

IMPORTANT SAFETY INSTRUCTIONS

When installing or using the lighting system, basic safety precautions should always be followed including the following:

- Read all instructions
- Do not conceal or extend exposed non-rated conductors through a building wall.
- Do not install this system in a damp or wet location
- To reduce the risk of fire and overheating, make sure all connections are tight.
- Do not install any fixture assembly closer than 6 inches (15.52cm) from any curtain or similar combustible materials.
- Turn off electrical power before modifying system in any way.
- Before energizing, make sure that the light system is clear of all material which could cause a direct short and check all electrical connections to make sure they are tight.
- The system is to be used only with luminaire heads identified for use with the Linear system.

SAVE THESE INSTRUCTIONS

If more cable is needed, contact your local Kichler® Linear Lighting distributor. 10GA cable can be purchased in lengths shown in the chart below.

| CABLE COLOR & LENGTH | KICHLER® PIN |
|----------------------|--------------|
| Cable White (25') | 10230WH |
| Cable Black (25') | 10230BK |
| Cable White (100') | 10232WH |
| Cable Black (100') | 10232BK |
| Cable White (500') | 10233WH |
| Cable Black (500') | 10233BK |
| Cable White (1000') | 10234WH |
| Cable Black (1000') | 10234BK |

FINDING TRANSFORMER LOAD: Low voltage systems require the use of a transformer to reduce standard 120-VOLT power from your home to 24-VOLTS. To determine the transformer size you will need to add up the wattages of all lamps you plan to use. Select a transformer that matches as closely as possible to the total lamp wattage. For example, if you have 21 fixtures all rated at 10 watts, you will need a 300 watt (VA) transformer (21 x 10 = 210 watts). Generally, the total lamp load should not be less than one-third the transformers wattage rating, nor exceed its maximum wattage capacity. If your total wattage is too high, either divide the load between two transformers, or use a more powerful transformer.

- 1) Determine desired location for mounting transformer. **NOTE:** When deciding location for mounting consideration should be taken for the requirements listed above.
- 2) Mark position of top portion of the keyhole slot location at top of transformer and the slot location at the bottom.
- 3) If mounting to a solid surface such as wood, siding, etc.
 - A. Drill 1/8 inch diameter pilot holes at positions marked in step 2
 - B. Drive screws approximately half way into the holes.
 If mounting to drywall:
 - A. Drill 1/4 inch diameter holes at positions marked in step 2
 - B. Push plastic anchors into holes and tap flush.
 - C. Drive screws approximately half way into plastic anchors.
- 4) Slip large portion of keyhole overhead of top screw and allow transformer to slid down making sure bottom slot is behind head of bottom screw.
- 5) Tighten screws until transformer is secure.
- 6) Split 10/2 cable approximately 3 inches and strip 1/2 inch insulation off each wire. 10/2 cable is the cable which all Kichler® 24-volt low voltage lighting fixtures will be connected. (Reference above for description and part numbers).
- 7) **For 10208 and 10209:** Connect one bare wire of the 10GA low voltage cable to the 24V output white wire labeled "X-1". Connect the remaining wire to the 24V output black wire labeled "X-2". **NOTE:** This transformer is equipped with a secondary circuit breaker that is connected to wire labeled "X-1". It is also equipped with a primary boost blue wire labeled "BOOST TAP". The primary boost will increase the output low voltage side to 25.7 volts when measured at the transformer. This allows compensation for voltage drop due to remote transformer locations. To use this feature connect the input 120V "hot" wire to the wire labeled "BOOST TAP" instead of "120V". Connect the line Neutral to the white wire labeled "COM". Line ground connects to the screw stud attached to the housing. Wire nut all connections inside transformer housing.
- 8) **For 10219:** On the bottom of the terminal block push one bare wire of the 10GA low voltage cable into the hole marked "COM" and tighten the corresponding screw on terminal block face until wire is secure. Push remaining bare wire into hole marked "24V" and tighten the corresponding screw on terminal block face until wire is secure. **NOTE:** This transformer is manufactured at 600W per circuit, each circuit is labeled "24V" and "COM". This transformer is equipped with two secondary circuit breakers that are connected to the secondary "COM". It is also equipped with a primary boost position, "BOOST TAP". The primary boost will increase the output low voltage side to 25.7 volts when measured at the transformer. This allows compensation for voltage drop due to remote transformer locations. To use this feature connect the input 120V "hot" wire to the wire labeled "BOOST TAP" instead of "120V". Use the wire position marked "COM" for the line neutral. **IMPORTANT:** Tighten all terminal block connections to 20 pound inches or tighten the screw hand tight, then tighten an additional 1/4 to 1/2 turn.
- 9) For optimum light output, the voltage at the lamp socket should range between 22.8 and 24 volts. For more information on voltage drop. Consult the Kichler® Linear Lighting Catalog or contact your local Kichler distributor.
- 10) Wire into standard 115/120 volt supply.

CIRCUIT BREAKER

(SECONDARY SIDE - 24 VOLT SIDE)

- Circuit breaker will trip if there is a short or if total wattage installed exceeds rated wattage per circuit.
- To reset breaker, flip switch to 'OFF' then back to 'ON' position.

THERMAL PROTECTION

(PRIMARY SIDE - 120 VOLT SIDE)

- This unit is equipped with a thermal protector and will shut off if overheated.