

## Entertainment Lighting

Hotels and Conference Centres often include a Banqueting Suite or Master Ballroom, which will need a mixture of lighting fixture types, and correspondingly two different types of control. In broad terms this means ambient and Entertainment lighting, though there may sometimes be an overlap. Ambients need to be controlled from wall-plates on the usual scene-setting principle, but for control of a stage lighting rig there is normally a desktop Lighting Console. Nearly all such Consoles operate by outputting a DMX data signal to the dimmers – this has become the standard as it allows maximum flexibility for 'live' control.

### Lighting Console

For Product Launches or other major events, theatrical Luminaires are liable to be moved around and used selectively according to the dictates of the event. Having focussed the lighting rig for a specific event or show, temporary lighting scenes may be set up using the Console's sliders (or other features) and recorded in its memory for playback when the event goes 'live'. All Dimmer racks, which are wired to the sockets for stage lights, will have a DMX input to allow control from the Console. Each individual dimmer channel is allocated a unique DMX channel number, and obviously the DMX signal from the Console is routed to all such racks. Additionally the DMX signal is often routed to DMX-Out sockets located at key positions in the rig. These sockets allow installation of devices such as Colour-changers or Scanners, which also operate from DMX control.

### DMX Patch-field

The illustration shows a typical system that includes four DMX-Out sockets, installed at high level on the four lighting bars. To avoid the need for installing a large DMX network that loops around every socket as well as the dimmers, a DMX patch-field is often installed. This serves to protect against line-termination problems for the DMX network, allows disconnection of redundant sockets, and usually includes buffering to protect the integrity of the DMX signal. Most Patch-fields are relatively simple, with selection made via an array of sockets and jumper cables.

Patch-fields sometimes include a separate section designed to allow mobility for the Console. In cases where a stage is set up at one end of the room, it is

helpful sometimes to have facility to transfer the Console from its normal position to a temporary position, say at one side of this stage. To allow for this DMX-In sockets are provided near to such positions. The Patch-field would include a separate section with jumper cables so that whenever the Console is moved, its DMX signal may be re-routed to reach its normal destination from the Console's new position.

### Lighting Control Flexibility

Not every event will be elaborate enough to require use of the Console, and many venues are designed with an element of stage lighting incorporated as part of the ambient lighting. For instance a dinner dance would use the normal room lighting (wall-lights, chandeliers etc), changing later in the evening to a scene that also includes spotlights illuminating the dance floor. A dinner dance probably does not justify use of the Console, since only one 'pseudo-theatrical' scene is involved. The solution is to record in the ambient scenes (stored in the source controllers, not the Console) a special scene for these applications. However as noted previously, spotlights are normally controlled by a DMX signal. It follows that dimmers must be able to respond to BOTH ambient scene commands (on the iCAN™ data bus) and DMX signals (at the DMX input) when required. The iCANsoft™ configuration software allows such combinations, and includes many different options, such as 'ignore one if other is present'.

The inverse scenario can occur when a large production takes place. In some cases the production team may wish to disable all local ambient control panels and take full control of all lighting from the Console. Once again, the source controllers ability to accept multiple inputs is a key requirement, and to allow for this a DMX input would be routed to all source controllers racks.

As each and every project is unique, iLight™ offer an advisory design service. This resource is equally at home working with specifiers, resellers, installer or users. Please call the iLight™ help desk for further information.

Notes for details on Entertainment products, please refer to the Zero 88 catalogue, and for system integration with entertainment products, see Section 12.

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Figure 1: a typical system

