

## DIY Pagoda Kit Installation Guide

This guide will take you through the installation procedure, step by step to make sure that installation is simple and done correctly. When following this guide, please keep in mind that if you aren't sure if what you are doing will harm yourself or your light fixtures, stop and either call us at 1 800 865 7221 or have your contractor/electrician do it for you. Nothing is more important than safety, not even beautiful lighting.

### Kit Includes:

(1) 12v 60w Outdoor Transformer PTX60



(1) 100' of 16 gauge 12v cable



(2) Rubber Gaskets (per fixture)

(2) Glass Jars (per fixture)



(1) 6" Stem



(1) 8" Stem



(1) 1/2" fine thread to 1/2" fine thread adapter (per fixture)



(1) 1/2" fine thread to 1/2" national pipe thread adapter (per fixture)



(1) Gen Stake or selected mount (per fixture)



(1) Light bulb of appropriate type (per fixture)

### Tools Required

Philips head screwdriver

Wire strippers

Wire cutter

Wire nuts

## Getting Started:

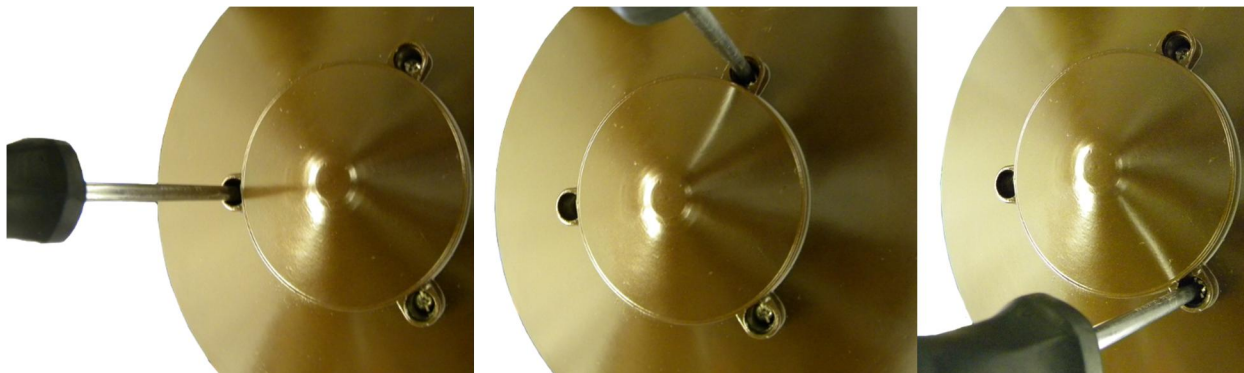
Location, location, location. For the DIY kit, there are two kinds of locations that must be kept in mind during the installation, the location of the transformer and the locations of each lighting fixture. The location of the transformer must be near a 120v GFI outlet in non-shaded area, given the transformer has a built-in photocell. If placed in an area without access to sunlight, the automatic functions of the transformer will not function properly. The location of the fixtures is more a matter of personal taste, desired light distribution and landscape layout. The only mandatory requirement is that you must connect each light in a run to the transformer in series, meaning that the main line coming from the transformer must reach the first light to the next light to the next and so on. Other than that, fixture placement is completely up to the user.

## Pagoda Assembly

### Light Bulb Installation

If you need to replace a burnt out bulb or want to swap out one bulb for another to give your fixture a different type of light output or have decided that saving money on the power bill by switching to LED light bulbs, follow these steps in order to gain access to the fixture's socket and bulb. Make sure the power is off before performing these steps and if you are using a halogen type bulb, give the bulb adequate time to cool down before touching it with your bare skin (LED light bulbs do not generate nearly as much heat so they don't have a cool down period). Please note that some of our kits have different sockets but the steps remain almost identical (this guide uses a JC Bi-Pin type socket but some pagoda kits use a medium type socket).

1. Using a Philips screwdriver, remove the 3 Philips head screws from the top of the pagoda



2. Remove the head and tier section from the lower body of the pagoda



3. Unscrew the glass jar from the lower body of the pagoda



4. Insert bulb into the socket (pictured is AQY 527 cluster bulb for a JC Bi-Pin, yours may be different as it also available with a medium base socket).



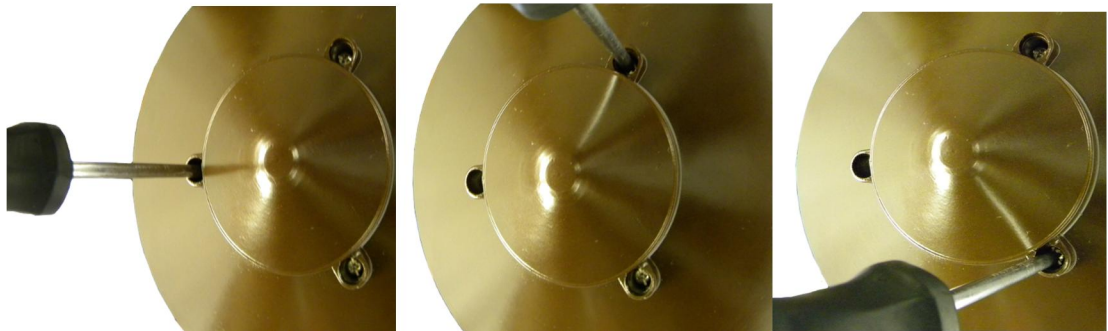
5. Screw the glass jar into the lower body of the pagoda



6. Place the tiered section and head on top of the lower body, lining up the screw holes



7. Tighten the 3 screws into the top of the pagoda and you're done!



## Stem Assembly

There are 3 different stem configurations for the DIY pagoda kits: 6" height, 8" height and 14" height. Depending on your lighting application, you are able to choose the height of the fixture. As a result, the procedure of assembling the stem system is slightly different.



For a 6" or 8" stem assembly:

1. Take the desired stem and screw in the  $\frac{1}{2}$ " fine thread to  $\frac{1}{2}$ " national pipe thread adapter into the bottom of the stem.



2. Then, thread the wire from the pagoda into the stem and screw the stem into the bottom of the pagoda.



3. Finally, thread the pagoda wire through the rubber wire guard and insert the wire guard into the bottom of the stem.



For a 14" stem assembly:

1. Thread the 1/2" fine thread to 1/2" fine thread into the bottom of the 6" stem. Then, screw the 6" stem into the 8" stem, combining the two stems together.



2. Thread the pagoda wire through the combined stems and screw the stem into the bottom of the pagoda.



3. Finally, thread the pagoda wire through the rubber wire guard and insert the wire guard into the bottom of the stem assembly.



4. Lastly, screw the desired mounting system to the bottom of the stem assembly (DIY kits typically come with gen stake mounts but are compatible with other mounting systems). With a Gen stake mount, thread the Pagoda wire through the hole of the Gen stake. When screwing the Pagoda stem into the stake mount, make sure to twist the Pagoda wire in the same direction so there is no wire tension in the line.

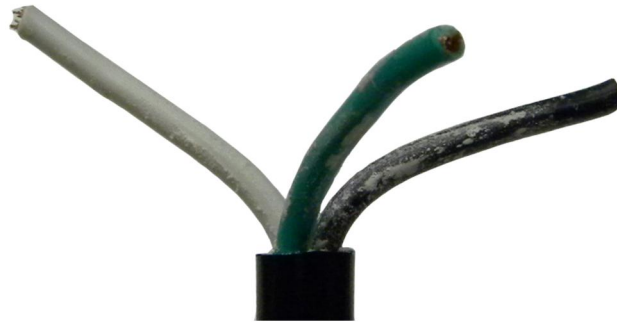


## Connecting the Fixture to Power

Once you have locations for all the fixtures for the run, now you have to run power to each of the fixtures in series. Try to start with the closest fixture to the transformer and end at the furthest; since the lights are to be arranged in a run, or a “T” style layout will also work great. Also, never perform these steps when the transformer is active/has power.

### Prepping the Fixture for Power

1. For each fixture, measure out enough length from the end of the wiring as necessary to connect the fixture to power and remove the black wire sheath from that section of wire.



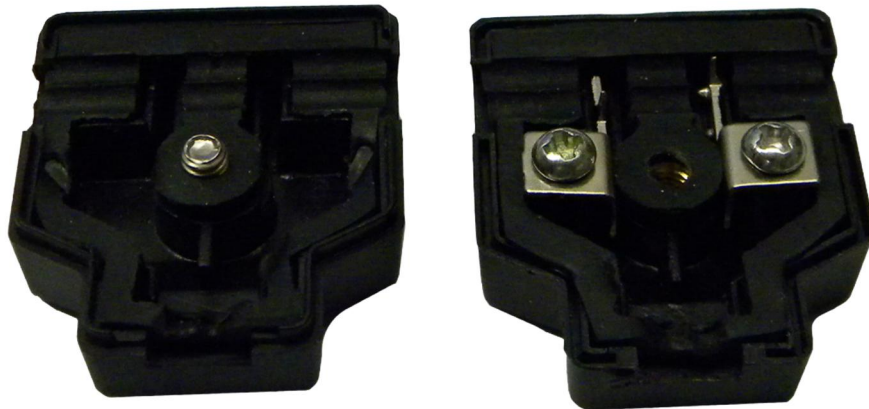
2. Next, strip the black wire and the white wire, giving yourself enough length to connect the ends to power. Depending on your application, you have the option to use quick connects or you can wire the fixtures in a more permanent method. Since this is a 12v system, a ground wire is not required, so you can trim the green wire flush to the sheath.



## Connection Method 1: Using Quick Connects (not included)

AQLighting offers an optional, screw in quick connect which allow you to tap into the main line of the transformer without cutting.

3a. To install a quick connect to a fixture: take a Philips screwdriver and unscrew the screw in the center of the quick connect, separating the two halves.



4a. Loosen the Philips head screw terminals inside the quick connect to allow for attaching the wires from the pagoda fixture. Attach one wire to each terminal (white to the left terminal, black to the right) and tighten the screw terminals to secure the wires.



5a. Next, take the main line from the transformer and place it over the offset metal teeth that line up with the grooves at the upper portion of the quick connect. Firmly press the wire onto the teeth, making sure each tooth only pierces one wire. The teeth are designed to pierce the main line jacket and make contact with the wire inside.



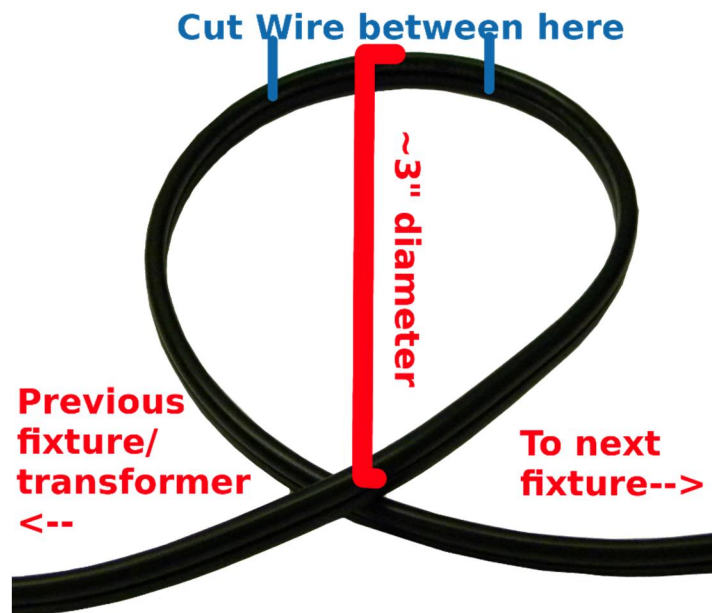
6a. Now, combine the two halves of the quick connect and tighten the screw in the middle of the quick connect. The fixture should now be connected to the main line of the transformer. If the light doesn't turn on, more often than not, there is a loose connection inside the quick connect so it is crucial that you make sure every connection inside the quick connect is secure.



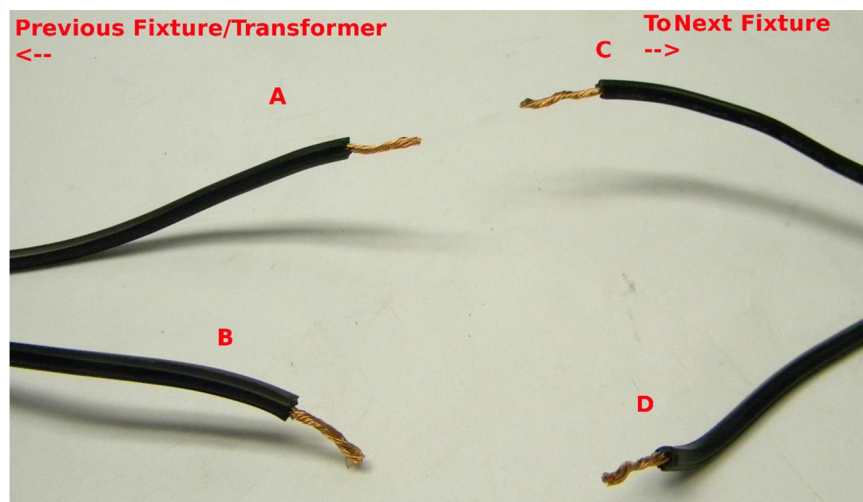
## Connection Method 2: Permanent Wiring Connection

Instead of using quick connects, the other method of wiring is more of a permanent solution and we find that professionals tend to prefer this method so we want to give you the same advantage. For this method, it requires you to know how to use wire strippers and have 2 wire nuts for every fixture you wish to connect in the run. Also, we recommend using some sort of weatherproofing on the connections to protect them from the elements, such as our [exclusive HPSK2 hub stake](#) with [electro-shield](#) or a [3M splice kit](#).

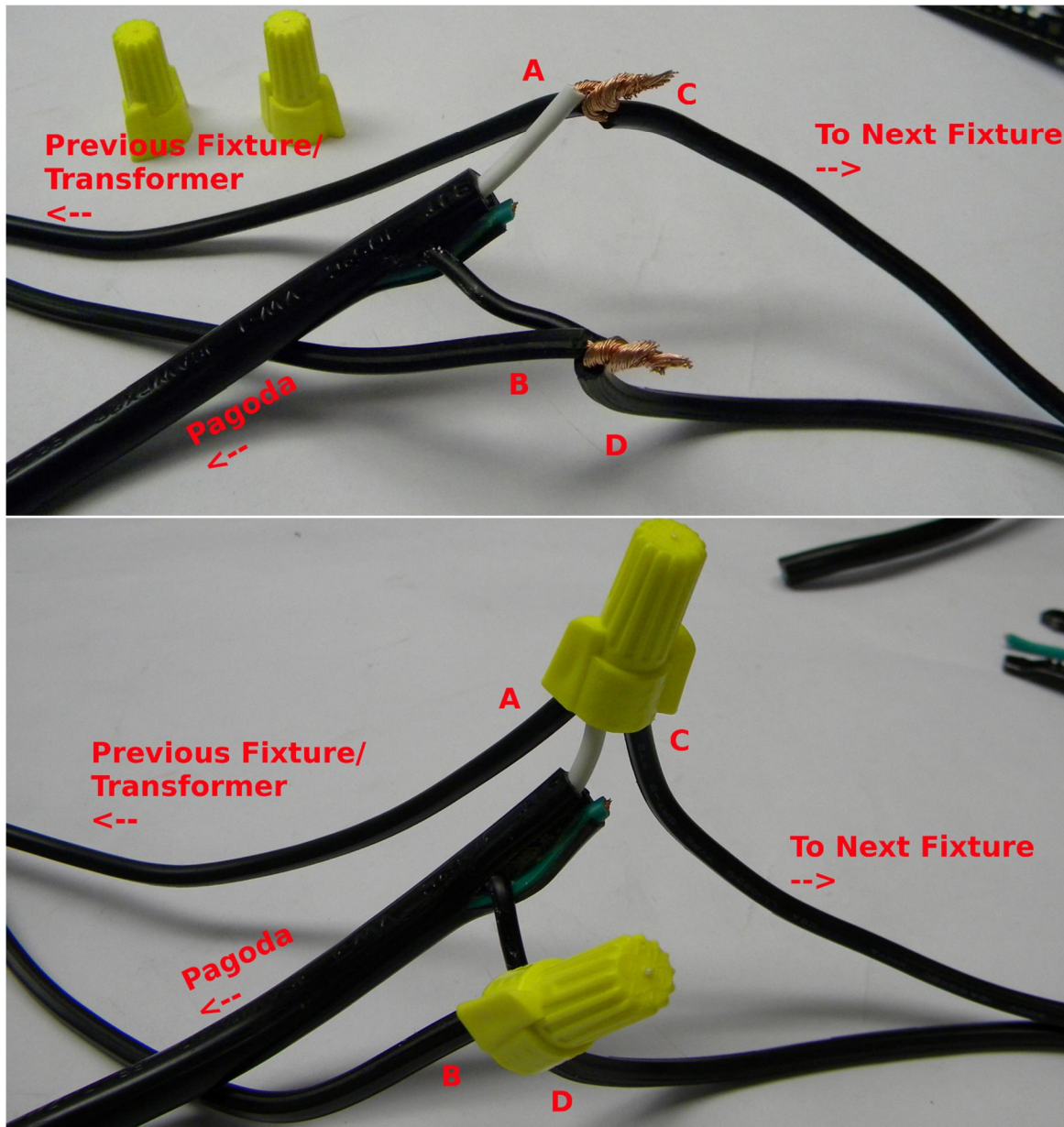
3b. First, run the main line alongside each of the light fixtures, looping at each fixture. This will ensure that you have enough length of cable to splice at each fixture. Each loop should be ~3" in diameter.



4b. In the middle of each loop, use wire cutters to cut the main line of the transformer at the top of the loop, separate the wires and strip each wire at both sides (the set of wires coming from the transformer and the set of wires leading to the next fixture).



5b. Connect the white wire to one of the set of splices and the black to the other set of splices. Screw a wire nut over each of the splice sets.



Repeat these steps for each of the fixtures and you'll have a permanent set of connections for your kit. After you test each of the lights in the run, apply silicone sealant inside each of the wire nuts to further protect the connections from the outside elements.