



Dank Light Co. EZ-Connect DIY Grow Light Kit Assembly Instructions

IMPORTANT NOTE: When removing the EZ-Connect Heatsink/Lighstrips from the shipping package either cut the foam inserts that surround the lightbars OR VERY CAREFULLY slide the lightbars through the foam inserts MAKING SURE the Small Monocolor Diodes (across the PCB) and Input Connectors (at both ends of the PCB) do not rub against the foam padding. These items are fragile and could break if they are rubbed against the foam insert!

STEP 1: Assembling the EZ-Connect Frame and Universal Driver Mount

PLEASE NOTE: If you will not be using our EZ-Connect Universal Driver Mount please skip to section 2: Mounting the Heatsinks/Lightstrips to the Frame

- A. Remove the EZ-Connect Frame and Universal Driver Mount and find the mounting hardware bag marked: **“Universal Driver Mount Installation Hardware”**
 - a. NOTE: The EZ- Connect Frame Kit and Universal Driver mount use the exact same T-Slot extrusion. There will be 4 of these extrusions in your kit.
 - b. The Frame and Driver Mount extrusions and hardware will look like this when removed:



B. Next, grab 4 of the short $\frac{5}{8}$ " screws, 4 black T-slot nuts, and 4 of the $\frac{3}{8}$ " white nylon spacers and assemble these in the center hole on each end of the drivers you plan to mount.

a. The T-Nut "nipple" should always face up towards the screw that you will be inserting into the driver, like this:



b. The driver mounting hardware should look like this when complete:



C. Now, slide the drivers onto the T-slot extrusion like this:



NOTE: Depending on the kit you are building, driver(s) you are using and the spacing of the lightbars you may mount your driver(s) perpendicular to the heatsinks or parallel to the heatsinks.

Typically our 8 lightbar kits are mounted perpendicularly and the 6 lightbar kits are mounted parallel:



Perpendicular mounting

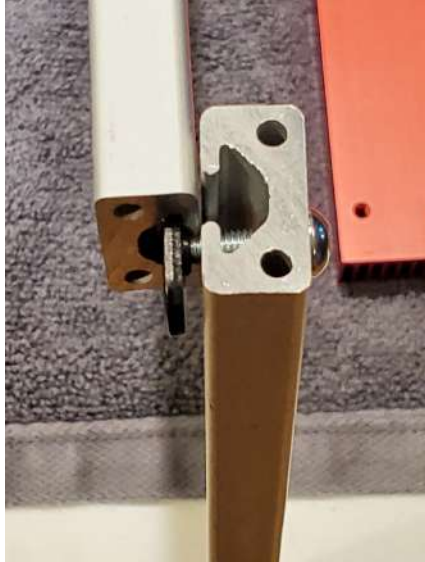


Parallel mounting

D. Put the Universal Driver Mount and Drivers aside for now and move on to **“Step 2: Mounting the Heatsinks and Lightstrips to the Frame”**.

We will come back to this step a little later.

- E. Mount the Universal Driver Mount to the Frame:
- From the “**Universal Driver Mount Installation Hardware**” bag find the 4 x $\frac{3}{4}$ ” bolts and 4 black t-nuts.
 - In the larger hole at the very end of the T-slot extrusion place the $\frac{3}{4}$ ” screw through the hole and thread it into a T-nut like this:



- c. Now simply slide the Universal Driver mount bars onto both of your Frame Extrusions.

NOTE: You will need to unbolt one side of your driver(s) to slide the extrusion in if you have previously assembled your driver to the Universal Driver mount.

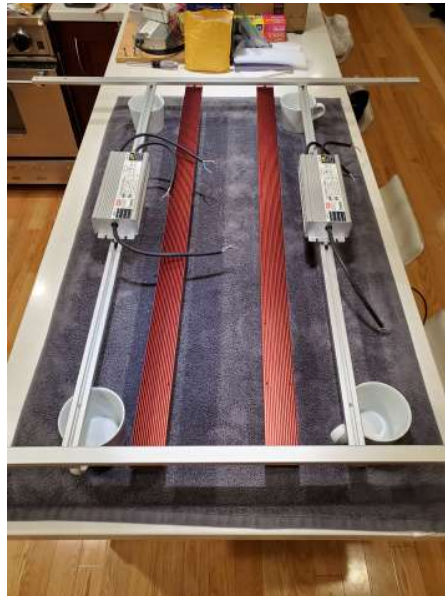


- d. 8 lightbar kit - Bolt the driver(s) to the opposite side of the Universal Driver Mount.

IMPORTANT NOTE: Never rest the LEDs down on a flat surface!! In the pics above I have used a cup to elevate the LEDs above the towel. Resting the LEDs down may break the monicolor (red, blue) diodes or the Input Terminals.



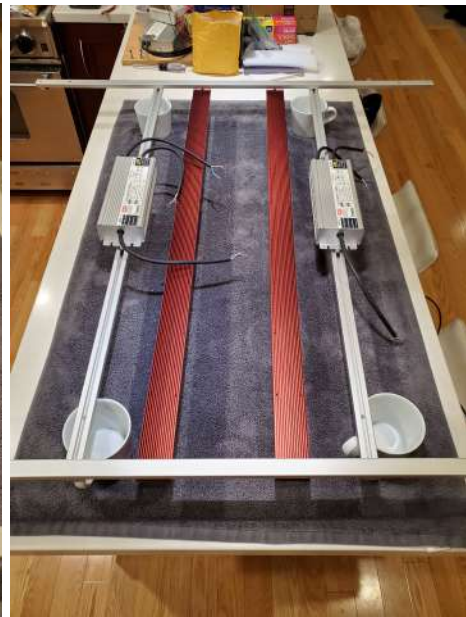
- e. 6 lightbar kit - bolt the drivers to their individual Driver Mount truss



f. Your progress should look like this when complete



8 Lightbar Kit



6 Lightbar Kit

Step 2: Mounting the Heatsinks/Lightstrips to the Frame

- A. Unpack the Heatsink/Lightstrips from the shipping package
SEE IMPORTANT NOTE AT TOP OF PAGE 1, REGARDING REMOVING HEATSINKS/LIGHTSTRIPS FROM PACKING FOAM
- B. Find the bag marked, “Heatsink Installation Hardware”. When you have everything together it should look like this:

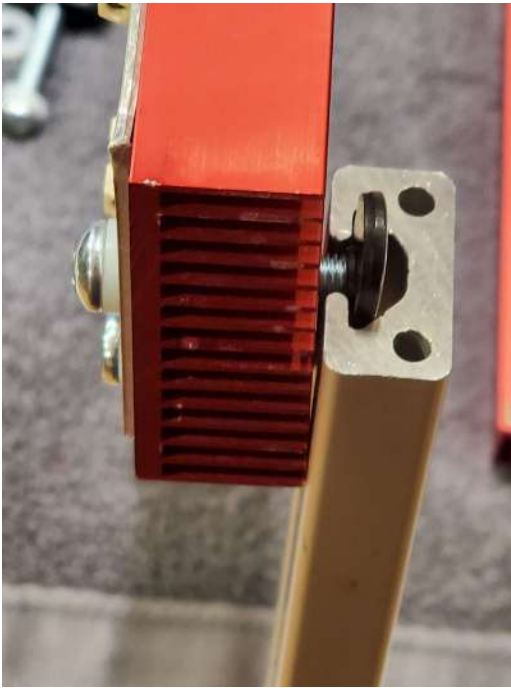


- C. Grab one screw, one nylon washer and one T-nut and insert through each end of the PCB heatsink like this:



IMPORTANT NOTE: The nylon washer is inserted between the bolt head and the PCB. The “nipple” on the T-Nut faces the screw you will be fastening it to.

- D. Continue inserting the screw, nylon washer and T-nut combination on all heatsinks.
- E. For the 8 lightbar kit, slide 2 of the heatsinks onto the Frame.



NOTE: Different kits (like the 6 lightbar kit) may require Parallel driver mounting in which case you should slide the Universal Driver Mount onto the frame first and then slide the heatsinks/lightstrips.

F. Your progress should look like this after mounting the first 2 heatsinks:



8 and 6 Lightbar Kit - no driver mounts yet

IMPORTANT NOTE: Never rest the LEDs down on a flat surface!! In the pics above I have used a cup to elevate the LEDs above the towel. Resting the LEDs down may break the monochrome (red, blue) diodes or the Input Terminals.

G. If you are building the 8 or 6 lightbar kit **WITH THE UNIVERSAL DRIVER MOUNT**, go back to step “1E “Mount the Universal Driver Mount to the Frame”.

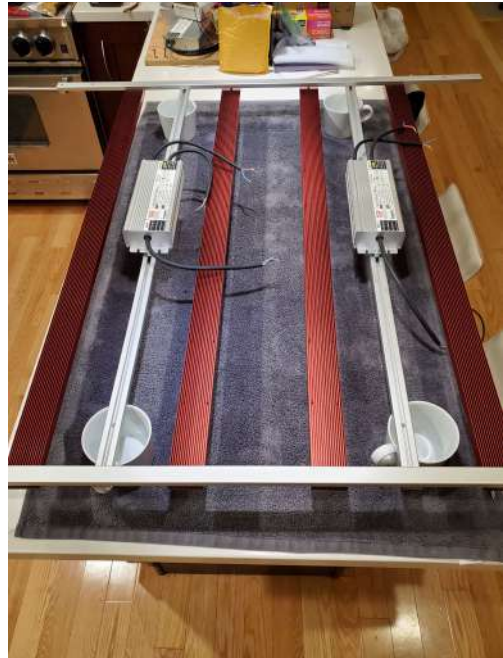
If you are not adding the Universal Driver Mount go to step H directly below:

- H. Continue sliding the heatsinks onto each end of the frame, but DO NOT tighten them down.
- Spacing for the 8 lightbar kit is approx 4 inches between heatsinks. Spacing for the 6 lightbar kit is ~6.25 inches between heatsinks.

- b. Your Frame (with) the Universal Driver Mount should look like this as you progress:



8 Lightbar Kit



6 Lightbar kit



- c. Your Frame (without) the Universal Driver Mount Kit should look like this as you progress:



8 Lightbar kit



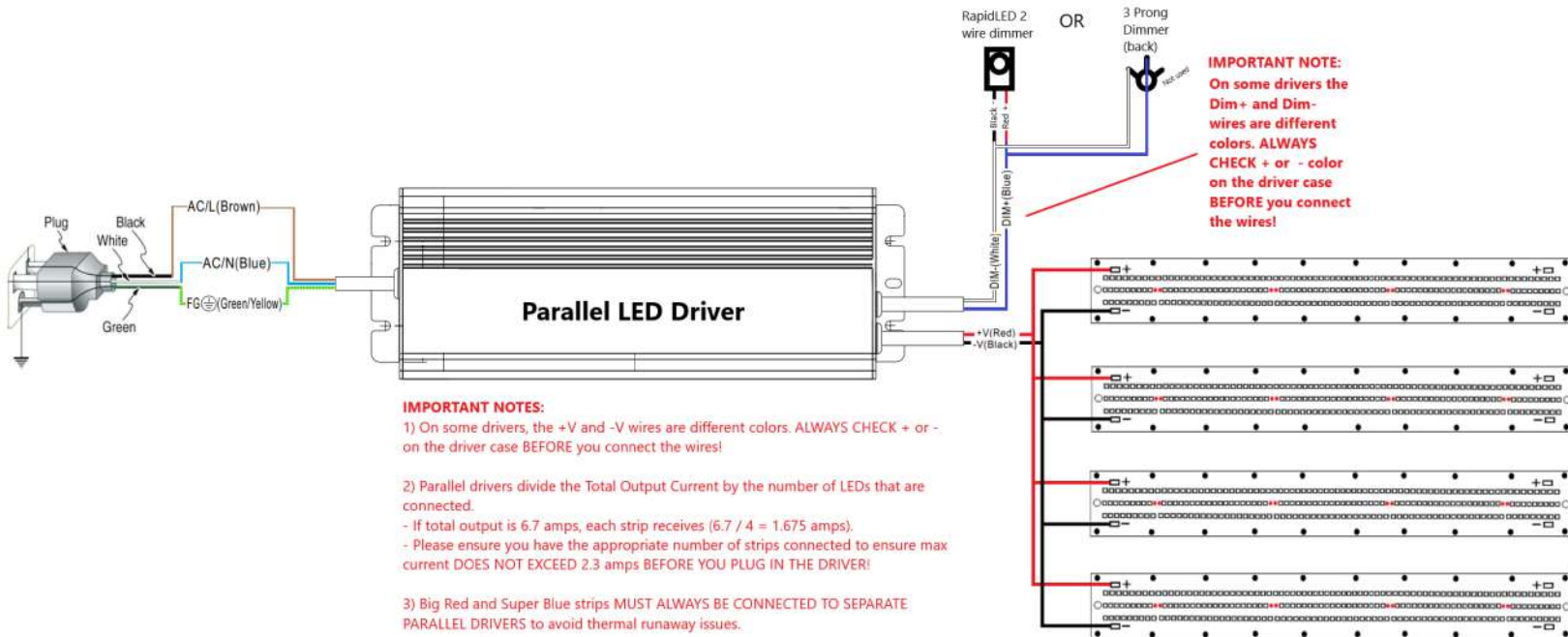
6 Lightbar kit

NOTE: Once everything is assembled, very gently tighten the screws. You want to leave them a little bit loose. We will tighten everything down at the end when all the Heatsink/Lighstrips have been mounted to the frame. This makes assembly easier.

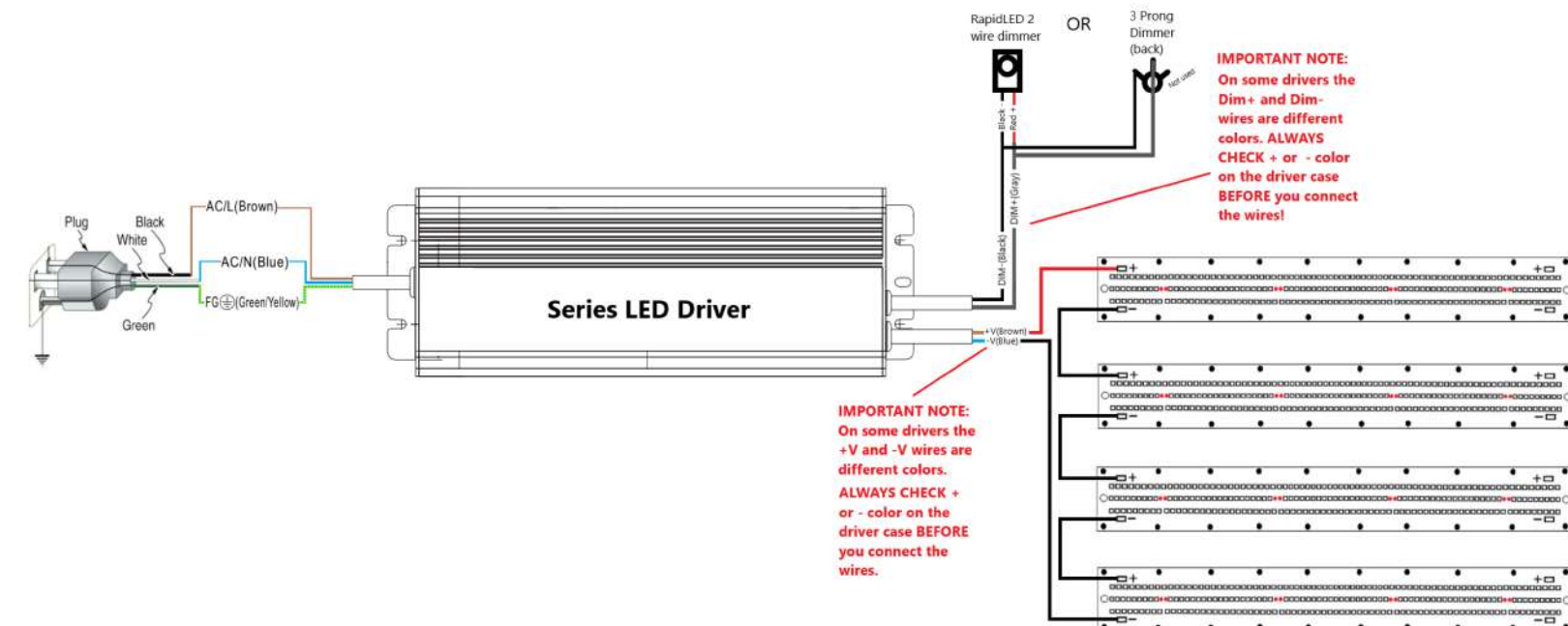
Step 3: Wiring your EZ-Connect Grow Light fixture

- A. How you wire your EZ-Connect light fixture depends on whether you chose Series or Parallel drivers. Please review the Driver wiring diagrams below before getting started.

Meanwell Parallel Driver Wiring Instructions



Meanwell Series Driver Wiring Instructions



- B. Since 2 Drivers are required to run the entire fixture, its best to think about wiring the light fixture in 2 halves, with half the lightstrips (3 or 4 depending on whether you are building the 8 or 6 lightbar kit) being wired on the left side of the fixture and the other half of the lightstrips being wired on the right side of the fixture.
- C. The lightstrips from the left half of the fixture are then wired to first Driver and the lightstrips from the Right half of the fixture are wired to the second driver.

WIRING NOTES:

- We highly recommend you take steps to route your wiring through the channels in the EZ-Connect Frame and Driver mount extrusion as much as possible. It will both clean up your build and reduce the number of wires in your grow which could get caught or snagged causing wiring problems for your light.
- We also recommend the use of Zip Ties to secure the wiring to Frame or Driver Mount extrusion.

D. To begin wiring your EZ-Connect lightbars, find the bags marked, “**Lightstrip Input Wires**” and “**Solderless Wire Connectors and Dimmer**”.

Parallel Driver Lightstrip Wiring Instructions

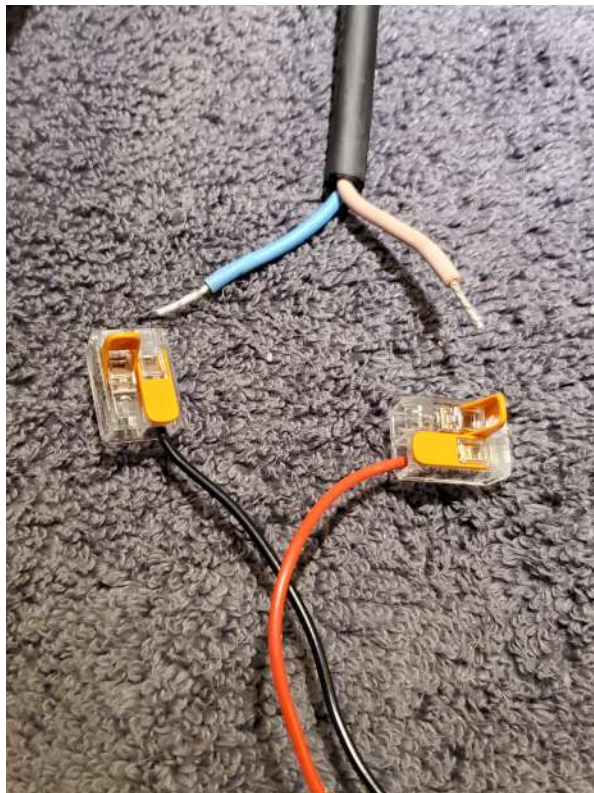
- A. Begin by finding the longest set of wires in the bag, followed by the second, third and fourth longest.
- B. The longest sets of wires are used on the outermost lightbars (those furthest from the middle of the fixture). The second longest set is used on the lightbars that are the second farthest from the middle of the fixture and so on.
- C. Connect the Red wires to the + terminal of the LED lightstrip and the Black wires to the - terminal of the LED Lightstrips. Keep connecting input wires until all wires have been connected to your lightstrips.
- D. When all wires have been connected to your lightstrips run the Red (+) wires from either the left or right half of your fixture to a single 5 terminal Wago Solderless Connector and run the Black (-) wires **from the same set of lightstrips** to another single 5 terminal Wago Solderless connector.
-- Repeat the same steps for the lightstrips from the other half of your fixture.



IMPORTANT NOTE: Please reference the Parallel Driver Wiring Instructions diagram above to see how the wiring is completed if you are unsure.

Series Driver Lighstrip Wiring Instructions

- A. When wiring in Series, you will be wiring groups of “3 or 4” lightbars together depending on which driver you chose.
- B. Begin by finding the long set of Red Wires and Black wires.
- C. The Red wire will be connected to the + terminal of the outermost lightbars (those furthest from the middle of the fixture).
- D. The Black wire will be connected to the - terminal of the innermost lightbar (those closest to the middle of the fixture)
- E. Now, find the short Black wires. These wires are wired from the - terminal of outermost lightbar to the + terminal of the next closest lightbar. Repeat this process until the 3 or 4 lightbars are connected together in Series.
- F. When all wires have been connected to your lightstrips, run the Red (+) wire from the group of lightstrips on either the left or right half of your fixture to a single 2 terminal Wago Solderless Connector and run the Black (-) wire **from the same set of Series Wired lightstrips** to another single 2 terminal Wago Solderless connector.
-- Repeat the same steps for the lightstrips from the other half of your fixture.



IMPORTANT NOTE: Please reference the Series Driver Wiring Instructions diagram above to see how the wiring is completed if you are unsure.

With the lightbars all wired, we can now move on to wiring the driver.

E. Wiring the AC Input side of your driver.

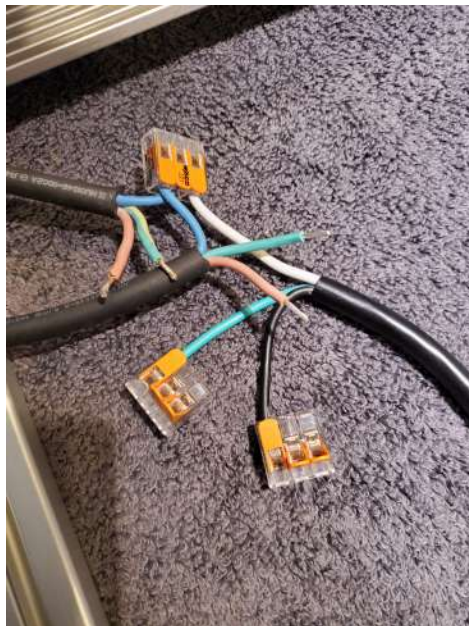
- a. The 8 and 6 lightbar kits require at least 2 drivers to power the entire fixture, and only one Power Cord is connected to BOTH drivers, so the entire light can be powered on simultaneously.
- b. Start by finding the power cord with 3 x 3 terminal Wago Solderless Connectors already attached to the Black (load/ACL), White (neutral/ACN) and Green (ground) wires. If the Wago is not connected, please connect it now.



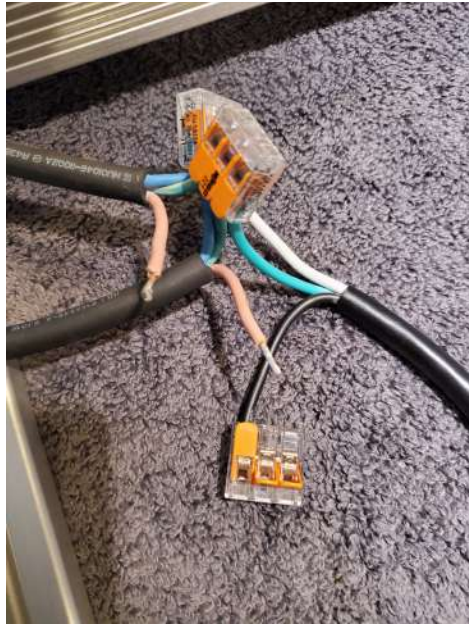
- c. Now go to the AC Input side of the Driver and find the large Black wire with 3 smaller wires (ACN, ACL and Ground) protruding from it.



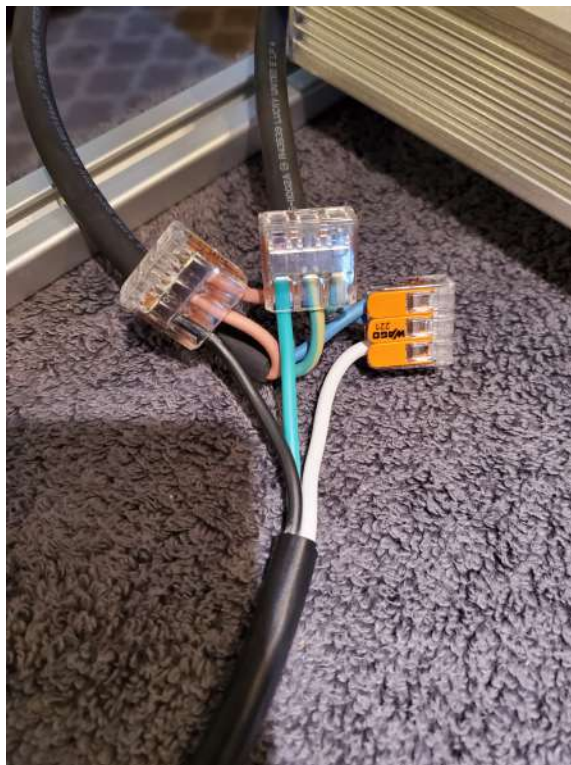
- d. Start by connecting ACN wires from BOTH Drivers to the White wire/Wago on the Power Cord



- e. Now connect the Ground wires from BOTH drivers to the Green wire/Wago on the Power Cord



- f. Finally, connect the ACL wires from BOTH drivers to the Black wire/Wago on the Power Cord. When complete, BOTH drivers will be connected to a SINGLE power cord, like this:



F. Wiring the Dimmer to your Driver.

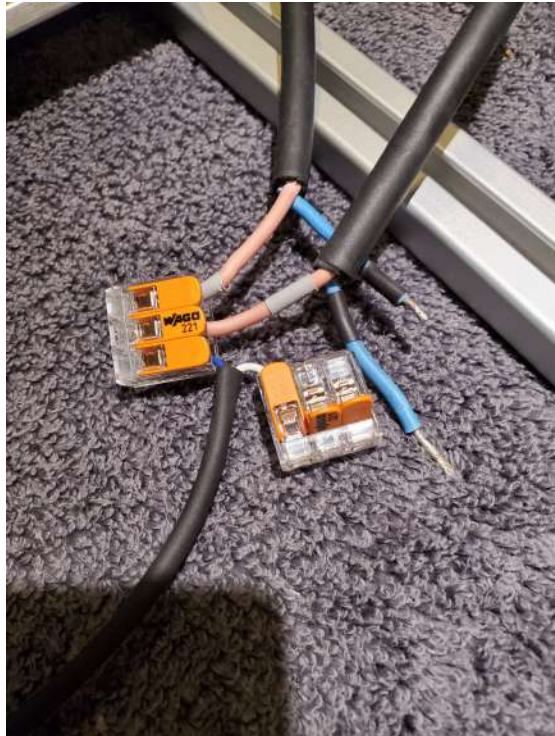
- a. The 8 and 6 lightbar kits require at least 2 drivers to power the entire fixture, and only one DIMMER is connected to BOTH drivers so the entire light can be dimmed simultaneously.
- b. Start by finding the Output side of the drivers. Look for the large Black wires with the 2 smaller DIM + and DIM - wires protruding from it.



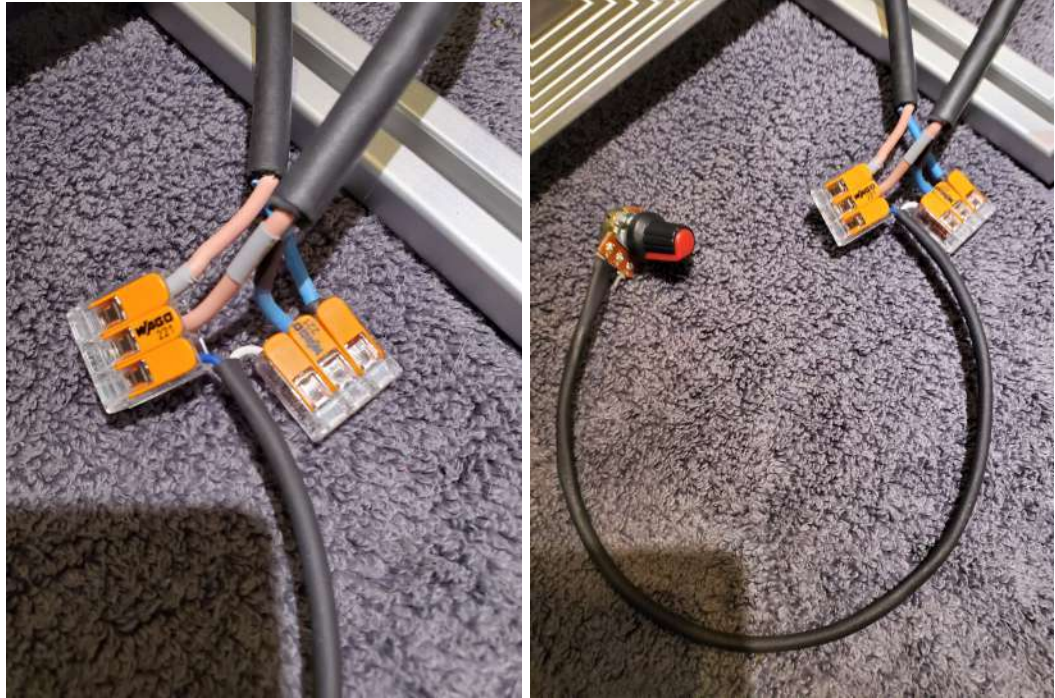
- c. Place the large black DIM output wires next to a single Dimmer Adjustment Pot. The Dimmer Adjustment Pot should have a 3 Terminal Wago Solderless connector on the Blue wire and one on the White wire.



- d. Connect the DIM+ wires from BOTH drivers to the Blue wire on the Dimmer Adjustment Pot



- e. Connect the DIM- wires from Both drivers to the White wire on the Dimmer Adjustment Pot. The wiring should look like this when complete:



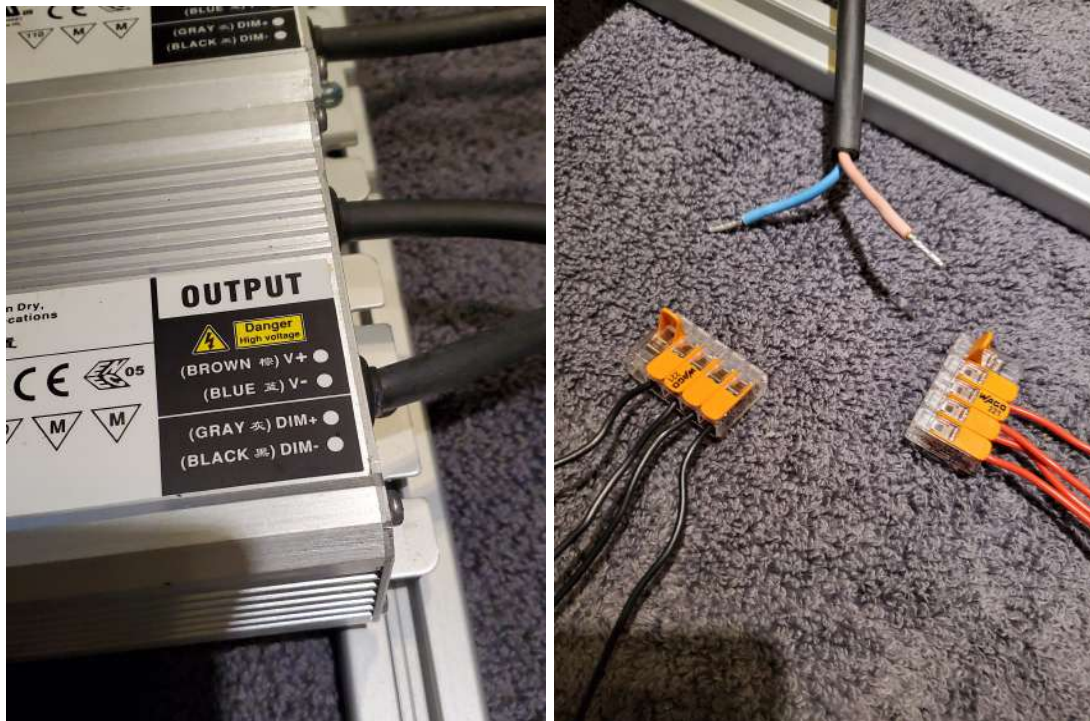
NOTE: When the dimmer wiring is complete, you can use 2 sided tape to mount the dimmer knob to the Universal Driver Mount extrusion.

G. Wiring the Lightstrips to the Driver

- a. Previously you wired all of the Red and Black wires to your Lightstrips per either the Meanwell Parallel OR Series Driver Wiring Instructions diagrams provided above.

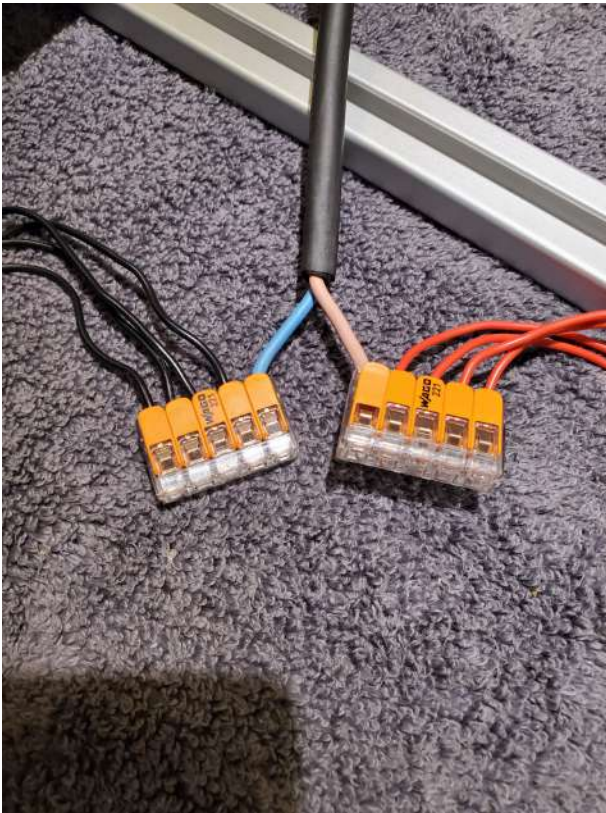
Parallel Driver Wiring Instructions

- a. Find the Output Section of a SINGLE driver and locate the single large Black wire with the 2 smaller V+ and V- wires protruding from it.



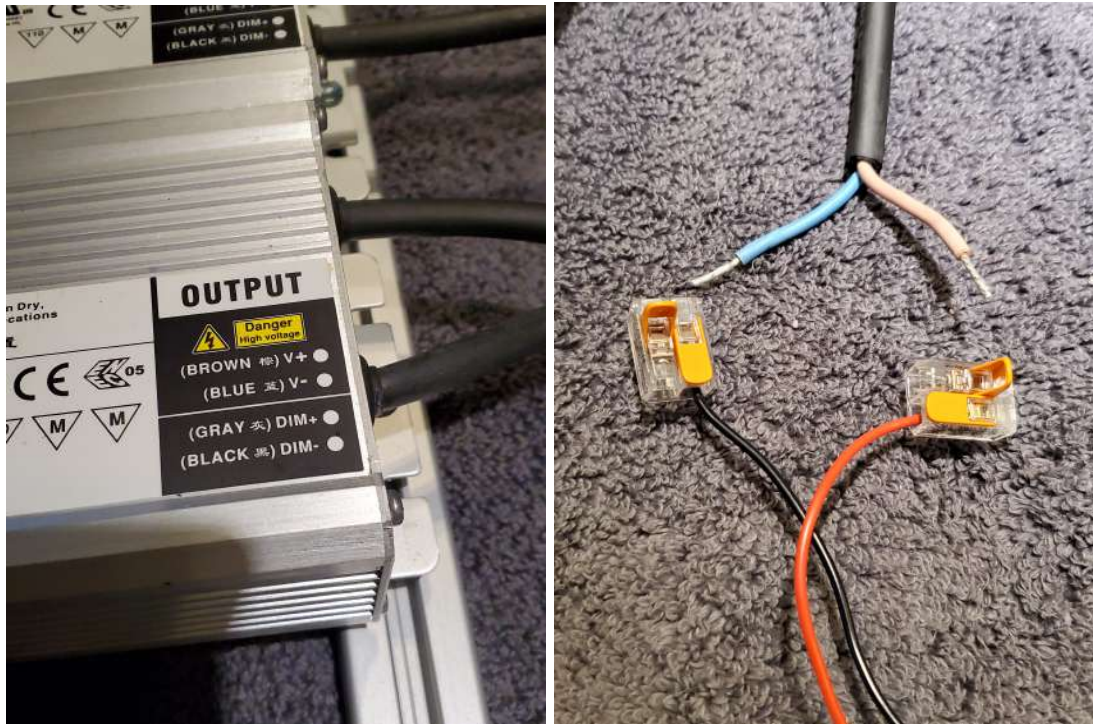
- b. Grab the 5 terminal Wago Solderless Connectors you previously wired to the Red (+) wires and connect the open terminal on the Wago to the V+ Output wire from a Single Driver.
- c. Grab the 5 terminal Wago Solderless Connectors you previously wired to the Black (-) wires **from the same set of lightstrips** and connect the open terminal on the Wago to the V- Output wire **from the same driver**.

- d. Repeat the steps above for the SECOND driver, wiring the strips from the other half of your fixture. When complete you will have 2 sets of Wago Solderless connectors that look like this (NOTE: Only one driver/one set of Wago connectors is shown in the pic):



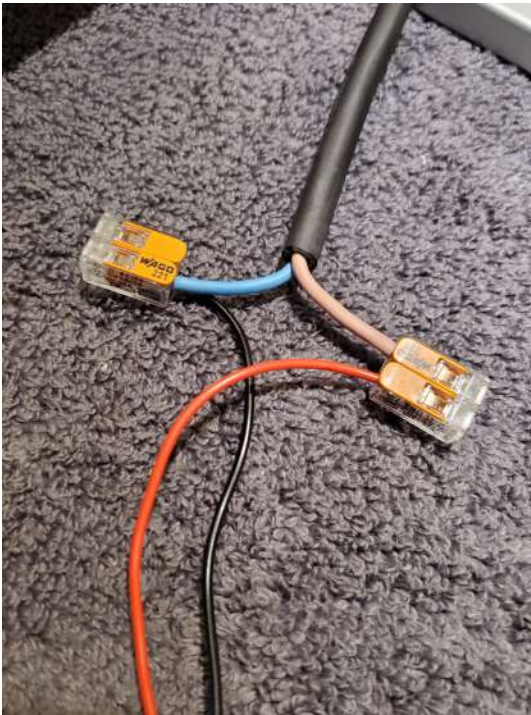
Series Driver Wiring Instructions

- a. Find the Output Section of a SINGLE driver and locate the single large Black wire with the 2 smaller V+ and V- wires protruding from it.



- b. Grab the 2 terminal Wago Solderless Connectors you previously wired to the Red (+) wires of **a set of SERIES WIRED lightstrips** and connect the open terminal on the Wago to the V+ Output wire from a Single Driver.
- c. Grab the 2 terminal Wago Solderless Connectors you previously wired to the Black (-) wires **from THE SAME SET OF SERIES WIRED lightstrips** and connect the open terminal on the Wago to the V- Output wire **from the same driver**.

- d. Repeat the steps above for the SECOND driver, wiring the strips from the other half of your fixture. When complete you will have 2 sets of Wago Solderless connectors that look like this (NOTE: Only one driver/one set of Wago connectors is shown in the pic):



IMPORTANT NOTE: IF YOU HAVE ANY DOUBTS AT ALL ABOUT WIRING, PLEASE CONTACT US WITH ANY QUESTIONS BEFORE YOU ATTEMPT TO POWER UP THE LIGHT.

****** PLEASE DOUBLE and TRIPLE CHECK ALL WIRING CONNECTIONS PRIOR TO POWERING ON YOUR LIGHT.***

Your wiring is functional now, but not necessarily complete.

If you didn't take steps to route your wiring through the channels in the Frame and Driver mount extrusion (as suggested earlier), we highly recommend you clean up your wiring by attempting to run as much of the wiring through the Frame and Driver Mount extrusion. It will both clean up your build and reduce the number of wires in your grow which could get caught or snagged causing problems for your light.

Good Luck with Your Grow!!
#TeamDank