Manuals+ — User Manuals Simplified.

VL3600 LT 6 Color LED Moving Head Profile Light

VARI-LITE VL3600 LT 6 Color LED Moving Head Profile Light User Guide

Contents

VARI*LITE

VARI-LITE VL3600 LT 6 Color LED Moving Head Profile Light

Specifications

- **Product Name:** VL3600 LT PROFILE IP
- **Model Numbers:** 74817-050, 74817-150, 74817-TBD, 74817-051, 74817-151
- **Power Requirements:** 120-240VAC, 50/60 Hz
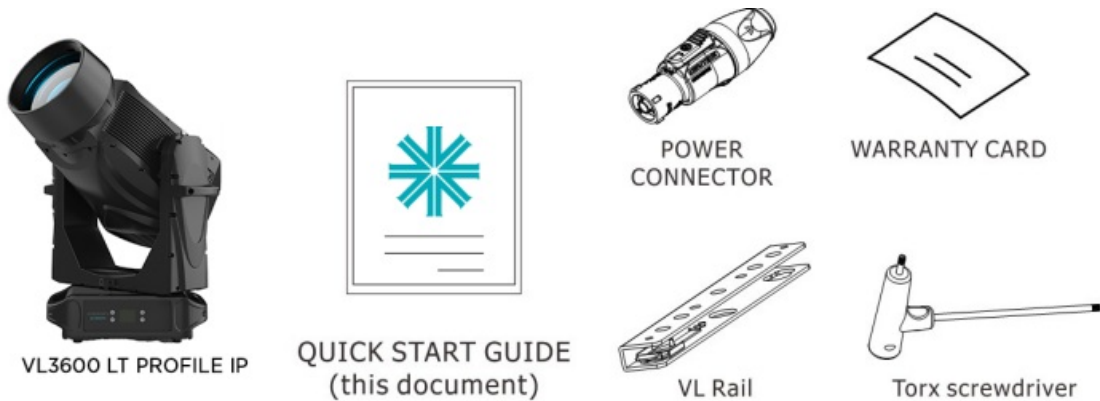- **Maximum Luminaires in DMX Data Link:** 32

FAQs

- **Q: How many luminaires can be connected in a DMX data link?**
  - **A:** A maximum of 32 luminaires can be connected to any one DMX data link.
- **Q: What power requirements are needed for the VL3600 LT PROFILE IP?**
  - **A:** The fixture requires standard AC power distribution from 120-240VAC, 50/60 Hz.

OVERVIEW

This document provides basic setup instructions and safety warnings for the following product(s):

VL3600 LT	**74817-050**	VL3600 LT-Touring Black
VL3600 LT	**74817-150**	VL3600 LT-Touring White
VL3600 LT	**74817-TBD**	VL3600 LT-Flight Case insert
VL3600	**74817-051**	VL3600 LT-Install Black
VL3600	**74817-151**	VL3600 LT-Install White

INCLUDED ITEMS

VL3600 LT PROFILE IP

QUICK START GUIDE
(this document)
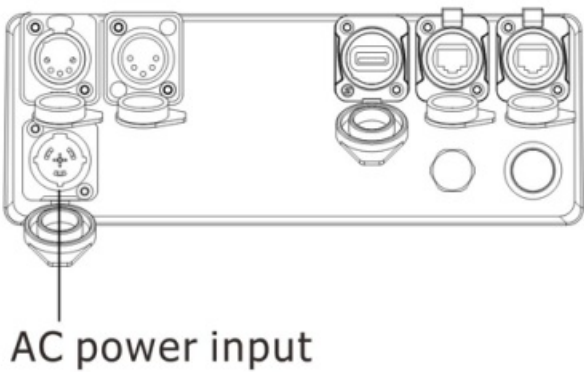
POWER CONNECTOR

WARRANTY CARD

VL Rail

Torx screwdriver

INSTALLATION AND SETUP

CONNECTING POWER

- This fixture requires standard AC power distribution from 120-240VAC, 50/60 Hz. The current required depends on the AC supply voltage and product model.
- **NOTE:** The mating True1 IP 65 compatible connector is supplied; however, you will need to purchase or construct a cable appropriate for your application.

AC power input

- Depending on the application, the luminaire's AC input cable may require a different connector. If required, install a new connector meeting your requirements using the following wire color code reference:
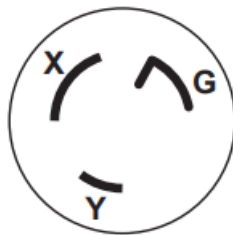
WIRE*	CONNECTION
Green/yellow	ac ground
Blue	ac neutral
Brown	ac line

- International (Harmonized) Standard

WARNING: DO NOT connect to three-phase service in countries with 240V power.

Single-phase power from 120-240V RMS:

CONNECTION	PIN
ac neutral	X
ac line	Y
Ground (earth)	G

Two-phase power at 208V RMS:

CONNECTION	PIN
Phase 1	X
Phase 2	Y
Ground (earth)	G

CURRENT VERSUS VOLTAGE

- TABLE 1 provides the luminaire's current draw at specific voltages. Total luminaire current is calculated with the lamp on and all motors sequencing.
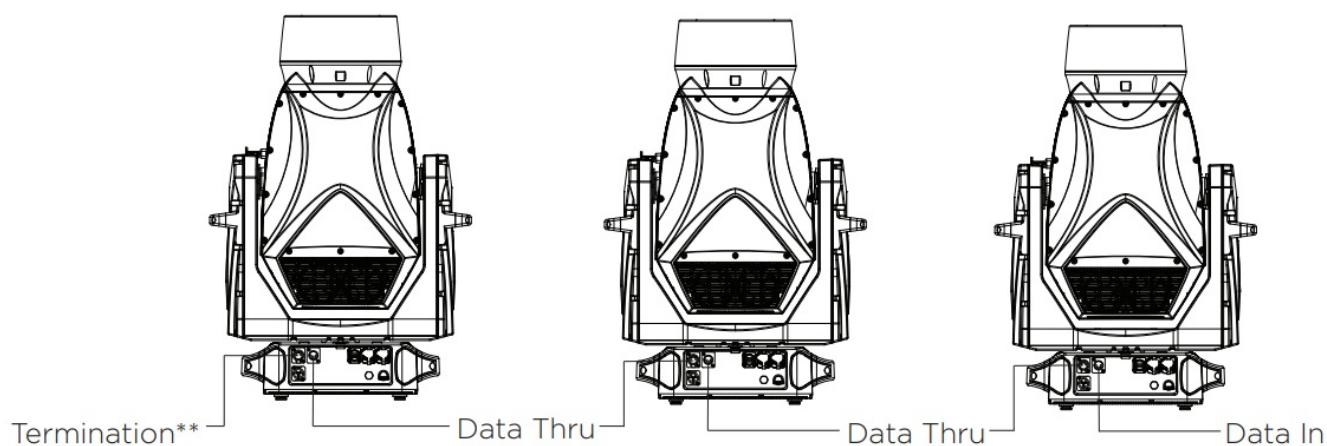
CONNECTING DATA

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

Table 1. CURRENT VS. VOLTAGE (1000W LED)

AC VOLTAGE AT 60HZ	TOTAL LUMINAIRE CURRENT	TOTAL LUMINAIRE POWER	PFC
120V	12.66a	1505W	0.996
180V	8.22a	1475W	0.988
208V	7.12a	1472W	0.987
230V	6.32a	1460W	0.987
240V	6.12a	1445W	0.983
264V	5.58a	1440W	0.980
277V	5.38a	1435W	0.966

To connect power and data

- **Step 1.** Connect the data cable from the console to the first luminaire in the chain at the DATA IN connector.
- **Step 2.** If required, connect additional data cables from DATA THRU connectors to DATA IN connectors of the remaining luminaires in link.
- **Step 3.** At the last luminaire in the link, install the male termination connector at the DATA THRU connector. (Luminaires and other devices on the same DMX chain may not function properly without termination.)

Termination**   Data Thru   Data Thru   Data In

- **Step 4.** Connect the AC Input Cable connector to the 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.
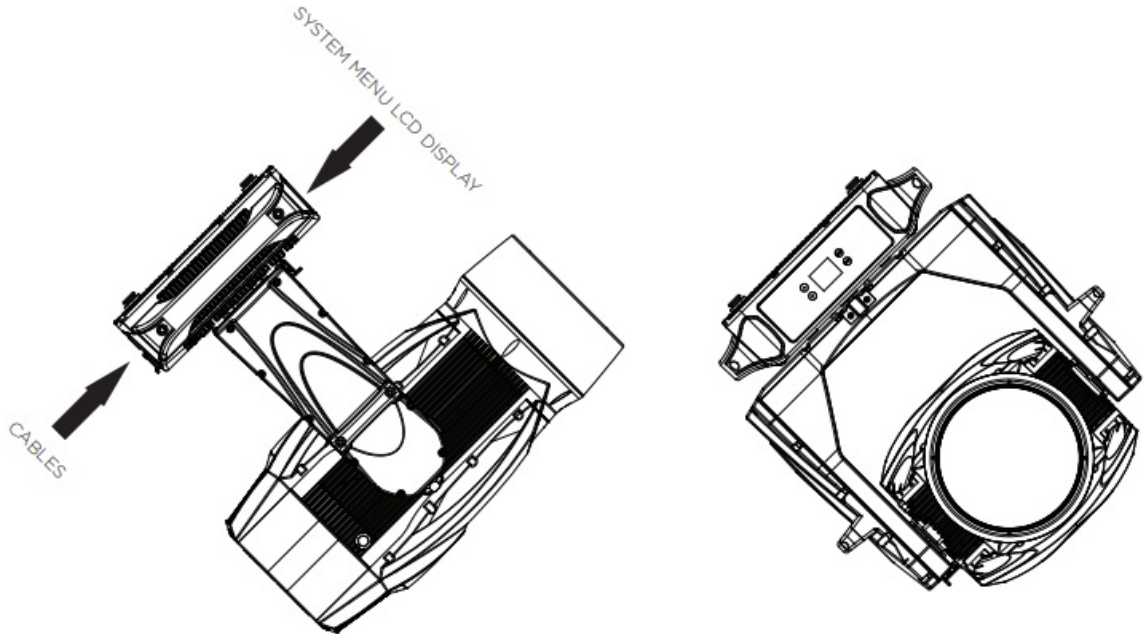
FLOOR MOUNTING

- All luminaires included in this manual are designed to sit directly on their base in a floor installation application.
- When used in this type of application, be sure to leave enough space around the luminaire to allow proper, uninterrupted airflow for cooling and movement.

HANGING THE FIXTURE

- The VL3600 LT PROFILE IP can be hung horizontally or 45° vertically from any structure designed to work with

the type of load created by this moving luminaire.

- Two mounting truss hooks or other mounting hardware are required.
- Many compatible truss hooks are available from different manufacturers for your particular needs.

- A minimum of two hooks per luminaire is required. If the mounting method does not use truss hooks, two attachment points, per luminaire, are required.

Install mounting hardware and brackets:

- **Step 1.** Install truss hooks on two provided truss hook brackets as required as shown.
    - **NOTE:** Various types of truss hooks can be used. The Mega Claw truss hook, as well as many other standard hooks, can be ordered separately.
- **Step 2.** Determine the required configuration of bracket installation. Brackets may be installed in many different orientations as shown.
- **Step 3.** While pulling up on the locking mechanism release, fit keyed holes onto raised mounting buttons at the bottom of the enclosure. Slide forward and release the locking mechanism to lock in place. Ensure brackets are locked securely.
    - **WARNING:** Ensure that the bracket locking mechanism is fully seated after the bracket is installed on the fixture.
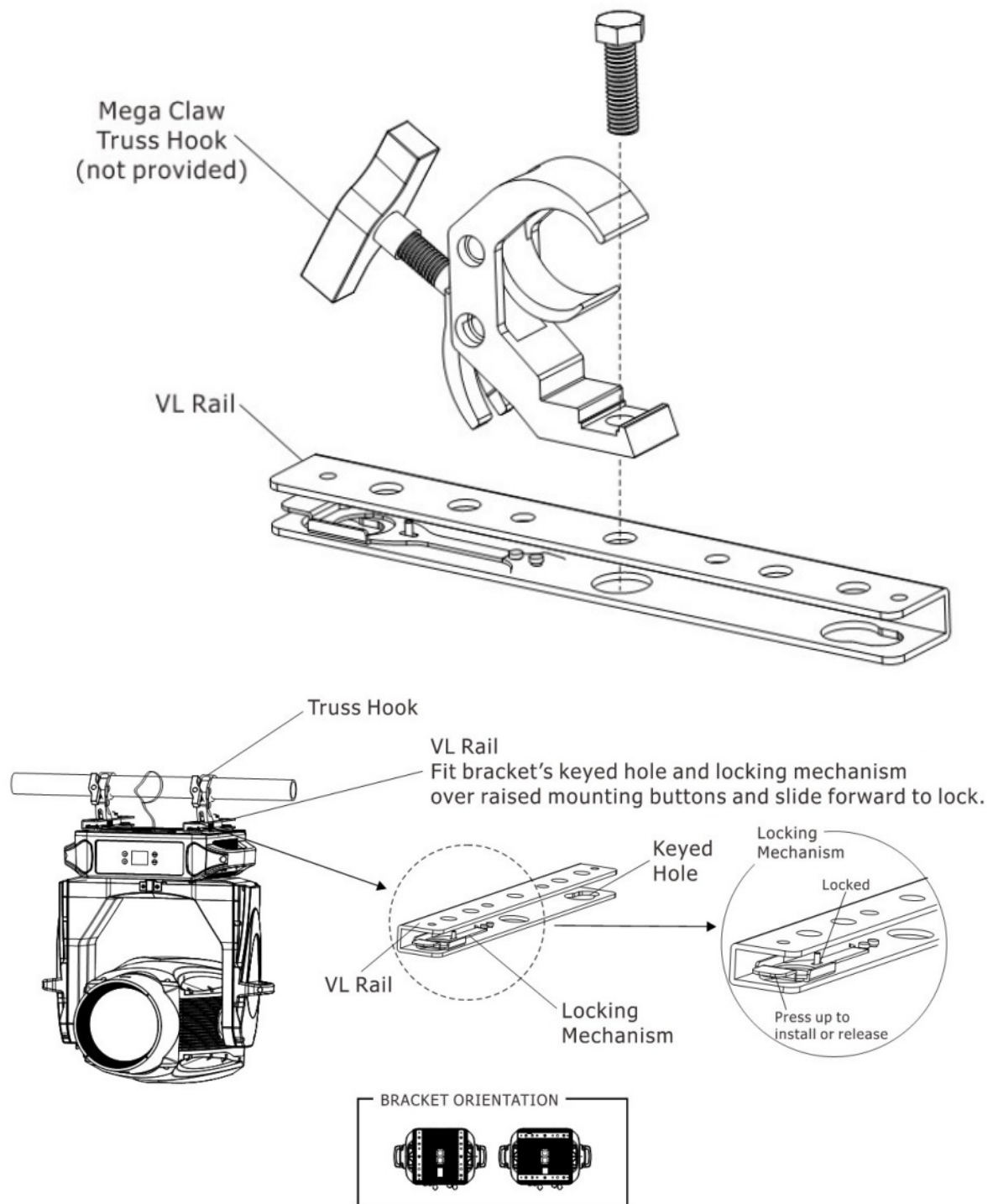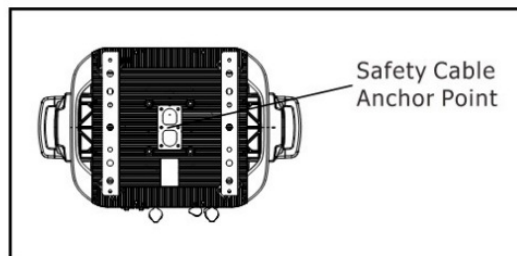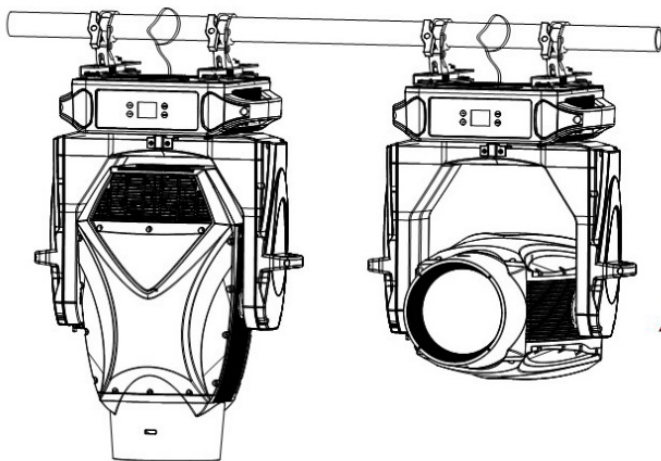
Mega Claw
Truss Hook
(not provided)

VL Rail

Truss Hook

VL Rail
Fit bracket's keyed hole and locking mechanism
over raised mounting buttons and slide forward to lock.

Locking
Mechanism

Keyed
Hole

Locked

VL Rail

Locking
Mechanism

Press up to
install or release

BRACKET ORIENTATION

FIGURE 1.   **INSTALLING BRACKETS ON LUMINAIRE ENCLOSURE**

Installing in Truss:

- **Step 1.** Using two people, lift the luminaire into the mounting position.
- **Step 2.** Secure in place with a truss hook. Ensure truss hook hardware that locks the hook in place (e.g. wing bolt) is properly tightened and that the luminaire is fully supported.
- **Step 3.** Attach safety cable (as required) as follows:
    - **a.** Loop the safety cable at least once around the safety cable anchor point rod.
    - **b.** Loop the safety cable at least once around the truss/pipe and secure it around the pipe.
- **Step 4.** Make sure the tilt and pan locks are disengaged so the luminaire moves freely.
- **Step 5.** Connect power and data cables.

Safety Cable Anchor Point

⚠️ SAFETY CABLE:
Recommended for hanging installations. May be required by local codes. Safety cable is sold separately.

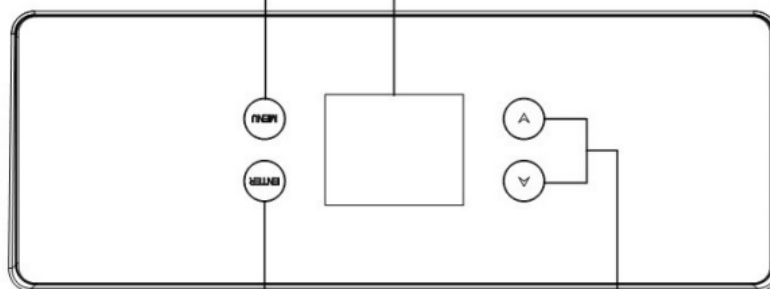NOTE: Truss hooks shown are sold separately. Truss and pipe by others.

MENU CONTROLS

- The menu system is controlled by an OK (Enter), MENU (Escape), and two Arrow (▲ ▼) buttons.
- Press and hold the ENTER button, and then quickly press the UP ▲, Down ▼, UP ▲, and DOWN ▼ buttons in 2s to unlock the screen.

[MENU] Button
Used to Access Main Menu Parameters, Exit, or Return to Previous Menu Item

LCD Display
Display all Data and Luminaire Settings

[ENTER] Button
To Select or Change a Setting or Data Value

▲ ▼
Arrow Keys (Up/Down)
Menu Navigation / Data Selection

QUICK REFERENCE MENU KEY SHORTCUTS

MENU KEY SHORTCUTS	FUNCTION
Holding Menu at Power up	Bypass calibration
Menu + up	recall all
Menu + down	Pan/tilt deactivated
Menu + enter	Factory defaults
enter + up	Led On
enter + down	Led Off
up + down	display FLiP
enter + up + down at Power up	reset timers Shortcut

QUICK REFERENCE DMX MAPS

The short form DMX maps are available on the following pages. Visit the product page for full DMX maps.

- Table 2. 16-Bit Mode
- Table 3. 16-Bit ENHANCED Mode (DEFAULT)Enhanced Mode (Default)

TABLE 2.   **16-BIT MODE**

DMX CHANNEL	PARAMETER	DMX CHANNEL	PARAMETER
1	Intensity High	26	VLFX (Gobo Wheel 3) Rotate/Index Low Byte
2	Intensity Low	27	VLFX (Gobo Wheel 3) Control
3	Pan High	28	Iris
4	Pan Low	29	Frame 1A
5	Tilt High	30	Frame 1B
6	Tilt Low	31	Frame 2A
7	Focus High	32	Frame 2B
8	Focus Low	33	Frame 3A
9	Zoom High	34	Frame 3B
10	Zoom Low	35	Frame 4A
11	Cyan	36	Frame 4B
12	Yellow	37	Frame Rotate
13	Magenta	38	Prism 1 (Triangular)
14	CTO Wheel	39	Prism 1 Index/Rotate High Byte
15	Color Adjustment (Color Wheel 2)	40	Prism 1 Index/Rotate Low Byte
16	Color Wheel 1	41	Prism 2 (Flat)
17	Color Wheel 1 Control	42	Prism 2 Index/Rotate High Byte
18	Gobo Wheel 1 (Fixed)	43	Prism 2 Index/Rotate Low Byte
19	Gobo Wheel 1 Control	44	Frost
20	Gobo Wheel 2	45	Strobe
21	Gobo Wheel 2 Rotate/Index High Byte	46	Future use channel
22	Gobo Wheel 2 Rotate/Index Low Byte	47	Programmers Channel
23	Gobo Wheel 2 Control	48	Fan Control
24	VLFX (Gobo Wheel 3)	49	Luminaire Control
25	VLFX (Gobo Wheel 3) Rotate/Index High Byte		

TABLE 3.   16-BIT ENHANCED MODE (DEFAULT)

DMX CHANNEL	PARAMETER	DMX CHANNEL	PARAMETER
1	Intensity High	28	Iris
2	Intensity Low	29	Frame 1A
3	Pan High	30	Frame 1B
4	Pan Low	31	Frame 2A
5	Tilt High	32	Frame 2B
6	Tilt Low	33	Frame 3A
7	Focus High	34	Frame 3B
8	Focus Low	35	Frame 4A
9	Zoom High	36	Frame 4B
10	Zoom Low	37	Frame Rotate
11	Cyan	38	Prism 1 (Triangular)
12	Yellow	39	Prism 1 Index/Rotate High Byte
13	Magenta	40	Prism 1 Index/Rotate Low Byte
14	CTO Wheel	41	Prism 2 (Flat)
15	Color Adjustment (Color Wheel 2)	42	Prism 2 Index/Rotate High Byte
16	Color Wheel 1	43	Prism 2 Index/Rotate Low Byte
17	Color Wheel 1 Control	44	Frost
18	Gobo Wheel 1 (Fixed)	45	Strobe
19	Gobo Wheel 1 Control	46	Future use channel
20	Gobo Wheel 2	47	Programmers Channel
21	Gobo Wheel 2 Rotate/Index High Byte	48	Focus Timing
22	Gobo Wheel 2 Rotate/Index Low Byte	49	Optics Timing
23	Gobo Wheel 2 Control	50	Color Timing
24	VLFX (Gobo Wheel 3)	51	Beam Timing
25	VLFX (Gobo Wheel 3) Rotate/Index High Byte	52	Gobo Timing
26	VLFX (Gobo Wheel 3) Rotate/Index Low Byte	53	Fan Control
27	VLFX (Gobo Wheel 3) Control	54	Luminaire Control

WARNING: It is not recommended to power any Vari-Lite fixture from a dimmer – even in 'NONDIM' mode. Dimmer and non-dim modules are not suitable sources of power because their output modifies the AC waveform. This may work for a short time, but will eventually result in power problems, operating errors, and/or fixture failure and may void the warranty.

WARNING: It is the responsibility of the user to adequately protect the supply source with a correct size and type circuit breaker and not overload circuits.

WARNING: This unit has a battery. Replace only with the correct type of battery. Failure to use the correct battery could cause serious damage to the fixture. Dispose of used batteries appropriately.

IEC/TR 62778 NOTICE ON RETINAL bLUE LIGHT HAZARD	
For reference only. refer to the product label for specific warnings for this product.	
Risk Group 1	None
Risk Group 2	Caution! do not stare into the beam.
Risk Group 3	Warning! Do not look into the beam. No direct eye exposure to the beam is permitted.

SAFETY WARNINGS AND NOTICES

- Read this user manual in full before attempting to install, operate, or maintain the fi xture to which it relates. This user manual is intended to provide general guidance to such suitably qualifi ed personnel.
- Installation and operation of the fixture are to be performed by qualifi ed 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 a 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 requirements) from combustible materials or illuminated objects. Do not mount near gas or electric heaters.
- Install only in locations with adequate ventilation. Ensure 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 the 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 the warranty.
- Refer service to qualified personnel. This fixture contains no user-serviceable parts.
- Before first use, carefully inspect the 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. Before each use, carefully inspect power cables and replace any damaged cables.
- The 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 a 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 service agent or a 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.

FCC

COMPLIANCE NOTICE

FCC DECLARATION OF CONFORMITY

- This equipment has been tested and found to comply with the limits for a Class A digital device under 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 by the Vari-Lite system, service, and safety guidelines, may cause harmful interference to radio communications.

As tested under this standard:

- **FCC 47CFR 15B clA*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 conform with the essential requirements of the following European Directives and harmonized standards:
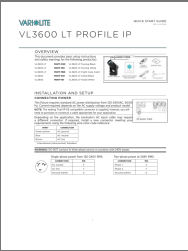
Low Voltage Director (LVD), 2006/95/EC

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

The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be li- able for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract unless otherwise agreed by Signify. Data is subject to change.

CUSTOMER SERVICE

- If you have any questions regarding this product, please contact Customer Service by phone at +1 **214-647-7880** or by email at **entertainment.service@signify.com**.
- VL3600 LT PROFILE IP QUICK START GUIDE
- **VERSION DATE:** JULY 22 2024

Documents / Resources

VARI●LITE VL3600 LT PROFILE IP	**VARI-LITE VL3600 LT 6 Color LED Moving Head Profile Light** [pdf] User Guide 74817-050, 74817-150, 74817-TBD, 74817-051, 74817-151, VL3600 LT 6 Color LED Moving Head Profile Light, VL3600 LT, 6 Color LED Moving Head Profile Light, Moving Head Profile Light, Head Profile Light, Profile Light

References

- **User Manual**