KLEMANTIS AS
DMX Chart

03/2021

OPERATING MODES

Klemantis has 6 different operating modes:

DMX Mode	Parameter	Colour Control Mode	RAW Mode
Basic RGB	14	RGB or CMY	Not available
Basic HSV	14	HSV	Not available
Extended RGB	27	RGB or CMY	CCMode RAW
Extended HSV	27	HSV	CCMode RAW
Extended DF RGB	29	RGB or CMY and DF	Not available
Extended DF HSV	29	HSV and DF	Not available

KLEMANTIS AS
DMX Chart

BASIC MODE

Number	RGB (CMY)	HSV	Note
1	Red / Cyan	Hue	
2	Green / Magenta	Hue fine	
3	Blue / Yellow	Saturation	
4	CTO	CTO	Filter or White mode
5	Macro colours	Macro colours	
6	Strobe	Strobe	
7	Dimmer	Dimmer	
8	Dimmer fine	Dimmer fine	
9	Crossfade	Crossfade	Not yet available
10	Fan	Fan	
11	Tint	Tint	
12	Function	Function	
13	Reset	Reset	
14	Frequency	Frequency	

KLEMANTIS AS
DMX Chart

BASIC MODE

RGB	HSV	DMX value	Function
1	-		**RED (RGB mode) / CYAN (CMY mode)**
		000 - 255	Red/Cyan colour linearly increases from 0 to 100%
2	-		**GREEN (RGB mode) / MAGENTA (CMY mode)**
		000 - 255	Green/Magenta colour linearly increases from 0 to 100%
3	-		**BLUE (RGB mode) / YELLOW (CMY mode)**
		000 - 255	Blue/Yellow colour linearly increases from 0 to 100%
-	1		**HUE**
		000 - 255	Define target point color in the HSV
-	2		**HUE FINE**
		000 - 255	Fine Hue
-	3		**SATURATION**
		000 - 255	Saturation ranges linearly increase from 0% (white) to 100% (pure color)
4	4		**CTO**
			Linear Colour Temperature correction from 8000K to 2500K
		000	OFF
		001	8000 K
		047	7000 K
		093	6000 K
		112	5600 K
		139	5000 K
		186	4000 K
		222	3200 K
		245	2700 K
		255	2500 K
5	5	**000 - 255**	**MACRO COLORS** Filter selection from a pre-built library. Details at page 16
6	6		**STROBE**
		000 - 003	Light OFF
		004 - 103	Strobe linearly from slow (1Hz) to fast (16Hz)
		104 - 107	Light ON
		108 - 207	Pulsation linearly from slow (0.5 Hz) to fast (25 Hz
		208 - 212	Light ON
		213 - 225	Random Slow Strobe
		226 - 238	Random Medium Strobe
		239 - 251	Random Fast Strobe
		252 - 255	Light ON
7	7		**DIMMER**
		000 - 255	Dimmer linearly increase from 0 to 100%
8	8		**DIMMER FINE**
		000 - 255	Fine Dimmer
9	9		**CROSSFADE**
		000 - 255	Not yet available
10	10		**FAN**
		000	OFF **–** Fan speed is auto regulated accordingly on the LEDs temperature.
		001 - 255	Fan linearly controlled from min speed (1 bit) to max speed (255 bit)

RGB	HSV	DMX value	Function	
11	11		**TINT**	
		000 - 127	Linear Tint setting, define target point correction from Magenta (0bit) to OFF (128b)	
		128	Tint adjustment OFF (default setting)	
		129 - 255	Linear Tint setting, define target point correction from OFF (128bit) to Green (255 bit	
12	12		**FUNCTION** To active selected functions stop in unused range for 5 sec Configuration setting remains active after switch off.	
		000 - 011	Unused range	
		012 - 037	Reserved	
		038 – 042	Linear (**Default**)	**Refer to page 15**
		043 - 047	Square	
		048 - 052	Smooth Square	
		053 - 057	S Curve	
		058 - 062	Raw colour channels gamma 1	**Refer to page 15**
		063 - 067	Raw colour channels gamma 1.5	
		068 - 072	Raw colour channels gamma 2.2 (**Default**)	
		073 - 077	Halogen mode disabled (**Default**)	
		078 - 082	Halogen mode 1, 750W lamp emulation	
		083 - 087	Halogen mode 2, 1000W lamp emulation	
		088 - 092	Halogen mode 3, 1200W lamp emulation	
		093 - 097	Halogen mode 4, 2000W lamp emulation	
		098 - 102	Halogen mode 5, 2500W lamp emulation	
		103 - 105	Reserved	
		106 - 108	CCMOD: RAW (**Default**)	
		109 - 111	CCMOD: RGB or HSV	
		112 - 114	CCMOD: CMY	
		115 - 117	Reserved	
		118 - 122	Reserved	
		123	CTO Filter (**Default**)	
		124	CTO White	
		125	Reserved	
		126 - 127	Gamut Adaptation Relative	
		128 - 129	Gamut Adaptation Absolute	
		130 - 133	Reserved	
		134	RGB Colour Space Native	
		135	RGB Colour Space sRGB	
		136 - 163	Reserved	
		164	Base frequency=1000H	
		165	Base frequency=1500Hz (**Default**)	
		166	Base frequency=2400Hz	
		167	Base frequency=3700Hz	
		168	Base frequency=5600Hz	
		169	Base frequency=9400Hz	
		170	Base frequency=15100Hz	
		171	Base frequency=21400Hz	
		172	Base frequency=31000Hz	
		173	Base frequency=43700Hz	
		174…250	Reserved	
		251…251	Default function recall	

RGB	HSV	DMX value	Function
13	13		**RESET**
		000 - 025	Unused range
		026 - 255	To active complete reset sequence stop in unused range for 5 seconds
14	14		**FREQUENCY**
		000 - 255	Fine adjusting of frequency value **Details at page 17**

EXTENDED MODE

Number	RGB (CMY)	HSV	Note
1	Red	Red	Active in RAW mode only
2	Red fine	Red fine	Active in RAW mode only
3	PC Amber	PC Amber	Active in RAW mode only
4	PC Amber fine	PC Amber fine	Active in RAW mode only
5	PC Green	PC Green	Active in RAW mode only
6	PC Green fine	PC Green fine	Active in RAW mode only
7	Green	Green	Active in RAW mode only
8	Green fine	Green fine	Active in RAW mode only
9	Cyan	Cyan	Active in RAW mode only
10	Cyan fine	Cyan fine	Active in RAW mode only
11	Blu	Blu	Active in RAW mode only
12	Blu fine	Blu fine	Active in RAW mode only
13	CTO	CTO	In RAW mode only White mode available. If Halo mode is selected CTO parameter is disabled.
14	Macro Colours	Macro Colours	
15	Strobe	Strobe	
16	Dimmer	Dimmer	
17	Dimmer fine	Dimmer fine	
18	Red/Cyan	Hue	
19	Green/Magenta	Hue fine	
20	Blue/Yellow	Saturation	
21	Crossfade	Crossfade	
22	Path	Path	**Not available yet**
23	Fan	Fan	
24	Tint	Tint	**Not available in RAW mode**
25	Function	Function	
26	Reset	Reset	
27	Frequency	Frequency	

KLEMANTIS AS
DMX Chart

RGB	HSV	DMX value	Function
1	1		**RED**
		000 - 255	Red linearly increases from 0 to 100%
2	2		**RED FINE**
		000 - 255	Red fine intensity
3	3		**AMBER**
		000 - 255	Amber colour linearly increases from 0 to 100%
4	4		**AMBER FINE**
		000 - 255	Amber fine intensity
5	5		**LIME**
		000 - 255	Lime colour linearly increases from 0 to 100%
6	6		**LIME FINE**
		000 - 255	Lime fine intensity
7	7		**GREEN**
		000 - 255	Green colour linearly increases from 0 to 100%
8	8		**GREEN FINE**
		000 - 255	Green fine intensity
9	9		**CYAN**
		000 - 255	Cyan colour linearly increases from 0 to 100%
10	10		**CYAN FINE**
		000 - 255	Cyan fine intensity
11	11		**BLUE**
		000 - 255	Blue colour linearly increases from 0 to 100%
12	12		**BLUE FINE**
		000 - 255	Blue fine intensity
13	13		**CTO**
			CTO linear correction from 8000K to 2500K
		000	OFF
		001	8000 K
		047	7000 K
		093	6000 K
		112	5600 K
		116	5500 K
		139	5000 K
		176	4200 K
		186	4000 K
		197	3750 K
		223	3200 K
		227	3100 K
		232	3000 K
		241	2800 K
		246	2700 K
		255	2500 K

RGB	HSV	DMX value	Function
14	14		**MACRO COLOUR**
		000 - 255	Filter selection from a pre-built library. **See details at page 16**.
15	15		**STROBE**
		000 - 003	Light OFF
		004 - 103	Strobe at linearly from slow (1Hz) to fast (16Hz)
		104 - 107	Light ON
		108 - 207	Pulsation at linearly from slow (0.5 Hz) to fast (25 Hz)
		208 - 212	Light ON
		213 - 225	Random Slow Strobe
		226 - 238	Random Medium Strobe
		239 - 251	Random Fast Strobe
		252 - 255	Light ON
16	16	**000 - 255**	**DIMMER**
			Light output linearly increases from 0 to 100%
17	17	**000 - 255**	**DIMMER FINE**
			Fine Dimmer
18	-	**000 - 255**	**RED (RGB mode) / CYAN (CMY mode)**
			Red/Cyan colour linearly increase from 0 to 100%
19	-	**000 - 255**	**GREEN (RGB mode) / MAGENTA (CMY mode)**
			Green/Magenta colour linearly increase from 0 to 100%
20	-	**000 - 255**	**BLUE (RGB mode) / YELLOW (CMY mode)**
			Blue/Yellow colour linearly increase from 0 to 100%
-	18	**000 - 255**	**HUE**
			Linear Hue setting
-	19	**000 - 255**	**HUE FINE**
			Fine Hue setting
-	20	**000 - 255**	**SATURATION**
			Saturation ranges linearly increase from 0% (white) to 100% (pure colour)
21	21	**000 - 255**	**CROSSFADE**
			Faded Transition with selectable timing between two colour points
22	22		**PATH**
		000 - 255	Selection of the different types of route for the functionality “Crossfade” (example: along a straight line connecting directly the two points, clockwise or anticlockwise along the saturated color on the gamut border connecting the two points)
23	23		**FAN**
		000	OFF The fan speed is automatically regulated based on the LEDs temp
		001 - 255	Fan can be linearly controlled from min to max speed
24	24		**TINT**.
		000 – 127	Linear Tint setting, define target point correction from Magenta (0bit) to OFF (128bit)
		128	Tint adjustment OFF
		129 - 255	Linear Tint, define target point correction from OFF (128bit) to Green (255 bit)

RGB	HSV	DMX value	Function	
25	25		**FUNCTION** To active selected function stop in unused range for 5 sec Configuration setting remains active after power off.	
		000 - 011	Unused range	
		012 - 037	Linear (**Default**)	**Refer to page 15**
		038 - 042	S Curve	
		043 - 047	Square	
		048 - 052	Smooth Square	
		053 - 057	S Curve	
		058 - 062	Raw colour channels gamma 1 -	**Refer to page 15**
		063 - 067	Raw colour channels gamma 1.5	
		068 - 072	Raw colour channels gamma 2.2 (**Default**)	
		073 - 077	Halogen mode disabled (**Default**)	
		078 - 082	Halogen mode 1, 750W lamp emulation	
		083 - 087	Halogen mode 2, 1000W lamp emulation	
		088 - 092	Halogen mode 3, 1200W lamp emulation	
		093 - 097	Halogen mode 4, 2000W lamp emulation	
		098 - 102	Halogen mode 5, 2500W lamp emulation	
		103 - 105	Reserved	
		106 - 108	CCMOD: RAW (**Default**)	
		109 - 111	CCMOD: RGB (or HSV) mode	
		112 - 114	CCMOD: *RGB to* CMY	
		115 - 117	Reserved	
		118 - 122	Reserved	
		123	CTO Filter (**Default**)	
		124	CTO White	
		125 - 163	Reserved	
		126 - 127	Gamut Adaptation Relative	
		128 - 129	Gamut Adaptation Absolute	
		130 - 133	Reserved	
		134	RGB Colour Space Native	
		135	RGB Colour Space sRGB	
		136 - 163	Reserved	
		164	Base frequency=1000Hz	
		165	Base frequency=1500Hz (**Default**)	
		166	Base frequency=2400Hz	
		167	Base frequency=3700Hz	
		168	Base frequency=5600Hz	
		169	Base frequency=9400Hz	
		170	Base frequency=15100Hz	
		171	Base frequency=21400Hz	
		172	Base frequency=31000Hz	
		173	Base frequency=43700Hz	
		174 - 250	Reserved	
		251 - 255	Default function recall	
26	26		**RESET**	
		000 - 025	Unused range	
		026 - 255	It does the complete reset sequence of fixture passing through the unused levels range and staying in this range for 5 seconds	
27	27		**FREQUENCY**	
		000 – 255	It allows a fine adjusting frequency value selected with Function parameter Details of values at page 17	

EXTENDED DFM (DIGITAL FILTER MIXING) MODE

RGB	HSV	DMX value	Function
1	1		**DIMMER 2**
		000 - 255	Dimmer DF 2 linearly increases from 0 to 100%
2	2		**DIMMER 2 FINE**
		000 - 255	Dimmer fine intensity
3	3		**DIMMER 3**
		000 - 255	Dimmer DF 3 linearly increases from 0 to 100%
4	4		**DIMMER 3 FINE**
		000 - 255	Dimmer fine intensity
5	5		**DIMMER 4**
		000 - 255	Dimmer DF4 linearly increases from 0 to 100%
6	6		**DIMMER 4 FINE**
		000 - 255	Dimmer fine intensity
7	7		**DIMMER 5**
		000 - 255	Dimmer DF 5 linearly increases from 0 to 100%
8	8		**DIMMER 5 FINE**
		000 - 255	Dimmer fine intensity
9	9		**DIGITAL FILTER 2**
		000 - 255	Select Macro colour from list 2
10	10		**DIGITAL FILTER 3**
		000 - 255	Select Macro colour from list 3
11	11		**DIGITAL FILTER**
		000 - 255	Select Macro colour from list 4
12	12		**DIGITAL FILTER 5 ID**
		000 - 255	Select Macro colour from list 5

RGB	HSV	DMX value	Function
13	13		**CTO** Colour Temperature linearly from 8000K to 2500K
		000	OFF
		001 …	8000 K
		… 047 …	7000 K
		… 093 …	6000 K
		… 112 …	5600 K
		… 116 …	5500 K
		… 139 …	5000 K
		… 176 …	4200 K
		… 186 …	4000 K
		… 197 …	3750 K
		… 223 …	3200 K
		… 227 …	3100 K
		… 232 …	3000 K
		… 241 …	2800 K
		… 246 …	2700 K
		255	2500 K
14	14		**MACRO COLOUR**
		000 - 255	Filter selection from a pre-built library. **See details at page 16**
15	15		**STROBE**
		000 - 003	Light OFF
		004 - 103	Strobe at linearly variable frequency from low (1Hz) to fast (16Hz)
		104 - 107	Light ON
		108 - 207	Pulsation at linearly variable speed from slow (0.5 Hz) to fast (25 Hz)
		208 - 212	Light ON
		213 - 255	Random Slow Strobe
		226 - 238	Random Medium Strobe
		239 - 251	Random Fast Strobe
		252 - 255	Light ON
16	16		**MASTER DIMMER 1**
		000 - 255	Light output linearly increases from 0 to 100%
17	17		**MASTER DIMMER 1 Fine**
		000 - 255	Dimmer fine intensity
18	-		**RED (RGB mode) / CYAN (CMY mode)**
		000 - 255	Red/Cyan colour linearly increases from 0 to 100%
19	-		**GREEN (RGB mode) / MAGENTA (CMY mode)**
		000 - 255	Green/Magenta colour linearly increases from 0 to 100%
20	-		**BLUE (RGB mode) / YELLOW (CMY mode)**
		000 - 255	Blue/Yellow colour linearly increases from 0 to 100%

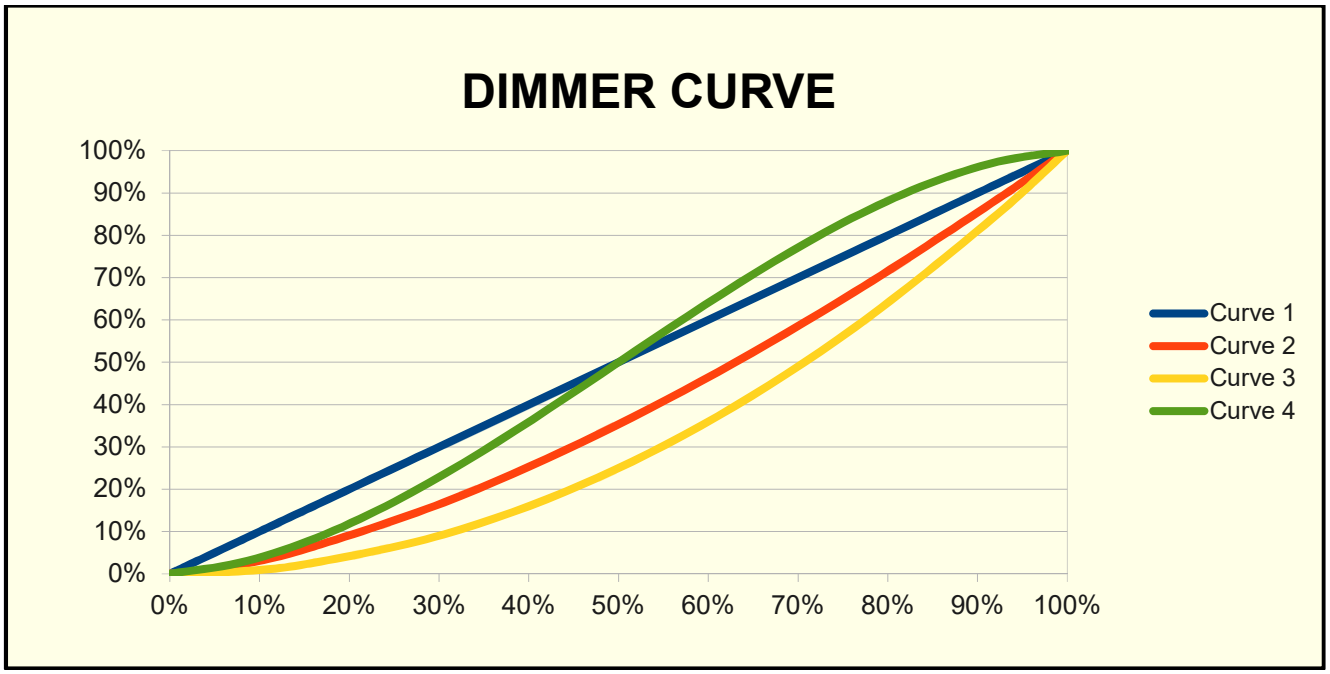
RGB	HSV	DMX value	Function
-	18		**HUE**
		000 - 255	Linear Hue setting
-	19		**HUE FINE**
		000 - 255	Fine Hue setting
-	20		**SATURATION**
		000 - 255	Saturation linearly increase from 0% (white) to 100% (pure colour)
21	21		**CROSSFADE DFM**
		000 - 255	Fade Transition between selected colour point RGB/CMY/HSV and DFM.
22	22		**CROSSFADE CTO**
		000 - 255	Faded Transition between selected colour point RGB/CMY/HSV and CTO
23	23		**PATH WEIGHT**
		000 - 255	Selection of “Weight” point for Bezier path between 2 colour points (when available)
24	24		**PATH CONTROL POINT**
		000 - 255	Selection of Control point, around the colour space, for Bezier path between 2 colour points (when available)
25	25		**FAN** The fan speed is automatically regulated accordingly on the LEDs temperature
		000	**OFF**
		001 - 255	Fan can be linearly controlled from min to max speed
26	26		**TINT**.
		000 - 127	Linear Tint setting, define target point correction from Magenta (0bit) to OFF (128bit)
		128	Tint adjustment OFF
		129 - 255	Linear Tint setting, define target point correction from Green (0bit) to OFF (128bit)

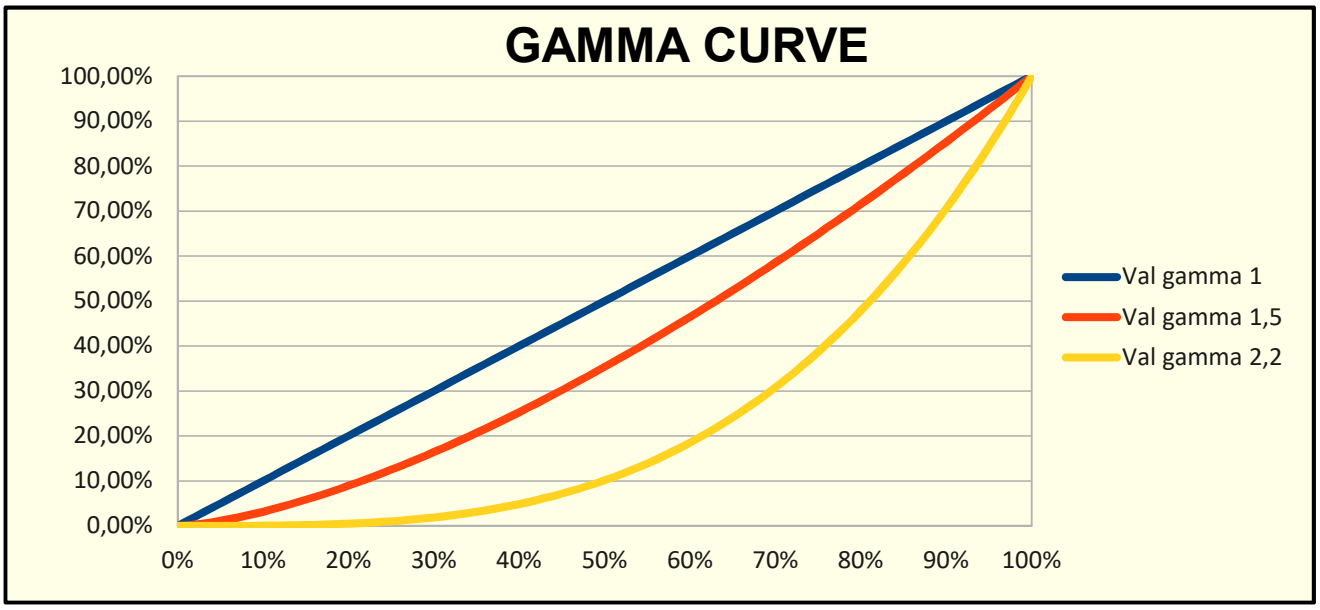
RGB	HSV	DMX value	Function	
27	27		**FUNCTION** To active selected function stop in unused range for 5 sec Configuration setting remains active after power off.	
		000 - 011	Unused range	
		012 - 037	Linear (**Default**)	
		038 - 042	S Curve	**Refer to page 20**
		043 - 047	Square	
		048 - 052	Smooth Square	
		053 - 057	S Curve	
		058 - 062	Raw colour channels gamma 1 -	**Refer to page 20**
		063 - 067	Raw colour channels gamma 1.5	
		068 - 072	Raw colour channels gamma 2.2 (**Default**)	
		073 - 077	Halogen mode disabled (**Default**)	
		078 - 082	Halogen mode 1, 750W lamp emulation	
		083 - 087	Halogen mode 2, 1000W lamp emulation	
		088 - 092	Halogen mode 3, 1200W lamp emulation	
		093 - 097	Halogen mode 4, 2000W lamp emulation	
		098 - 102	Halogen mode 5, 2500W lamp emulation	
		103 - 105	Reserved	
		106 - 108	CCMOD: RAW (**Default**)	
		109 - 111	CCMOD: RGB (or HSV) mode	
		112 - 114	CCMOD: *RGB to* CMY	
		115 - 117	*Reserved*	
		118 - 122	*Reserved*	
		123	CTO Filter (**Default**)	
		124	CTO White	
		125 - 163	Reserved	
		126 - 127	Gamut Adaptation Relative	
		128 - 129	Gamut Adaptation Absolute	
		130 - 133	Reserved	
		134	RGB Colour Space Native	
		135	RGB Colour Space sRGB	
		136 - 163	Reserved	
		164	Base frequency=1000Hz	
		165	Base frequency=1500Hz (**Default**)	
		166	Base frequency=2400Hz	
		167	Base frequency=3700Hz	
		168	Base frequency=5600Hz	
		169	Base frequency=9400Hz	
		170	Base frequency=15100Hz	
		171	Base frequency=21400Hz	
		172	Base frequency=31000Hz	
		173	Base frequency=43700Hz	
		174 - 250	Reserved	
		251 - 255	Default function recall	

RGB	HSV	DMX value	Function
28	28		**RESET**
		000 - 025	Unused range
		026 - 255	It does the complete reset sequence of fixture passing through the unused levels range and staying in this range for 5 seconds
29	29		**FREQUENCY**
		000 - 255	It allows a fine adjusting of frequency base value selected with Function parameter- **Details of values at page 17.**

KLEMANTIS AS
DMX Chart

03/2021





KLEMANTIS AS
DMX Chart
Macro Colors Library

03/2021

DMX Value	LEE Filter references	Description	DMX Value	LEE Filter references	Description
000 – 009	None	None	104 – 105	147	Apricot
010 – 011	004	4 Med Bast Amber	106 – 107	152	Pale Gold
012 – 013	009	Pale Amber Gold	108 – 109	154	Pale Rose
014 – 015	-	*Reserved*	110 – 111	157	Pink
016 – 017	017	Surprise Peach	112 – 113	158	Deep Orange
018 – 019	019	Fire	114 – 115	161	Slate Blue
020 – 021	021	Gold Amber	116 – 117	162	Bastard Amber
022 – 023	026	Bright red	118 – 119	-	*Reserved*
024 – 025	029	Plasa Red	120 – 121	165	Daylight Blue
026 – 027	035	Light Pink	122 – 123	169	Lilac Tint
028 – 029	058	Lavender	124 – 125	170	Deep Lavender
030 – 031	068	Sky Blue	126 – 127	172	Lagoon Blue
032 – 033	071	Tokyo Blue	128 – 129	174	Dk Steel Blue
034 – 035	075	Evening Blue	130 – 131	-	*Reserved*
036 – 037	079	Just Blue	132 – 133	180	Dark Lavander
038 – 039	088	Lime Green	134 – 135	-	*Reserved*
040 – 041	090	Dark Yellow/Green	136 – 137	182	Light Red
042 – 043	-	*Reserved*	138 – 139	197	Alice Blue
044 – 045	-	*Reserved*	140 – 141	200	Double C.T. Blue
046 – 047	-	*Reserved*	142 – 143	201	Full C.T. Blue
048 – 049	103	Straw	144 – 145	202	1/2 C.T. Blue
050 – 051	-	*Reserved*	146 – 147	203	1/4 C.T. Blue
052 – 053	-	*Reserved*	148 – 149	204	Full C.T. Orange
054 – 055	106	Primary Red	150 – 151	205	1/2 C.T. Orange
056 – 057	108	English Rose	152 – 153	206	1/4 C.T. Orange
058 – 059	111	Dark Pink	154 – 155	241	Lee Fluor 5700K
060 – 061	113	Magenta	156 – 157	242	Lee Fluor 4300K
062 – 063	115	Peacock Blue	158 – 159	247	Lee Minus Green
064 – 065	116	Med Blue-Green	160 – 161	248	1/2 Minus Green
066 – 067	117	Steel Blue	162 – 163	281	3/4 C.T. Blue
068 – 069	118	Light Blue	164 – 165	285	3/4 C.T. Orange
070 – 071	119	Dark Blue	166 – 167	328	Follies Pink
072 – 073	-	*Reserved*	168 – 169	352	Glacier Blue
074 – 075	121	Lee Green	170 – 171	353	Lighter Blue
076 – 077	122	Fern Green	172 – 173	363	Special Medium Blue
078 – 079	124	Dark Green	174 – 175	706	King Fals Lavender
080 – 081	127	Smokey Pink	176 – 177	711	Cold Blue
082 – 083	128	Bright Pink	178 – 179	724	Ocean Blue
084 – 085	131	Marine Blue	180 – 181	728	Steel Green
086 – 087	132	Med Blue	182 – 183	747	Easy White
088 – 089	134	Golden Amber	184 – 185	778	Millenium Gold
090 – 091	135	Dip Golden Amber	186 – 187	793	Vanity Fair
092 – 093	136	Pale Lavender	188 – 189	R05	Rose Tint (ROSCO)
094 – 095	137	Spec Lavender	190 – 255	-	Reserved
096 – 097	138	Pale Green			
098 – 099	139	Primary Green			
100 – 101	141	Bright Blue			
102 – 103	143	Pale Navy Blue			

Frequency parameter levels

Base Frequency setting	Value at 128 bit	Min value at 0 bit	Max value at 255 bit
1000 Hz	**1000 Hz**	744 Hz	1254 Hz
1500 Hz (**Default**)	**1500 Hz**	1244 Hz	1754 Hz
2400 Hz	**2400 Hz**	1760 Hz	3035 Hz
3700 Hz	**3700 Hz**	3060 Hz	4335 Hz
5600 Hz	**5600 Hz**	4320 Hz	6870 Hz
9400 Hz	**9400 Hz**	6840 Hz	11940 Hz
15100 Hz	**15100 Hz**	11900 Hz	18275 Hz
21400 Hz	**21400 Hz**	18200 Hz	24575 Hz
31000 Hz	**31000 Hz**	24600 Hz	37350 Hz
43700 Hz	**43700 Hz**	37300 Hz	50050 Hz