MATRIX S SERIES

OWNER'S MANUAL

Matrix S Series Owner's Manual

Reading the User manual thoroughly is strongly recommended in order to optimize the performance of your LED fixtures. Please keep your user manual in a safe place for future references. Thanks for purchasing the Matrix S Series Grow Light.

Specifications

Matrix S600

Input:	110V,220V capable with switch
Output:	400-420W
LEDs:	200 X 3W
Spectrum(nm/k)：	410nm-460nm-630nm-660nm-730nm-6000K- 12000K
Driver：	1 X Mean Well 400W
Current：	2-4A
Dimensions：	18"X13"X4"
Net Weight：	15 lbs.

Matrix S900

Input：	110V,220V capable with switch
Output:	600-620W
LEDs:	300 x 3W
Spectrum(nm/k)：	410nm-460nm-630nm-660nm-730nm-6000K- 12000K
Driver：	2 X Mean Well 350W
Current：	3-6A
Dimensions：	26" X 13" X 4"
Net Weight：	21 lbs.

Matrix S1200

|	
Input：	110V,220V capable with switch
Output:	800-820W
LEDs:	400 x 3W
Spectrum(nm/k)：	410nm-460nm-630nm-660nm-730nm-6000K- 12000K
Driver：	2 X Mean Well 450W
Current：	4-8A
Dimensions：	34" X 13" X 4"
Net Weight：	28 lbs.

Precautions

1. Prevent the risk of electric shock do not expose to rain or moisture. Store indoors.
2. Keep power off during installation and disassembly.
3. Avoid direct contact to high moisture substances.
4. No containers filled with liquid such as vases, coffee cups, shall be placed onto the LED panel.
5. Do not look into the LEDs directly, especially the UV diode.
6. Aggressively switching power ON/OFF should be prohibited.
7. Basic safety precautions should always be followed to reduce the risk of fire and personal injury.

Features

-Brushed Aluminum Casing is a unique design in the existing market. It's light weight, rust and corrosion resistant, and yields fine heat dissipation

-Energy efficient LEDs run on 600W~900W, equivalent to 800W~1200W, saving energy while yielding higher penetration and PAR value for better plant illumination and spread

-Full spectrum LEDs at 410nm ~ 730nm and 6000K ~ 12000K whites available in Matrix S Series, brings the most out of the LEDs, ideal for plants.

-One of the most advanced controlling system pairings with functional programmability, 4 channel, 5 modes, 8 time points sets

-The quad-band system is consists of 4 channels of red, deep red, blue, white, UV blended LEDs, modularized design is dimmable with a remote or a programmed controller

-UL, FCC, CE approved Mean Well driver ensures stable everlasting operations of the fixtures

-Both models of Matrix S fixtures are compatible with remote, wired or wireless controllers

-Intelligent temperature-controlled fans, effective thermal solution, low noise and extends lifespan
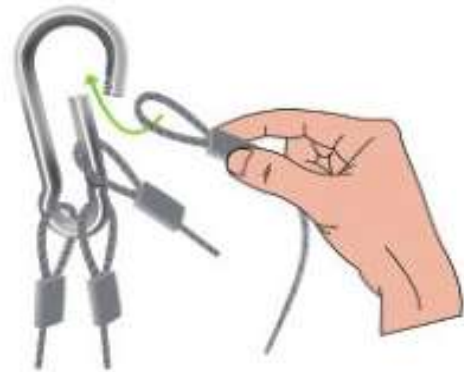
PAR Value

Matrix S Series Owner's Manual
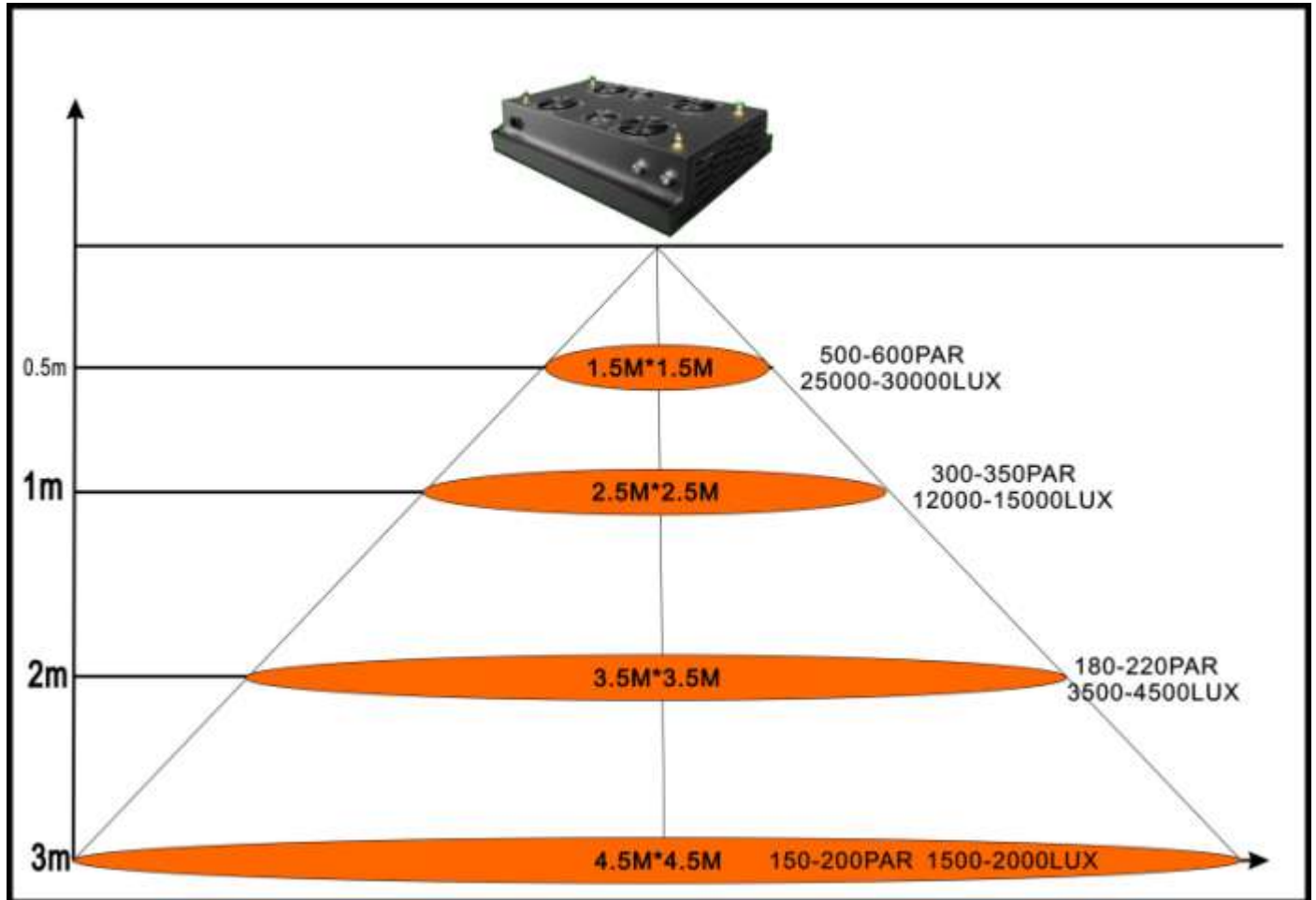
Installation

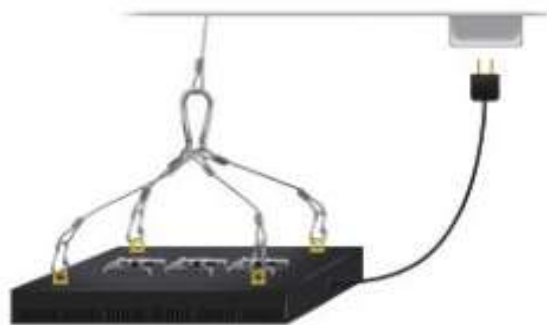**①** Take one loop-end of each hanging cable and attach to a snap-hook (included).

② Fasten the other loop-end of the cables to the hanging snap hook.

③ Clasp each snap hook to each sling swivel screw on the LED panel.

④ Hang the LED panel to a firm ceiling.

⑤ Plug the power cord to a well grounded AC outlet.

Connections

A: Wired Connection

B: Wireless Connection

◆ When using the wired controller, connect the controller with the aux-to-data cable to the "DATA IN" socket on the first fixture, and then connect the data-to-data cable to the "DATA OUT" socket on the first fixture, lastly, connect the other end of the data-to-data cable from the first fixture to the "DATA IN" socket on the next fixture.

◆ When using the wireless controller, connect multiple units with the data-to-data cable in the "DATA IN", "DATA OUT" sequence.

Accessories

Smart controller   RF Remote

Controller-to-LED   LED-to-LED Wire   Hanging Kits   Wireless Controller   Power Cord
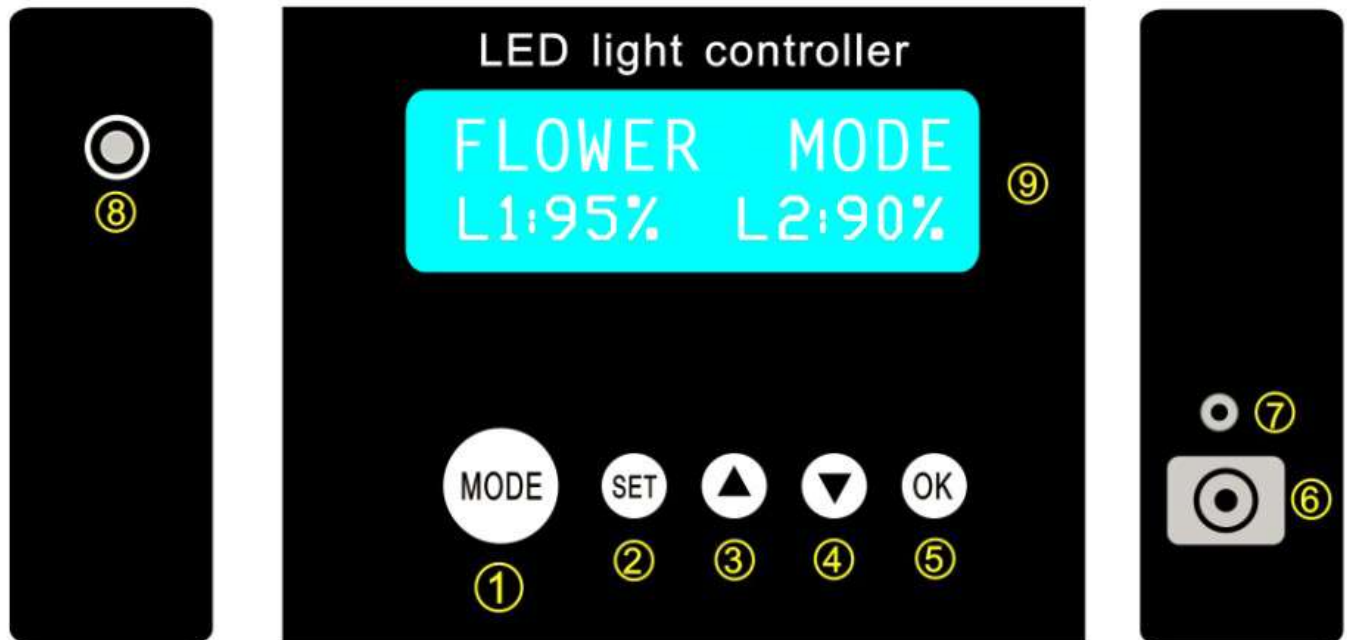Wire   Charger

Manual Controls

- ◆ Dim each of the four channels with the +/- keys
- ◆ Turn each of the four channels on/of with the on/of keys
- ◆ Operates on No. 10 (23V 12A) batteries
- ◆ Nonfunctional when used with a wired or wireless controller

Wired & Wireless Smart Controllers

1. Mode: change modes.
2. SET: setting change.
3. UP △:   increase in value.
4. DOWN ▽:   decrease in value.
5. OK: confirm and move cursor to the next value
6. Power input port.
7. Signal output port.
8. WIFI antenna port.
9. LCD.

To turn the system ON and OFF, press and hold the Mode button for 5 seconds.
The Smart Controller programs 5 growing modes:
Vegetating Mode
Flowering Mode
UVB Mode
DIY Mode
Manual Mode

All fixtures are equipped with 4 LED channels and 8 timers to automatically adjust the brightness to the time of a day.

Functional Modes

VEG Mode
Vegetating mode is preset with light intensity and timers which are ideal for vegetation, and will self-adjust throughout the day.

Flower Mode
Flowering mode is preset with light intensity and timer which are ideal for flowering, and will self-adjust throughout the day.

UVB Mode
UVB mode is preset with light intensity and timer for flowering, and will self-adjust throughout the day.

DIY Mode
DIY mode allows owners to program the timers and light intensity.

Manual Mode
Manual mode allows owners to press the **up** and **down** buttons to alter brightness, and to press the **OK** button for the next value input.

DIY Mode Instructions

DIY Mode General Instructions
1. Press **Set** to enter parameter settings.
2. Press **Up**, **Down** keys to select a LED channel.
3. Press the **OK** key to select the channel.
4. Press the **Up**, **Down** keys to set the timer, then press **OK** for the next value, when the timer is set, set the brightness.
5. Press **Mode** to go back one step.
6. Repeat 1-5 for more LED timer and channel settings.

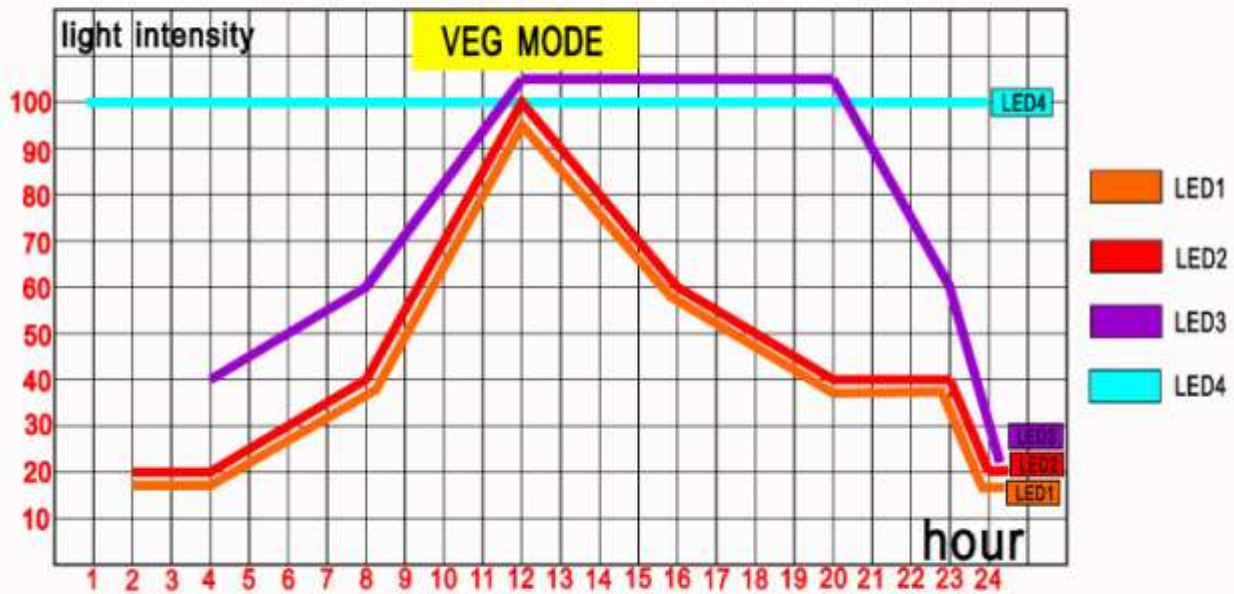Note: The owner could program up to 8 timer for a 24 hour day.

System Clock

In Manual Mode, press **Set** to enter system time setting.
Press the **Up**, **Down** keys to adjust the value, **OK** for the next value, **Mode** to go back.

VEG MODE

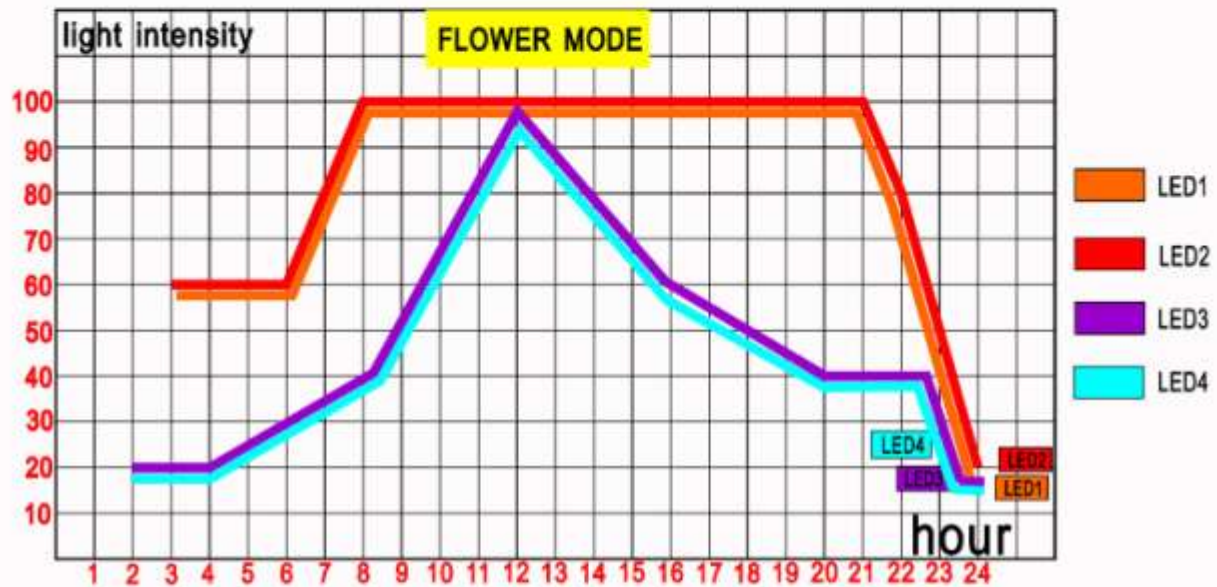Light intensity adjusts to the hours of the day.

VEG MODE

	Hour	LED1	LED2	LED3	LED4
1	2:00	20%	20%	40%	100%
2	4:00	20%	20%	40%	100%
3	8:00	40%	40%	60%	100%
4	12:00	100%	100%	100%	100%
5	16:00	60%	60%	100%	100%
6	20:00	40%	40%	100%	100%
7	23:00	40%	40%	60%	100%
8	23:00	40%	40%	60%	100%

FLOWER MODE

Light intensity adjusts to hours of the day.

	Hour	LED1	LED2	LED3	LED4
1	2:00	60%	60%	20%	20%
2	4:00	60%	60%	20%	20%
3	8:00	100%	100%	40%	40%
4	12:00	100%	100%	100%	100%
5	16:00	100%	100%	60%	60%
6	20:00	100%	100%	40%	40%
7	23:00	80%	80%	40%	40%
8	23:00	80%	80%	40%	40%

UVB MODE

Light intensity adjusts to the hours of the day.
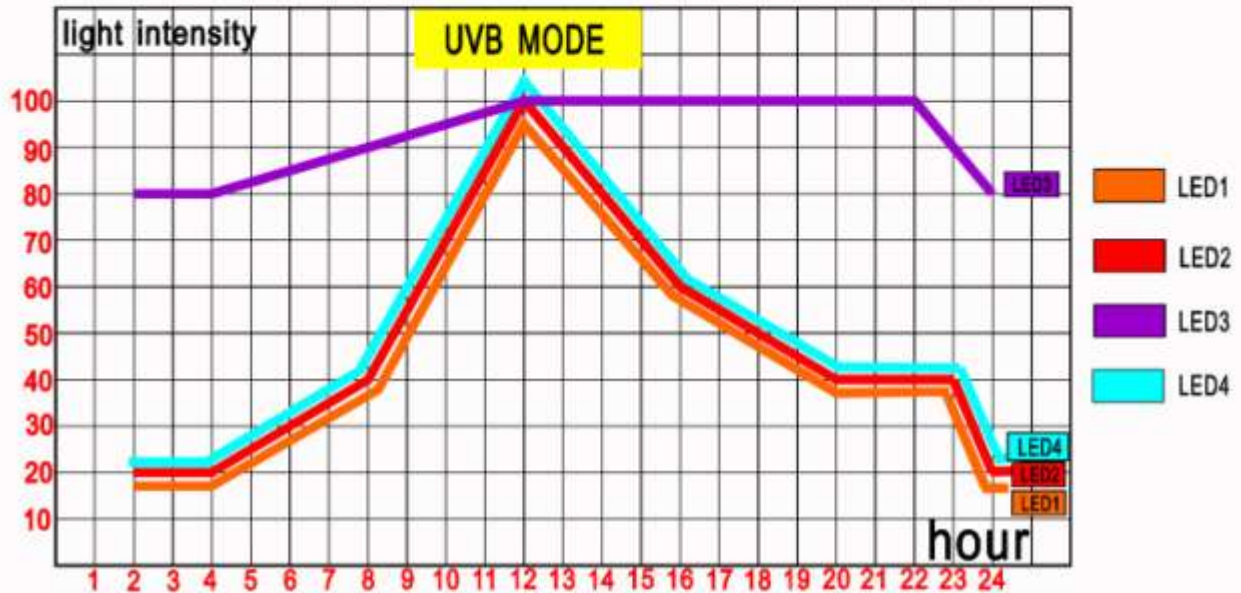
UVB MODE

	Hour	LED1	LED2	LED3	LED4
1	2:00	20%	20%	80%	20%
2	4:00	20%	20%	80%	20%
3	8:00	40%	40%	100%	40%
4	12:00	100%	100%	100%	100%
5	16:00	60%	60%	100%	60%
6	20:00	40%	40%	100%	40%
7	23:00	40%	40%	100%	40%
8	23:00	40%	40%	100%	40%

Limited Warranty

A. Warranty Period.

All Malibu S Series Aquarium light and Matrix S series Grow Light warrant original purchasers by the manufacture. The products are to be free from defects in material and workmanship under the condition of regular operation for 1 (one) year from the date of purchase.

B. Warranty Procedure.

During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with the same or similar models) at our option, without charge regarding either parts or labor. Repairs generally take one or two business days. You must first contact us to obtain a RMA number, such requests may be made through email or fax. State your name, address, email, product serial number, an explanation of the problem and proof of purchase (copy of invoice/receipt). You must bear all packaging, shipping and insurance costs. If possible, use the original packaging. Freight collection or shipment without a RMA number will not be accepted. Return the product with RMA number written on top of the box. Repaired product will be shipped back to you, prepaid at our cost via FedEx or UPS ground services.

C. Limited Liability.

Our liability is limited to the cost of the defective materials. In no case will the manufacture assume liability for any injuries or consequential damage to property or livestock resulting from any failure. Not covered by this warranty are damages due to corrosion, alteration, abuse, accident, unreasonable or improper use.

D. Shipping Damage.

Shipping damages are the responsibility of the carrier, and claims for such damage should be made directly to the carrier.

Repairs after Warranty Period ends

Repairs after the warranty period but less than 4 (four) years from the date of purchase will be charged at a flat fee of $60 per incident (includes parts, labor and return shipping cost) for standard repair.   Repairs after 4 years from the date of purchase or repairs for damages due to corrosion, alteration, abuse, accident, unreasonable or improper use will be quoted on a case by case basis.

Warranty Claim

Please fax or email this completed form to: (805) 601 5095-USA or (0755) 366 97499-China. Upon receipt of your application and the failed product, the manufacture will evaluate the product and will notify you within 24 hours if the damages are not covered under warranty. If the damages are covered under warranty, the manufacture will repair or replace the fixture and return it as soon as possible but not later than 10 business days at the manufacture's cost. If necessary and (subject to availability), the manufacture makes available loaner grow light or Aquarium units to customers subject to credit card payment to the manufacture in the event that the loaner is not timely returned in working order.

First Name: _____ **S 600 _____ S900_____S1200 _____Controller_____**

Last Name: _____ **S120 ____ S150_____ S200____ S300_____S400 _____**

Street: _____ Receipt / Serial Number: _____

City: _____ Serial Number: _____

State: _____Zip: _____ Purchased From: _____

Number of Malfunctioning Units: _____ Date of Purchase: _____

Phone: _____Email Address: _____

Please describe the problem you experiencing_____

What size breakers were used in the circuit the failed light was connected_____

How many other lights or other devices were on that same circuit? _____

Were the LED fans free of all obstructions that could have potentially interfered with proper cooling? Y/ N

What was the maximum temperature/humidity in the room with the light? _____

Was the unit ever exposed to water?   Y / N

Any lightning storms in your area near time of failure?   Y / N

Was there any type of insect problem?   Y / N   If so, what kind? _____

Did you use a light controller?   Y / N   Did you use a timer?   Y / N

If so, what type? _____   If so, what brand? _____

How many plugs? _____Digital or analog? _____

What size circuit was the unit used with? _____

Are the lights run off a separate sub panel?   Y / N

By signing below, you agree to return all loaner products associated with this claim. Failure to return the merchandise within 14 days from the date you receive your new or repaired unit will result in a charge on the credit card for the full amount of the product.

Billing Zip Code: _____

Customer Signature: _____   Date: _____/_____/_____