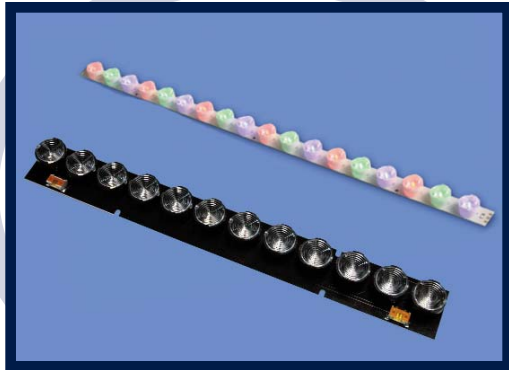




# COLOR ENGINE LINEAR LED LIGHT ENGINES



## FEATURES / BENEFITS

- ▲ Extremely long life of 50,000 hours at 55°C PCB temperature
- ▲ Durable F-Form optics holder allow for easy changing of 4 lens options (5, 15, 25 degree and 5X20 degree oval)\*\*
- ▲ Red, Blue and Green LEDs allow for infinite number of color combinations and dynamic color changing (appropriate colordriver controller required)
- ▲ Aluminum based PCB for easier heat dissipation and more efficient operation
- ▲ Modular “Plug & Play” system with CT4 quick connects for easy wiring
- ▲ Available Color Kinetics pass through license, consult factory for details

## OPERATING CONDITIONS

- ▲ Recommended PCB temp=55°C (131°F)  
Maximum PCB temp = 105°C (221°F)
- ▲ LED Life @ 55°C PCB temp = 50,000 hours
- ▲ For maximum performance, all “Linear Color Engine” LED Light Engines should be screwed or affixed using thermal adhesive to an appropriate heat sink
- ▲ Thermal conductivity = 1.3W/m-k
- ▲ Breakdown voltage = 2kV
- ▲ Recommended drivers = Color driver DMX, RF\* or SL\*

\* = with mfg date of 4/08 or later

## APPLICATIONS

- ▲ Color washing
- ▲ Decorative effects
- ▲ Entertainment lighting
- ▲ Retail
- ▲ Landscape
- ▲ Night clubs, restaurants, bars
- ▲ Any application requiring color changing, efficiency, and long life in a linear pattern.

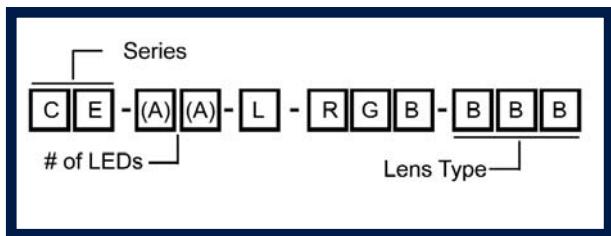
## MECHANICAL DIMENSIONS

Height (all models including lens) = 15.5mm (0.61")  
 Color engine12L, Length = 290mm x 35mm (11.42" x 1.38")  
 Color engine18L, Length = 590mm x 22.5mm (23.22" x 0.88")

## MATERIALS/FINISH

- ▲ LUXEON® I LEDs
- ▲ 1.6mm Aluminum clad PCB substrate
- ▲ 4 pin quick connector blocks for use with CT-4 cable system (see recommended cables on back)

## PART NUMBERS



# of LEDs (AA)
12 = Color engine12L (4 each of red, blue and green LEDs)
18 = Color engine18L (6 each of red, blue and green LEDs)

LENS Type (BBB)**
005 = 5 Degree
015 = 15 Degree
025 = 25 Degree
520 = 5 X 20 Degree
XXX = no lens*

\* Lens to be purchased and installed seperately  
 \*\* Half divergence angles

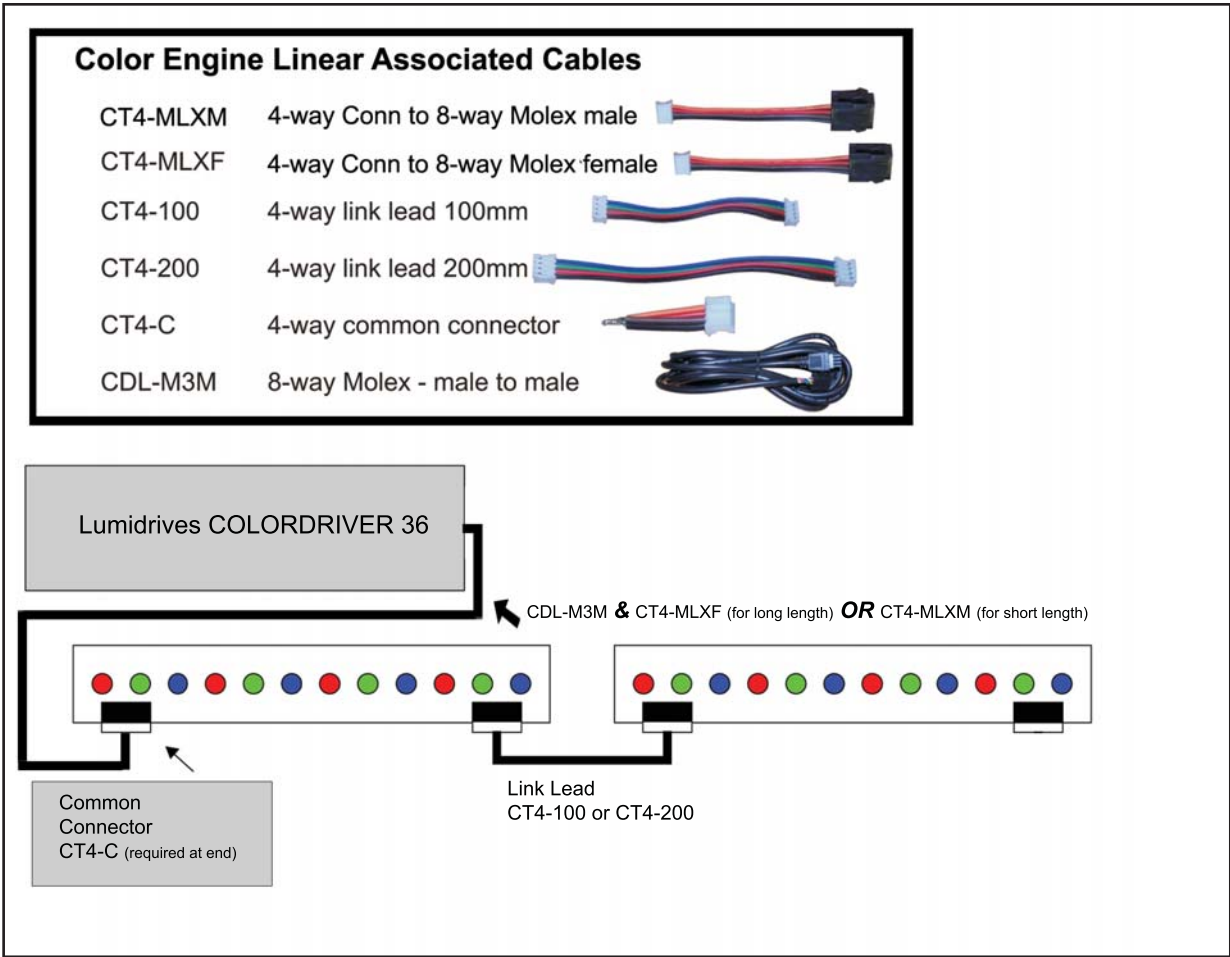
Dialight reserves the right to make changes at any time in order to supply the best product possible.

**Dialight Corporation**

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## WIRING INFORMATION



## TYPICAL LED PHOTOMETRIC DATA

LED	Color	Forward Voltage (Typ)	Max. Current (mA)	Max. Power (Watts)	Dom Wavelength / CCT			Min Luminous Flux (lm) / Radiometric Power (mW)	Typ Luminous Flux (lm) / Radiometric Power (mW)
					Min	Typ	Max		
	Red	2.95	350	1.03	620.5 nm	627 nm	645 nm	30.6 lm	44 lm
	Green	3.42	350	1.20	520 nm	530 nm	550 nm	30.6 lm	53 lm
	Royal Blue	3.42	350	1.20	440 nm	455 nm	460 nm	145 mW	220 mW

Maximum current input 350mA  
 Maximum power consumption  
 1.2W per LED for Blue / Green,  
 1.0W per LED for Red.

Results are LED manufacturer's test data @ 25°C JTC. Light output at 55°C PCB temperature will be approximately 15-20% lower. Elevated temperatures will result in further degradation of light output. For maximum performance use appropriate heat sinking.

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