LOW-VOLTAGE TRANSFORMER

INSTALLATION GUIDE

Models:

VTR-100SL-SS-R1, VTR-150SL-SS-R1 &
VTR-300SL-SS- R1

ATTENTION:

Please read this installation guide carefully to ensure safe and efficient operation of this Power Supply

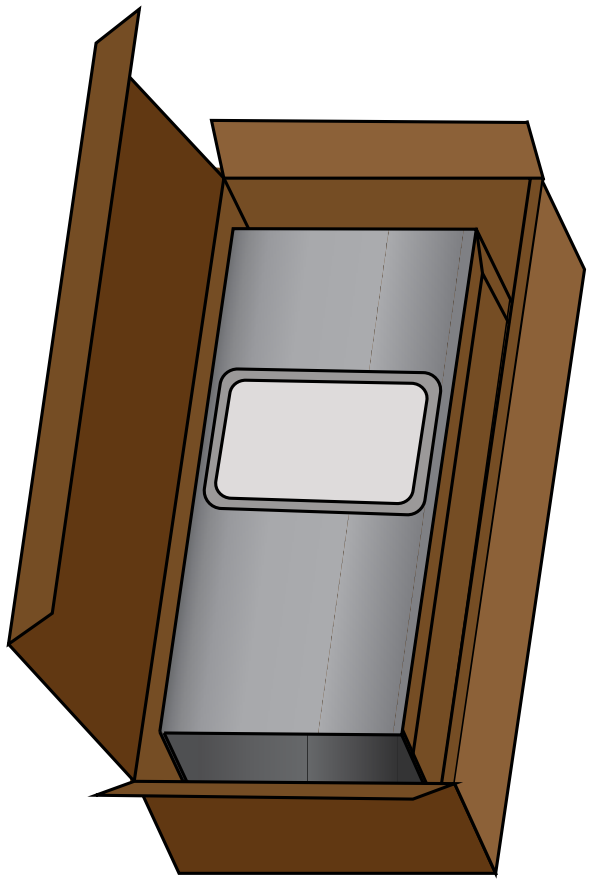
SAFETY GUIDELINES

Low voltage installation and maintenance is safe and presents no risk for electric shock injury. However, there are regulations that may apply and that should be followed by installers. The following safety points may or may not be included in these regulations - the installer is responsible for ensuring a compliant installation.

- WARNING- RISK OF SHOCK. Install power unit at least 5 feet (1.5m) from pool or spa and at least 10 feet (3.05m) from a fountain.
- WARNING- install power unit in or on non-combustible materials only.
- Power supply must be connected (using supplied power cord) to GFCI-protected receptacle with an In-use cover.
- All VOLT® power supplies are indoor and outdoor rated, but we recommend that the transformer be mounted outdoors. If mounting indoors, check for local electrical codes that may apply.
- Power supply must be mounted in a vertical orientation with the bottom plate at least 1 foot above the ground.
- In hot climates, avoid mounting in direct sunlight.Power unit will get hot regardless of climate. This is normal for operation.

Open the shipping carton and carefully remove the transformer, accessories, and hardware. Note that transformer mounting hardware is not included. Inspect contents for any damage that may have occured during shipping.

Mounting Hardware not included



DETERMINE THE LOAD

The general capacity should have been determined prior to purchasing the transformer. Circuit loads should not exceed 80% of capacity. As a general rule, total light fixture wattage should not exceed 80% of the transformer capacity. To determine the total wattage, simply add up the wattage of all fixture lamps. This number should be 20% less than the transformer's wattage capacity. If you need help with this, please call customer service at 813-978-3700. If you are over capacity, your installation may require a secondary or larger transformer.

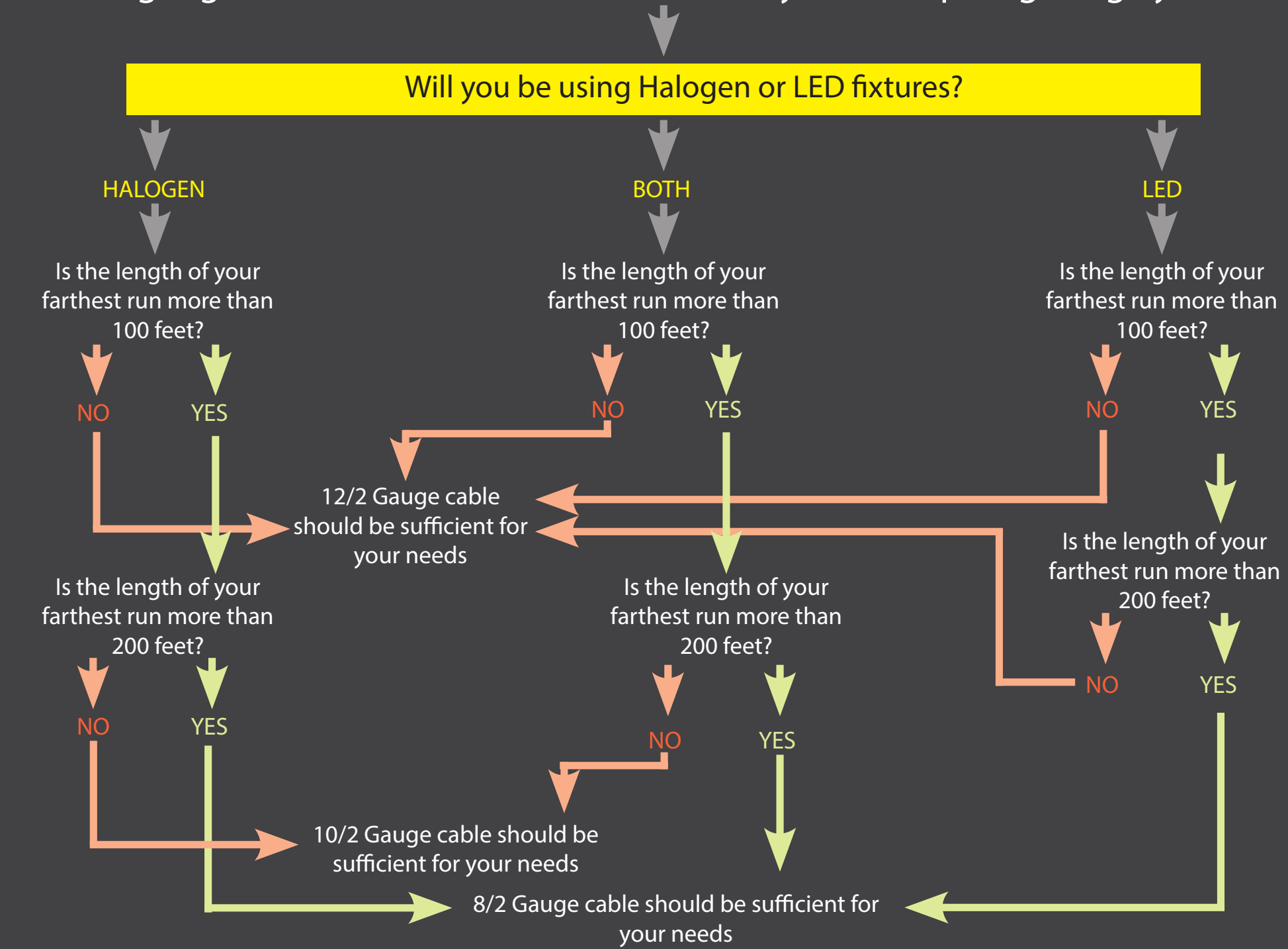
Notes

DETERMINE WIRE GAUGE

On the right, there is a diagram to help you determine what size cable is needed for your lighting job. If you have questions or concerns regarding this, please call customer service at **(813)-978-3700** to speak with a live representative.

IMPORTANT! Please note that we do not recommend any runs longer than 300 ft. for low voltage lighting.

What gauge cable do I need in order to run my Landscape Lighting System?



Ready to Install?

If you have already designed your system, and mounted your transformer, use the Quick Start Guide Steps starting on the next page.

START HERE

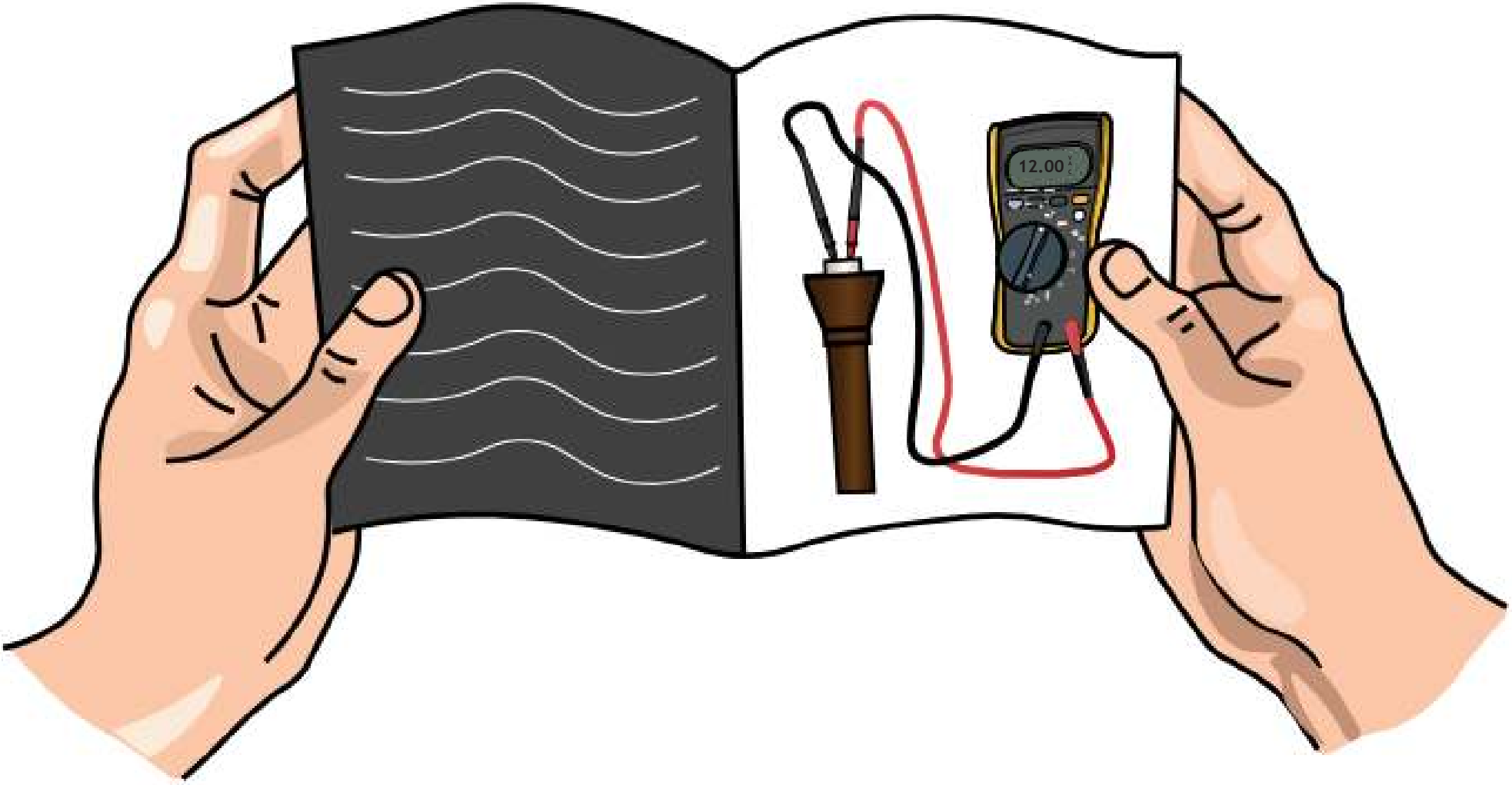


Quick Start Guide Steps

1. Read the safety instructions and upack the transformer.
2. Mount the transformer.
3. Run the wires from the transformer location to the fixtures or hubs.
4. Attach all the wires to the transformer terminals. For each paired wire, attach one side to a common terminal and the other side to the voltage terminal.
5. Check to ensure all of the connections are secure.
6. Plug in the transformer.
7. Flip the ON/OFF breaker switch upward to power on the transformer.
8. Check that the transformer pilot light and timer pilot light are both on.
9. Turn the timer clockwise to the manual "On" mode.
10. Check to ensure all the fixtures are on and functioning properly.
11. Measure the voltage at the fixtures or hubs.
12. If needed, use another voltage terminal (some transformers only have one).
13. Set the timer to the desired function.
14. Close the transformer door using the locking mehanism to seal the unit from weather and debris.
15. At Dusk, make any last minute adjustments to the fixtures. Bury the wire only after the adjustments have been made.

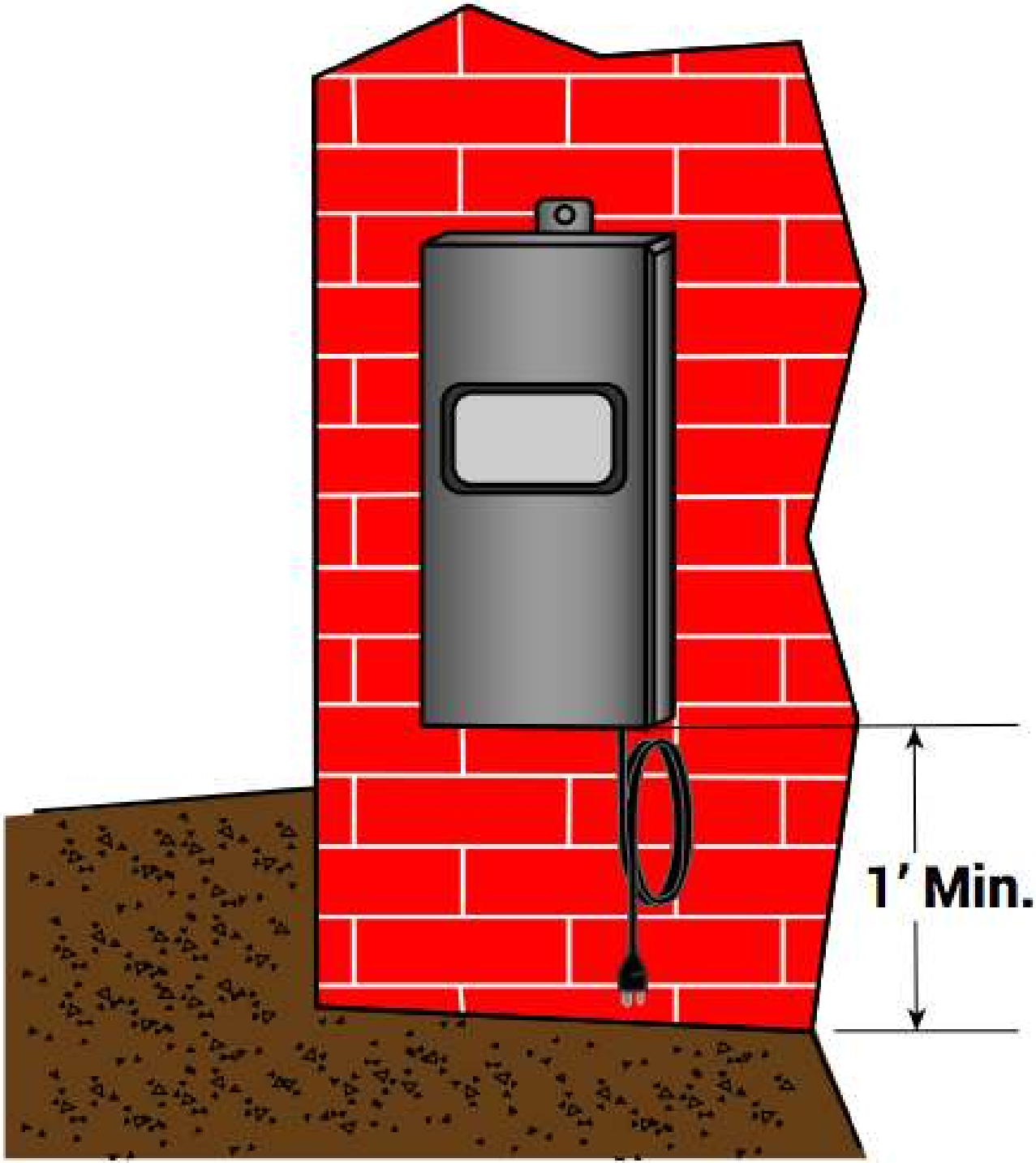
Quick Start Step 1

Read and understand the safety guidelines printed on the back of the front cover of this guide. If you have questions or need help, please call the help hotline at 813-978-3700 or consult a licensed electrician in your area for any issues requiring work on line voltage applications.


12.00

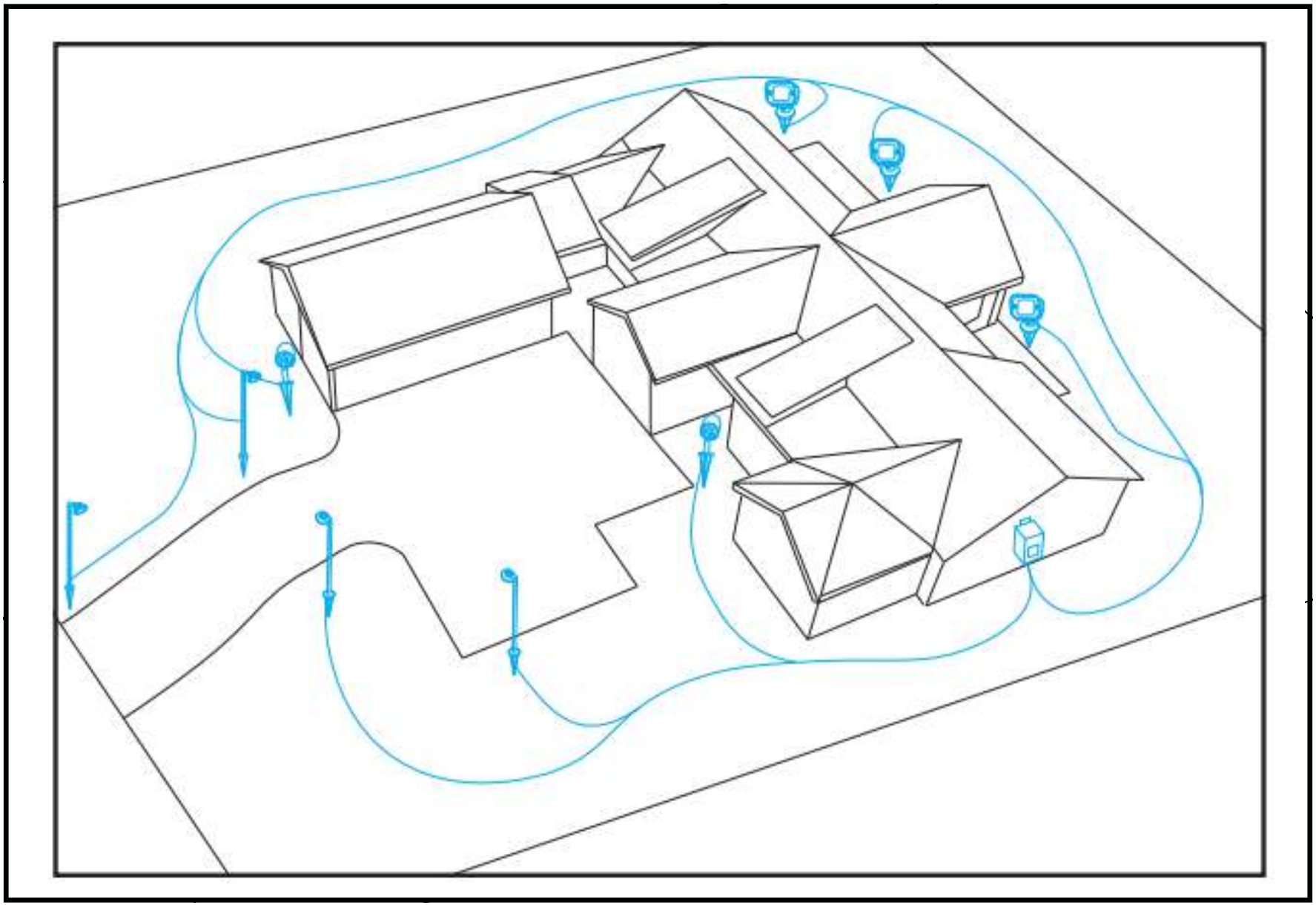
Quick Start Step 2

Mount the transformer directly to the wall using the wall anchors to insure the transformer is secure. Be sure that you are within 5 feet of a GCFI protected outlet with an In-Use cover.


1’ Min.

Quick Start Step 3

With your plans or layout in hand, run the wires from the transformer to the hub and/or fixture locations. Leave extra wire to adjust the fixtures at night and achieve the desired effect.



Quick Start Step 4

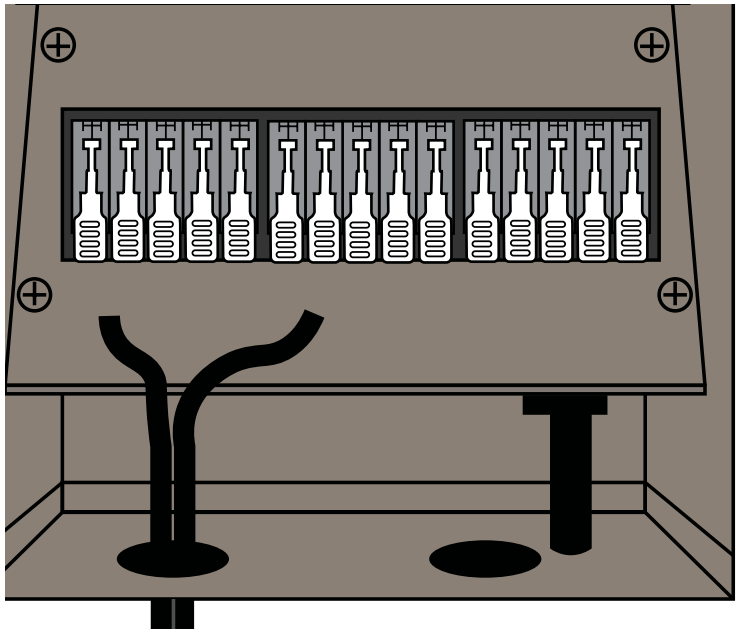
Attach all of the wires to the transformer. Using the common and voltage terminals split each wire and fit one side into the common and one side into the desired voltage terminal (some transformers will only have one terminal).

1. Feed the wire through the wire slots and into the transformer.

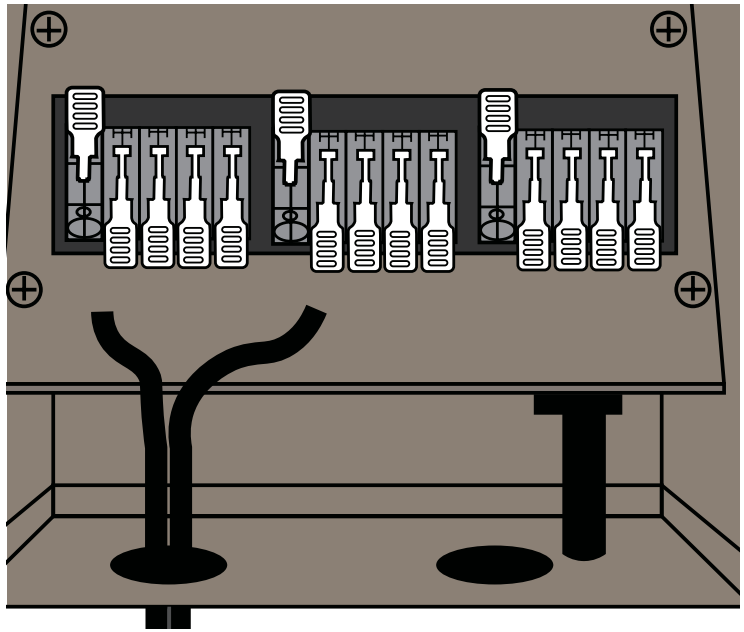
2. Flip up the easy connect lever, which will allow the wire entry.

3. Strip the lead ends of the wires to allow metal to metal contact within the connector.

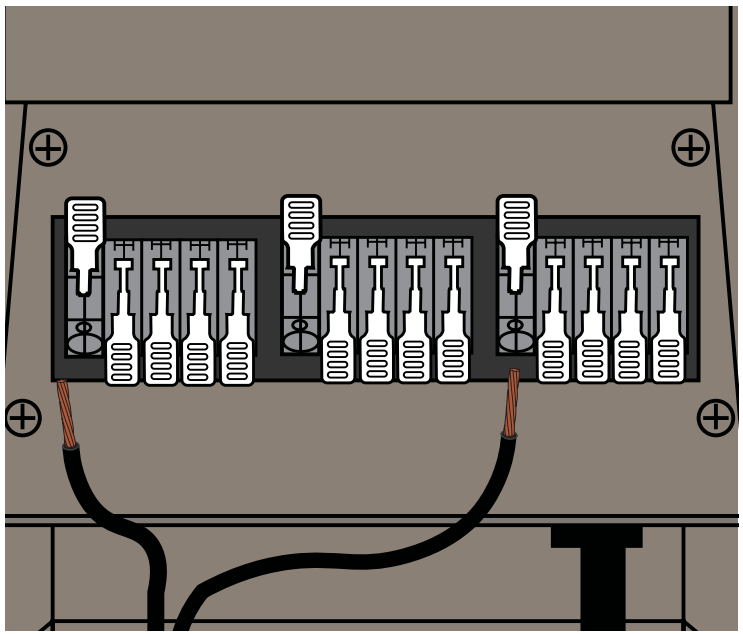
4. Slide one side of the wire into the common terminal and one side into the voltage terminal, then clamp both levers down onto the wires. Check for a strong connection by firmly pulling on the wire.



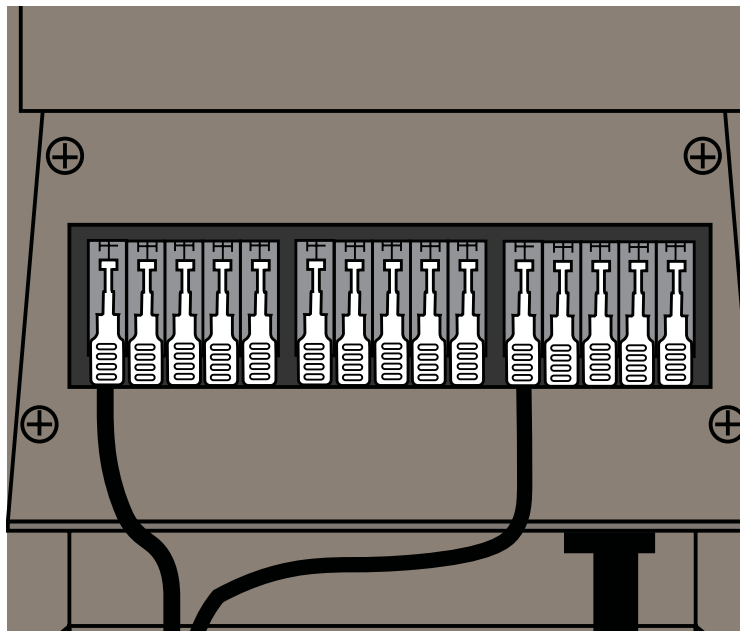
1



2



3



4

Quick Start Step 5

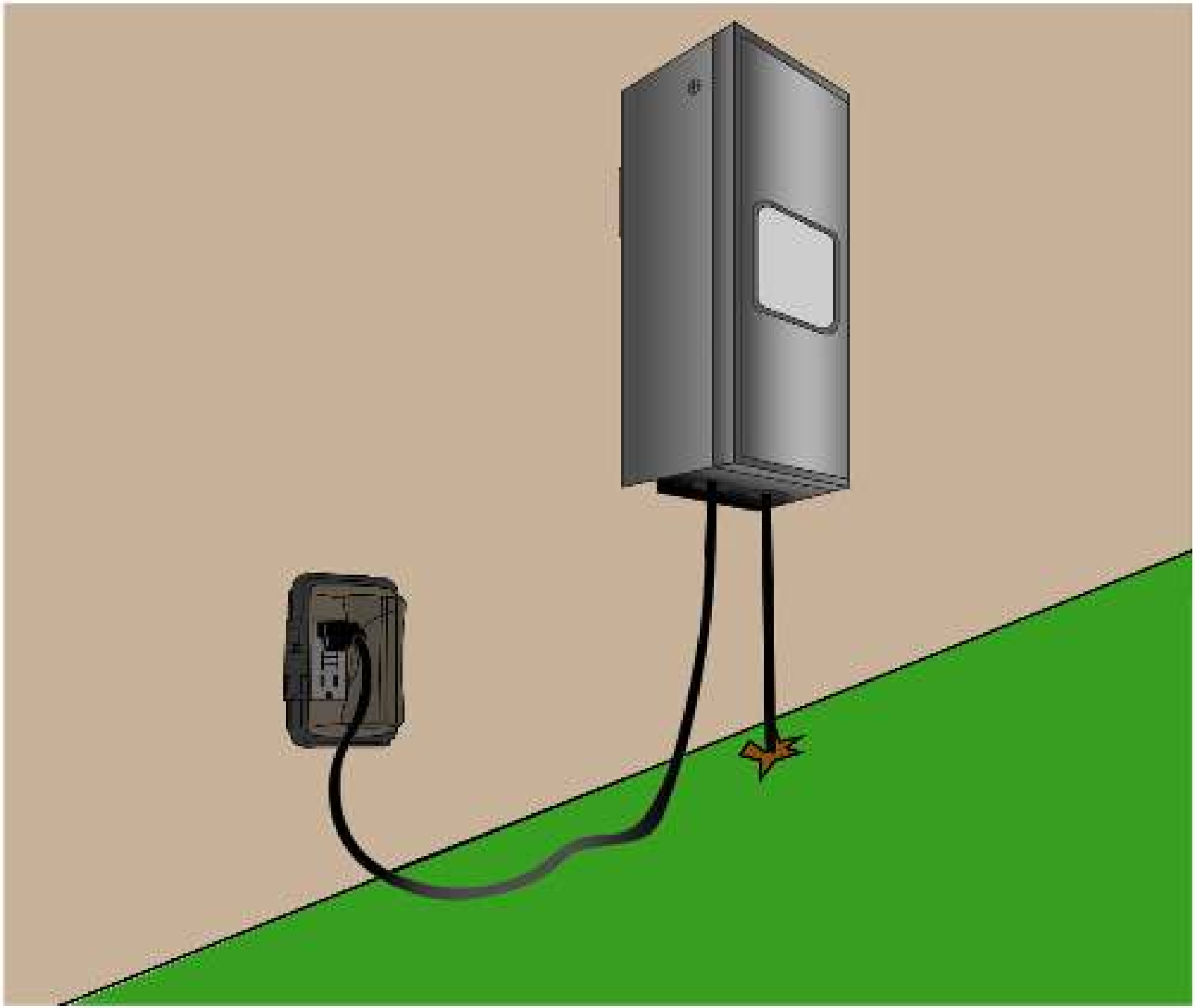
Firmly pull each individual wire to ensure that they are all completely secure. If you have an issue with a wire that is not secure, try snipping the end exposing less wire at the end before remaking the connection.

Quick Start Step 6

Plug in your transformer at a GFCI protected outlet with an In-Use cover.

Quick Start Step 7

Flip the transformer's internal breaker upward to the on position to power on the unit.



WARNING: Disconnect power before changing timer.

Quick Start Step 8

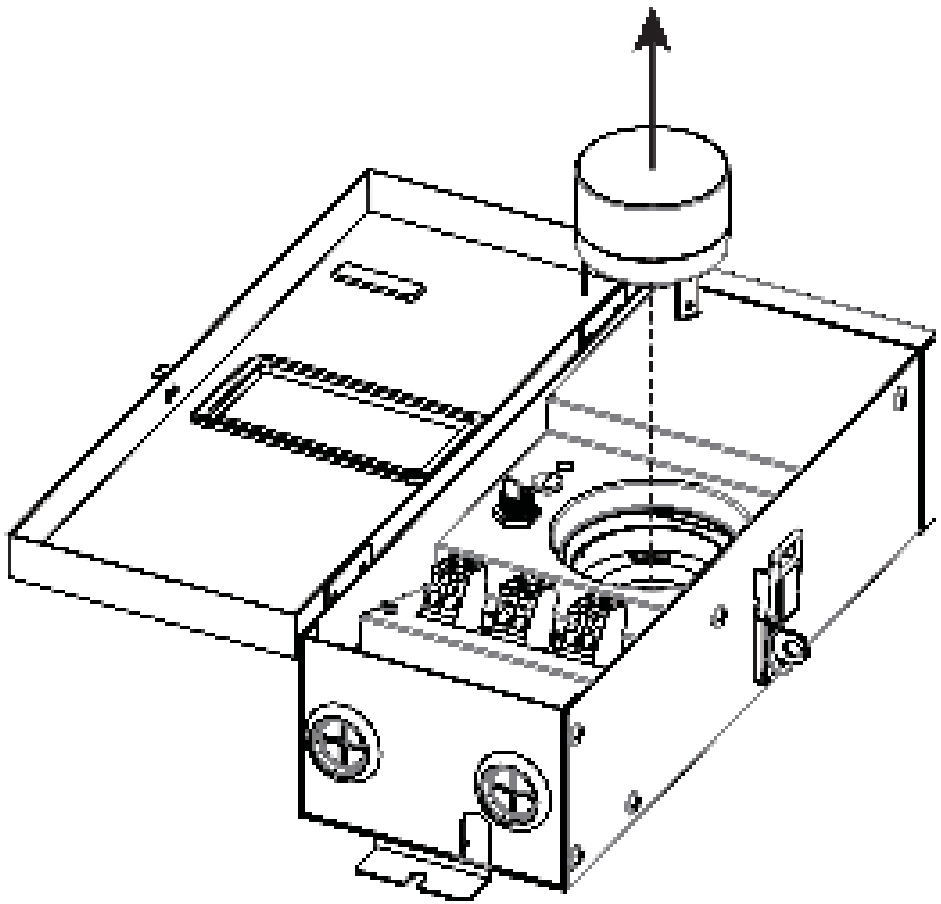
Check that both pilot lights are on inside the transformer power unit. The main pilot light for the transformer is green and located right above the internal breaker. If it is not on, the transformer is not receiving power. Check if the breaker for the GFCI outlet is on. For any line voltage issues, contact a licensed electrician.

The timer's pilot light is blue and towards the top of the timer. Be sure that the timer pilot light is also on to ensure proper timer function.

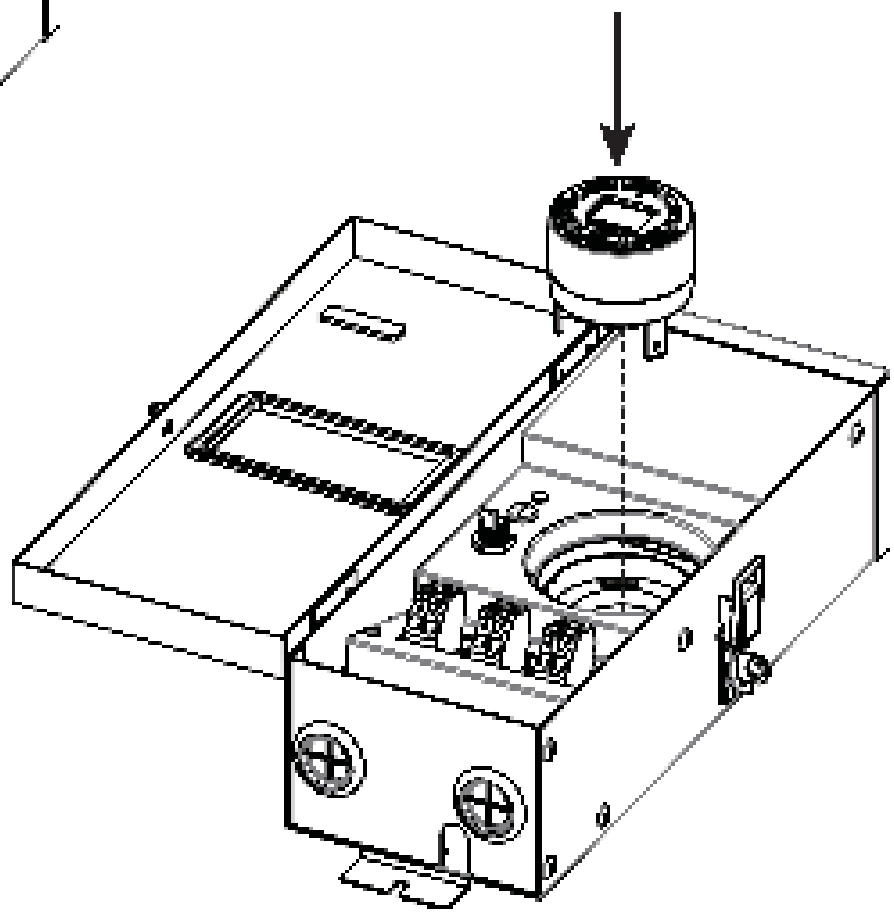
Quick Start Step 9

Gently pull the Timer Switch Module out of the transformer and replace it with the EZ Timer (sold separately). Model: VAC- TIMERX

Remove Timer Switch Module

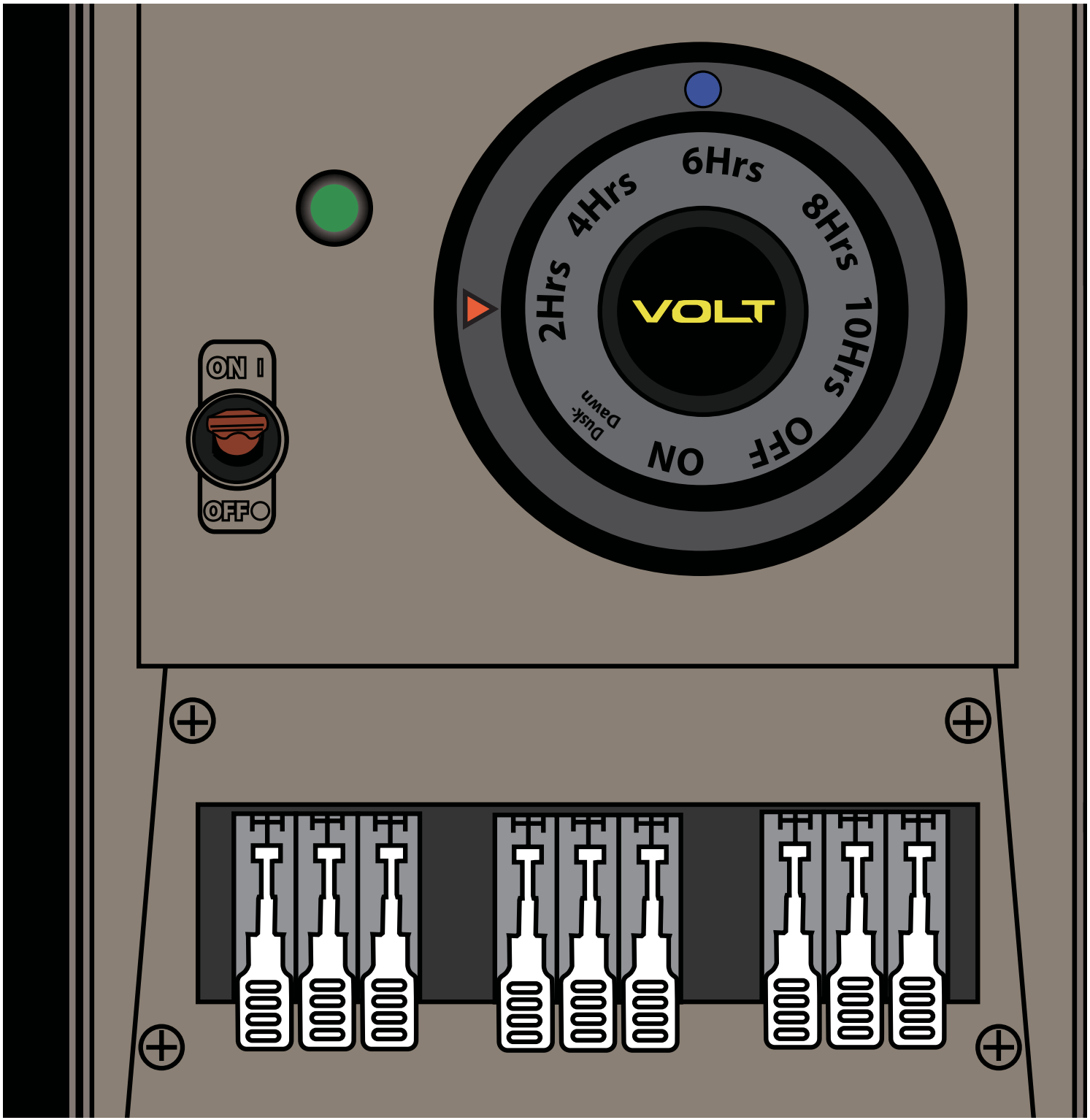


Insert EZ Timer (sold separately)



Quick Start Step 10

Turn the timer clockwise to the manual "ON" setting by aligning the word "ON" with the orange triangle on the left.

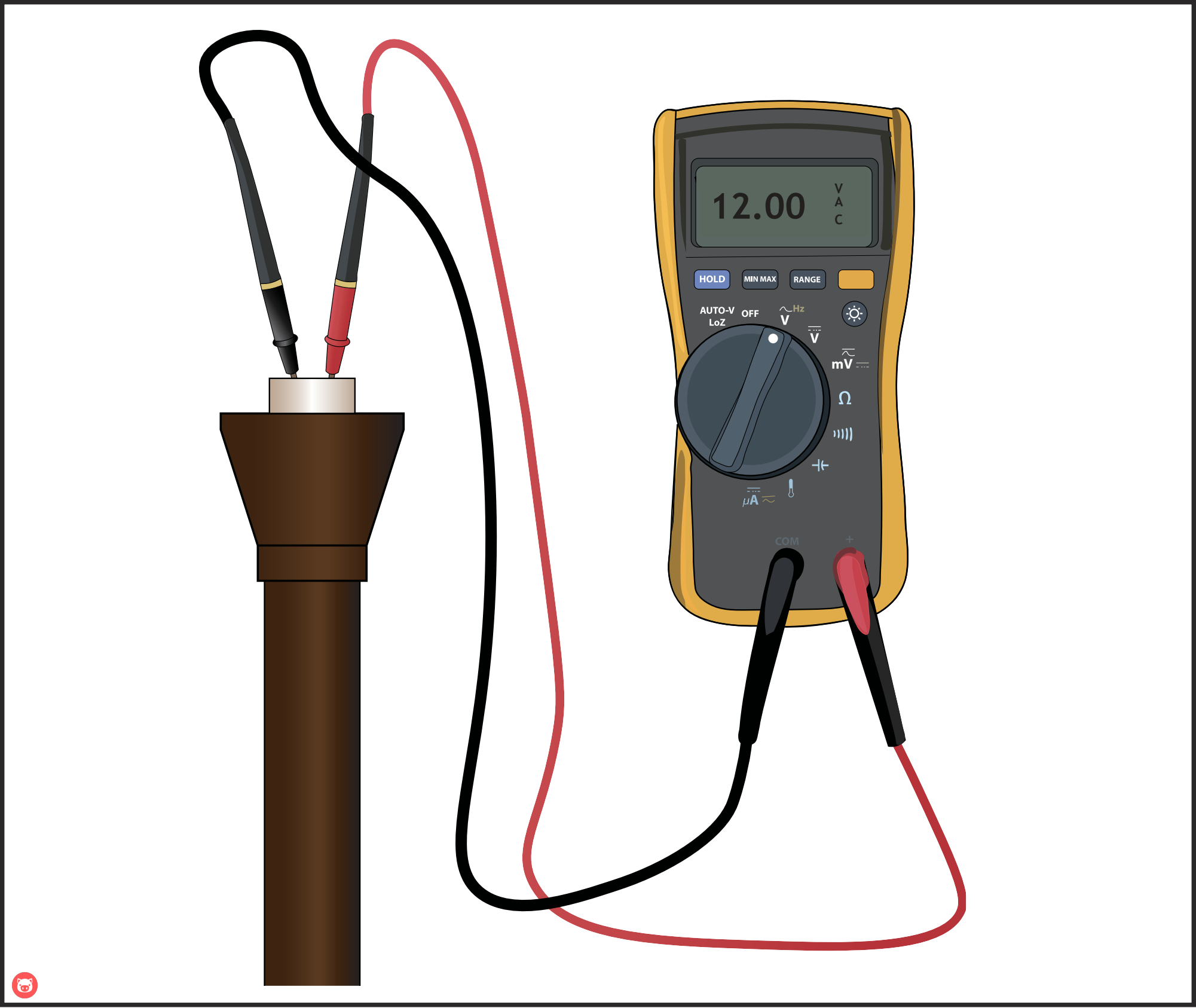

ON I
OFF
2Hrs
4Hrs
6Hrs
8Hrs
10Hrs
OFF
ON
Dusk-
Dawn
VOLT

Quick Start Step 11

Check that all the fixtures are on and functioning properly. Flickering or fixtures that aren't powered on could present a connection problem at the fixture or lamp. If a failed lamp is suspected, try replacing it with another that is working in a different location. This will help you to troubleshoot where the problem is.

Quick Start Step 12

Using a volt meter, measure the voltage at the fixtures by removing the lamp and using the probes in the bulb receptacle. Be sure that all the other lamps are installed at the time of testing. For integrated fixtures, test voltage at the closest connection point to the lighting fixture. A good range is typically between 10.8 -15 volts for LED lighting fixtures.


12.00
V
A
C
HOLD
MIN MAX
RANGE
AUTO-V
LoZ
OFF
Hz
V
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Quick Start Step 13

If needed, you can adjust the fixture voltage by using a higher voltage at the transformer terminal.

CAUTION: When adjusting low voltage wires, be sure to unplug the transformer prior to switching terminals.

Quick Start Step 14

Set your timer to the desired function for everyday use. The next page will show in detail the various timer functions.

Quick Start Step 15

Close the transformer door ensuring a tight seal.

TIMER FUNCTIONS

2 Hrs: Function that keeps lights on for 2 hours after dusk.

4 Hrs: Function that keeps lights on for 4 hours after dusk.

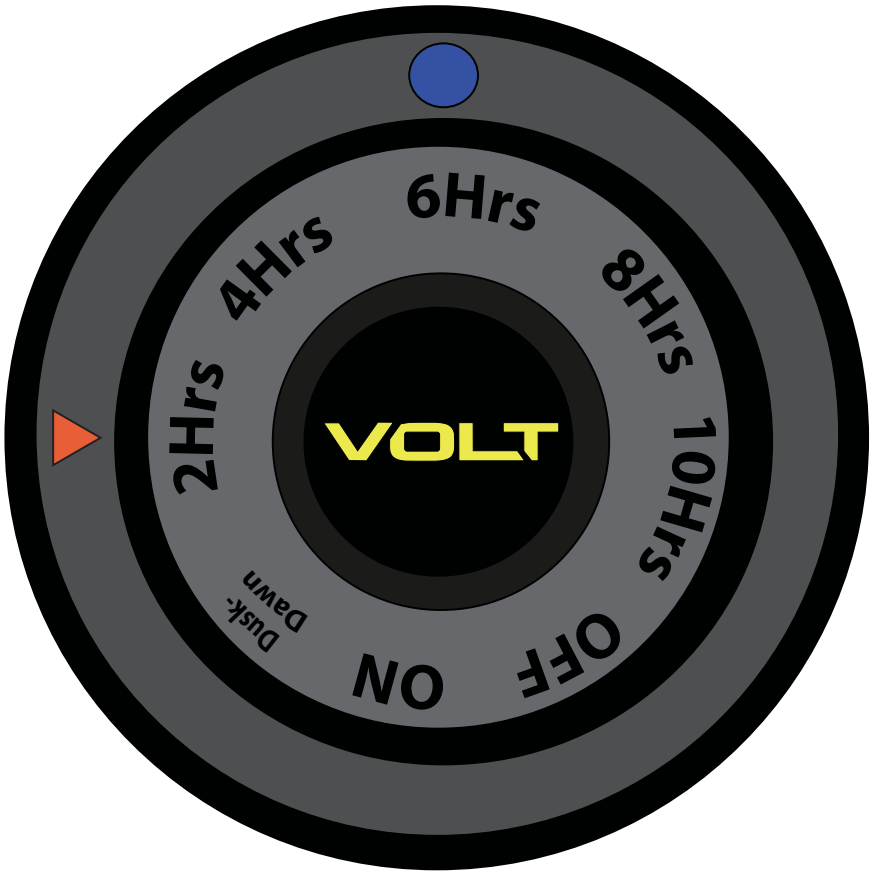
6 Hrs: Function that keeps lights on for 6 hours after dusk.

8 Hrs: Function that keeps lights on for 8 hours after dusk.

10 Hrs: Function that keeps lights on for 10 hours after dusk.

OFF: Manual off function

ON: Manual on function



Dusk - Dawn: Photocell function that turns transformer on at dusk and off at dawn.

Pilot Light: This lets you know that the timer has power and is functioning properly. **Note that it will take a few seconds to light up.**



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