



## GUIDE TO CHURCH LIGHTING



Manning  
Lighting

# 7 tips for a SUCCESSFUL CHURCH LIGHTING project.

Get started with a lighting upgrade or new installation by understanding some basics.



## 1 LOCATION, LOCATION, LOCATION

Two important things to keep in mind:

- Position fixtures over seating areas to make reading easier.
- Space fixtures based on light coverage **and** the spacing of windows, beams, and any other architectural elements.

Different Manning hangers and ceiling canopies are available to accommodate sloped ceilings as well as cover both recessed and exposed outlet boxes for best appearance.

## 2 MOUNTING HEIGHT

Suspend pendants so that the distance from floor to bottom of fixture is about 1.2 times the distance between fixtures (*i.e.* fixtures 10 feet apart should be 12 feet above floor). Generally, the higher a fixture is mounted, the more even the light distribution will be below.

## 3 FOCUS ATTENTION

Since the altar or chancel is the focal point of most churches, light levels here should be two to three times greater than above the seating area. Manning adjustable spot and flood lighting units mounted behind an arch or beam can be used to light the altar, pulpit, or other areas. Lighting the pulpit or lectern is best accomplished by at least two units to minimize shadows.



Manning Spatialites mounted behind a beam are a great way to draw attention to areas, artwork, or people.

## 4 DIRECT VS. INDIRECT

There are two basic ways to light your church: **DIRECT FIXTURES** use sophisticated reflector systems to light the seating areas from above. **INDIRECT FIXTURES** bounce light up off the ceiling to light the area. Direct fixtures are better suited for churches with dark interiors and high ceilings. Indirect fixtures work best for white or light wood interiors and lower ceilings. Many Manning fixtures combine both indirect and direct lighting for the advantages of both.



Bowl pendants direct light upwards for soft, comfortable illumination.

## 5 LIGHT LEVELS

Light levels are measured in units called “footcandles,” with a level of 20 to 30 footcandles generally recommended for comfortable reading. Manning Lighting will work with you to ensure these levels are achieved by creating a detailed photometric report and computer rendering of the new fixtures in your space. As important as the overall light levels, is the distribution of light in the space.

A uniform amount of light, without bright spots under fixtures or shadows between them, is the goal.

Another goal is the ability to control light levels in different parts of the church at different times to highlight a speaker, a choir, or a ceremony. That’s why Manning fixtures are compatible with a wide variety of dimming controls, from sophisticated theatrical systems to simple wall dimmers.



REPLACING older fixtures with new ones led to dramatically higher light levels and energy efficiency at St. Columbanus Church in Blooming Prairie, MN.



## 6 BE EFFICIENT

Can church lighting be effective and energy efficient? Yes! But not all types of lighting sources are appropriate for ecclesiastical spaces.

- Fixtures designed with incandescent lamps in mind may still be a viable option because they are inexpensive, can be dimmed easily, and need little in the way of special equipment to operate and maintain. However, because they are inefficient and have relatively short lamp life (generally 2000 hours or less), they aren’t a good choice for many types of spaces. Screw-in LED bulbs are now widely available as incandescent replacements, and provide benefits in terms of energy savings and life. However, their overall quality, color, and performance when being dimmed varies.
- Purpose-built LED light engines offer much better efficiency and longer life than screw-in LED bulbs. They also are designed to provide better, more even illumination and be compatible with a variety of dimming systems. Manning Lighting has many of these dedicated LED solutions available across its product line. See the “LED FAQ” in this Guide for more information on LED.

## 7 NEW OR RETROFIT?

Churches considering a lighting upgrade often have a difficult decision to make: Should existing fixtures stay or are new ones a better choice? Start by answering a few questions:

- How attached is the congregation to the existing fixture design?
- What is the condition of the items?
- What is your budget? (*Refurbishing old or badly damaged fixtures is often more expensive than purchasing new ones.*)
- Is more light a priority, or is simply renewing the fixture appearance sufficient?

From there, we can give you ideas and estimates on both new and retrofit options. And sometimes a combination of retrofitted fixtures and new lighting types is the right answer. Either way, Manning Lighting can do everything from a simple cleaning and rewiring, to a full-blown refurbishment with a state-of-the-art LED system.



# THE FAQs ON LED

## NEW TO LED LIGHTING?

These frequently asked questions and answers below will give you some information about LED technology and its benefits.



**HOW DOES LED LIGHTING WORK?** We'll spare you the technical details here: Think of an LED as a tiny light bulb that lives on a circuit board. A power supply called an LED driver is necessary to convert standard line voltage to the low voltage that the circuit board requires.

**WHAT ARE THE BENEFITS OF LED VS. CONVENTIONAL LIGHTING?** Lower energy costs, and reduced maintenance. For example, an incandescent fixture that uses 1500 watts can be replaced with an equivalent LED model that uses 150 watts. Plus, the LED components are rated to last 50,000+ hours before replacement is required. That's decades for most churches!

## ARE THERE ANY DOWNSIDES TO LED TECHNOLOGY?

- Initial cost is higher.
- Care must be taken to ensure compatibility with dimming systems.

## WHAT KIND OF LEDS DOES MANNING LIGHTING OFFER?

We offer different LED types depending on the fixture shape, size, and lighting requirements. Sconces use LED boards, while pendants use both boards and LED downlight or uplight modules. We use only high quality LED components from proven manufacturers including Cree, Osram, and Lutron.

**CAN I UPGRADE MY OLDER MANNING FIXTURES TO LED?** Yes. Our fixtures have always been designed with a modular approach, so replacing incandescent, fluorescent, or other sources with LED can be very cost-effective. Even fixtures not originally made by Manning Lighting can usually be upgraded to LED.

**WHAT ABOUT DIMMING?** LEDs can dim very well if they are connected to the proper dimming controls. Manning fixtures are compatible with most systems, including incandescent dimmers (also called leading edge or Triac), electronic low voltage dimmers (also called trailing edge or ELV), and 0-10v dimmers (also called fluorescent). Theatrical controls such as DMX are also an option.

Whichever system is used, we recommend you proceed with caution. Most dimmers have a maximum LED load that can be applied, often as little as 10% of its nominally rated value. Since it's impossible to test every LED option with every dimmer type, it is advisable to test a particular fixture with a specific dimmer beforehand to ensure that the combination will work as expected.

**WHAT ELSE SHOULD I KNOW?** LEDs don't burn out like regular sources. Instead, they gradually grow dimmer over time. LED longevity is typically rated as the time it takes until their light output is reduced to 70% (or L70). Our components are rated to have an L70 of 50,000 hours or more.

**IS LED LIGHTING EXPENSIVE?** LED equipment costs more than incandescent, fluorescent or other sources. However, when you factor in savings in energy, maintenance, initial cost of lamps, and dimming controls, LEDs will always have a relatively short payback time to recoup the initial cost.

## WHAT'S THE DIFFERENCE BETWEEN A RETROFIT LED LIGHT ENGINE FROM MANNING LIGHTING AND BUYING SCREW-IN LED LIGHT BULBS FROM A LOCAL HARDWARE STORE?

- Higher Maintenance Costs: Screw-in bulbs have a shorter rated life than dedicated boards and modules (usually less than half as long).
- Lower Light Levels: Bulbs don't provide nearly as much light as dedicated LED downlight modules.
- Spotty performance: Bulbs don't illuminate the acrylic or glass diffuser panels of the fixture as evenly as LEDs.
- Color: The color temperature of LED bulbs ranges from warm to cool – even among bulbs from the same manufacturer. Color consistency, and the ability to accurately show the colors of your church—the wood, the artwork, and even the people, is much better with dedicated LEDs. After all, who wants to see a green bride?



### INCANDESCENT BULB:

Watts: 500  
Lumens: 6500  
Life: 2000 hours (or about two years if used 20 hrs./week)



### MANNING LED:

Watts: 96  
Lumens: 9,937  
Life: 50,000 hours (or about 48 years if used 20 hrs./week)

CONTACT US TODAY TO LEARN HOW **YOUR CHURCH CAN BENEFIT FROM LED!**

**920.458.2184**

# PRODUCT OVERVIEW

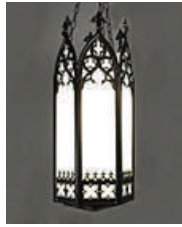
MANNING LIGHTING'S STANDARD PRODUCT LINE offers dozens of fixture styles, each available in several sizes and illumination options. To see all Manning products, including new items and the latest LED technology, visit us at [www.manningltg.com](http://www.manningltg.com).



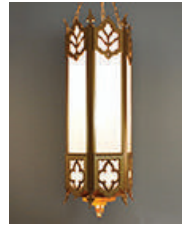
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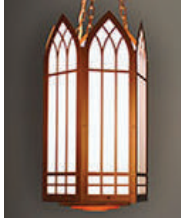
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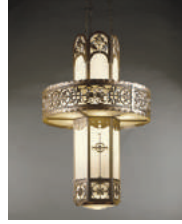
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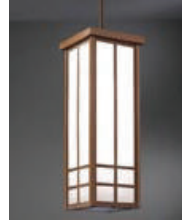
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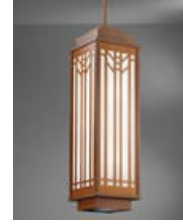
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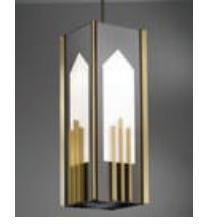
GREENE



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COLUMN 4BAR



COLUMN RAIL



COLUMN BLANK



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PLINTH ROUND



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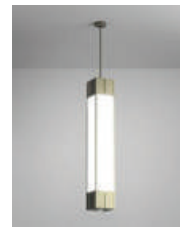
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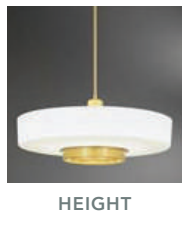
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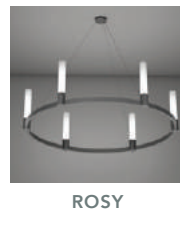
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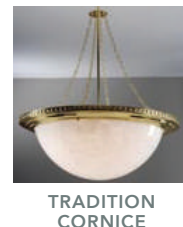
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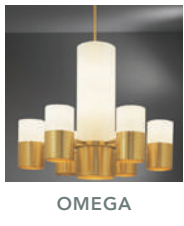
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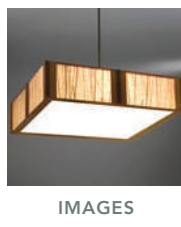
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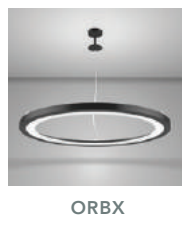
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MEDDLE CHANDELIER



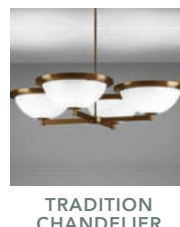
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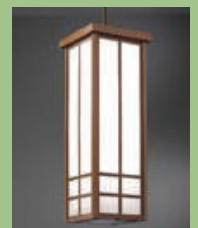


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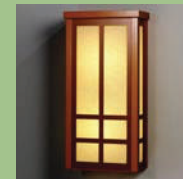


TRADITION CHANDELIER

Each Manning fixture style includes matching pendants, wall sconces, and ceiling fixtures.



PENDANT



WALL SCNCE



CEILING FIXTURE



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**MANNING LIGHTING** WAS FOUNDED  
IN 1948 AS A CUSTOM DESIGNER AND  
MANUFACTURER OF TRADITIONAL  
AND CONTEMPORARY DECORATIVE  
LIGHTING FOR RELIGIOUS BUILDINGS.



Today Manning Lighting remains family-owned and offers a complete line of products for commercial and institutional architectural spaces in addition to an extensive line of church lighting for all denominations and budgets.



**Manning** Lighting

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