

## User's Manual for Recessed LED Downlights 3" & 4" & 6"

### ▶ Product Description

FOBSUN provides quality LED downlight in a various specification. In our product line, there's a full collection of LED lights and bulbs. If our standard design LED downlight is not what you are looking for, we welcome customized design as well. FOBSUN has released the new generation of led downlights, Nichia LED Chips, including dimmable led downlights. Each low energy LED downlight fitting has superior light output and exceptional life whilst consuming little energy. LED downlights can replace halogen, incandescent, and all other downlights for residential & commercial applications.

These products are in accordance with CE, UL and FCC testing standards. FOBSUN Recessed LED down light adopts advanced LED lighting technology of reverse polarity protection, constant current regulation, and special design for excellent thermal solution and lumen maintenance.

Nichia LED Chips are used as light source, which ensures high brightness and low heat generation. These LED ceiling lights employ full aluminum alloy radiator design which greatly improves the thermal management, the unique light guide plate and light diffusion cover design will enable the recessed downlights to transmit light more evenly and highly increase the CRI.



The recessed LED downlights are TRIAC dimmable at both 120v ac and 230v ac, which is a new breakthrough of FOBSUN in dimming technology. Matching with the specially designed drivers, these lamps can be dimmable and compatible with most traditional dimmers, which mean they can deliver a comfortable and proper light output that you desire and save your energy bills. Our LED ceiling lamps are direct replacements of traditional CFL, they are suitable for cabinet, restaurant, houses, villa, hotel etc.

## ▶ Performance Summary

- ▶ Utilize Nichia LED Chips
- ▶ Up to 50,000 hours lifetime
- ▶ 445–1325 delivered lumens depending on different models
- ▶ CCT: 2800-4200K (Warm White), 5000-6500K (White) Typical
- ▶ Full aluminum alloy radiator design ensures full heat dissipation
- ▶ Unique design of light guide plate and light diffusion cover enable uniform light distribution and high CRI
- ▶ 3 Year Warranty
- ▶ 70 percent energy saving over traditional downlights

## ▶ Unique Edges

- ▶ Heat sink: Aluminum alloy
- ▶ Light guide plate: Frosted glass
- ▶ Easy to install
- ▶ Utilize drivers approved by CE, UL and CUL
- ▶ Specially designed drivers enable these downlights to be dimmable at both 120V AC and 230V AC
- ▶ TRIAC dimmable, compatible with most traditional dimmers to 8%
- ▶ Isolating circuit design, safe and reliable
- ▶ Excellent property of shock-resistant
- ▶ Low maintenance costs
- ▶ No UV, IR and RF output, no hazardous materials, mercury free
- ▶ Low carbon dioxide emission, eco-friendly
- ▶ Lamp fully CE & RoHS compliant

## ▶ Data Sheet & Specifications

Model	Input Voltage	Dimension (Diameter*Height)	Cutting size	Power	Lumen Output	Material	Beam Angle
FDL-D9070-8W-H	85-260V AC, 50/60 Hz	D3.5*H2.8inch (D90*H70mm)	80mm	Dimmable: 8.5W Non-dimmable: 8W	White: 445.65lm Warm White: 421.26lm	Aluminum alby housing + frosted facia plate	60degree optic
FDL-D13070-13W-H	85-260V AC, 50/60 Hz	D5.1*H2.8inch (D130*H70mm)	119mm	Dimmable: 15W Non-dimmable: 13W	White: 828.9lm Warm White: 747.26lm		
FDL-D19080-20W-H	85-260V AC, 50/60 Hz	D7.5*H3.1inch (D190*H80mm)	179mm	Dimmable: 21W Non-dimmable: 20W	White: 1325lm Warm White: 1227lm		

## ▶ Physical Specification

- ▶ Full aluminum alloy radiator
- ▶ Uniquely designed driver
- ▶ Housing finish color: Will you want to create a mood that is warm and cozy? Or bright and efficient? Matt White, other colors can be available as per the customers' request when the order quantity is more than 500 pieces (including 500) that coordinate with any interior décor. Each finish can provide a certain mood, enhance a specific design element, or make a space more visually stimulating.
- ▶ Lower heat, energy saving
- ▶ Operating environmental temperature:  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  (+14 to +104 degree Fahrenheit)

## ▶ Optical Specifications

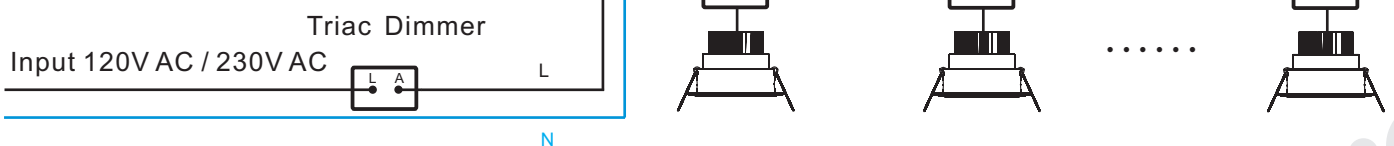
- ▶ Unique design of light guide plate and light diffusion cover
- ▶ Beam angle: 60 degree
- ▶ CRI > 70
- ▶ Color temperature standard: 2800-4200K (Warm White), 5000-6500K (White) Typical
- ▶ No UV, IR and RF radiation
- ▶ Brightness loss: 70% maintains after 50,000 hours
- ▶ Light source: Nichia LED Chips

## ▶ TRIAC Dimmable

Recessed LED Downlights work with special drivers to be Dimmable TRIAC dimmable, compatible with most traditional dimmers to 8% Input Voltage for Downlights & Dimmer: 120V AC/230V AC



Driver (Black housing or White housing)



Please choose dimmers with reliable quality, and the load of dimmer shall reach or be higher than 60% power consumption of the dimmer itself, for instance, the load of a dimmer with power consumption of 600W shall be within the range of 360W-600W. The dimming quality will be affected if the load is lower than 60%, and the dimming effect will not be apparent; meanwhile if the load is higher than 600W, the dimmer will be burnt out.

## ▶ Application

The use of downlighting in a room changes the look and feel of the room and can highlight works of art, architectural details or simply create a mood. Because it is unobtrusive by its very nature and blends comfortably into any décor, recessed lighting can be bold or subtle, dramatic or subdued.

LED Downlights, designed for residential & commercial applications, are the ideal replacement of existing halogen, incandescent and all other downlights. They are supposed to be used in the existing homes, new residences, offices, restaurants, exhibition halls, galleries, hotels, meeting rooms, schools, spas etc.



## ▶ Contact us

Phone: 86-755-3366-2660 (English Service)

Fax: 86-755-3366-2986

Website: [www.fobsun.com](http://www.fobsun.com)

Email: [sales@fobsun.com](mailto:sales@fobsun.com)