

Exterior 400IP Warm-up Mode

The Exterior 400 Image Projector is a powerful tool for integrating textures, patterns and graphics in outdoor lighting designs. At over 7000 lumens, the fixture can be used for bright and dynamic logo projection, as well as precision framing. To do this the Exterior 400IP is equipped with an effect module that has some delicate mechanical gears, bearings and spindles. These mechanical joints are treated with some very durable lubricants. However these lubricants have some limitations in temperatures below freezing point. At these temperatures, mechanical functions may be affected by increased lubricant viscosity.

In order to overcome this issue, we have released firmware ver. 1.2.0 for the Exterior 400 IP. The main feature of the new FW is that a fixture running it can actively putting itself into Warm-up Mode whenever the fixture is powered on at ambient temperatures below +10° Celsius.

In Warm-up Mode, the fixture heats its interior by:

- powering the LEDs on at full power
- placing the stepper motors under load
- moving the color wheel to position 8.

As the LEDs are fully on in Warm-up Mode, there is light output from the fixture. To prevent light from escaping and to keep the heat inside the fixture, a shutter flag (see Figure 1) must be installed on the color wheel.

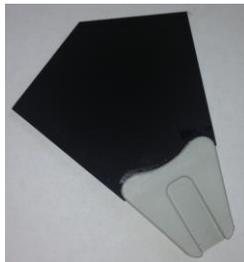


Figure 1: shutter flag PN/62327266

When the temperature rises above 15° Celsius, the fixture exits Warm-up Mode, performs a reset and starts up in Normal Mode.

Installing the new shutter flag.

To install the shutter flag in the Exterior 400 Image Projector color wheel:

1. Following all the safety precautions and instructions in the Exterior 400IP user manual, open the fixture's front cover as described in the section "Installing color filters and gobos". The user manual is supplied with products and is also available for download from www.martin.com

2. See Figure 2. The shutter flag must be mounted in slot 8 on the color wheel. The color wheel is shown from the rear (the side facing the back of the effects module, away from the front cover). It will help you identify filter positions if you note the position of the small magnet **A** on the color wheel opposite the open slot.

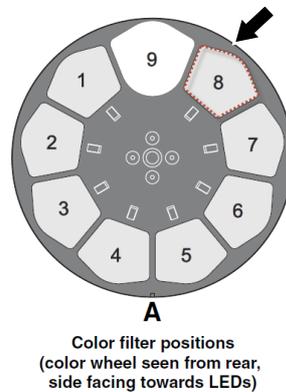


Figure 2: Position of the shutter flag

3. If a filter is already installed in slot 8, push it slightly away from the color wheel towards the gobo wheel to release it, then grasp it by the edges and remove it. If your fingers are too large, protect the glass with a piece of paper that has been folded several times and grasp the filter with needle-nose pliers.
4. See Figure 3. To install the shutter flag, push it in between the color wheel and the gobo wheel and slide it under the retention spring in the color wheel until it snaps into place on the color wheel and the raised lug **B** in the filter holder engages in its cutout **C**.

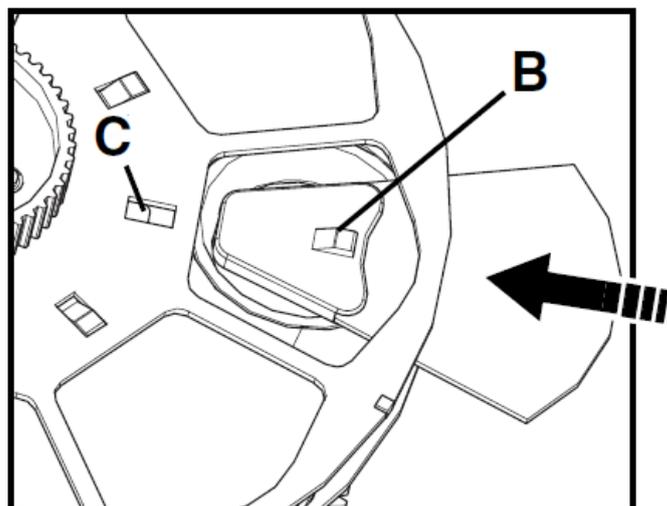


Figure 3: Installing the shutter flag

5. If no further service work is planned, reassemble the fixture following the safety precautions and instructions in the Exterior 400IP user manual.

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