

# LD-Series

Electronic Dimmer Controls

[PRODUCT WEBPAGE](#)

*request sample, configure part*



The LD-Series represents a dynamic breakthrough in dashboard technology, with its programmable circuitry, superior design, and unparalleled performance that affords seamless integration into most any dash panel. A variety of options, along with superior performance, functionality, and aesthetics assure compliance with the most stringent customer requirements.

**1** Pole    **2-10** Amps    **12-24** VDC

## Typical Applications

- On/Off-Highway Equipment
- Agricultural Equipment
- Construction Equipment

# Tech Specs

## Electrical

Contact Rating	9-16VDC, 2-10Amp.
Terminals	6.3mm (0.250" TAB)
Contacts	solid-state load switching
Output	PWM 200 Hz.
EMI/EMC	SAE J1113 and SAE J1455 Conducted Transient Emissions RF Conducted Emissions Conducted Susceptibility: Test pulse #1 Test pulse #2 Test pulse #3a, #3b Load Dump: Test Pulse #5 Power lead Disturbance (Power Dips) AF Conducted Immunity Direct RF Injection (DRFI) Abnormal Vehicle Operating Conditions RF Radiated Emissions Radiated Immunity-Absorber Lined Chamber Electrostatic Discharge: Shipping / handling Electrostatic Discharge: Human Static Discharge
Dielectric Strength	000V @ 60 Hz was applied for each unit for 1 minute
Reverse Polarity	24VDC for 5 minutes

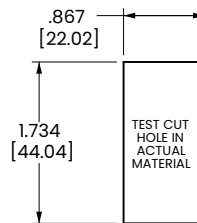
## Physical

Function	Incremental for continuous dimming
Operation	Momentary
Lighted	LED's internally dimmed
Base	PBT Polyester V-0 flammability
Rocker	Polycarbonate or Nylon 6/6 Glass filled
Bracket	PBT Polyester V-0 flammability
Connector	Nylon 6/6 toughened
Actuation Force	300 gm ± 50 gm
Weight	52 grams

## Environmental

Operating Temp.	-40°C to + 85°C
Vibration	Resonance Search Individual resonance searches were conducted with vibration applied along each of the three mutually perpendicular axes. 24-50 Hz 0.40DA 50-2000 Hz ± 10 G's peak Random Vibration The random vibration endurance test conditions were sequentially conducted in each of the three mutually perpendicular axes, 1hr/axis Freq. (Hz) PSD (G <sup>2</sup> /Hz) 9.36 grms 24 Hz 0.06 60 Hz 0.50 100 Hz 0.025 1000 Hz 0.025 2000 Hz 0.025 During the test, all units were operated at a load current of 2A with 12.5VDC.
Salt Spray	Per Mil-Std 202F, Method 101D, Test Condition A. Duration 96 hrs.
Dust	Per Mil-Std 810C, Method 510.2. Air velocity 300 ± 200 Feet/Min., Test Duration 16 Hr.
Moisture Resistance	Per Mil-Std 202F, Method 106E. Test Criteria-pre and post test operation of switch.

## Mounting Specifications



MOUNTING HOLE

**Panel Thickness Range**  
Acceptable Panel Thickness  
.030 to .156 (.76mm to 3.96mm)  
Recommended:  
.030, .062, .093, .125 and .156

# Ordering Scheme

Sample Part Number

**LD 3 5 1 C C 1 - 3 A A FE - 1 FC**

Selection 1 2 3 4 5 6 7 8 9 10 11 12 13

## 1. SERIES

**LD** Electronic Dimmer Control

## 2. RATING

1	4A, 12 volts	A	2A, 24 volts
2	7A, 12 volts	C	5A, 24 volts
3	10A, 12 volts		

## 3. DIMMING RATE

1	30 - 100% 8 positions	A	0 - 100% 11 positions
5	10 - 100% 10 positions		

## 4. TERMINATION

1 .230 TABS (5.84 mm)

## 5 & 6. ILLUMINATION

No lamp	S			
12V LED	C	N	H	
24V LED	D	P	J	
	Red	Amber	Green	

## 7. BRACKET COLOR

1 Black      2 White      3 Gray

## 8. ACTUATOR STYLE / COLOR

	Laser Etched	Black	White	Gray	Red
Rocker	3	A	B	C	D
Paddle	4	J	K	M	N

## 9 & 10. LENS COLOR

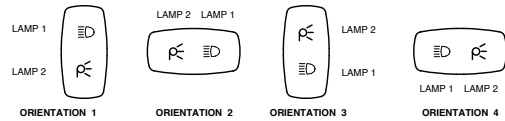
Z	No Lens						
Clear	White	Amber	Green	Red	Blue		Lens Style
1	-	B	G	M	T		Large Transparent
-	-	C	H	N	U		Large Translucent
3	-	D	J	P	V		Bar Transparent
-	9	E	K	R	W		Bar Translucent
5	A	-	-	-	-		Bar Laser Etch

## 11. LEGEND #1

00 No legend      FC Dim      FE Bright  
For legend options, visit us at [carlingtech.com](http://carlingtech.com)

## 12. LEGEND ORIENTATION

0 No legend  
1 vertical (lamp 1 on top)  
2 horizontal (lamp 1 on right)  
3 vertical (lamp 1 on bottom)



## 13. LEGEND #2

00 No legend      FC Dim      FE Bright  
For legend options, visit us at [carlingtech.com](http://carlingtech.com)

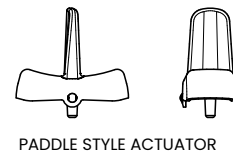
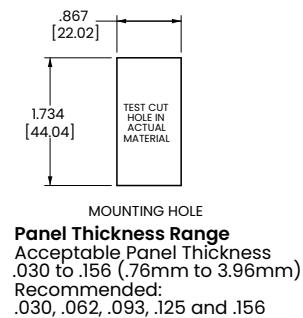
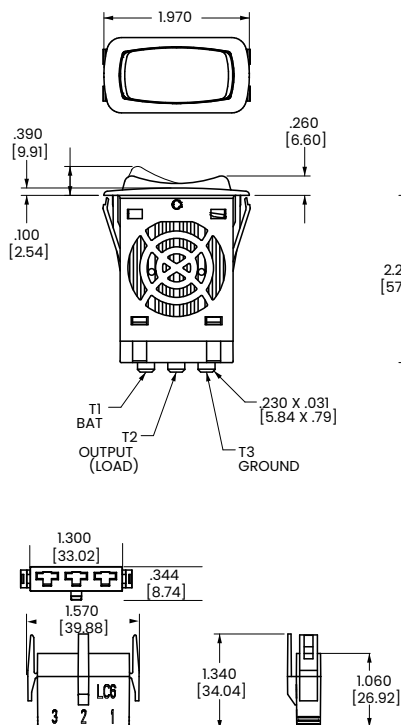
Notes:

1 Custom colors are available. Consult factory.

[Configure Complete Part Number >](#)

# Dimensional Specs

inches [millimeters]



Q.C. SELECTION GUIDE			
COMPANY SERIES	PACKARD PART NO.	WIRE GAGE	
		AWG	MM <sup>2</sup>
PACKARD METRI-PACK 630 SERIES TIN PLATED BRASS	12084590	12	3.0
	12052224	12	3.0
	12015870	16-14	2.0-1.0
	12015869	20-18	1.0-.80
	12020035	22-18 (2 REQ'D)	.80-.50 (2 REQ'D)
	12052222	20-22	.50-.35

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