

ECO Spot™ Gobo Changer

Description

This manual describes the standard gobo changer that comes with ECO Spot indoor gobo changer projectors with 60mm projection lens, such as the ECO Spot LED40C.

Some models may vary but the general functionality as described in this document remains the same.

The changer is a “build option” and comes installed in the models equipped with a gobo changer. It cannot be installed as after sales option.

Functions

The gobo changer has four gobo slots. A timer continuously switches between the different gobos. Unless customized (see below), it will go a full sequence (slot 1,2,3,4,1,2,...). Turn on and off the gobo changer with the small switch on the back plate.

Interval Timer: The interval timer can be set by turning the knob on the back plate from continuous up to approx. 120 seconds changing interval.

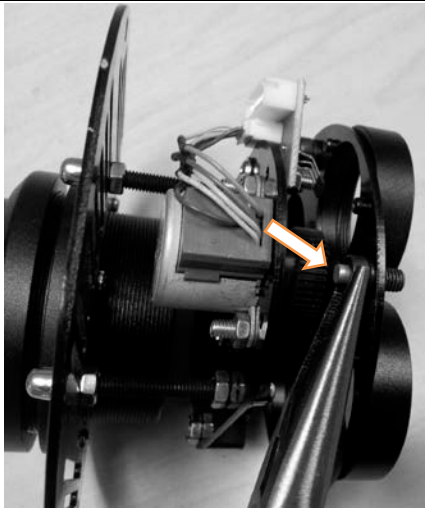
Single Gobo: For showing only a single gobo w/o any changes, simply turn off the changer power switch on the back plate when the correct gobo shows.

Two or Three Gobos: For showing 2 or 3 gobos only. The changer is equipped with four sensor magnets, one for each gobo slot. For showing only three gobos, remove one magnet. For two gobos, remove two magnets. Unscrew the magnet with pliers.

Tip: Screw the removed magnet back in from the opposite to keep it for later use.

Static Slot: The unit has an additional static slot between projection lens and changer wheel, which can be utilized in two ways:

- **Color Overlay** in conjunction with b/w gobos in the changers Gobo Wheel and a color filter in the Static Slot.
- **Gobo Color Changer** in conjunction a b/w gobo in the Static Slot and color filters in the changers Gobo Wheel. **Caution:** *This configuration may not work with all projection lens configurations.*



Gobo Placement

The changer takes E-Size Metal or Glass Gobos and Dichroic filters:

Outer Diameter (OD): 37.5mm (1.47in), **Max. Image Diameter (ID):** 25mm (1.0in)

Max Thickness: 4mm (0.16in)



- Unplug the power cord.
- Unscrew the four thumbscrews to remove the front cover with the projection lens and Gobo Changer attached.
- For easier access carefully unplug the flat cables from the changer.
- Unscrew the retaining cylinders to access the gobo.
- 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. **Tighten it only lightly or it may be hard to unscrew later.** If it's hard to unscrew, it helps to grab it in only one spot instead of the two opposite sides.
- Replace the front cover and adjust the focus.

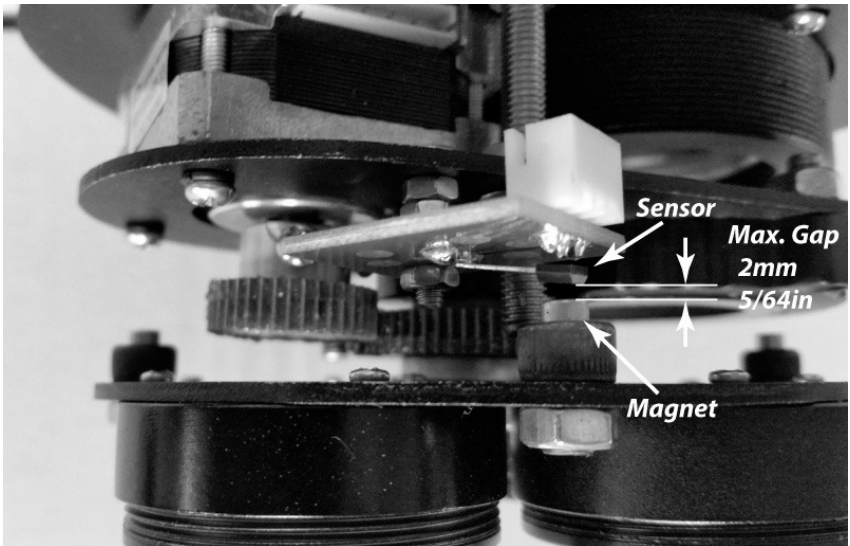
Focus adjustment for mixing various Gobo Types

If you mix thin gobos such as metal gobos with glass gobos, some of the gobos may be out of focus because the focal plane is not even. In such cases try placing one or two spacer rings in front of the thinner gobo to make it come out further.



If the changer won't position correctly

The correct gobo position is defined by magnets that trigger a sensor. Sometimes it can get bent. If that happens, some or all gobos won't find their stop position and the changer wheel might just rotate a couple times and come to a stop at an undefined position. To verify, remove the front cover with the changer attached and look for the sensor. Manually rotate the gobo wheel and check the gap between sensor and magnet. It should be no more than 2mm and can be as close as possible without the magnets touching the sensor.



Gobo Dimensions

This changer takes **E-Size** Metal or Glass Gobos and Dichroic filters

Outer Diameter (OD): 37.5mm

Max. Image Diameter (ID): 25mm

Max Thickness: 4mm

Gobo Slots

Four (4) gobo Slots

Gobo Selection and Positioning

Hall Sensor with magnets to select active gobo slots.

Static Slot

Can be used to place a color filter for color Overlay of b/w or metal gobos.

Filter diameter is E-Size 37.5mm

Controls

On back plate:

- Switch for Rotator On/Off
- Dial for rotation change Interval continuous to 120s

On rotator wheel:

Magnets to select active gobo slots