## VL1100 AS / AI automated ellipsoidal

spotlight



The VARI\*LITE VL1100 ERS luminaire, borne from the very popular VL1000 ERS luminaire, combines the functionality of one of the most popular conventional lighting tools — the ellipsoidal reflector spotlight with the versatility of an automated luminaire. All VL1100 models have undergone design enhancements to provide more quiet and fluid operation.

Automated functions include CYM color mixing, rotating gobos (gobos/patterns sold separately), variable diffusion and a zoom lens that ranges from 19° to 36° for normal imaging and a super zoom function that ranges to 70°. A new 50 kHz. drive system quiets all two-phase motors both when moving and static. A central bearing system in the gobo wheel reduces noise and ensures smooth operation of the mechanism. Additionally, new, three-phase, ultra quiet stepper motors provide for smoother and quieter pan and tilt operation.

Models VL1100AI and VL1100AS deliver more than 15,000 lumens with the higher color temperature of the 575 watt arc source. These models also include a mechanical dimmer and a truss-mounted, fanless ballast.

The VL1100AS model includes an automated, four-blade shutter mechanism that provides control of all shutter functions popular in conventional ellipsoidal reflector spotlights. The VL1100AI model includes a beam size iris.

# **Programmable Functions**

Arc Units

| Zoom Optics:                     | Continuously variable field angle in imaging range from 19° to 36°, super zoom angles to 70° is                        |
|----------------------------------|--|
|                                  | programmable over a timed range of 2 seconds to 20 minutes.  |
| Color Mixing System:             | A fully cross-fading CYM color system. All motors utilize a noise reducing, 50kHz. drive system that                   |
|                                  | quiets operation during movement and also while static.  |
| Diffusion:                       | Field or gobo can be continuously and smoothly diffused to wash.   |
| Dimmer:                          | A coated glass dimmer wheel provides full-field dimming designed for smooth timed fades.                               |
| Rotating Gobo Wheel:             | Six position rotating gobo wheel with a central bearing system, five rotatable and indexable gobo                      |
|                                  | positions plus open. (Patterns are not included with the fixture.)   |
| Shutter (Framing Models):        | Four-blade system can frame and crop beam field and gobos. Each individual shutter is                                  |
|                                  | capable of translating to beam center while also rotating $\pm 35^{\circ}$ . Entire shutter rotates $\pm 45^{\circ}$ . |
| Beam Size Control (Iris Models): | In addition to the zoom optics, a mechanical iris provides continuous beam size control for                            |
|                                  | both rapid changes and smooth timed beam angle changes.  |
| Pan and Tilt:                    | Smooth, timed continuous motion using three phase, ultra quiet stepper motors with encoder correction.                 |
|                                  | Pan range is 540°; tilt is 270°. Resolution is 0.1°. Unit will calibrate to support close hangs (yoke-to-yoke).        |

reflector

### Description

| Sources:                 | 575 W Arc Lamp, Phillips MSR 575HR (or equivalent)                             |   |  |  |
|--------------------------|--|---|--|--|
|                          | Color Temp: 6000K  | CRI: 95   |  |  |
|                          | Output: >15,000 Lumens   | Rated Life: 1,000 Hours   |  |  |
| Optional Source:         | 575 W Arc Lamp, Phillips MSD 575HR (or equivalent)                             |   |  |  |
|                          | Color Temp: 5900K  | CRI: 75   |  |  |
|                          | Output: >14,000 Lumens   | Rated Life: 2,000 Hours   |  |  |
| Power Requirements:      | 3 to 9 Amps depending upon input voltage. 90 -264 VAC 50/60 Hz.                |   |  |  |
| Reflector:               | Precision glass reflector with dichroic cold mirror coating.                   |   |  |  |
| Operational Temperature: | -20° to 122°F (-29° to 50°C)   |   |  |  |
| Cooling:                 | Free convection cooling when hung. Flo   | nvection cooling when hung. Floor mounted units and extreme ambient temperatures activate a |  |  |
|                          | low-noise, forced-air cooling system.  |   |  |  |
| Control:                 | Completely compatible with a wide variety of DMX512 lighting control consoles. |   |  |  |
| Mounting Position:       | VL1100 ERS luminaires can be mounte  | d and operated in any orientation.  |  |  |
| Spacing:                 | Full range of motion on 26.5" centers. Hangs as close as 20.0".                |   |  |  |
| Weight:                  | Luminaire: 70.0 lbs (32.0 kg) / Ballast: 16.6 lbs (7.52 kg).                   |   |  |  |
|                          |  |   |  |  |

### **Ordering Information**

#### Luminaires:

| 20.9664.0001.12    |  |
|--------------------|--|
| 20.9664.0001.12.02 |  |
| 20.9664.0001.13    |  |
| 20.9664.0001.13.02 |  |

#### Accessories:

71.2528.0575 71.2556.0575 22.9620.0194 28.8500.0054 55.6840.0001 55 6841 0001 41.6010.XXXX

VL1100AS ERS, Arc, Framing Shutters, Includes 575W Arc Lamp VL1100AS ERS, Arc, WHITE, Framing Shutters, Includes 575W Arc Lamp VL1100AI ERS, Arc, Iris, Includes 575W Arc Lamp VL1100AI ERS, Arc, WHITE, Iris, Includes 575W Arc Lamp

575 Watt Arc Lamp, MSR575HR 575 Watt Long-Life Arc Lamp, MSD575HR Safety Cable USB Luminaire Programming Kit Truss Hook, Mega-Clamp, Round and Square Truss Hook, Mega-Claw for 2" Round Tube Gobo, Series 1000 (Specify pattern from catalog to complete P/N.)



# **VL1100 AS / AI**

automated ellipsoidal reflector spotlight

# Arc Units

### Arc Ballast Unit Description:

+0.97

 $\pm 450V$ 

100V \*

6.25A\*

625W\*

200Hz\*

± 3%

Square wave

| Input          |              |
|----------------|--------------|
| Voltage Range: | 90 to 275V,  |
|                | Auto Ranging |
| Frequency:     | 50 or 60 Hz  |
| Current Range: | 2.7 to 9.0A* |

Power Factor:

Lamp Voltage:

Lamp Current:

Lamp Power:

Open Circuit Voltage:

Output Current Shape:

Output Frequency:

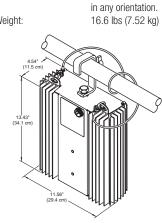
High Frequency Ripple Current:

\* Nominal Values

Output

90 to 275V, Mounting Position: Auto Ranging 50 or 60 Hz Weight:

Weight & Dimensions



Ballast can be mounted

# **Specifications**

The unit shall be an integrally designed, remote-controlled, automated ellipsoidal reflector spot luminaire. An integral enclosure/pan tube supports the luminaire with provisions for two hooks. The pan tube serves as an interconnection point for power and data. Low noise fans provide forced-air cooling for internal components during extreme operating conditions. The rear cap provides three-point lamp adjustment and easy access to the lamp for replacement.

An AC input connector, a remote ballast interconnect cable and two, five-pin DMX512 compatible connectors (in and through) are provided. The unit can be controlled by a wide variety of DMX512 consoles.

Each unit shall be equipped with a high-speed processor providing diagnostic and self-calibration functions as well as internal test routines and software update capabilities. A yoke arm mounted panel and display provide the user interface.

The unit shall contain three-phase stepper motors to provide movement of the head through 540° in the horizontal plane (pan) and 270° in the vertical plane (tilt). The luminaire calibrates to minimize hanging distances.

A zooming multi-element optical system provides continuous focus of gobo images for field angles from 19° to 36°. A super zoom function provides field angles to 70°. Independent control of edge is provided.

A CYM color mixing system shall be provided for a broad range of user color selection. A variable diffusion stage shall be included. This stage provides controlled reduction of the contrast ratio of imagery and beam edges. The effect is a continuous transition from spotlight to floodlight.

A six-position gobo wheel with five rotatable, indexable gobo positions and one open position shall be included. A central bearing system in the gobo wheel shall reduce noise and ensure smooth operation of the mechanism. Gobos are easily installed and removed. (A wide selection of gobos are available from Vari-Lite.)

Framing shutter models contain four shutter blades that translate radially across the beam. Each individual shutter is capable of translating to beam center while also rotating  $\pm 35^{\circ}$ . The framing shutter mechanism rotates as a unit  $\pm 45^{\circ}$ .

Iris models contain a beam size iris suitable for producing narrow beams and cropping gobos.

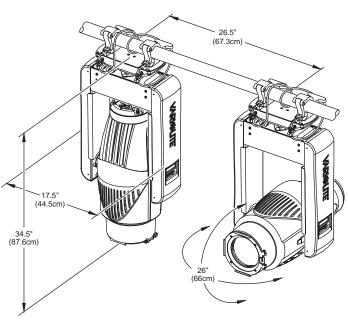
A 50 kHz, drive system shall quiet all two phase motors in the luminaire both when moving and static.

The unit is ETL and ETLc certified and CE marked. The unit's exterior finish shall be available in black or white.

# PHILIPS



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Shown with accessories that are sold separately.

# Photometric Data\*

| FIELD ANGLE<br>(Degrees)                   | FIELD DIAMETER<br>TN <sup>1</sup> | BEAM ANGLE<br>(Degrees) | BEAM DIAMETER<br>TN <sup>1</sup> | CANDELA<br>(cd) |  |  |
|--|-----------------------------------|-------------------------|----------------------------------|-----------------|--|--|
| VL1100 ERS - 575W Metal Halide             |                                   |                         |                                  |                 |  |  |
| 19.0                                       | .335                              | 13.0                    | .228                             | 235,300         |  |  |
| 27.0                                       | .480                              | 18.0                    | .317                             | 123,700         |  |  |
| 36.5                                       | .660                              | 24.0                    | .425                             | 66,500          |  |  |
| 70.0                                       | 1.40                              | 28.5                    | .508                             | 31,600          |  |  |
| (Super Zoom)                               |                                   |                         |                                  |                 |  |  |
| VL1100 ERS - 575W Metal Halide (Long Life) |                                   |                         |                                  |                 |  |  |
| 19.5                                       | .344                              | 13.5                    | .237                             | 205,400         |  |  |
| 27.0                                       | .480                              | 18.5                    | .326                             | 104,900         |  |  |
| 36.0                                       | .650                              | 24.5                    | .434                             | 56,400          |  |  |
| 70.0                                       | 1.40                              | 28.0                    | .499                             | 27,000          |  |  |
| (Super Zoom)                               |                                   |                         |                                  |                 |  |  |

#### Notes:

\* All data taken with seasoned light source at 20 hours of life.

<sup>1</sup> Multiply distance by Tn to determine coverage.

To calculate center beam Illuminance (I), at a specific distance (D): I = cd I D2

— if (D) is in feet, (I) is in foot candles
— if (D) is in meters, (I) is in lux



