SPECTRUM ILLUMINATION

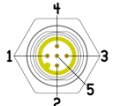# ES40 LIGHT
ES Series with Internal Driver

SERIES

ELECTRICAL:

Input Voltage: 12 to 26.4VDC
Input Current: 80mA typical (320mA max for burst) @24VDC
120mA typical (620mA max for burst) @12VDC
Note: Power supply must be capable of 320mA per light for burst feature to work correctly.
Strobe Input Impedance: 10KΩ – PNP typical, 9.1KΩ – NPN typical
Strobe Timing: <20 microseconds from strobe to LED on
0-10V Input Impedance: 15KΩ typical
0-10V Input Control: 0V = 100%, 10V = 0% LED current. (Can be left disconnected for 100% LED current)
Variable Intensity: Adjustable via trim potentiometer from 0% (CCW) to 100% (CW).
Over-temperature LED: 65 ± 5°C strobe disable / "Error" LED on; 5°C hyst. for strobe enable / "Error" LED off

Wiring:

Pin #	Wire Color	Function
1	Brown	+12 to +26.4VDC
2	White	NPN STROBE INPUT: GND for "ON", Open or >Vin-1V for "OFF"
3	Blue	0VDC (DC GND)
4	Black	PNP STROBE INPUT: < 1 VDC for "OFF", >3 ≤30 VDC for "ON"
5	Grey or Green/Yellow	0-10VDC analog intensity control – 0V = 100%, 10V = 0%

ENVIRONMENTAL:

Operating Temperature: 0 to 40°C
Relative Humidity: 5 to 85% non-condensing

MECHANICAL:

Lighted Area: 40mm
Connector: M12 - 5 pin
Weight: 3.88 oz (110g)

ILLUMINATION:

Light Source: LED – available in 4 Colors and IR
Quantity HB LED's: 1
LED Lens: 16° FWHM Standard
23° FWHM Optional
39° FWHM Optional
44x15° FWHM Line Optional
LED Life: Please visit: spectrumillumination.com
Select "RESOURCES" and under LED Information
select "LED Presumption of Life Data"

FEATURES:

- Built-in Driver
- Aluminum Single Interface Housing
- Auto Burst – LED high current for 500µs ±10% (burst pulse width repeatability ±1% same light), then drops to standard current
- Auto Burst Disable Switch

- 0-10VDC Intensity Control
- Potentiometer Intensity Control
- PWM Dimming Capable (with Auto Burst disabled)
- Internal Thermal Protection
- Robot Friendly Weight – 3.88 oz (110g)

PART NUMBER DESIGNATION: ES40–XXX

XXX = Light Color – 365, 395, 470, 530, 630, 850, and WHI

Color	Dash #
Ultra Violet	-365
Ultra Violet	-395
Blue	-470
Green	-530
Red	-630
Infrared	-850
White	-WHI

For additional LED information, please visit:
spectrumillumination.com
Select "RESOURCES" and under LED Information
select "Monster LED Specifications and Photometrics"
Direct link below:
https://spectrumillumination.com/wp-content/uploads/Monster-LED-Info.pdf

Other colors available on request