

# 120 Volt to 12 Volt DC Single Feed 300W Remote Electronic Transformers

**250AT300EL** **1.2**



ENCOMPASS LIGHTING GROUP

## TRANSFORMERS



**CAUTION: RISK OF FIRE**  
 This product requires installation by qualified electrician. Before installing be sure to read all instructions and **TURN THE POWER TO THE ELECTRICAL BOX OFF.**

### GENERAL PRODUCT INFORMATION:



This transformer is ETL listed for use with low voltage lighting systems of brands offered by Encompass Lighting Group.

This product is suitable only for indoor dry locations and approved for use at any height above the finished floor.

A typical installation is shown. Specific installation must be in accordance with the local electrical codes.

This product may be dimmed only with a low voltage electronic dimmer. Using a dimmer not designed for low voltage electronic applications may work initially, but could eventually cause transformer failure and will void the warranty. The dimmer must be derated as indicated by the dimmer manufacturer.

This product is intended for use with Encompass Lighting Group brands of low voltage lighting systems only.

During installation, make sure all power connections are tight.

Read all instructions thoroughly. Read "Important Safety Information" on next column before proceeding with the installation.

### Important Safety Information

Do not conceal or extend bus bar conductors through a building wall.

Do not install this lighting system in a damp or wet location.

To reduce the risk of fire and burns, do not install this lighting system where the uninsulated open bus bar conductors can be shorted or contact any conductive materials.

To reduce the risk of the system overheating and possibly causing a fire, make sure all the connections are tight.

Do not install fixture assemblies closer than six inches to curtains or similarly combustible materials.

Turn the electrical power off before modifying the lighting system in any way.

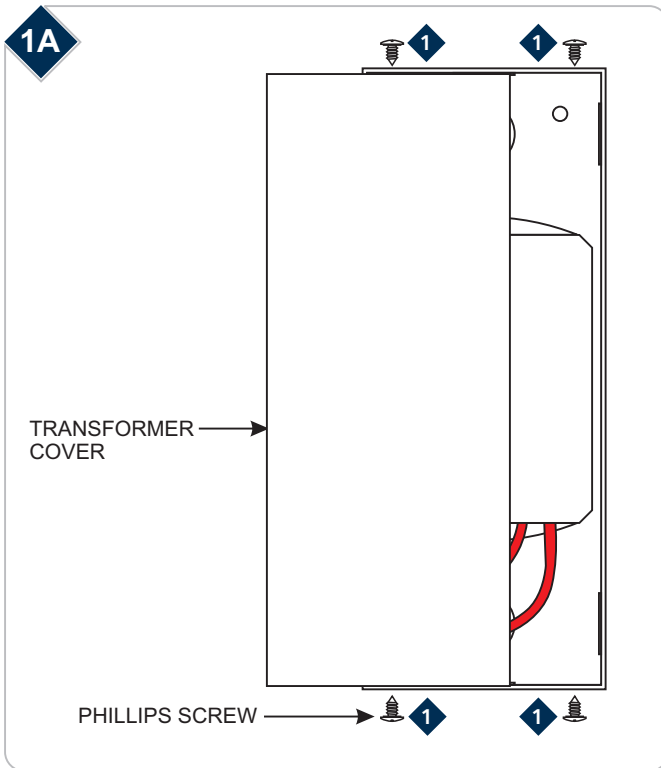
The fixtures used with the system must be identified for use with the corresponding system.

Minimum volume of the electrical box must be 6 cubic inches (98 cubic centimeters).

**To Reduce Risk of Fire**, it is important to wire the remote transformer for the system as described in this installation instruction.

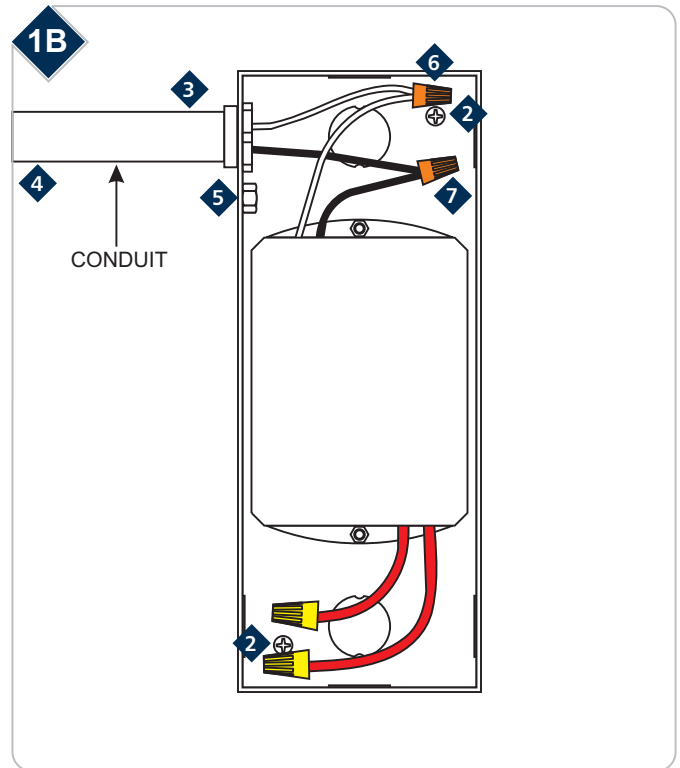
Load the circuit of the remote transformer to **MAXIMUM** 300 Watt.

# Install the Remote Transformer

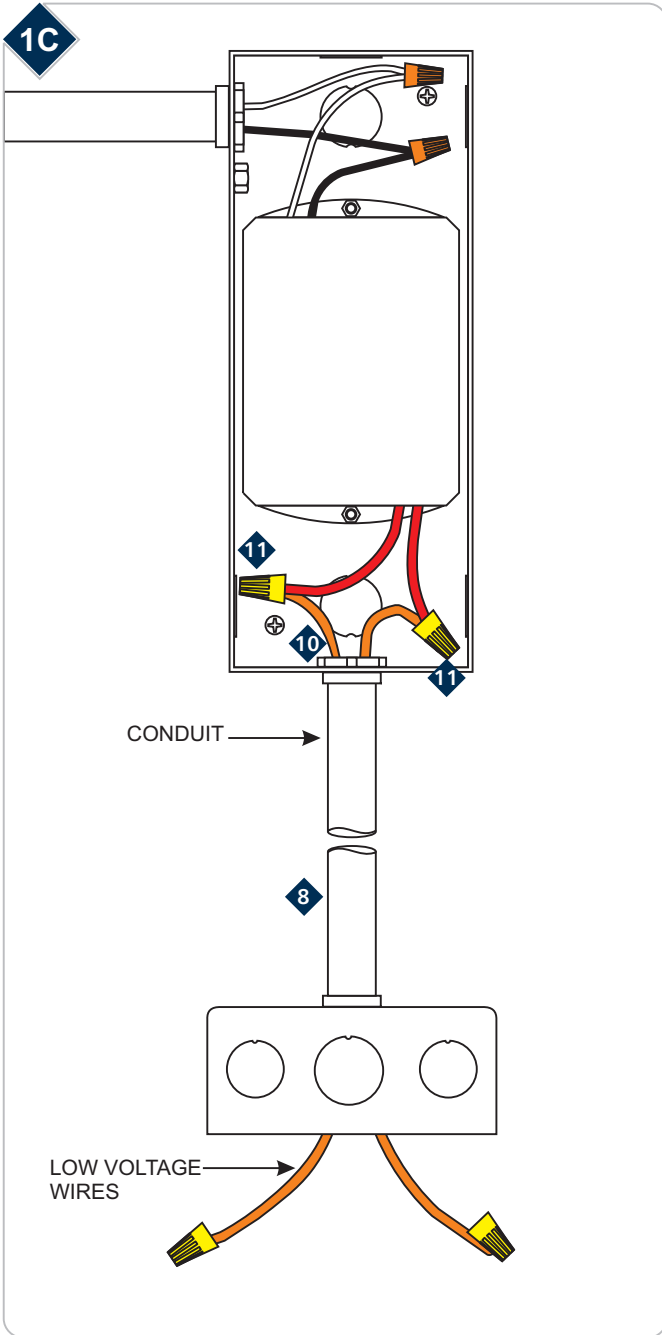


**NOTE:** In order to use small gage wires from the transformer to the electrical box, it is recommended to install the remote transformer near (if possible) the electrical box. See "Low Voltage Wire Size Table" on page 3.

- 1 Remove the four Phillips screws to remove the transformer cover.



- 2 Secure the transformer housing in place (hardware not included).
- 3 Install a conduit and power line wires from the panel to the remote transformer.
- 4 **Do not** connect the power line wires to the panel at this time.
- 5 Make sure the transformer housing is grounded in accordance with local electrical codes.
- 6 Connect the transformer white wire to the neutral power line wire with a wire nut.
- 7 Connect the transformer black wire to the hot power line wire with a wire nut.



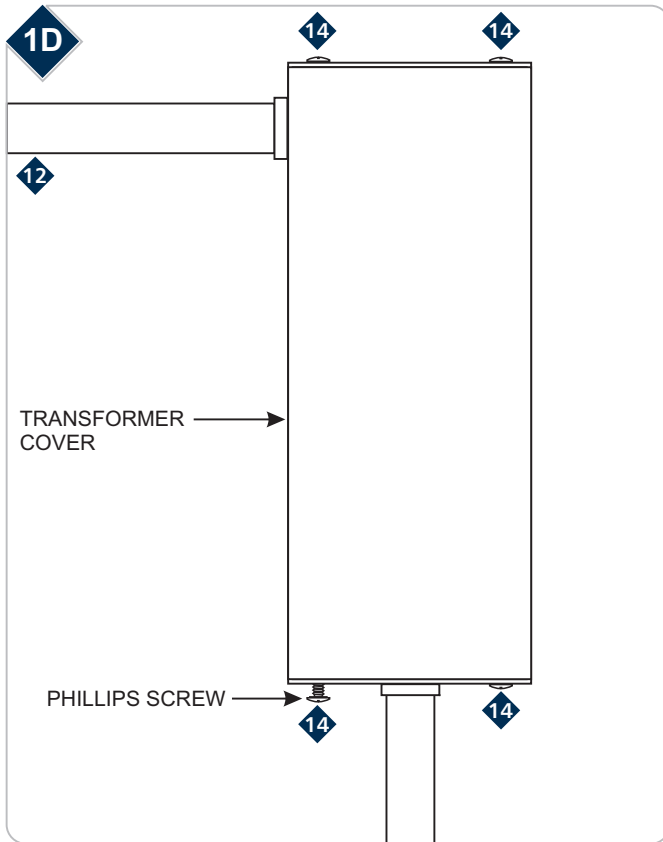
- 8 Install a conduit from the transformer to the electrical box.
- 9 For the best performance, use the "Low Voltage Wire Size Table" below to select the wire size.

**NOTE:** Other wire sizes that comply with electrical code can be used, but may result in an increased voltage drop and reduced lamp intensity.

**NOTE:** The THHN wire sizes are for 3% or less drop in voltage based on 300 watt loads. Lengths are the distance from the transformer to the system power feed connector.

- 10 Install the low voltage wires from the transformer to the electrical power feed box.
- 11 Connect one red transformer wire to each low voltage wire with a wire nut.

LOW VOLTAGE WIRE SIZE TABLE						
TRANSFORMER WATTAGE	WIRE SIZE FOR 5 FT	WIRE SIZE FOR 6-15 FT	WIRE SIZE FOR 16-20 FT	WIRE SIZE FOR 21-40 FT	WIRE SIZE FOR 40-60 FT	WIRE SIZE FOR 61-90 FT
300 WATT	#10 GA	#6 GA	#4 GA	#1 GA	#1/0 GA	#3/0 GA



- ◆12 Connect the 120 volt power line wires at the panel.
- ◆13 After installing the entire system, operate the system for five minutes. On the low voltage side, all electrical connection points should be no more than warm to the touch. If a connection is hot to the touch, retighten the connection and check to ensure that the temperature decreases.
- ◆14 Replace the transformer cover and tighten the four Phillips screws.

**SAVE THESE INSTRUCTIONS!**



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