
Technical Bulletin 60

Externally caused damage

Version 1.0.0



Technical Center

Abstract

Direct sun and beams of lighting fixtures can cause damage to the internals of static and moving heads. This bulletin describes risks associated with such exposure and it also mentions preventative steps.

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1. Introduction

External beams of lighting fixtures (beams, spots, lasers) and of sun, can, within minutes of exposure, cause huge damage not only to the exterior of a light, but also to the internals of lighting units, causing serious burning damage. This phenomenon is not new and not specific to any manufacturer. It is a result of improved efficiency of the optical systems and of the increased output of the units. During the operation of the luminaries, there is no way to prevent external beam energy from entering from the outside and thus causing possible damage. We have been providing many warnings within User Manuals and this bulletin is to remind everybody of this and to explain, that external beams can cause damage not only during shows but also during preparation, unpacking, setup and during idle times on the stage.

2. Recommendations

- Always make sure not to point beam of one unit onto or into another.
- When handling unpacked products on the outside, make sure to prevent sun from entering the front lenses.
- When powering down the rig, ensure that lenses of fixtures are pointing away from sun and from other lighting sources.

3. Warnings

User manuals specifically mention this issue, here is listing of some of the warnings:



Caution!

To avoid damage of the internal parts of the fixture head, never let the sunlight (or other light source) lights directly to the front lens, even when the fixture is not in operation!



Caution!

When installing fixtures side-by-side, avoid illuminating one fixture with another!

4. Parking/Home position

Prevention is always up to the user of the units. We have been providing the Parking/Home position function to help to eliminate this issue. Before powering down the rig, you can engage the Parking/Home position, which will arrange internal optical elements in such a way, that upon powering off the head will tilt lens down to the ground, preventing exposure to direct sunlight.

List of fixtures which support Parking/Home position:

- Robin BMFL series (please see Technical Bulletin TB56_BMFL_Beam_Exposure_Protection for details)
- Robin Spider
- Robin MegaPointe



Parking/Home position

In order to protect the internal parts of the head from the sun, the function Parking/Home position must be switched ON before switching the fixture off.

The Parking/Home position function is located on the Power/Special functions channel. If the function is on, the fixture will automatically detect via G-sensor whether the fixture is on the floor or hangs on the truss or is mounted sideways on the truss and moves the pan and tilt to the position (including movement of zoom and focus lenses to the front part of the head) in which the front lens of the head will always face down. Owing this position of the fixture head, there is not chance to burn internal parts of the head by the sun light.

A. Revision History

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