

ALTMAN

L I G H T I N G



HELIOS SERIES

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Preface

The document provides basic information on installation and operational instructions for a qualified, trained installer. These instructions provide information for the following product:

HELIOS SERIES

Additional product information can be found on our web site at www.altmanlighting.com or by scanning the QR code to the right.



Have a question regarding this manual?

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Should you have a suggestion or question regarding your Altman Lighting product, we would love to hear from you.

You can reach us at:

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1400 East 66th Ave.
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Note: Information contained in this document may not be duplicated in full or in part by any person without prior written approval of Altman Lighting. Its sole purpose is to provide the user with conceptual information on the equipment mentioned. The use of this document for all other purposes is specifically prohibited.

Our Commitment

Altman Lighting continually engages in research related to product improvement. New materials, production methods and design refinements are introduced into existing products without notice as a routine expression of the philosophy. For this reason any current Altman Lighting product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise noted.

Important Information

Product Safety Notices

When using electrical equipment, basic safety precautions should always be followed including the following:



1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. Do not use outdoors.
3. Do not mount near gas or electric heaters.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. Refer service to qualified personnel.

SAVE THESE INSTRUCTIONS.

Warnings



WARNING: You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by removing fuses or turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltages and damage the device. A qualified electrician must perform this installation.

WARNING: Refer to National Electrical Code® and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to personnel.

WARNING: This equipment is intended for installation in accordance with the National Electric Code® and local regulations. It is also intended for installation in indoor applications only. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

WARNING: This Lighting Fixture IS NOT for residential installation or use.

WARNING: The structure where fixture(s) is to be mounted must be capable of supporting the weight of the fixture and its accessories.

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE.

**CONSULT A QUALIFIED ELECTRICIAN TO ENSURE CORRECT BRANCH CIRCUIT CONDUCTOR.
CONSULTEZ UN ÉLECTRICIEN QUALIFIÉ POUR VOUS ASSURER QUE LES CONDUCTEURS DE LA
DÉRIVATION SONT ADÉQUATS.**

FCC Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Altman Lighting Product Warranty

Warranty Terms

Altman Lighting, Inc., a subsidiary of Altman Stage Lighting Company, Inc., herein referred to as Altman, warrants each new product (except for spare parts or products Altman does not manufacture) for a period of TWO (2) years from date of shipment to correct by repair or replacement any part defect due to faulty material or workmanship. Under these same terms products with an LED light source shall be warranted for a period of FIVE (5) years and One (1) day.

Altman warrants for NINETY (90) days any spare part it manufactures. On spare parts or products Altman does not manufacture, including, but not limited to, lamps, sockets, lenses, roundels, electronics, ignitors, ballasts, etc.; Altman will grant the same warranty given Altman by its vendors. Altman assumes no responsibility for damage or faulty performance caused by misuse, improper installation, careless handling or where repairs have been attempted by others. This warranty is in lieu of all warranties or guarantees expressed or implied and no representative or person is authorized to assume Altman any other liability with the sale of Altman's products.

Altman assumes no responsibility for damage or faulty performance caused by misuse, improper installation, careless handling or where repairs have been attempted by others. This warranty is in lieu of all warranties or guarantees expressed or implied and no representative or person is authorized to assume Altman any other liability with the sale of Altman's products.

Warranty Service

The customer must receive a Return Material Authorization (RMA) number prior to return, return shipment must be visibly marked with the RMA number and the product must be returned (shipping prepaid) to the factory at:

1400 East. 66th Avenue
Denver, CO 80229 USA
+1-303-500-7072
support@altmanlighting.com

RMA's can also be submitted on line via <https://www.altmanlighting.com/return-materials-authorization/>

The return must be within THIRTY (30) days of receiving the RMA from Altman. Altman warrants for NINETY (90) days any spare part it manufactures. On spare parts or products Altman does not manufacture, such as lamps, sockets, lenses, roundels, electronics, ignitors, ballasts, etc. Altman will grant the same warranty given Altman by its vendors.

Product Overview

Components



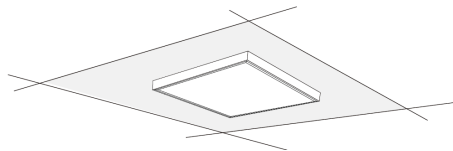
Helios Series 1x4



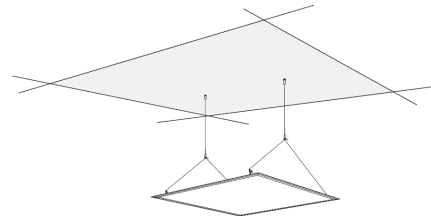
Helios Series 2x2



Helios Series 2x4



Surface Mounting Kit



Cable Suspension Kit

Power Requirements



Before performing any field wiring, refer to and read the warnings contained in “Important Information” on page 4.



WARNING! The Back-Lit Panel should be connected to a constant circuit or a relay device. It should never be connected to a dimmer or circuit controlled by a dimmer.



WARNING! The maximum allowable input current is 20 Amps. Do not overload circuits! Luminaires must be supplied by a branch circuit protected by a maximum 20 Amp circuit protector. Doit être alimenté par un circuit de dérivation protégé par un maximum de 20 ampères circuit protecteur. Ne surchargez pas les circuits!

Power requirements per panel are as follows:

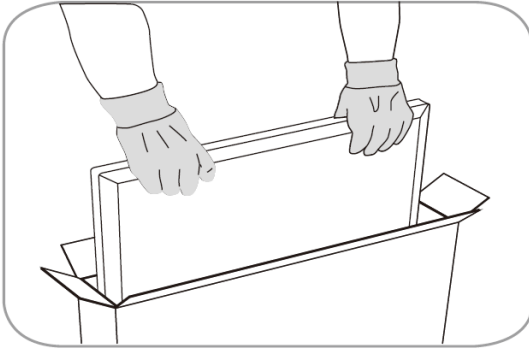
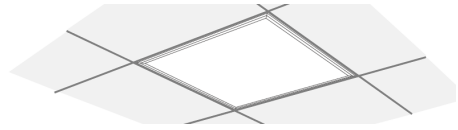
2x2 = 20 watts minimum, 120 - 277VAC

1x4 = 20 watts minimum, 120 - 277VAC

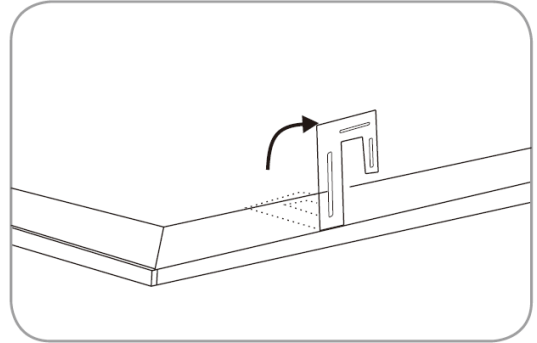
2x4 = 30 watts minimum, 120 - 277VAC

Installation And Setup

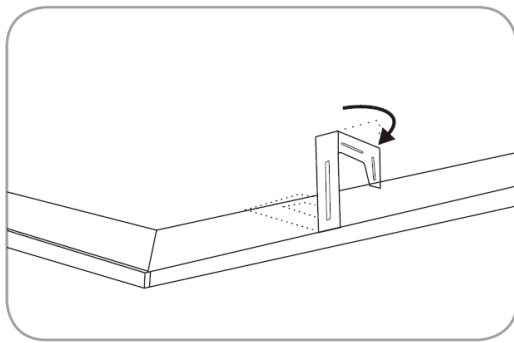
Recessed Grid Ceiling



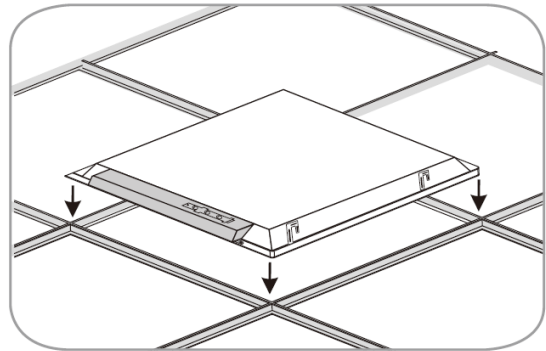
1. Take the panel out of the box and protective bag, remove protective film.



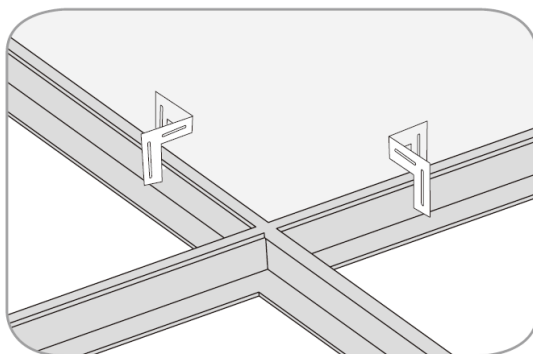
2. Lift the mounting clip on the edge of the panel.



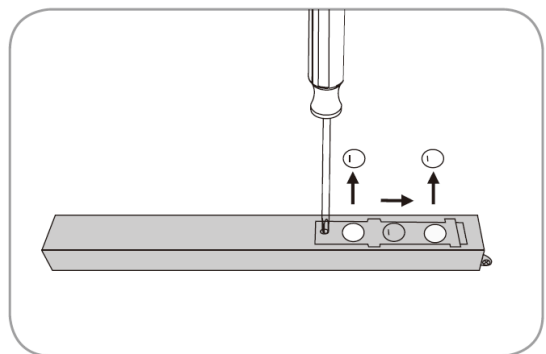
3. Turn the mounting clip head.



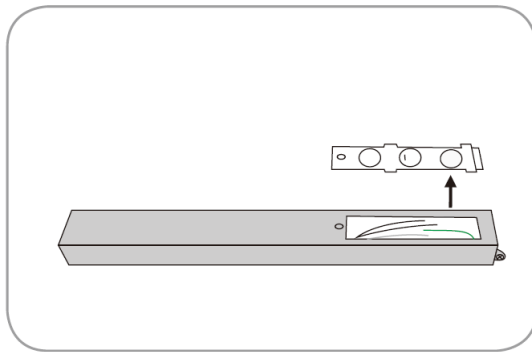
4. Place the panel into the ceiling.



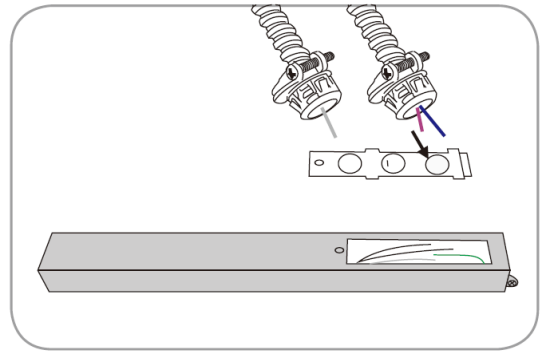
5. Check the clips can fasten to the T-Bar structure.



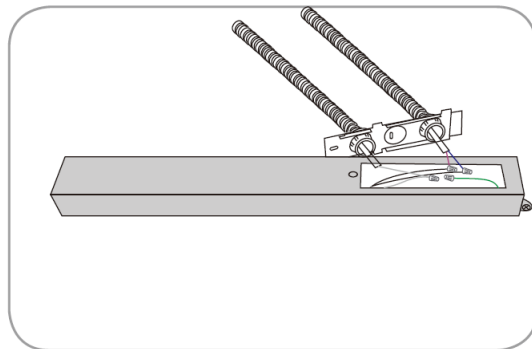
6. Remove the driver box cover.



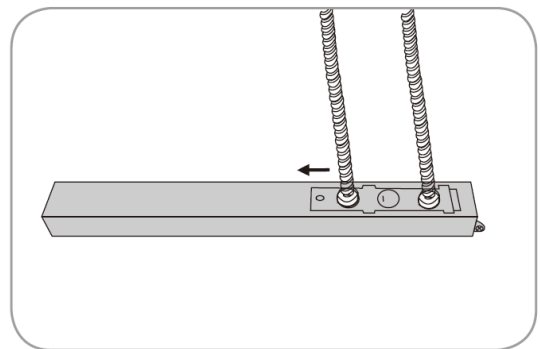
7. Open the knockout hole.



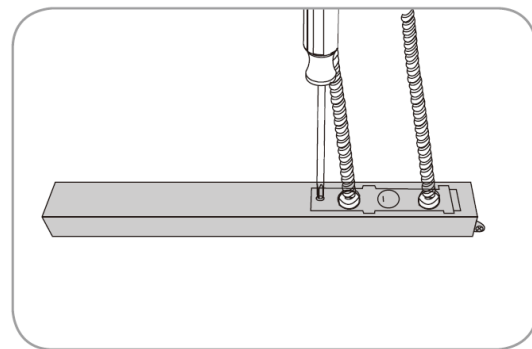
8. Insert the cable into the driver box.



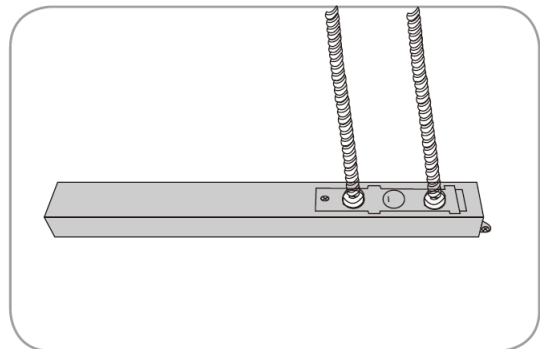
9. Connect the AC power and the 0-10V signal cable to LED driver (if 0-10V control)



10. Insert the driver box on the right side of the cover, then slide it to the left to hold the cover.

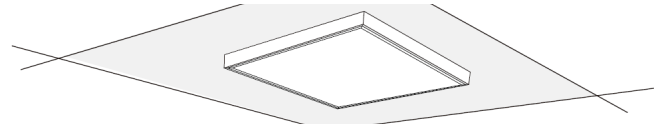


11. Re-attach the driver cover.



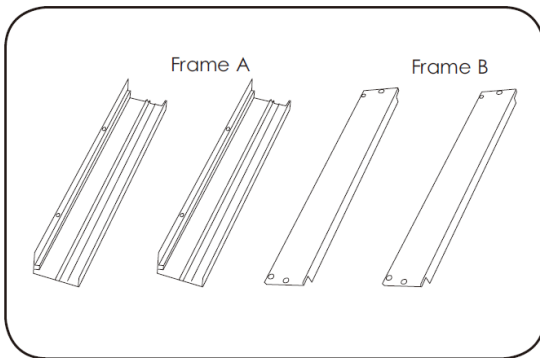
12. Complete.

Surface Mount with Frame

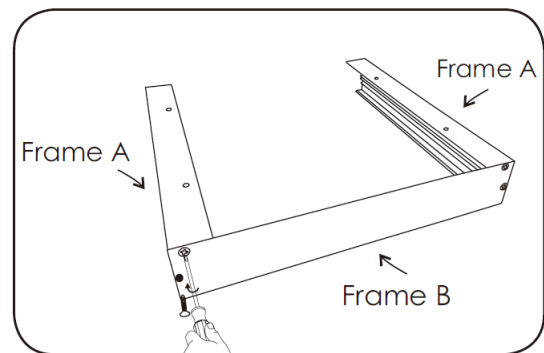


Frame A 	X 2	X 2
Frame B 	X 2	X 2

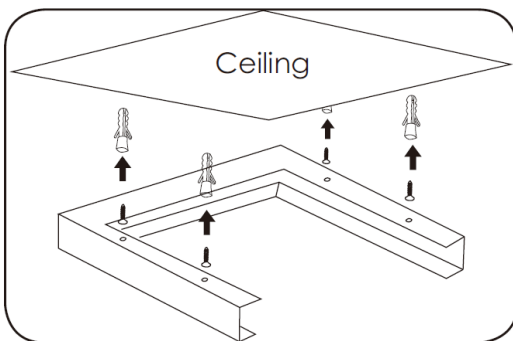
	X 8	X 8
	X 4	X 6



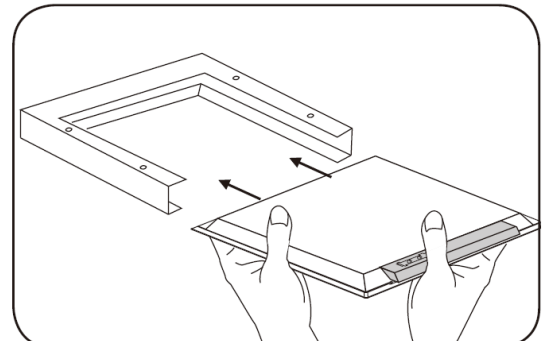
1. Identify the two frame types as illustrated above (type A & B)



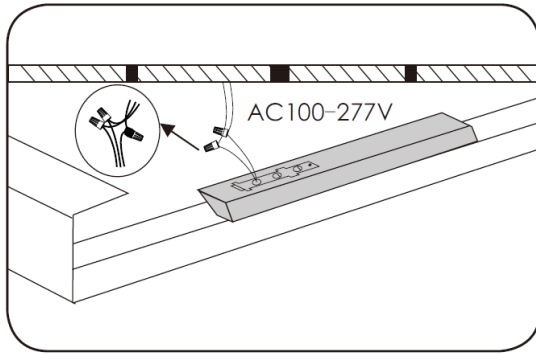
2. Attach the two 'A' frames together with one 'B' frame.



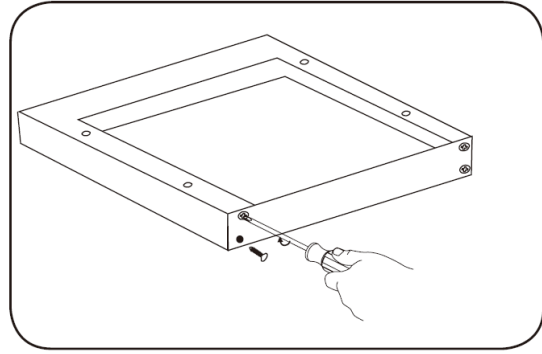
3. Mount the frame to the ceiling.



4. Slide the Panel in to the frame.
Note: Luminaire shown for installation purposes and is not to scale.

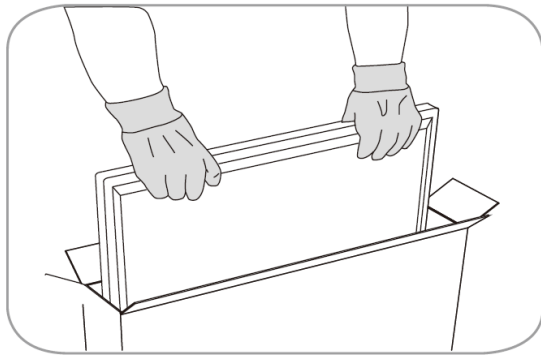


5. Wire luminaire per wiring instructions previously described in this manual.

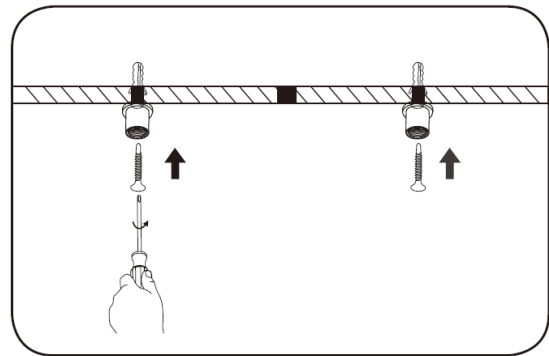
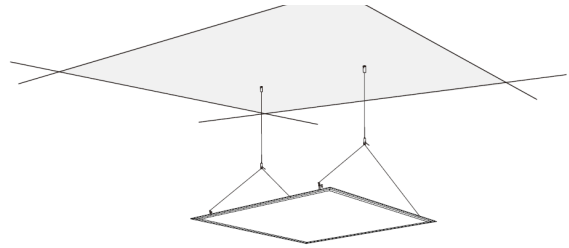


6. Affix the second frame with the screws supplied.

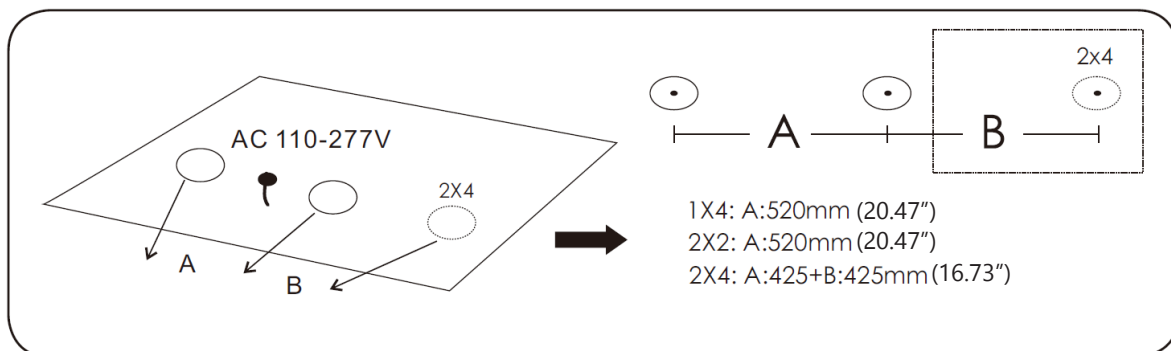
Cable Suspension



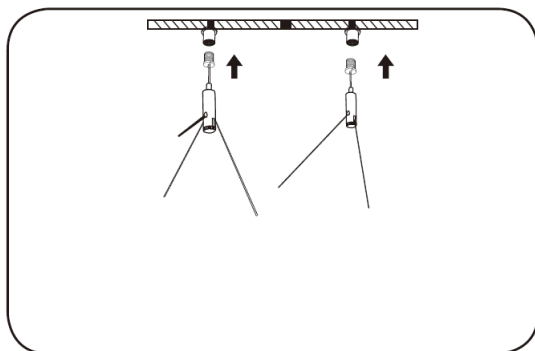
1. Identify the two frame types as illustrated above (type A & B).



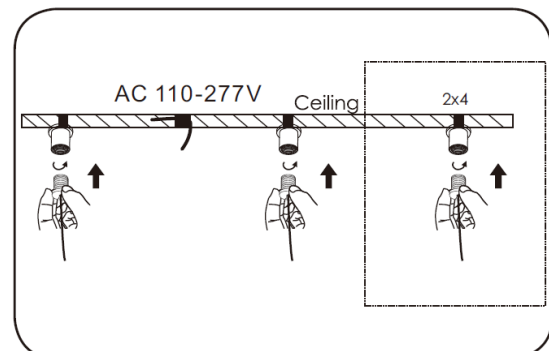
2. Insert the wall plugs into the ceiling and secure the suspension surface fixing to the ceiling.

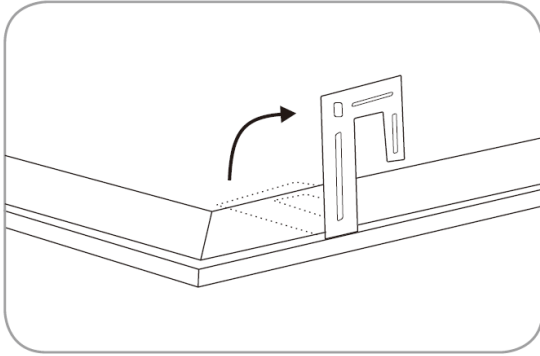


3. Please note the recommended distances for the ceiling fixings.

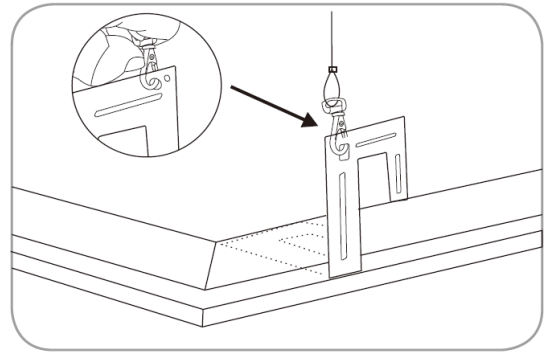


4. Screw the suspension cable to the ceiling fixing.

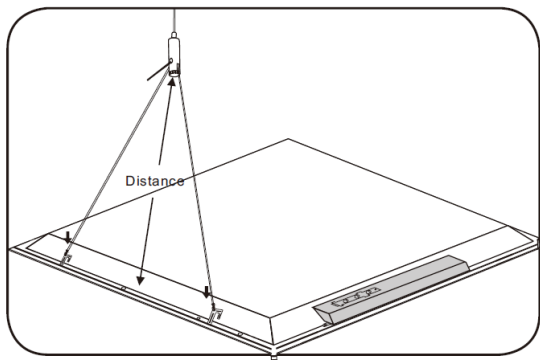




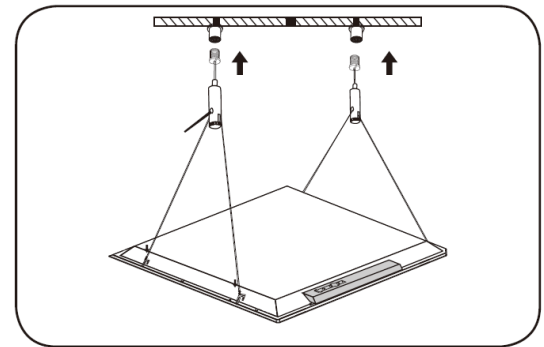
5. Lift the mounting clip on the edge of panel.



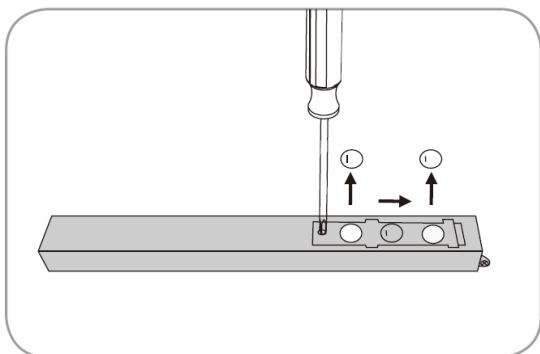
6. Lock the suspension cable to the clip.



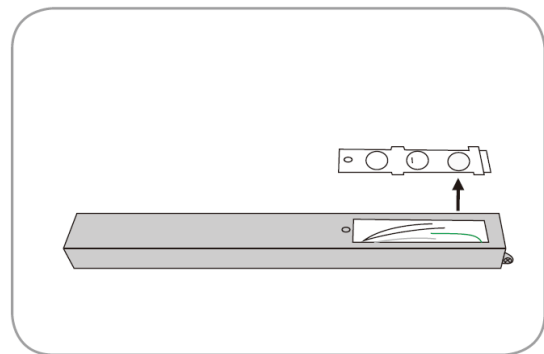
7. Adjust the cable length to meet the height requirements.



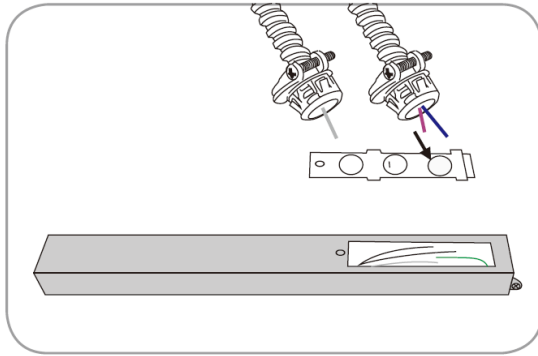
8. Fix the cable to the ceiling.



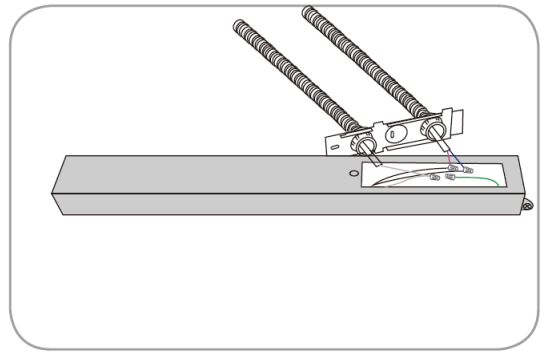
9. Open the knockout holes.



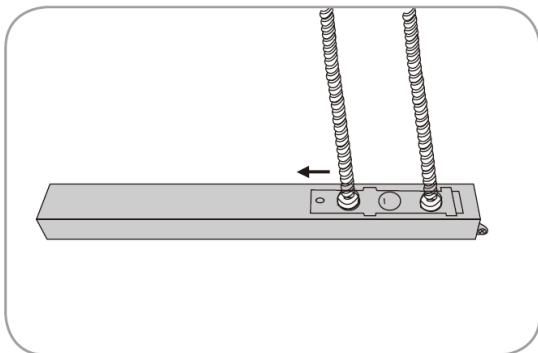
10. Remove the driver box cover.



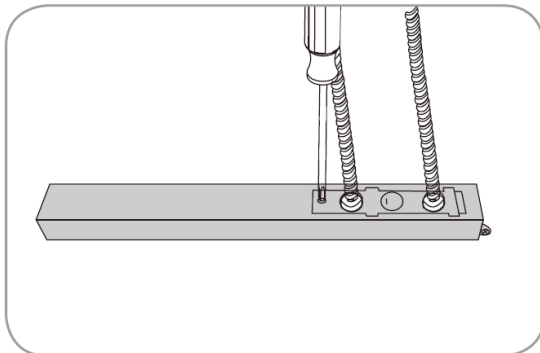
11. Insert the cables into driver box.



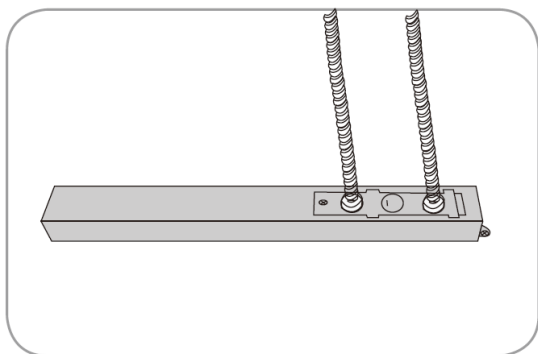
12. Connect the AC mains power and 0-10V dimmable cable to LED Driver.



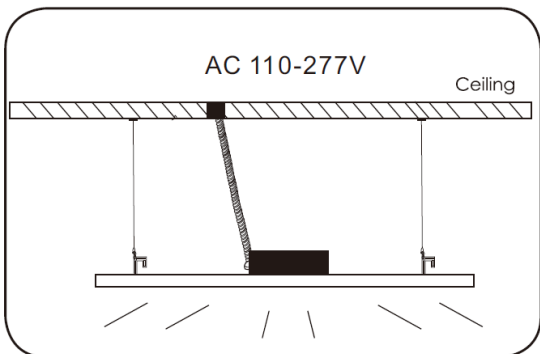
13. Slide the power cover toward the label to secure the power cover.



14. Attach the driver cover back with hardware provided.



15. Completed.



Connecting 0-10V Control

All 0-10VDC wiring should be done with shielded pair wiring with the shield grounded to earth at the controller. The pair does not need to be twisted. We particularly recommend this when low end dimming performance is of high importance as un-shielded analog control wiring runs are susceptible to interference.

Fixture dimming performance is dependant on driver quality. The Helios Series is designed to dim from 100% - 10% of maximum intensity.

Connect 2-wire cable to terminals via flexible conduit.



Conduit Entry / Exit

Connecting Emergency Battery and Control (Optional)

A optional battery backup driver in compliance with UL924 and CSA C22.2 no.141 is available. This is comprised of a driver/battery and separate bracket. The emergency battery back up can only be utilized on recessed mounted units. Surface mount and cable mounted units are not compatible with the Emergency Battery back up accessory.



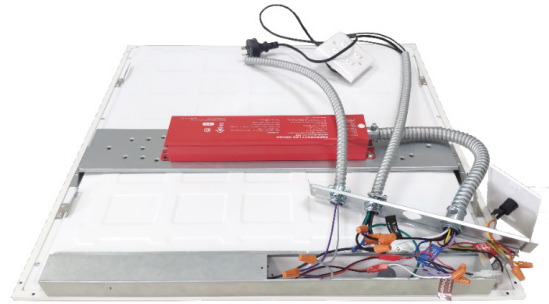
1. Locate bracket to align with screw holes on back of panel.



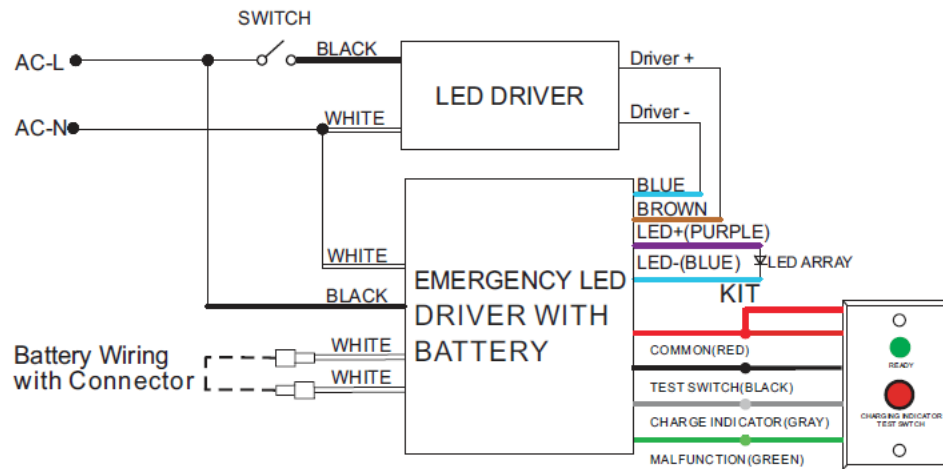
2. Attach bracket to back of panel.



3. Attach battery driver to bracket.



4. Using appropriate conduit, connect wiring as detailed below.



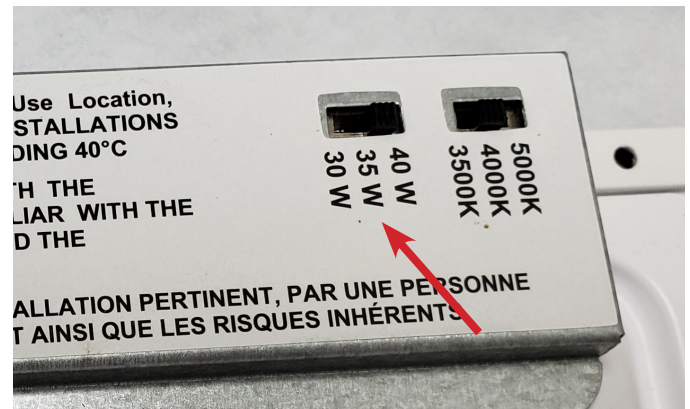
Operation

Selecting Power Level

Power levels are selectable via the switch located on the driver / control box.



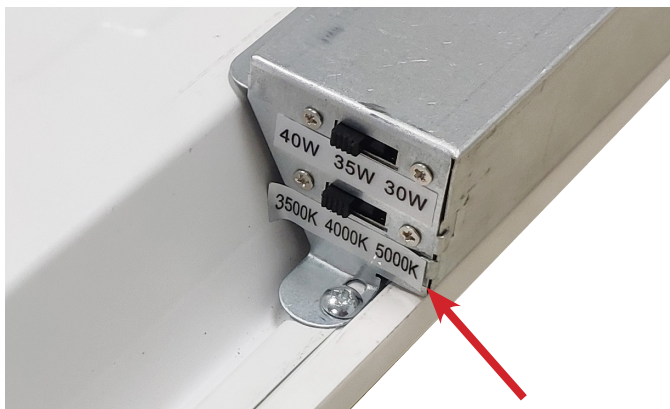
Power Switch Type 1



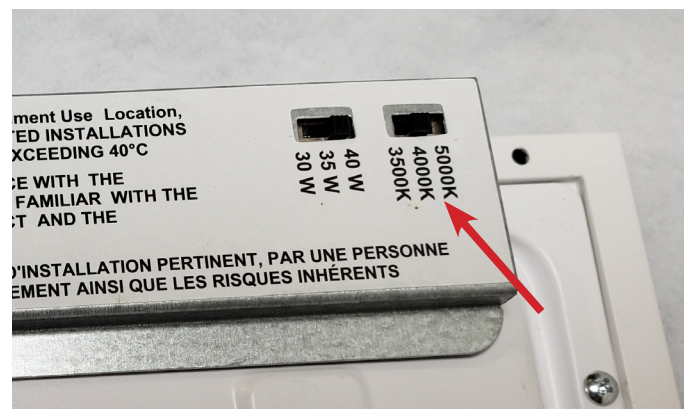
Power Switch Type 2

Selecting Color Temperature

Color temperature is selectable via the switch located on the driver / control box.



Selector Switch Type 1



Selector Switch Type 2

Cleaning And Care



WARNING! All cleaning should be performed with power completely removed from the luminaire. Never remove protective covers when luminaire is powered. Wear appropriate protective eye wear and gloves when cleaning the fixture. All service and maintenance, other than described herein, should be performed by a qualified technician or Authorized Service Center. AT NO TIME SHOULD THE LEDs BE TOUCHED.

Cleaning Instructions

Being a solid-state fixture, the Helios Series requires very little routine maintenance by the user. The luminaire requires special care to be taken with the plastic components because they are much easier to scratch or damage than glass.

The following is a list of cleaning materials required to care for the Helios Series:

- Lint free lens tissue
- Lint or powder free gloves
- A mild soap solution.



WARNING! Under no circumstances should ammonia-based cleaners, acetone, or other harsh solvents be used on or near the Helios Series. These types of cleaners or solvents can permanently damage the optics or housings of the fixture.

Service and Maintenance

For all other service and maintenance issues, please contact your local Altman Lighting office or an Authorized Service Center.



WARNING! Disassembly, alterations, unauthorized service, etc. will void the product warranty. Contact your local Altman Lighting office or an Authorized Service Center for technical support and service

Troubleshooting

The chart below provides possible causes and remedies for various error messages and/or symptoms. If this chart is unable to address your issue, please contact your authorized dealer or Altman customer service for assistance.



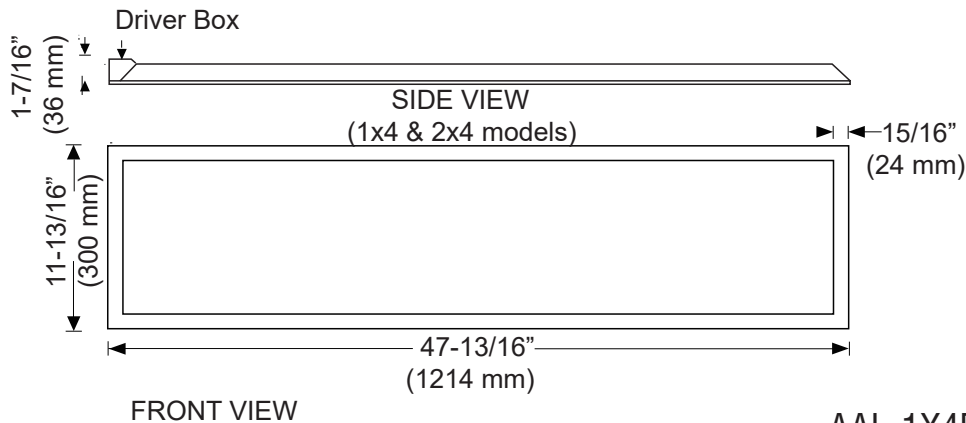
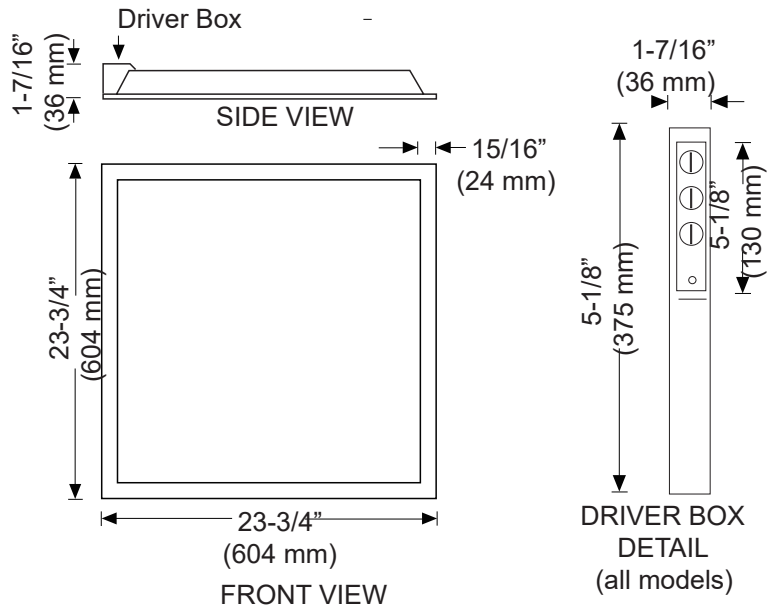
Any service and maintenance (including troubleshooting), other than described herein should be performed by an Authorized Altman Lighting Dealer or Service Center.

DESCRIPTION	ISSUE	POSSIBLE CAUSE/REMEDY
No light output.	Fixture will not produce or output light and connected to power.	0-10....Control is set at 0% intensity... 0-10 Control is not connected properly NON-DIM version has no power.
Low light output.	Fixture produces low light output and connected to power.	0-10 Control is set to low setting.
No power at luminaire.	Luminaire does not power up.	Circuit not energized...verify circuit breaker is turned on. Not plugged in...ensure A/C cable is connected to power source. Power cable wired incorrectly...verify power cable and connector are wired correctly.

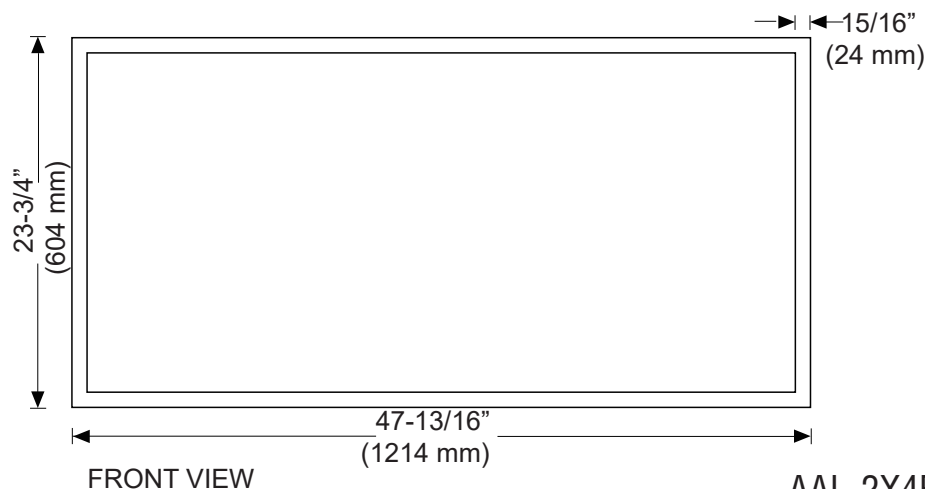
Technical Specifications

Materials:	Corrosion-resistant materials and hardware
Color:	White (RAL 9016)
Control:	0-10V (10%-100%) or Non Dim (On/Off)
CCT Settings:	3000K, 3,500K, 4,300K
Beam Angle:	120°
Light Engine	2x2 (20/25/30 Watt Settings) 1x4 (20/25/30 Watt Settings) 2x4 (30/35/40 Watt Settings)
Lumens/Watt	125 lm/W rating >50,000 hours to L70.
Current Draw:	30 Watt setting: 120VAC - 0.25 Amp 277VAC - 0.10 Amp
Input Voltage:	100-277 Vac 50/60Hz
Power Factor:	0.95
Cooling:	Convection
Environment:	0 to 40 degrees C (32 to 104 degreesF) / 5%-95% Non condensing
Compliance:	DLC, cETLus listed, RoHS, & CE marked
Warranty:	Five (5) years and One (1) day
Support:	Supported Forever - free phone and online tech support for the life of your product.
Emergency:	UL924 and CSA C22.2 NO.141 compliant

AAL-2X2FPTFR-TW-VP



AAL-1X4FPTFR-TW-VP



AAL-2X4FPTFR-TW-VP

Drawings not
to scale.