specifications

May 2021

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RDM Command Protocol

True Match 5.00 RDM commands	PID	Description
Manufacturer ID	0x4b46	Manufacturer identification number (Kino Flo, Inc.)
Model ID		Model identification number
	0x0101	Celeb 250
	0x0102	Celeb 450
	0x0103	Celeb 450Q
	0x0104	Celeb 850
	0x0201	Diva 20
	0x0202	Diva 30
	0x0203	Diva 21
	0x0204	Diva 31
	0x0205	Diva 41
	0x0301	LED-150X
	0x0302	LED-151X
	0x0303	LED-152X
	0x0304	LED-140X
	0x0305	LED-120X
	0x0401	Image L40
	0x0402	Image L80
Personality		DMX Personality
	0x01	"P1 CCT 8b, 3",
	0x02	"P2 GEL 8b, 6",
	0x03	"P3 RGB 8b, 6",
	0x04	"P4 FX 8b, 8",
	0x05	"P5 xy 8b, 3",
	0x06	"P6 CCT 16b, 4",
	0x07	"P7 GEL 16b, 7",
	0x08	"P8 RGB 16b, 7",
	0x09	"P9 FX 16b, 9",
	0x0A	"P10 xy 16b, 4",
	0x0B	"P11 CCT 8b, 3",
	0x0C	"P12 CCT 16b, 5",
	0x0D	"P13 Gel 8b , 3",
	0x0E	"P14 Gel 16b , 5",
	0x0F	"P15 HS 8b, 4",
	0x10	"P16 HS 16b, 8",

	0x11	"P17 RGB 8b, 5",
	0x12	"P18 RGB 16b, 10",
	0x13	"P19 CIE xy 8b, 3",
	0x14	"P20 CIE xy 16b, 6",
	0x15	"P21 FX 8b, 8",
	0x16	"P22 FX 16b, 10",
	0x17	"P23 CCT & HS 8b, 7",
	0x18	"P24 CCT & HS 16b, 13",
	0x19	"P25 CCT & RGB 8b, 8",
	0x1A	"P26 CCT & RGB 16b, 15",
	0x1B	"P27 xy1 & xy2 8b, 6",
	0x1C	"P28 xy1 & xy2 16b, 12"
	0x1D	"P29 CCT & TDRGB 8b, 9"
	0x1E	"P30 CCT & TDRGB 16b, 15"
Network Management		
DISC_UNIQUE_BRANCH	0x0001	
DISC_MUTE	0x0002	
DISC_UN_MUTE	0x0003	
RDM Information		
SUPPORTED_PARAMETERS	0x0050	
PARAMETER_DESCRIPTION	0x0051	
Product Information		
DEVICE_INFO	0x0060	
MANUFACTURER_LABEL	0x0081	
SOFTWARE_VERSION_LABEL	0x00C0	
DMX512 Setup		
DMX_PERSONALITY	0x00E0	
DMX_PERSONALITY_DESCRIPTION	0x00E1	
DMX_START_ADDRESS	0x00F0	
SLOT_INFO	0x0120	
SLOT_DESCRIPTION	0x0121	
Control		
IDENTIFY_DEVICE	0x1000	
Manufacturer PIDS (0x8000-0xFFDF)		
DIM_CURVE	0x8000	(G S) Square = 1, Linear = 0
SMOOTHING	0x8001	(G S) Off = 0, On = 1
CAMERA LUT	0x8002	(G S) Off = 0, Arri = 1, Sony = 2, DXL = 3, Varicam = 4
COLOR SPACE	0x8003	(G S) Default - 0, sRGB = 1, P3 = 2, 2020 = 3
CRMX ENABLE	0x8004	(G S) Off = 0, On = 1
CRMX SIGNAL	0x8005	(G)
CRMX LINK	0x8006	(G S)
FREQUENCY	0x8007	(G S)
BOOST*	0x8008	(G S) Off = 0, On = 1 *Celeb 250 ONLY

DMX Personalities

P1 CCT 8 bit

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CCT 2500K -> 9900K
3			Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M

P2 CCT, Gel, Hue Angle and Saturation 8 bit

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CCT 2500K -> 9900K
3			Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
4	0 - 255	0 - 100	Gel List (Green Magenta = 0) See Appendix A
5	0 – 255	0 – 100	Hue Angle 0 – 360
6	0 – 255	0 – 100	Saturation 0 – 100

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CCT 2500K -> 9900K
3	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
4	0 – 255	0 – 100	Red
5	0 – 255	0 – 100	Green
6	0 – 255	0 – 100	Blue

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2			Effect Selection
	0-19	0-7	Candle
	20-29	8-11	Fire
	30-39	12-15	TV
	40-49	16-19	Police
	50-59	20-23	Lightning
	60-69	24-27	Paparazzi
	70-79	28-31	Pulse
	80-89	32-35	Scroll
3	0 – 255	0 – 100	CCT (see Appendix B)
4	0 – 255	0 – 100	FX Parameter 1 (see Appendix B)
5	0 – 255	0 – 100	FX Parameter 2 (see Appendix B)
6	0 – 255	0 – 100	FX Parameter 3 (see Appendix B)
7	0 – 255	0 – 100	FX Parameter 4 (see Appendix B)
8	0 – 255	0 – 100	FX Parameter 5 (see Appendix B)

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CIE x 0 to 0.85
3	0 – 255	0 – 100	CIE y 0 to 0.85

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 255	0 – 100	CCT 2500K -> 9900K
4	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M

P7 CCT, Gel, Hue Angle and Saturation 16 bit

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 255	0 – 100	CCT 2500K -> 9900K
4	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
5	0 – 255	0 – 100	Gel List (See Appendix A)
6	0 – 255	0 – 100	Hue Angle 0 – 360
7	0 – 255	0 – 100	Saturation 0 – 100

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 255	0 – 100	CCT 2500K -> 9900K
4	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
5	0 – 255	0 – 100	Red
6	0 – 255	0 – 100	Green
7	0 – 255	0 – 100	Blue

P9 FX 16bit

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	MSB Dimmer closed -> open
2	0 – 255	0 – 100	LSB Dimmer closed -> open
3			Effect Selection
	0-19	0-7	Candle
	20-29	8-11	Fire
	30-39	12-15	TV
	40-49	16-19	Police
	50-59	20-23	Lightning
	60-69	24-27	Paparazzi
	70-79	28-31	Pulse
	80-89	32-35	Scroll
4	0 – 255	0 – 100	CCT (see Appendix B)
5	0 – 255	0 – 100	FX Parameter 1 (see Appendix B)
6	0 – 255	0 – 100	FX Parameter 2 (see Appendix B)
7	0 – 255	0 – 100	FX Parameter 3 (see Appendix B)
8	0 – 255	0 – 100	FX Parameter 4 (see Appendix B)
9	0 – 255	0 – 100	FX Parameter 5 (see Appendix B)

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 255	0 – 100	CIE x 0 to 0.85
4	0 – 255	0 – 100	CIE y 0 to 0.85

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CCT 2500K -> 9900K
3			Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M

P12 CCT 16 bit

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
4			LSB CCT 2500K -> 9900K
5	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CCT 2500K -> 9900K
3	0 - 255	0 - 100	Gel List (see Appendix A)

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
4			LSB CCT 2500K -> 9900K
5	0 - 255	0 - 100	Gel List (see Appendix A)

P14 Gel 16 bit

P15 Hue Angle & Saturation (HS) 8 bit

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CCT 2500K -> 9900K
3	0 – 255	0 – 100	Hue Angle 0 – 360
4	0 – 255	0 – 100	Saturation 0 – 100

P16 Hue Angle & Saturation (HS) 16 bit

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
4			LSB CCT 2500K -> 9900K
5	0 – 65535	0 – 100	MSB Hue Angle 0 – 360
6			LSB Hue Angle 0 – 360
7	0 – 65535	0 – 100	MSB Saturation 0 – 100
8			LSB Saturation 0 – 100

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CCT 2500K -> 9900K
3	0 – 255	0 – 100	Red
4	0 – 255	0 – 100	Green
5	0 – 255	0 – 100	Blue

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
4			LSB CCT 2500K -> 9900K
5	0 – 65535	0 – 100	MSB Red
6			LSB Red
7	0 – 65535	0 – 100	MSB Green
8			LSB Green
9	0 – 65535	0 – 100	MSB Blue
10			LSB Blue

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CIE x 0 to 0.85
3	0 – 255	0 – 100	CIE y 0 to 0.85

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CIE x 0 to 0.85
4			LSB CIE x 0 to 0.85
5	0 – 65535	0 – 100	MSB CIE y 0 to 0.85
6			LSB CIE y 0 to 0.85

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2			Effect Selection
	0-19	0-7	Candle
	20-29	8-11	Fire
	30-39	12-15	TV
	40-49	16-19	Police
	50-59	20-23	Lightning
	60-69	24-27	Paparazzi
	70-79	28-31	Pulse
	80-89	32-35	Scroll
3	0 – 255	0 – 100	CCT (see Appendix B)
4	0 – 255	0 – 100	FX Parameter 1 (see Appendix B)
5	0 – 255	0 – 100	FX Parameter 2 (see Appendix B)
6	0 – 255	0 – 100	FX Parameter 3 (see Appendix B)
7	0 – 255	0 – 100	FX Parameter 4 (see Appendix B)
8	0 – 255	0 – 100	FX Parameter 5 (see Appendix B)

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3			Effect Selection
	0-19	0-7	Candle
	20-29	8-11	Fire
	30-39	12-15	TV
	40-49	16-19	Police
	50-59	20-23	Lightning
	60-69	24-27	Paparazzi
	70-79	28-31	Pulse
	80-89	32-35	Scroll
4	0 – 65535	0 – 100	MSB CCT (see Appendix B)
5			LSB CCT (see Appendix B)
6	0 – 255	0 – 100	FX Parameter 1 (see Appendix B)
7	0 – 255	0 – 100	FX Parameter 2 (see Appendix B)
8	0 – 255	0 – 100	FX Parameter 3 (see Appendix B)
9	0 – 255	0 – 100	FX Parameter 4 (see Appendix B)
10	0 – 255	0 – 100	FX Parameter 5 (see Appendix B)

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CCT 2500K -> 9900K
3			Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
4	0 – 255	0 – 100	Crossfade to Color (White -> HS)
5	0 – 255	0 – 100	CCT 2500K -> 9900K
6	0 – 255	0 – 100	Hue Angle 0 – 360
7	0 – 255	0 – 100	Saturation 0 – 100

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
4			LSB CCT 2500K -> 9900K
5			Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
6	0 – 65535	0 – 100	MSB Crossfade to Color (White -> HS)
7			LSB Crossfade to Color (White -> HS)
8	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
9			LSB CCT 2500K -> 9900K
10	0 – 65535	0 – 100	MSB Hue Angle 0 – 360
11			LSB Hue Angle 0 – 360
12	0 – 65535	0 – 100	MSB Saturation 0 – 100
13			LSB Saturation 0 – 100

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	Color Temperature CCT 2500K -> 9900K
3	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
4	0 – 255	0 – 100	Crossfade to Color (White -> RGB)
5	0 – 255	0 – 100	CCT 2500K -> 9900K
6	0 – 255	0 – 100	Red
7	0 – 255	0 – 100	Green
8	0 – 255	0 – 100	Blue

P26 xfade CCT & RGB 16 bit

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
4			LSB CCT 2500K -> 9900K
5	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
6	0 – 65535	0 – 100	MSB Crossfade to Color (White -> HS)
7			LSB Crossfade to Color (White -> HS)
8	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
9			LSB CCT 2500K -> 9900K
10	0 – 65535	0 – 100	MSB Red
11			LSB Red
12	0 – 65535	0 – 100	MSB Green
13			LSB Green
14	0 – 65535	0 – 100	MSB Blue
15			LSB Blue

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	CIE x1 0 to 0.85
3	0 – 255	0 – 100	CIE y1 0 to 0.85
4	0 – 255	0 – 100	Crossfade (xy1 -> xy2)
5	0 – 255	0 – 100	CIE x2 0 to 0.85
6	0 – 255	0 – 100	CIE y2 0 to 0.85

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CIE x1 0 to 0.85
4			LSB CIE x1 0 to 0.85
5	0 – 65535	0 – 100	MSB CIE y1 0 to 0.85
6			LSB CIE y1 0 to 0.85
7	0 – 65535	0 – 100	MSB Crossfade (xy1 -> xy2)
8			LSB Crossfade (xy1 -> xy2)
9	0 – 65535	0 – 100	MSB CIE x2 0 to 0.85
10			LSB CIE x2 0 to 0.85
11	0 – 65535	0 – 100	MSB CIE y2 0 to 0.85
12			LSB CIE y2 0 to 0.85

DMX Channel	Value	Percent	Function
1	0 – 255	0 – 100	Dimmer closed -> open
2	0 – 255	0 – 100	Color Temperature CCT 2500K -> 9900K
3	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
4	0 – 255	0 – 100	Crossfade to TDRGB
5	0 – 255	0 – 100	Tungsten LED
6	0 – 255	0 – 100	Daylight LED
7	0 – 255	0 – 100	Red LED
8	0 – 255	0 – 100	Green LED
9	0 – 255	0 – 100	Blue LED

DMX Channel	Value	Percent	Function
1	0 – 65535	0 – 100	MSB Dimmer closed -> open
2			LSB Dimmer closed -> open
3	0 – 65535	0 – 100	MSB CCT 2500K -> 9900K
4			LSB CCT 2500K -> 9900K
5	0 – 255	0 – 100	Green Magenta
	0-11	0-4	0 G/M
	12-22	5-8	100 M
	23-121	9-47	99 M - 1M
	122-133	48-52	0 G/M
	134-232	53-91	1 G - 99 G
	233-243	92-95	100 G
	244-255	96-100	0 G/M
6	0 – 65535	0 – 100	MSB Crossfade to TDRGB
7			LSB Crossfade to TDRGB
	0 – 65535	0 – 100	MSB Tungsten LED
			LSB Tungsten LED
	0 – 65535	0 – 100	MSB Daylight LED
			LSB Daylight LED
10	0 – 65535	0 – 100	MSB Red LED
11			LSB Red LED
12	0 – 65535	0 – 100	MSB Green LED
13			LSB Green LED
14	0 – 65535	0 – 100	MSB Blue LED
15			LSB Blue LED

Appendix A - Gel List

Value	Percent	GEL
0 - 4	0.00 - 1.57	OFF
4 - 5	1.57 - 1.96	KF Candle Flame
6 - 7	2.35 - 2.75	KF Flo Warm White
8 - 9	3.14 - 3.53	KF Flo Cool White
10 - 11	3.92 - 4.31	KF LP Sodium Vpr
12 - 13	4.71 - 5.10	KF Mercury Vpr
14 - 15	5.49 - 5.88	KF 20K Blue Sky
16 - 17	6.27 - 6.67	KF Green Screen
18 - 19	7.06 - 7.45	KF Blue Screen
20 - 21	7.84 - 8.24	Smokey Pink
22 - 23	8.63 - 9.02	Dark Magenta
24 - 25	9.41 - 9.80	Bright Rose
26 - 27	10.20 - 10.59	Pale Salmon
28 - 29	10.98 - 11.37	Light Rose
30 - 31	11.76 - 12.16	Light Salmon
32 - 33	12.55 - 12.94	Magenta
34 - 35	13.33 - 13.73	Pink
36 - 37	14.12 - 14.51	Rosy Amber
38 - 39	14.90 - 15.29	Pale Red
40 - 41	15.69 - 16.08	Scarlet
42 - 43	16.47 - 16.86	Loving Amber
44 - 45	17.25 - 17.65	Pale Rose
46 - 47	18.04 - 18.43	Medium Red
48 - 49	18.82 - 19.22	Gold Tint
50 - 51	19.61 - 20.00	M Bastard Amber
52 - 53	20.39 - 20.78	Bright Red
54 - 55	21.18 - 21.57	Flame Red
56 - 57	21.96 - 22.35	Primary Red
58 - 59	22.75 - 23.14	Light Red
60 - 61	23.53 - 23.92	Dark Salmon
62 - 63	24.31 - 24.71	Fire
64 - 65	25.10 - 25.49	Sunset Red
66 - 67	25.88 - 26.27	Pale Gold
68 - 69	26.67 - 27.06	English Rose
70 - 71	27.45 - 27.84	Bastard Amber
72 - 73	28.24 - 28.63	Surprise Peach
74 - 75	29.02 - 29.41	Deep Gld Amber
76 - 77	29.80 - 30.20	Dark Amber
78 - 79	30.59 - 30.98	Apricot
80 - 81	31.37 - 31.76	Gold Amber
82 - 83	32.16 - 32.55	Cosmetic Peach
84 - 85	32.94 - 33.33	Deep Orange
86 - 87	33.73 - 34.12	Chocolate

88 - 89	34.51 - 34.90	Orange
90 - 91	35.29 - 35.69	White Flame
92 - 93	36.08 - 36.47	Medium Amber
94 - 95	36.86 - 37.25	Pale Amber Gold
96 - 97	37.65 - 38.04	Chrome Orange
98 - 99	38.43 - 38.82	Straw Tint
100 - 101	39.22 - 39.61	Straw
102 - 103	40.00 - 40.39	Deep Straw
104 - 105	40.78 - 41.18	Deep Amber
106 - 107	41.57 - 41.96	Light Amber
108 - 109	42.35 - 42.75	Yellow
110 - 111	43.14 - 43.53	Medium Yellow
112 - 113	43.92 - 44.31	Spring Yellow
114 - 115	44.71 - 45.10	Pale Yellow
116 - 117	45.49 - 45.88	Lime Green
118 - 119	46.27 - 46.67	Pale Green
120 - 121	47.06 - 47.45	Leaf Green
122 - 123	47.84 - 48.24	Fern Green
124 - 125	48.63 - 49.02	Primary Green
126 - 127	49.41 - 49.80	Moss Green
128 - 129	50.20 - 50.59	Dark Y Green
130 - 131	50.98 - 51.37	Dark Green
132 - 133	51.76 - 52.16	Marine Blue
134 - 135	52.55 - 52.94	Peacock Blue
136 - 137	53.33 - 53.73	Med Blue-Green
138 - 139	54.12 - 54.51	Sp Steel Blue
140 - 141	54.90 - 55.29	Lagoon Blue
142 - 143	55.69 - 56.08	Steel Blue
144 - 145	56.47 - 56.86	Lighter Blue
146 - 147	57.25 - 57.65	Summer Blue
148 - 149	58.04 - 58.43	Light Blue
150 - 151	58.82 - 59.22	Moonlight Blue
152 - 153	59.61 - 60.00	Pale Blue
154 - 155	60.39 - 60.78	Pale Navy Blue
156 - 157	61.18 - 61.57	Mist Blue
158 - 159	61.96 - 62.35	Bright Blue
160 - 161	62.75 - 63.14	True Blue
162 - 163	63.53 - 63.92	Dark Steel Blue
164 - 165	64.31 - 64.71	Daylight Blue
166 - 167	65.10 - 65.49	Slate Blue
168 - 169	65.88 - 66.27	Medium Blue
170 - 171	66.67 - 67.06	Sky Blue
172 - 173	67.45 - 67.84	Paler Lavender
174 - 175	68.24 - 68.63	Alice Blue
176 - 177	69.02 - 69.41	Special Lavender

178 - 179	69.80 - 70.20	Pale Violet
180 - 181	70.59 - 70.98	Just Blue
182 - 183	71.37 - 71.76	Violet
184 - 185	72.16 - 72.55	Dark Blue
186 - 187	72.94 - 73.33	Surprise Pink
188 - 189	73.73 - 74.12	Deeper Blue
190 - 191	74.51 - 74.90	Special M Blue
192 - 193	75.29 - 75.69	Zenith Blue
194 - 195	76.08 - 76.47	Light Lavender
196 - 197	76.86 - 77.25	Palace Blue
198 - 199	77.65 - 78.04	Lilac Tint
200 - 201	78.43 - 78.82	Deep Blue
202 - 203	79.22 - 79.61	Lavender Tint
204 - 205	80.00 - 80.39	Pale Lavender
206 - 207	80.78 - 81.18	Dark Lavender
208 - 209	81.57 - 81.96	Lavender
210 - 211	82.35 - 82.75	Deep Lavender
212 - 213	83.14 - 83.53	Congo Blue
214 - 215	83.92 - 84.31	Rose Purple
216 - 217	84.71 - 85.10	Mauve
218 - 219	85.49 - 85.88	Rose Pink
220 - 221	86.27 - 86.67	Follies Pink
222 - 223	87.06 - 87.45	Bright Pink
224 - 225	87.84 - 88.24	Middle Rose
226 - 227	88.63 - 89.02	Medium Pink
228 - 229	89.41 - 89.80	Light Pink
230 - 231	90.20 - 90.59	Dark Pink
232 - 233	90.98 - 91.37	Flesh Pink

Appendix B - FX Parameters

Candle			
CCT	0-255	0-100	1400-2500
Effect Parameter	**Value**	**Percent**	**Function**
			flame type
1	0-9	0-4	Interior
	10-19	5-7	Breeze
2	0-255	0-100	Rate 1-20
3	0-255	0-100	Amplitude
4			
5	255	100	Sync - bump to start sequence

Fire			
CCT	0-255	0-100	1400-2500
Effect Parameter	**Value**	**Percent**	**Function**
			flame type
1	0-9	0-4	Firepit
	10-19	5-7	Gas Fireplace
2	0-255	0-100	Rate 1-20
3	0-255	0-100	Amplitude
4			
5	255	100	Sync - bump to start sequence

TV			
CCT	0-255	0-100	2500-9900
Effect Parameter	**Value**	**Percent**	**Function**
			TV type
1	0-9	0-4	Movie
	10-19	5-7	Music Video
	20-29	8-11	Sports
2	0-255	0-100	Rate 1-20
3	0-255	0-100	Amplitude
4			
5	255	100	Sync - bump to start sequence

Police			
CCT	0-255	0-100	2500-9900
Effect Parameter	**Value**	**Percent**	**Function**
			Color
1	0-9	0-4	Blue + Red
	10-19	5-7	Red
	20-29	8-11	Yellow
	30-39	12-15	Blue + White + Red
	40-49	16-19	Blue
2	0-255	0-100	Burst 1-4
3	0-255	0-100	Rate 1-100
4			
5	255	100	Sync - bump to start sequence

Lightning			
CCT	0-255	0-100	2500-9900
Effect Parameter	**Value**	**Percent**	**Function**
			Type
1	0-9	0-4	Storm
	10-19	5-7	Frankenstein
2	0-255	0-100	Rate 1-20
3			
4			
5	255	100	Sync - bump to start sequence

Paparazzi			
CCT	0-255	0-100	2500-9900
Effect Parameter	**Value**	**Percent**	**Function**
			Type
1	0-9	0-4	Red Carper
	10-19	5-7	Stalker
2	0-255	0-100	Rate 1-100
3	0-255	0-100	Flash 1-100
4			
5	255	100	Sync - bump to start sequence

Pulse			
CCT	0-255	0-100	2500-9900
Effect Parameter	**Value**	**Percent**	**Function**
1	0-255	0-100	Hue 0-360
2	0-255	0-100	Sat 0-100
3	0-255	0-100	Rate 1-100
4	0-255	0-100	Length 1-100
5	255	100	Sync - bump to start sequence

Scroll			
CCT	0-255	0-100	2500-9900
Effect Parameter	**Value**	**Percent**	**Function**
1	0-255	0-100	Time 0.6 - 60 sec
2	0-255	0-100	Sat 0-100
3			
4			
5	255	100	Sync - bump to start sequence