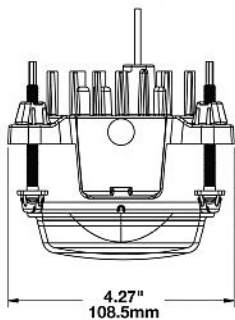
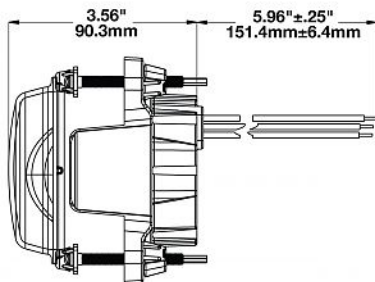
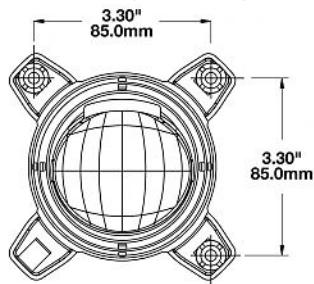




Model 90 LED Projector Headlights, Low Beam (top right) and High Beam with Front Position Light (bottom right)



Dimensions in inches (mm in parentheses).  
Dimensions are for reference only.

### Product List

Model Number	Description
90-12/24V LB	12-24V LED Low Beam Headlight
90-12/24V HB	12-24V LED High Beam Headlight w/ Front Position
90-12/24V LB	12-24V LED Symmetrical Low Beam Headlight

### Features & Benefits

- 45,000 max. candela output (high beam); 17,500 max. candela output (low beam)
- Available in a 12-24V DC configuration
- High beam comes with integrated front position light
- UV-resistant polycarbonate lens
- Rugged solid state LEDs can withstand shock & vibration
- Long-lasting LEDs mean never having to replace another bulb again!
- Die-cast aluminum housing provides maximum protection
- Low profile mount
- **High Beam complies with FMVSS 108 UB6 when operated in conjunction with a low beam**
- Retrofits standard 90mm projector headlights
- [Low Beam Version Installation Instructions](#)
- [High Beam Version Installation Instructions](#)
- See additional information at <http://www.jwspeaker.com/other/90mm-family>

### General Specifications

<b>Lens Material :</b>	Polycarbonate
<b>Housing Material :</b>	Die-Cast Aluminum
<b>Mounting Hardware:</b>	(x3) Ball & Socket
<b>Mounting :</b>	Low Profile Mount
<b>Wiring:</b>	6" Bare Leads

### Technical Specifications

Low Beam Version	High Beam Version w/ Front Position	Symmetrical Low Beam Version
12-24V DC Input	12-24V DC Input	12-24V DC Input
10.5-38V DC	10.5-38V DC Operating Voltage	10.5-38V DC Operating Voltage
Operating Voltage	0.80 Amps (High Beam); 0.40 Amps (Front Position) @ 12V DC	1.90 Amps @ 12V DC
1.90 Amps @ 12V DC	0.40 Amps (High Beam); 0.20 Amps (Front Position) @ 24V DC	0.95 Amps @ 24V DC
0.95 Amps @ 24V DC		

### Standards Compliance

DOT-Compliant	FMVSS 108
CMVSS 108	Buy America Compliant
ECE Reg. 7 (Front Position)	ECE Reg. 112 (Low Beam RHT, Low Beam LHT, and High Beam)
ECE Reg. 113 (Symmetrical Low Beam Version Only)	Sealed to IP67

### Applications

Agricultural	Construction	Military
Off-Highway	On-Highway	Recreational

### Additional Info

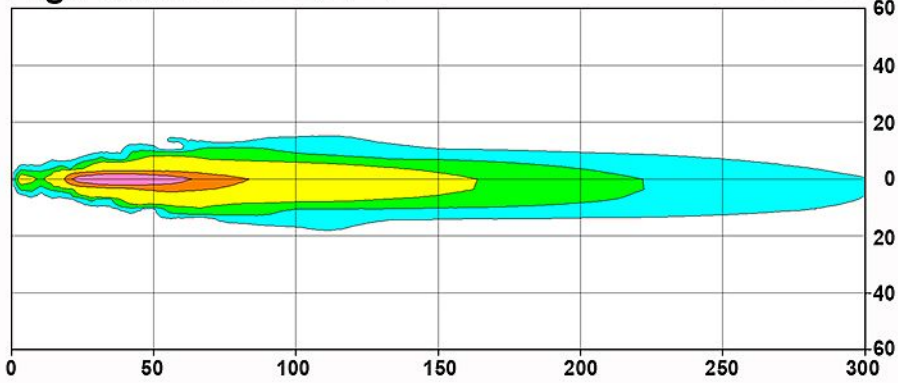
Headlight must be securely mounted and properly aimed such that the beam pattern "cut off line" complies with all applicable regulations. If you are not familiar with the legal requirements for aiming your headlights, please see a professional service provider. We recommend that headlights are aimed with a headlight aiming system for proper alignment.

Wires: Red=Power, Black=Ground, White=Front Position (for ECE applications)  
Transient Spike Protection: 150V Peak @ 1 HZ-100 Pulses

# Model 90

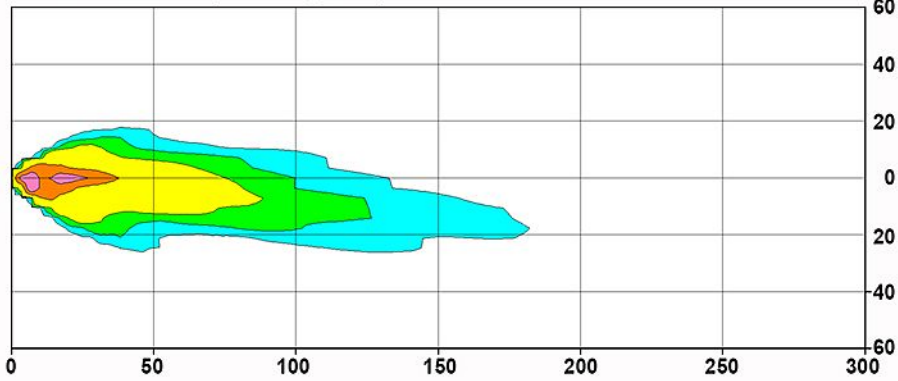
**High Beam** (1.0m high, -0°)

19.0 Max.



**Low Beam** (1.0m high, -0°)

15.8 Max.



**Symmetrical Low Beam** (1.0m high, -0°)

21.0 Max.

