



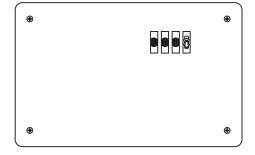
1718 W. Fullerton Ave Chicago, IL 60614 Tel: 773-770-1195 Fax: 773-935-5613 www.edgelighting.com info@edgelighting.com

TR-300-12



## Installation Instructions for 300 Watt Recessed Magnetic Transformer 120 Volt Input to 12 Volt Single Feed Output

**SAVE THESE INSTRUCTIONS!** 



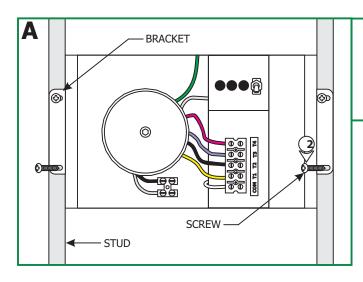
#### **GENERAL INFORMATION**

- **RISK OF FIRE:** This product must be installed by a qualified electrician. Turn the power to the electrical box off during installation. Read the "Important Safety Instructions" before installation.
- This product is suitable only for indoor dry locations and approved for the use at any height above the finished floor.
- This product may be dimmed only with a low voltage magnetic dimmer. Using a dimmer other than specified may work initially, but will eventually cause transformer failure and void the warranty. The dimmer must be derated as indicated by the dimmer manufacturer.
- A typical installation is shown. Specific installation must be in accordance with the local electrical codes.
- TO REDUCE RISK OF FIRE, it is important to wire the recessed transformer for the system as described in this installation instruction.
- Load the circuit of the recessed transformer to <u>MAXIMUM</u>
  300 Watt.
- This product may require some modification (remodeling) to existing wall where the transformers is to be mounted. The wall studs should be 16" apart.

### **IMPORTANT SAFETY INSTRUCTIONS**

- Do not install this lighting system in a damp or wet location.
- Do not conceal or extend bus bar conductor through building wall.
- To reduce the risk of fire and burns, do not install this lighting system where the insulated 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, or as specified in the fixture installation instructions, to curtains or similarly combustible materials.
- Turn the electrical power off before modifying the lighting system in any way.
- The fixtures used with the Edge Lighting systems must be identified for use with the corresponding Edge Lighting systems.
- Minimum volume of the electrical box must be 6 cubic inches (98 cubic centimeters).
- The system is "ETL" listed for USA and Canada only when all the products used are supplied by Edge Lighting.

## **Install the Transformer**



- **1:** Select the location between the wall studs (16" apart) where the transformer is to be mounted.
- **2:** Place the transformer between the studs and fasten it to the studs through the bracket holes with four #8 or #10 screws (not provided).

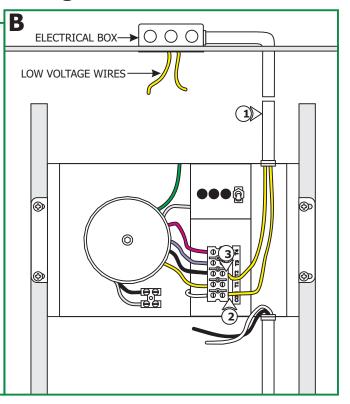
# **Connect the 12 Volt Low Voltage Wires**

1: Install two THHN low voltage wires from the transformer to the electrical box to which the power feed canopy will be attached. Run the proper size wire using the "Low Voltage Wire Size" chart below.

**NOTE:** Smaller wire sizes other than specified will result in an increase voltage drop and will reduce the lamp intensity.

**NOTE:** The THHN wire sizes specified in "Low Voltage Wire Size Chart" are for 3% or less drop in voltage based on 300 watt loads. Lengths are the distance from the recessed transformer to the system power feed connector, or power feed canopy.

- **2:** Insert one low voltage wire into the secondary terminal marked "COM" and tighten the screw firmly.
- **3:** Insert the second low voltage wire to the "T2" tap terminal (default) and tighten the screw firmly.
- **4:** Measure the voltage at the primary power line coming into the transformer. If the voltage is not in the range of 115-120 volt, then pick the proper terminal tap using the "Terminal Tap Chart" to reconnect the second low voltage wire.
- 5: Install drywall.



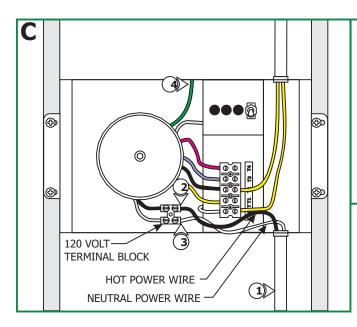
## LOW VOLTAGE WIRE SIZE CHART

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
300 WATT	#10 GA	#6 GA	#4 GA	#1 GA

### **TERMINAL TAP CHART**

PRIMARY POWER INPUT VOLTAGE	TERMINAL TAP TO BE USED	
105-109	T4	
110-114	T3	
115-120	T2	
121-125	T1	

## **Connect the 120 Volt Wires**



- 1: Install the 120 Volt power wires to the transformer.
- **2:** Insert the hot power wire inline with the black transformer wire into the 120 volt terminal block and tighten the screw firmly.
- **3:** Insert the neutral power wire inline with the white transformer wire into the 120 volt terminal block and tighten the screw firmly.
- **4:** Ground the transformer housing in accordance with local electrical codes.

- **5:** After installing the entire low voltage system, if the lamps have low intensity, then measure the voltage at the fixture closest to the power feed contacts with a voltmeter. The system must be at least 80% loaded and the voltmeter should read between 11V-12V ~AC. If the voltage does not fall in this range, call Edge Lighting "Technical Support" at 773-770-1195.
- **6:** After operating the system for a few 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.
- **7:** Replace the transformer cover and tighten the four Phillips screws on the sides of the transformer.

