# ECO Spot™ LED C25E/40E/60E User Manual

The ECO Spot CxxE series projectors are intended for exterior applications but they are also suitable for interior use.

These units are equipped with a fan cooled heat pipe to keep the High-Power LEDs running cool.

Please read this manual before installing or operating this fixture, follow the safety precautions listed below and observe all warnings.



# **WARNING!**

To prevent damage to the LED, always connect the driver cable to the projector FIRST before plugging it into the power outlet.

# **Package Contents**

✓ Projector, External LED Driver, Test Gobo, Spare gobo retaining ring and spare drive belt, Gobo adapter ring for E-Size Gobos (usually pre-installed)

# **Safety Information**

- Place your fixture at a suitable place with good air flow.
- Keep flammable materials away from the fixture.
- Minimum distance to flammable material = 1 ft (0.3m).
- Provide a minimum clearance of 4 in (10cm) around air vents.
- Use only genuine spare parts for part replacement.
- Do not look directly into the lamp; it can result in eye damage.
- Always unplug the unit from the power mains before any service is done.
- Light fixtures should be installed and maintained only by qualified personnel with experience in lighting equipment and general electrical experience.

# **Electrical Safety**

- Disconnect the fixture from AC power before handling the fixture.
- Always ground (earth) the fixture electrically.
- Use only a power source that complies with local building and electrical codes and has both, overload and ground-fault protection.
- Do not use the fixture if the power cable or power plug is in any way damaged, defective or wet, or if they show signs of overheating.

## **Handling Instructions**

- There is a weatherproof connector between the driver (power supply) and projector, which can be opened for easier handling. Always make this connection first before powering up the driver, otherwise the LED can be damaged by the power surge.
- Before the initial start-up, please unpack and carefully check for damage caused during transportation.
- Place your fixture at a suitable place with good air flow.
- Make sure there are no flammable materials close to the lamp.
- When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.
- Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.

#### Warranty

One Year from Date of Purchase. Keep your receipt for reference and contact your dealer in case of warranty issues.

# **Projection Lenses**

The projector accommodates interchangeable projection lenses to allow optimizing the projection size and resulting brightness at varying distances. The narrower the lens, the smaller and brighter the image will be at a given distance. For example, cutting the projection size in half, will quadruple its brightness.

#### **Gobo Rotator**

If the fixture is equipped with a gobo rotator, it can be turned on/off with the silver pushbutton on the front plate underneath the lens. There are no controls for rotating speed or direction.

#### **Focusing**

- Power up the projector.
- If the fixture is equipped with a gobo rotator, turn it on, once the gobo projects in the desired position, turn it off.
- Loosen the outer ring around the lens that acts as a water seal.
- Focus the projection by twisting the lens in and out until the image is well focused.
   When used for the first time, the lens will often need to be twisted outwards many rotations to reach the focusing point. When in doubt, keep going.
- Re-tighten the outer ring to ensure a tight seal of the lens.

#### **Multi-functional Yoke**

The yoke can...

- slide over the length of the fixture body to accommodate a wide range of pointing directions.
- be screwed to a wall or ceiling or fastened with a C-clamp
- also serve as stand.

#### **Gobo Types and Size** (see *Specifications* for Gobo Dimensions)

The projector takes **metal** and **glass** gobos and filters with a max thickness of 5mm. Because of its light intensity and resulting heat, **film gobos cannot be used.** 

The gobo size is E-Size, some units have adapter rings that can be removed and allow the use of larger D-Size gobos.

The recommended gobo image diameter for best image quality is 25mm and below. An image diameter of up to 32mm is possible with some yellowing and focusing weakness in the outer projection area.

#### **Gobo Placement** (see *Specifications* for Gobo Dimensions)

Unscrew the thumbscrews to remove the front cover with the projection lens.

- Push the two pins of the gobo retaining ring together and pull out the retaining ring. Carefully remove the old gobo and replace it with the new gobo.
- Tip: Tilt the projector forward while placing the palm of your hand inside, the old gobo will fall into your hand.
- If you have a glass gobo, place the more reflective side towards the light bulb.
- Replace the retaining ring and make sure it evenly pushes the gobo all the way back.
- Replace the front cover and adjust the focus by threading the projection lens in or out.



# **Specifications**

Input Voltage Range Ambient Operating Temp.  Input Power  Typ Input Current  Gobo Size  Rated lumens (Im)  Color Temperature (k)  CRI  Ambient Operating Temp.  30W  24W  24W  CAN  COLOFA/115V, 0.11/277V  24W  COLOFA/115V, 0.11/277V  AMPIEUR COLOFA/115V, 0.11/277V  AMPIEUR COLOFA/115V, 0.11/277V  COLOFA/115V, 0.11/277V  AMPIEUR COLOFA/115V, 0.11/277V  COLOFA/115V, 0.11/277V  AMPIEUR COLOFA/115V  AMPIEUR COLOFA/115	11/277V 11/277V E. E. Withou'	100-240V, 277V, 47-63Hz -13 to 104°F (-25 to 40°C) 50W 77V 0.43A/115V, 0.18A/277V 6.62 40W E-Size - OD:37.5mm, ID25:mm Without adapter ring: OD:53mm, ID.25mm	72W 0.62A/115V, 0.26A/277V 60W
er Current r Current r Current l Cur	11/277V 11/277V E. E. Withou	-13 to 104°F (-25 to 40°C) 50W 0.43A/115V, 0.18A/277V 40W Size - OD:37.5mm, ID25:mm adapter ring: OD:53mm, ID	72W 0.62A/115V, 0.26A/277V 60W
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(k)	000		25mm
(k)	000	3,000lm	4,000lm
(x)	009	2,400lm	3,400lm
		9000 +/-200	9009 +/-200
		75	75
	ľ	40,000h	40,000h
		<b>Narrow</b> : f=140mm/10°	
	V,	Semi-Narrow: f=100mm/15°	
Lens Options		<b>Medium</b> : f=70mm/20°	
		Wide: f=50mm/25°	
	Ultra-M	<b>Ultra-Wide</b> : f=28mm/45° (max. ID=25mm)	5mm)
Dimensions (incl lens)		5.5" x 6" x 13"	
Weight (lbs) 7lbs		8lbs	8lbs
		Driver IP 65	
IP Ratings	Fixtu	Fixture equivalent of IP 62 (self rated)	ted)
Rain h	n hood recom	Rain hood recommended for permanent outdoor installation	loor installation