

Flex Tube™ SE SC

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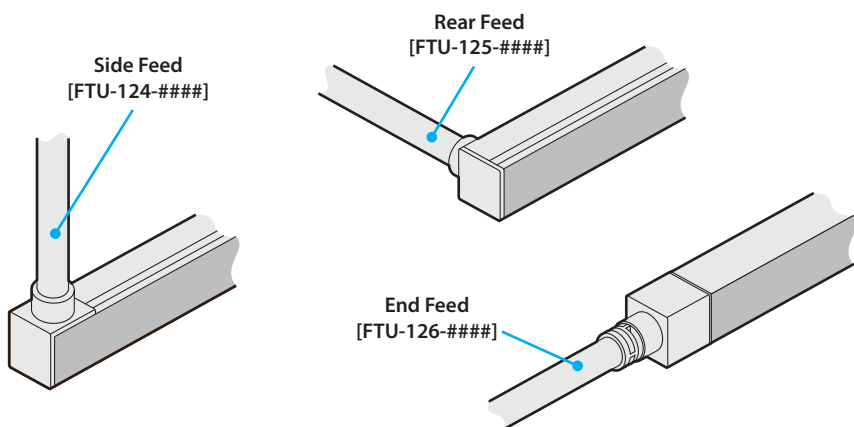
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Introduction

Welcome

Welcome to the Flex Tube SE SC range from Acclaim Lighting. These flexible LED powered strips produce a greatly homogenized light output along their full length to provide a viable alternative to other linear light sources, such as neon or cold cathode. Designed from the outset for external applications, Flex Tubes are rated to IP68 and can be submersed up to 3 feet (1m) in depth.

Three model types are available, categorized by the approach of the main feed connection relative to the illuminated front face:



All three of these models are available with various single color LED options:

- White: 2700K, 3000K, 3500K or 4000K
- Red
- Green
- Blue

A range of dimming driver and static power supply options are available from Acclaim Lighting. See the section *Connecting and controlling Flex Tubes* on page 12 and also www.acclaimlighting.com for further details.

Safety

- Ensure that the power input is supplied from a correctly fused and environmentally protected location.

Flex Tube orientation

ACCLAIM LIGHTING

02 01

DC24V

Cut point mark plus signal labeling
(shown roughly every 1 meter)

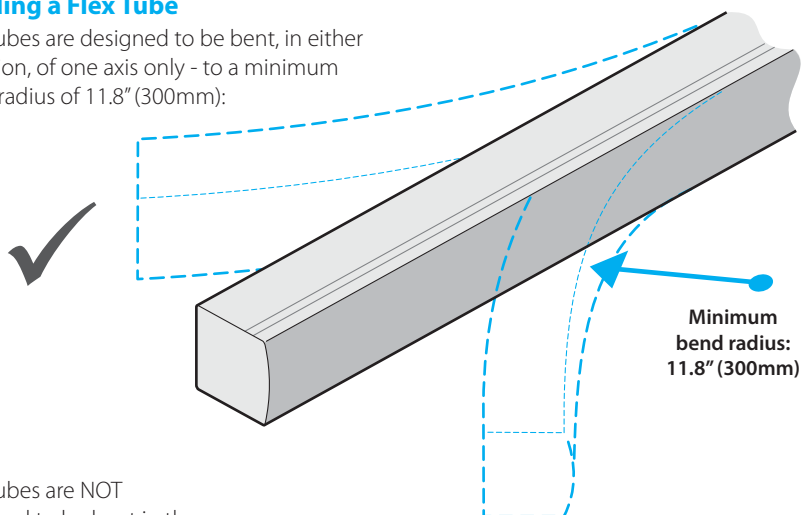
02 01

Cut point mark
(shown every 55mm)

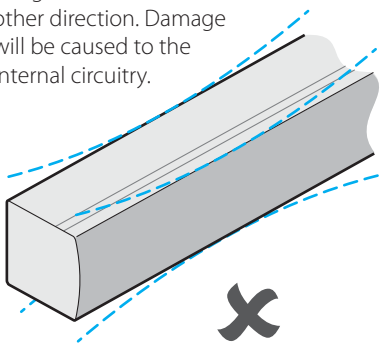
Ensure the number designation on the connector matches that on the cut mark

Bending a Flex Tube

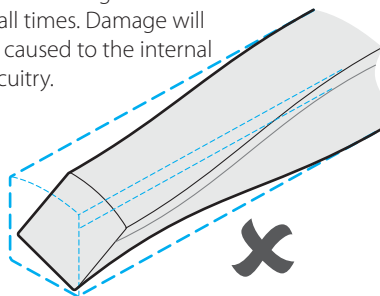
Flex Tubes are designed to be bent, in either direction, of one axis only - to a minimum bend radius of 11.8" (300mm):



Flex Tubes are NOT designed to be bent in the other direction. Damage will be caused to the internal circuitry.



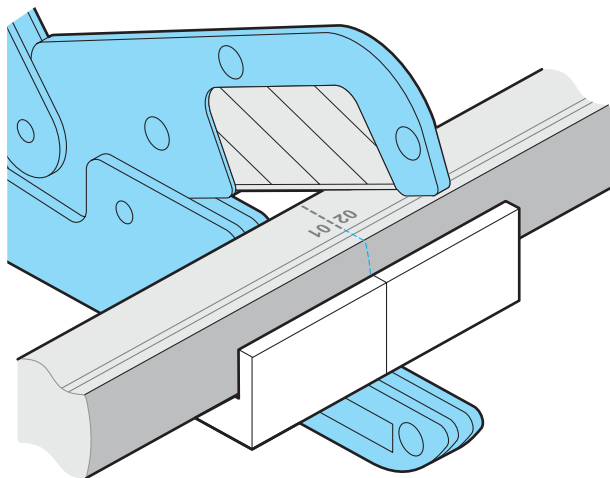
Avoid twisting Flex Tubes at all times. Damage will be caused to the internal circuitry.



Cutting a Flex Tube

Each Flex Tube is marked every 2.16" (55mm) with cut marks. It is important that cuts are only made at these points to ensure internal components are not damaged and also that the connection terminals are readily available.

All cuts should be made using the special shears supplied within the toolkit.



Feed, end cap and mounting kits

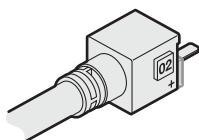
The following optional kits are available for use with the Flex Tube SE SC:

- **Feed cable kit** - used for linking a Flex Tube with driver circuitry. See below
- **End cap kit** - used to seal an open end of Flex Tube. See page 8
- **Self-locking mounting channel kit** - used to fix a Flex Tube to a surface. See page 10

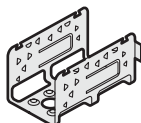
Feed cable kit

This kit adds a connection point to a Flex Tube.

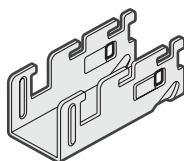
Kit contents



Feed connector
with silicone gasket
[x1]



Grip clip
[x1]



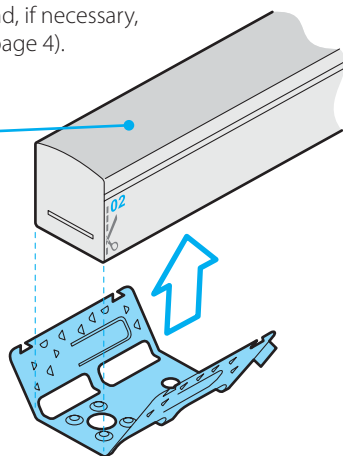
Joiner
[x1]

To install a feed cable kit

- 1 Check the orientation of the Flex Tube (see page 3) and, if necessary, carefully cut the Flex Tube to the correct length (see page 4).

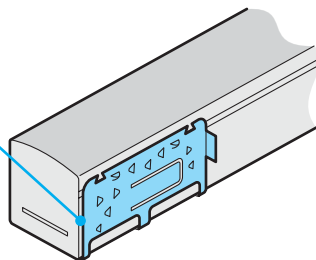
- 2 Fit the grip clip to the **02** end of the Flex Tube so that wraps tightly around the rear face...

Flex Tube
front face

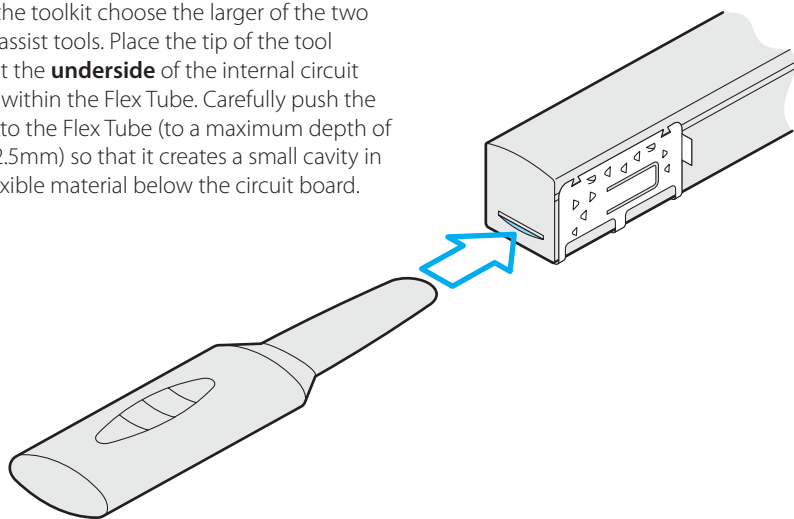


Align the 'non-tabbed' edge of the grip clip with the cut edge of the Flex Tube

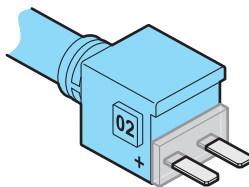
...and its edge (that does not have the small tabs) is aligned with the cut edge of the Flex Tube.



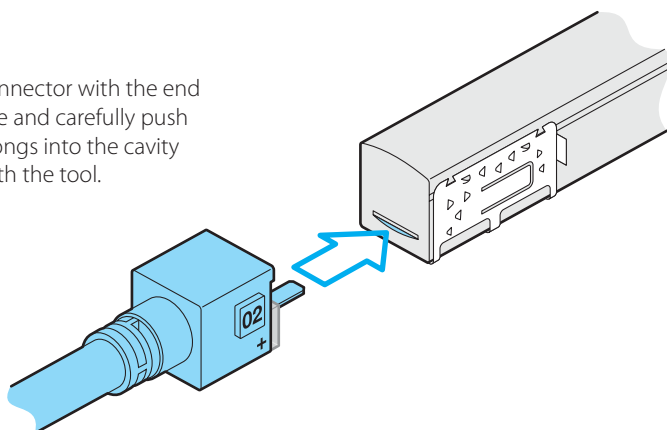
- 3 From the toolkit choose the larger of the two insert assist tools. Place the tip of the tool against the **underside** of the internal circuit board within the Flex Tube. Carefully push the tool into the Flex Tube (to a maximum depth of 0.5", 12.5mm) so that it creates a small cavity in the flexible material below the circuit board.



- 4 Check that the silicone gasket is correctly positioned over the contacts of the feed connector.

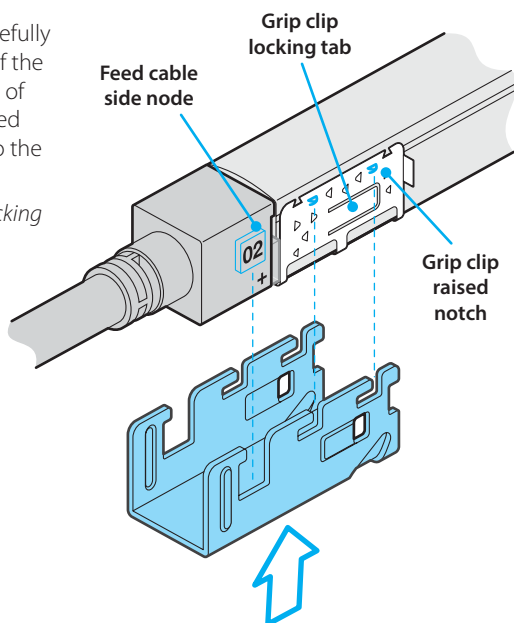


- 5 Line up the feed connector with the end face of the Flex Tube and carefully push the two contact prongs into the cavity that you created with the tool.

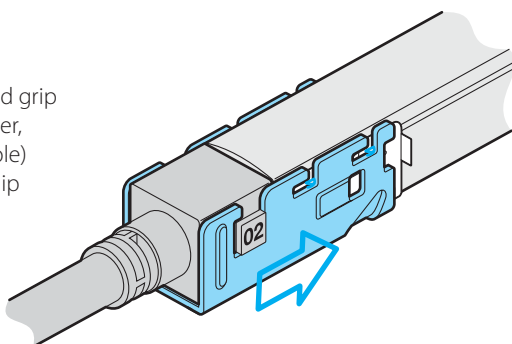


- 6 Ensure the feed connector is fully inserted into the Flex Tube. Then, carefully slide the joiner onto the underside of the assembly so that the two side nodes of the feed connector and the four raised clip notches of the grip clip slide into the appropriate slots of the joiner.

Note: You will need to compress the locking tabs on either side of the grip clip.



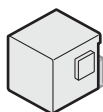
- 7 When the feed cable, Flex Tube and grip clip are fully seated within the joiner, slide the joiner (away from the cable) until the locking tabs of the grip clip audibly click into place.



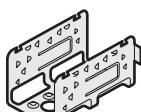
End cap kit

Each Flex Tube SE SC is supplied with both ends fully sealed. However, if shorter lengths need to be made, you will need to seal the cut ends to prevent moisture ingress (for external installations). This kit is used to seal off a bare end of Flex Tube SE SC.

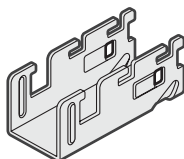
Kit contents



End cap with
silicone gasket
[x1]



Grip clip
[x1]

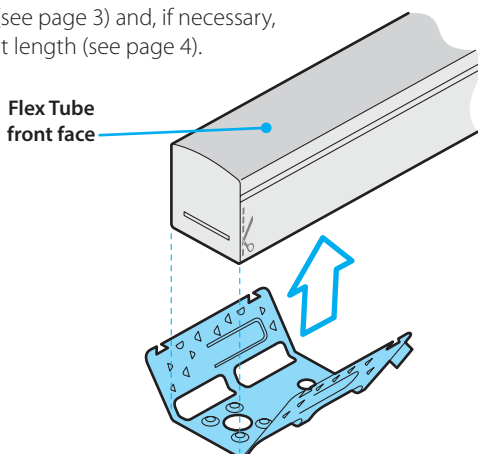


Joiner
[x1]

To install an end cap kit

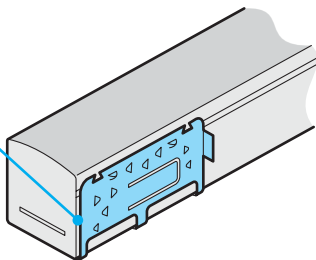
- 1 Check the orientation of the Flex Tube (see page 3) and, if necessary, carefully cut the Flex Tube to the correct length (see page 4).

- 2 Fit the grip clip to the end of the Flex Tube so that wraps tightly around the rear face...

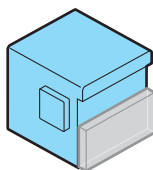


Align the 'non-tabbed' edge of the grip clip with the cut edge of the Flex Tube

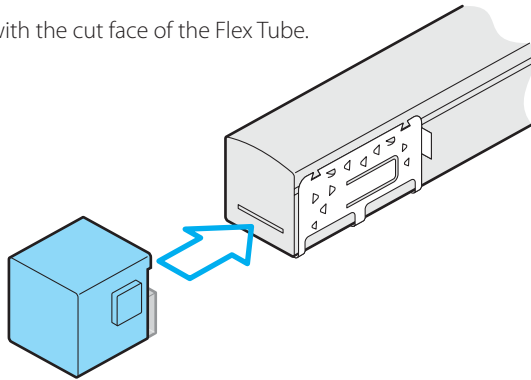
...and its edge (that does not have the small tabs) is aligned with the cut edge of the Flex Tube.



- 3 Check that the silicone gasket is correctly positioned on the end cap.

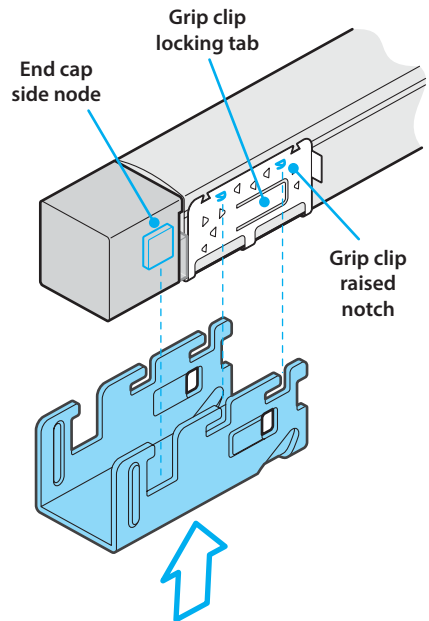


4 Line up the end cap with the cut face of the Flex Tube.

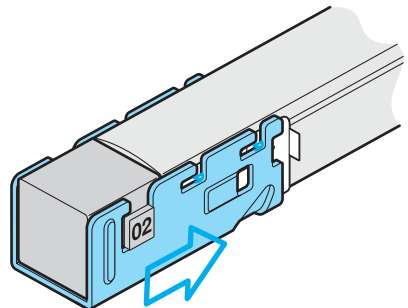


5 While holding the end cap in place, carefully slide the joiner onto the underside of the assembly so that the two side nodes of the end cap and the four raised clip notches of the grip clip slide into the appropriate slots of the joiner.

Note: You will need to compress the locking tabs on either side of the grip clip.



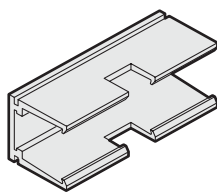
6 When the end cap, Flex Tube and grip clip are fully seated within the joiner, slide the joiner (away from the end cap) until the locking tabs of the grip clip audibly click into place.



Self-locking mounting channel kit

These kits are used to mount Flex Tube SE SC onto solid surfaces.

Kit contents



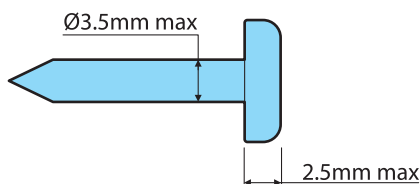
Mount channel
(5cm or 1 meter lengths)



Grip clip
(mount-type)

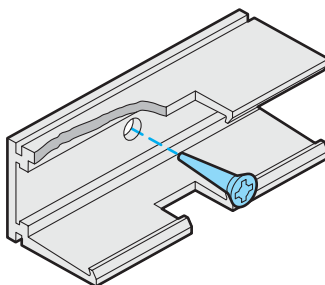
To install a self-locking mounting channel kit

- 1 Choose appropriate screws and fixings for the intended mounting surface. The limited space within the mount channel restricts the screws used to the following dimensions:

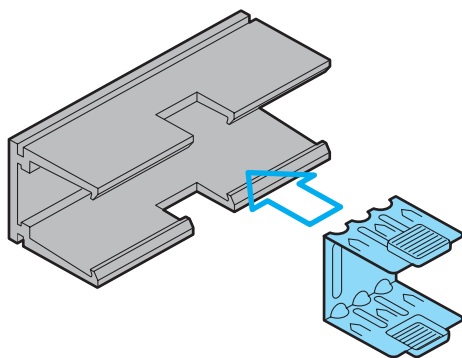


- 2 Attach the mount channel to the intended surface, taking all appropriate precautions as you do so.

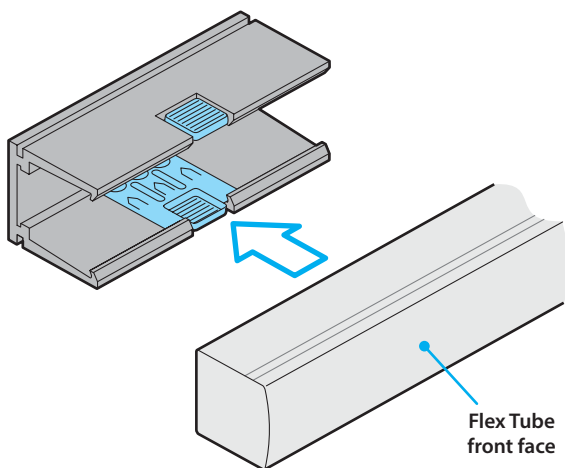
- 5cm mounts have just one hole.
- 1 meter mounts have five holes, spaced 20cm apart.



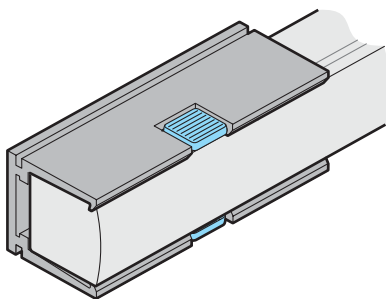
- 3 If they are not already in position, place the grip clip(s) into the mount channel.



- 4 Push the Flex Tube (front face outwards) fully into the mount channel until it engages fully with the grip clip(s).



- If you should need to remove the Flex Tube, press and hold the two raised buttons while you gently pull the Flex Tube out from the mount channel.



Connecting and controlling Flex Tubes

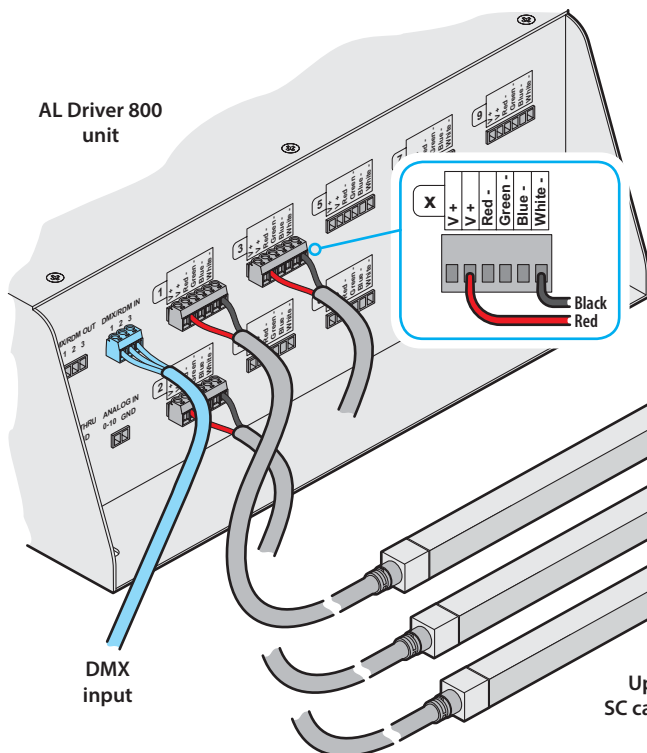
FlexTube SE SC are run at 24VDC and consume 3.3W per foot (or 10.6W per meter).

Connection cables (not supplied) used to link Flex Tubes to the power/driver unit should follow these guidelines:

- Up to 40 feet (12m) 18 AWG (0.823mm²)
- Up to 100 feet (30.5m) 14 AWG (2.081mm²)
- Up to 180 feet (55m) 12 AWG (3.309mm²)

In all cases, ensure that the voltage drop at the fixture end of the link cable is no greater than 8% (1.92V) of the original 24VDC supply.

DMX (or 0-10V) dimming control



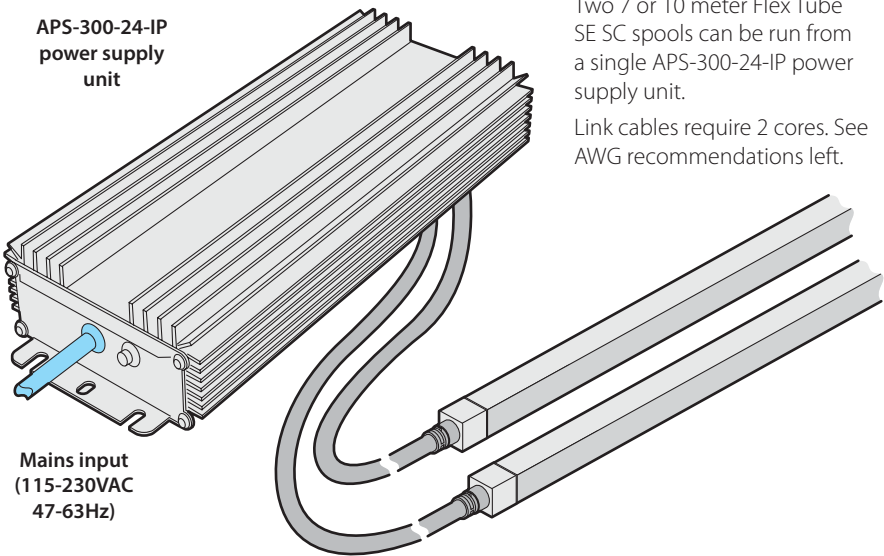
Up to six 7 or 10 meter Flex Tube SE SC spools can be run from a single AL Driver 800 unit.

Link cables require 2 cores. See AWG recommendations above.

Up to 60 meters of Flex Tube SC can be driven across the ten channels.

Ensure that no more than 10 meters is placed on any one output.

Non-dim power



Further information

Troubleshooting

No light output is visible when expected.

- Check that power is correctly applied to the fixture and that there is no damage to the power input cord.
- Check that the connections to the feed cable have the correct polarity.
- If external DMX control is being used, check that the DMX address set within the fixture matches that being output by the controlling source device.

Flex Tube SE SC specifications

Beam angle	160°
Lumens per foot	171 (54 center beam candlepower) - 3500K, >80 CRI
Operating voltage	24VDC
Power consumption	3.3W per foot 10.6W per metre 106W per 32' (10m) spool
Dimming	Pulse Width Modulation
Maximum overall length	32' (10m)
Installation temperature	32°F to 113°F 0°C to 45°C
Operation temperature	-40°F to 131°F -40°C to 55°C
Housing	UV coated, flexible silicone jacket
Ingress protection	IP68 wet location submersible to 3' (1m)
Impact resistance	IK08 Protected up to a 5 Joule impact
Dimensions (W x H x L)	0.63" x 0.63" x 32' (16mm x 16mm x 10m)

Certifications



Limited 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 3 Years from the date of purchase, with an extended warranty available upon request.

This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories, Mexico and Canada and pre-approved in written form by Acclaim Lighting™. 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 Lighting™ 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 Lighting™ 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