

## 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.**

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# Charm-Lite Electric-Gaslight Installation Manual

## TOOLS

STRAIGHT EDGE SPADE  
DANDELION DIGGER  
POSTHOLE DIGGER  
AXE W/SLEDGE  
3/4 IN. STEEL PIPE  
HAND DRILL  
3/8 IN. DRILL BIT  
1/2 IN. MASONRY BIT  
EXTENSION CORD  
FLAT FISHTAPE  
8 FT. STRING  
TWO PAIR OF PLIERS  
PIECE OF WIRE  
SCREWDRIVER  
WIRE CUTTERS

## MATERIALS

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

## 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.

## IMPORTANT!

*\* Have one continuous run of wire or splice may later break.*

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. Ideal locations for power source for transformer are inside the house, basement or garage. Ideal rafter access into home is a crawl space or basement. **BE SURE WHERE DRILL IS GOING INTO THE HOME! DO NOT DRILL INTO HOME FOUNDATIONS!!**

## 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 (1)-one Charm-Lite. **DO NOT SHORT OR OVERLOAD TRANSFORMER!** To contact customer support call: 765-644-6876

## 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. If supply line has been capped off at meter, it's already shut off!
  7. Stretch the wire from the house to pole. Drop the string down the pole to bottom opening and retrieve through opening with piece of wire 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. Consumers may have a clear shot to the hole made for the eye, if the "Slide in Post mount" (the one with a foam block holding it in the pole) was purchased. If so, consumers will only need to compress the foam, slide it down to match the eye, with the drilled hole. If you bought the threaded mount, with the wire extension, remove the cap and one nut, lower the photoelectric 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.
- If you have an unusually tall lamp head make the stem of the bulb tree longer. Modification of the bulb tree is easy if you used CPVC as a conduit. Cut a portion of it to desired length. Drill out one end about 1/2 inch deep with the 1/2-inch drill bit. Screw in threaded piece from the original stem – about half way. Push wires in the new stem and slip the bulb socket onto end. Paint plastic stems gold or desired color.
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.

House wire = One of Two wires ran from Transformer in the house

Head wire = One of Two wires from Bulb Tree in Lamp Head

Eye wire = One of Two wires from Dusk-To-Dawn Control mounted in Post.



- 1-House wire to Eye wire.
- 1-Head wire to Eye wire.
- 1-Head wire to House wire.

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 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. Impress yourself! *(Remember we suggest hiring a professional for split foyer homes.)*
13. Begin burying wire by slicing ground at a 45-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 come in. BE ACCURATE as to where you come in, there is sometimes only 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.