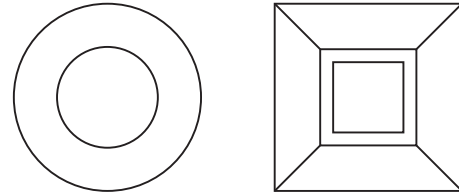


## Installation Instructions for Port Round & Square LED

### IMPORTANT SAFETY INFORMATION

- **WARNING:** Fixture must be installed in accordance with National and Local Electrical codes.
- Load cannot exceed the total wattage of the transformer rating.
- This fixture must be installed by a licensed electrician.
- Use UL listed type UF underground cable when no conduit is used to power the fixture(s).
- For outdoor installation, use outdoor rated electrical boxes (minimum 1.5" deep), conduit feedings, and wire nuts. For indoor installation use octagon electrical boxes.

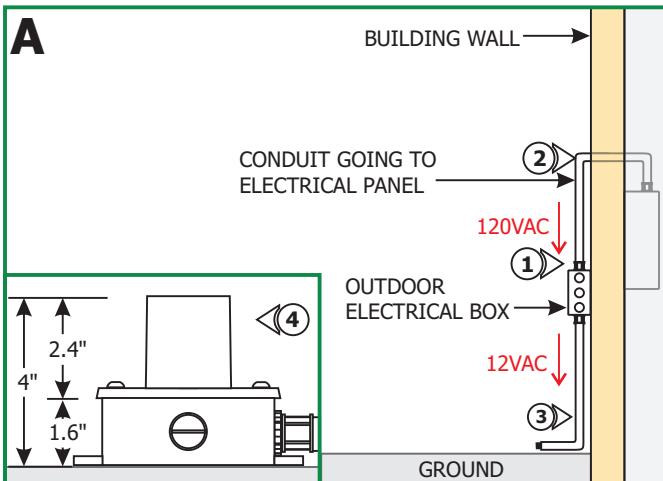
**SAVE THESE INSTRUCTIONS!**



### IMPORTANT INFORMATION

- This fixture must be powered with a 12 VAC magnetic remote transformer (T-150-12, or T-300-12) or an LED electronic power supply (TE-60L-12) only.
- For optical controls such as 20° beam tilt, micro louver or glass lens use PORT-LL accessory (sold separately).
- When dimming use a magnetic low voltage dimmer with a magnetic remote transformers and electronic low voltage dimmer with an electronic transformer.

## Outdoor Installation Using an Electronic LED Power Supply (TE-60L-12)

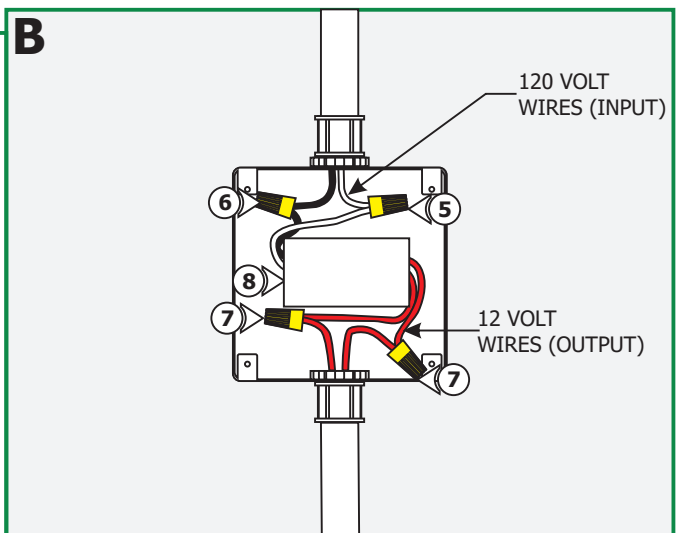


**NOTE:** If using a magnetic remote transformer to power the fixture omit the steps below and refer to the "Outdoor Installation Using Magnetic Remote Transformer" section.

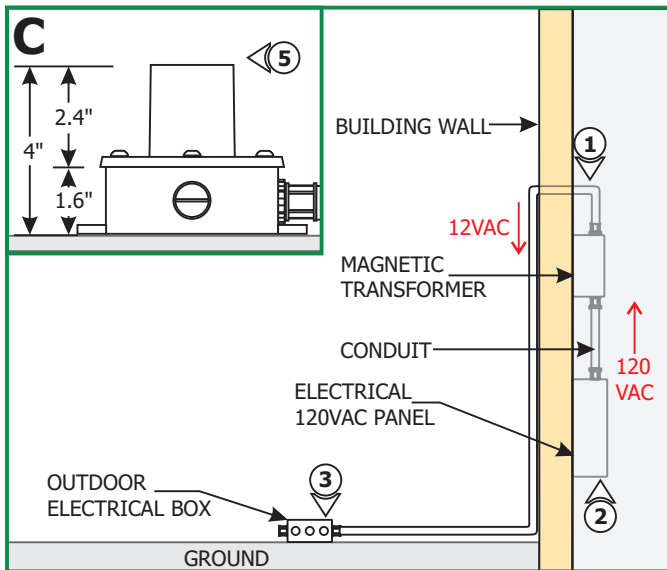
- 1: Install an outdoor electrical box onto the wall or post next to the building to fit the LED power supply (TE-60L-12) and to branch the power to all in ground electrical boxes
- 2: Install conduit and run 120 volt power wires from the panel to the outdoor box.
- 3: Install conduit(s) from the outdoor electrical box to all in ground fixture outdoor electrical boxes.
- 4: Run proper wire sizes from branching electrical box to all fixture electrical boxes using the "Wire Size Chart" on page 6.

**NOTE:** The TE-60L-12 electronic LED power supply can power maximum of 15 Port fixtures.

- 5: Connect the white LED power supply wire to 120 volt neutral power wire with a wire nut.
- 6: Connect the black LED power supply wire to 120 volt hot power wire with a wire nut.
- 7: Connect one 12 volt power supply (red wire) in parallel to one wire going to each fixture electrical box with wire nuts. Connect the other 12 volt power supply wire in parallel to the other wire going to each fixture electrical box with wire nuts. (See wiring diagram on page 6).
- 8: Place the LED power supply and wire nut connection inside the electrical box and mount the box cover.

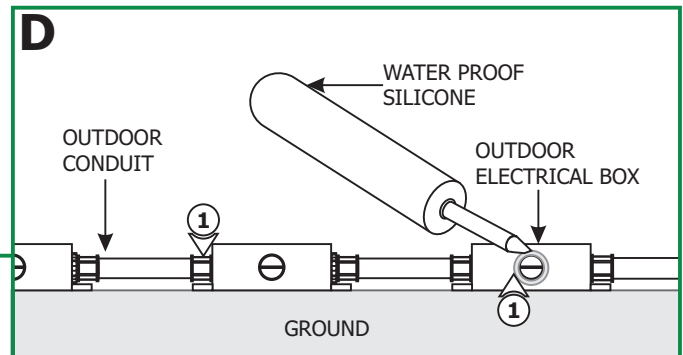


## Outdoor Installation Using a Magnetic Remote Transformer

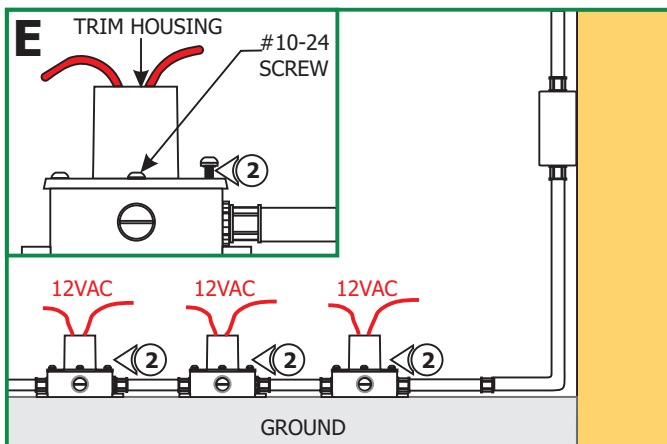


- 1:** Install the magnetic remote transformer indoor (unless it is rated for outdoor).
- 2:** Refer to the instructions supplied with the remote transformer to run the power from the panel to the remote transformer.
- 3:** Install an outdoor electrical box onto the wall or ground next to the building. Connect a conduit coming from the remote transformer to the outdoor box.
- 4:** Install conduit(s) from the outdoor electrical box to all in ground fixture outdoor electrical boxes.
- 5:** Run proper wire sizes from branching electrical box to all fixture electrical boxes using the "Wire Size Chart" provided with remote magnetic transformer. Wire the transformer wires parallel to the fixture wires. (See wiring diagram on page 6).

## Outdoor Trim Housing Installation



- 1:** Caulk all areas of the outdoor electrical boxes and the conduit connectors with a water proof silicone to prevent water entering in the electrical boxes.

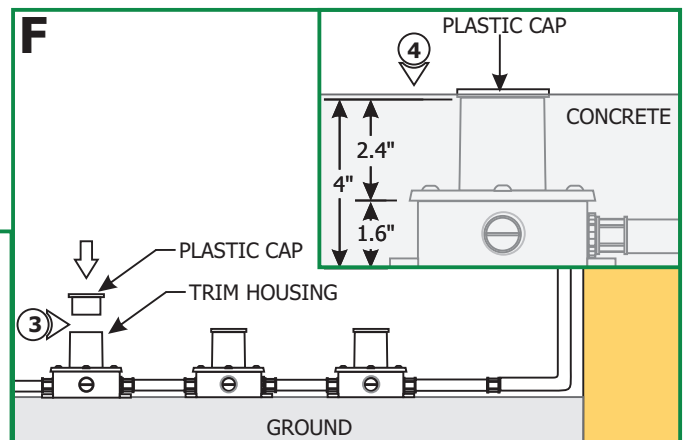


- 2:** Align and secure each trim housing to the electrical box holes with the four #10-24 water sealant screws provided.

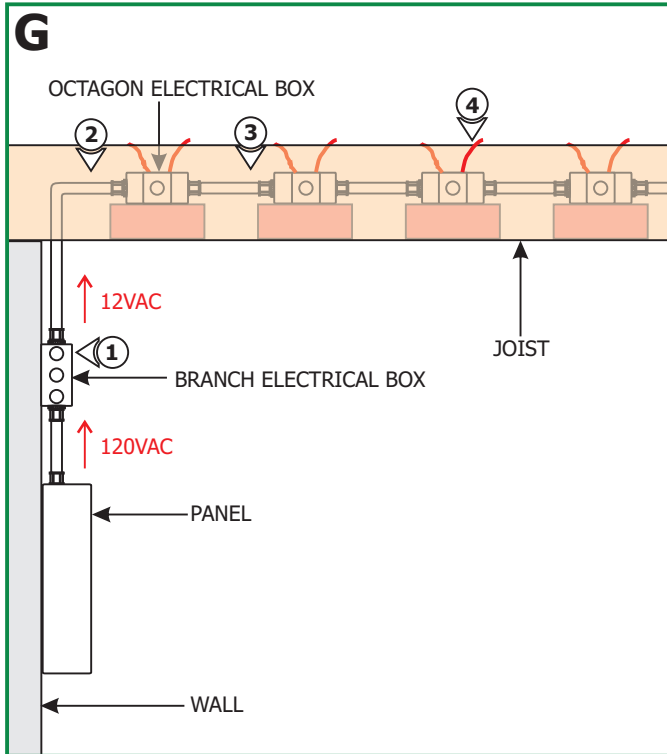
- 3:** Insert the provided plastic caps to all trim housings to prevent particles and concrete debris from entering inside the box.

- 4:** Pour the concrete up to plastic cap and wait to dry.

- 5:** Refer to the "Install the Trims" section.



## Indoor Floor Installation Using an Electronic LED Power Supply (TE-60L-12)



**NOTE:** Use only octagon boxes to install the trim housings indoor.

**NOTE:** If using a magnetic transformer to power the fixtures omit the steps below and refer to the "Indoor Installation Using Magnetic Remote Transformer" section.

**1:** Install an electrical box onto the wall or post next to the panel to fit the LED power supply (TE-60L-12) and to branch the power to all octagon electrical boxes.

**2:** Install conduit and run 120 volt power wires from the panel to the branching electrical box.

**NOTE:** Subfloor, floor, and Port trim housings (2.4") heights must be considered when positioning the octagon boxes between the joists.

**3:** Install conduit(s) from the branching electrical box to all octagon fixture electrical boxes.

**4:** Run proper wire sizes from branching electrical box to all fixture electrical boxes using the "Wire Size Chart" on page 6.

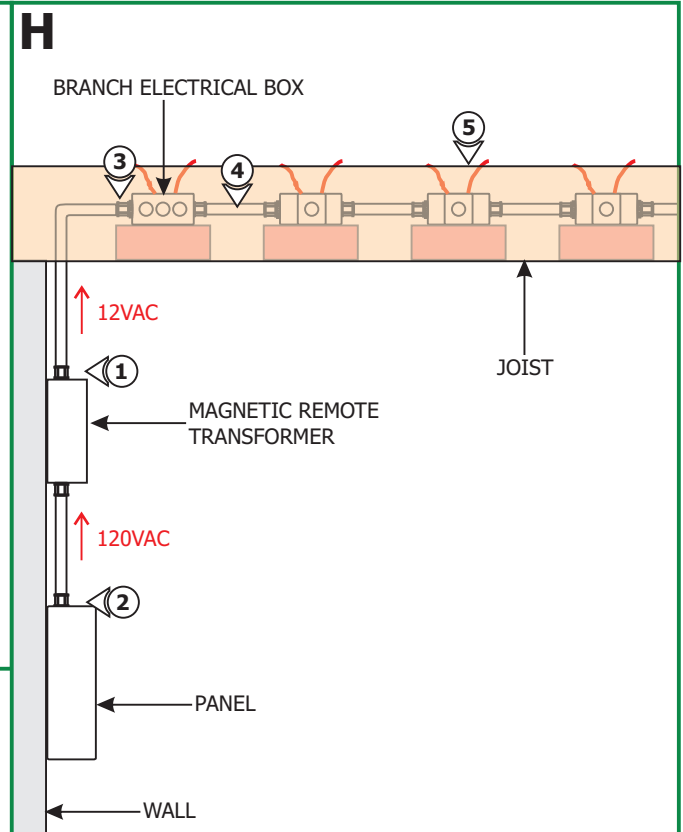
**5:** Follow steps 5 through 8 on page 1 using drawing B to connect the wires to the power supply.

## Indoor Floor Installation Using a Magnetic Remote Transformer

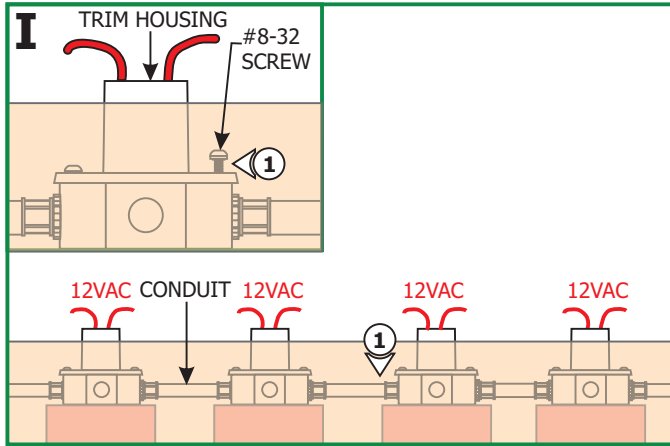
- 1: Install the magnetic remote transformer to an accessible location.
- 2: Refer to the instructions supplied with the remote transformer to run the power from the panel to the remote transformer.

**NOTE:** Subfloor, floor, and Port trim housings (2.4") heights must be considered when positioning the octagon boxes between the joists.

- 3: Install an electrical box onto the wall or ground next to the octagon fixture electrical boxes to branch the power. Connect a conduit coming from the remote transformer to branching electrical box.
- 4: Install conduit(s) from the branching electrical box to all octagon electrical boxes.
- 5: Run proper wire sizes from branching electrical box to all octagon boxes using the "Wire Size Chart" provided with remote magnetic transformer. Wire the transformer wires parallel to the fixture wires. (See using diagram on page 6).

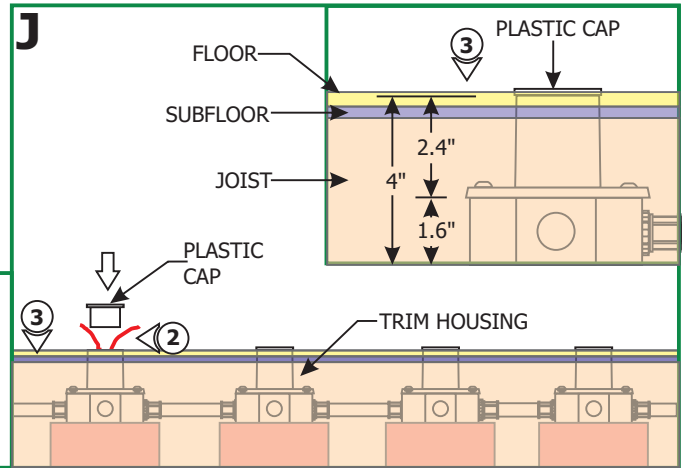


# Indoor Floor Trim Housing Installation

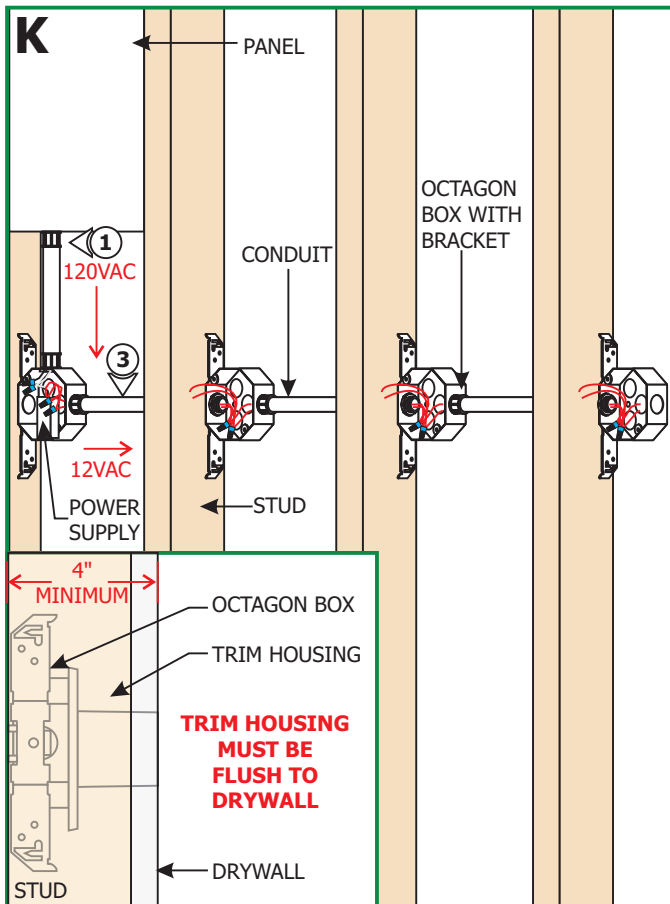


**1:** Align and secure the each trim housing to the octagon electrical box holes with the two #8-32 screws (not provided).

- 2:** Insert the provided plastic caps to all trim housing to prevent dust and debris from entering inside the box.
- 3:** Finish the floor installation up to the plastic cap.
- 4:** Refer to the "Install the Trims" section.



# Indoor Drywall Installation Using an Electronic LED Power Supply (TE-60L-12)



**NOTE:** Use only octagon boxes to install the trim housings indoor.

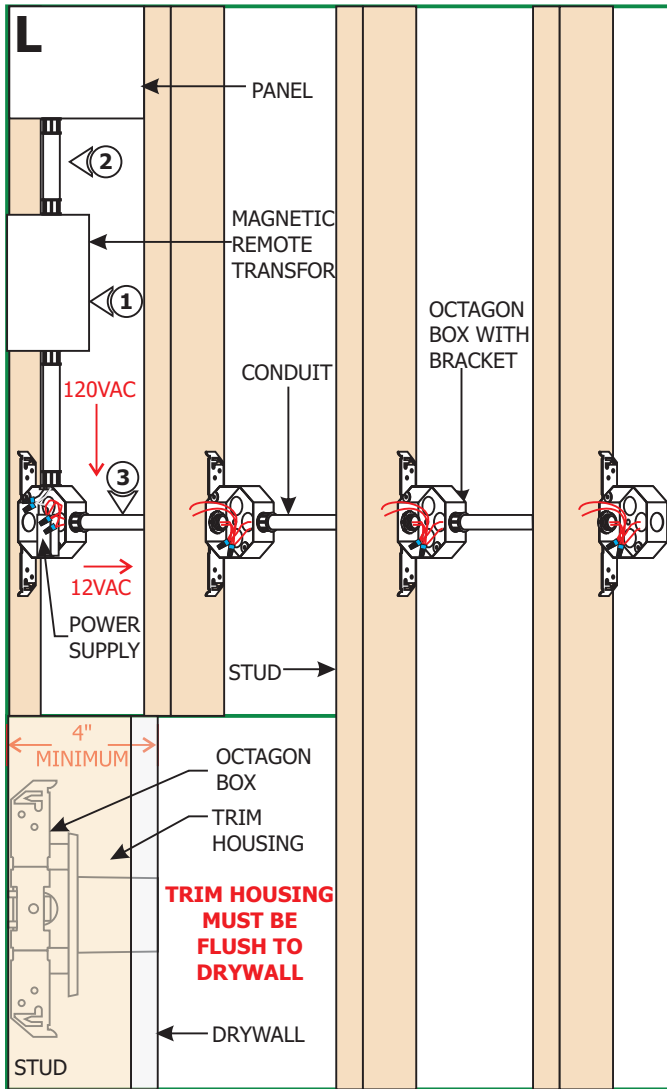
**NOTE:** If using a magnetic transformer to power the fixtures omit the steps below and refer to the "Indoor Drywall Installation Using Magnetic Remote Transformer" section.

- 1:** Install an octagon box onto the stud next to the panel to fit the LED power supply (TE-60L-12) and to branch the power to all octagon boxes.
- 2:** Install conduit and run the 120 volt power wires from the panel to the branching octagon box.

**NOTE:** Port trim housing depth (2.4") along with octagon box depth (1.6") for total of 4" depth should be considered when positioning and mounting an octagon on side of the stud.

- 3:** Install all octagon boxes for the housing trims and run conduits from the branching octagon box to all these octagon boxes.
- 4:** Run proper wire sizes from branching electrical box to all fixture electrical boxes using the "Wire Size Chart" on page 6.
- 5:** Follow steps 5 through 8 on page 1 using drawing B to connect the wires to the power supply.

# Indoor Drywall Installation Using a Magnetic Remote Transformer

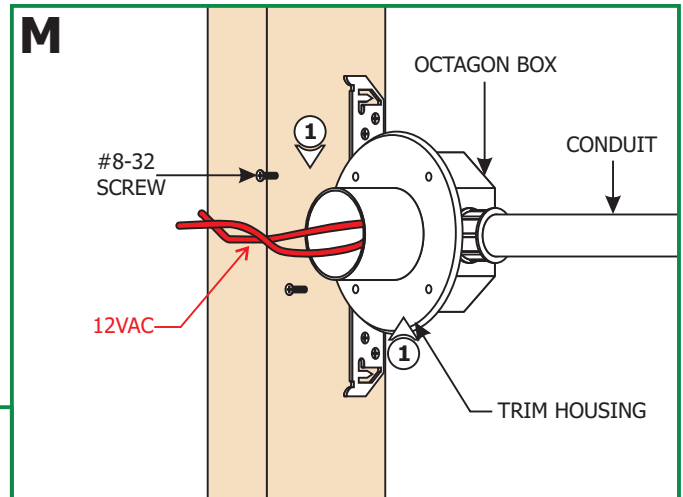


- 1: Install the magnetic remote transformer to an accessible location.
- 2: Refer to the instructions supplied with the remote transformer to run the power from the panel to the remote transformer.

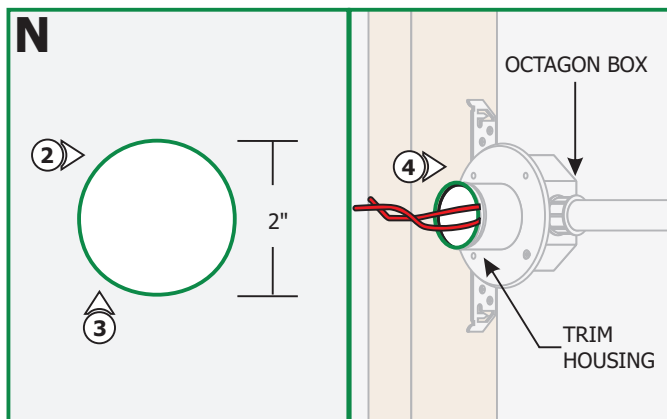
**NOTE:** Port trim housing depth (2.4") along with octagon box depth (1.6") for total of 4" depth should be considered when positioning and mounting an octagon on side of the stud.

- 3: Install an octagon box onto the stud next to the remote transformer to branch the power to all octagon boxes.
- 4: Install all octagon boxes for the housing trims and run conduits from the branching octagon box to all these octagon boxes.
- 5: Run proper wire sizes from branching electrical box to all octagon boxes using the "Wire Size Chart" provided with remote magnetic transformer. Wire the transformer wires parallel to the fixture wires. (See using diagram on page 6).

## Indoor Drywall Trim Housing Installation & Drywall

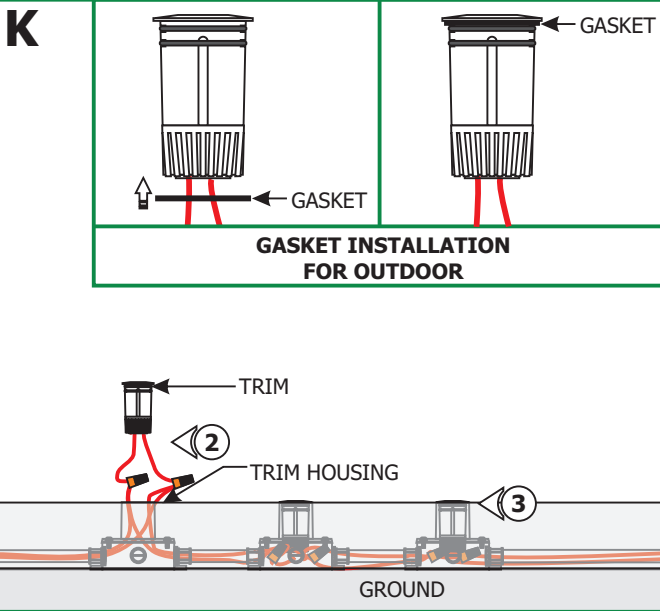


- 1: Align and secure each trim housing to the octagon electrical box holes with the two #8-32 screws (not provided).



- 2: Mark a point on the drywall where the housing opening is going to be located.
- 3: Cut out the marked drywall location with a 2" metal hole saw bit.
- 4: Install the drywall onto the studs making sure that the housing trims is not exposed out of the drywall.

# Wiring the Trims



**NOTE:** If using the PORT-LL accessory, refer to the instruction provided with the PORT-LL to install the beam control accessories in each trim prior to wiring the trims.

**NOTE:** For outdoor installation, place the water proof gasket (provided) onto the trim to prevent water leaking inside the electrical box. Use water proof outdoor wire nuts for power connection.

- 1: Remove the plastic caps.
- 2: Connect each trim wire to one power wire in the electrical box with a wire nut.
- 3: Place all wire connections inside the electrical box and push the trim completely into the trim housing opening.
- 4: Repeat steps 2 and 3 for other trims.

**NOTE:** Each fixture contains an integrated LED lamp. Each Port consumes 2.4 watts.

## LOW VOLTAGE WIRE SIZE CHART

TRANSFORMER WATTAGE	WIRE SIZE FOR UP TO 13 FT	WIRE SIZE FOR 14-20 FT	WIRE SIZE FOR 21-34 FT	WIRE SIZE FOR 34-52 FT
<b>12V 60W TE-60L-12</b>	#14 AWG	#12 AWG	#10 AWG	#8 AWG

## Overall Wiring Diagram

