Installation Manual

Infinity XE & Boost XE



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Introduction

This manual provides installation instructions for Boost and Infinity LED light bars for top lighting. For under canopy lighting, use "Installation Guide, Under Canopy Lighting" located on Thrive Agritech's website.

General Guidelines

- Confirm the overall integrity of the light bars prior to installation.
- Maintain at least 8 inches (0.2 meters) between the light fixture and any combustible materials.
- Keep the light fixture away from sources of heat.
- The LED light is an indoor fixture operated within an ambient temperature range of -20°C to 30°C.
- Ensure power is off before installation. Installation must be carried out by qualified electricians.
- To clean the light fixture, switch power off and use a dry cloth without corrosive cleaning agents.

Daisy-Chaining

The maximum number of lights that can be daisy-chained together at various input voltages is shown in the tables below. Also shown is the nominal current supplied to each fixture. 16AWG wire is recommended.

Boost LED Light

Parameter	110 Volts	240 Volts	277 Volts
Nominal current / fixture	1.1A	0.50A	0.43A
Max # of fixtures linked together in a daisy-chain	7 fixtures	15 fixtures	17 fixtures

Infinity LED Light

Parameter	110 Volts	240 Volts	277 Volts
Nominal current / fixture	0.54A	0.25A	0.22A
Max # of fixtures linked together in a daisy-chain	14 fixtures	31 fixtures	35 fixtures

Installation Instructions: Flush Mount

This guide provides installation instructions using a 4’x16’ canopy as an example. While your specific canopy may be a different geometry, the same general installation procedures apply. Please contact Thrive Agritech customer support with any questions not covered in this guide.

Parts for Flush Mount Installation

Item	Part Number	Image	Website Link
Boost or Infinity	TBAR-120W-FS2 or TBAR-60W-FS2		thriveagritech.com/products/
Slide & Lock Clips	SLCLIP		
Interconnection Clips	INCLIP-BD		
Unistrut	Various		unistrut.us/product-details/p3000t
Cone Nuts	CM-100B-1/2		mscdirect.com/product/details/54055116
¼-20x1.5” machine screws or ¼-20x1.5” hex bolts	Various		www.grainger.com
Power Cables	BDPC**X-XX**		
Power Interconnection Cables (optional)	BDINC**X-XX**		
Dimming Controller Cables (optional)	DIMPC**X-XX**		
Dimming Interconnection Cables (optional)	DIMINC**X-XX**		
End Caps	ENDCAP-BD		

Figure 1 shows the completed installation example of the lights (either Boost or Infinity) over a 4’x16’ canopy. The installation consists of 4 lines of lights, with each line containing 4 lights connected end-to-end for a total of 16 lights over the canopy.

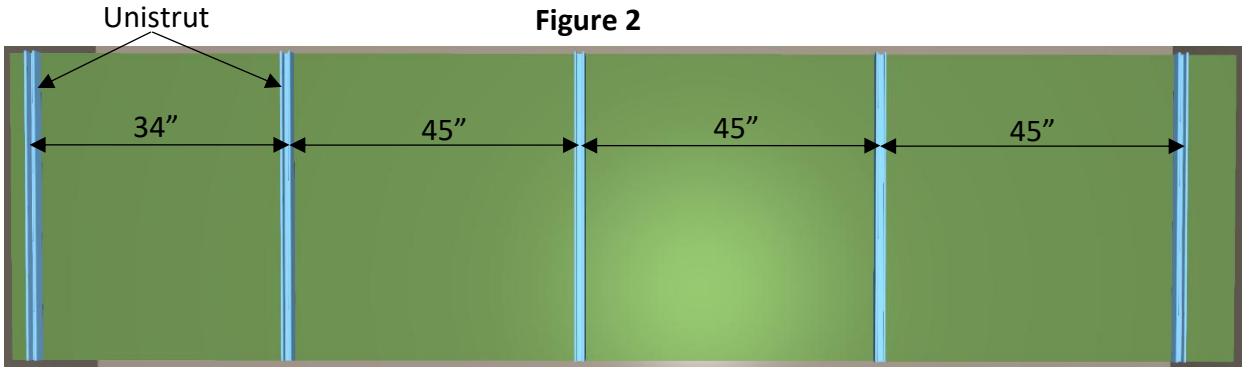
Figure 1



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1) Attach the Unistrut bars to the mounting surface as shown in Figure 2. The first two Unistrut bars of a line of lights should be approximately 34” apart, and all subsequent Unistrut bars should be about 45” apart.

Figure 2



2) Slide the cone nuts into the Unistrut bars and position them where the lights will be located (Figures 3 & 4). The center spacing of the light bars must match the lighting design provided by Thrive Agritech to ensure proper light intensity and uniformity.

Figure 3

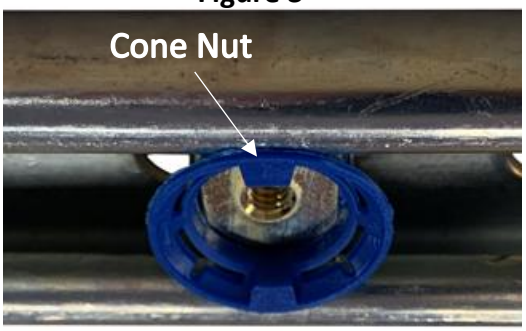
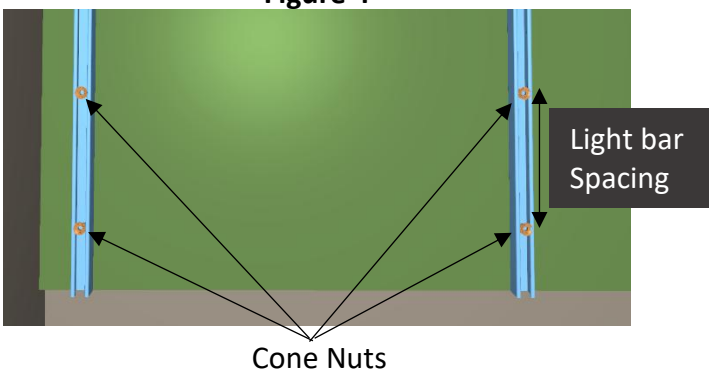


Figure 4



3) Position the Slide & Lock clips on top of the cone nuts and secure in place using ¼-20 x 1.5” machine screws or hex bolts (Figure 5). Ensure all locking arms of the clips are facing the same direction.

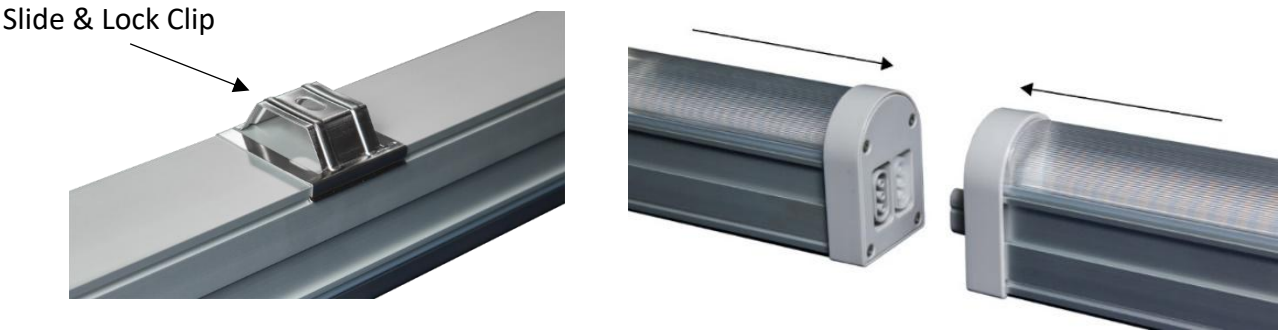
Figure 5

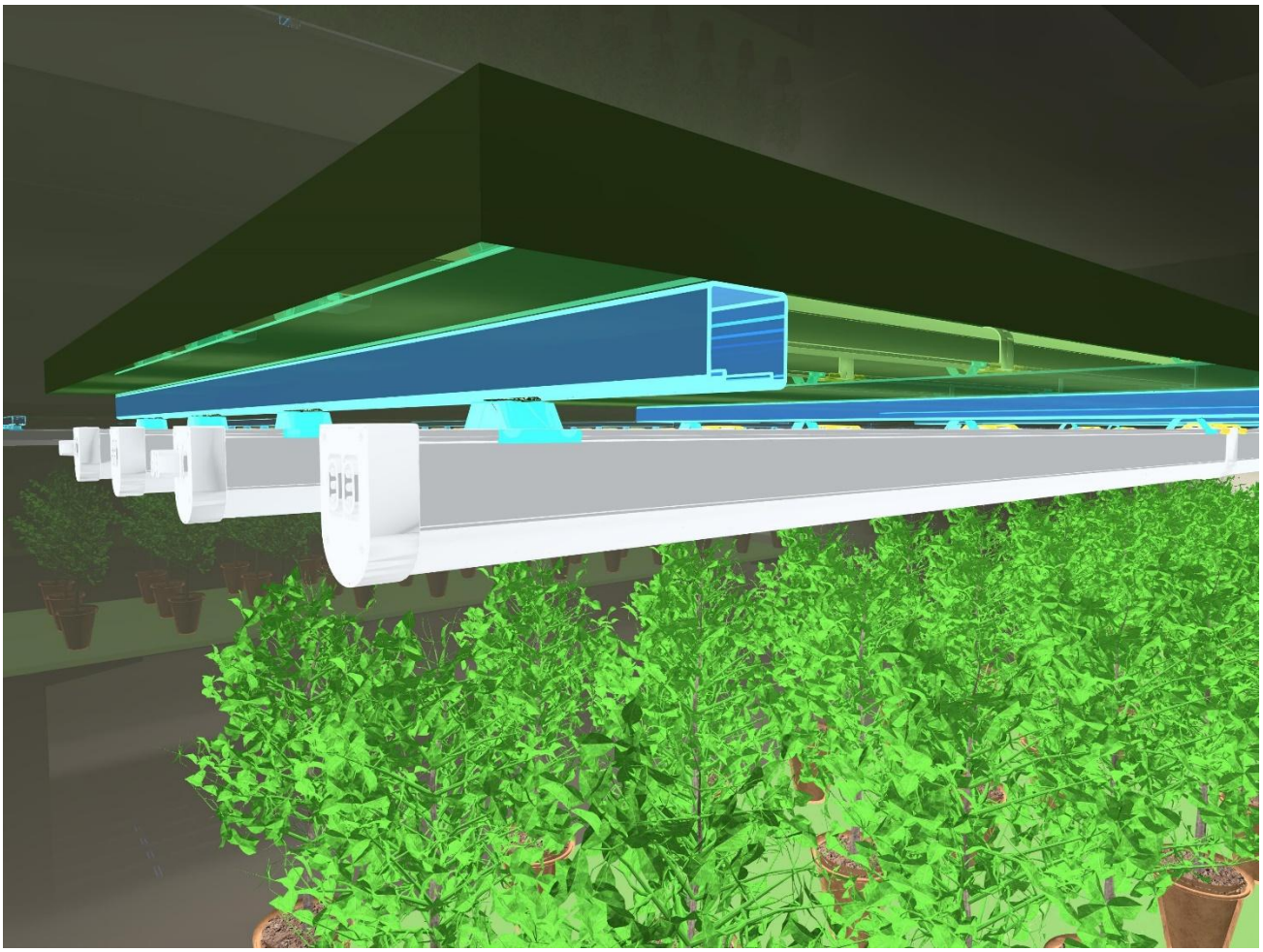


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4) Beginning with the Unistrut bars that are spaced 34” apart, secure the lights to the slide & lock clips as shown in Figure 6, but leave the locking arms disengaged to allow the lights to slide and connect with each other.

Figure 6

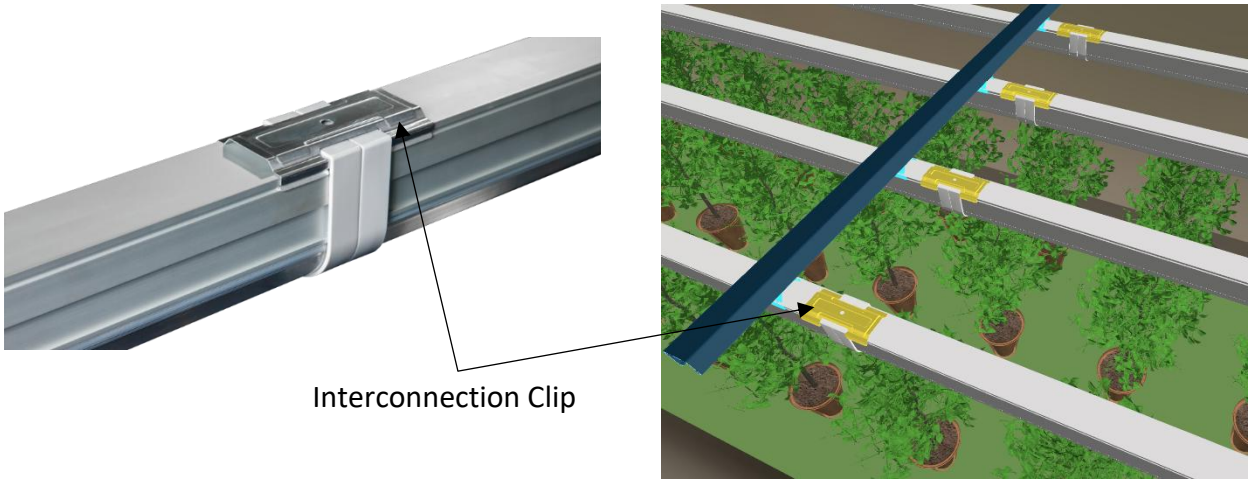




5) Once the lights are connected end-to-end, make any final positional adjustments such as ensuring the ends of the lights are aligned.

6) Attach the interconnection clip as shown in Figure 7 to secure the lights mechanically and electrically.

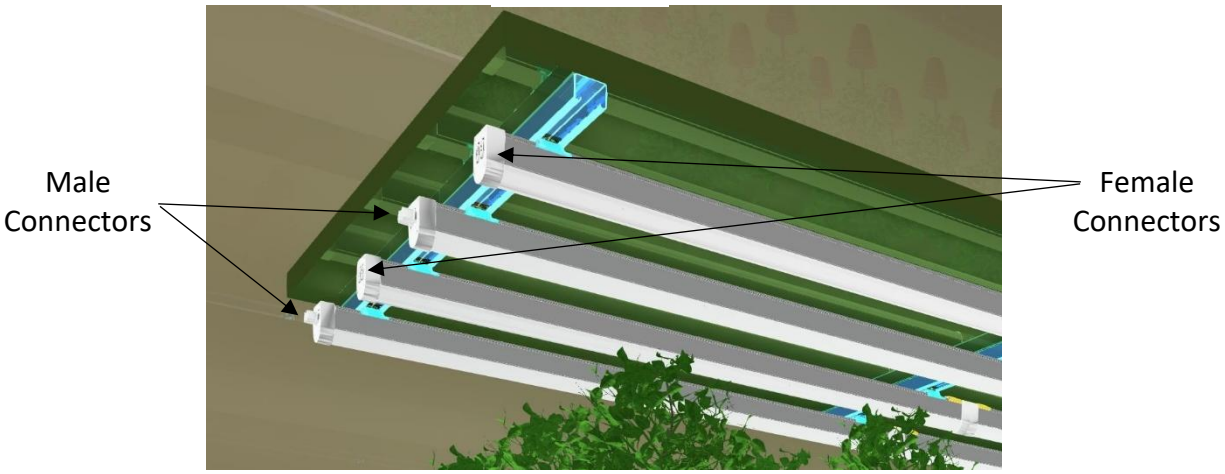
Figure 7



7) Compress the locking arms of the slide & lock clips to secure the lights in place.

8) Connect power cables to lights. Connect optional interconnection cables or dimming cables as needed. When using interconnection cables to electrically connect fixtures side by side, ensure the fixture direction is alternating male to female (Figure 8).

Figure 8

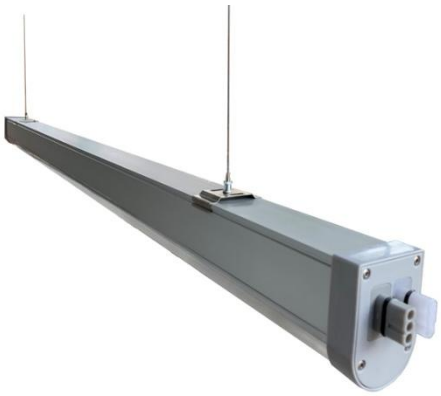


9) Cover any exposed connectors with the end caps.

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Installation Instructions: Suspension Mount

In some circumstances, customers may prefer to install Boost or Infinity lights using suspension cables.



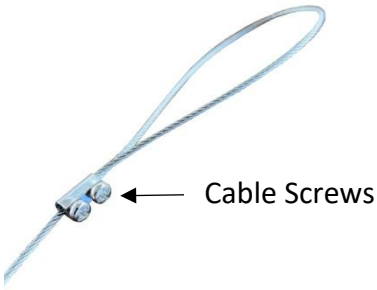
Parts for Suspension Mount Installation

Item	Part Number	Image
Boost or Infinity	TBAR-120W-FS2 or TBAR-60W-FS2	
Suspending kit	SKIT-BD	
Interconnection Clips (optional	INCLIP-BD	
Power Cables	BDPC**X-XX**	
Power Interconnection Cables (optional)	BDINC**X-XX**	
Dimming Controller Cables (optional)	DIMPC**X-XX**	
Dimming Interconnection Cables (optional)	DIMINC**X-XX**	
End Caps	ENDCAP-BD	

1) Unpack the suspending kit (SKIT-BD) clips and cables.

2) Loosen of the cable screws for each cable and adjust the length of the cables so the lights will hang at the desired height above the canopy. The cables are normally all set to the same length. After setting the cables to the appropriate length, tighten the cable screws to lock in place.

Figure 9



3) Attached the suspension clips to the cables using the provided screw (Figure 10).

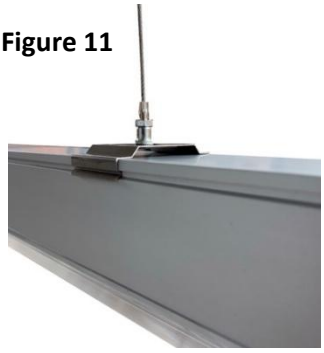
Figure 10



4) Secure the suspension clip & cable assemblies to the mounting structure (e.g., Unistrut, eye bolts, hooks, etc.) at the positions above the canopy as specified in the lighting design. The cable assemblies should be positioned so that two (2) suspension clips can attach to the light bar approximately 6” from each end of the light.

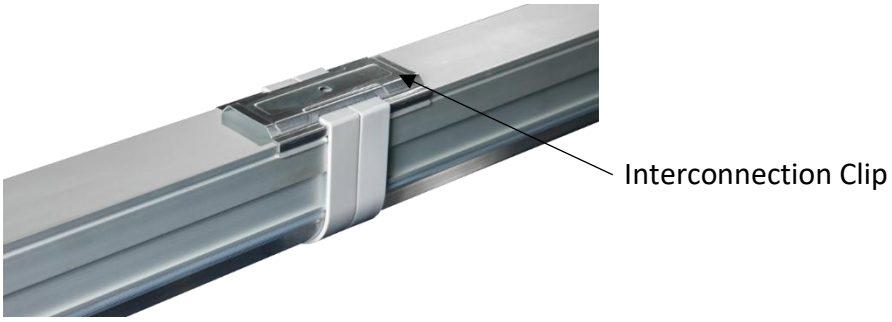
5) Attach the Boost or Infinity light bar to the suspension clips (Figure 11).

Figure 11

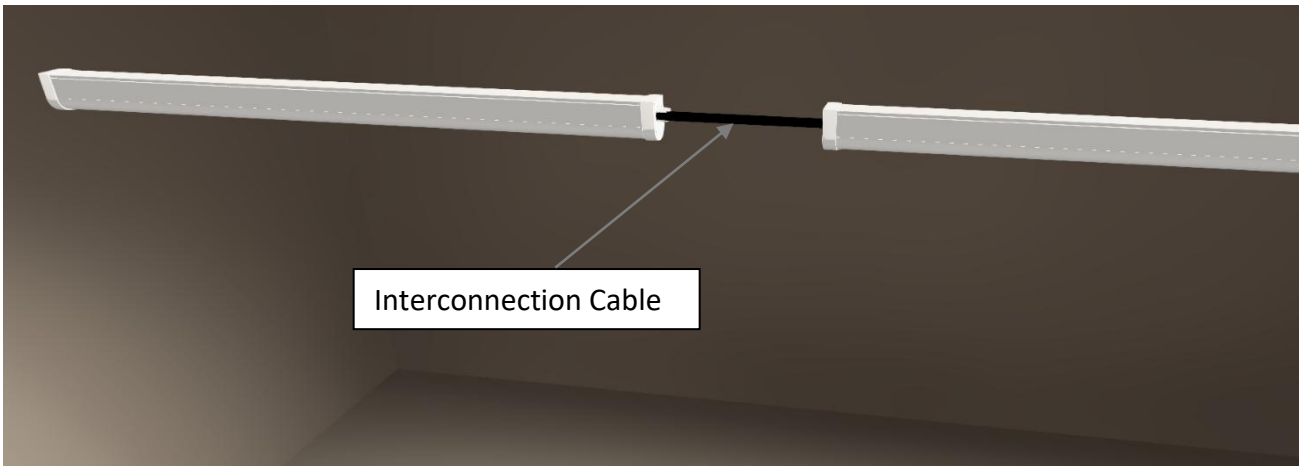


6) The lights are frequently electrically and mechanically daisy-chained by mating the ends together. If creating end-to-end connections, attach an interconnection clip (INCLIP-BD) at the connection point between the lights – Figure 11.

Figure 11



7) Connect power cables to lights. Connect optional interconnection cables or dimming cables as needed. Lights that are physically separated may be electrically daisy-chained using interconnection cables. Be sure not to exceed the maximum number of connected lights when daisy-chaining (see page 2 of this guide or the product datasheet).



8) Cover any exposed connectors with the end caps.