



TITAN™ ULTIMATE PROTOCOL 1: 8 BIT 16 CHANNEL

For Titan firmware 205_212 and above (July 2021). DMX protocols v1.5.

DMX CHANNEL	FUNCTION	MODE 1A	MODE 1B	MODE 1C	MODE 1D	MODE 1E	MODE 1F	MODE 1G
1	Master Intensity	Master Intensity	Master Intensity	Master Intensity	Master Intensity	Master Intensity	Master Intensity	Modelling Intensity
2	CCT	Colour Temperature (CCT)	Colour Temperature (CCT)	Colour Temperature (CCT)	Colour Temperature (CCT)	Colour Temperature (CCT)	Colour Temperature (CCT)	Colour Temperature (CCT)
3	Diffusion	Diffusion	Diffusion	Diffusion	Diffusion	Diffusion	Diffusion	Diffusion
4	MODE SELECT	Col Mode: CCT (0-31)	Col Mode: RGBW (32 - 63)	Col Mode: HSI (64 - 95)	Col Mode: XY (96 - 127)	Col Mode: FILTER (128 - 159)	Col Mode: Cine SFX (160 - 191)	Col Mode: FLASH (192 - 223)
5	Magenta / Green	Magenta / Green	Magenta / Green	Magenta / Green	Magenta / Green	Magenta / Green	Magenta / Green	Magenta / Green
6	Red	Red	Red	Hue lo	CIE x hi	Brand (FILT1)	Red	XFX Delay
7	Green	Green	Green	Hue hi	CIE x lo	GelNumber 100s (FILT2)	Green	XFX Reps
8	Blue	Blue	Blue	Saturation	CIE y hi	GelNumber 1s (FILT3)	Blue	XFX Gaps
9	Warm White Intensity	Warm	Warm		CIE y lo	(FILT4)	Warm	
10	Cool White Intensity	Cool	Cool				Cool	Flash Duration
11	Trigger	SFX Trigger	SFX Trigger	SFX Trigger	SFX Trigger	SFX Trigger	SFX Trigger	Flash Trigger
12	FX & Flash Parameter	SFX Select	SFX Select	SFX Select	SFX Select	SFX Select	SFX Select	Flash Power
13	FX & Flash Parameter	SFX Frequency	SFX Frequency	SFX Frequency	SFX Frequency	SFX Frequency	SFX Frequency	Skyport mode
14	FX & Flash Parameter	SFX Duty	SFX Duty	SFX Duty	SFX Duty	SFX Duty	SFX Duty	Sky Group
15	Crossfade	Crossfade	Crossfade	Crossfade	Crossfade	Crossfade	Crossfade	Sky Frequency
16	Fan Control	Fans Auto->127->Manual	Fans Auto->127->Manual	Fans Auto->127->Manual	Fans Auto->127->Manual	Fans Auto->127->Manual	Fans Auto->127->Manual	Fans Auto->127->Manual

In Filter Mode 1E use channel 2 to select filter base colour, 3200K or 6500K

The crossfade control fades between the **primary** and **secondary** colours.

For example; In CCT mode CCT white is the primary and RGBWC is the secondary
In RGB mode RGBWC is the primary and CCT white is the secondary etc.

When crossfade is set to **zero** it's backwards compatible with the previous mappings - just giving the primary colour output in each mode.

Valid from July 2021 firmware V1.5 and above



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SFX Sel Value Mapping (Channel 12)

0	7	SFX Off
8	15	Strobe
16	23	Lightning Storm
24	31	Throbing
32	39	Colour Cycle
40	47	Fire
48	55	Police Lights
56	63	TV Simulator
64	71	Shotgun
72	79	Neon Light
80	87	Film Simulation
88	95	Welding
96	103	Paparazzi
104	111	Spare
112	119	Spare
120	127	Fade
128	255	Reserved

Col Mode Value Mapping (Channel 4)

Min	Min	
0	31	CCT
32	63	RGB
64	95	H.S.I
96	127	xy
128	159	Filter
160	191	CineSFX
192	223	Flash

Fans Value Mapping (Channel 16)

0	127	Auto speed mode
128	255	Manual speed control

CCT Mapping

DMX	CCT	DMX	CCT	DMX	CCT	DMX	CCT	DMX	CCT
0	3000	192	6850	208	7650	224	8450	240	9250
1	3020	193	6900	209	7700	225	8500	241	9300
2	3040	194	6950	210	7750	226	8550	242	9350
3	3060	195	7000	211	7800	227	8600	243	9400
4	3080	196	7050	212	7850	228	8650	244	9450
5	3100	197	7100	213	7900	229	8700	245	9500
6	3120	198	7150	214	7950	230	8750	246	9550
7	3140	199	7200	215	8000	231	8800	247	9600
8	3160	200	7250	216	8050	232	8850	248	9650
9	3180	201	7300	217	8100	233	8900	249	9700
10	3200	202	7350	218	8150	234	8950	250	9750
11	3220	203	7400	219	8200	235	9000	251	9800
12	3240	204	7450	220	8250	236	9050	252	9850
13	3260	205	7500	221	8300	237	9100	253	9900
14	3280	206	7550	222	8350	238	9150	254	9950
15	3300	207	7600	223	8400	239	9200	255	10000

DMX Value Range for filter 'BRAND' (Channel 6)

Start	End	Gel Brand	Approx No of Items in group	Brand/GrpNo
0	9	Apollo	117	0
10	19	GAM	142	1
20	29	Lee	247	2
30	39	Lee HT	50	3
40	49	Rosco	652	4
50	59	Source	67	11
60	69	Red	74	0
70	79	Orange	83	1
80	89	Amber	94	2
90	99	Yellow	103	3
100	109	Green	112	4
110	119	Turquoise	102	5
120	129	Blue	252	6
130	139	Pink	112	7
140	149	Magenta	209	8
150	159	Brown	26	9
160	169	Cosmetic	22	10
170	239	All	1256	
240	255	GUI Controls	All	

In this mode Gel,2,3,are treated as a simple copy of the GUI COLOUR AND NUMBER filter selection controls.

Gel2 Specifies Manufacturers index number in 100's

Gel3 Specifies Manufacturers index number in 1's

Eg. Rosco R4215 would be selected by setting the following DMX values: Gel 1 = 40, Gel 2 = 42, Gel 3 = 15

Note: Manufacturers index number are non-contiguous.
If the DMX values specify a non-existent filter number then select the nearest valid filter number.