

GEMINI DMX FUNCTION CHART V2.9

For use with Gemini FW Rev B2 and later. May 10, 2018

CCT Mode (Gemini Set to 8 Bit Mode)

<u>Channel</u>	<u>Value</u>	<u>%</u>	<u>Function</u>	<u>Notes</u>		
Base Chan	0-255	0-100	Dimmer	Base Chan= 1 to 497		
Base Chan+1	0-255	0-100	CCT (2700K-6000K)			
Base Chan+2	0-10 11-20 21-119 120-145 146-244 245-255	0-4 4-8 8-47 47-57 47-96 96-100	Green OffSet NO OffSet (0 Green) -100 Green -99 to -1 Green No OffSet (0 Green) +1 to +99 Green +100 Green			
Base Chan+3			Reserved			
Base Chan+4	0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	0 < Val < 42		
Base Chan+5	0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		

HSI Mode (Gemini Set to 8 Bit Mode)

<u>Channel</u>	<u>Value</u>	<u>%</u>	<u>Function</u>	<u>Notes</u>		
Base Chan	0-255	0-100	Dimmer	Base Chan= 1 to 497		
Base Chan+1	0-255	0-100	HUE 0 to 359 Degrees			
Base Chan+2	0-255	0-100	Saturation 0 to Full Saturation			
Base Chan+3			Reserved			
Base Chan+4	0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	43 < Val < 85		
Base Chan+5	0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power Reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		

GEL Mode (Gemini Set to 8 Bit Mode)						
Channel	Value	%	Function	Notes		
Base Chan	0-255	0-100	Dimmer	Base Chan= 1 to 497		
Base Chan+1	0-127 128-255	0-50 50-100	CCT (2700K-6000K) Tungsten Source Daylight Source			
Base Chan+2	0-25 26-51 52-76 77-102 103-127 128-153 154-178 179-204 205-229 230-255	0-10 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100	Gel ID 1's Digit (See GEL ID Chart) 0 1 2 3 4 5 6 7 8 9	GelID#= _ GelID#= _1 GelID#= _2 GelID#= _3 GelID#= _4 GelID#= _5 GelID#= _6 GelID#= _7 GelID#= _8 GELID#= _9		
Base Chan+3	0-25 26-51 52-76 77-102 103-127 128-153 154-178 179-204 205-229 230-255	0-10 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100	Gel ID 10's Digit (See GEL ID Chart) 0 1 2 3 4 5 6 7 8 9	GelID#= _ GelID#= 1_ GelID#= 2_ GelID#= 3_ GelID#= 4_ GelID#= 5_ GelID#= 6_ GelID#= 7_ GelID#= 8_ GELID#= 9_		
Base Chan+4	0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	86 < Val < 127		
Base Chan+5	0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power Reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		

RGBW Mode (Gemini Set to 8 Bit Mode)						
Channel		Value	%	Function	Notes	
Base Chan		0-255	0-100	Dimmer	Base Chan= 1 to 497	
Base Chan+1		0-255	0-100	CCT (2700K-6000K)		
Base Chan+2		0-255	0-100	White Intens		
Base Chan+3				Red Intens		
Base Chan+4				Mode	128 < Val < 170	
		0-42	0-16	CCT		
		43-85	17-33	HSI		
		86-127	34-50	GEL		
		128-170	50-66	RGBW		
		171-212	67-83	EFFECTS (Loop Mode)		
		213-255	83-100	PRESETS TRIGGER MODE		
Base Chan+5				Fan	(Enable/Disable DMX Fan	
Base Chan+6		0-255	0-100	Green Intens		
Base Chan+7		0-255	0-100	Blue Intens		

Channel		Value	%	Function	Notes		
Base Chan		0-255	0-100	Dimmer	Base Chan= 1 to 497		
Base Chan+1		0-255	0-100	CCT (2700K-6000K)			
Base Chan+2		0-255	0-100	White Intens			
Base Chan+3				Red Intens			
Base Chan+4		0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	128 < Val < 170		
Base Chan+5				Fan	(Enable/Disable DMX Fan		
Base Chan+6		0-255	0-100	Green Intens			
Base Chan+7		0-255	0-100	Blue Intens			

EFFECTS Mode (Gemini Set to 8 Bit Mode)						
<u>Channel</u>	<u>Value</u>	<u>%</u>	<u>Function</u>	<u>Notes</u>		
Base Chan	0-255	0-100	Dimmer	Base Chan= 1 to 497		
Base Chan+1	0-15 16-31 32-47 48-63 64-79 80-95 96-111 112-127 128-143 144-159 160-171 172-255	0-6 6-12 12-19 19-25 25-31 31-37 37-43 44-50 50-56 57-63 63-69 70-100	EFFECTS Emergency Fire Fireworks HUE Burst Lite-ning Paparazzi Party Lites Pulsing Squares Strobe TV/Monitor Reserved			
Base Chan+2	0-255	0-100	DMX EFFECTS PARAMETER 1 (See Dmx Effects Parm's below)			
Base Chan+3	0-255	0-100	DMX EFFECTS PARAMETER 2 (See Dmx Effects Parm's below)			
Base Chan+4	0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	171 < Val < 212		
Base Chan+5	0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power Reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		
Base Chan+6	0-255	0-100	DMX EFFECTS PARAMETER 3 (See Dmx Effects Parm's below)			
Base Chan+7	0-255	0-100	DMX EFFECTS PARAMETER 4 (See Dmx Effects Parm's below)			
Base Chan+8	0-255	0-100	DMX EFFECTS PARAMETER 5 (See Dmx Effects Parm's below)			

<u>Presets Trigger Mode (Gemini Set to 8 Bit Mode)</u>						
(Bump "Base Ch+2" Data from 0 to 128+ to Trigger)						
<u>Channel</u>	<u>Value</u>	<u>%</u>	<u>Function</u>	<u>Notes</u>		
Base Chan	0-255	0-100	Dimmer (if changed after preset is triggered)	Preset Dim used unless Board Dimmer changes		
Base Chan+1	0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 51-66 67-83 84-100	PRESET SELECT Preset # 1 Preset # 2 Preset # 3 Preset # 4 Preset # 5 Preset # 6	Select the Preset # to be triggered		
Base Chan+2	0-10 11-127 128-255	0-4 4-50 51-100	Trigger the Preset Preset Trigger Armed No Action Preset Triggered	Bump from 0 to 128+ to trigger the preset that is selected by (Base Ch+1) and (Base Ch+3)		
Base Chan+3	0-127 128-191 192-255	0-50 51-75 176-100	FACTORY / USER TYPE SELECT Preset Trigger Disabled Factory Preset Selected User Preset Selected	Select Factory or User Preset		
Base Chan+4	0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	213 < Val < 255		

CCT Mode (Gemini Set to 16 Bit Mode)							
<u>Channel</u>		<u>Value</u>	<u>%</u>	<u>Function</u>	<u>Notes</u>		
Upper	Lower						
Base Ch	Base Ch+1	0-65535	0-100	Dimmer	Base Chan= 1 to 497		
Base Ch+2	Base Ch+3	0-32767 32768-65535	0-50 50-100	CCT (2700K-6000K) Tungsten Source Daylight Source			
Base Ch+4	Base Ch+5	0-5000 5001-10000 10001-29999 30000-40000 40001-59999 60000-65535	0-7 8-15 16-46 46-61 61-92 92-100	Green OffSet NO OffSet (0 Green) -100 Green -99 to -1 Green NO OffSet (0 Green) +1 to +99 Green +100 Green			
Base Chan+6		0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	0 < Val < 42		
Base Chan+7		0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power Reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		

HSI Mode (Gemini Set to 16 Bit Mode)							
<u>Channel</u>		<u>Value</u>	<u>%</u>	<u>Function</u>	<u>Notes</u>		
Upper	Lower						
Base Ch	Base Ch+1	0-65535	0-100	Dimmer	Base Chan= 1 to 497		
Base Ch+2	Base Ch+3	0-65535	0-100	HUE 0 to 360 Degrees			
Base Ch+4	Base Ch+5	0-65535	0-100	Saturation 0 to Full Saturation			
Base Chan+6		0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 51-66 67-83 84-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	43 < Val < 85		
Base Chan+7		0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power Reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		

Gel Mode (Gemini Set to 16 Bit Mode)							
Channel		Value	%	Function	Notes		
Upper	Lower						
Base Ch	Base Ch+1	0-65535	0-100	Dimmer	Base Chan= 1 to 497		
Base Chan+2		0-127 128-255	0-50 50-100	CCT (2700K-6000K) Tungsten Source Daylight Source			
Base Chan+3				Reserved			
Base Chan+4				Gel ID 1's Digit (See GEL ID Chart)			
		0-25	0-10	0	GelID#= _		
		26-51	10-20	1	GelID#= _1		
		52-76	20-30	2	GelID#= _2		
		77-102	30-40	3	GelID#= _3		
		103-127	40-50	4	GelID#= _4		
		128-153	50-60	5	GelID#= _5		
		154-178	60-70	6	GelID#= _6		
		179-204	70-80	7	GelID#= _7		
		205-229	80-90	8	GelID#= _8		
		230-255	90-100	9	GELID#= _9		
Base Chan+5				Gel ID 10's Digit (See GEL ID Chart)			
		0-25	0-10	0	GelID#= _		
		26-51	10-20	1	GelID#= 1_		
		52-76	20-30	2	GelID#= 2_		
		77-102	30-40	3	GelID#= 3_		
		103-127	40-50	4	GelID#= 4_		
		128-153	50-60	5	GelID#= 5_		
		154-178	60-70	6	GelID#= 6_		
		179-204	70-80	7	GelID#= 7_		
		205-229	80-90	8	GelID#= 8_		
		230-255	90-100	9	GELID#= 9_		
Base Chan+6		0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	86 < Val < 127		
Base Chan+7		0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power Reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		

RGBW Mode (Gemini Set to 16 Bit Mode)							
Channel		Value	%	Function	Notes		
Upper	Lower						
Base Ch	Base Ch+1	0-65535	0-100	Dimmer	Base Chan= 1 to 497		
Base Ch+2	Base Ch+3	0-65535	0-100	CCT (2700K-6000K)			
Base Ch+4	Base Ch+5	0-65535	0-100	White Intensity			
Base Chan+6		0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	128 < Val < 170		
Base Chan+7		0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power Reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		
Base Ch+8	Base Ch+9	0-65535	0-100	Red Intensity			
Base Ch+10	Base Ch+11	0-65535	0-100	Green Intensity			
Base Ch+12	Base Ch+13	0-65535	0-100	Blue Intensity			

Effects Mode (Gemini Set to 16 Bit Mode)							
Channel		Value	%	Function	Notes		
Upper	Lower						
Base Ch	Base Ch+1	0-255	0-100	Dimmer	Base Chan= 1 to 497		
Base Chan+2		0-15 16-31 32-47 48-63 64-79 80-95 96-111 112-127 128-143 144-159 160-171 172-255	0-6 6-12 12-19 19-25 25-31 31-37 37-43 44-50 50-56 57-63 63-69 70-100	EFFECTS Emergency Fire Fireworks HUE Burst Lite-ning Paparazzi Party Lites Pulsing Squares Strobe TV/Monitor Reserved			
Base Ch+3	Base Ch+4	0-255	0-100	DMX EFFECTS PARAMETER 1 (See Dmx Effects Parm's below)			
Base Chan+5				Reserved			
Base Chan+6		0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	171 < Val < 212		
Base Chan+7		0-127 128-255	0-50 50-100	Fan Fan Auto Fan Off (Power Reduced by 50%)	(Enable/Disable DMX Fan Control Option in Gemini Menu)		
Base Ch+8	Base Ch+9	0-255	0-100	DMX EFFECTS PARAMETER 2 (See Dmx Effects Parm's below)			
Base Ch+10	Base Ch+11	0-255	0-100	DMX EFFECTS PARAMETER 3 (See Dmx Effects Parm's below)			
Base Ch+12	Base Ch+13	0-255	0-100	DMX EFFECTS PARAMETER 4 (See Dmx Effects Parm's below)			
Base Ch+14	Base Ch+15	0-255	0-100	DMX EFFECTS PARAMETER 5 (See Dmx Effects Parm's below)			

Preset Trigger Mode (Gemini Set to 16 Bit Mode)						
(Bump "Base Ch+2" Data from 0 to 128+ to Trigger)						
Base Chan	0-255	0-100	Dimmer (if changed after preset is triggered)	Preset Dim used unless Board Dimmer changes		
Base Chan+1	0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 51-66 67-83 84-100	PRESET SELECT Preset # 1 Preset # 2 Preset # 3 Preset # 4 Preset # 5 Preset # 6	Select the Preset # to be triggered		
Base Chan+2	0-10 11-127 128-255	0-4 4-50 51-100	Trigger the Preset Preset Trigger Armed No Action Preset Triggered	Bump from 0 to 128+ to trigger the preset that is selected by (Base Ch+1) and (Base Ch+3)		
Base Chan+3	0-127 128-191 192-255	0-50 51-75 176-100	FACTORY / USER TYPE SELECT Preset Trigger Disabled Factory Preset Selected User Preset Selected	Select Factory or User Preset		
Base Chan+4			Reserved			
Base Chan+5			Reserved			
Base Chan+6	0-42 43-85 86-127 128-170 171-212 213-255	0-16 17-33 34-50 50-66 67-83 83-100	Mode CCT HSI GEL RGBW EFFECTS (Loop Mode) PRESETS TRIGGER MODE	213 < Val < 255		

GEL ID CHART						
ID#	10's Digit	1's Digit	Gel ID	Gel Description		
0	0	0	R01	Light Bastard Amber		
1	0	1	R09	Pale Amber Gold		
2	0	2	R16	Light Amber		
3	0	3	R19	Fire		
4	0	4	R20	Medium Amber		
5	0	5	R24	Scarlet		
6	0	6	R26	Light Red		
7	0	7	R31	Salmon Pink		
8	0	8	R33	No Color Pink		
9	0	9	R36	Medium Pink		
10	1	0	R40	Light Salmon		
11	1	1	R42	Deep Salmon		
12	1	2	R45	Rose		
13	1	3	R54	Special Lavender		
14	1	4	R57	Lavender		
15	1	5	R60	No Color Blue		
16	1	6	R63	Pale Blue		
17	1	7	R65	Daylight Blue		
18	1	8	R67	Light Sky Blue		
19	1	9	R68	Parry Sky Blue		
20	2	0	R70	Nile blue		
21	2	1	R76	Light Green Blue		
22	2	2	R77	Green Blue		
23	3	3	R80	Primary Blue		
24	2	4	R85	Deep Blue		
25	2	5	R86	Pea Green		
26	2	6	R89	Moss Green		
27	2	7	R90	Dark Yellow Green		
28	2	8	R95	Medium Blue Green		
29	2	9	R99	Chocolate		
30	3	0	R355	Pale Violet		
31	3	1	R3202	Full CTB		
32	3	2	R3204	1/2 CTB		
33	3	3	R3208	1/4 CTB		
34	3	4	R3304	Tough PlusGreen		
35	3	5	R3407	RoscoSun CTO		
36	3	6	R3408	RoscoSun 1/2 CTO		
37	3	7	R3409	RoscoSun 1/4 CTO		
38	3	8	R4330	CalcColor 30 Cyan		
39	3	9	R4360	CalcColor 60 Cyan		
40	4	0	R4390	CalcColor 90 cyan		
41	4	1	L71	Tokyo Blue		
42	4	2	L103	Straw		
43	4	3	L116	Medium Blue-Green		
44	4	4	L147	Apricot		
45	4	5	L713	J. Winter Blue		
46	4	6	RE213	White Flame Green		
47	4	7	RE730	Liberty Green		
48	4	8	R3150	Industrial Vapor		
49	4	9	R3152	Urban Vapor		
50	5	0	L650	Industry Sodium		
51	5	1	L651	HI Sodium		
52	5	2	L652	Urban Sodium		
53	5	3	L653	LO Sodium		
54	5	4	L713	Aurora Borealis Green		

<u>DMX Effects Parameters (8-bit) (Effects Run in Looped Mode)</u>					
EFFECT	PARM1	PARM2	PARM3	PARM4	PARM5
EMERGENCY!	# of Pulses 0-20% (0-50) = 1 21-40% (51-101) = 2 41-60% (102-153) = 3 61-80% (154-203) = 4 81-100% (204-255) = 5	Colors 0-13% (0-36) = Blue 14-28% (37-73) = Red 29-42% (74-109) = Amber 43-56% (110-145) = Blue+Red 57-71% (146-181) = Blue+Amber 72-85% (182-217) = Blue+White 86-100% (218-255) = Blue+Red+WH	Reserved	Reserved	Reserved
FIRE	HUE 0%(0) = 0 Deg 100%(255) = 359 Deg	SATuration 0%(0) = No SAT 100%(255) = Full SAT	Rate 0%(0) = Slow 100%(255) = Fast	Depth 0%(0) = Shallow 100%(255) = Deep	Color Mix 0-24%(0-63) = 1 Color 25-49%(64-127) = Narrow 50-74%(128-191) = Medium 75-100%(192-255) = Wide
FIREWORKS	Frequency 0%(0) = Sparse 100%(255) = Frequent	Colors 0-20% (0-50) = RWB 21-40% (51-101) = RGB 41-60% (102-153) = 6 CLR 61-80% (154-203) = 12 CLR 81-100% (204-255) = Random	Decay 0-33%(0-85) = Short 34-66%(86-170) = Med 67-100%(171-255) = Long	Reserved	Reserved
HUE BURST	HUE 0%(0) = 0 Deg 100%(255) = 359 Deg	SATuration 0%(0) = No SAT 100%(255) = Full SAT	Gap Between Pulses 0%(0) = 40mSec 100%(255) = 400mSec	Rest for Loop 0%(0) = 50mSec 100%(255) = 5000mSec	Pulse Qty 0%(0) = 1 100%(255) = 16
Lite-ning	Rate 0%(0) = Slowest 100%(255) = Fastest	CCT 0%(0) = 2700K 100%(255) = 6000K	Reserved	Reserved	Reserved
Paparazzi	Frequency 0%(0) = Sparse 100%(0) = Frequent	CCT 0%(0) = 2700K 100%(255) = 6000K	Flash Type 0-24% = 50mSec 25-49% = 100mSec 50-74% = 150mSec 75-100% Bulb	Reserved	Reserved
Party Lites	Rate 0%(0) = Slowest 100%(255) = Fastest	Type 0-33%(0-85) = Pulsing 34-66%(86-170) = Chase 67-100%(171-255) = Blend	Colors 0-19%(0-50) = Red, WH, Blue 20-39%(51-101) = Red, Green, Blue 40-60%(102-153) = 6 Color 61-79%(154-203) = 12 Color 80-100%(204-255) = Random	Reserved	Reserved
Pulsing	HUE 0%(0) = 0 Deg 100%(255) = 359 Deg	SATuration 0%(0) = No SAT 100%(255) = Full SAT	Ramp Time 0%(0) = Fastest Ramp U/D 100%(255) = Slowest Ramp U/D	On Time 0%(0) = 25mSec 100%(255) = 5000mSec	Rest for Loop 0%(0) = 25mSec 100%(255) = 5000mSec

[illegible]