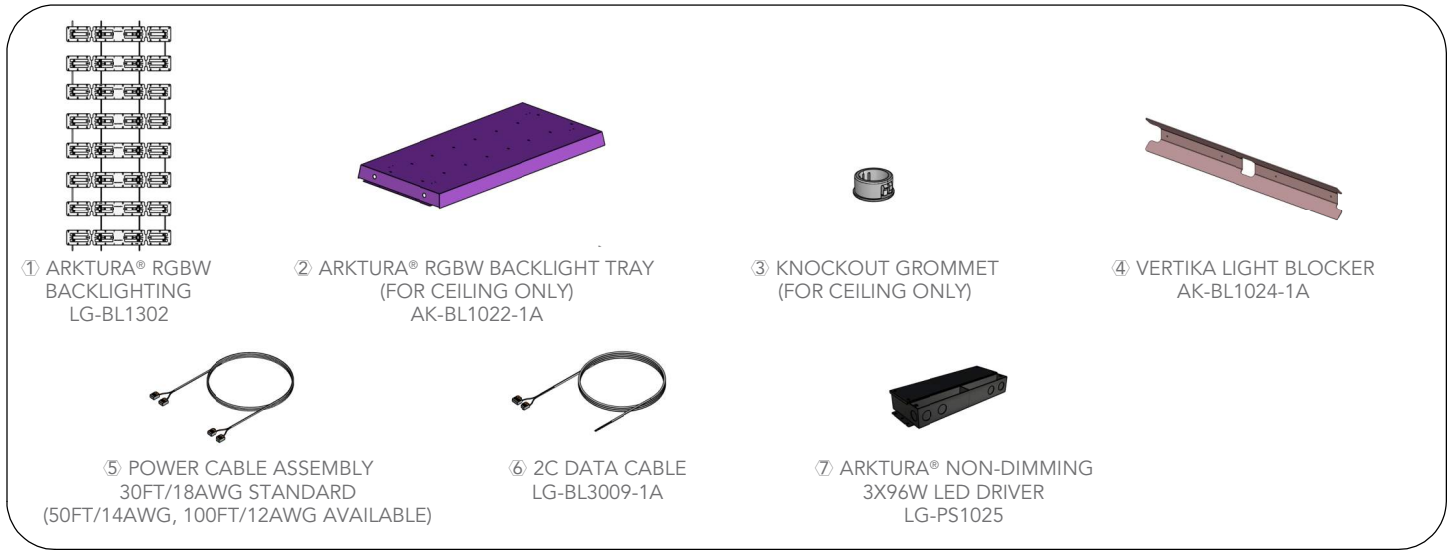


ARKTURA® RGBW BACKLIGHTING

SUPPLIED PARTS LIST



① ARKTURA® RGBW BACKLIGHTING LG-BL1302

② ARKTURA® RGBW BACKLIGHT TRAY (FOR CEILING ONLY) AK-BL1022-1A

③ KNOCKOUT GROMMET (FOR CEILING ONLY)

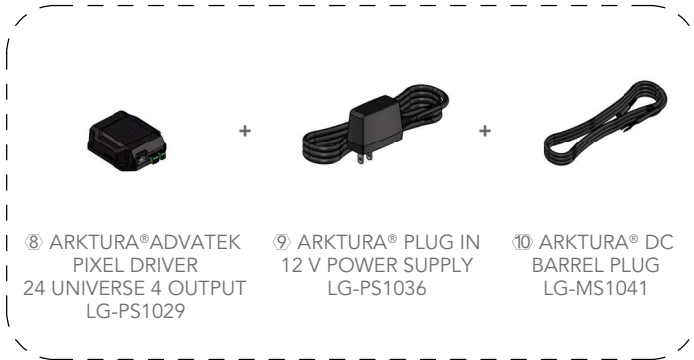
④ VERTIKA LIGHT BLOCKER AK-BL1024-1A

⑤ POWER CABLE ASSEMBLY 30FT/18AWG STANDARD (50FT/14AWG, 100FT/12AWG AVAILABLE)

⑥ 2C DATA CABLE LG-BL3009-1A

⑦ ARKTURA® NON-DIMMING 3X96W LED DRIVER LG-PS1025

PIXEL DRIVER KIT 24U: AK-BL3007-1A



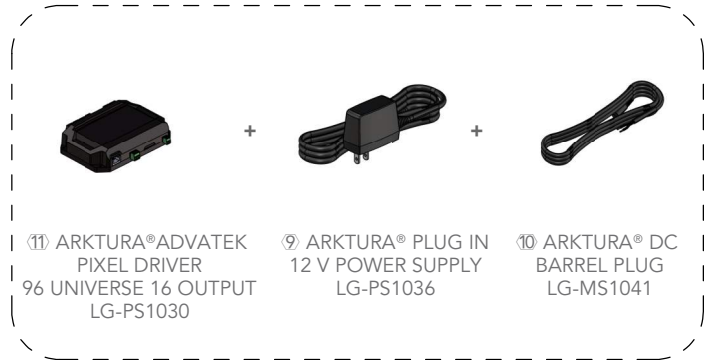
⑧ ARKTURA® ADVATEK PIXEL DRIVER 24 UNIVERSE 4 OUTPUT LG-PS1029

⑨ ARKTURA® PLUG IN 12 V POWER SUPPLY LG-PS1036

⑩ ARKTURA® DC BARREL PLUG LG-MS1041

OR

PIXEL DRIVER KIT 96U: AK-BL3008-1A

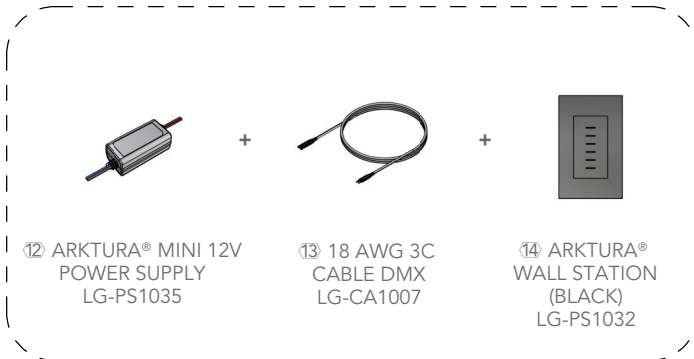


⑪ ARKTURA® ADVATEK PIXEL DRIVER 96 UNIVERSE 16 OUTPUT LG-PS1030

⑨ ARKTURA® PLUG IN 12 V POWER SUPPLY LG-PS1036

⑩ ARKTURA® DC BARREL PLUG LG-MS1041

WALL CONTROL KIT BLACK - AK-BL3005-1A



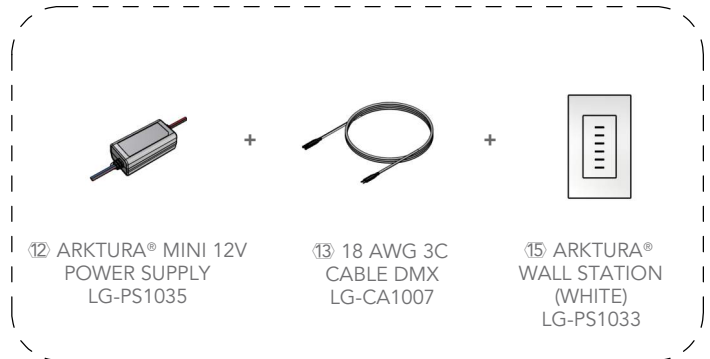
⑫ ARKTURA® MINI 12V POWER SUPPLY LG-PS1035

⑬ 18 AWG 3C CABLE DMX LG-CA1007

⑭ ARKTURA® WALL STATION (BLACK) LG-PS1032

OR

WALL CONTROL KIT WHITE - AK-BL3006-1A



⑫ ARKTURA® MINI 12V POWER SUPPLY LG-PS1035

⑬ 18 AWG 3C CABLE DMX LG-CA1007

⑮ ARKTURA® WALL STATION (WHITE) LG-PS1033

NOT SUPPLIED PARTS LIST - REQUIRED FOR INSTALLATION



⑯ #4 SCREW RECOMMENDED FOR WALL INSTALLATIONS

⑰ SINGLE GANG J-BOX WALL STATION

⑱ #4 SHEET METAL SCREW RECOMMENDED FOR CEILING INSTALLATIONS

*Note: Actual parts may vary slightly in appearance.

ARKTURA® RGBW BACKLIGHTING GUIDELINES

STORAGE AND HANDLING

Product shall be stored in a dry interior location and shall remain in boxes prior to installation to avoid damage. The boxes shall be stored in crated orientation and not stacked with any added weight. Proper care should be taken when handling to avoid damage or soiling.

DELIVERY AND SITE CONDITIONS

Wall Light Fixture Weight: 2 lbs. Ceiling Light Fixture Weight: 6 lbs.
The product will be shipped in a crate with an average size of: 48"L x 51"W x 84"H
Crate weight (may exceed in some cases) is approximately: 780 lbs

All wet work must be complete and dry prior to installation. Installation shall be carried out where the temperature is between -4°F and 122°F. These temperatures and conditions must be maintained throughout the life of the product or warranty will be void.

SETUP AND UNPACKAGING

Warning: Use extreme care when slitting tape with a knife to prevent damage to the product inside.

Product container should only be opened in a clean area, free of construction dust. Wearing white cloth gloves, carefully remove the components from the packing materials. Verify that all items listed on the packing list are included.

Inspect the product after opening. If product appears to be damaged or defective on visual inspection, do not install and contact your Arktura representative immediately.

ASSEMBLY NOTES AND WARNINGS

- Read and follow all instructions before installation and save these instructions for future reference. Failure to follow these instructions could lead to damage to the system and to personal injury or death.
- Personal Protective Equipment should be worn at all times during the installation process.
- Do not attempt to modify the unit or these instructions. Arktura does not assume any liability for any installation not in compliance with these instructions.
- Installation should only be conducted by qualified personnel, in accordance with all applicable codes & standards, including fire-safety and seismic codes and standards.
- Use clean nitrile gloves while handling material; if stepping between products during assembly wear clean protective booties to prevent soiling.
- Keep product unit dry and clean during installation.
- Layout and assemble product on a clean surface to prevent damaging the finish.
- If product requires assembly, use two or more people to prevent damage or injury.
- Any wiring required for Arktura Light Fixtures should be performed by a qualified electrician in accordance with all applicable codes and standards.

IMPORTANT ELECTRICAL SAFETY INSTRUCTIONS

- Turn off power at main switch before installing, inspecting, or modifying the system.
- Follow all NEC and local codes.
- Product must be powered by a Class 2 Constant Voltage LED Power Supply (Driver).
- This product is intended for interior or exterior use. Suitable for dry, damp, and wet locations.

FIXTURE SPECIFICATIONS

Refer to Arktura® RGBW Addressable Backlighting Specs sheet for fixture specifications and wiring instructions.

Fixtures Power: Standard 65 Watts per 2x4 assembly.

Power Supply: Arktura® 24V Non-Dimming LED Driver 3x96

Refer to driver spec sheet for wiring diagrams and installation instructions.

Refer to the Arktura Warranty, Terms and Conditions of Sale for the product warranty and return information.

Drawings contained in this document, and these instructions, reflect typical conditions for installing the product shown. Such drawings and instructions should not be construed as a substitute for an engineering or architectural design. Such drawings and instructions do not reflect unique conditions or special requirements of local codes, laws, statutes or regulations that may be applicable. Arktura LLC does not assume any liability for the accuracy or completeness of the drawings or instructions for a specific installation or their fitness for a particular purpose. Purchasers are advised to consult with locally-licensed design professionals to ensure compliance with all legal requirements.

The information contained in this drawing is the sole property of Arktura LLC. Any reproduction in part or as a whole without the written permission of Arktura LLC is prohibited. Any use of information contained in these documents for construction is prohibited without written permission from Arktura LLC. Some of the details contained within may also be copyrighted by Arktura LLC.

ARKTURA® RGBW BACKLIGHTING INSTALLATION

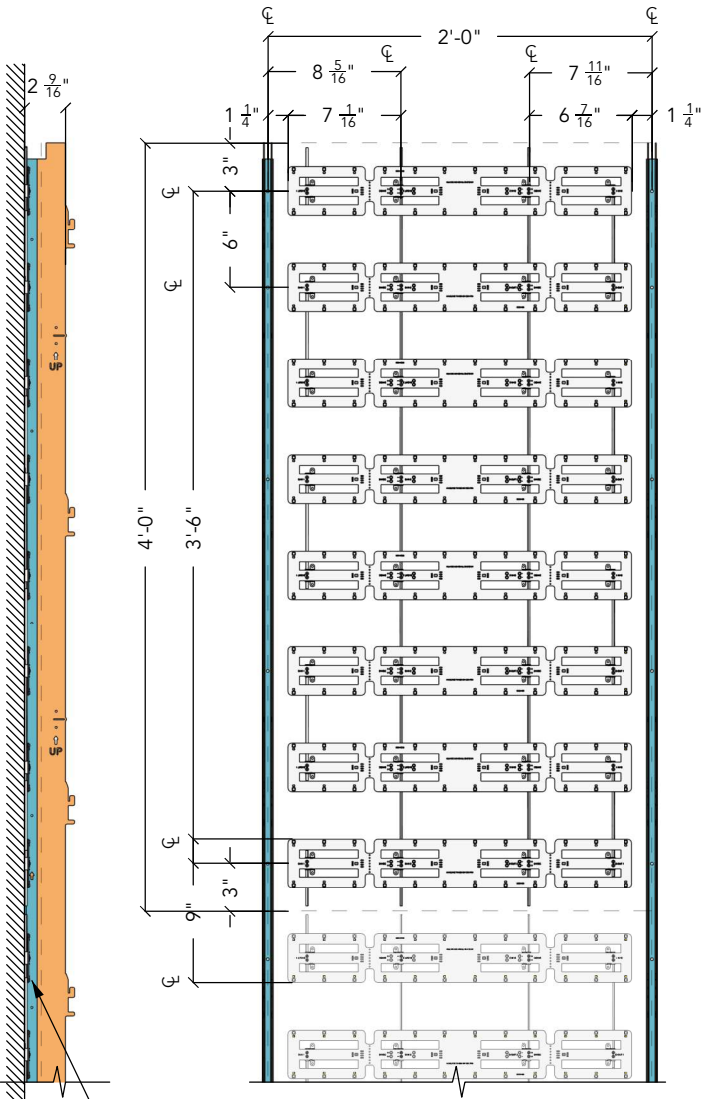
WALL INSTALLATION

Arktura® RGBW Backlighting Fixture Weight: 6 lbs

Note: Not all holes are required for attachment. At minimum, the top, bottom, and middle rung need to be secured to the substrate.

SECTION

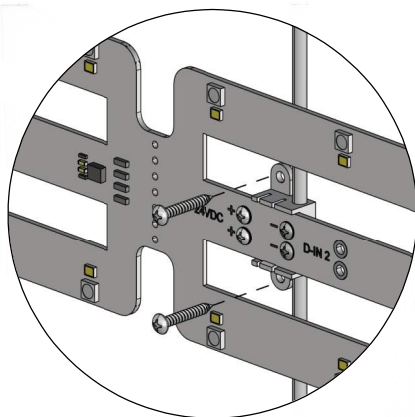
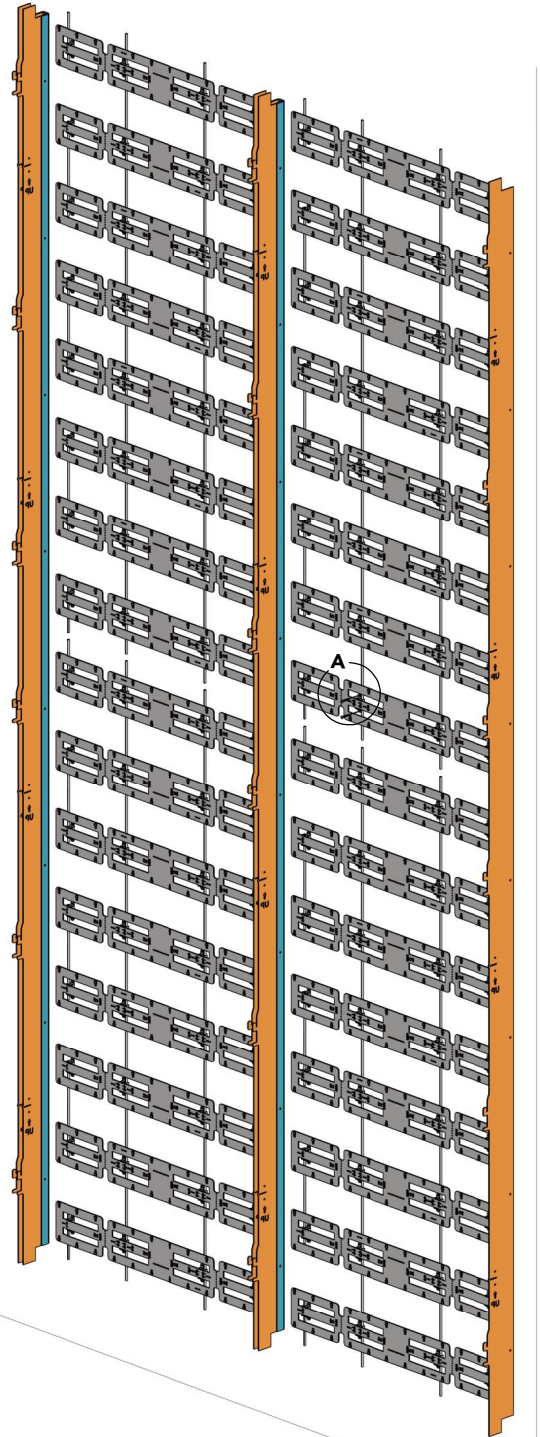
ELEVATION



LIGHT FIXTURE

AXONOMETRIC

Attach the Arktura® RGBW Backlighting system directly to the wall.



- A Use 16 #4 screws to attach system to wall. Attach top screws first, followed by screws at the bottom.

ARKTURA® RGBW BACKLIGHTING INSTALLATION

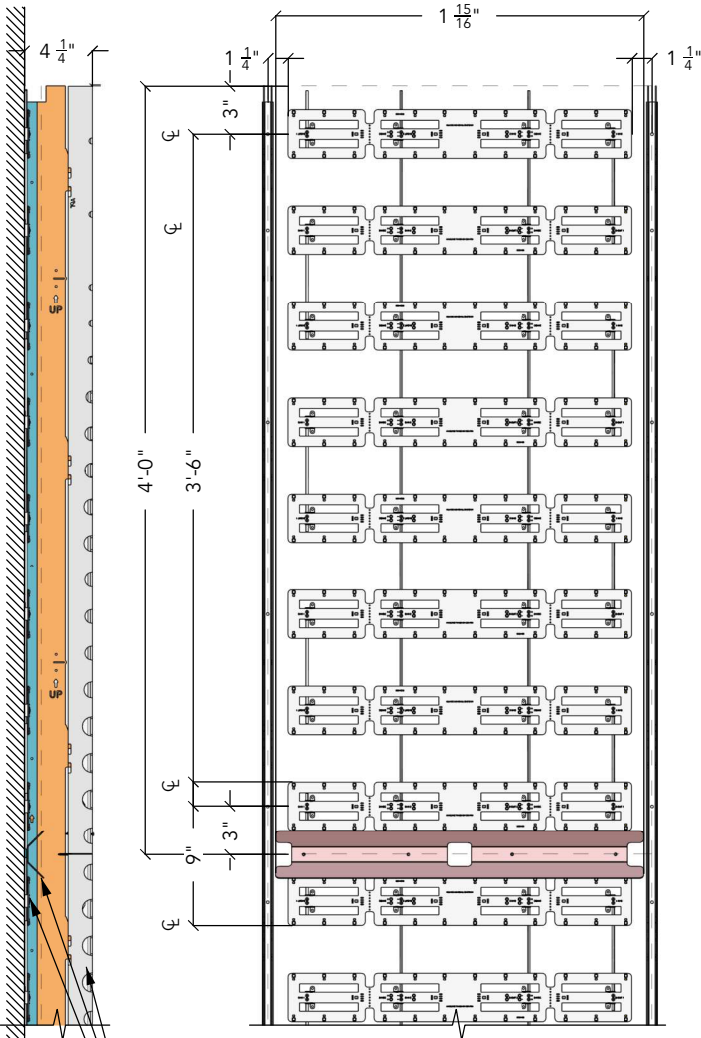
WALL INSTALLATION

Arktura® RGBW Addressable Backlighting Fixture Weight: 6 lbs

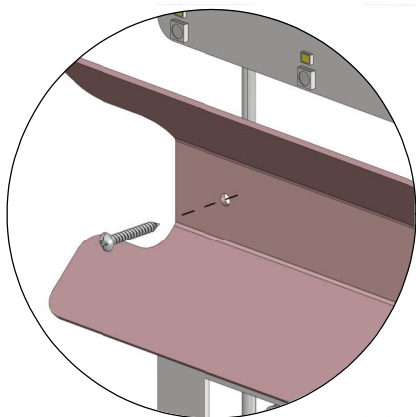
Note: Not all holes are required for attachment. At minimum, the top, bottom, and middle rung need to be secured to the substrate.

SECTION

ELEVATION



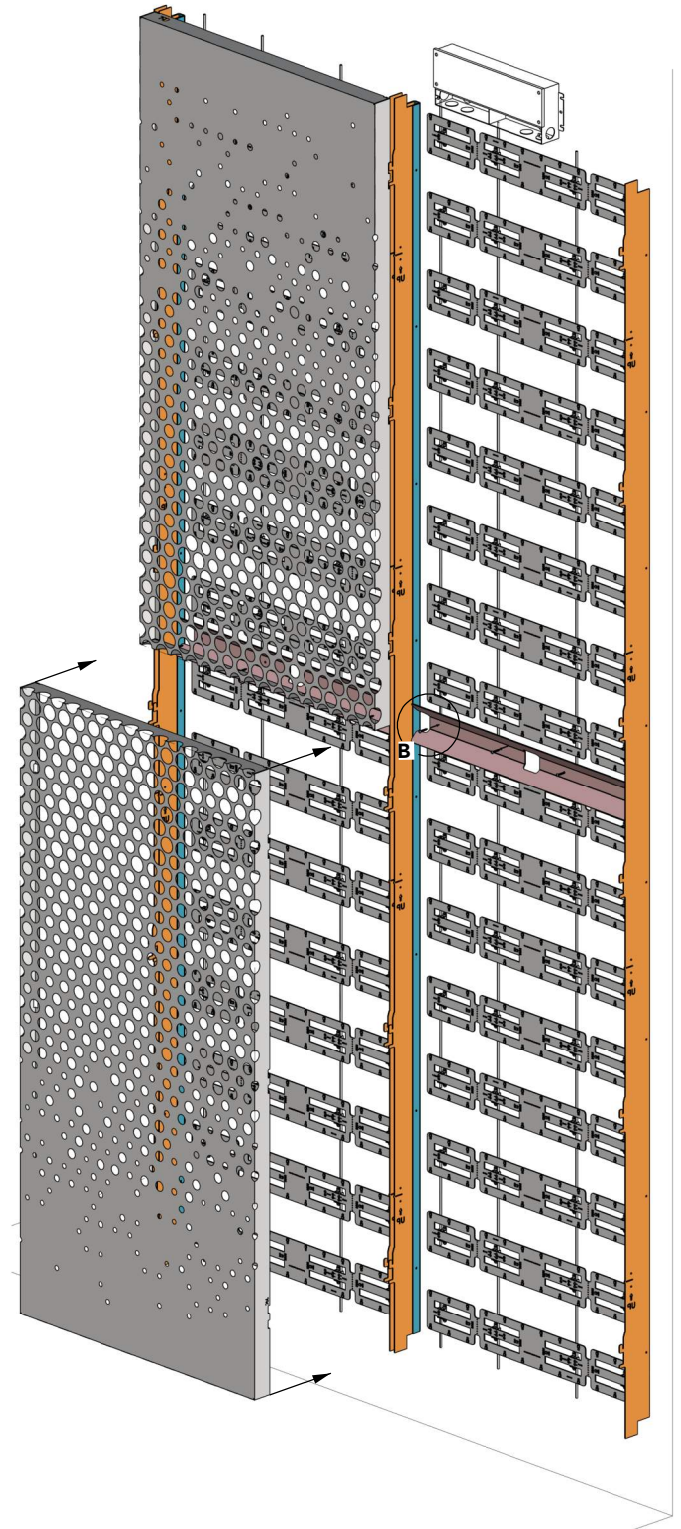
TORSION PANEL
VERTIKA LIGHT BLOCKER
LIGHT FIXTURE



AXONOMETRIC

Attach the Arktura® RGBW Backlighting system directly to the wall.

Note: Driver placement and installation to be determined by electrician.



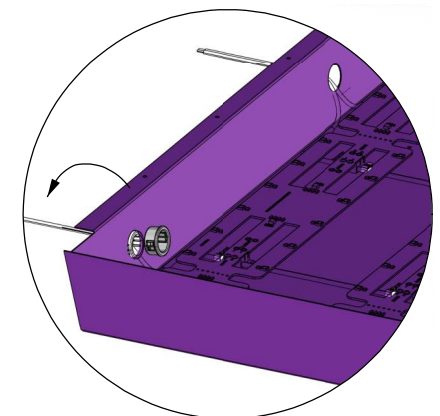
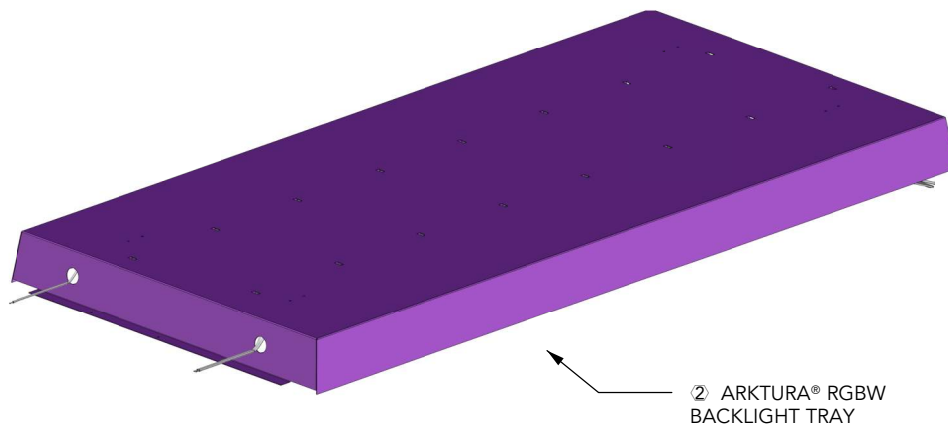
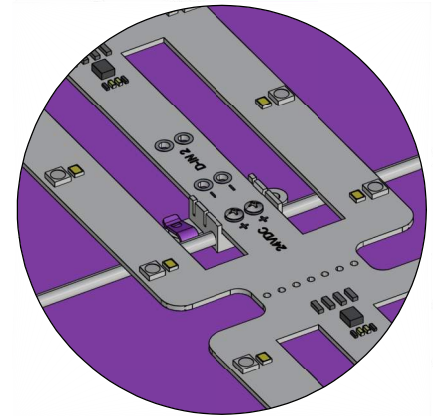
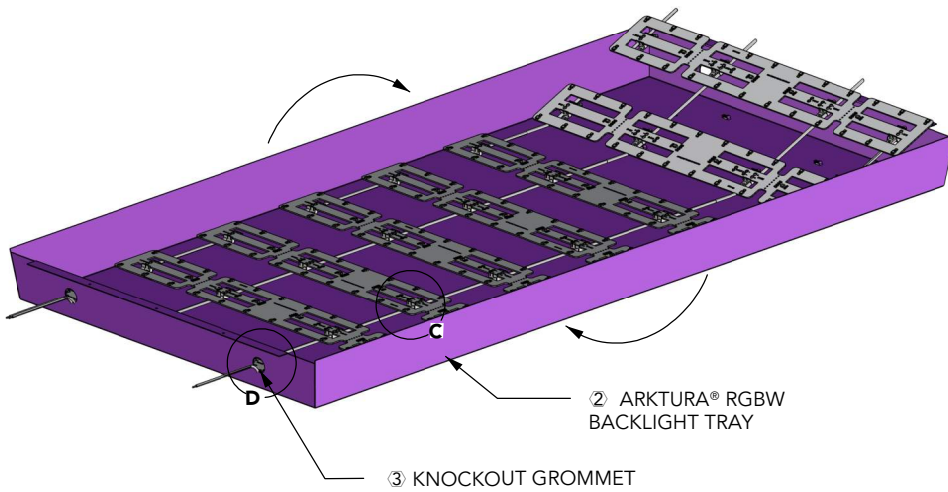
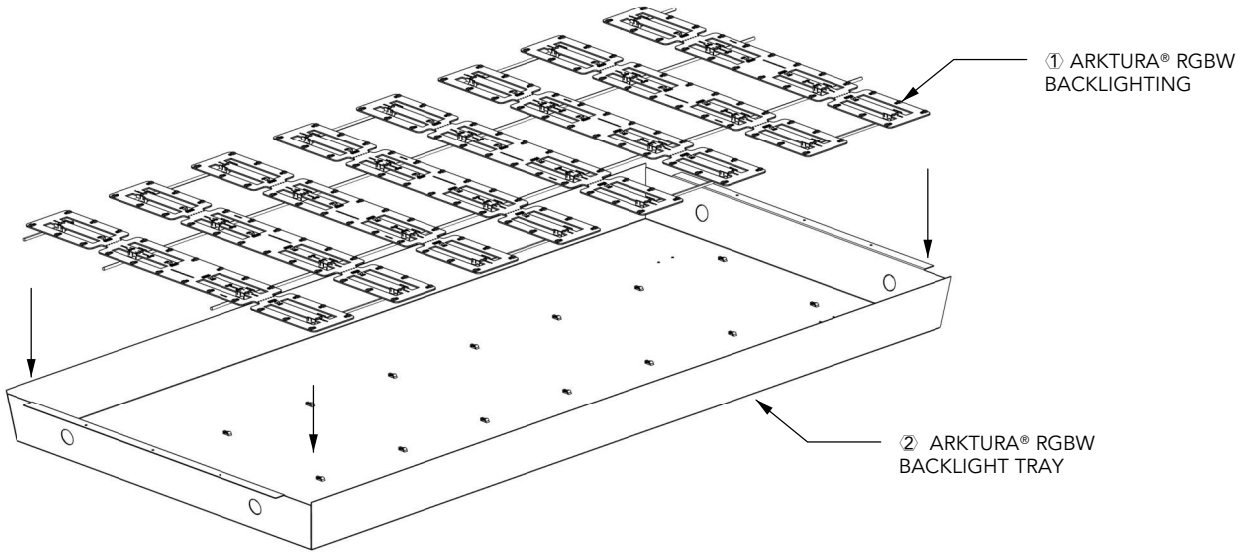
B Use 16 #4 screws to attach the 4 Vertika light blocker system to the wall.

ARKTURA® RGBW BACKLIGHTING INSTALLATION

ARKTURA® LIGHT TRAY ASSEMBLY FOR CEILING INSTALLATION

For ceiling installation only.

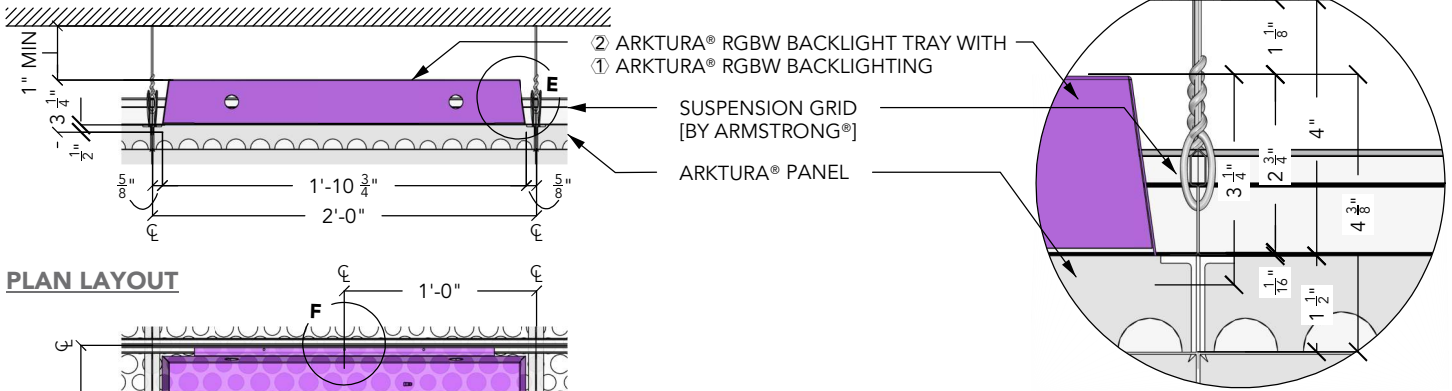
Attach the ① Arktura® RGBW Backlighting to the ② Arktura® RGBW Backlight Tray by using the Tabs provided. Attach the Tray Attachment between the Lights and the Light Tray.



CEILING INSTALLATION (CONT.)

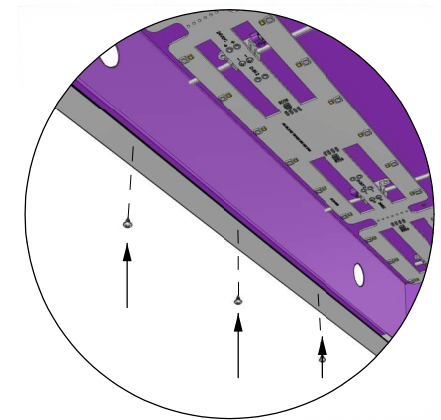
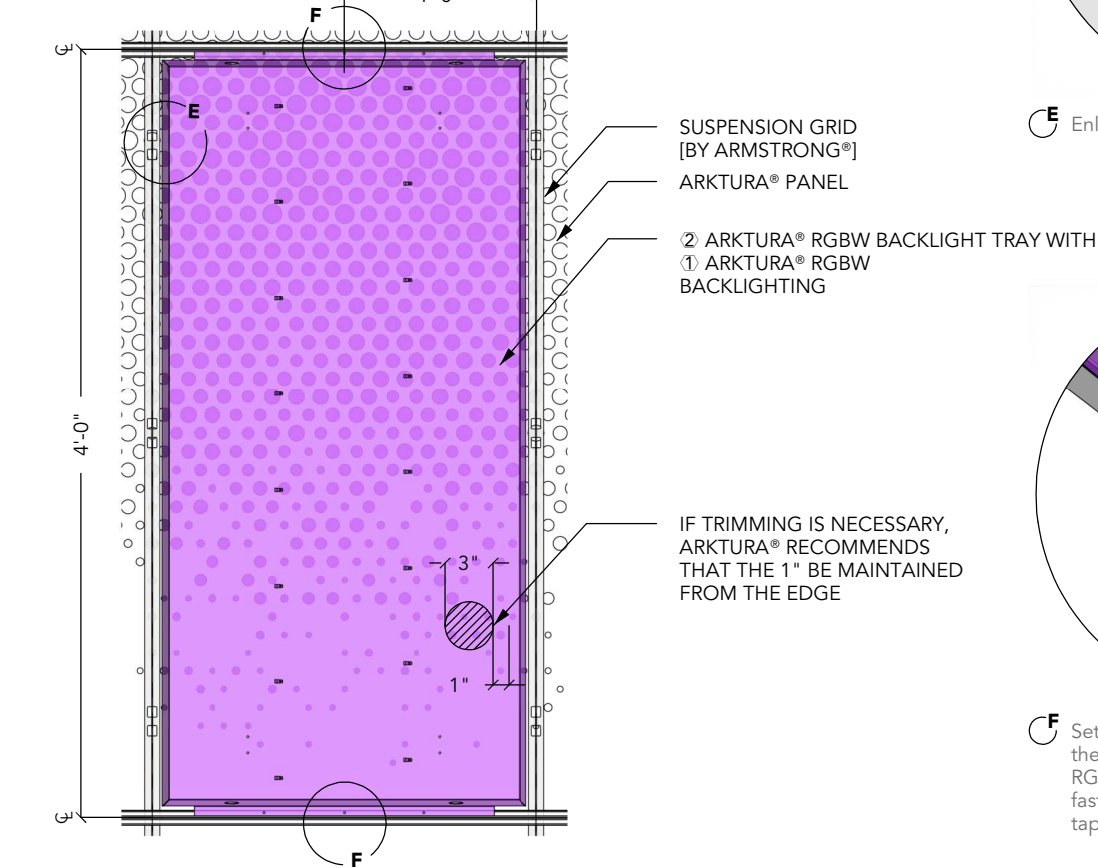
Arktura® RGBW Backlighting with Arktura® RGBW Backlight Tray Weight: 6 lbs.

ELEVATION



E Enlarged View

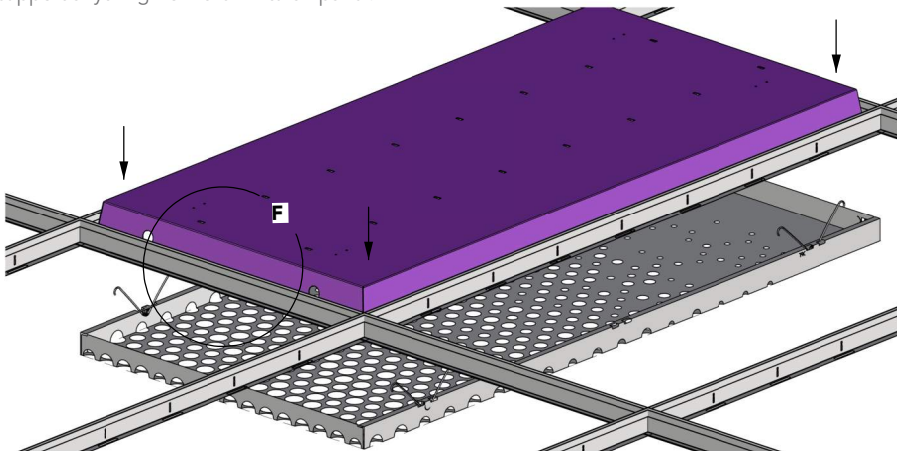
PLAN LAYOUT



F Set ① Arktura® RGBW Backlighting onto the T-Grid as shown. The ② Arktura® RGBW Backlight Tray needs to be fastened to T-Grid face with (3) self tapping (5) screws on each side.

AXONOMETRIC

Carefully place the Arktura® Light system centered on top of the T-Grid system, supported on top of the T-Grid. Arktura® Panel should be installed after light is installed and wired. Do not support anything from the Arktura® panel.

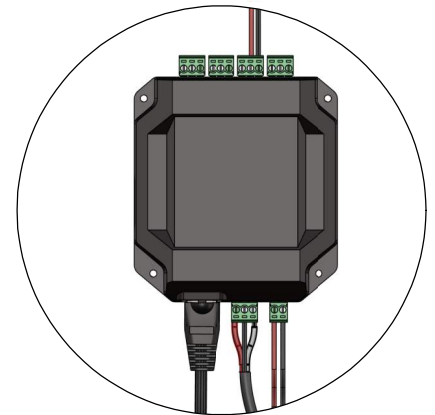
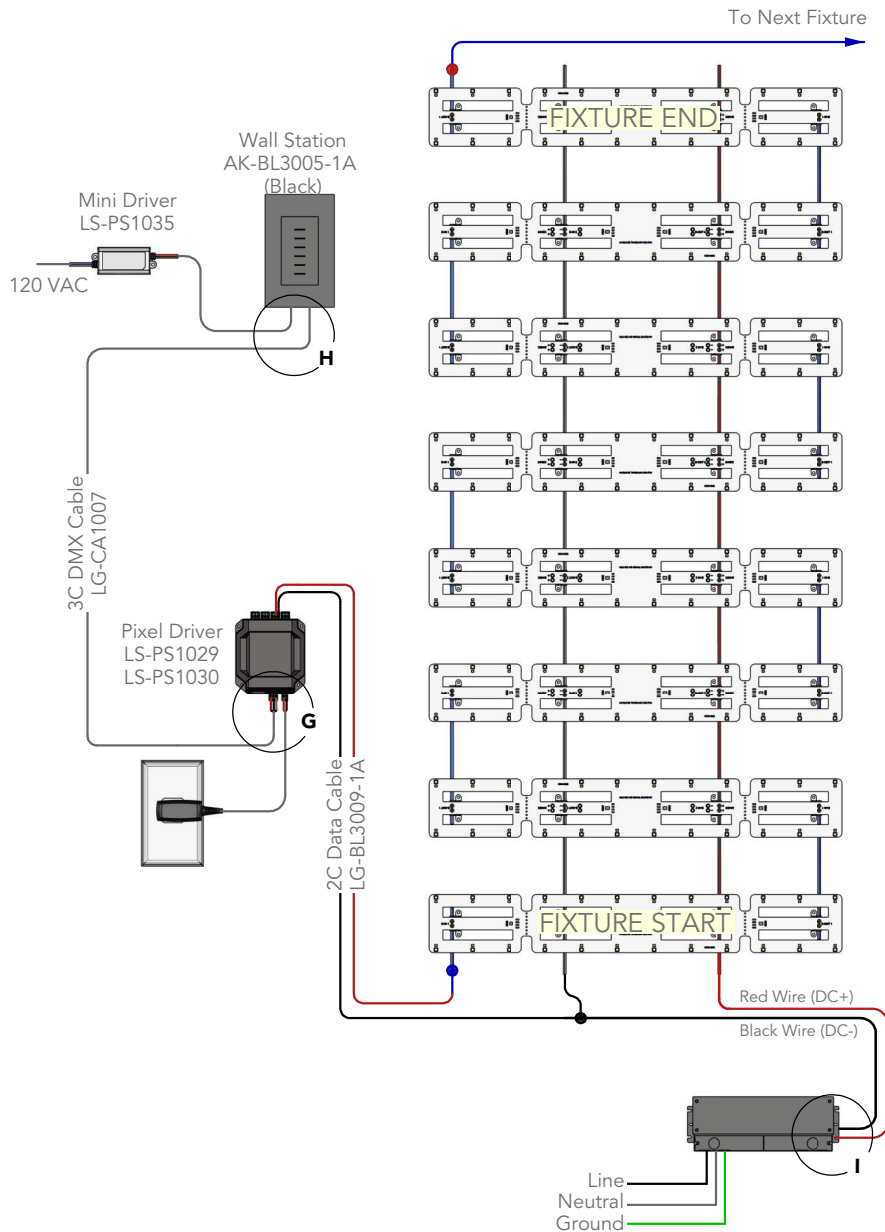


ARKTURA® RGBW BACKLIGHTING WIRING INSTRUCTIONS

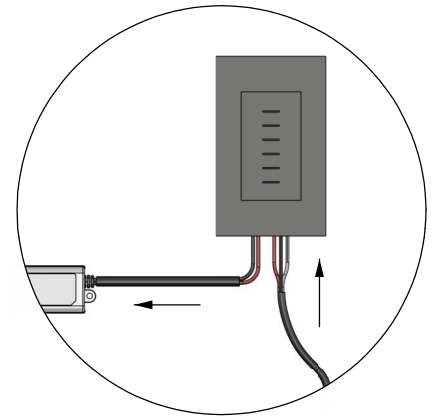
TYPICAL WIRING DIAGRAM

- Identifying the main elements of the diagram, such as power supplies, controllers, light fixture. Each is represented by clearly defined labels.
- Note how the power flows. From a 120 VAC source to a controller) or how the signal is transmitted (such as a DMX or Ethernet line). The lines in the diagram show electrical or communication connections.
- Make sure the wires are connected correctly, respecting colors (e.g., red for positive, black for negative) and designated terminals (+, -, data, ground, etc.).
- Pay attention to footnotes, labels, and references to other pages in the manual. These indications often provide important details for a safe and functional installation.
- For more detailed information about Auragrams™, please refer to Arktura® RGBW Brochure.
- For more detailed information about Spec Sheets, please refer to Arktura® RGBW Spec Sheet.

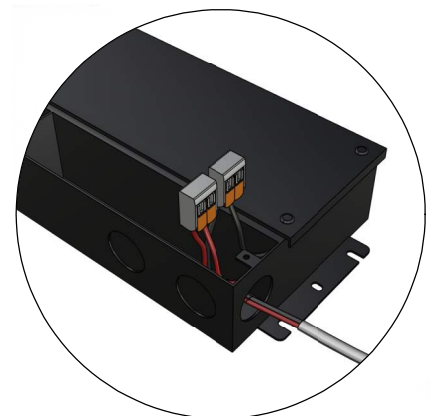
- Data Line INPUT
- Data Line OUTPUT



G CONNECTION TO THE CONTROLLER
Refer to page 9 for more information on this detail.



H CONNECTION TO THE JBOX
Refer to page 10 for more information on this detail.



I LOW VOLTAGE CONNECTION
Connect light fixture to the Arktura® Non-Dimming Driver, 1x Fixture per 1x Output

Cable Gauge	Max Cable Length (ft)
18 AWG Cable	0-30 ft
16 AWG Cable	30-60 ft
14 AWG Cable	60-100 ft

*Arktura® recommends using CL39 or CMP-rated cable with UL-listed wire connectors, or an equivalent solution, as permitted by your local electrical code and accordance with your specific installation requirements.

ARKTURA® RGBW BACKLIGHTING WIRING INSTRUCTIONS

ARKTURA ADVATEK PIXEL DRIVER - INSTALLATION REQUIREMENTS

- The unit must be installed according to the mounting methods described below.
- Do not fasten to objects that generate heat, such as a power supply.
- Do not install or store the device exposed to direct sunlight.
- This device is suitable for indoor installation only.
- Ensure device ambient temperatures do not exceed the limits detailed in the specifications section

SUPPLYING POWER

- Power is applied to the pixel driver via the small pluggable screw terminal connector. The screws should be loosened for wire insertion and then tightened again, providing a highly robust and secure connection. Polarity for the connector is clearly marked on the lid. See Step 1.

AUXILIARY PORT

- Auxiliary port can be used as either an input or an output. As an output, connect DMX devices to the port and control them via sACN or Art-Net. As an input, connect a DMX source directly to the PixLite and use the data source for your pixels, or as a trigger source, or as a live intensity data source. See step 2

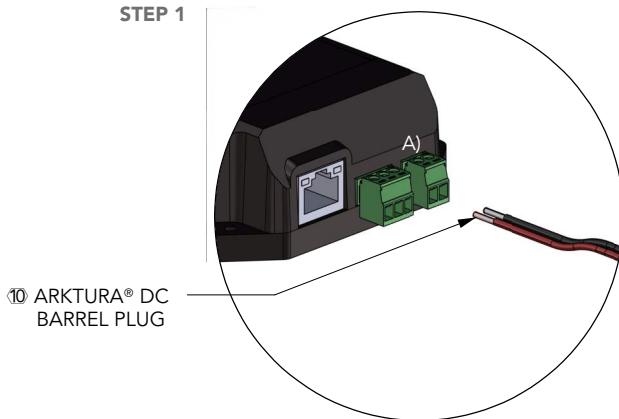
ETHERNET PORT

- Ethernet data is connected via a standard network cable to the front-facing Ethernet port of the unit. This connection enables the use of SHOWTime™, a feature that allows users to create, record, and play back pixel shows directly from the Advatek Pixel Driver using the built-in microSD slot. See step 3

PIXEL DRIVER OUTPUTS

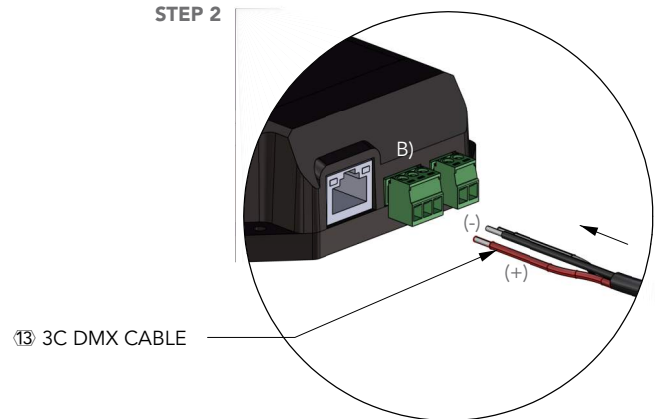
- The pixel lights are connected directly via the 4 pluggable screw terminal connectors on the rear of the unit. Each connector is labelled with its output channel number. See step 4

STEP 1



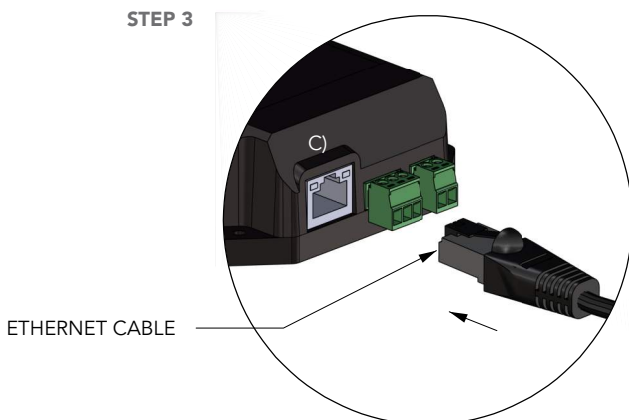
Install the 10 Arktura® DC barrel plug to the (A) Pixel driver power terminal block.

STEP 2



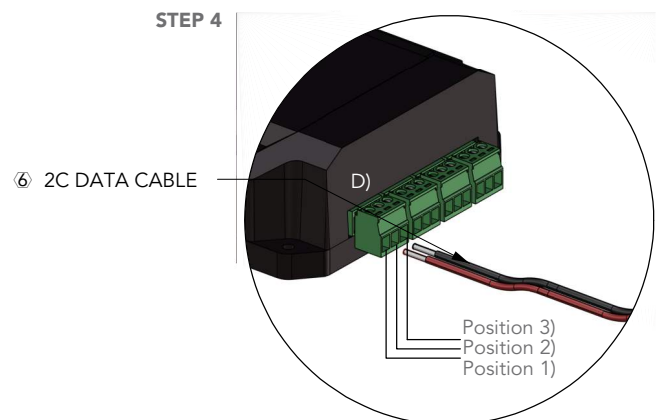
If using the Wall Station Kit Install the provided 13 3C DMX Cable to the auxiliary terminal block on the pixel driver. Connect Red/DMX (+) to position 1, Black/DMX (-) to Position 2, and White/Ground to position 3.

STEP 3



If connecting to a network/3rd party eDMX controller or to access the embedded showtime interface connect an ethernet cable to the, C) ETH port.

STEP 4



Using provided 6 2C Data cable assemblies connect the data and ground wires to each, D) applicable terminal block. Connect the labeled Data wire to position 2), connect the labeled DC (-) ground wire to position 1). Position 3 remains unconnected.

ARKTURA® RGBW BACKLIGHTING WIRING INSTRUCTIONS

WALL CONTROLLER KIT - INSTALLATION REQUIREMENTS

- The unit must be installed according to the mounting methods described below.
- Do not fasten to objects that generate heat, such as a power supply.
- Do not install or store the device exposed to direct sunlight.
- This device is suitable for indoor installation only.
- Ensure device ambient temperatures do not exceed the limits detailed in the specifications section

SINGLE GANG BOX

- Install the Wall Station into a standard single gang electrical box. Secure it firmly using the provided screws, ensuring it is level on the wall. See Step 1.

WALL STATION ASSEMBLY

- Use the supplied 13 3C DMX cable to establish the signal connection between the 14 Wall Station and the pixel controller. In addition, connect the 12 Mini power supply to the Wall Station to ensure proper operation. See step 2

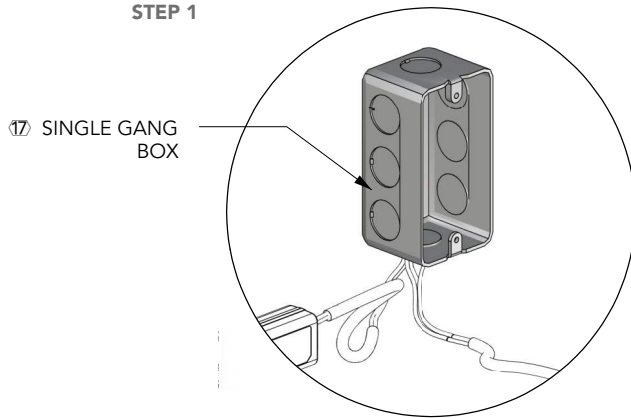
PIXEL DRIVER CONNECTIONS

- Connect the supplied 13 3C DMX cable to the auxiliary terminal block on the pixel driver. Attach the Red/DMX (+) wire to Position 1, the Black/DMX (-) wire to Position 2, and the White/Ground wire to Position 3. Finally, connect the 10 Arktura® DC barrel plug to 8 Arktura® Advatek pixel driver to supply power. See step 3.

PLUG CONNECTION

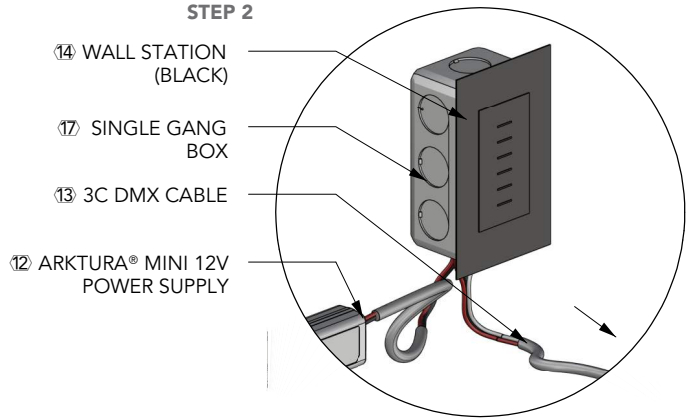
- Connect the 10 Arktura® DC barrel plug connector to the 9 Arktura® plug-in power supply. Finally, connect the power adapter plug to a 120 VAC outlet. See step 4.

STEP 1



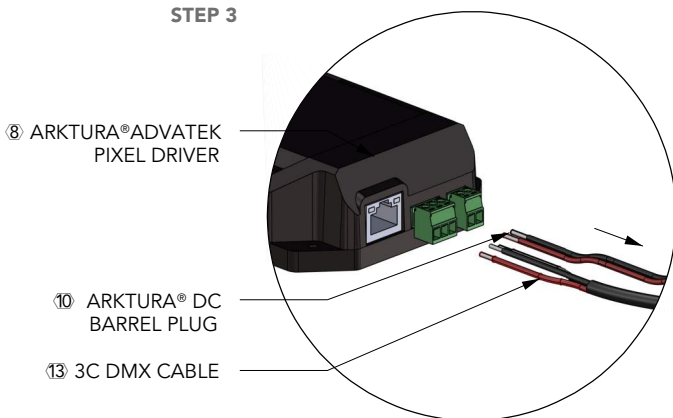
SINGLE GANG BOX

STEP 2



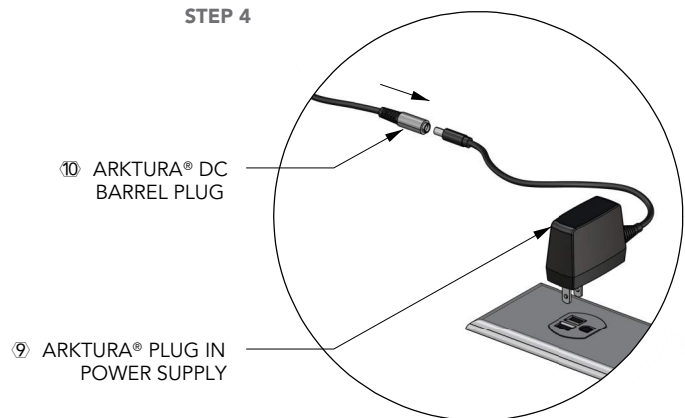
WALL STATION ASSEMBLY

STEP 3



PIXEL DRIVER CONNECTIONS

STEP 4



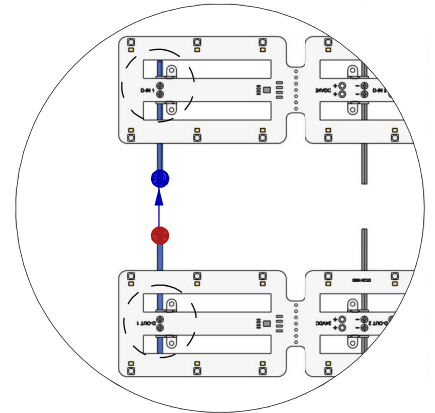
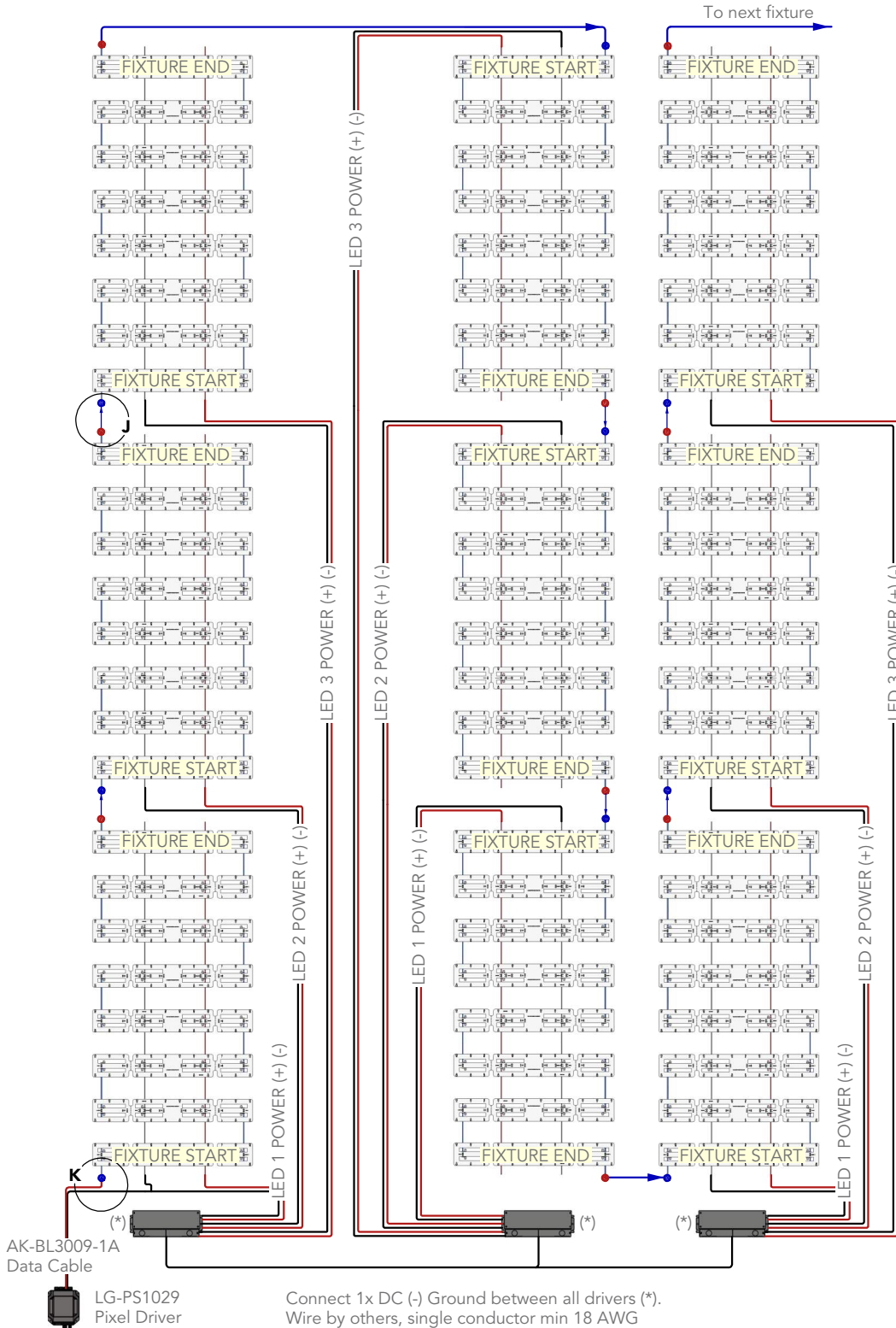
PLUG CONNECTION

ARKTURA® RGBW BACKLIGHTING WIRING INSTRUCTIONS

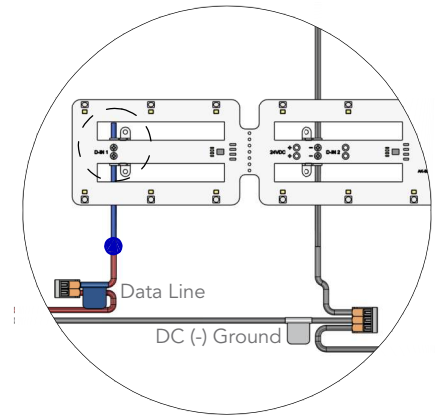
WIRING INSTRUCTIONS

- Disconnect power at circuit breaker before installing, maintaining or modifying the system.
- For power cables see page 8 for recommended wire size per cable length.
- Data runs through the fixture in a serpentine pattern. Refer to the labels on the LED board that indicates data Input and Output connections.
- Each LG-BL1302 Fixtures requires an individual power connection.

Note: Invert every other column of lighting assemblies to maintain proper data connections. Refer to project specific wiring diagrams.



Continue the data connection between light fixtures by connecting the Data Out wire from the final LED board of one assembly to the Data In connection of the next assembly.



Using the provided 2C Data cable assembly, connect the data line from the pixel driver to data wire labeled 'Data In' on first light fixture. At the same connection point connect DC (-) Ground from the light fixture, the pixel driver and the power supply.

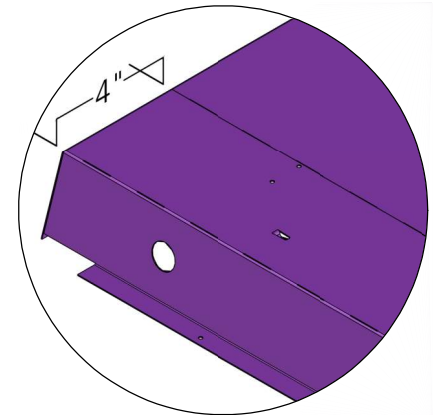
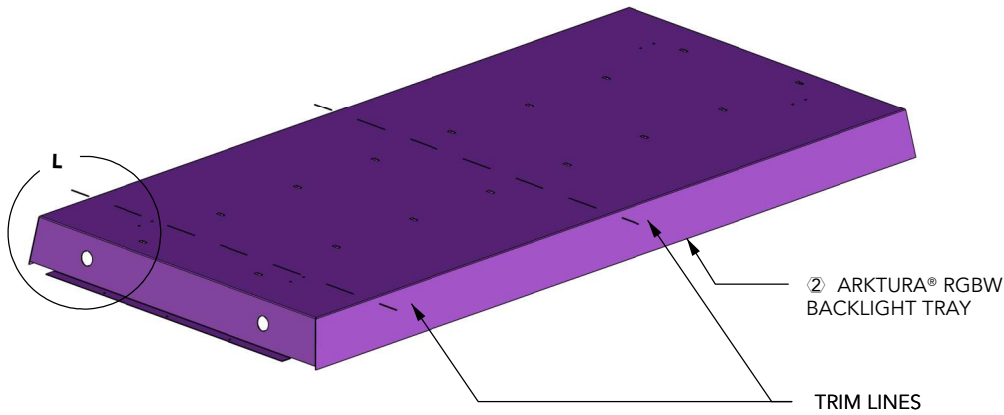
- Data Line INPUT
- Data Line OUTPUT

(*) Arktura Non-Dimming Led Driver LG-PS1025

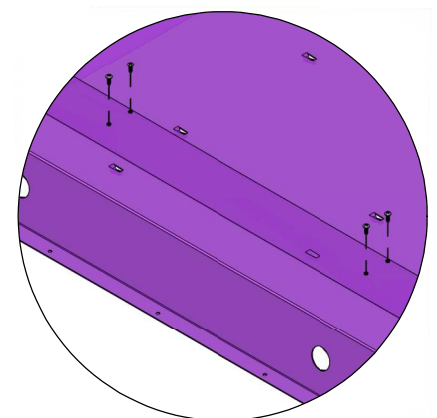
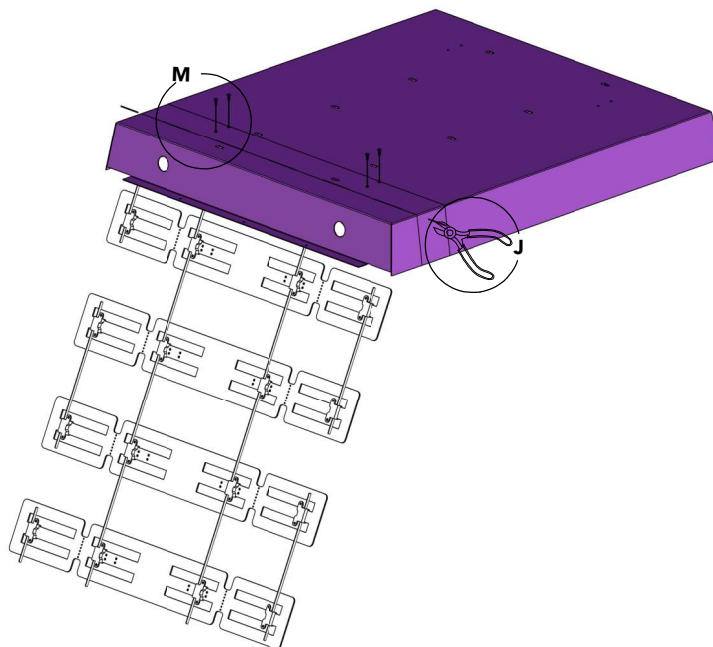
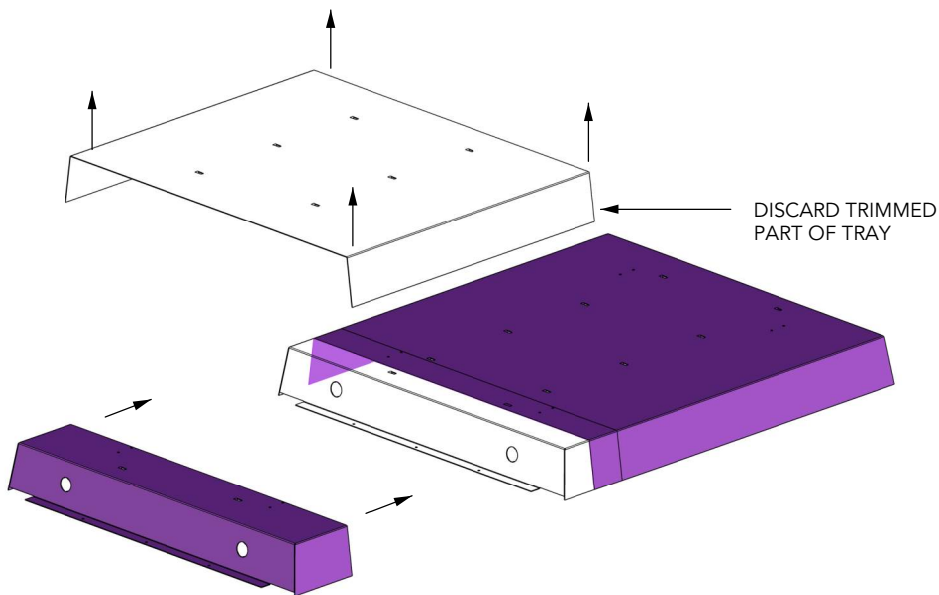
ARKTURA® RGBW BACKLIGHTING MODIFICATIONS

RGBW BACKLIGHT TRAY FIELD TRIMMING

Identify how much of the ② Arktura® RGBW Backlight Tray needs to be trimmed. Keep at least 4" on one side of the Light Tray. Ensure remaining tray length spans between T-Grid and edge trim.



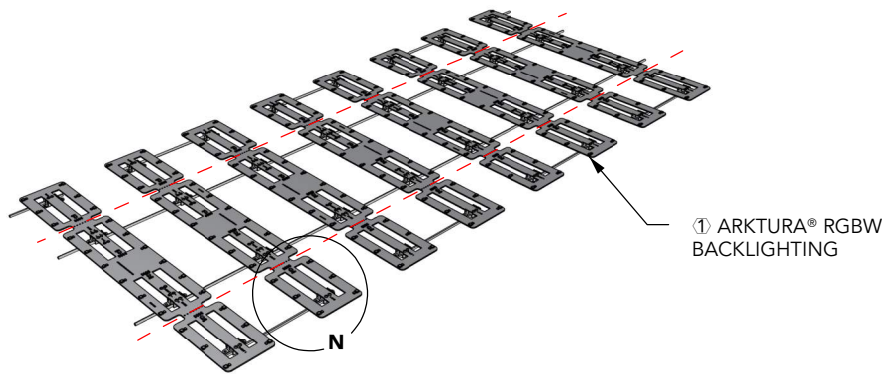
Ⓒ Keep at least 4" from the start of the bend so there is enough material to reattach to the remaining part.



Ⓜ Attach the two trimmed parts together as shown using mechanical fasteners to maintain the tray's form. Remove excess light strips per light instructions.

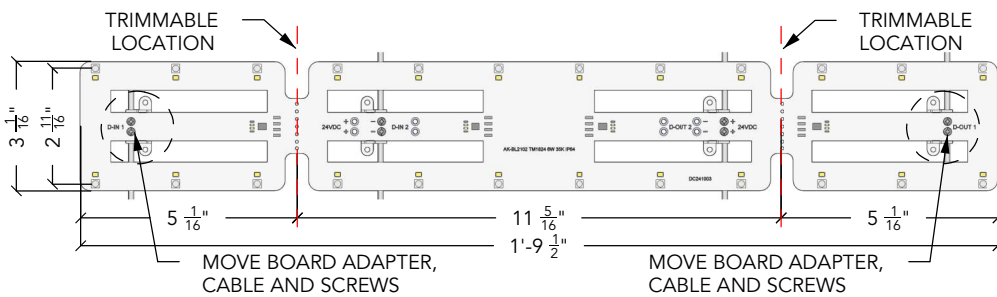
ARKTURA® RGBW BACKLIGHTING MODIFICATIONS

The length of ① Arktura® RGBW Backlighting can be trimmed as needed by cutting the wires along the desired section. The remaining boards are still usable, requiring additional wiring for proper connection.



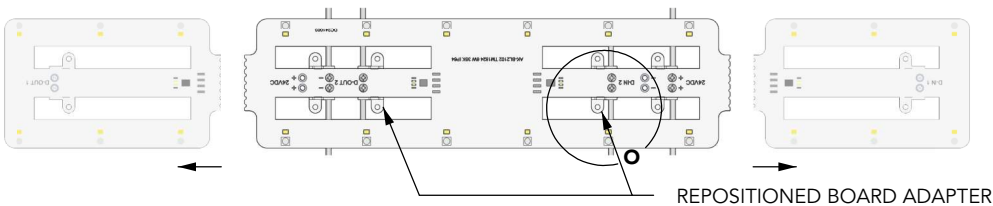
① ARKTURA® RGBW BACKLIGHTING

FULL BACKLIGHT BOARD



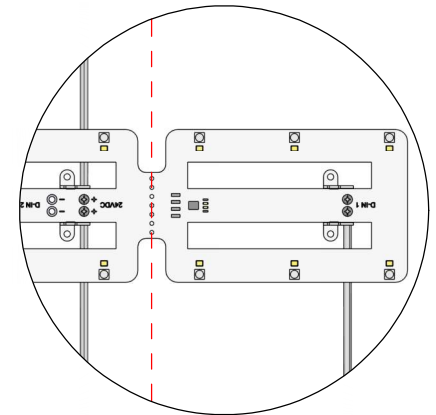
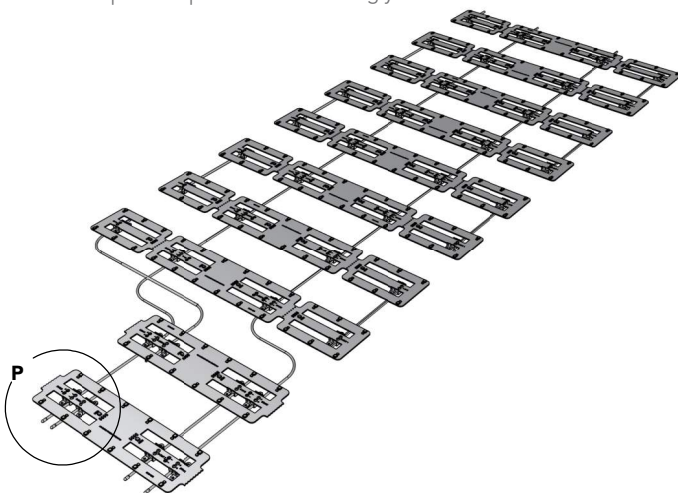
TRIMMED BACKLIGHT BOARD

The remaining sections of the boards are not usable, as only the central portion remains operable.

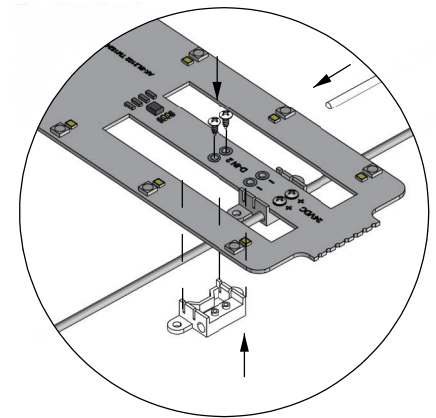


INSULATING CAP AT THE END OF FIXTURE WIRE

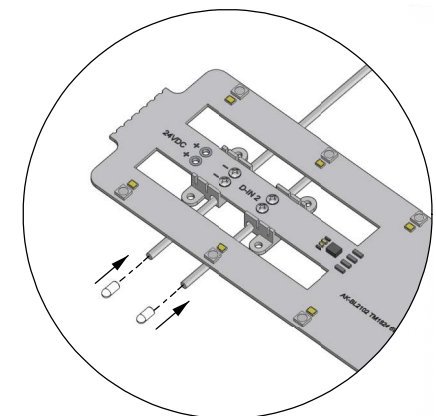
① Arktura® RGBW backlighting assembly is trimmable. When modifying the length, ensure that the end wire caps are repositioned accordingly.



① Use carefully applied force at the break off lines to snap apart sections. Use shears to facilitate cutting, cut along perforations on Backlight Board.



① Once the ends of the boards have been trimmed. Reposition the connector on the trimmed board and then pass the cable through the connector. Finally fasten the screws.

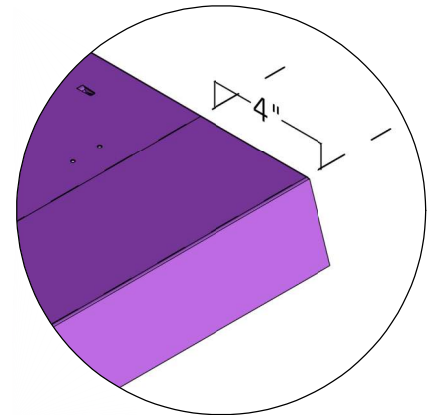
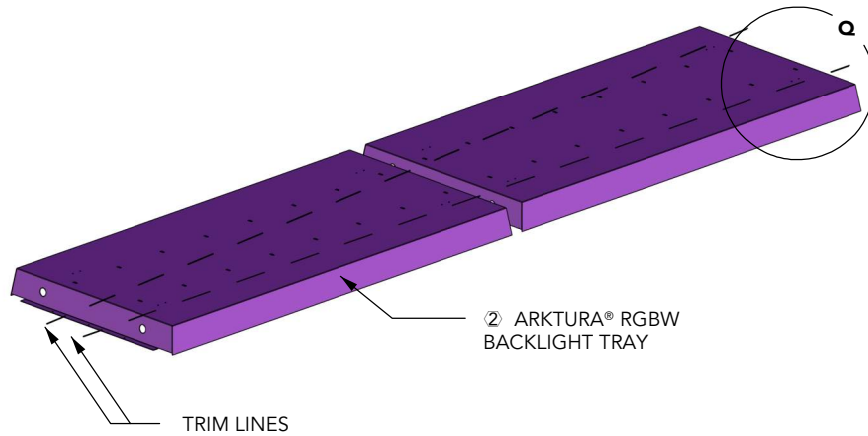


① Caps should be fitted at the end of the assembly of ① Arktura® RGBW backlighting. To be used after the power cables have been cut.

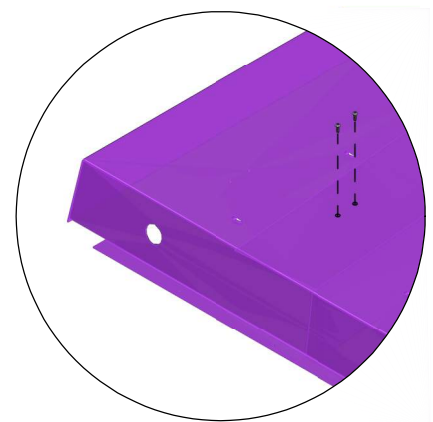
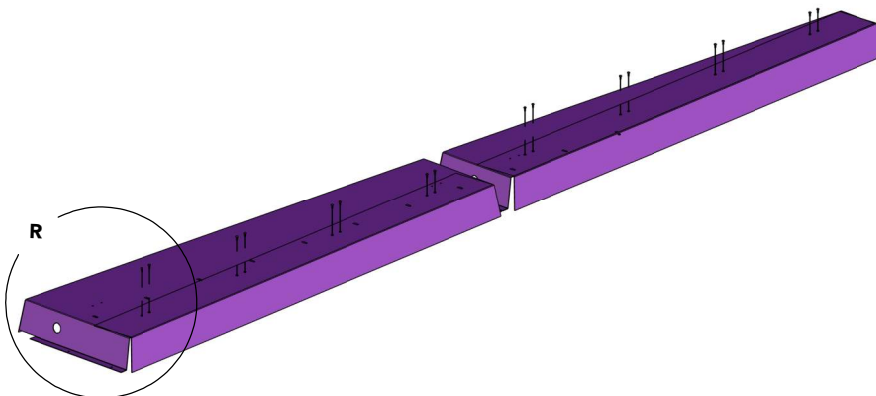
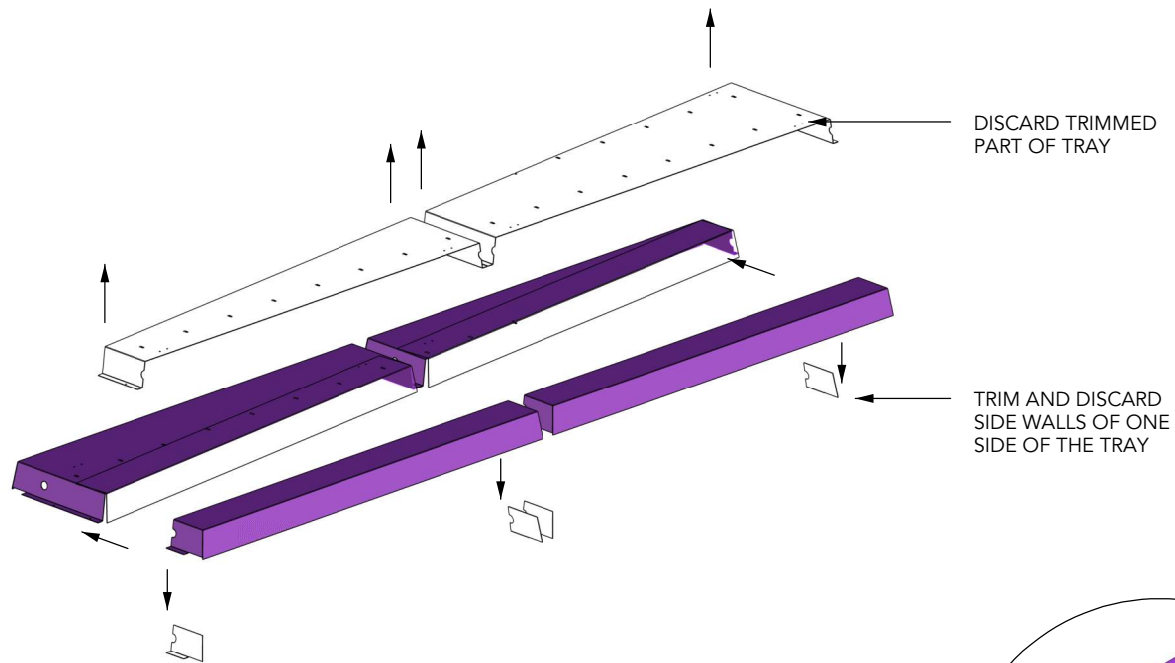
ARKTURA® RGBW BACKLIGHTING MODIFICATIONS

RGBW BACKLIGHT TRAY FIELD TRIMMING EXAMPLE

Identify how much of the ② Arktura® Backlight Tray needs to be trimmed. Keep at least 4" on one side of the Light Tray. Ensure remaining tray length spans between T-Grid and edge trim.



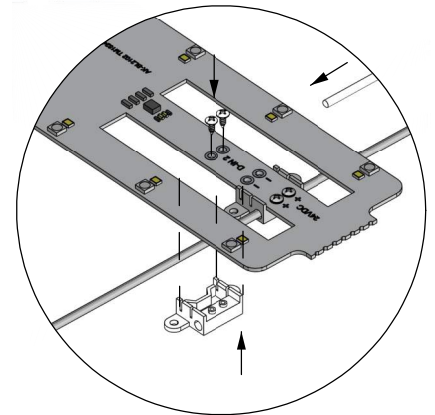
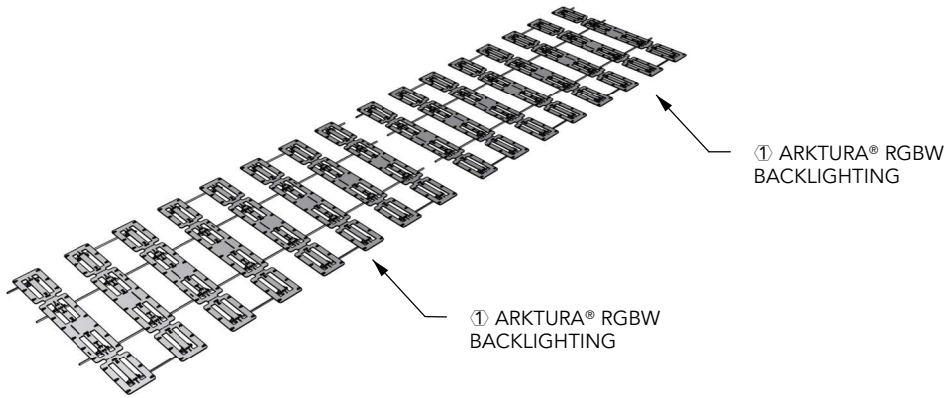
Q Keep at least 4" from the start of the bend so there is enough material to reattach to the remaining part.



R Attach the two trimmed parts together as shown using mechanical fasteners to maintain the tray's form.

RGBW BACKLIGHTING TRIMMING EXAMPLE (CONT.)

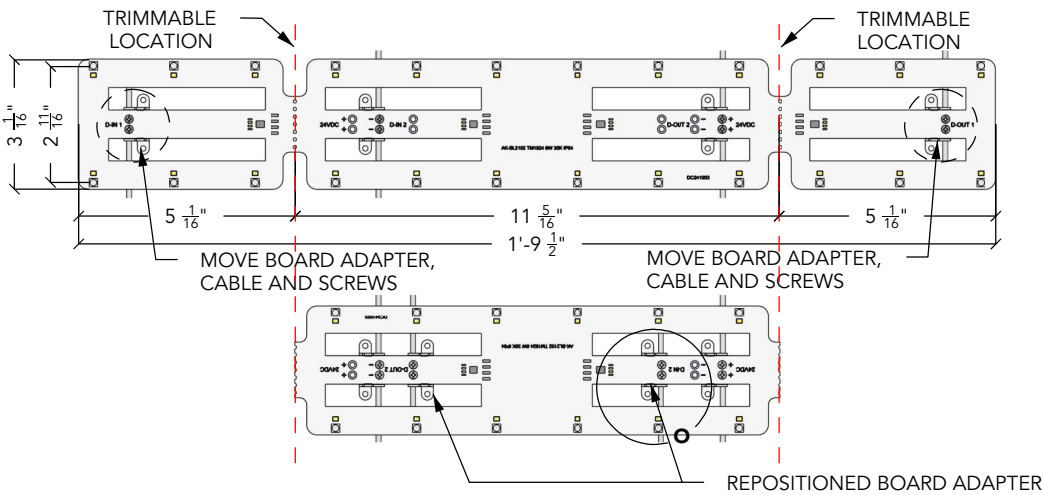
① Arktura® RGBW Backlighting can be trimmed at two designated positions. The data wiring will need to be repositioned accordingly. Trimming can be performed manually using hand pressure or with the assistance of shears. The remaining sections of the boards are not usable, as only the central portion remains operable.



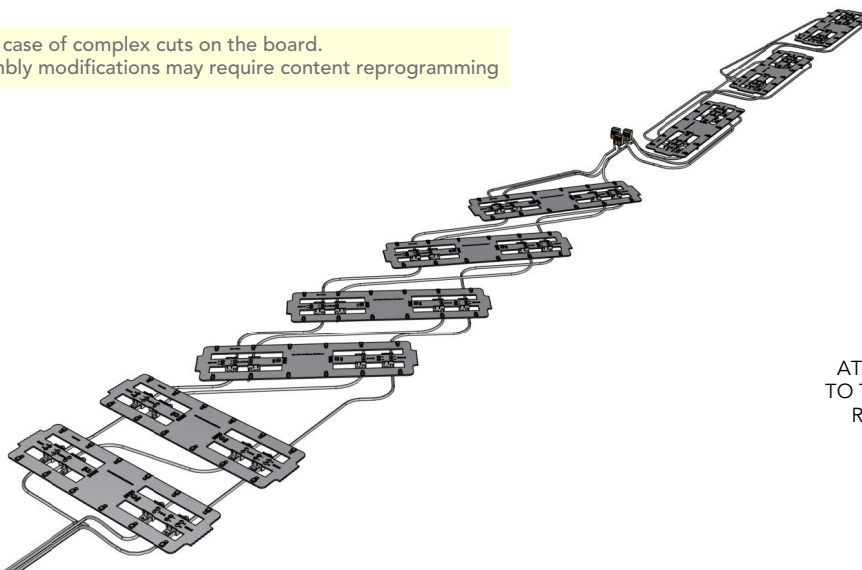
For more information on this detail, please refer to page 13.

TRIMMED BOARD (11 5/16")

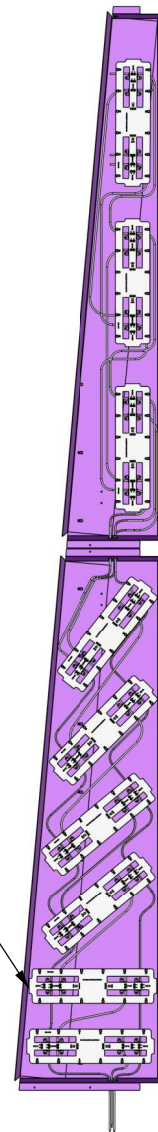
Dispose of ① Arktura® RGBW Backlighting end trimmed sections, reposition data wires, board clips and contact fasteners



In the case of complex cuts on the board. Assembly modifications may require content reprogramming



ATTACH THE LIGHTS TO THE ② ARKTURA® RGBW BACKLIGHT TRAY



ARKTURA® RGBW BACKLIGHTING CARE AND CLEANING

CARE AND CLEANING

ALUMINUM

- Use a damp cloth or sponge with water, mild clear detergent to gently wipe the surface with medium pressure.
- Lightly spray parts with a clear cleaning agent and wipe clean with a clean, dry cloth, taking care not to overspray onto adjacent materials.