

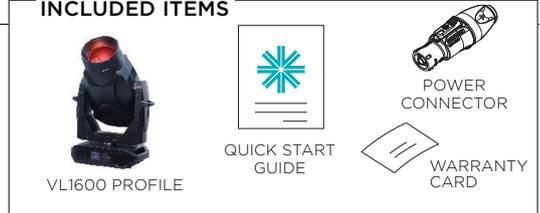
# VL1600 PROFILE

## OVERVIEW

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

VL1600 Profile, black	<b>74016-001</b>
VL1600 Profile, white	<b>74816-002</b>

### INCLUDED ITEMS



## INSTALLATION AND SETUP

### CONNECTING POWER

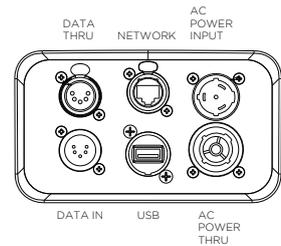
This fixture requires standard AC power distribution from 100-240VAC, 50/60 Hz. Current required depends on the AC supply voltage and product model.

**NOTE:** The mating Neutrik® powerCON® True1 connector is supplied; however, you will need to purchase or construct a cable appropriate for your application.

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 100-240V RMS:



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

Three-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.

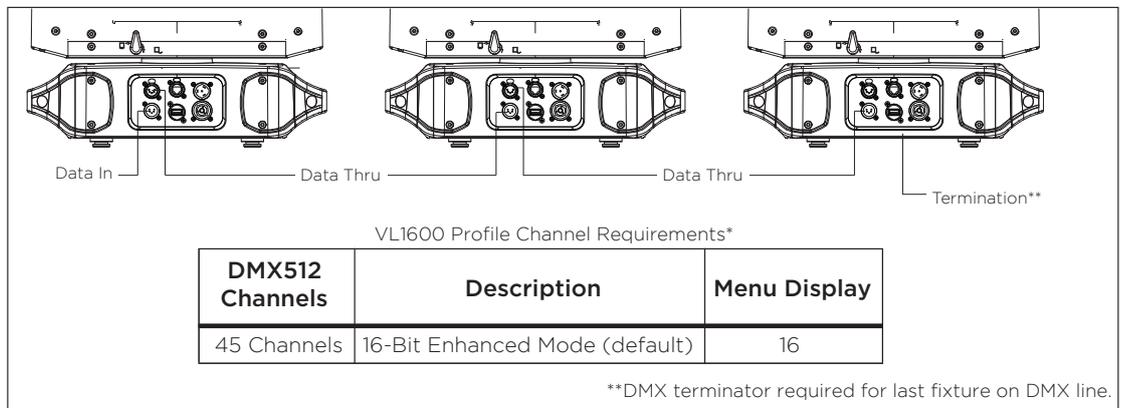
TABLE 1. CURRENT VS. VOLTAGE (550W LED)

AC VOLTAGE AT 60HZ	TOTAL LUMINAIRE CURRENT (MOTOR + LAMP CURRENT)
100V	7.8A
110V	7.0A
120V	6.4A
130V	5.9A
200V	3.8A
210V	3.6A
220V	3.4A
230V	3.3A
240V	3.2A

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**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.

**FLOOR MOUNTING**

All luminaires included in this manual are designed to sit directly on its 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 VL1600 Profile can be hung horizontally or 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 mounting method does not use truss hooks, two attachment points, per luminaire, are required.

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**Install mounting hardware and brackets:**

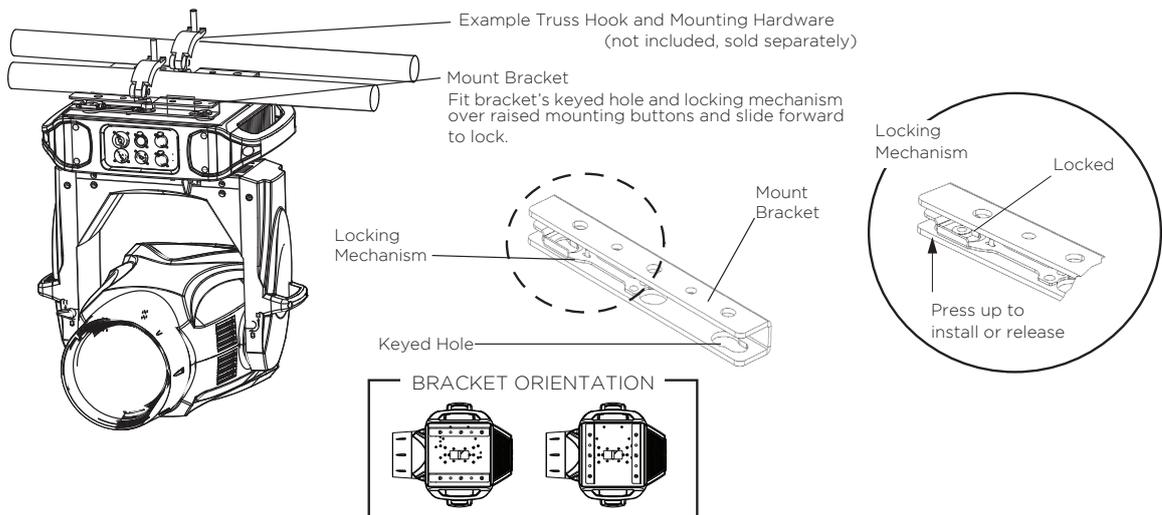
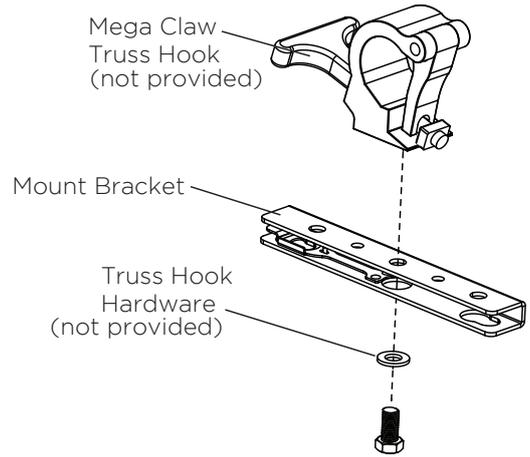
Step 1. Install truss hooks on two provided truss hook brackets as required as shown.

**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 required configuration of bracket installation. Brackets may be installed in many different orientations as shown.

Step 3. While pulling up on locking mechanism release, fit keyed holes onto raised mounting buttons at bottom of enclosure. Slide forward and release 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.

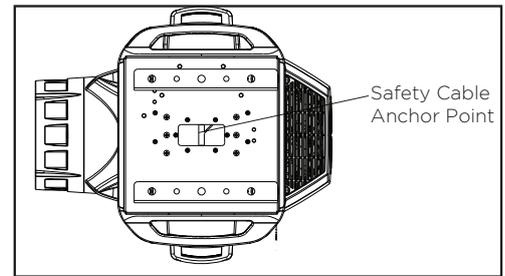
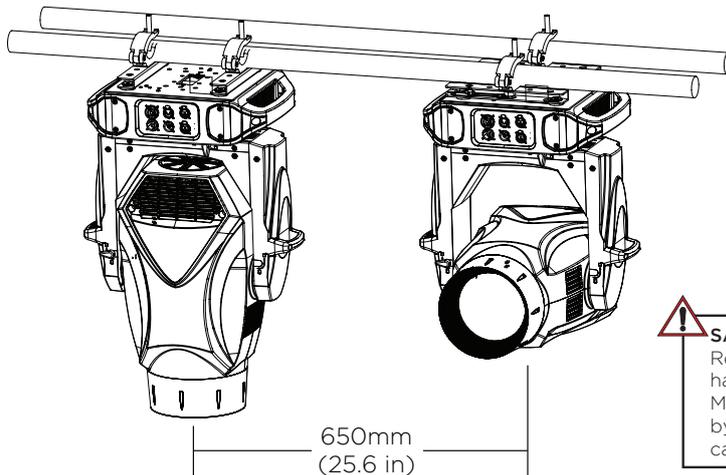


**FIGURE 1. INSTALLING BRACKETS ON LUMINAIRE ENCLOSURE**

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## Installing in Truss:

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



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

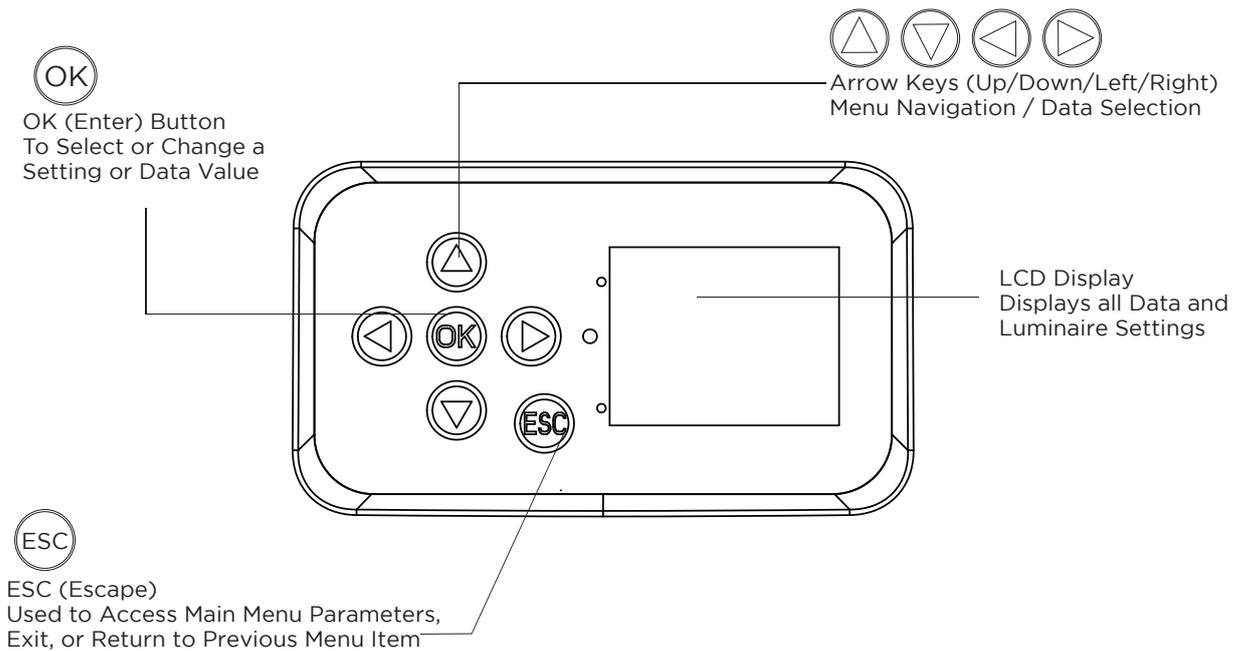
NOTE: Truss hooks shown are sold separately. Truss and pipe by others.

The safety cable anchor point is tested and is in compliance of the following safety standards:  
 - IEC / EN 60598-1:2015

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## MENU CONTROLS

The menu system is controlled by an OK (Enter), ESC (Escape), and four Arrow (◀▲▼▶) buttons.



## 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 Enhanced Mode](#)
- [Table 3. 16-Bit Mode](#)

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**TABLE 2. 16-BIT ENHANCED MODE**

DMX CHANNEL	PARAMETER	DMX CHANNEL	PARAMETER
1	Intensity High	25	VLFX Wheel Control
2	Intensity Low	26	Iris
3	Pan High	27	Frame 1A
4	Pan Low	28	Frame 1B
5	Tilt High	29	Frame 2A
6	Tilt Low	30	Frame 2B
7	Focus High	31	Frame 3A
8	Focus Low	32	Frame 3B
9	Zoom High	33	Frame 4A
10	Zoom Low	34	Frame 4B
11	Cyan	35	Frame Rotate
12	Yellow	36	Variable Frost
13	Magenta	37	Strobe/Shutter
14	Variable CTT	38	Programmers Channel
15	Color Wheel	39	Focus Timing
16	Color Wheel Control	40	Optic Timing
17	Color Presets	41	Color Timing
18	Gobo Wheel 1 (Rotating)	42	BeamTiming
19	Gobo Wheel 1 Rot/Index High	43	Gobo Timing
20	Gobo Wheel 1 Rot/Index Low	44	Variable Fan Control
21	Gobo Wheel 1 Control	45	Luminaire Control Channel
22	VLFX Wheel (Gobo wheel 2)		
23	VLFX Rot/Index High		
24	VLFX Rot/Index Low		

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**TABLE 3.**
**16-BIT MODE**

DMX CHANNEL	PARAMETER
1	Intensity High
2	Intensity Low
3	Pan High
4	Pan Low
5	Tilt High
6	Tilt Low
7	Focus High
8	Focus Low
9	Zoom High
10	Zoom Low
11	Cyan
12	Yellow
13	Magenta
14	Variable CTT
15	Color Wheel
16	Color Wheel Control
17	Color Presets
18	Gobo Wheel 1 (Rotating)
19	Gobo Wheel 1 Rot/Index High
20	Gobo Wheel 1 Rot/Index Low

DMX CHANNEL	PARAMETER
21	Gobo Wheel 1 Control
22	VLFX Wheel (Gobo wheel 2)
23	VLFX Rot/Index High
24	VLFX Rot/Index Low
25	VLFX Wheel Control
26	Iris
27	Frame 1A
28	Frame 1B
29	Frame 2A
30	Frame 2B
31	Frame 3A
32	Frame 3B
33	Frame 4A
34	Frame 4B
35	Frame Rotate
36	Variable Frost
37	Strobe/Shutter
38	Programmers Channel
39	Variable Fan Control
40	Luminaire Control Channel

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**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 wave form. 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.

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

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**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.

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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.

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**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.

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## COMPLIANCE NOTICE



### 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

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