

## INSTALLATION INSTRUCTIONS RECESSED FIXTURES

### DESIGN LAYOUT



Start by determining and marking where each fixture is to be installed. Next, determine the sequence in which the main line will run. The fixtures should run in sequence and the total wattage of each run should not exceed the transformer's circuit. Total wattage is determined by multiplying # of fixtures x wattage of bulb in fixtures. (9 lights with 7 watt bulbs, 9x7 = 63). Refer to your specific transformer to determine the circuit's allowable wattage.

### TRANSFORMER 1



Using installation instructions provided with transformer, mount transformer to house and install main power feed line. This line should be a UV resistant, UL approved 12-2 low voltage line. Be sure main line is long enough to reach the first lighting fixture.

### TRANSFORMER 2



Drill a 3/8" hole through the deck surface and feed main line through to the under side of deck. Next, run the main wire to your first fixture. Secure the main wire using staples or cable tacks. Tip: For faster installation pre-wire the main run before decking is installed!

### SUPPLIES YOU WILL NEED

1/2" Drill Wire Tacks 12-2 Low Voltage wire Silicone filled Wire Nuts

3/8" drill bit 3" Fostner Bit Phillips Screw driver Flat head screw driver

### RECESSED 1



Determine where the fixture is to be installed and make a reference mark for drilling the 3" round hole. Tip: Measure from top of stair tread to bottom and divide this # in half and make a mark. Next, measure from left to right across stair tread and divide this # in half and mark. Center is where the two marks intersect.

### RECESSED 2



Next, carefully drill a 3" hole using a forstner bit (model # HP-990A) or hole saw. Hole must be drilled a minimum of 1 1/4" deep to accept back box. WARNING: BE SURE AREA BEING DRILLED IS FREE OF NAILS OR SCREWS.

### RECESSED 3



Drill a 3/8" hole all the way through the deck in the center of the 3" hole. Next, run the fixture wire through the 3/8" hole to underside of deck where wire connections will be made.

NOTE: If using Rectangular face plates, a 3/8" hole must be drilled to the left and right of the 3" hole to accept back box tabs. If using Square or Round face plates, tabs on the outside of 3" back box must be removed with a flat head screw driver.

DO NOT drill 3/8" side holes when using square or round face plates.

### RECESSED 4



Install back box by inserting into 3" hole and screwing through two slots in back of box or through two slots in side of box. Be sure box is installed straight or face plate will be crooked.



RECESSED 5 Install face plate using finished screws provided.

> WARNING: HAND TIGHTEN FACE PLATE SCREWS UNTIL SCREWS ARE JUST SLIGHTLY SNUG OR GLASS FACE WILL BREAK.



RECESSED 6 Cut and snip fixture wire and (2) main wires to comfortable working length and connect with a UL approved silicone wire nut. Be sure at least 7/16" of copper wire is exposed and wire nuts are on securely. Loose connectors can arch causing fixture failure or fire.

Note: Silicone filled wire nuts do not come with fixture.



# INSTALLATION INSTRUCTIONS RAILING FIXTURES

# **DESIGN LAYOUT**

Start by determining and marking where each fixture is to be installed. Next, determine the sequence in which the main line will run. The fixtures should run in sequence and the total wattage of each run should not exceed the transformer's circuit. Total wattage is determined by multiplying # of fixtures x wattage of bulb in fixtures. (9 lights with 11 watt bulbs, 9x11 = 99 Watts). Refer to your specific transformer to determine the circuit's allowable wattage.

# TRANSFORMER 1



Using installation instructions provided with transformer, mount transformer to house and install main power feed line. This line should be a UV resistant, UL approved 12-2 low voltage cable with a 100' max run and no more than 250 watts. If run is more than 100' and over 250 watts, use 10-2 or 8-2 wire to carry the load. Be sure main line is long enough to reach the first lighting fixture.

# TRANSFORMER 2



Drill a 3/8" hole through the deck surface and feed main line through to the under side of deck. Next, run the main wire to your first fixture. Secure the main wire using insulated staples or cable tacks. Tip: For faster installation pre-wire the main run before decking is installed!

# SUPPLIES YOU WILL NEED

1/2" Drill
Insulated Wire Tacks
Low Voltage Wire
Silicone Filled Wire Nuts
Torpedo Level

3/8" Drill Bit
Phillips Screw Driver
Flat head Screw Driver
Pencil
Tape Measure

NOTE: The Railing Lights have slight variances in installation depending on the style of railing. This varies how the wire will be run/hidden to get to the main run. The following is a basic installation guide:

# RAIL 1



Determine where the fixture is to be installed and make a reference mark for centering the mounting and wire hole. Tip: measure from the top of the deck to the desired top of light height (usually around 34") and make a mark. Next, measure from left to right across the post and divide this # in half and mark. Center is where the two marks intersect.

# RAIL 2



RAIL 3



RAIL 4





Install back plate by first threading the wire through the 3/8" hole and running it where it needs to go. Then hold the back plate in place while hand installing the mounting screws provided. Be careful not to over tighten. Make sure to install level or light fixture will be crooked.

Next, hold the back plate on the centering

mark, mark the two mounting holes. Also

mark where the wire will feed through to

get to the main feed line. TIP: depending

on what style of post/ post sleeve you are

be made just under the post cap, or the

pigtail wire may be able to slide between

the post and the post sleeve to get to the

joist and connect to the main line.

It is recommended that you predrill

for the mounting screws to help not

crack the surrounding material. Use

a drill bit smaller than the screw to

the wire through and making

the decking, use a 3/8" drill bit

ensure the screw will hold. If passing

connection under post cap or below

through the sleeve and into the space.

using, the wire connections may be able to

# RAIL 5



Install face plate by carefully sliding onto the back plate in the runners. Be sure both sides slide into the runners.

# RAIL 6



Cut and snip fixture wires and main wires to comfortable working length.

Then connect with an UL approved silicone filled wire nut. Be sure at least 7/16" of copper wire is exposed and wire nuts are on securely. Loose connectors can arch causing fixture failure or fire.

Note: Silicone filled wire nuts do not come.

Note: Silicone filled wire nuts do not come with fixture.