

THE MOTORISED HOIST

The motorised hoist is the main rival in larger studios to the overhead single point suspension grid. It consists of a length of barrel (48mm scaffold) supported by wire ropes connected to a motor winch mounted in the studio roof. Power outlets for connecting the luminaires can be mounted into a frame above the barrel and power cables housed in a collapsible tray which folds and unfolds as the barrel height is altered. The barrels are

usually 2.4m long and the luminaires attached to them by means of clamps or on small wheeled trolleys which give the additional possibility of lateral positioning of the luminaire. The hoists are placed at regular intervals along the length and across the width of the studio to enable luminaires to be fixed at almost any required position. It is usual to rig two luminaires on each barrel.

As all the luminaires normally remain on the barrel, de-rigging the studio at the end of a production can simply consist of raising all barrels to maximum height through a single master control.

This system gains maximum advantage when the number of different types of luminaire are reduced and the installation density of luminaires is increased compared to the requirements of the single point suspension system (i.e., the saturated grid). The dual source luminaire is particularly suited to this type of suspension.

Medium sized studios can be fitted with handwinched hoists, which are similar in conception to the motorised hoist but the suspension cables are diverted through roof mounted pulleys to winches mounted on the studio wall either operated from floor level or from a gantry.

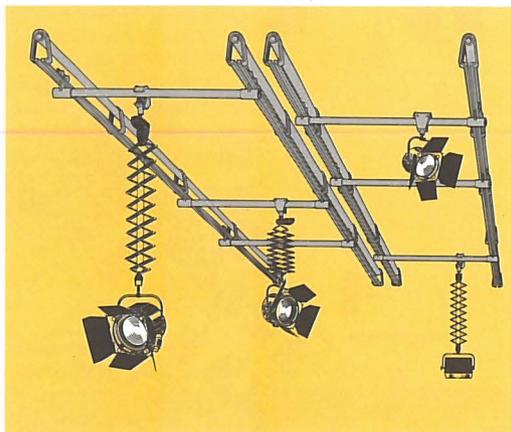
Raising or lowering of the hoist is achieved through the use of a hand operated handle or a power tool similar to that used with the single point suspension telescope.

TRACK & BARREL SYSTEM

Smaller studios, particularly those of limited height, are ideally suited to the track and barrel system. This comprises pairs of tracks (similar to that used for industrial sliding doors) mounted directly under the studio ceiling. The number of pairs of tracks is determined by the studio width. The barrel is fitted with a roller carriage at each end which runs in the tracking, enabling the barrel to be moved along the length of the studio.

The luminaires are rigged on the barrel by means of a roller trolley which allows them to move the length of the barrel or on a pantograph which gives the additional facility of individual height adjustment.

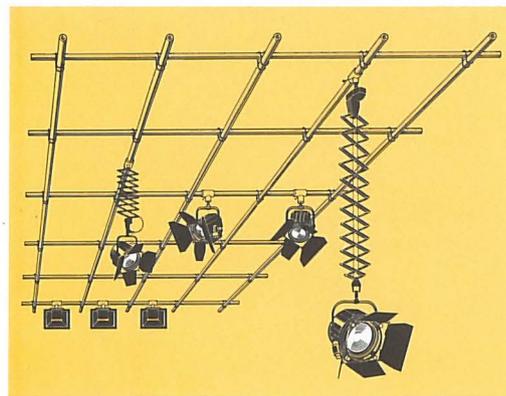
Power distribution is generally achieved by mounting sockets on trunking between the adjacent pairs of tracks. The luminaires can remain connected to these sockets with the trailing power cables supported by a supplementary catenary system.



Track and Barrel System

FIXED BARREL SYSTEM

This is the simplest form of installation and one that is adequate for presentation studios or small to medium sized studios where a fixed lighting installation can be used, as for example when the same sets are used for each production or with very little change in the scene. At its simplest, the fixed barrel system comprises scaffold barrels mounted across the full width of the studio just below the studio ceiling. The luminaires are attached to the barrels with clamps and little or no attempt is made to provide facilities for height variation or lateral movement.

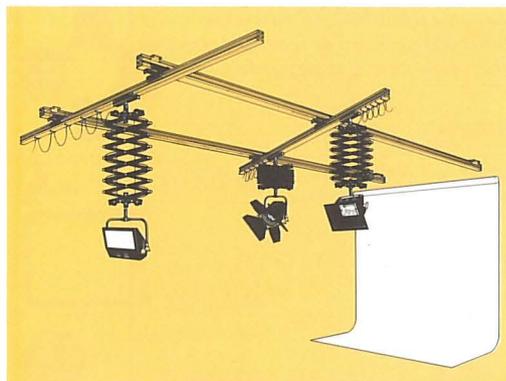


Fixed Barrel System

LIGHTRIG SYSTEM

This suspension system is a variation on the track and barrel grid, but it is much more flexible as the traversing tracks can be adjusted diagonally across the primary track, providing a greater combination of luminaire positions, with the added advantage that fewer traversing tracks are required. Moreover, the traversing track can travel through its supporting carriages to provide an extended overhang outside the normal primary supports, as well as extra positions for luminaires in inaccessible places.

LightRig is a flexible system, ideal for small studios where the height is comparatively restricted.



LightRig System

ANCILLARY LIGHTING

Although generally the studio will be rigged with the necessary luminaires, there are occasions when other luminaires will be used. Certain effects can only be achieved by luminaires at studio floor level, e.g., fireflicker; water rippling. As well as effects, it is often desirable to use soft and hard sources at floor level. In particular, softlights can be at their most effective when square to a subject.

When planning the studio this must be taken into account and it is therefore necessary to supply floor stands to support the equipment. Other than these lights at floor level, there is the need to rig luminaires on the top of scenery flats which will require special clamps.