

Special Circumstances

The following circumstances may require an installation professional. Evaluate level of difficulty and individual circumstances prior to installation. Other special circumstances and individual situations may be related, but not limited to design of home, irrigation, landscape design, etc.

Sidewalks

When necessary to go under a sidewalk, use the 3/4-inch pipe. Lay it down perpendicular to sidewalk. Slice ground at a straight up angle, as deep as sidewalk, as long as pipe, plus two feet. Lay pipe in slot and sledge it under sidewalk. Dig to find the pipe on the other side. Now cut wire. Make sure you have enough slack to finish the job. Pull out pipe and shove wire through hole, left, by pipe. Continue burying wire up to house entrance point. Conduit is not necessary, but does help protect wire and looks straight. Tree roots are a hazard – avoid them if possible. Digging deep enough might enable going under the root, but would mean cutting wire and threading it under the root. But, always keep in mind, it is very important to keep a continuous run of wire. DON'T COME UP SHORT!

Split Foyer Homes: Many consumers with split foyer homes have experienced great installation difficulty by improperly feeding wire into split foyer homes or improperly drilling into the home. This is why hiring a professional for split-foyer homes is generally advisable.

Never drill through a foundation! It will crack. About the only way to drill into the home is to go to the lowest level through the window frame or the finished garage. This is tough. You have to tack a wire from the front of the garage to the back outlet or go to the ceiling fixture and install a pull chain socket. Such homes always have sidewalks, or a concrete drive is connected to the porch, which means about fifteen feet of concrete molloys exposed. You could go up the wall to the second floor, into an outlet there. Either way it doesn't look very attractive. The trick is to hide wire.

Disclaimer: This manual is intended for the standard installation, and is a reference guide only. There may be special circumstances, individual situations, or state and local building codes that would require adaptation of instructions in this guide, and would require an electrician or professional installer. Check your state and local law building and electrical codes prior to installation. Charm-lite bears no liability for improperly installed products, or for products utilized contrary to purposes or instructions.

The Charm-Lite Bulb Tree and Dusk-to-Dawn Control is manufactured, assembled and shipped from factories in Central Indiana, USA by: Charm-Lite Inc. 765-644-6876
2448 E. 39th St. Anderson, Indiana 46013
<http://www.charm-lite.com> / sales@charm-lite.com

USPTO: US 20070201228 A1 and US 7841754 B2

Charm-Lite Electric-Gaslight Installation Manual

TOOLS

STRAIGHT EDGE SPADE
DANDELION DIGGER
3/4 IN. STEEL PIPE or Flexi-bit 54"x1/2" Masonry
HAND DRILL
3/8 IN. DRILL BIT
1/2 IN. MASONRY BIT
EXTENSION CORD
FLAT FISHTAPE or
8 FT. STRING
TWO PAIR OF PLIERS
SCREWDRIVER
WIRE CUTTERS

MATERIALS

GASLITE CONVERSION KIT
OUTDOOR WIRE
WIRE STAPLES
CAULKING COMPOUND
1/2 IN. CONDUIT (CPVC)
3/8 IN. FLAIR CAP or
1/4 IN FLAIR PLUG
ENAMEL SPRAY PAINT

STEPS

1. REMOVE GLASS AND PULL HEAD OFF POLE
2. PLUG GAS LINE AT METER OR TOP OF HEAD
3. REMOVE GAS PARTS FROM HEAD
4. PAINT HEAD AND LET DRY
5. DRILL EYE HOLE NEAR TOP OF POLE
6. DRILL WIRE ENTRANCE AT BASE OF POLE
7. FISH WIRE UP POLE
8. INSTALL EYE
9. INSTALL BULB TREE
10. CONNECT EYE AND BULB TREE
11. PAINT POLE AND INSTALL GLASS
12. DRILL THROUGH WALL
13. BURY WIRE
14. WIRE TO TRANSFORMER

The Transformer is tested and certified "In Good Working Order" with sufficient power to operate (2)-LED bulbs or less than 24 watts. (The LED bulbs use less than 5 watts of power!) DO NOT OVERLOAD TRANSFORMER.
To contact customer support call: 765-644-6876

BEFORE INSTALLATION

Calculate where wire will enter the house and extend wire to the pole. If something is in the way go around it, move it, or go under it. It can be a hassle to cut wire only to find it's too short to extend inside the house.

Start job at pole and if something is in the way, go under it or around it and bury up to that point, then cut.

Dry locations for power source inside the house to the transformer can be found in the garage, basement, or an inside outlet along an outside wall.

BE SURE WHERE THE DRILL IS GOING INTO THE HOME! DO NOT DRILL INTO HOME FOUNDATIONS!!

***** BEFORE YOU DIG! *****

Call your local Utility Protection Service at #811

INSTRUCTIONS

1. Remove the glass from the lamp head. There should be a set screw at the base. If it doesn't turn, push up at the bottom of cage and force head off the pole. Use both palms in a **synchronous bumping straight up method**. Do this on each side of the head.
2. Disconnect the gas line at the flair fitting and plug it off or locate gas light supply line and cap after the valve, if there is one. Use a 3/8 or a 1/2 inch flair fitting. If unsure which to use check first. If unsure how to do this, consult a licensed plumber or consult your local Gas Company.
3. Remove gas fixture inside lamp head. Two pair of pliers should do the job nicely. Steel lamp-heads may take a bit of persuasion in freeing the center for the Charm-Lite, however, a chisel and hammer, or drill can be used. In rare cases a new lamp head is necessary.
4. Once you've disconnected the gas line, and removed gas burning components, paint interior and exterior of lamp-head using average spray enamel. Eagles on lamp-heads are painted gold.
5. Drill a 3/8-inch hole in the pole, 4 inches down from top of pole, or approximately 1/2 inch below the lamp head seat line. Aim it away from major light sources – North if possible.
6. Drill or chisel another hole just below the dirt line. Make sure the bottom hole is rounded out nicely for slipping wire through. Make certain not to accidentally nick the gas line unless the supply line has been capped off at meter,
7. Stretch the wire from the house to pole. We push the wire up from the bottom with an 8' piece of fish tape or you could drop a string down the pole to bottom opening and retrieve it through the opening with a wire hook or paper clip. Attach wire by lifting and pushing until wire extends about six inches out top of pole. Fold over to keep it from falling.
8. Remove the cap and one nut lower the photoelectric dusk-to-dawn eye into the pole with a pair of pliers. Push the end through the hole made earlier, at the top of pole, and screw the nut; place cap on end.
9. By now the lamp-head is dry and ready for the bulb tree. Place the bulb tree inside the lamp-head, with one flat nut and one washer assembled onto all thread. Guide it through the center hole in the head. Place the other washer and nut on the end of the all thread and tighten down. Make sure it's centered in the head. Modification of the bulb tree is easy you can pull the copper top off the stem and cut to the desired length. Push wires back into the stem and slip the bulb sockets onto the new end pinch the top of the stem if it is loose.
10. Most poles have two slots cut in the top. This makes it handy for wiring. Place the head on top of the pole and stick all wires out one of the slots. Wire accordingly.
Transformer wire = One of Two wires ran from Transformer in the house
Lamp Head wire = One of Two wires from Bulb Tree in Lamp Head
Eye wire = One of Four wires from Dusk-To-Dawn Control mounted in Post.



11. Use an up and down method for smooth paint lines on the pole. Be sure to use the original color. When reinstalling the glass, some heads use a glass clip. Bend a paper clip or piece of wire braid to fit around the hold down screws.

12. Now it's time to install the wiring system to the house. Start at the pole and work towards the power supply. Now calculate the optimum path for the wire to go, taking into consideration barriers. Map out the job like a professional. If the front door is in the middle, and the sidewalk extends to the drive then go to the side that has no sidewalk. Look along the top of the foundation wall in the basement for a good wire entrance location, on that side of the porch. Use the water faucet as a good location finder. If you have no basement, you will have to run wire through the crawl space to garage or straight up through the floor to an existing outlet. If it's a split-foyer home, many consumers have run into demise by running the wire improperly. Never drill through a foundation! It will crack. About the only way to drill into a split foyer home is to go to the lowest level through the window frame or the finished garage. This is tough because you have to tack a wire from the front of the garage to the back outlet or go to the ceiling fixture and install an outlet. Such homes always have sidewalks, or a concrete drive is connected to the porch, which means about fifteen feet of concrete mollies exposed. You could go up the wall to the second floor, into an outlet there. Either way it doesn't look very attractive. The trick is to hide wire. Impress yourself!
(Remember we suggest hiring a professional for split foyer homes.)

13. Begin burying wire by slicing ground at a 65-degree angle, breaking down and then pushing up, causing a tilted "V" gap. The wire doesn't have to go to China. The voltage is only 24V. The transformer has a fused secondary, in case of a short. About 6 inches deep is all that's necessary. Push the wire in with a dandelion digger at an angle, in order to stretch out any slack and keep wire from creeping out. This will take some getting used to, so take your time. Once reaching a point where going under something is necessary, do it now, and then continue until reaching entrance point of home. Cut off a piece of conduit and run wire through it. Cut the wire now. Give enough slack to splice the basement wire and the outside wire without standing on a ladder. Shove wire through hole and seal with caulk.

14. Splice into the basement wire and staple to the rafters. Just remember to take a look at the example left by the phone, cable or existing electrical wiring. Don't run staples too close to 110V wires, and if you can, try to hide them as much as possible. Go to the nearest outlet for hooking up the transformer. Make sure it's not on the basement switch at the top of the stairs. If you have an outlet in an enclosed wall you can fish the wire behind the wall, assuming the ceiling tiles are removable. Go around the outlet box and fish up. Attach the wire and pull down.

If you are unfortunate enough to have an enclosed ceiling then you have to be tricky about where you come in with the wire. Most of the time there will be a water meter at the front wall and assuming there is it will also be enclosed. If you look up inside this you will have a little space to access the wire. BE ACCURATE as to where you come in, there is sometimes less than the width of a rafter in which to do so. Remember the water faucet? It is usually right there! MAKE SURE with a visual check. If not, then whip out the tape measure. Don't forget the width of the wall when measuring the outside, which is usually about 10 inches. Then run the wire down to the baseboard. Like an extension cord go to the nearest outlet. An alternate method is to go in through the utility room rafter with your fish-tape, and literally hook the wire by attaching a wire clothes hanger to your fish tape and reel it into the utility room. Connect the wire to the **two AC secondary screw terminals** on the back of the transformer.