

Retrofit Modules for Recessed Housings – 4” & 6”

What is it used for?

The [RLR-4010](#) and the [RLR-6010](#) are LED retrofit modules which easily convert any 4” diameter or 6” diameter incandescent recessed downlight to the latest in LED technology without special tools or rewiring. The units are suitable for use in either IC or Non-IC applications.

The 10W module in the RLR-4010 comes complete with an LED array, a heat sink and driver, and produces comparable light output to that of a 50W PAR20 or 50W MR16.

The 14W module in the RLR-6010 comes complete with an LED array, a heat sink and driver, and produces similar light output to that of a 65W PAR 38 or 23W CFL.

The unit is provided with a detachable Edison base adapter that screws into the existing incandescent socket and can be dimmed by most standard incandescent dimmers.

What is unique about it?

The important differences between RLR-4010 and RLR-6010 and other similar-looking products are as follows:

- 1) **Testing** – The units have been tested and approved for c-UL-us, Energy Star, LM-79. Lighting Facts, Title 24 (California), FCC part 15 subpart B.
- 2) **Product design** – JESCO has the highest quality LED sources of our own specification. Our design for a quick and simple installation makes it a favorite with installers and homeowners across the country.
- 3) **Lensing** – Our unique polycarbonate lens provides uniform light output with lamp like appearance.
- 4) **Interchangeable Trims** – Unlike many manufacturers, JESCO’s Retrofit Modules offer you a choice of trim finishes that can all be changed without removing or replacing the fixture.

Can I dim it?

Can I connect it to my building control system?

Yes. Our LED Retrofit Modules can be controlled with a standard incandescent dimmer mounted remotely. The LED can be dimmed down to 10% before turning off.

What is the standard operating voltage for the LED Retrofit Modules?

These products are a line voltage system and work at standard 120V.

In what environments can I use the LED Retrofit Modules?

The 4” and 6” diameter LED Retrofit Modules are designed for indoor dry and damp locations only. They are not listed for use in wet locations. They are suitable for use in either IC or Non-IC applications.



Is it difficult to install?

These units are quick and easy to install. They easily convert any incandescent recessed downlight to the latest in LED technology without special tools or rewiring. The unit is provided with a detachable Edison base adapter that screws into the existing incandescent socket. View our installation instructions for detailed information.

What are the different color temperatures of the LED Retrofit Modules?

We offer our LEDs in Kelvin color temperatures of 2700°K and 4000°K.

The lower the color temperature the warmer the color - 2700°K is considered warm white and 4000°K is considered a neutral white.

How do I determine the cost savings in switching to an LED fixture?

We have designed a quick, online [Energy Savings Configurator](#) that allows you to plug in data pertaining to the fixtures you currently have installed and compare them to JESCO's LED Retrofit Modules and Downlights. You can print or e-mail the final result upon completion.

What are the recommended applications for the LED Retrofit Modules?

Recommended applications for these LED Retrofit Modules include Government and Office buildings - entries, lobbies, corridors and hallways; Conference rooms; Shopping Malls and Retail Stores - open-traffic area, entries, passageways, merchandise displays, showrooms, restrooms, food service areas; Hospital and Health Care Facilities - entries, reception area, corridors, treatment rooms, doctors/nurses/technicians offices, food service and restrooms; Theaters and Museum Lobbies - food service areas, aisle ways, restrooms; Hotels Lobbies - reception areas, guest rooms, bar and dining areas, meeting and exercise rooms; Residential properties.

How long do your LEDs last?

JESCO LEDs in the Retrofit Modules are designed to meet or exceed a Rated Lumen Maintenance Life or L_{70} of 35,000 hours (Meaning the LEDs will maintain at least 70% of their original light output after the fixture has been on for 35,000 hours).

That being said, exceeding the operating temperature values may damage the LEDs by reducing the lifespan, lumen output, and/or adversely impact color consistency. It is recommended that adequate airflow and heat sinking be taken into consideration in the installation and application of this product. Improper thermal management may lead to premature product failure and void the warranty. See the product specification sheets for more information

Do the colors of your LEDs vary?

All our LEDs are designed to maintain their color over time.

We exceed the market's highest standards by specifying the exact color bins when we select LEDs so that they do not fluctuate more than $\pm 200^\circ$ for warm color temperatures and $\pm 300^\circ$ for cool color temperatures. This meets or exceeds the recognized standards for color quality and guarantees uniformity and consistency of hue and color temperature across LEDs, fixtures, and manufacturing runs.



Why choose LED over any other type of lighting?

LEDs have caused a revolution in lighting. JESCO has helped lead that revolution. We were one of the first manufacturers to make the shift to the LED light source many years ago. Our LEDs are of the highest quality and they are time-tested to be dependable.

There are many reasons to make the switch to LED products. Some of the reasons include:

Technological Impact

LEDs are solid state, light emitting chips that are not encased in fragile glass enclosures or use delicate and inefficient filaments. LEDs are vibration resistant. They also do not need to warm up as they are an instant-on light source. LEDs currently offer life expectancy of 35,000 to 50,000 hours, on average. LEDs offer much more control of correlated color temperatures and provide the option to add color(s) either monochromatically or through RGB technology. The chips are miniscule in size which allows manufacturers to design much smaller fixtures and allows designers and end users much greater flexibility incorporating and installing these fixtures on their projects.

Financial Impact

The long life expectancy means a higher rate of return on investment – installed fixtures can last, at least, 10 years (depending on the design, the lifespan of the power source and the duty cycle of the fixture) with no maintenance. No maintenance means no labor costs and no replacement lamp costs associated with installed fixtures and lamps over the life of the fixture. Fixtures mounted in high or hard-to-reach locations are the prime candidates for LED lighting. LEDs are very efficient light sources and are cool to the touch unlike incandescent light sources which release 90% of their energy generated as heat. Due to the inherent cooler running temperatures of LEDs, HVAC system design loads can be scaled down. LEDs use much less energy per fixture than standard light sources guaranteeing savings in electrical costs far into the future. Lastly, many local energy providers are currently offering rebates to customers making the switch to LED fixtures.

Environmental Impact

LEDs are easily recyclable. They contain no mercury or lead which require special handling and disposal. LEDs do not emit harmful UV/IR which discolors fabric, furniture and artwork. The U.S. Department of Energy [estimates](#) that rapid adoption of LED lighting in the U.S. by 2027 could deliver savings of about \$265 billion, avoid the building of 40 new power plants and reduce lighting electricity demand by 33% in 2027.

All or even one of the above stated reasons may be the right reason for you to choose a fixture with an LED light source.

The last important factor when choosing an LED fixture is scrutinizing the manufacturer of the LED chip and the incorporation of this chip into the design of the lighting fixture. As the United States EPA and DOE Energy Star program states on its website “Bad design can lead to a wide range of problems, some immediately observable and some not. Poorly designed products often come with exaggerated claims while failing to deliver on the quality specifications provided.” Our LED products are designed around the LED light source and not the other way around making for a well-designed, color consistent and extra long-life fixture with a proven track record. With all our LED products, JESCO offers layout assistance and technical support helping make specification, as well as installation, simple.

Therefore, always look for reputable and trusted sources of LEDs and LED fixtures - be it JESCO Lighting or anyone else.

