VL7™ Series

spot luminaire

The VARI✳LITE® VL7™ spot luminaire uses a revolutionary collection optics system that produces a bright, even field using only 700 watts of arc power.

Full color spectrum crossfades via the unique CVF™ System, from the palest shades to the most saturated hues with unparalleled precision and repeatability.

8:1 zoom projection lens produces a high quality image that remains in focus throughout the entire zoom range.

Rotating and fixed gobos, strobe and image morphing.

Every feature is optimized for speed and also for slow, smooth repeatable transitions.

Programmable

Zoom Optics:	Continuously variable beam angle from 5˚ to 40˚, programmable over a timed range of 2 seconds to 1 hour.
CVF Color System:	Continuously variable full color spectrum crossfading. Maximum translation may occur over a programmed range from .5 second to 1 hour. Adjacent colors may be reached in as little as .12 second.
Beam Size Control:	Beam size iris programmable over a timed range of .1 second to 30 seconds.
Intensity Control:	Consistent dimming from fully open to full blackout, over a programmable range of .5 second to 1 hour.
Strobe:	Provides variable speed up to 7.25 Hz.
Color/Fixed Gobo Wheel:	12 position wheel. Rotation in either direction over a range of 3 RPS to 1 RPM. Minimum time shall be .12 second for a single position change.
Rotating Gobo Wheel:	6 position gobo wheel. Wheel may rotate 180˚ in either direction in as little as .3 second. Adjacent gobos may be reached in .12 second. Individual gobo rotation shall be smooth and stepless over a range from .2 RPM to 120 RPM in either direction. Angular resolution shall be .3˚.
Edge & Pattern Focus:	Variable beam focus to soften edges of gobos or spots may be over a timed range of 2 seconds to 1 hour.
Pan & Tilt:	Smooth, time controlled continuous motion by way of a digital servo system.
Range:	Pan - 370˚, Tilt - 270˚.
Max Velocity:	200˚ per second.
Accuracy:	0.3˚ resolution.

Description

Source:	Philips MSR 700 SA, 5600˚K integrated color temperature.
Power Requirements:	Lamp power from the APS6™ module in the Modular Power Distribution Rack at 180 to 265 VAC, 50/60 Hz. Luminaires are powered through the Smart Repeater™ Plus unit.
Reflector:	Precision metal reflector with dichroic cold mirror coating. Source may be adjusted in the reflector to peak or flatten the projected beam field.
Operationial Temperature:	32˚ to 113˚F (0˚ to 45˚C).
Cooling:	Virtually silent forced air.
Control:	Completely compatible with either the VARI✳LITE automated lighting system, featuring the Virtuoso™ console and Artisan® console families. Also compatible with a wide variety of DMX-512 consoles.
Mounting Position:	Mounted and operated in any orientation.
Spacing:	Hangs on 26 in. (660 mm) centers.
Weight:	68 lbs (30.8 kg).

Accessories

71.2528.0700	MSR 700 SA Lamp
21.9650.0005	Series 300™ Truss Hook
21.9650.4103	Series 300 Floor Stand
22.9634.0145	Series 300 Safety Cable
25.7042.0006	6 ft. Shielded Series 300 Lamp Cable
25.7042.0012	12 ft. Shielded Series 300 Lamp Cable
25.7042.0020	20 ft. Shielded Series 300 Lamp Cable
25.7155.0050	50 ft. Shielded Series 300 Lamp Cable (Smart Lamp Plus)
25.7155.0100	100 ft. Shielded Series 300 Lamp Cable (Smart Lamp Plus)
25.7155.0XXX	Custom Length Shielded Series 300 Lamp Cable*
20.9623.0600	Smart Repeater™ Plus Unit
20.9625.0024	Series 300 Molded Plastic Work Trunk
20.9625.0102	VL7 Luminaire Trunk (Holds 2 VL7 luminaires)
22.5011.0086	Spare Components Set

*Cannot exceed 300 ft. in length.

VARI✳LITE®
Express yourself.

PART # : 20.9650.0001

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Specifications

The unit is an integrally designed, remote controlled, motorized spot luminaire. The housing and yoke are constructed of aluminum and steel for lightweight strength and are forced-air cooled using four virtually silent fans. The rear lamp cap slides away from the unit, providing ease of access to the lamp for replacement.

Two enclosed, high torque servomotors are provided to permit movement of the head on a horizontal plane of 370˚ and on a vertical plane of 270˚. Control cabling runs internally to prevent tangling. The pan and tilt are belt-driven, providing positional resolution and repeatability of 0.3˚ on either axis. Manual override under power results in no harm to the drive mechanism.

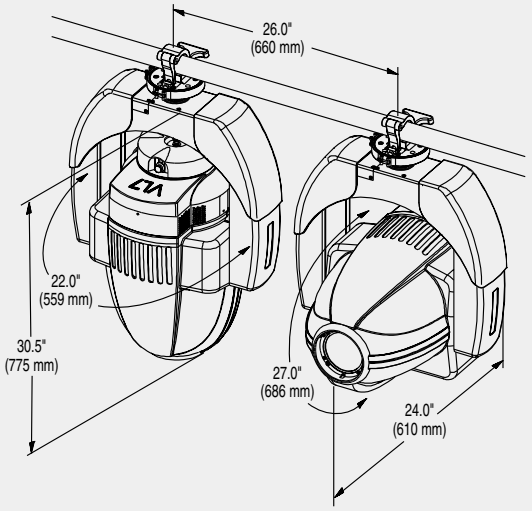
Each unit is equipped with an on-board microprocessor providing diagnostic and self-calibration functions. In the event the luminaire encounters any physical obstruction during calibration, the pan and tilt motors will automatically be disabled preventing damage to the mechanisms.

The unit contains a rotating, easily removable filter wheel capable of holding up to eleven interchangeable, user-selectable dichroic color filters or gobos. The wheel is capable of spinning continuously. A six position rotating, indexable gobo wheel is also provided. Two motors provide independent drive regardless of direction of movement. All gobos are easily removable from units without the need to power down or lower the lighting system. Positional accuracy of the filter frame in reference to the beam is ensured by the microprocessor, which maintains count of both stepper motors and optical sensors that define the open white positions.

The unit contains a mechanical dimmer to provide full field dimming and allow for smooth timed fades and fast blackouts. The unit also contains a douser/strobe mechanism with variable speed cycling of up to eight times per second. A mechanical iris provides continuous beam size control for both rapid changes and smooth timed beam angle changes. Variable beam focus is provided to soften edges of gobos or spots and provide gobo crossfades. The zoom optics system provides adjustable field angle from 5˚ to 40˚.

The unit contains a continuously variable dichroic color mechanism capable of full color spectrum crossfading. The mechanism is programmable in a range of time from one second to one hour with adjacent color changes possible in as little as .12 seconds.

The control cable to the luminaire provides both digital control signals and power from the Smart Repeater Plus unit. A safety cable is provided with each unit, and a floor stand is available. Exterior finish is black epoxy coat. Total weight does not exceed 68 lbs (30.8 kg). The unit is UL and C-UL listed and CE-marked.



Photometric Data*

VL7 Spot Luminaire - 700W Arc					
FOV	CANDELA (cd)	BEAM ANGLE (DEGREES)	BEAM DIAMETER TN[1]	FIELD ANGLE (DEGREES)	FIELD DIAMETER TN[1]
5˚	1,900,000	4.0˚	.070	6.5˚	.114
10˚	1,120,000	5.5˚	.096	10.0˚	.175
15˚	508,000	7.5˚	.131	15.0˚	.263
20˚	260,000	11.0˚	.193	21.0˚	.371
25˚	174,000	13.0˚	.228	25.5˚	.453
30˚	122,000	16.0˚	.281	29.5˚	.523
35˚	90,000	17.5˚	.308	34.0˚	.612
40˚	69,600	20.0˚	.353	37.0˚	.669

[1] Multiply distance by Tn to determine coverage.

To calculate center beam Illuminance (I), at a specific distance (D): $I = \frac{cd}{D^2}$
— if (D) is in feet, (I) is in foot candles
— if (D) is in meters, (I) is in lux

* All data taken with seasoned light source at 20 hours of life. Lens is focused on the beam size iris to provide a hard edge for each FOV.

VARI*LITE®
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Vari-Lite, Inc.
201 Regal Row
Dallas, TX 75247
1.877.VARILITE
fax: 214.630.5867
www.vari-lite.com

Underwriters Laboratories Inc.®

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