



MODE	NAME / FUNCTION	CHANNELS	RESOLUTION	FUNCTION
1	1 - CCT / RGB	7	8 BIT	DIM, CCT,G/M, CROSSFADE,R,G,B
2	2 - CCT - HUE/SAT	5	8 BIT	DIM, CCT, G/M, HUE, SAT
3	3 - GEL	5	8 BIT	DIM, CCT, GEL, R CORRECT, G CORRECT, B CORRECT
4	4 - FX	12	8 BIT	DIM, FX,TYPE, RATE,MIXEFF, CCT, G/M, CROSS ,R,G,B
5	5 - XY	3	16 BIT	DIM, X, Y

MODE 1 CCT / RGB 8 BIT

DMX CHANNEL	FUNCTION	VALUE	OUTPUT
1	DIMMING	0-255	0-100%
2	CCT	0-200 201-250 251-255	2.000K -7.000K increasing by 25K 7.100 - 12.000K increasing by 100K 13.600K - 20.000K increasing by 1600K
3	G/M	0 - 11 12-22 23-121 123-133 134 - 231 232 -243 244-255	Neural full Minus Green 99 Minus Green to 0 Minus Green Neutral 0 Plus Green to 99 Plus Green full Plus Green Neural
4	CROSSFADE	0-255	CTT 100% to RGB 100%
5	R	0-255	0-100%
6	G	0-255	0-100%
7	B	0-255	0-100%

MODE 2 CCT - HUE/SAT 8 BIT

DMX CHANNEL	FUNCTION	VALUE	OUTPUT
1	DIMMING	0-255	0-100%
2	CCT	0-200 201-250 251-255	2.000K -7.000K increasing by 25K 7.100 - 12.000K increasing by 100K 13.600K - 20.000K increasing by 1600K
3	G/M	0 - 11 12-22 23-121 123-133 134 - 231 232 -243 244-255	Neural full Minus Green 99 Minus Green to 0 Minus Green Neutral 0 Plus Green to 99 Plus Green full Plus Green Neural
4	HUE	0-255	0°-360°
5	SAT	0-255	0-100%



MODE 3 GEL 8 BIT			
DMX CHANNEL	FUNCTION	VALUE	OUTPUT
1	DIMMING	0-255	0-100%
2	CCT	0-120 121-255	3200K 5600K
3	GEL	0 1 - 236 237 - 255	NO CORRECTION GELS (SEE GEL LIST) NO FUNCTION
4	R	0-9 10-124 125-143 144-255	0 -40 - -1 R LEVEL 0 +1 - + 40 R LEVEL
5	G	0-9 10-124 125-143 144-255	0 -40- -1 GLEVEL 0 +1 - + 40 G LEVEL
4	R	0-9 10-124 125-143 144-255	0 -40 - -1 B LEVEL 0 +1 - + 40 B LEVEL

MODE 4 FX 8 BIT			
DMX CHANNEL	FUNCTION	VALUE	OUTPUT
1	DIMMING	0-255	0-100%
2	FX	0-10 11-20 21-30 31-40 41-50 51-60 61-70 71-255	CCT Police Lightning Flash Pulse Scroll Candle CCT
3	TYPE*	0-255	SEE FX TABLE
4	RATE*	0-255	SEE FX TABLE
5	Break*	0-255	SEE FX TABLE
6	MIXEFF*	0-255	SEE FX TABLE
7	CCT	0-200 201-250 251-255	2.000K -7.000K increasing by 25K 7.100 - 12.000K increasing by 100K 13.600K - 20.000K increasing by 1600K
8	G/M	0 - 11 12-22 23-121 123-133 134 - 231 232 -243 244-255	Neural full Minus Green 99 Minus Green to 0 Minus Green Neutral 0 Plus Green to 99 Plus Green full Plus Green Neural
9	CROSSFADE*	0-255	CCT 100% to RGB 100%
10	R*	0-255	0-100%
11	G*	0-255	0-100%
12	B*	0-255	0-100%

* NOT IN EVERY FX FUNCTION AVAILABLE / SEE FX FUNCTION TABLE



FX FUNCTION TABLE						
DMX CHANNEL	1	2	3	4	5	6
FX (DMX CHANNEL)	DIM	FX	Type	Rate	Break	MIXEFFECT
CCT	0-255 0%-100%	0-10	-	-	-	-
POLICE -11	0-255 0%-100%	11-20	COL 0-51 BLUE/RED 52-102 RED 103-153YELLOW 154 - 204 BL/WH/RD 205 - 255 BLUE	SPEED 0-255 0,02s - 2,00sec	0-255 0,10s - 3,00sec	BURST 0-63 = 1 64-127 =2 128-191=3 192 - 255 =4
LIGHTNING-11	0-255 0%-100%	21-30	0-127 FAST 128-255 STRONG	0-12= 1 13-25=2 26-38=3 39-51=4 52-63=5 64-76=6 77-89=7 90-102=8 103-115=9 116-127=10 128-140=11 141-153=12 154-166=13 167-179=14 180-191=15 192-204=16 205-217=17 218-230=18 231-243=19 244-255=20	0-255 0,10s - 3,00sec	-----
FLASH-12	0-255 0%-100%	31-40	0-127= MULTI 128-255=SINGLE	0-255 0-100 Single (1: 60ms..60ms, 50: 60ms..1000ms, 100: 60ms..2000ms) MULTI (1: 110ms..110ms, 50: 60ms..1000ms, 100: 110ms..3000ms)	0-255 0,10s - 3,00sec	FLASH 0-255 0-100 (30ms..200ms) length
PULSE -11	0-255 0%-100%	41-50	-----	0-255 0-100 (0.02s..2.00s)	0-255 0,10s - 3,00sec	LEN 0-255 0-100 (0.02s..2.00s)
SCROLL- 6	0-255 0%-100%	51-60	-----	-----	-----	TIME 0-255= 0.6s -119.5s
CANDLE -11	0-255 0%-100%	61-70	0-127= CALM 128-255=VIVID	0-12= 1 13-25=2 26-38=3 39-51=4 52-63=5 64-76=6 77-89=7 90-102=8 103-115=9 116-127=10 128-140=11 141-153=12 154-166=13 167-179=14 180-191=15 192-204=16 205-217=17 218-230=18 231-243=19 244-255=20	-----	AMPL 0-255 0-100
CCT	0-255 0%-100%	71-255	CCT	-	-	-



FX FUNCTION TABLE						
DMX CHANNEL	7	8	9	10	11	12
FX	CCT	G/M	CROSS	RED	GREEN	BLUE
CCT	0-255 2000K-20.000K	0-11 Neural 12-22 full Minus Green 23-121 99 Minus Green to 0 Minus Green 123-133 Neutral 134-231 0 Plus Green to 99 Plus Green 232-243 full Plus Green 244-255 Neural	0-255= CTT 100% to RGB 100%	0-255 0%-100%	0-255 0%-100%	0-255 0%-100%
POLICE	0-255 2000K-20000K CHANGING THE WHITE EFFECT COLOR	0-11 Neural 12-22 full Minus Green 23-121 99 Minus Green to 0 Minus Green 123-133 Neutral 134-231 0 Plus Green to 99 Plus Green 232-243 full Plus Green 244-255 Neural CHANGING THE WHITE EFFECT COLOR	—————	0-9=0 10–124= 330°-360° HUE 125-143 = 0° 144-255= 1° - +30°HUE	0-9=30° 10–124= 90°-120° HUE 125-143= 120°Hue 144-255= 120°- 150°HUE	0-9=0° 10–124= 210°-240° HUE 125-143=240° 144-255= 240°- +270°HUE
LIGHTNING	0-255 2000K-20.000K	0-11 Neural 12-22 full Minus Green 23-121 99 Minus Green to 0 Minus Green 123-133 Neutral 134-231 0 Plus Green to 99 Plus Green 232-243 full Plus Green 244-255 Neural	0-255= CTT 100% to RGB 100%	0-255 0%-100%	0-255 0%-100%	0-255 0%-100%
FLASH	0-255 2000K-20.000K	0-11 Neural 12-22 full Minus Green 23-121 99 Minus Green to 0 Minus Green 123-133 Neutral 134-231 0 Plus Green to 99 Plus Green 232-243 full Plus Green 244-255 Neural	0-255= CTT 100% to RGB 100%	0-255 0%-100%	0-255 0%-100%	0-255 0%-100%
PULSE	0-255 2000K-20.000K	0-11 Neural 12-22 full Minus Green 23-121 99 Minus Green to 0 Minus Green 123-133 Neutral 134-231 0 Plus Green to 99 Plus Green 232-243 full Plus Green 244-255 Neural	0-255= CTT 100% to RGB 100%	0-255 0%-100%	0-255 0%-100%	0-255 0%-100%
SCROLL	0-255 2000K-20.000K	0-11 Neural 12-22 full Minus Green 23-121 99 Minus Green to 0 Minus Green 123-133 Neutral 134-231 0 Plus Green to 99 Plus Green 232-243 full Plus Green 244-255 Neural	0-255= CTT 100% to RGB 100%	—————	—————	—————



FX FUNCTION TABLE

DMX CHANNEL	7	8	9	10	11	12
CANDLE	0-255 2000K-20.000K	0-11 Neural 12-22 full Minus Green 23-121 99 Minus Green to 0 Minus Green 123-133 Neutral 134-231 0 Plus Green to 99 Plus Green 232-243 full Plus Green 244-255 Neural	0-255= CTT 100% to RGB 100%	0-255 0%-100%	0-255 0%-100%	0-255 0%-100%
CCT	0-255 2000K-20.000K	0-11 Neural 12-22 full Minus Green 23-121 99 Minus Green to 0 Minus Green 123-133 Neutral 134-231 0 Plus Green to 99 Plus Green 232-243 full Plus Green 244-255 Neural	0-255= CTT 100% to RGB 100%	0-255 0%-100%	0-255 0%-100%	0-255 0%-100%

MODE 5 X/Y (BETA) 16 BIT

DMX CHANNEL	FUNCTION	VALUE	OUTPUT
1	DIMMING	0-255	0-100%
2	X (H)	0-255	
3	X (L)	0-255	
4	Y (H)	0-255	
5	Y (L)	0-255	

CALCULATION OF X/Y (BETA) 16 BIT

X and Y value = (DMX value * 1,0000) / 65536

X VALUE= XH (CH2) * 256 + XL(CH3)

Y VALUE = YH (CH4)* 256 + YL (CH5)



RDM Command Specification

supported PID's:

Identification	Data Hex	Description
Manufacturer ID	06A3H	Manufacturer identification number (RODLIGHT)
Model	RODLIGHT ColorDim 8	Model identification number
MANUFACTURER_LABEL		"RODLIGHT"
SENSOR_VALUE:		see below
SENSOR_DEFINITION:		see below
DMX_PERSONALITY:		see below
DMX_PERSONALITY_DESCRIPTION:		see below
IDENTIFY_MODE:		LAUD, QUIET
FACTORY_DEFAULTS:		yes
DEVICE_LABEL:		yes
DEVICE_HOURS:		yes
BOOT_SOFTWARE_VERSION_ID:		yes
BOOT_SOFTWARE_VERSION_LABEL:		yes

RDM PERSONALITIES

NR:	FOOTPRINT	DESCRIPTION	SLOTS	DEFAULT VALUE	ID TYPE	CATEGORY
0	7	'CCT/RGB'	DIM, CCT, G/M, CROSS, RED, GREEN, BLUE	0 (for all)	0, PRIMARY (for all)	0xffff, undefined (for all)
1	5	CCT-HUE/SAT	DIM, CCT, G/M, HUE, SAT	0 (for all)	0, PRIMARY (for all)	0xffff, undefined (for all)
2	6	GEL	DIM, CCT, GEL, RED, GREEN, BLUE	0 (for all)	0, PRIMARY (for all)	0xffff, undefined (for all)
3	13	FX	DIM, FX, TYPE, BURST, RATE, MIXEFF, HUE, CROSS, CCT, G/M, RED, BLUE, YELLOW	0 (for all)	0, PRIMARY (for all)	0xffff, undefined (for all)
4	5	XY	DIM, XH, XL, YH, YL	0 (for all)	0, PRIMARY (for all)	0xffff, undefined (for all)

RDM Sensors:

		prefix	min	max	normal min	normal max	record value support	description
type: 0 TEMPERATURE	unit: 1 CENTIGRADE	none	0	120	0	80	none	Internal temperature
type: 3, FREQUENCY	unit: 8 HERTZ	kilo	0	60	0	60	none	PWM frequency
type: 1 VOLTAGE	unit: 2 VOLTS DC	deci	0	260	120	245	none	Driver source voltage
type: 0x87 TEMP limit	unit: 0 none	none	0	256	0	256	none	OUTPUT LIMIT BY TEMPERATURE'