

This instruction sheet covers the installation of the following Kichler® Transformers: 10204, 10205, 10207 and 10213. Read these instructions carefully before installing this unit.

IMPORTANT SAFETY INSTRUCTIONS

- Read all instructions
- Do not conceal or extend exposed conductors through a building wall.
- Do not install this system in a wet location
- To reduce the risk of fire and overheating, make sure all connections are tight.
- Do not install any luminaire closer than 6 inches (15.52cm) from any curtain or similar combustible materials.
- Turn off electrical power before modifying system in any way.

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 12-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. For transformers 10207 & 10213 use the hole template guide to mark the mounting holes.
- 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® 12-volt low voltage lighting fixtures will be connected. (Reference above for description and part numbers).
- 7) **For 10207 and 10213:** On the bottom of the terminal block push one bare wire of the 10GA low voltage cable into the hole marked "COM SEC" and tighten the corresponding screw on terminal block face until wire is secure. Push remaining bare wire into hole marked "12 VAC SEC" and tighten the corresponding screw on terminal block face until wire is secure. **NOTE:** This transformer is equipped with a secondary circuit breaker that is connected to "COM SEC". It is also equipped with a primary boost position, "BOOST PRI". The primary boost will increase the output low voltage side to 12.8 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 terminal labeled "BOOST PRI" instead of "120 VAC PRI". Use the Terminal Block position marked "GND" for 120 volt grounding of the transformer, the "COM PRI" position for the line neutral. Tighten the corresponding screw on terminal block face until wire is secure.
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.
- 8) **For 10204 and 10205:** Connect one bare wire of the 10GA low voltage cable to the 12V output white wire labeled "X-1". Connect the remaining wire to the 12V 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 yellow wire labeled "BOOST TAP". The primary boost will increase the output low voltage side to 12.8 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.
- 9) For optimum light output, the voltage at the lamp socket should range between 10.8 And 12 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 - 12 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.
- If the unit cycles on and off without regard to the timer setting, it should be checked by a qualified service person.

THERMAL PROTECTION

(PRIMARY SIDE - 120 VOLT SIDE)

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