# ECO Spot™ LED C40/C60 User Manual

Thank you for choosing an ECO Spot™ Gobo projector. This manual covers the ECO Spot C40 and ECO Spot C60.

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



# **Package Contents**

- ✓ Projector with power cord
- ✓ Test Gobo
- ✓ Spare gobo retaining ring and drive belt
- ✓ Gobo adapter for D- to E-Size gobos with retaining ring

# **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.

## Warranty

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

# **Handling Instructions**

- 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.

## **Projection Lenses**

The projector accommodates interchangeable projection lenses to allow optimizing the projection size and resulting brightness at varying distances. The more narrow the lens, the smaller and brighter the image will be at a given distance.

## Focusing

- Power up the projector by pressing the power switch in the back.
- 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.
- Turn on the gobo rotator with the push-button in the back and switch it off when the gobo projects in the desired position.
- Re-adjust the focus if necessary.

# **Gobo Rotator**

The gobo rotator can be turned on/off with the push-button switch on the back plate. There are no controls for rotating speed or direction.

#### **Dimming**

If equipped, the projection brightness can be adjusted with the manual dial on the back plate.

#### Multi-functional Yoke

- The yoke can slide over the whole length of the fixture body to accommodate a wide range of pointing directions.
- The yoke serves as stand.
- The yoke can be screwed to a wall or ceiling or fastened with a C-clamp

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

The projector uses D-Size gobos or E-Size gobos with an adapter ring. See the Specifications for exact dimensions.

- Unscrew the thumbscrews to remove the front cover with the projection lens.
- For E-Size gobos, use the adapter ring. For larger gobos, remove the adapter ring and use the larger retaining ring.
- 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.
- 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 screwing the projection lens in or out.



For D-Size gobos, remove the E-Size Adapter and leave it out:



## Power Supply C40 (C60)

100-240V, 277V 50-60Hz, 48W (72W)

# **Dimensions / Weight**

### **Body without yoke:**

10.5 x 6 x 3.75in (L x W x H) (267 x 153 x 95mm)

The projection lens adds 0.5 to 2in (12 to 50mm) to the length.

Height with yoke: 7.75in (197mm)

Weight 7lbs (3kg)

#### **Gobo Dimensions**

Metal or Glass Gobos and Dichroic filters with up to 4mm thickness.

## Standard gobo size (E-Size):

Outer Diameter (OD): 37.5mm

Image Diameter (ID): 27mm (max 32mm)

Larger D-size gobos can be used by removing the adapter ring.

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

# **LED Lamp C40 (C60)**

- Power: 40W (60W)
- Rated luminous flux: 4,000lm (6,000lm)
- Effective luminous flux: 2,200lm (3,400lm)
- Rated Bulb life 40,000h
- Color Temperature 6,000k, +/-500k

## **Lens Options**

The projector can be equipped with standard ECO Spot projection lenses.

A larger focal length (f) makes a smaller projection angle and therefore a smaller but brighter image. Currently these lenses are available:

- Wide f=50mm, 25°
- Medium f=70mm 20°
- Semi-Narrow f=100mm, 15°
- Narrow f=140mm, 10°

#### **Ambient Operating Temperature**

-13 to 104°F (-25 to 40°C)