

**AJBOX1**



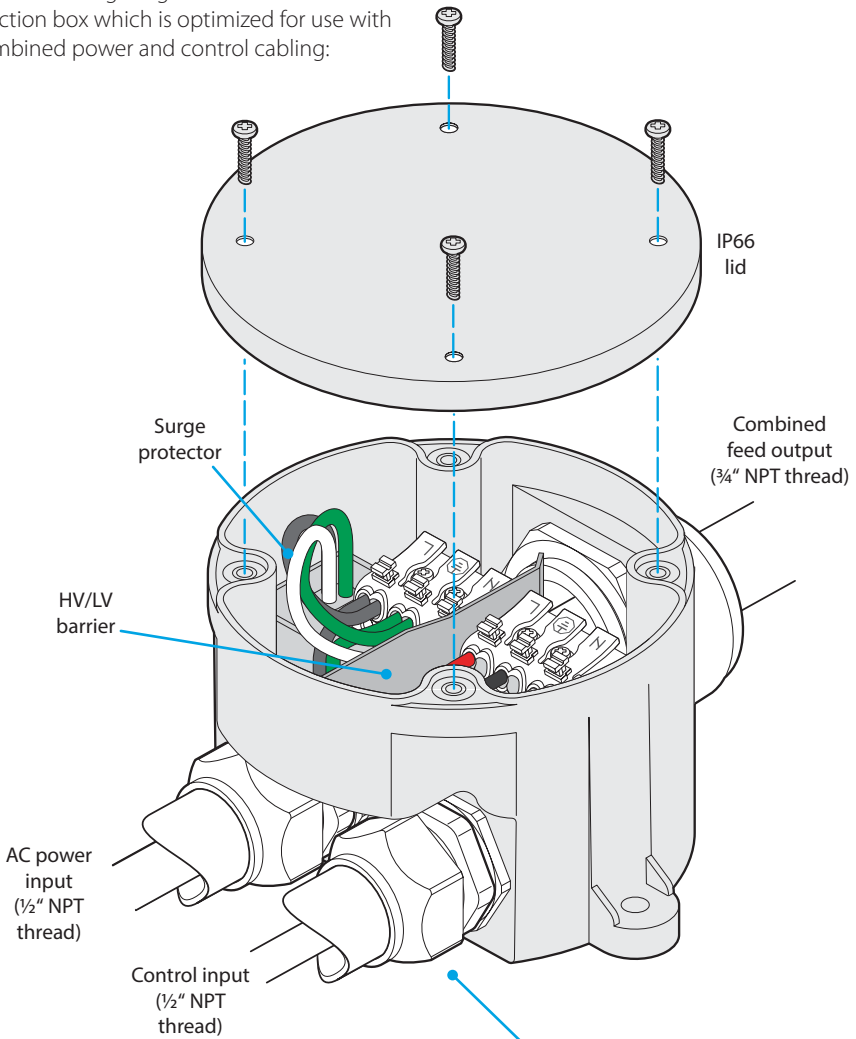
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# INTRODUCTION

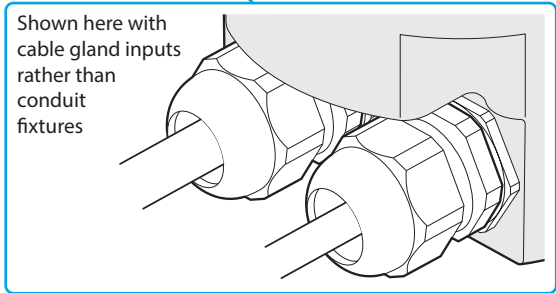
## WELCOME

The Acclaim Lighting AJBOX1 is an IP66-rated junction box which is optimized for use with combined power and control cabling:

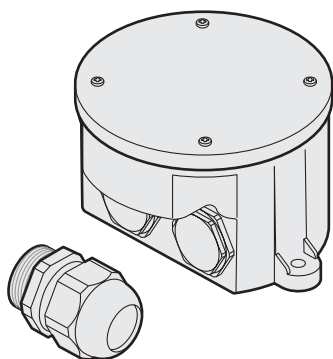


### INPUT FIXTURES/GLANDS

You will need to source 3rd-party conduit fixtures/cable glands for the inputs, as suits your installation. The large cable gland for the output is provided with the AJBOX1.



## PART CODE



**IP66 junction box plus  
outlet cable gland**  
[AJBOX1]

## IMPORTANT NOTES

Please note the following points when planning and implementing an installation:

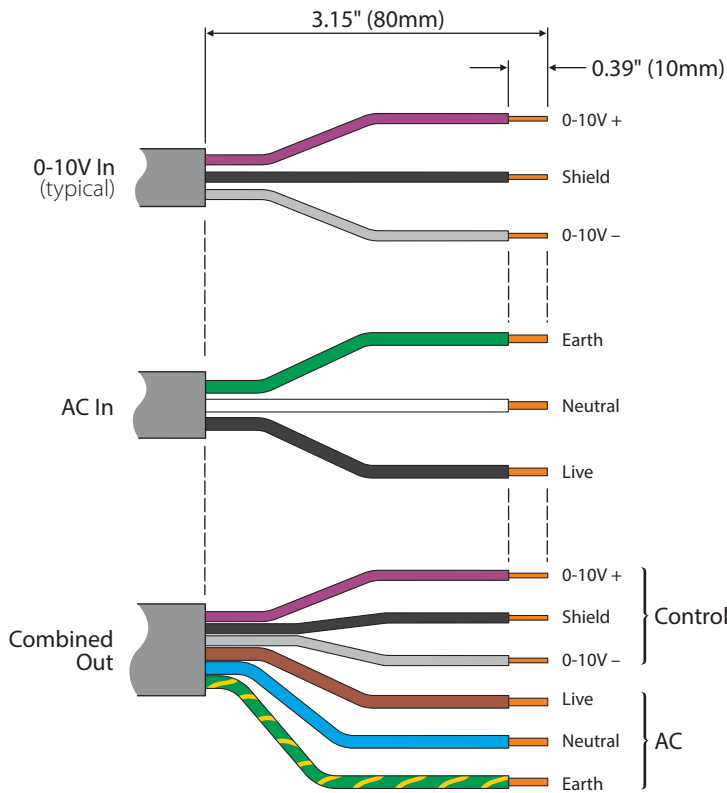
- We recommend taking proper precautions for external surge protection, as control and power electronics can be damaged by major events.
- Ensure that:
  - the mains input is derived from a suitable overload-protected supply.
  - all cable access points, plus the enclosure cover are correctly sealed.
  - all local codes are followed during planning and installation.
  - connections are made, inspected and certified by a qualified electrician.

# INSTALLATION

The AJBOX1 is quite compact considering the number of connections required within it. For best results we recommend that you prepare all cables in the manner shown on these two pages in order to provide just enough flexibility without filling the box with excess cable.

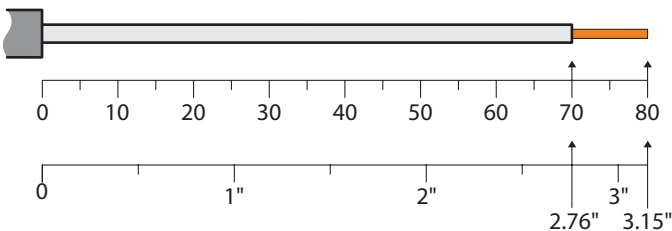
## CABLE PREP (0-10V)

Prep your cables as shown below when using a 0-10V control system with a combined output cable.



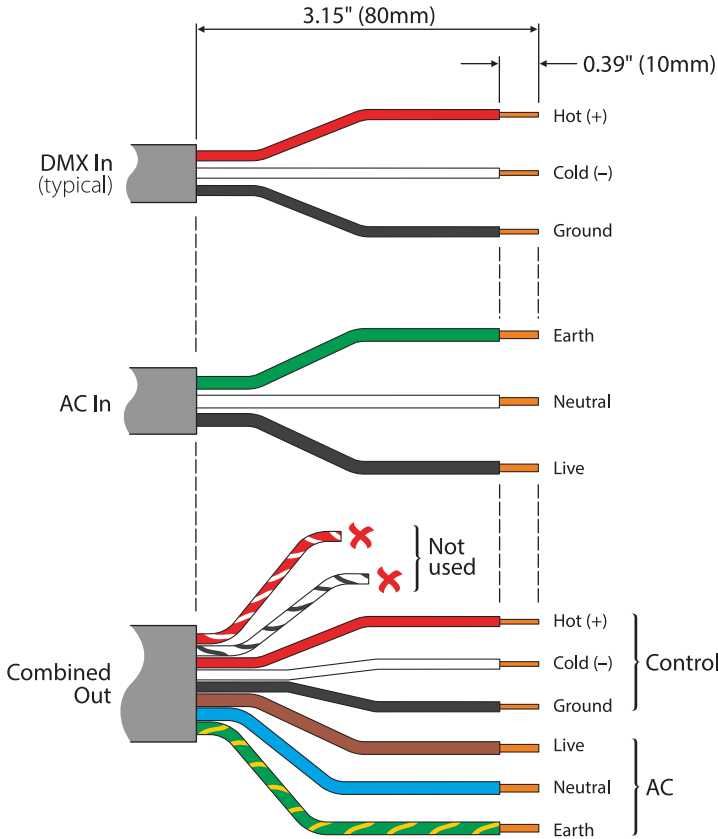
## CABLE TRIM RULER

When this document is printed at 100%, the gauge below is accurate to scale.



### CABLE PREP (DMX)

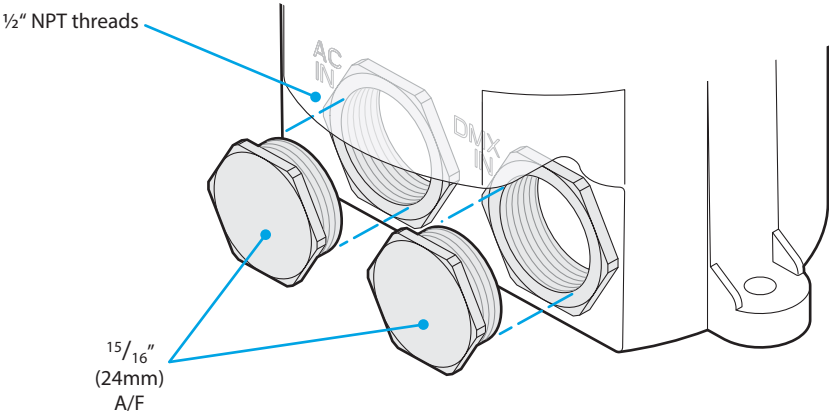
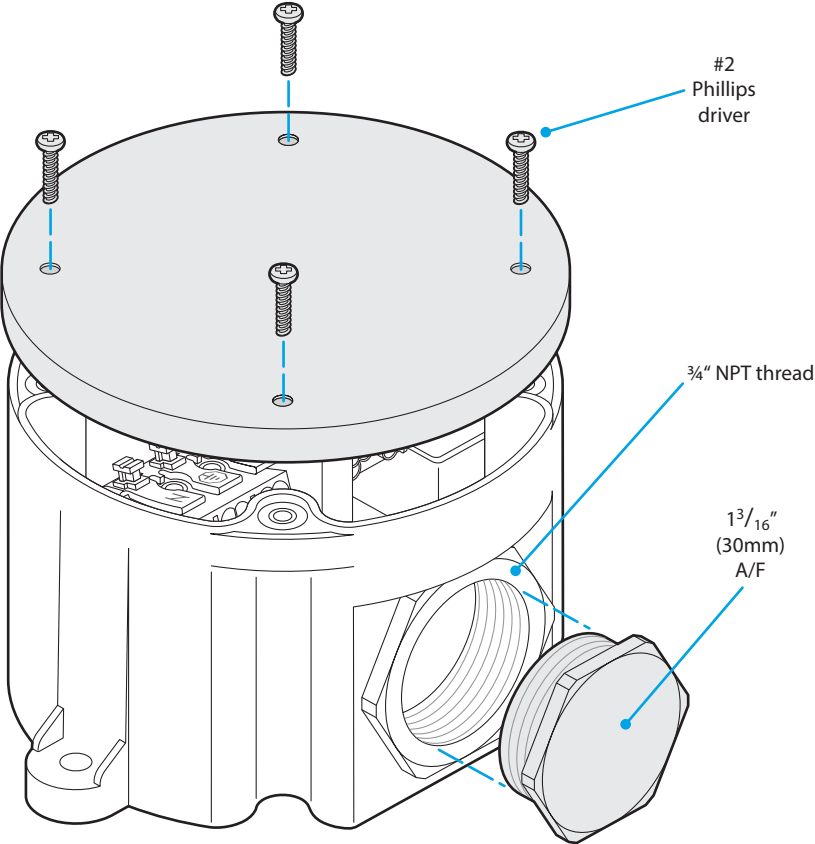
Prep your cables as shown below when using a DMX control system with a combined output cable.



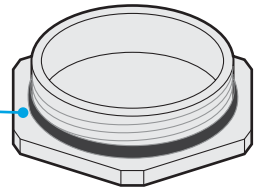
The DMX hot and cold out connections (red/white and white/black striped) are not used and can be trimmed. We suggest that you cut them short at slightly different lengths and ensure that no conductors are visible. Optionally you could also cap them off. Double check that they cannot short together and are well away from the mains connections.

# CONNECTING THE AJBOX1

1 Begin by removing the lid and also the blanking plugs on the main inlet/outlet holes.

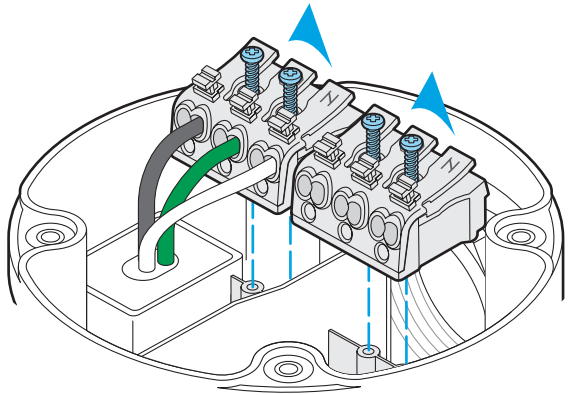


- 2 If required, gently prise off the rubber seals from the blanking plugs using a small flat blade screwdriver in order to install them on the cable glands/conduit fittings that you're using:



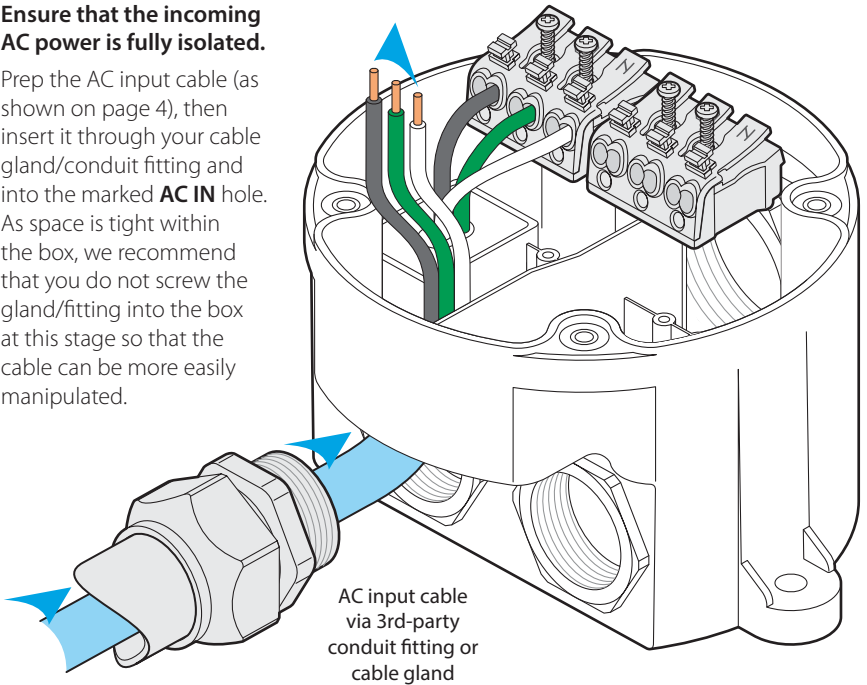
- 3 If required, place the rubber seals removed above onto your cable glands/conduit fittings.

- 4 Space is quite tight within the box so it is advisable to release the two connector blocks in order to make them more accessible. Use the #2 Phillips driver to loosen the four screws holding down the connector blocks (there is no need to remove the screws completely).

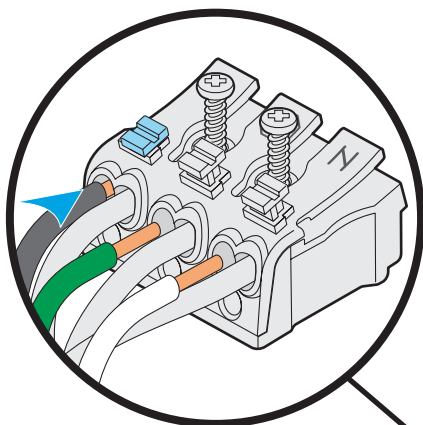


- 5 **Ensure that the incoming AC power is fully isolated.**

Prep the AC input cable (as shown on page 4), then insert it through your cable gland/conduit fitting and into the marked **AC IN** hole. As space is tight within the box, we recommend that you do not screw the gland/fitting into the box at this stage so that the cable can be more easily manipulated.

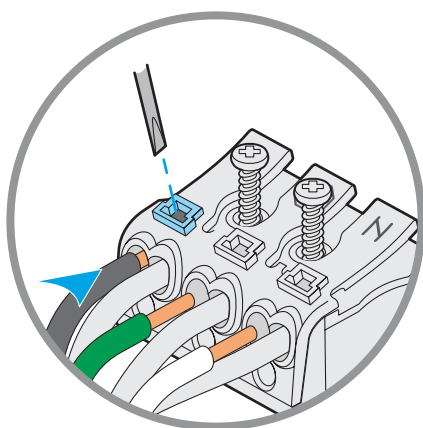
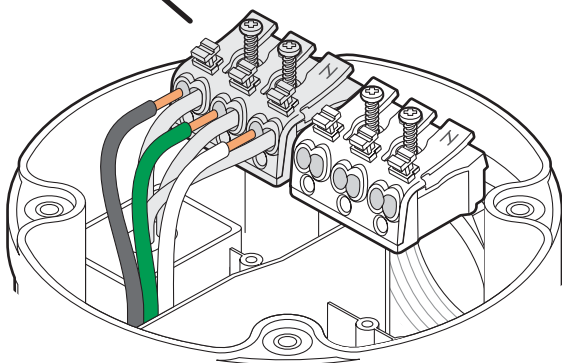


6 In turn, insert the incoming live, earth and neutral lines into the AC IN connector block, alongside and matching the connections from the internal surge protector.



For each input:

- a Press down on the small button (to open the internal spring contacts).
- b Carefully push the correct wire into the vacant hole until the bare conductor goes all the way in.
- c Release the small button and check, by gently pulling the wire, that it is correctly seated and retained.

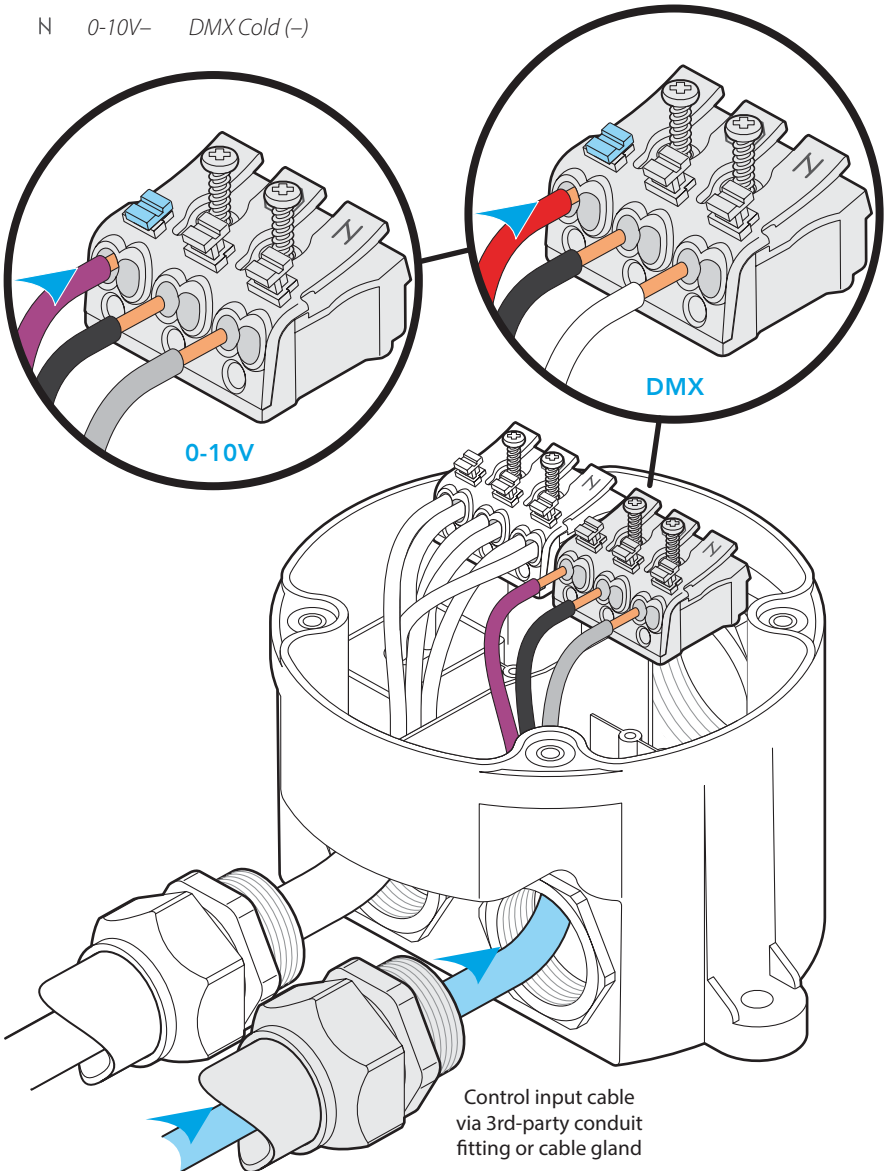


*Note: If the small buttons are not fitted to the connector block, insert a small flatblade screwdriver into each hole to open the spring contacts.*

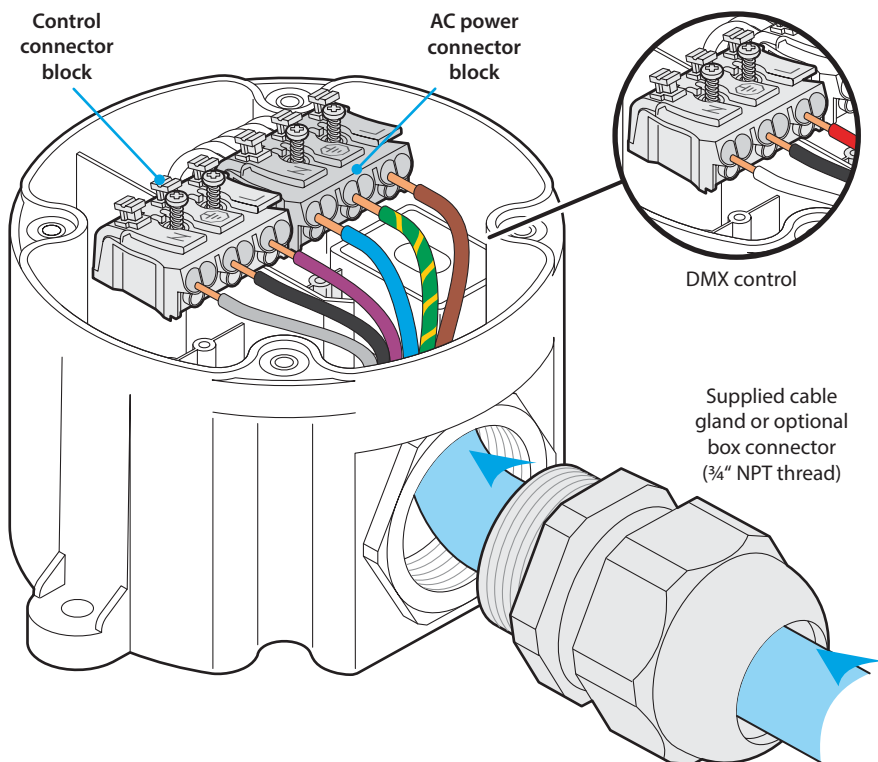
7 Repeat steps 5 and 6 for the control input. Once again, we recommend that you do not screw the gland/fitting into the box at this stage so that the cable can be more easily manipulated.

*Note: Although the three contacts of the control connector block are labeled L, ⊕ and N, we recommend that you decide upon, and adhere to a consistent convention for your control connections. We suggest:*

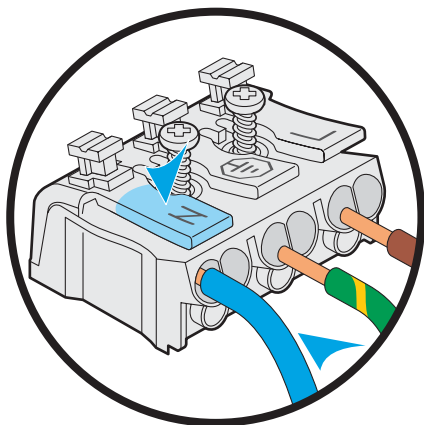
	<b>0-10V</b>	<b>DMX</b>
L	0-10V+	DMX Hot (+)
⊕	Shield	DMX Ground
N	0-10V-	DMX Cold (-)



8 Prep the output feed cable (as shown on pages 4 and 5), then insert it through the large cable gland and into the  $\frac{3}{4}$ " access hole. Once again, we recommend that you do not screw the gland into the box at this stage so that the cable can be more easily manipulated.



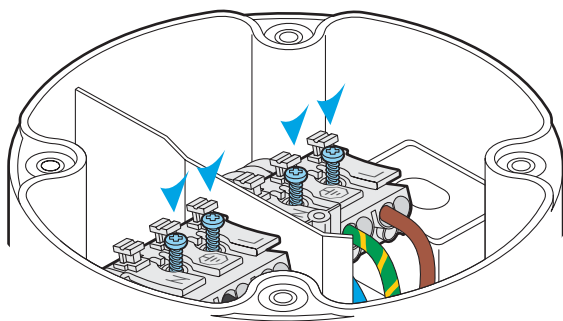
9 In turn, insert the six output feed wires into the AC power and control connector blocks, taking great care to ensure that the various wires are mated only with the correct terminals (see pages 4 and 5 for wire designations):



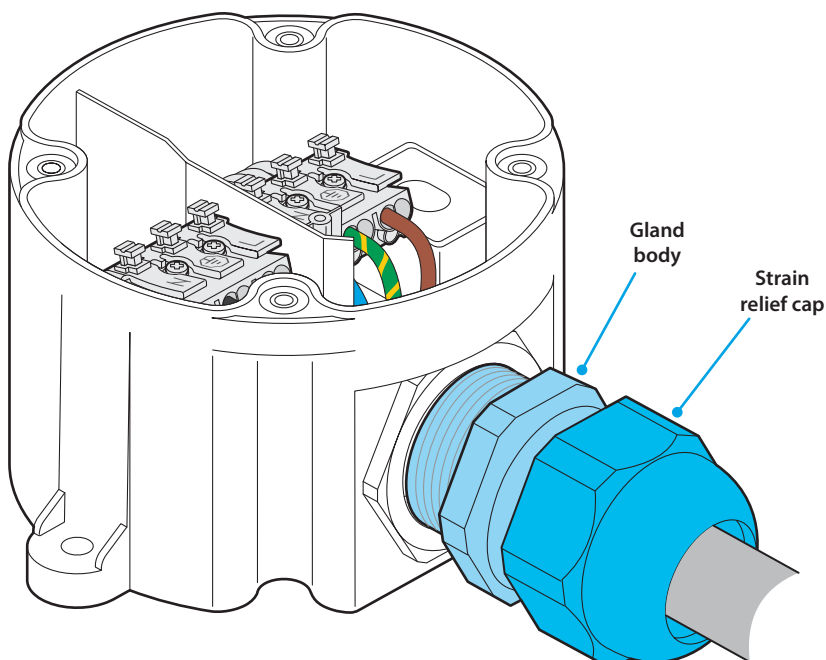
For each input:

- Press down on the lever (to open the internal spring contacts).
- Carefully push the correct wire into either of the adjacent holes until the bare conductor goes all the way in.
- Release the lever and check, by gently pulling the wire, that it is correctly seated and retained.

- 10 Once all connections have been made and double-checked, use a #2 Phillips driver to fix the two connector blocks into place; check for correct alignment with the two screw lugs located on either side of the divider.

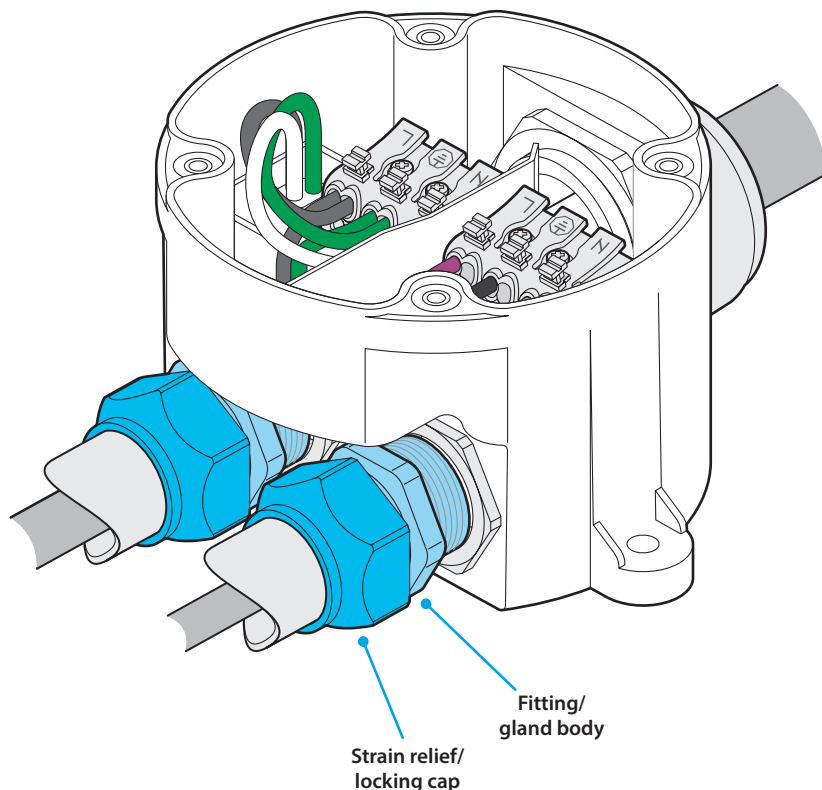


- 11 Apply a bead of suitable silicone sealant to the thread of the large cable gland and run a finger round it to spread the sealant across all parts of the thread.
- 12 Ensure the strain relief cap is loose, then carefully screw the body of the gland into the outlet hole and tighten it using an adjustable wrench.



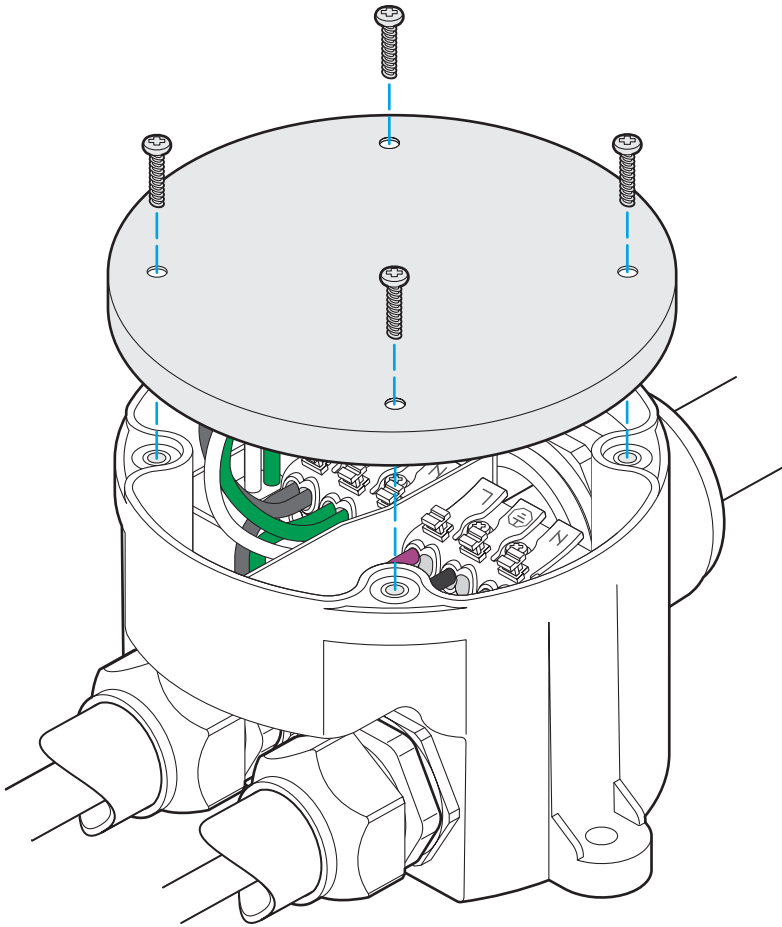
- 13 Push the feed cable slightly into the box (to ensure there's sufficient slack inside) and then tighten the strain relief cap of the gland using an adjustable wrench.

- 14 Apply a bead of suitable silicone sealant to the threads of each conduit fitting/cable gland and run a finger round them to spread the sealant across all parts of the threads.
- 15 Ensure the strain relief/locking caps are loose, then carefully screw the bodies of each gland into their inlet holes and tighten them using an adjustable wrench.



- 16 Push each cable slightly into the box (to ensure there's sufficient slack inside) and then tighten the strain relief/locking caps of the fittings/glands using an adjustable wrench.

- 17 After a final check, place the lid onto the box, align the holes with the internal threads and insert the four screws.





- 18 Use a #2 Phillips driver to secure the four screws to a reasonable hand-tightness.

## ADDITIONAL ENVIRONMENTAL PROTECTION

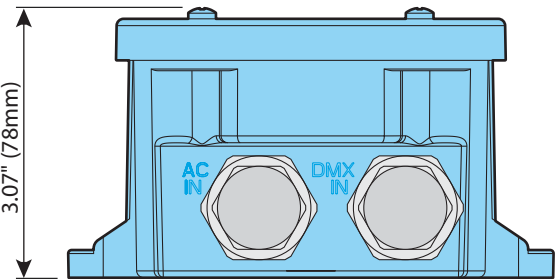
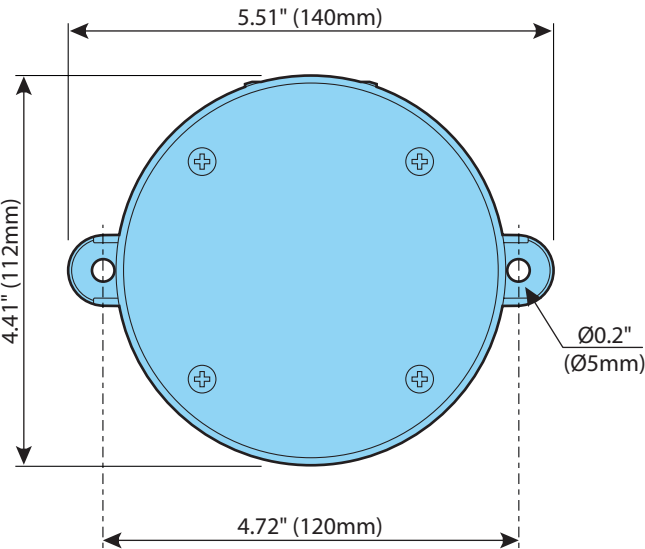
If the AJBOX1 is to be externally wall mounted in a vertical orientation it is advisable to apply extra silicone sealant into and around the strain relief cap of the cable gland/fitting(s) located on the upper-most surface. This will help to prevent moisture from welling in the head of the gland/fitting and tracking down past the seal into the box.

# FURTHER INFORMATION

## SPECIFICATIONS

External connection A	Two ½" NPT conduit inlets for separate AC and control inputs
External connection B	One ¾" NPT conduit outlet for combined feed cable
Internal connections	Two 3-conductor push terminals for AC and control links
Maximum conductor size	12 AWG
Maximum input voltage	390VAC
Maximum connection current	15A
Maximum total line power	120VAC: 1,800W 230VAC: 3,450W 277VAC: 4,155W
Internal surge protection	5kA, 10kV
IP rating	IP66, wet location
Ambient temperature range	-40°F to 140°F (-40°C to 60°C)
Certifications	 

DIMENSIONS



## LIMITED PRODUCT WARRANTY

A. Acclaim Lighting™ hereby warrants, to the original purchaser, Acclaim Lighting finished products to be free of manufacturing defects in material and workmanship for a standard period of:

- Fixtures: 5 Years (1,825 days) from the date of purchase.
- Drivers, power supplies and accessories: 5 Years (1,825 days) from the date of purchase.
- Flex Products: 3 Years (1,095 days) from the date of purchase.
- Controllers: 2 Years (730 days) from the date of purchase.

It is the owner's responsibility to establish the date and place of purchase and warranty terms by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Acclaim factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Acclaim Lighting will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Acclaim Lighting shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof. Acclaim reserves the right to replace the item with same or similar product at its discretion.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Acclaim concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Acclaim Lighting factory unless prior written authorization was issued to purchaser by Acclaim Lighting; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up nor do we guarantee as part of this warranty any lumen performance during period. Parts not covered by this warranty include: fuses, external power supplies, third party items not manufactures by Acclaim lighting. During the period specified above, Acclaim Lighting will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Acclaim Lighting under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Acclaim Lighting. At no time will installation or re-installation or products labor or liability costs will be assumed by Acclaim Lighting. All products covered by this warranty were manufactured after January 1, 2012, and bear identifying serial number marks to that effect.

E. Acclaim Lighting reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products describe above. Except to the extent prohibited by applicable law, all implied warranties made by Acclaim Lighting in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired.

F. Marine or extreme weather location applications using Acclaim lighting products are subject to a 2 year limited warranty and Acclaim must be notified prior to delivery of units for such applications so that preventative treatment can be made to the products to ensure proper performance and product life with a special marine code coating / sealing process at an additional cost.

G. The consumer's and or dealer's sole remedy shall be such repair or replacement as is expressly provide above; and under no circumstances shall Acclaim Lighting be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product. This warranty is the only written warranty applicable to Acclaim Lighting products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.



[www.acclaimlighting.com](http://www.acclaimlighting.com)