

**wahlberg**  
LIGHT & MOTION DESIGN

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# Projector Shutter

## DMX controlled

# User Manual



## Product content

- 1 Projector Shutter with transformer
- 1 Small Flap without motor clamp
- 1 Big Flap with motor clamp
- 1 Small screwdriver
- 1 Anti-shake bag



## Functional description

The shutter disc is controlled with DMX signal from a light desk; 0° - 180° shutter angle. The projector shutter can be controlled without a DMX signal, by an ON/OFF switch box; which is bought separately.

## Connection

### Power supply

The shutter is connected to the mains (120-230VAC).

### DMX

DMX signal is applied with a standard 5 poled male XLR-plug. The DMX lamp (the green LED) indicates if the DMX signal is present or not. The DMX lamp lights up when a good signal is found and is blinking if the signal is bad or missing.

## Settings

### DMX start address

The address is set on the three DMX selectors found on the projector shutter. The DMX start address determines from which DMX channel on the light desk the shutter is controlled. The DMX start address can be set from 1 to 512.



## Mounting

### The shutter

The shutter should be mounted on a projector. This can be done in several ways e.g. with duct tape or Velcro. It is important to make sure that the shutter is mounted well and sits tightly on the projector, so it does not move, when the motor turns the shutter flap.



## The Shutter flap

The shutter flap and the red washer (vibration damper) should be mounted on the motor axle.

The red washer should be mounted between the motor and the shutter flap, see the picture.

When the desired angle has been found, the disc can be tightened with the small black screw, not too tight. For this you may use the small screwdriver included with the projector shutter.



## Product advice

Some projector shutter's has a problem with shaking in some positions.

To solve this problem, we have added an extra small washer.

Place this washer between the motor and the white disc on the flap.

Take care of not tighten the screw too much.

## Using the shutter

When the power and the DMX signal have been connected to the shutter, and the shutter flap has been mounted, the projector shutter is ready for use.

By changing the percentage of the DMX address, the motor axle will turn forward or backward following the DMX percentage.

The motor axle turns from 0 to 180 degrees, 0% equalling 0 degrees and 100% being 180 degrees



## Technical specifications

Power supply:	120 – 230vAC 50/60Hz
Power consumption:	10 Watt.
Motor speed:	60 degrees - 0.16 sec.
DMX control:	DMX 512 1990 + DMX512A / 1 channel is used.
Weight shutter:	0,3 kg. / 10.5 ounces
Dimensions shutter box:	140 x 65 x 38 mm. / 5.5 x 2.6 x 1.5 inch. (L-W-H)
Plugs:	EU, US, AU or GB

## Optional - ON / OFF function

The Projector Shutter has an optional ON/OFF function.

This option makes it possible to use the shutter without DMX signal.

To do this, you need to make a special cable with the required connections to a button or a relay.

You can also buy a separate ON/OFF switchbox at the Wahlberg web shop.

## Connection

The ON/OFF box is connected to the shutter, via the included cable (5 poled XLR female to 3 poled XLR female).

When ON/OFF box is connected correctly and the shutter is connected to a power plug, the green button on the box will illuminate.

### Pin connections in the 5 pole XLR plug

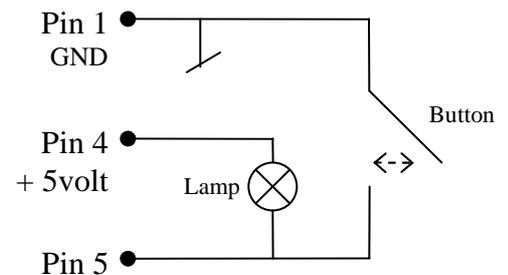
Pin 1 – GND

Pin 2 – DMX –

Pin 3 – DMX +

Pin 4 - +5 volt, light to the button, only uses 0.05 A.

Pin 5 – Sense signal for the switch, the shutter is active when this pin is connected to GND



## Settings

### Setting the ON/OFF address

When the address is set to 700-709 the ON/OFF function is active.

**Note** – the 10' digit should be set to 0, if set to 1, you can test the ON/OFF function.

### Setting the operating angle of the motor axis

The operation angle is set on the 1' digits on the address.

When set to 700 you have a small operation angle, when set to 709 you have the maximum operation angle.

## Functional description of the ON/OFF switch

When the green button on the ON/OFF box is pressed, the shutter flap moves down to shut off the light from the projector. When the green button is released, the shutter flap moves up and away from the light.

