

Important information about Track Lighting in the Great Hall

If you are installing an exhibition in the Great Hall, you need to know this. The lighting system has been set up so that it does not need to be adjusted, and should not be adjusted or augmented.

The lights hang on 12-volt rails. These rails are in sections, each section is a 15-amp circuit. The electrical code permits a 15-amp circuit to handle no more than 12 amps continuously—140 watts. To light art exhibitions we use the maximum: seven 20-watt dtt bulbs. This is not just a legal limit, it is a physical one. The rails require special electrical connectors, so adding an extra light causes these connectors to burn out — we know this from experience! The repair is expensive, and in fact and may no longer be possible if the connectors are no longer be available. ***Do not add an extra head or install a brighter bulb — not even temporarily.***

Heads: The light heads break easily. The plastic parts become embrittled with age and heat, and the attachment to the rail can snap when someone tries to unscrew what looks like a screw but is actually a cam. When properly adjusted, the seven 20-watt bulbs illuminate the walls evenly.

Unless someone accidentally knocks a head awry, the heads need not be adjusted and should not be.

If you need to move a head, be sure you first examine a new one carefully , to see how it is attached. **And never try to unscrew the cam**—a natural mistake—the base is likely to break and it may not be removable from the track.

However, there are spare heads if they are needed in a box marked “track lighting” in the Great Hall Art cupboard.

Diffusers: Each bulb needs a diffuser in front of it. Glass diffusers are too thick to fit in the heads, so we are using diffusers cut from stage gels. Again, these can be found in the Great Hall Art cupboard.

Bulbs: We use halogen bulbs with built-in reflectors. If you do need to change a bulb, you can find them in the Great Hall Art cupboard.

Out of interest, you might want to know why we don't use LEDs in the lighting system. They are impractical for the Great Hall, since the wall lights serve as house lights for performances, and need to dim and brighten gradually to and from zero: LEDs cannot do this, and below a certain level of brightness, they switch off and on suddenly. And, other than by trial and error, there is no way to choose LEDs that are suitable for illuminating artwork.

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