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# How To:

## INSTALL LOW-VOLTAGE UNDER-CABINET LIGHTING

**Skill Level: INTERMEDIATE** Give these projects a try if you're a confident DIYer with a good working knowledge of a variety of tools. They can take a day or more to complete. If you can build a birdhouse or install a ceiling fan, your skill level is probably appropriate.

### ✓ MATERIALS

- Low-Voltage Under-Cabinet Lighting Kit
- Screwdrivers (Cross-head/Phillips and Slotted/Standard)
- Drill with Bits
- Hammer
- Pencil
- Soft Cloth—for handling bulbs
- Safety Glasses
- Small Ladder or Step-Stool
- Hole Saw—for recessing lights

There are many ways to brighten up your kitchen. The easiest is installing low-voltage under-cabinet lighting that's functional, decorative, and energy-efficient. It can brighten your workspace, accent your kitchen, and create an inviting mood.

### PREPARATION

#### 01 Identify and measure the area to be lit.

- Typical installations are above the sink, work areas and small appliances.

#### 02 Select an under-cabinet lighting kit.

- There are many options available when it comes to under-cabinet lighting. These instructions are for low-voltage puck lights. Low-voltage puck lights (often shaped like a hockey puck) are popular, decorative, and use only a small amount of electricity. A corded puck light system plugs into a nearby outlet and can include a dimmer switch to control light intensity. Kits include an electronic transformer that reduces household voltage (120v) to power required by the lights (3v - 20v). The following instructions are for installation of a corded low-voltage puck lighting kit.
- **TIP:** Low-voltage halogen puck lights are less expensive than low-voltage Xenon puck lights, but Xenon lights burn cooler and the bulbs have a longer life.

#### 03 Clear the work area on the countertop.

- If wires will be routed through cabinets, remove any items from those cabinets that might get in the way.

#### 04 Read the manufacturer's installation instructions before proceeding.

#### 05 Plan the placement of the individual lights following the manufacturer's directions.

- For heat and safety reasons, some manufacturers suggest that lights be installed at least 12" apart.
- For maximum coverage, the lights should be placed as close as possible to the front of the cabinet.
- Full-faced cabinets will hide the fixtures and wires.



#### IMPORTANT

Before you begin this project, read the manufacturer's instructions. Also be sure to follow all local building codes. If you're not comfortable installing under-cabinet lighting, discuss the job with a Lowe's associate or call a professional for help.

## INSTALL LOW-VOLTAGE UNDER-CABINET LIGHTING

### PREPARATION (cont.)

#### 06 Plan the route for the wires between the power supply and lights.

- Lighting kits will have preassembled wiring that may determine the location of your lights. It may help to lay out the wiring on the counter to figure out possible positions for your lights. Make sure the connectors will reach the lights and power supply.
- If possible, plan to conceal the wires and power supply.
- The wires can be hidden in the space between cabinets, or inside the cabinets. If you route the wires through the inside of the cabinets, you have to drill holes.
- The power supply can be hidden behind appliances, like a refrigerator or microwave.
- **WARNING:** Only low-voltage kits can be routed between and through cabinets. Do not attempt with high-voltage lighting. And for safety, do not install corded wires or a power supply behind wallboard. If you want to completely conceal the wires behind wallboard, install a hard-wired lighting system.

#### 07 Mark the location of the lights with a pencil.

- You can also mark the route of the wires, if desired.



## INSTALLING THE UNDER-CABINET LIGHTS

#### 01 Remove the lens cover from the light housing.

- Some snap into place and others are screwed in.

#### 02 Hold the light in the marked position with the wire notch toward the back of the cabinet.

#### 03 Mount the housing assembly with wood screws.

- Pre-drilled holes may be required to minimize damage to the cabinet surface.
- **TIP:** You can also recess the fixtures, such as inside the top of a cabinet.
  1. Drill the recess hole with a hole saw. Wear safety glasses for this step.
  2. Remove the housing from the fixture. Most fixtures just pop out of the housing.
  3. Route the wires through the hole.
  4. Mount the light with wood screws.

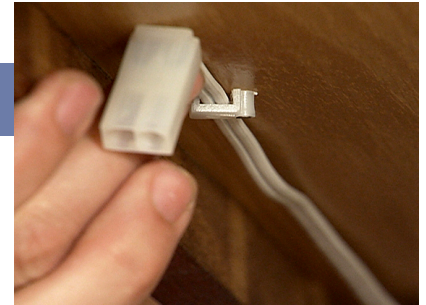


## INSTALL LOW-VOLTAGE UNDER-CABINET LIGHTING

### INSTALLING THE UNDER-CABINET LIGHTS (cont.)

#### 04 Hide the wires along the route to the power supply.

- Some kits have clips that attach to the under side of a cabinet with just a few taps from a hammer.
- Remember, excess wire can be hidden inside a cabinet or in the space between two cabinets.



#### 05 Follow the manufacturer's instructions for attaching the connector plugs.

- For some low-voltage kits, just slip the connector body over the pre-installed pins, push until they snap into position, then plug them into the cable.

#### 06 Continue mounting and assembling the other lighting fixtures and wiring.

#### 07 Install the lighting switch or dimmer in a convenient location following the manufacturer's instructions.

- Most are attached with a screw or an adhesive backing.
- Mount the switch and route the wires to the power supply.



#### 08 Plug the power supply transformer into an electrical outlet.

#### 09 Turn the lights on and check each light to make sure that it illuminates.

- If any of the lights are not working, turn off the lights, disconnect the power supply, and check the connections of the wire plugs.
- Also check that the bulbs are properly seated in the fixture. Handle the bulbs with a soft cloth. Oil from your hands can cause the bulbs to overheat and decrease the life of the bulb.

#### 10 Install the lens covers on the light housings.

- Skip this step if you recessed the fixtures.

#### 11 Replace items removed from the cabinets and countertops.

Under-cabinet lighting will definitely illuminate your countertops, providing you with a brighter workspace. Remember, Lowe's has plenty of other lighting options when it comes to under-cabinet lighting. Installing an LED light system is similar to low-voltage installation. For other installation projects and instruction sheets, visit [Lowes.com/Videos](https://www.lowes.com/Videos).

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