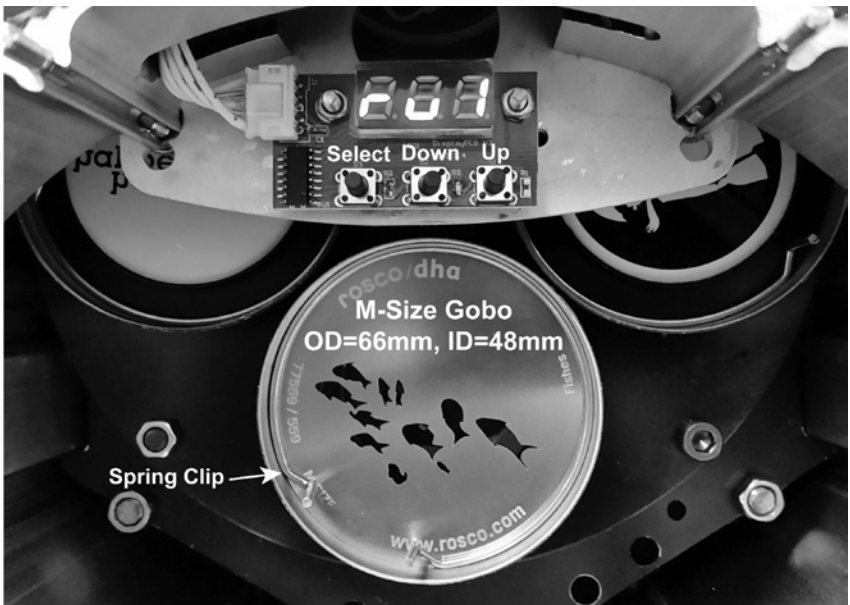


# ECO Spot™ Gobo Changer with Control Board

## Description

This manual describes ECO Spot Gobo Changers with a Control Board.

It accommodates four M-size gobos. The changer is a “build option” and comes installed in models equipped with a gobo changer. It cannot be installed as after sales option. The gobo changer has four gobo slots and a control board for configuring the changer functions. In most use cases, a timer continuously switches between the different gobos but gobo slots can be skipped. By default it will continuously go a full sequence (slot 1,2,3,4,1,2,...).



**Remote Power:** Outdoor projectors equipped with this changer have a separate external outdoor rated power supply for the changer.

**Remote Gobo Selection:** If the rotator power is interrupted, the currently showing gobo remains in place. This is helpful for remote controlling the gobo changer when the projector is mounted in inaccessible areas. Simply wire the changer power to a power switch and turn the power off when the desired gobo shows.

**Functions**

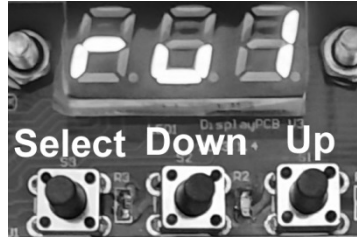
**Changer Controls:**

The control board has three buttons for mode and value selection:

**Left button = SELECT**

**Center button = DOWN**

**Right button = UP**



**Cycle** through the different modes by repeatedly pressing the **SELECT** button.

**Select** a value with the **UP** and **DOWN** buttons

**Auto Save:** After staying with a selection for a few seconds, it will automatically be saved and you can move on to the next selection.

**Run Mode:** To enter the **RUN** mode, press **SELECT** until the display shows “**run**”

Mode	Display	Function
Run	run	Run mode
n/a	0-511	Not used, ignore this setting
Slot A	A 0-99/on/off	Slot A interval time / on / off
Slot B	b 0-99/on/off	Slot B interval time / on / off
Slot C	C 0-99/on/off	Slot C interval time / on / off
Slot D	d 0-99/on/off	Slot D interval time / on / off
n/a	F 0-20	Not used, ignore this setting

**Gobo Slot Values:**

“**1-99**” = Gobo interval time in seconds

“**ON**” = Only this particular gobo will be shown (overrides ON setting of other slots)

“**OFF**” = This slot will be skipped.

**Single Gobo:** For showing only a single gobo w/o any changes, select “ON” for the particular gobo slot. There is a way to remotely select a certain gobo and leave it in position, see **Remote Gobo Selection**.

**Two or Three Gobos:** For showing 2 or 3 gobos only, select “OFF” for the gobo slots you don’t wish to show.

### Gobo Placement

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

**Outer Diameter (OD):** 66mm (2.6in)

**Max. Image Diameter (ID):** 48mm (1.89in)

**Max Thickness:** 4mm (0.16in)

For this procedure it helps to turn off the LED but keep the changer powered on for changing/selecting the gobo slots.

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

Press the **SELECT** button until the desired gobo slot is reached. The wheel will turn and stop at the gobo position so it's accessible.

Unclip the Spring Clip (retaining ring)

If a gobo is already installed, carefully remove the old gobo and replace it with the new gobo.

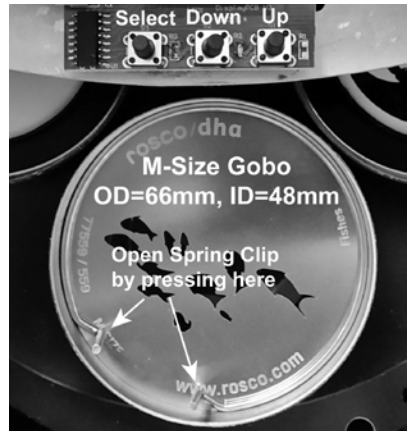
If you have a glass gobo, place the more reflective side towards the light bulb.

Replace the retaining ring and make sure it evenly pushes the gobo all the way back.

Temporarily replace the front cover and check if the image projects in the correct position. Remove the front plate again and make adjustments if needed.

Press **SELECT** again to advance to the next gobo slot.

Once you are done, press **SELECT** until the display shows "rul" for RUN mode and replace the front cover with all seals.



### Focus adjustment for mixing various Gobo Types

The changer comes with spacer rings, one per gobo slot. If you mix thin gobos such as metal gobos with thicker 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 and remove the spacer from the thicker gobo slot to make it come out further.



## ECO Spot M-Size Gobo Changer with Control Board

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### Gobo Dimensions

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

**Outer Diameter (OD):** 66mm

**Max. Image Diameter (ID):** 48mm

**Max Thickness:** 4mm

### Gobo Slots and Controls

Four (4) gobo Slots

**Controls:** on / off / interval time (1-99s):

- **on:** only this slot will show, interval time is turned off.
- **Off:** this slot will be skipped
- **Interval time:** The slot will be shown for a configurable time interval between 1 to 99 seconds

### Gobo Selection and Positioning

Performed through control Board

The number of active gobo slots is selectable from one to four gobos.

### Control Board Position

**Exterior Fixtures:**

Inside the unit behind the front plate.

**Interior Fixtures:**

On back plate