Edge LIGHTING

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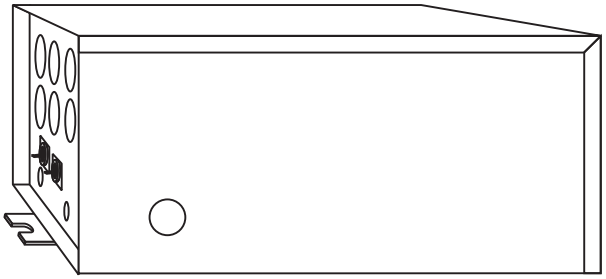
904-T-2X300-12-02

T-2X300-12

T-4X300-12

Installation Instructions for **2-Circuit 12V Single or Dual Feed Remote Magnetic Transformers**

SAVE THESE INSTRUCTIONS!



GENERAL INFORMATION

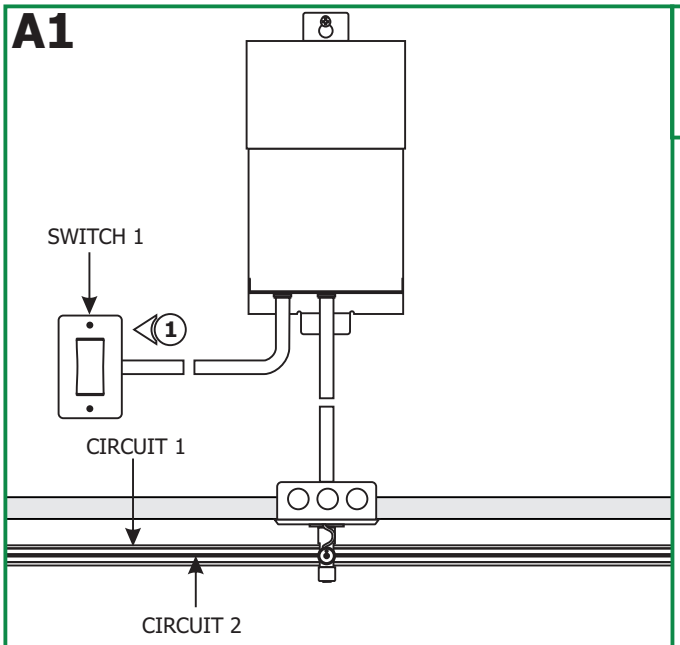
- **RISK OF FIRE:** This product must be installed by a qualified electrician. Turn the power to the electrical box off during installation. Read the Important safety instructions before installation.
- This product is suitable only for indoor dry locations and approved for the use at any height above 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 remote transformer for the system as described in this installation instruction.
- Load each circuit of the remote transformer to **MAXIMUM 300** Watt.

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 instruction 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.

Installing the 120V wires to the T-2X300 Transformer

A1

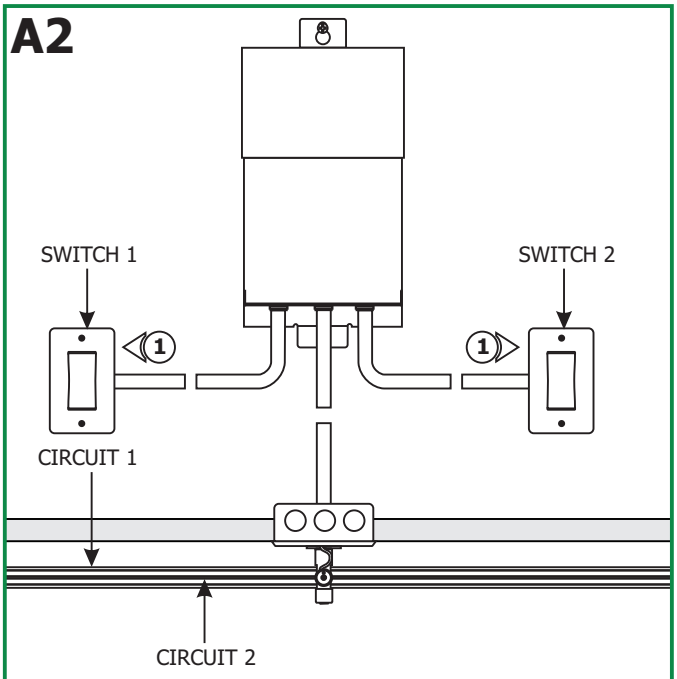


Switch 1 turns on/off both Circuits.

1: Select one of the two possible switching options that fits the design.

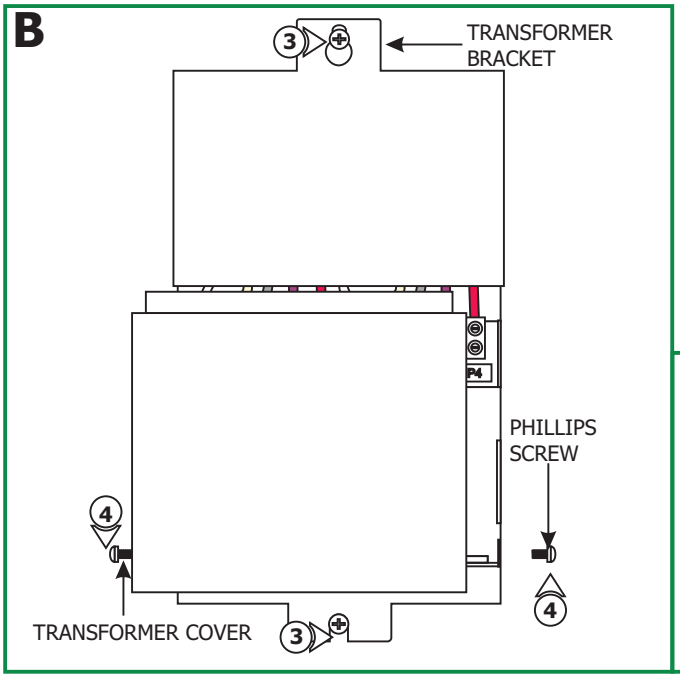
2: Turn off the electrical power at the panel.

A2



Switch 1 turns on/off Circuit 1 and Switch 2 turns/off Circuit 2.

B

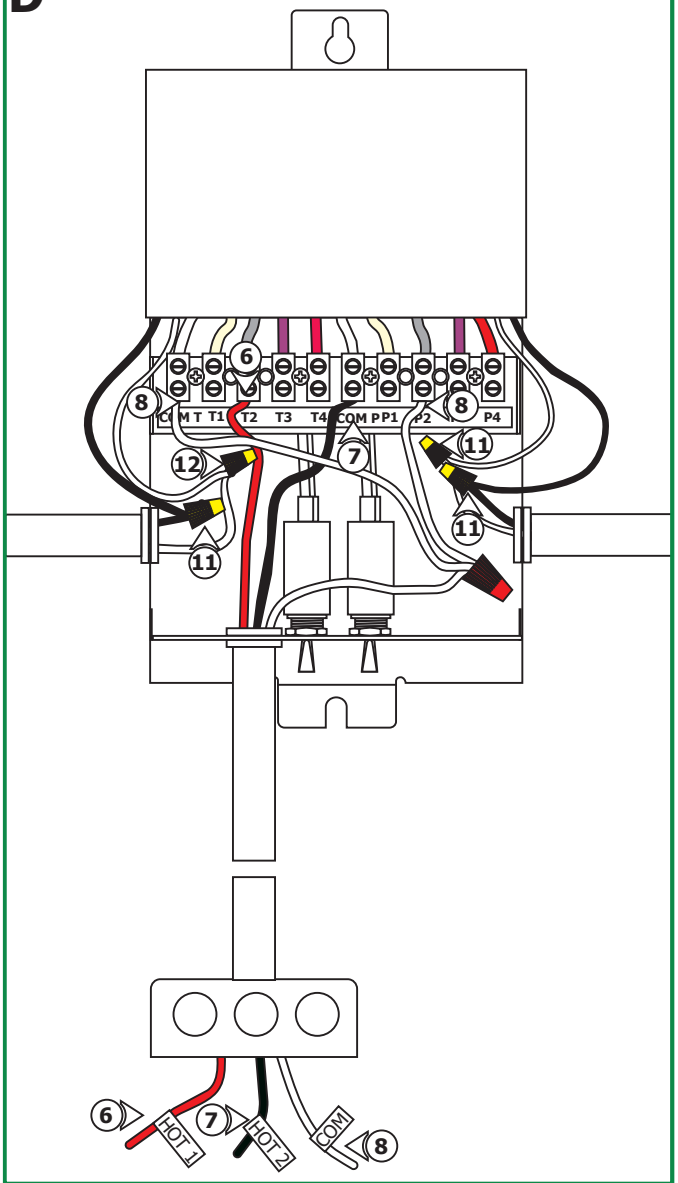


NOTE: In order to use small gauge wires from the transformer to the electrical box, it is recommended to install the remote transformers as near as possible to the electrical box. See "Low Voltage Wire Size Chart" on page 3.

3: Use the transformer brackets to secure the transformer in place (hardware not included).

4: Loosen and remove the two Phillips screws on the sides of the transformer to remove the transformer cover.

D



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

5: Install the low voltage wires from the transformer to the electrical power feed box to which the power feed canopy will be attached. For best performance, use the wire size from the "Low Voltage Wire Size Chart below".

6: Insert one low voltage wire into the "T2" terminal (default) and tighten the screw firmly. Mark this low voltage wire in the electrical power feed box as "HOT 1".

7: Insert the second low voltage wire into the "COM P" terminal (default) and tighten the screw firmly. Mark this low voltage wire in the electrical power feed box as "HOT 2".

8: Cut two short pieces of low voltage wires (THHN). Insert one short low voltage wire into "COM T" terminal (default) and the other one into "P2" terminal (default) and tighten the screws. Connect these two short wires to the third low voltage wire with a wire nut. Mark this low voltage in the electrical power feed box as "COM".

9: 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 Table" to reconnect the low voltage wire that was connected to "T2" and the short wire that was connected to "P2" terminal taps.

10: Turn off the electrical power at panel.

11: Connect the 120V black transformer wire to the hot power line wire with a wire nut.

12: Connect the 120V white transformer wire to the neutral power line wire with a wire nut.

13: Turn on the electrical power at the panel.

NOTE: Risk of Fire - The terminal taps **ARE NOT** for boosting the transformer low voltage power, they are selected to ensure output power voltage based upon input power voltage condition. **NEVER** use a higher terminal tap to compensate for voltage drop, this will overheat the low voltage wires and transformer. It is recommended to use the wire size as indicated in "Low Voltage Wire Size Chart" below to avoid excessive voltage drop.

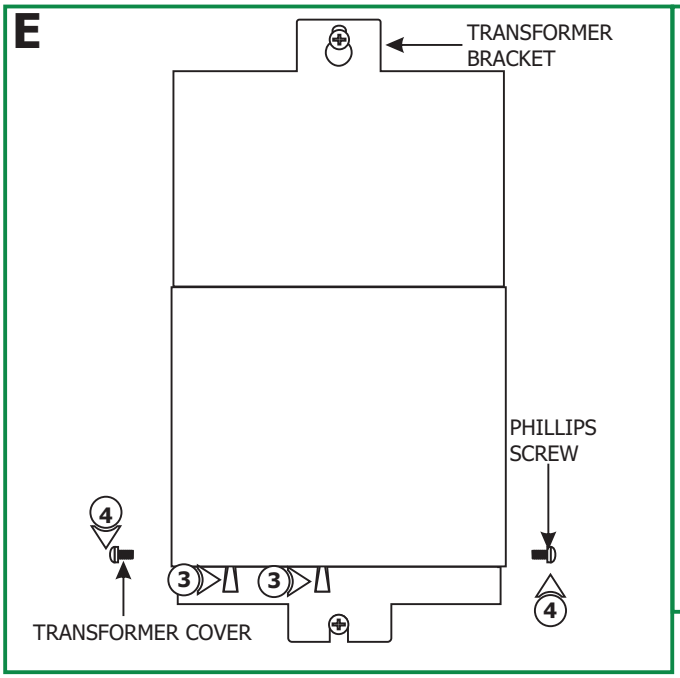
TERMINAL TAP CHART

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

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

Check the System



1: 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.

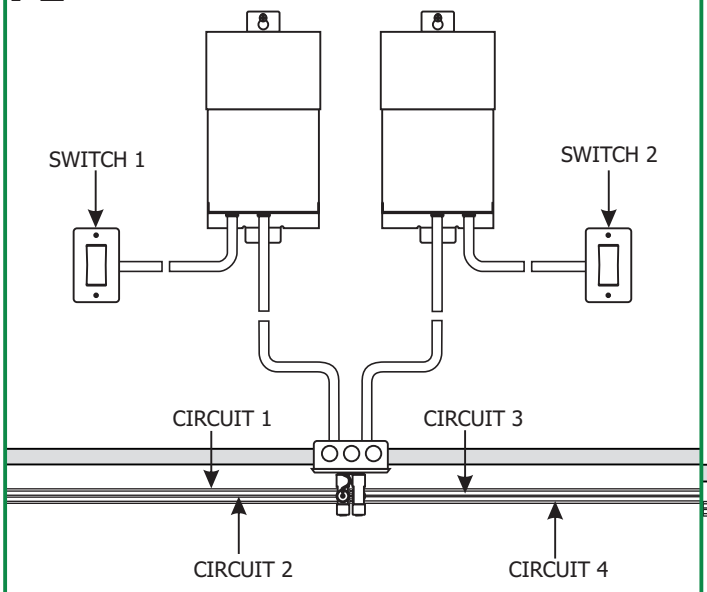
2: After operating the system for a few minutes, on the low voltage side, all electrical connection points should be no more than warm to the touch. If a connection is hot to the touch, retighten the connection and check to ensure that the temperature decreases.

3: The transformer circuit breaker will trip if there is a short in the system. After removing the cause of the short, reset the circuit breaker to power the system.

4: Replace the transformer cover and tighten the two Phillips screws on the sides of the transformer.

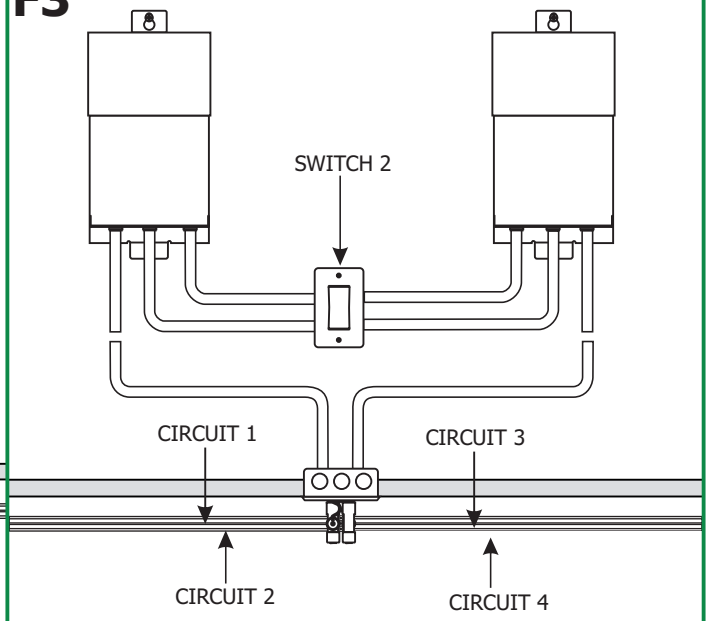
Installing the 120V wires to the T-4X300 Transformer

F1



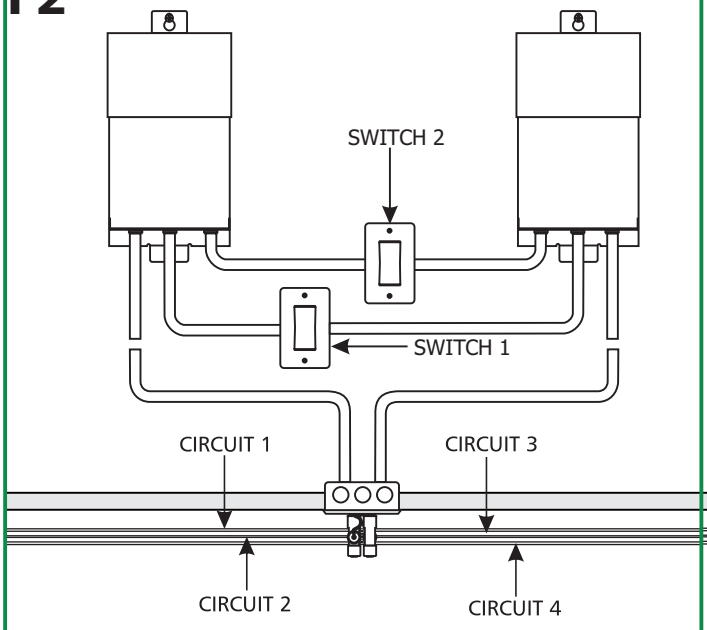
Switch 1 turns on/off both Circuits 1&2.
Switch 2 turns on/off both Circuits 3&4.

F3



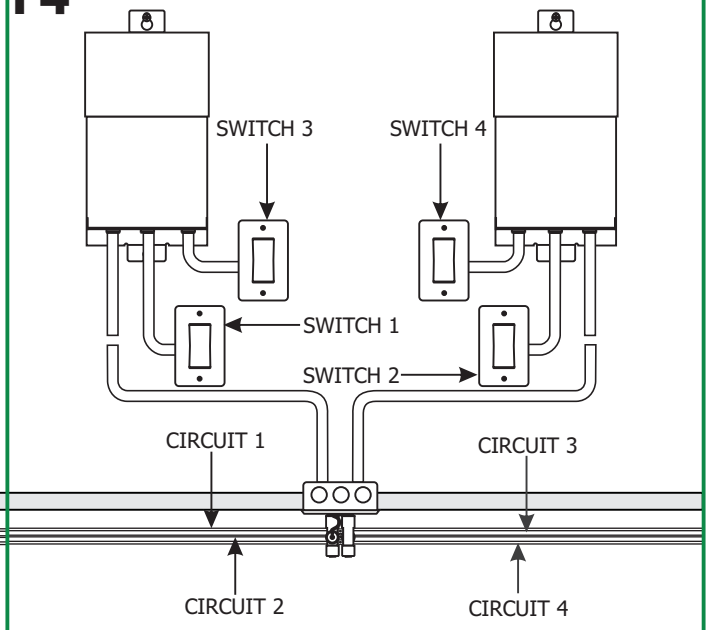
Switch 1 turns on/off all four Circuits.

F2



Switch 1 turns on/off both Circuits 1&3.
Switch 2 turns on/off both Circuits 2&4.

F4

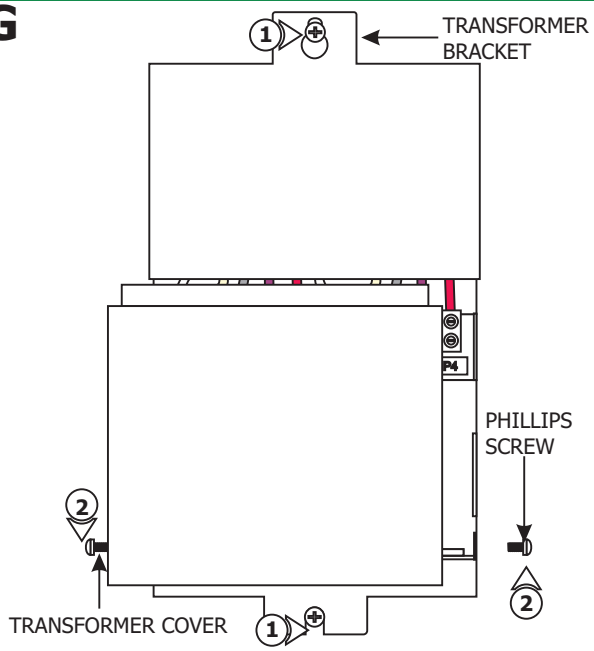


Each Circuit turns on/off by its switch.

1: Select one of the four possible switching options.

2: Turn off the electrical power at the panel.

G



NOTE: In order to use small gauge wires from the transformer to the electrical box, it is recommended to install the remote transformers as near as possible to the electrical box. See "Low Voltage Wire Size Chart" on page 3.

1: Use the transformer brackets to secure the transformers in place (hardware not included).

2: Loosen and remove the two Phillips screws on the sides of each transformer to remove the transformer cover.

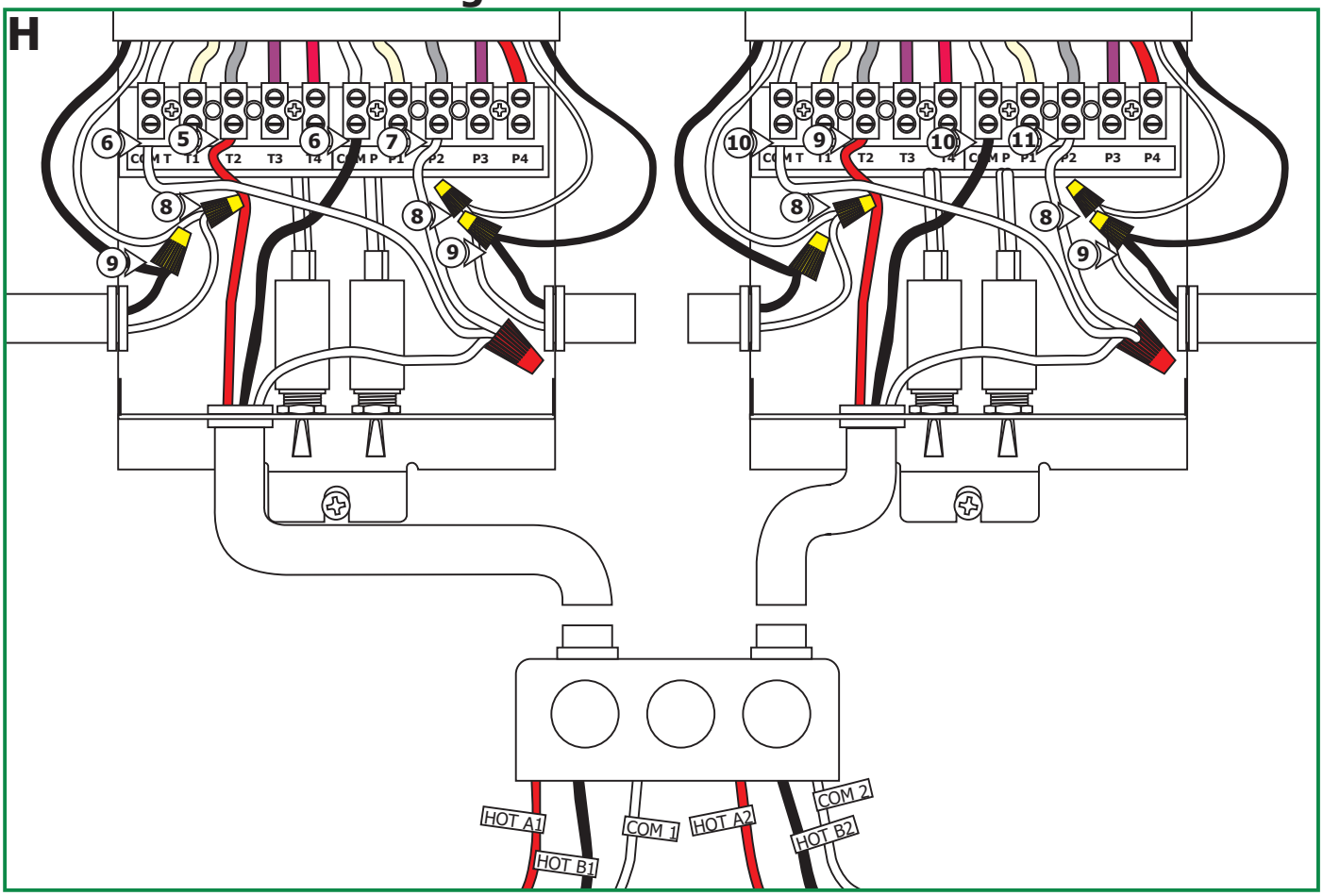
TERMINAL TAP CHART

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

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

Connect the Low Voltage Wires



3: Install the low voltage wires from the transformer to the electrical power feed box to which the power feed canopy will be attached. For best performance, use the wire size from the "Low Voltage Wire Size Chart" on page 6.

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

4: Starting from the left transformer, install three low voltage wires from the transformer to the electrical power feed box.

5: Insert one low voltage wire into the "T2" terminal (default) and tighten the screw firmly. Mark this low voltage wire in the electrical power feed box as "HOT A1".

6: Insert the second low voltage wire into the "COM P" terminal (default) and tighten the screw firmly. Mark this low voltage wire in the electrical power feed box as "HOT B1".

7: Cut two short pieces of low voltage wires (THHN). Insert one short low voltage wire into "COM T" terminal (default) and the other one into "P2" terminal (default) and tighten the screws. Connect these two short wires to the third low voltage wire with a wire nut. Mark this low voltage in the electrical power feed box as "COM 1".

8: Install three low voltage wires from the right transformer to the electrical power feed canopies.

9: Insert one low voltage wire into the "T2" terminal tap and tighten the screw firmly. Mark this low voltage wire in the electrical power feed box as "HOT A2".

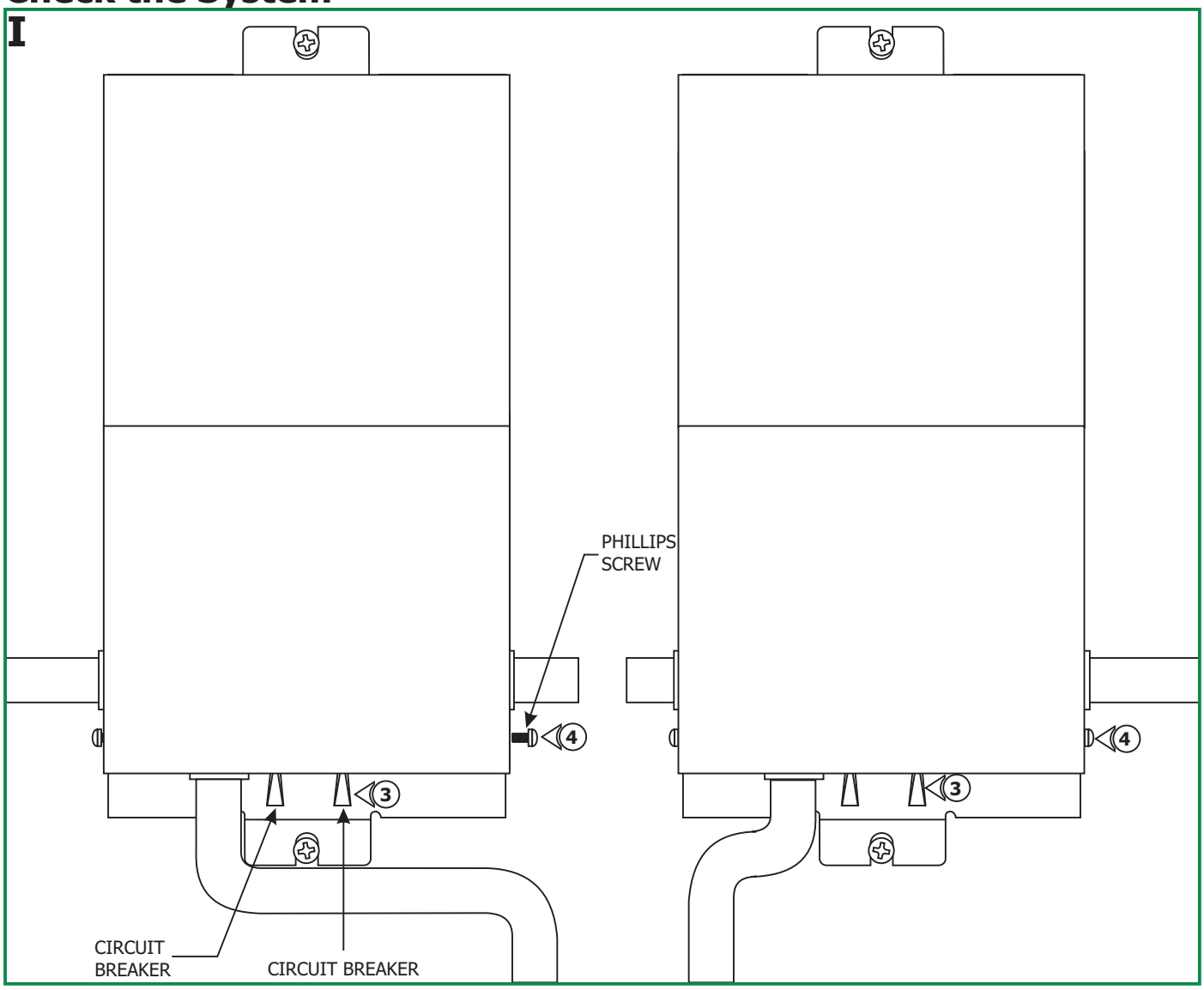
10: Insert the second low voltage wire into the "COM P" terminal tap and tighten the screw firmly. Mark this low voltage wire in the electrical power feed box as "HOT B2".

11: Cut two short pieces of the low voltage wires (THHN). Insert one short low voltage wire into "COMP T" terminal and the other one into "P2" terminal tap (default) and tighten the screws. Connect these two short wires to the third low voltage wire with a wire nut. Mark this low voltage wire in the electrical power feed box as "COM 2".

12: Connect the 120 volt power line wires at the panel.

13: 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 Table" on page 6 to reconnect the low voltage wire that was connected to "T2" and the short wire that was connected to "P2" terminal taps in each tranformer.

Check the System



1: 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.

2: 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.

3: The transformer circuit breaker will trip if there is a short in the system. After removing the cause of the short, reset the circuit breaker to power the system.

4: Replace the transformer cover and tighten the two Phillips screws on the sides of the transformer.