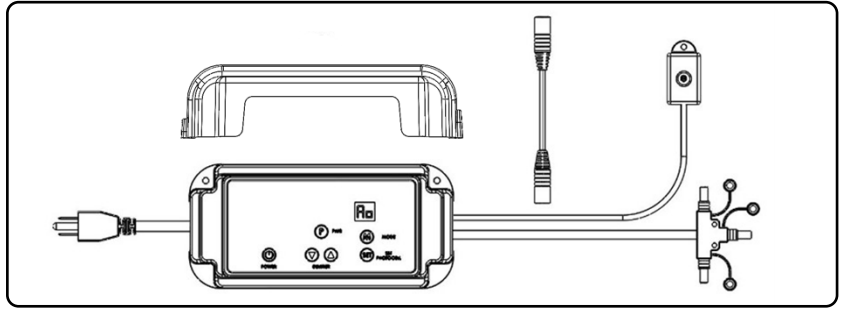


Pre - Installation Notes

- Follow all national and local building/electrical codes.
- Transformer must be plugged into a GFCI outlet.
- Transformer can be mounted indoors or outdoors.
- Transformer can support up to 50 watts output.
- Don't cut any wires. Extra wire length can be coiled up.
- Do not use extension cords.
- Do not use within 10 feet of ponds, pools, or spas.
- If using insulated wire staples to hold the wires in place, be sure not to pierce or crush the wires.
- Do not mount in direct sunlight. Keep away from external heat sources.

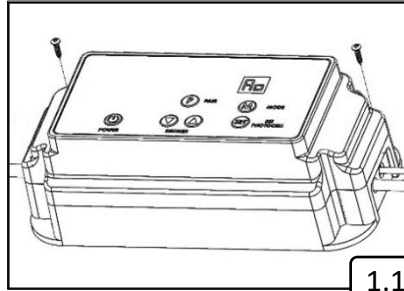
12 Volt 50 Watt Smart DC Transformer



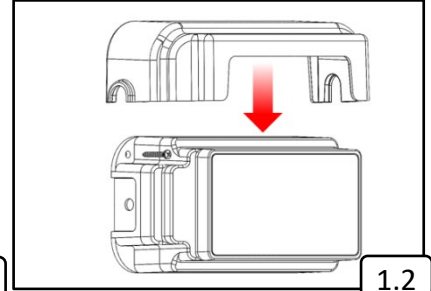
Step 1

Mount the Transformer and Photocell

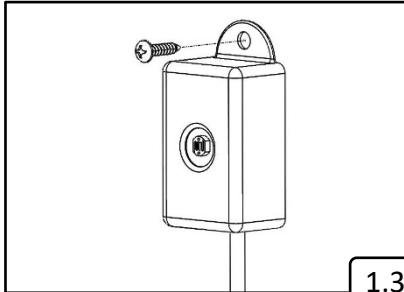
- 1.1 Mount the transformer horizontally at least 12" above ground using two stainless steel screws (not included), near a 120V AC GFCI outlet. Ensure the 5-foot power cord reaches the outlet. The transformer can be mounted under a deck, but keep the control panel accessible for settings adjustments. Plug into the GFCI outlet.
- 1.2 If the transformer is mounted outdoors, slide the included cover over the top of the transformer.
- 1.3 Use a stainless steel screw (not included) to mount the photocell (5 foot cord) in a location that can sense dusk and dawn.



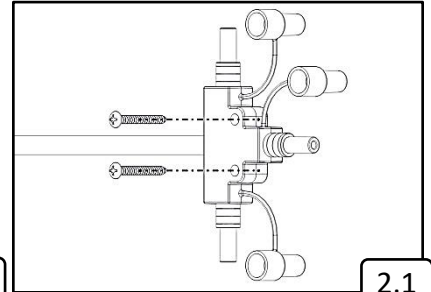
1.1



1.2



1.3

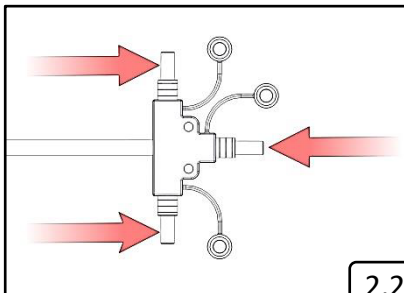


2.1

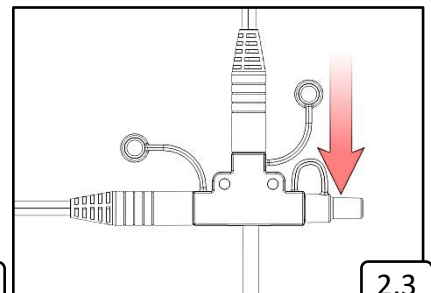
Step 2

Mount the Tee Connector

- 2.1 Run the 4 foot output power cable with Tee Connector attached to the location of the first light or a central location if lights will be located in multiple directions. The Tee Connector can be secured loosely using (2) #4 x 1" stainless steel screws (not supplied). Do not tighten the screws completely as this can damage the Tee Connector.
- 2.2 If needed, all 3 of the output connectors on the Tee Connector are active and will supply equal power to the entire system.
- 2.3 Any unused Tee Connector terminals or splitters in the system must be sealed using the attached cap.



2.2



2.3

Step 3

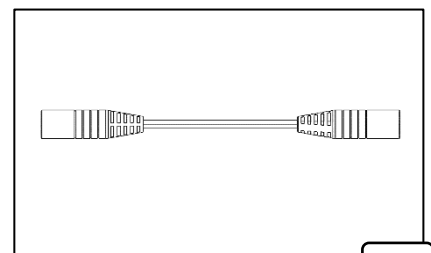
Install the Lights and Finalize Installation

- 3.1 Connect the rest of the Main Wiring Connections (not included) per their individual instructions.
- 3.2 Connect the desired light fixtures (not included) per their individual instructions.
- 3.3 Refer to the included Control Instructions for operation of the transformer. The Control Instructions should be retained for future reference.

Step 4

Closed Loop Connector (optional but recommended)

- 4.1 Included with the transformer is a closed loop connector. The closed loop connector has a red female connector on each end and is 6" long. The closed loop connector is used to connect the Main Wiring back into the transformer. This reduces the voltage drop across the wiring in the system.
- 4.2 Use a 2 output splitter on the last light fixture of the run. Plug the last light fixture into one of the 2 outputs splitters male connections. Plug an extension harness into the other male connection of the 2 output splitter. Run enough extension harnesses end to end to reach back to the Tee Connector of the transformer. Use the closed loop connector to make the connection between the extension harness and the Tee Connector.



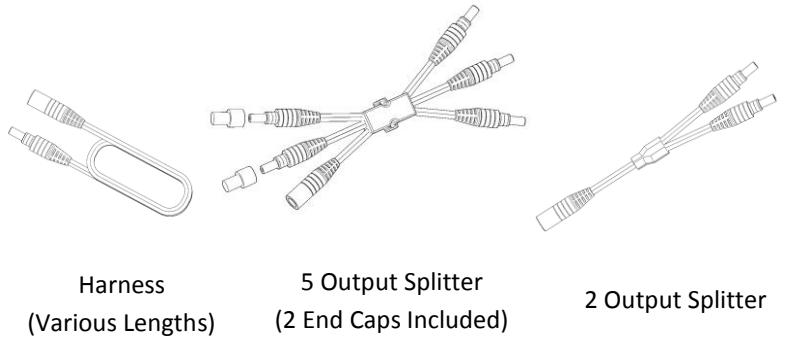
4.1

Wiring Harness and Splitters

Pre - Installation Notes

- Do not cut any wires. Any extra wire length can be coiled up.
- If using insulated wire staples to hold the wires in place, be sure not to pierce or crush the wires.
- During installation, it is recommended that you temporarily cover the photocell on the transformer with dark tape so the lights will be on when you plug them in. This will help check for any issues during installation. Remove tape when done.

Components



Harness

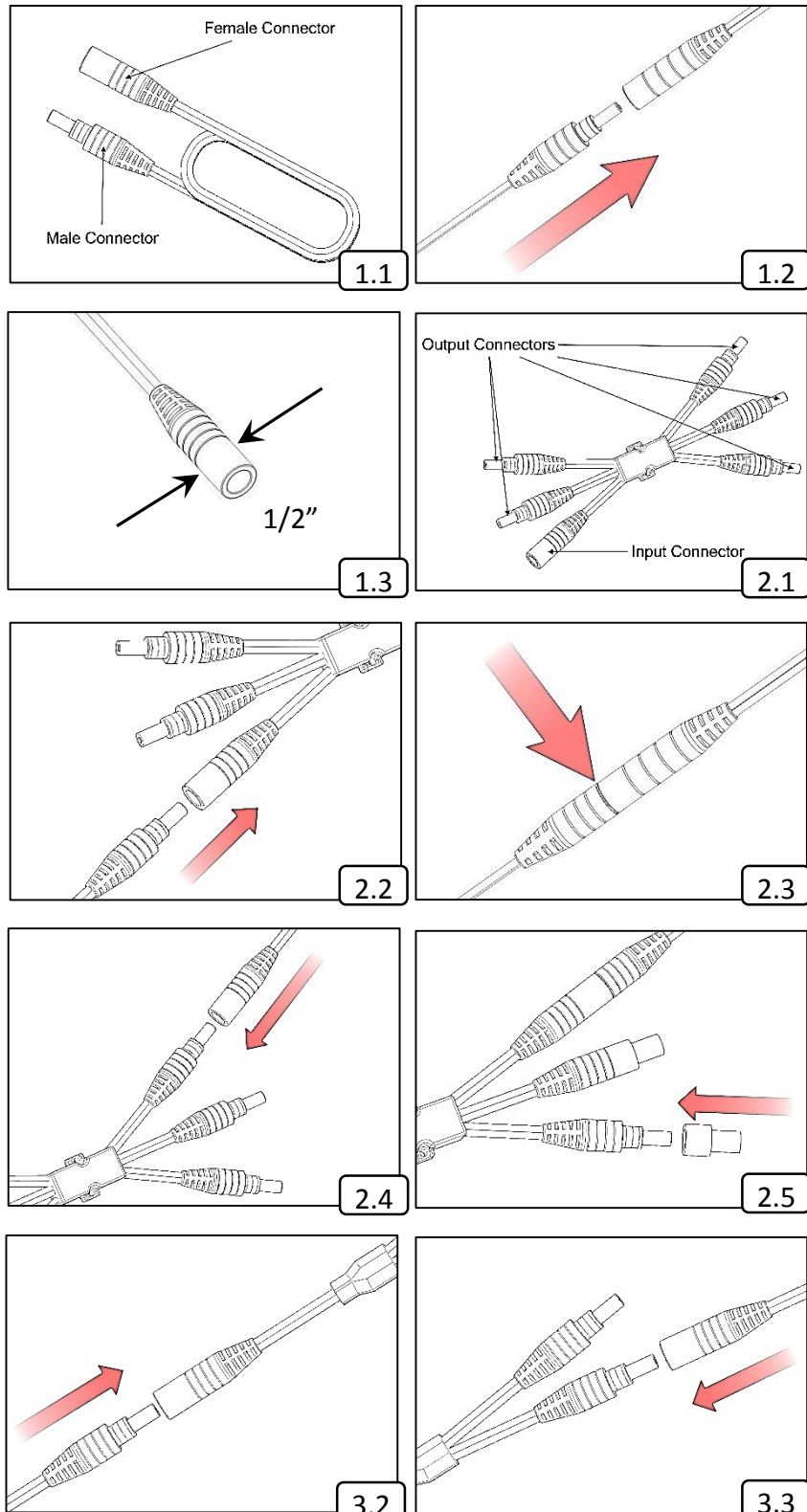
- 1.1 The Harness is used to extend power from the transformer to each individual light or splitter. The Harness has a male and female end.
- 1.2 Harnesses can be plugged into each other to extend length if needed.
- 1.3 The Harness can be run underneath the deck (above ground) and/or inside the post/railing where it is hidden from view.
- 1.4 If needed, the connectors can fit through a 1/2" hole.

5 Output Splitter

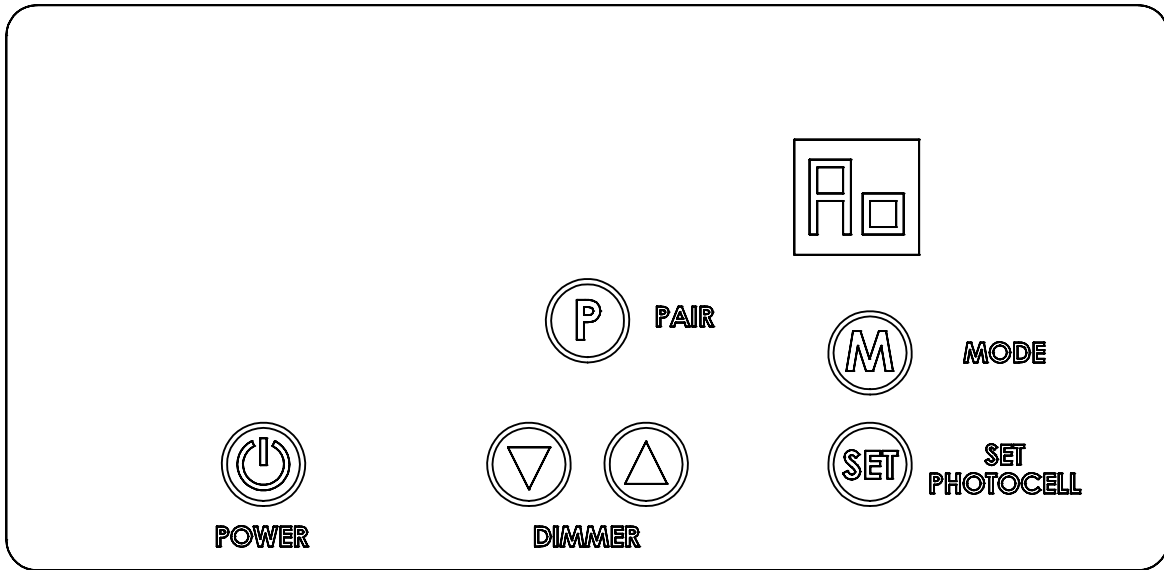
- 2.1 The 5 Output Splitter is used to evenly distribute power from 1 input to 5 outputs.
- 2.2 Plug the male connector from a harness into the female input connector of the 5 Output Splitter. Press firmly until the connection is fully engaged.
- 2.3 Connection is fully engaged when there is minimal gap between the male harness connector and the female input connector.
- 2.4 Plug the female connector from a harness or a light into one of the male output connectors. Repeat for each output connector that is needed.
- 2.5 If there are any unused output connectors, an end cap (2 included) must be used to seal the output connector. Any unused end caps can be saved or discarded. If there are more than 2 unused output connectors, a 2 Output Splitter (see below) should be used.
- 2.6 The 5 Output Splitter can be secured using (2) #2 Stainless Steel Screws (not supplied).

2 Output Splitter

- 3.1 The 2 Output Splitter is used to evenly distribute power from 1 input to 2 outputs.
- 3.2 Plug the male connector from a harness into the female input connector of the 2 Output Splitter. Press firmly until the connection is fully engaged. (See Step 2.3)
- 3.3 Plug the female connector from a harness or a light into one of the male output connectors. Repeat for the other output connector.



12V 50W Smart Transformer Control Instructions (Adjustable Color Temperature)



POWER:



Turns the system power off and on. When the system power is off, the LCD display will be blank and the only button that will function is the Power button. When the system power is on, the LCD display will show the current mode or function that is active.

MODE and LCD DISPLAY:



Pressing and releasing the mode button will cycle through the different modes settings. The mode settings are **1h, 2h, 3h,4h, 5h, 6h,7h, 8h, dd** and **Ao**.

1 to 8 hour timer (1h, 2h, 3h,4h, 5h, 6h,7h, 8h)



MODE

- Uses the photocell to turn the lights on. When the photocell senses darkness continually for 30-40 seconds, the lights will turn on.
- The lights shut off after the set time expires (1 hour for **1h** mode, 2 hours for **2h**, etc.).
- After the set time expires the lights will remain off.
- Whether the timer has expired or is still active, when the photocell senses light continually for 30 - 40 seconds, the timer will be reset and ready for another cycle. If the lights are on, they will be shut off and the timer is reset.

Dusk to Dawn (dd)

- Uses the photocell to turn the lights on. When the photocell senses darkness continually for 30-40 seconds, it will turn on the lights.
- The lights will remain on until the photocell senses light continually for 30-40 seconds.
- When the photocell senses light continually for 30 - 40 seconds the lights will be shut off and ready for another cycle.

Always On (Ao)

- The lights are on all the time. The photocell is not used.

ADJUSTING COLOR TEMPERATURE:

Transformer must be in Always On (Ao) mode to change color temperature. Pressing and holding the mode button for 6s will display the current color temperature setting. The settings are 2700K(warm), 3000K, 3500K, 4000K, 5000K(white) and 6500K(cool). Continue holding the Mode button to cycle through temperature modes until desired temperature is selected. Release the Mode button to save the selection.

12V 50W Smart Transformer Control Instructions (Adjustable Color Temperature)

PAIR:  PAIR

(continued)

To pair a new mobile device (only needs to be done once per device):

- Download and open **SmartPower 50** app from Google Play or Apple App stores.
- Press and release the Pair button on the transformer. The LCD display will show **bt** to indicate that it is in pairing mode.
- When in **bt** mode, no buttons can be pushed for 30 seconds or until a new device or phone pairs with the transformer. The transformer will go back to the previous mode once 30 seconds has expired or a new device or phone has been paired with the transformer.
- A new device or phone that tries to pair with the transformer without being in **bt** mode will be rejected.

To pair with home Wi-Fi network (Provision):

- Download and open **SmartPower 50 Wi-Fi Setup** app from Google Play or Apple App stores.
- Click "Setup New Device". First time users will need to create a Smart Power Gateway account (click "Sign Up" link, enter email and create password).
- A confirmation email will be sent to the email associated with the account. Click "Verify Your Account" in the email. If no email is received, check Spam Folder and confirm correct email address was used. For existing users, Log In to your Smart Power Gateway account using credentials used to Sign Up.
- Press and hold the 'Pair' button on the transformer (10-12 seconds) until the LCD display shows **Pr** to indicate that it is in Wi-Fi provisioning mode. Release the button. The transformer will reboot and the display will show **Pr**.
- When in **Pr** mode, no buttons can be pushed for 3 minutes or until a new Wi-Fi network is set up. The transformer will reboot to the previous mode once 3 minutes have expired or a Wi-Fi network has been set up with the transformer.
- Connect to device named SMARTPWRPROV_XXXX listed on 'Connect to Devices' screen. If no devices are in the list, ensure transformer is in **Pr** mode and click 'Scan Again'.
- Select the desired Wi-Fi network to pair the transformer with. Enter the Wi-Fi password and click 'SETUP WIFI'.
- Once all items are complete on 'Setting Up Wi-Fi' screen, Wi-Fi setup is complete and the transformer will reboot. Click OK and close the app.
- Refer to 'Voice Control Setup' Guide for Smart Home integration instructions.

SET PHOTOCELL:

Sets the trigger point for turning the lights on and off. 

To set the photocell level:

- Ensure mode is set to **1h, 2h, 3h, 4h, 5h, 6h, 7h, 8h**, or **dd**. The Set Photocell button will only work when in these modes.
- Wait until the ambient outdoor light condition is at the desired level for when the lights are to come on (dusk).
- Press and continue to hold the Set Photocell button for 10-15 seconds. The LCD display will change to **P5**.
- The lights will flash or flicker once the new photocell setting has been saved.
- The lights will turn on in 30-45 seconds as long as the ambient light condition is lower than when it was set.



DIMMER:

- Pressing or holding in the up button (**▲**) will make the lights brighter - if the lights are full brightness and the button is pressed again (or held in), the lights will flicker or flash to indicate the lights are at the brightest setting.
- Pressing or holding in the down button (**▼**) will make the lights dimmer - if the lights are dimmed to the lowest setting and the button is pressed again (or held in), the lights will flicker or flash to indicate the lights are at the dimmest setting.
- The dimmer buttons are only operational when the output lights are on.