



 **Strand**

ACCLAIM LED PLE WW

USER MANUAL

# INTRODUCTION

## OUR GOAL

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We are committed to providing you the highest quality in customer service. Our comprehensive resources are available to help your business succeed and ensure you get the full benefit of being a Strand customer.

## TECHNICAL SUPPORT

Our Service and Support team is tasked with online and field support, repair, demo, commissioning, maintenance contracts, and technical training for fixtures and systems. In addition, this team plays a large role in a Systems sales, responsible for administering final commissioning, record-keeping, and organizing services. Refer to the back cover of this User Manual for contacts in your region or visit [www.strandlighting.com/support](http://www.strandlighting.com/support)

## CUSTOMER SERVICE

Customer Service is responsible for boxed goods and spare parts quotations, order entry and fulfilment, project delivery, lead times, and general account management. They also manage all after sales warranty fulfilment, RGA, and repairs invoicing in tandem with our After Sales Service & Support team. Visit our website to find a customer service agent in your region.

## ADDITIONAL DOCUMENTATION

Additional product documentation, including DMX maps, software, and photometric reports, are available for download on our website.

For more information on installing DMX512 control systems, the following publication is available for purchase from the United States Institute for Theatre Technology (USITT), "Recommended Practice for DMX512: A Guide for Users and Installers, 2nd edition" (ISBN: 9780955703522).

USITT Contact Information:

USITT

315 South Crouse Avenue, Suite 200

Syracuse, New York 13210-1844 USA

Phone: 800-938-7488 or +1-315-463-6463

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Website: [www.usitt.org](http://www.usitt.org)

## ABOUT THIS DOCUMENT

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Read all instructions before installing or using this product. Retain this User Manual for future reference.

Additional product information and descriptions may be found on the product data sheet(s) which can be downloaded from the Strand website at [www.strandlighting.com](http://www.strandlighting.com).

This User Manual provides necessary information regarding safety, installation, operation and routine maintenance for Strand VL2600 Series. Familiarizing yourself with this information will help you to get the most out of your product.

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**WARNING:** It is important to read ALL accompanying safety and installation instructions to avoid damage to the product and potential injury to yourself or others.

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## SAFETY WARNINGS AND NOTICES

Read this user manual in full before attempting to install, operate or maintain the fixture to which it relates. This user manual is intended to provide general guidance to such suitably qualified personnel. Installation and operation of the fixture are to be performed by qualified personnel only.

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

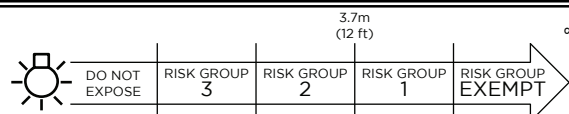
### READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

- For indoor, dry location use only. Do not use outdoors unless fixture is suitably IP rated.
- Use safety tether when mounting.
- Equipment should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- Not for residential use. Do not use this equipment for other than intended use.
- Note distance requirement(s) from combustible materials or illuminated objects. Do not mount near gas or electric heaters.
- Install only in locations with adequate ventilation. Ensure sure that ventilation slots are not blocked.
- Ensure that the voltage and frequency of the power supply match the power requirements of the fixture.
- The fixture must be earthed/grounded to the appropriate conductor.
- Do not operate fixture outside the specified ambient temperature range.
- Do not connect the fixture to any dimmer pack.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition and void warranty.
- Refer service to qualified personnel. This fixture contains no user serviceable parts.
- Prior to first use, carefully inspect fixture to ensure no damage has occurred during shipping.
- Materials used in the manufacturing process can cause strong odors when the product is new. These odors dissipate over time.
- Prior to each use, carefully inspect power cables and replace any damaged cables.
- Exterior surfaces of the luminaire will be hot during operation. Take appropriate precautions.
- Continuous use of the fixture may shorten the lifespan. Power down the fixture when not in use.
- Do not cycle power on and off repeatedly. Disconnect mains power if the fixture is not used for an extended period.
- Clean fixtures regularly, particularly when working in a dusty environment.
- Never touch power cables or wires while the fixture is powered on.
- Avoid entangling power wires with other cables.
- In the event of a serious operating problem, immediately discontinue using the fixture.
- It is hazardous to operate luminaires without lens or shield. Shields, lenses, or ultraviolet screens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired, for example, by cracks or deep scratches.
- Original packing materials can be reused for transporting the fixture.
- Do not look directly at the LED light beam while the fixture is on.
- This is a Class A product. In a domestic environment this product may cause radio interference, in which case, the user may be required to take adequate measures.
- The light source contained in this luminaire shall only be replaced by the manufacturer or service agent or similarly qualified person.

### SAVE THESE INSTRUCTIONS.

**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.

**CAUTION!** Do not stare into the beam. This fixture is categorized as Risk Group 2 (RG2).



## COMPLIANCE NOTICE

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### FCC DECLARATION OF CONFORMITY

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this 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 Vari-Lite Strand system, service, and safety guidelines, may cause harmful interference to radio communications.

As tested under this standard:

#### **FCC 47CFR 15B cIA\*CEI**

Issued:2009/10/01 Title 47 CFR Part 15 Subpart B Unintentional Radiators Class A

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/her own expense.



### EU DECLARATION OF CONFORMITY

We, Vari-Lite LLC., 10911 Petal Street, Dallas, Texas 75238, declare under our responsibility for the products contained herein are in conformity with the essential requirements of the following European Directives and harmonized standards:

#### **Low Voltage Director (LVD), 2006/95/EC**

EN 60589-2-17:1984+A1:1987+A2:1990 used in conjunction with 60598-1:2008/A11:2009

#### **Electromagnetic Compatibility Directive (EMC), 2004//108/EC**

EN 55022:2010, EN55024:2010

## HOW TO OBTAIN WARRANTY SERVICE

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A copy of the Limited Warranty card was included in the shipping package for this product.

To obtain warranty service, please contact customer service at 1-214-647-7880, or **entertainment.service@signify.com** and request a Return Material Authorization (RMA) for warranty service. You will need to provide the model and serial number of the item being returned, a description of the problem or failure and the name of the registered user or organization. If available, you should have your sales invoice to establish the date of sale as the beginning of the warranty period. Once you obtain the RMA, pack the unit in a secure shipping container or in its original packing box. Be sure to clearly indicate the RMA number on all packing lists, correspondence, and shipping labels. If available, please include a copy of your invoice (as proof of purchase) in the shipping container.

With the RMA number written legibly on or near the shipping address label, return the unit, freight prepaid, to:

Vari-Lite Strand  
Attention: Warranty Service (RMA# \_\_\_\_\_)  
10911 Petal Street  
Dallas, Texas 75238  
USA

As stated in the warranty, it is required that the shipment be insured and FOB our service center.

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**IMPORTANT!** When returning products to Vari-Lite Strand for repairs (warranty or out-of-warranty) from a country other than the USA, "Vari-Lite LLC", must appear in the address block as the Importer of Record (IOR) on all shipping documentation, Commercial Invoices, etc. This must be done in order to clear customs in a timely manner and prevent returns.

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# 1 DESCRIPTION

## FEATURES

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- 500 W/650 W-equivalent LED profile engine from Strand –cost effective profile from the original name in theatrical lighting.
- High CRI 3200K white color.
- Supports Strand SPX lens system – works perfectly with industry standard lens system with a wide range of available beam angles.
- Four-blade manual shutter system – superior control to position light exactly where you need it.
- Optional angle-adjusting size B metal gobo holder – add depth and texture using industry-standard gobos. Easily adjust gobo angle within holder to get the perfect look.
- Adjustable yoke – mount fixture where you want it even when headroom is limited.
- Available in black or white – the perfect body color for your application.
- Available in black or white – the perfect body color for your application.

For detailed product information, please refer to the Product Guide at [www.strandlighting.com/global/products/acclaim-led-ple-ww](http://www.strandlighting.com/global/products/acclaim-led-ple-ww)

## COMPONENTS

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The document provides installation and operation instructions for the following products:

- Strand Acclaim LED PLE WW

Read all instructions before installing or using this product. Retain this manual for future reference. Additional product information and descriptions may be found on the product specification sheet.

## INCLUDED ITEMS

Each Strand Acclaim LED PLE WW luminaire includes the following items:

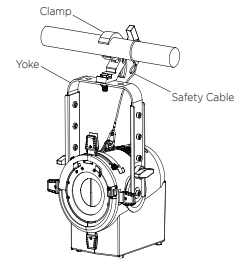
- Strand Acclaim LED PLE WW
- Quick Start Guide

## 2 INSTALLATION

### MOUNTING

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Always use a safety cable that can hold up to 12 times the weight of the unit when installing the fixture.

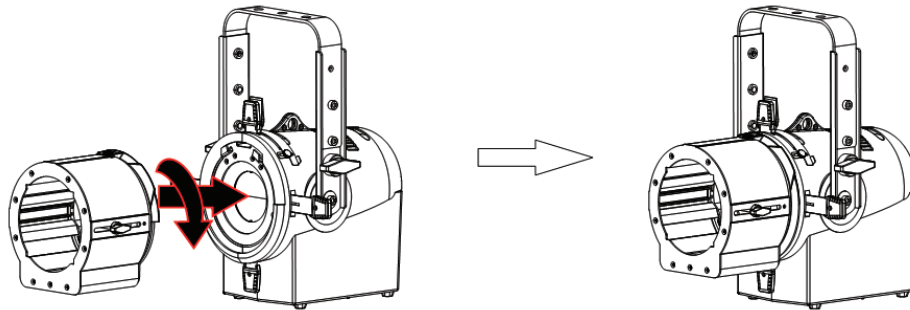
The luminaire must be mounted by professionals.



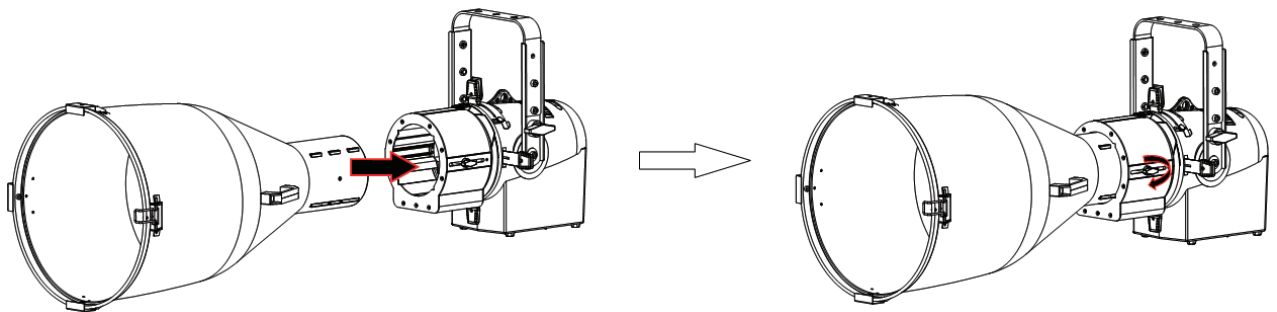
### LENS INSTALLATION

#### To install lens:

Step 1. Snap the adapter into the luminaire as shown.



Step 2. Insert the lens tube into the adapter. After achieving the desired beam edge, tighten the locking bolt.

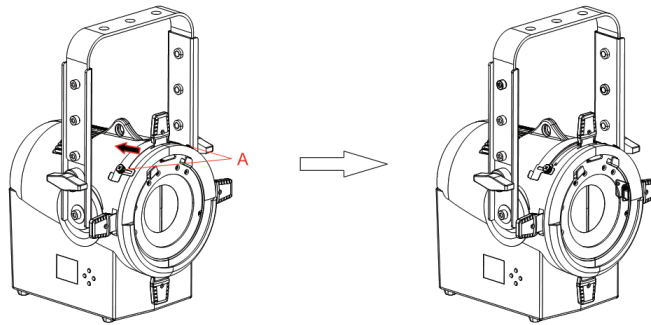


Visit [www.strandlighting.com](http://www.strandlighting.com) for a complete list of compatible lens tubes.

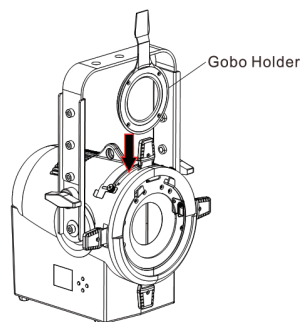
## GOBO HOLDER INSTALLATION

Acclaim LED PLE WW gobo holder (B-size)	912400576897	64511-012
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**To install the gobo holder:**



Step 1. Loosen the two screws at A and move the shading plate backward. Tighten the two screws to fix it.

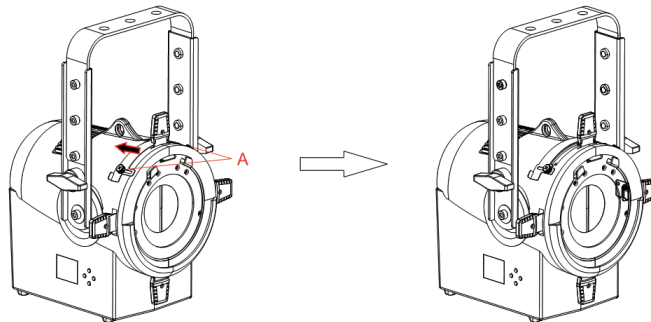


Step 2. Snap the gobo holder into the luminaire.

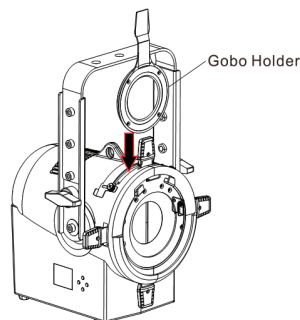
## IRIS INSTALLATION

Acclaim LED PLE WW 16-leaf iris	912400576949	64511-013
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**To install the iris:**



Step 1. Loosen the two screws at A and move the shading plate backward. Tighten the two screws.





Step 2. Snap the iris into the luminaire as shown.

## CONNECTING DATA AND POWER

A maximum of 32 luminaires may be connected in any one DMX data link.

A maximum of 9 luminaires may be connected in 120V, 60Hz.

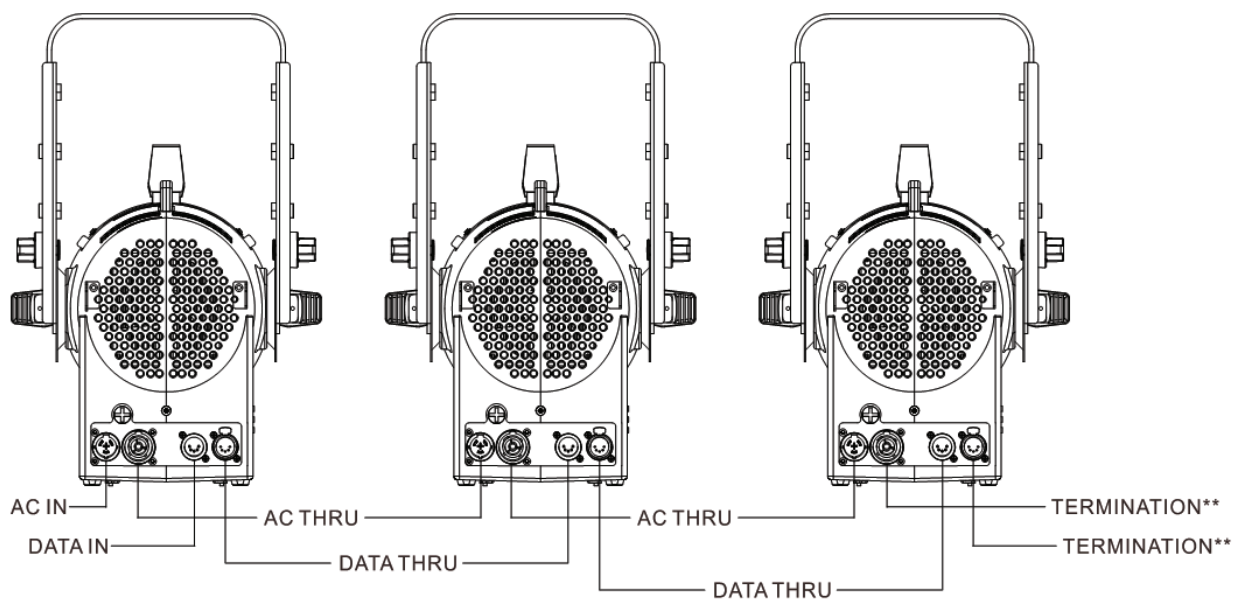
A maximum of 16 luminaires may be connected in 230V, 50Hz.

**NOTE:** This maximum limit applies to the luminaire “daisy chain” only. Your system or console may require fewer luminaires on a single data link path. Consult your console documentation for more information.

### To connect power and data:

Step 1. Connect data cable from console to first luminaire in chain at DATA IN connector.

Step 2. If required, connect additional data cables from DATA THRU connectors to DATA IN connectors of remaining luminaires in link.



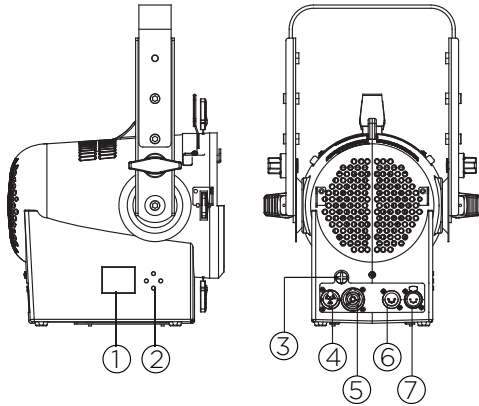
Step 3. At last luminaire in link, install male termination connector at DATA THRU connector. (Luminaires and other devices on the same DMX chain may not function properly without termination.)

Step 4. Connect AC Input Cable connector to power input source.

Step 5. Dress AC input and data cables and secure them so that they will not interfere with luminaire head and yoke movement.

# 3 MENU OPERATION

## CONTROL PANEL



- 1 LCD display - shows menu and selected function
- 2 Buttons:  
MENU - to select programming functions  
DOWN - to go forward in selected functions  
UP - to go backward in selected functions  
ENTER - to confirm the selected function
- 3 FUSE (3.15A) - protects the unit from damage of over current or short circuit
- 4 POWER IN - connects to power supply
- 5 POWER OUT - connects to next fixture
- 6 DMX IN - 5-pin XLR cable to link the DMX console
- 7 DMX OUT - 5-pin XLR cable to link next fixture

Press the MENU button to select any functions, until the required function is shown in the display. Select the desired function by pressing ENTER, which will cause the display to blink. Use the UP and DOWN button to change the mode. Once the required mode has been selected, press the ENTER button to accept the selection, otherwise after a period of one minute wait, the the menu will return automatically to the main functions, without any changes having been made. Return to the main functions without making any changes by pressing the MENU button.

BUTTON COMBINATION	FUNCTION
MENU + ENTER	Factory defaults
ENTER + UP	Turns the fixture on at full output
ENTER + DOWN	Toggles through Standard, Studio, and Whisper modes
UP + DOWN	Inverts display

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	DEFAULT
DMX	Address	001-512				(Default)
	DMX Mode	8 - Bit				
		16 - Bit				
	Data	Ch 1 - Intensity XXX (Value)				
		Ch 2 - Intensity Fine XXX (Value)				
Manual		.....All functions				
	DMX Fail	DMX Hold				(Default)
		Blackout				
	Red	0-255				(Default - 0)
	Green	0-255				(Default - 0)
Settings	Blue	0-255				(Default - 0)
	Lime	0-255				(Default - 0)
		Dimming Curve	Square Law			(Default)
			S Curve			
			Linear			
Service		Output Mode	Standard			(Default)
			Studio			
			Whisper			
		Color Calibration	On			(Default)
			Off			
			On			
	LED	Fan Mode	Auto			(Default)
			500Hz			
			1000Hz			
			1500Hz			(Default)
			2000Hz			
			2500Hz			
			3000Hz			
			3500Hz			
			4000Hz			
Service		Refresh Rate				
Service		Auto (30 seconds since last press)				(Default)
		On				
	Display On Time					
	Reset Defaults	Are You Sure?				
	Status	(No Errors... or displays a list of errors)				
	Diagnostics	Fan Check	Give list of fixture errors			
		Temp	Give fans speeds			
	Version	VXXX	Give LED / Fixture temperatures			
	Fixture Hours	Gives Fixture run time hours / LED hours				
	Cross load (Software)	Are You Sure?				
			Send			
			Red			
			Green			
			Blue			
			Lime			
		White Balance	Reset to Defaults (Reset to White Balance)			
Service			Zoomspot			
	Password (2606)		PLE			
			Fresnel			
			Cyc			
		Change Model				

**NOTE:** Not all menu options are available for every fixture.

## DMX MENU

Choose DMX, press the ENTER button to confirm, use the UP/DOWN button to choose from options listed.

### ADDRESS

Choose Address, press the ENTER button to confirm. Use the UP/DOWN button to select range of values. Press the ENTER button to store. Press the MENU button to return to previous menu or let the unit idle one minute to exit.

### DMX MODE

Choose DMX Mode, press the ENTER button to confirm. Use the UP/DOWN button to select mode. Press the ENTER button to store. Press the MENU button to return to previous menu or let the unit idle one minute to exit.

### DATA

Choose Data, press the ENTER button to confirm. Use the UP/DOWN button to select option. Choose Ch1 – Intensity xxx(value), Ch2 – Intensity Fine xxx(Value), .... All functions, press the ENTER button to store. Press the MENU button to return to previous menu or let the unit idle one minute to exit menu mode.

### DMX FAIL

To select DMX Fail, press the ENTER button to confirm. Use the UP/DOWN button to select DMX Hold or Blackout, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## MANUAL MENU

To select Manual, press the ENTER button to confirm, use the UP/DOWN button to select Red, Green, Blue and Lime. Use the UP/DOWN button to adjust the value from 0 to 255, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## SETTINGS MENU

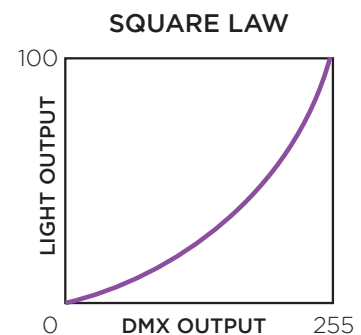
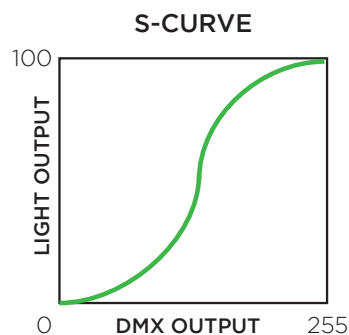
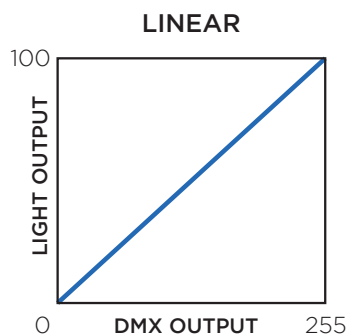
Choose Settings, press the ENTER button to confirm, use the UP/DOWN button to choose from options shown on screen.

### LED

Choose LED, press the ENTER button to confirm. Use the UP/DOWN button to select an option. Press the ENTER button to store. Press the MENU button to return to previous menu or let the unit idle one minute to exit menu mode.

### DIMMING CURVE

To Choose Dimming Curve, press the ENTER button to confirm. Use the UP/DOWN button to Choose Square Law Curve, S Law Curve or Linear Law Curve, press the ENTER button to store. Press the MENU button to return to previous menu or let the unit idle one minute to exit menu mode.



## OUTPUT MODE

Choose Output Mode, press the ENTER button to confirm. Use the UP/DOWN button to select Standard, Studio, or Whisper. Press the MENU button to return to previous menu.

## COLOR CALIBRATION

Choose Color Cal, press the ENTER button to confirm. Use the UP/DOWN button to Choose ON or OFF. Press the MENU button to return to previous menu.

## FAN MODE

Select Fan Mode, press the ENTER button to confirm. Use the UP/DOWN button to select On or Auto, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## REFRESH RATE

Select Refresh Rate, press the ENTER button to confirm. Use the UP/DOWN button to select 500Hz, 1000Hz, 1500Hz, 2000Hz, 2500Hz, 3000Hz, 3500Hz, 4000Hz, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## DISPLAY ON TIME

To select Display On Time, press the ENTER button to confirm. Use the UP/DOWN button to select Auto(30 seconds since last press) or On, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## RESET DEFAULTS

To select Reset Defaults, press the ENTER button to confirm, Are You Sure? will show on the display, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

# SERVICE

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## SERVICE MENU

To select Service, press the ENTER button to confirm, use the UP/DOWN button to select Status, Diagnostics, Version, Fixture Hours, Crossload(Software) and Password(2606).

## STATUS

To select Status, press the ENTER button to confirm, No Errors or a list of errors will show on the display, press the MENU button back to exit.

## DIAGNOSTICS

To select Diagnostics, press the ENTER button to confirm. Use the UP/DOWN button to select Fan Check or Temp, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## VERSION

To select Version, press the ENTER button to confirm, Version will show on the display, press the MENU button back to exit.

## FIXTURE HOURS

To select Fixture Hours, press the ENTER button to confirm, Fixture Hours will show on the display, press the MENU button back to exit.

## CROSSLOAD(SOFTWARE)

Select Crossload(Software), press the ENTER button to confirm, Are You Sure? will show on the display, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

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**NOTE:** Incoming DMX must be removed from the fixture or software crossload will not be activated.

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## PASSWORD

Select Password(2606), press the ENTER button to confirm. Use the UP/DOWN button to select White Balance or Change Mode, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## WHITE BALANCE

To select White Balance, press the ENTER button to confirm. Use the UP/DOWN button to select Red, Green, Blue, Lime or Reset to Defaults (Reset to White Balance), press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## CHANGE MODE

To select Change Mode, press the ENTER button to confirm. Use the UP/DOWN button to select Zoomspot, PLE, Fresnel or Cyc, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

## 4 DMX MAPPING

The fixture can be operated by DMX controller. The following tables assumes a DMX start address of 1. When a different starting address is used, this address becomes channel 1 function and other functions follow in sequence.

**TABLE 1. 8-BIT MODE (DEFAULT)**

[illegible]**TABLE 2. 16-BIT MODE**

<b>DMX CHANNEL</b>	<b>PARAMETER</b>	<b>DEFAULTS</b>	<b>RANGE DMX</b>	<b>DESCRIPTION</b>
1	Intensity (16-bit high)	0	0 - 255	16-bit intensity (dimmer) control
2	Intensity (16-bit low)	0	0 - 65535	Open
3	Strobe	0	0 1 - 255	Open Strobe speed Slow>>>>>>>>>>>>Fast (Rate TBC) XX Hz>>>>>>>>>>>>XX Hz

# 5 RDM PARAMETER IDS

Remote Device Management (RDM) is a protocol enhancement to USITT DMX512 that allows bi-directional communication between a lighting or system controller and attached RDM compliant devices over a standard DMX line. This protocol will allow configuration, status monitoring, and management of these devices in such a way that does not disturb the normal operation of standard DMX512 devices that do not recognize the RDM protocol.

ACCLAIM LED PLE WW RDM PRODUCT PARAMETER IDS				
Model ID	Manufacturer	Vendor ID	Model Description	Product Category
0x0114	Strand	0x736C	Acclaim LED PLE WW	0x0101

The table on the following pages outlines and describes all the RDM parameters IDs associated with the Acclaim LED PLE WW.



GET ALLOWED	SET ALLOWED	RDM PARAMETER IDS	VALUE	COMMENT	ESTA STANDARD	REQUIRED / IMPLEMENTED	DMX / UI DESCRIPTION
Category - Network Management							
		DISC_UNIQUE_BRANCH	0x0001		X	X	
		DISC_MUTE	0x0002		X	X	
		DISC_UN_MUTE	0x0003		X	X	
X		PROXIED_DEVICES	0x0010				
X		PROXIED_DEVICES_COUNT	0x0011				
X	X	COMMS_STATUS	0x0015				
Category - Status Collection							
X		QUEUED_MESSAGE	0x0020				
X		STATUS_MESSAGES	0x0030			X	Status
X		STATUS_ID_DESCRIPTION	0x0031			X	
	X	CLEAR_STATUS_ID	0x0032				
X	X	SUB_DEVICE_STATUS_REPORT_THRESHOLD	0x0033				
Category - RDM Information							
X		SUPPORTED_PARAMETERS	0x0050		X	X	
X		PARAMETER_DESCRIPTION	0x0051		X	X	
Category - Product Information							
X		DEVICE_INFO	0x0060		X	X	
X		PRODUCT_DETAIL_ID_LIST	0x0070				
X		DEVICE_MODEL_DESCRIPTION	0x0080			X	
X		MANUFACTURER_LABEL	0x0081			X	
X	X	DEVICE_LABEL	0x0082			X	
X	X	FACTORY_DEFAULTS	0x0090			X	Reset Defaults
X		LANGUAGE_CAPABILITIES	0x00A0				
X	X	LANGUAGE	0x00B0				
X		SOFTWARE_VERSION_LABEL	0x00C0		X	X	Version
X		BOOT_SOFTWARE_VERSION_ID	0x00C1				
X		BOOT_SOFTWARE_VERSION_LABEL	0x00C2				

GET ALLOWED		SET ALLOWED	RDM PARAMETER IDS		VALUE	COMMENT	ESTA STANDARD	REQUIRED / IMPLEMENTED	DMX / UI DESCRIPTION
Category - DMX512 Setup									
X		X	DMX_PERSONALITY		0x00E0			X	DMX Mode
X			DMX_PERSONALITY_DESCRIPTION		0x00E1			X	
X		X	DMX_START_ADDRESS		0x00F0		X	X	Address
X			SLOT_INFO		0x0120			X	
X			SLOT_DESCRIPTION		0x0121			X	
X			DEFAULT_SLOT_VALUE		0x0122			X	
Category - Sensors 0x02xx USE									
X			SENSOR_DEFINITION		0x0200			X	
X		X	SENSOR_VALUE		0x0201	Fan Speed and Temperatures		X	Diagnostics
		X	RECORD_SENSORS		0x0202				
Category - Dimmer Settings 0x03xx - FUTURE USE									
X		X	Dimmer Curve		0x0343			X	
X			Dimmer Curve Description		0x0344			X	
X		X	Modulation Frequency		0x0347			X	
X			Modulation Frequency Description		0x0348			X	
Category - Power / Lamp Settings 0x04xx									
X		X	DEVICE_HOURS		0x0400			X	Fixture Hours
X		X	LAMP_HOURS		0x0401				
X		X	LAMP_STRIKES		0x0402				
X		X	LAMP_STATE		0x0403				
X		X	LAMP_ON_MODE		0x0404				
X		X	DEVICE_POWER_CYCLES		0x0405				
Category - Display Settings 0x05xx									
X		X	DISPLAY_INVERT		0x0500				
X		X	DISPLAY_LEVEL		0x0501				
			Category - Configuration 0x06xx						
X		X	PAN_INVERT		0x0600				
X		X	TILT_INVERT		0x0601				
X		X	PAN_TILT_SWAP		0x0602				
X		X	REAL_TIME_CLOCK		0x0603				

GET ALLOWED		SET ALLOWED	RDM PARAMETER IDS		VALUE	COMMENT	ESTA STANDARD	REQUIRED / IMPLEMENTED	DMX / UI DESCRIPTION
Category - Control 0x10xx									
X		X	IDENTIFY_DEVICE		0x1000		X	X	
		X	RESET_DEVICE		0x1001			X	
X		X	POWER_STATE		0x1010				
X		X	PERFORM_SELFTEST		0x1020	All Test, Pan/Tilt, Encoder			
X			SELF_TEST_DESCRIPTION		0x1021				
		X	CAPTURE_PRESET		0x1030	See EI-20_2010a			
X		X	PRESET_PLAYBACK		0x1031	Table A-7 defines			
			ESTA Reserved Future RDM		0x7FE0-0x7FFF				
			Manufacturer-Specific PIDs		0x8000-0xFFDF				
X		X	Output Power Mode		0x8A97	Value range depends on options (Standard, Studio, etc)		X	LED Output Mode
X		X	Pan/Tilt Feedback (On/Off)		0x8AD3				
X		X	Display On Time		0x8AA0	Value range depends on options		X	Display On Time
X		X	LED Dimmer Curve		0x8AA1	Value range depends on options			LED Dimming Curve
X		X	Pan Tilt Movement (On/Off)		0x8AA2				
X		X	Head Motor Movement (On/Off)		0x8AA3				
X		X	Auto Shutdown Mode		0x8AA4	Value range depends on options			
X		X	LED Hours		0x8AA5				
X		X	Dim Snap (On/Off)		0x8AA6				
X		X	Color Snap (On/Off)		0x8AA7				
X		X	Auto Fan Mode (On/Off)		0x8AA8				LED Fan Mode
X		X	Gamma Shift		0x8AA9	Value range depends on options			
X		X	Tungsten Dimming (On/Off)		0x8AA10				
X		X	CTB Correction (On/Off)		0x8AA11				

GET ALLOWED	SET ALLOWED	RDM PARAMETER IDS	VALUE	COMMENT	ESTA STANDARD	REQUIRED / IMPLEMENTED	DMX / UI DESCRIPTION
Category - Control Ox10xx (continued)							
X	X	LED Refresh Rate	Ox8AA12	Value range depends on options			LED Refresh Rate
X	X	Side Hang (On/Off)	Ox8AA13				
X	X	Focus Track (On/Off)	Ox8AA14				
	X	Control Signal select DMX only/ArtnET (On/Off)	Ox8AA15				
	X	Recalibrate Fixture (Level)	Ox8AA16	different levels (all, position, color, etc)			
X	X	DMX Fail (Hold, Blackout, GOTO Preset)	Ox8AA17				DMX Fail
X	X	ArtNet Universe	Ox8AA18				
X	X	ArtNet Net	Ox8AA19				
X	X	ArtNet Sub-Net	Ox8AA20				
X	X	ArtNet Ethernet IP	Ox8AA21				
X	X	ArtNet Ethernet Sub-Net Mask	Ox8AA22				
X	X	Manual PRESET Playback Power Up Preset	Ox8AA23				
X	X	Manual PRESET Playback Preset Intensity	Ox8AA24				
X	X	Manual PRESET Playback Priority	Ox8AA25				
X	X	Manual PRESET Playback Power Up?	Ox8AA26				
X	X	LED Color Calibration (On/Off)	Ox8AA27			X	LED Color Calibration

# APPENDIX A

## CARE AND MAINTENANCE

### TROUBLESHOOTING

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The following are a few common problems that may occur during operation.

**The unit does not work; light and fan do not turn on**

- Check the connection of power and main fuse.
- Measure the mains voltage on the main connector.

**Not responding to DMX controller**

- Check DMX connectors, cables to see if link properly.
- Check the address settings and DMX polarity.
- If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
- Try to use another DMX controller.
- Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

### CLEANING

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The cleaning of internal must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the fixture's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 30 days.

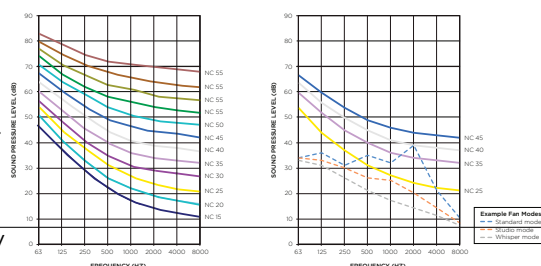
# APPENDIX B

## FAN SPEED AND CONTROL

All Vari-lite and Strand lighting luminaires are governed by the same fan speed versus noise levels and maximum power output rules as detailed below. The noise related to these levels conforms to noise criteria levels detailed within the document.

There are three control parameters that can be selected separately or in conjunction when permitted to manage fan speed versus noise levels and maximum power output.

**NOTE:** Not all fixture have all modes or functions. Refer to DMX map and/or user interface menu tree to verify the modes and functions in your fixture.



### FAN VERSUS OUTPUT PRESET MODES

These modes are selectable at either / or the fixtures DMX control channel or via the fixture user interface screen.

**Boost mode** - LED output boosted to >120% of standard output fan speeds increased manage heat level of LED (may be limited to only run for XXhrs). Fixture will not exceed NC45 - NC55 sound levels in this mode

**Standard mode** - Full LED Output + Fan Spin at top speed (loudest setting). Fixture will not exceed NC40 sound levels in this mode.

**Studio mode** - Fan speed reduced to appropriate amount to reduce dB levels >10% of full speed + LED @ max output approximately 80% of Standard output at appropriate level to ensure LED work at optimum temperature and output efficiency (fan speed remains at a constant speed and do not ramp up or down) NC35.

**Whisper mode** - Fan speed reduced to appropriate amount to reduce dB levels to >30% of the full speed + LED Max output approximately 60% of Standard output at appropriate level to ensure LED work at optimum temperature and output efficiency (Fan speed remains at a constant speed and do not ramp up or down) NC25.

**Silent mode** - ideally Fans do not spin + output capped at appropriate level to ensure LED work at optimum temperature and output efficiency (Fan should never switch on in this mode or change speed if they on) NC15 target level.

MODE	LED OUTPUT	FAN SPEED	NOISE CRITERION	EQUIVALENT SOUND LEVEL DBA (@3M)
Boost Mode	>100%	Boosted fan speed constant	NC45	50
Standard Mode	Full 100%	Full 100% constant	NC40	45
Studio Mode	80%	Appropriate speed to reduce dB levels >10% of full speed	NC35	40
Whisper Mode	60%	Appropriate speed to reduce dB levels >30% of full speed	NC25	35
Silent Mode	TBC	Fan off	NC15	25

NOISE CRITERION	OCTAVE BAND CENTER FREQUENCY (HZ)							
	63	125	250	500	1000	2000	4000	8000
	SOUND PRESSURE LEVELS (DB)							
NC-15	47	36	29	22	17	14	12	11
NC-20	51	40	33	26	22	19	17	16
NC-25	54	44	37	31	27	24	22	21
NC-30	57	48	41	35	31	29	28	27
NC-35	60	52	45	40	36	34	33	32
NC-40	64	56	50	45	41	39	38	37
NC-45	67	60	54	49	46	44	43	42
NC-50	71	64	58	54	51	49	48	47
NC-55	74	67	62	58	56	54	53	52
NC-60	77	71	67	63	61	59	58	57
NC-65	80	75	71	68	66	64	63	62
NC-70	83	79	75	72	71	70	69	68

# TECHNICAL SUPPORT

## GLOBAL 24HR TECHNICAL SUPPORT:

Call: +1 214 647 7880  
[entertainment.service@signify.com](mailto:entertainment.service@signify.com)

## NORTH AMERICA SUPPORT:

Call: 800-4-STRAND (800-478-7263)  
[entertainment.service@signify.com](mailto:entertainment.service@signify.com)

## EUROPEAN CUSTOMER SERVICE CENTER:

Call: +31 (0) 543 542 531  
[entertainment.europe@signify.com](mailto:entertainment.europe@signify.com)

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