



DRAGON



DRAGON
alpha

USER MANUAL & INSTALLATION GUIDE

For all our User Manuals please visit www.scynceled.com/support

MANUAL FOR END USER AND INSTALLER

Thank you for purchasing the Alpha fixture. This manual contains all the information needed to quickly familiarize yourself with the product. Please review this information carefully, before installing and/or operating the product.

We recommend you keep this manual on hand for future reference.

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PRODUCT DESCRIPTION

INTENDED USE/S

The Alpha fixture is intended for overhead illumination of horticultural crops. For other applications in professional horticulture, please contact a representative at Scynce. Any use other than the approved intended use described above is considered an unintended use. Scynce cannot be held responsible for possible consequential damage caused by improper, incorrect or inadvisable use.

SYMBOLS USED

The following symbols are used in this manual to draw attention to specific topics or actions

WARNING

A warning indicates the possibility of injury to the user and/or damage to the product should the user not perform the procedures as described.

ATTENTION

A note alerts the user to potential problems which may occur if a procedure is not carried out as described.

SPECIFICATIONS

Product Name	Optic	Manufacture's ID	Size	Wheight	Ingress Protection Rating	Installation Environment
Dragon Alpha	70°	52702	(1124 x 203 x 131)mm (44.25 x 8 x 5)in	25 lbs	IP66	Suitable for Damp Loactions
	Main Voltage +/- 10%(VAC) 50/60 Hz	Power Draw	Power Factor	Color Spectrum Four Channels	Dimmable	Ambient Operating Temp
	120-277	600 watts	>0.95	2700K White 6500K White 660nm Red 720nm Red	Four Channel independent dimming, 0%-100% with Scheduling	-40C ~ 30C

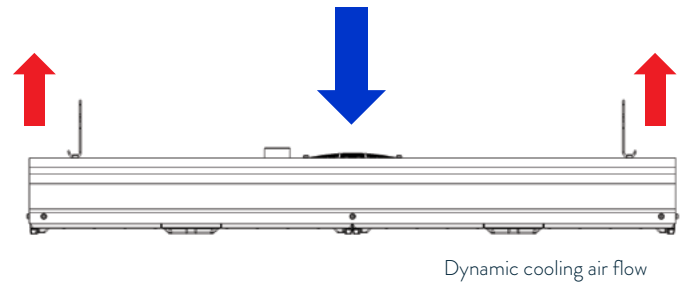
THERMAL MANAGEMENT

All Scynce fixtures have built-in dynamic thermal monitoring. In addition, the Alpha fixture utilizes an active cooling system. Should the light begin to overheat, the fan will automatically increase in speed. If the light continues to overheat the onboard processor will automatically reduce output to protect the light while still maintaining a minimal level of output.

To ensure safe operation of the lighting equipment it is necessary to control the temperature of the room by mechanical ventilation or cooling system to below the maximum ambient operating temperature of 40°C (104°F).

WARNING

Never block the cooling ports on the Dragon Fixtures. Doing so will cause the performance of the product to reduce and may cause permanent damage.

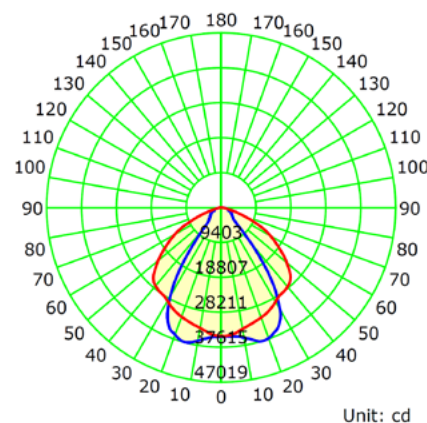


LIGHT OUTPUT

The Alpha features Scynce's newest optical technology called the Linear 70. The 70° distribution angle has effective penetration of light into the crop and is typically used in high ceiling single-level indoor or greenhouse applications where the fixtures need to be mount 3+ feet over the canopy.

OPTICAL DISTRIBUTION

The luminosity distribution curve for the Linear 70 is depicted below. This optic offers a higher intensity that is evenly distributed across the 70° beam. By controlling the beam with optics, light energy is gathered and focused, taking full advantage of the LED directed radiation pattern. If you need assistance with fixture layout to achieve a desired PAR level at the canopy contact your sales representative, we can help.



LINEAR 70 OPTIC

Luminous Intensity Distribution Curve

PRECAUTIONARY MEASURES AND SAFETY INSTRUCTIONS

WARNING

- Always adhere to the local building and electrical codes when installing or using the fixture.
- HIGH VOLTAGE- Switch off the main voltage before commencing installation or maintenance work.
- Do not open or disassemble the fixture, it contains no serviceable parts inside. Opening the fixture can be dangerous and will void the warranty.
- Never look directly into the light source while fixture is turned on. Doing so can cause damage to the eyes.

ATTENTION

- The end user is responsible for ensuring correct installation and use of the product. Incorrect installation can cause damage to the product. The warranty shall become void if the product and/or electronic components are damaged due to incorrect installation.
- The performance of the fixture may be compromised if operated outside of the recommended ambient temperature guidelines.

Risk Group 2

CAUTION. Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eye.

Product tested against IEC62471

Groupe de Risque 2

MISE EN GARDE. Rayonnement optique potentiellement dangereux émis par ce produit. Ne regardez pas la lampe en marche. Peut être nocif pour les yeux.

Produit testé contre IEC62471

These photobiological safety markings are based on testing of the light output characteristic of a single horticultural luminaire. Increased exposure risk to facility personnel may be present depending upon the number of horticultural luminaires and their placement and/or positioning within the plant growth facility.

It is the responsibility of the plant growth facility to address these risks at the facility level and to ensure that people entering the plant growth areas while the lights are on, are aware of these risks and that appropriate safeguards are in place.

INSTALLING THE FIXTURE

ATTENTION

- 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

MOUNTING THE LIGHT FIXTURE

The Alpha fixture is designed to be hung using the hangers at either end of the fixture's cowling. The hangers can be installed to the cowling by;

- Orientate the hanger parallel to the cowling and align the ends of the hanger with the insert tabs in the cowling.
- Insert the hanger ends into the tabs in the cowling.
- Rotate the hanger upward through the tabs in the cowling

The Alpha fixture hangers are equipped with three featured shapes to assist when hanging; 1-3/8" (35 mm) square, 1-3/8" (35 mm) round, and 3/4" (19 mm) round.

When mounting the Dragon fixtures in an array, a minimum distance of 8 inches side to side and a minimum distance of 1 inch end to end must be maintained. When mounting next to a ceiling or wall, movable partitions, and the like, insure a minimum distance of 40 inches (100cm) is maintained.

ELECTRICAL CONNECTION

Alpha fixture equipped with a NEMA L7-15 plug on the cowling. Installed the cable provided by Scynce into the plug and rotate clockwise to lock. Make sure that the plug is fully seated prior to rotating to lock (See Fig. 2). Slip the rubber boot over the plug collar on the cowling, this is to insure that water does not enter the plug. Plug the light in and you are ready to go. Always ensure that fixture installation is compliant with local building codes. The Alpha fixture is intended to connect to the branch circuit with the supply cord and attachment plug.

When routing the fixture power cord ensure that;

- The cord is not concealed or extended through a wall, floor, ceiling, or other parts of the building structure.
- The cord is not located above a suspended ceiling or dropped ceiling.
- The cord is not permanently affixed to the building structure.
- The cord is routed so that it is not subject to strain and is protected from physical damage.
- The cord is visible over its entire length.
- The cord is to be used within its rated ampacity as determined for the maximum temperature of 30C ambient.

To ensure safe operation of the lighting equipment it is necessary to control the temperature of the room by mechanical ventilation or cooling system to below the maximum ambient operating temperature of 30C (86F).



Figure 2: Provided cable by Scynce with rubber boot

INSTALLATION PREP

- Switch off main voltage
- Refer to your light plan. Arrange boxed light fixtures in specified mounting locations.
- Remove the fixture from the packaging and check contents.
- Gather any additional tools and/or hardware that may be required to mount the fixture.

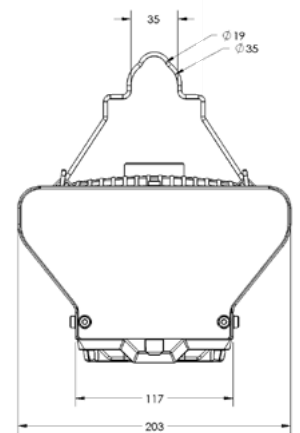


Figure 1: Fixture mounting detail in mm.

SINGLE PHASE CORD TERMINATION

BLACK	Line
WHITE	Neutral
GREEN	Ground

DOUBLE PHASE CORD TERMINATION

BLACK	Line
WHITE	Line
GREEN	Ground

CONTROLLING THE LIGHT

Dragon fixtures are equipped with four independent channels of LEDs (White 3000K, White 6500K, Red 660nm, and Red 720nm). Each channel can be independently dimmed from 0% to 100%. Channel dimming can be adjusted on-demand using the mobile app (See Mobile App Instructions for details) or by setting up an embedded schedule in the light (See Scheduling Instructions for details).

MAINTENANCE

WARNING

- High Voltage - Switch off the main voltage before commencing maintenance work.
- Caution - Fixture reaches high temps while in use.
- Do not open or disassemble the product. Opening the product can prove hazardous and will void the warranty.
- Caution - Risk of Fire
- Caution - Risk of shock

ATTENTION

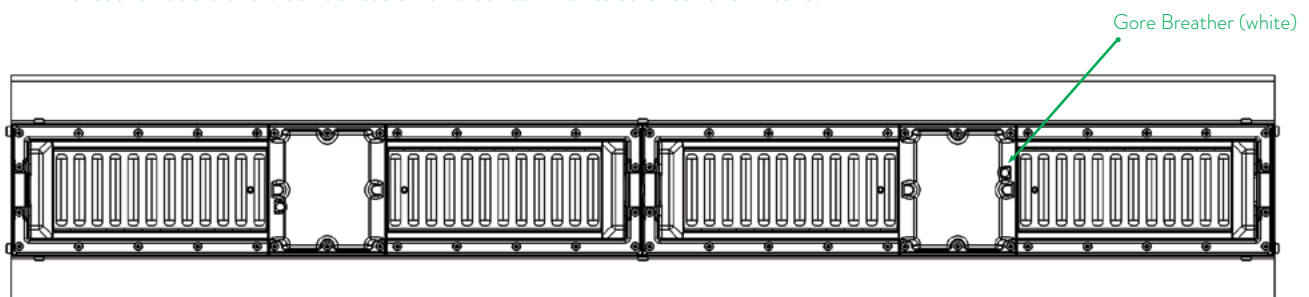
In the event that the product is defective or damaged, contact the dealer from whom you purchased the fixtures, or SCYNCE directly. Never switch on a defective or damaged fixture.

- Check the product at regular intervals for build-up of dust and dirt. Clean the product if necessary. Contamination can lead to overheating and reduced light output performance.
- Clean the fixture with water and a damp cloth or a polycarbonate safe cleaner such as Novus #1 Cleaner. Ensure that the polycarbonate lens is always clean.

CLEANING

- Always allow the fixture to cool to room temperature before cleaning it.
- Never clean the fixture with corrosive cleaning agents or other aggressive liquids. The following cleaners are known to cause damage to polycarbonate.
 - o Solvents; Acetone, Alcohol...
 - o Window Cleaner; Windex, 409...
 - o Alkaline Cleaners
- Never use abrasive cleaners, abrasive pads, or gritty cloths to clean, the polycarbonate lenses will scratch.
- Never scrape the polycarbonate lenses to remove build-up. Only use a vinegar and water solution (1:100 ratio) to remove build-up of limescale on the lens.
- Fixtures have been tested under Chlorine gas exposure at manufacturer's recommended dosage with no adverse effects.
- Oil based and non oil based fungicides and pesticides used at manufactures recommendations will not degrade lenses or the fixture.

Do Not remove or damage the Gore breathers. Removal or damage of the breather could allow condensation and contaminants to enter the fixture.



TROUBLESHOOTING

WARNING

Do not open or disassemble the product. Opening the product can prove hazardous and will void the warranty.

In the event a single fixture is not working correctly, disconnect power from circuit and re-apply power prior to any other trouble shooting.

ATTENTION

Never switch on a defective or damaged fixture. In the event the product is defective or damaged, contact the dealer where you purchased the fixture or contact SCYNCE directly.

WHAT CAN YOU SEE?

WHAT SHOULD I DO?

The fixture does not emit any light.

Reset the fixture by disconnecting the main voltage for more than 5 seconds and then reconnect.

In the event that the fixture switches off again, lower the ambient temperature.

Check main voltage line for correct voltage range (120-277vac).

Reload default settings.

If the issue persists, contact supplier for assistance.

Only half of the fixture lights turn on

Reset the fixture by disconnecting the main voltage from the fixture for more than 5 seconds and then reconnecting.

If the issue persists, contact supplier for assistance.

The fixture emits too little light when compared to the other fixture(s).

Reload default settings.

Contact the installer and have the wiring checked.

If the issue persists, contact supplier for assistance.

Fixture will not respond to Dim Control.

Reload default settings.

Contact the installer and have the wiring checked.

If the issue persists, contact supplier for assistance.



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PRODUCT DIMENSIONS (IN MM)

