

## DMX Lookup Tables (8-Bit Generic)

## CTM 0/1/1B/1C/1C HD, DDM 0/1/1B/1C, ALM

### Notes

#### Tunable White Options

If you want to strictly do Tunable White control with DMX, then use Channel 1 (INT) and Channel 2 (CCT).  
 Channel 3 (SAT) is set at 0.  
 Channel 4 (HUE) is set at 0.

If you want to play with a more saturated version of a Tunable White CCT setting, then keep Channel 4 (HUE) at 0 and use Channel 3 (SAT).  
 As you go from 0 to 100 on Channel 3 (SAT), you are adding “RED” to the current CCT value, pulling it more towards red on the CIE chromaticity diagram (away from the black body curve).

#### Full Color Gamut Options

If you want to play with full color gamut options, you will really only be using Channel 1 (INT), Channel 3 (SAT) and Channel 4 (HUE).  
 Channel 2 (CCT) would be set to 0. (It can be left at current value if needed in program.)

For full saturated color, Channel 3 (SAT) = 100.  
 Channel 1 (INT) can be anything from 0 - 100.  
 Channel 4 (HUE) will be the range of colors shown on the spreadsheet (0 = RED, 100 = RED, other colors in between for values shown).

You can go less saturated at different HUE values, but recommend that it remains at 100.

Refer to the separate ‘Araya DMX512-A Specifications’ for additional notes.

%	CH1 (Hex)	CH2 (Hex)	CH3 (Hex)	CH4 (Hex)	Color	CIE Chart	CTM0 (2700–6000 K)	CTM 0/1/1B (1650–4000 K)	CTM 1C/1C HD ALM2 (1650–8000 K)	DDM 0/1/1B/1C (1800–3050 K)
Percentage	Dim	CCT	Saturation	Hue	Center Point	Hue Values	CCT	CCT	CCT	CCT
0	0	0	0	0	RED	0	2700	1650	1650	1800
1	2	2	2	0		0	2725	1668	1699	1800
2	5	5	5	3		0	2764	1696	1774	1814
3	7	7	7	6		0	2790	1714	1824	1829
4	10	10	10	9	ORANGE	0	2829	1742	1899	1844
5	12	12	12	12		3	2855	1760	1948	1858
6	15	15	15	15		3	2894	1788	2023	1873
7	17	17	17	15		3	2920	1806	2073	1873
8	20	20	20	18		3	2958	1834	2148	1888
9	22	22	22	21		3	2984	1852	2197	1902
10	25	25	25	24	YELLOW	6	3023	1880	2272	1917
11	28	28	28	27		6	3062	1908	2347	1932
12	30	30	30	30		6	3088	1926	2397	1947
13	33	33	33	33		6	3127	1954	2471	1961

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CTM 0/1/1B/1C/1C HD, DDM 0/1/1B/1C, ALM

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Percentage	Dim	CCT	Saturation	Hue	Center Point	Hue Values	CCT	CCT	CCT	CCT
14	35	35	35	33		6	3152	1972	2521	1961
15	38	38	38	36		9	3191	2000	2596	1976
16	40	40	40	39		9	3217	2018	2646	1991
17	43	43	43	42		9	3256	2046	2720	2005
18	45	45	45	45	GREEN	9	3282	2064	2770	2020
19	48	48	48	48		9	3321	2092	2845	2035
20	51	51	51	51		12	3360	2120	2920	2050
21	53	53	53	51		12	3385	2138	2969	2050
22	56	56	56	54		12	3424	2166	3044	2064
23	58	58	58	57		12	3450	2184	3094	2079
24	61	61	61	60		12	3489	2212	3169	2094
25	63	63	63	63		15	3515	2230	3218	2108
26	66	66	66	66		15	3554	2258	3293	2123
27	68	68	68	66		15	3580	2276	3343	2123
28	71	71	71	69		15	3618	2304	3418	2138
29	73	73	73	72		15	3644	2322	3467	2152
30	76	76	76	75		18	3683	2350	3542	2167
31	79	79	79	78		18	3722	2378	3617	2182
32	81	81	81	81		18	3748	2396	3667	2197
33	84	84	84	84		18	3787	2424	3741	2211
34	86	86	86	84		18	3812	2442	3791	2211
35	89	89	89	87		21	3851	2470	3866	2226
36	91	91	91	90		21	3877	2488	3916	2241
37	94	94	94	93		21	3916	2516	3990	2255
38	96	96	96	96		21	3942	2534	4040	2270
39	99	99	99	99		21	3981	2562	4115	2285
40	102	102	102	102		24	4020	2590	4190	2300
41	104	104	104	102		24	4045	2608	4239	2300
42	107	107	107	105		24	4084	2636	4314	2314
43	109	109	109	108		24	4110	2654	4364	2329

**IMPORTANT:** Refer to the Notes on page-1. Refer to the separate 'Araya DMX512-A Specifications' for additional notes.

**CONTINUED:** On next page.

DMX Lookup Tables (8-Bit Generic)

CTM 0/1/1B/1C/1C HD, DDM 0/1/1B/1C, ALM

%	CH1 (Hex)	CH2 (Hex)	CH3 (Hex)	CH4 (Hex)	Color	CIE Chart	CTM0 (2700–6000 K)	CTM 0/1/1B (1650–4000 K)	CTM 1C/1C HD ALM2 (1650–8000 K)	DDM 0/1/1B/1C (1800–3050 K)
Percentage	Dim	CCT	Saturation	Hue	Center Point	Hue Values	CCT	CCT	CCT	CCT
44	112	112	112	111		24	4149	2682	4439	2344
45	114	114	114	114		27	4175	2700	4488	2358
46	117	117	117	117		27	4214	2728	4563	2373
47	119	119	119	117		27	4240	2746	4613	2373
48	122	122	122	120		27	4278	2774	4688	2388
49	124	124	124	123		27	4304	2792	4737	2402
50	127	127	127	126		30	4343	2820	4812	2417
51	130	130	130	129		30	4382	2848	4887	2432
52	132	132	132	132		30	4408	2866	4937	2447
53	135	135	135	135		30	4447	2894	5011	2461
54	137	137	137	135		30	4472	2912	5061	2461
55	140	140	140	138		33	4511	2940	5136	2476
56	142	142	142	141		33	4537	2958	5186	2491
57	145	145	145	144		33	4576	2986	5260	2505
58	147	147	147	147		33	4602	3004	5310	2520
59	150	150	150	150		33	4641	3032	5385	2535
60	153	153	153	153		36	4680	3060	5460	2550
61	155	155	155	153		36	4705	3078	5509	2550
62	158	158	158	156		36	4744	3106	5584	2564
63	160	160	160	159		36	4770	3124	5634	2579
64	163	163	163	162		36	4809	3152	5709	2594
65	165	165	165	165		39	4835	3170	5758	2608
67	170	170	170	168		39	4900	3216	5883	2623
68	173	173	173	171	BLUE	39	4938	3244	5958	2638
69	175	175	175	174		39	4964	3262	6007	2652
70	178	178	178	177		42	5003	3290	6082	2667
71	181	181	181	180		42	5042	3318	6157	2682
72	183	183	183	183		42	5068	3336	6207	2697
73	186	186	186	186		42	5107	3364	6281	2711
74	188	188	188	186		42	5132	3382	6331	2711
75	191	191	191	189		45	5171	3410	6406	2726
76	193	193	193	192		45	5197	3428	6456	2741
77	196	196	196	195		45	5236	3456	6530	2755
78	198	198	198	198		45	5262	3474	6580	2770
79	201	201	201	201		45	5301	3502	6655	2785
80	204	204	204	204		48	5340	3530	6730	2800
81	206	206	206	204		48	5365	3548	6779	2800

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Percentage	Dim	CCT	Saturation	Hue	Center Point	Hue Values	CCT	CCT	CCT	CCT
82	209	209	209	207		48	5404	3576	6854	2814
83	211	211	211	210		48	5430	3594	6904	2829
84	214	214	214	213		48	5469	3622	6979	2844
85	216	216	216	216		51	5495	3640	7028	2858
86	219	219	219	219		51	5534	3668	7103	2873
87	221	221	221	219		51	5560	3686	7153	2873
88	224	224	224	222		51	5598	3714	7228	2888
89	226	226	226	225		51	5624	3732	7277	2902
90	229	229	229	228		54	5663	3760	7352	2917
91	232	232	232	231		54	5702	3788	7427	2932
92	234	234	234	234		54	5728	3806	7477	2947
93	237	237	237	237		54	5767	3834	7551	2961
94	239	239	239	237		54	5792	3852	7601	2961
95	242	242	242	240	VIOLET	57	5831	3880	7676	2976
96	244	244	244	243		57	5857	3898	7726	2991
97	247	247	247	246		57	5896	3926	7800	3005
98	249	249	249	249		57	5922	3944	7850	3020
99	252	252	252	252		57	5961	3972	7925	3035
100	255	255	255	255	RED	60	6000	4000	8000	3050

**IMPORTANT:** Refer to the Notes on page-1. Refer to the separate 'Araya DMX512-A Specifications' for additional notes.