floor—unfortunately the Danish Food Centre and Boots Chemists are immediately beneath. Sight lines do allow platform stages to be used, but it was thought to be more practicable and powerful for its basic stage to be at the same level as the main hall.

The first three rows of seats are totally flexible and any number can be removed or re-arranged in a matter of minutes. Oneseventh of the whole ground floor can be taken out to give a more thrust-like stage form for scenic backing, music accompaniment, additional entrance etc. Thank goodness this is the only mechanical object, it took five hours to remove at the last count!! In addition the fronts and seats can be removed from the two balconies allowing stairs and platforms to be directly supported from the main structure.

Actors enter to the stage from the main hall through seven doors in the skin of the module (these are also common with the audience and are the routes for changing settings and props). There is no separate "wings" or "scene dock". Actors and stage management wait and work in the public space around the module.

As I mentioned, there is no fly tower; it is conceived that objects are not flown as such but spotlined in position, with the ability to move up and down within the space available. The clear height is only 7.3 m with a further 2.5 m between the roof trusses so that hanging objects are always visible. Because everything else from lanterns to rigging bars is also in sight, it does not lessen the dramatic impact or surprise at an object dropping in or flying out. There are three counterweights that run on the outside of the module and they can be spotlined to any position within. Various hand winches and hemp lines complete this motley but flexible flying system.

STAGE LIGHTING

As the audience is on seven sides and the whole area is so small, increased emphasis is placed on the actors, what they wear, what they act with and how they are lit. In these conditions it is hard to cover up artificiality and insincerity.

It was known that lighting was going to be very important. A lot of discussion was spent on positions, lanterns, circuitry and control of the lighting process. I have now lit one simple production and even with the background knowledge of the design concept, I found myself quite unprepared. The rig is totally visible, distances are small therefore critical, the audience is onto the edge of the stage all round, and there is the necessity to achieve a balance between directional feeling and lighting the actors well for a comedy. A lot of equipment is necessary.

Very early on a special link between the Company and Rank Strand was formed which has resulted in a system closely moulded to our needs. At the heart of the system is a 120-way M.M.S. with $100 \times 2\frac{1}{2}$ K and 20×5 K dimmer circuits. The desk is split in two to fit into a very small control space which is completely open to the stage and the audience (shared with the Stage Manager and the Sound



Operator—on the second gallery). One part of this desk containing all the controls needed for performance is able to be carried easily to the ground floor for lighting sessions. This enables many of the operations and fades to be fully worked out during the lighting sessions, and a real contact can be established between the lighting designer and the operator which is independent of telephonic or other mechanical aids. A tape store has been incorporated into the fixed part of the desk as the Company plays in repertoire, TV companies use the theatre regularly and many lunchtime and late night shows are performed.

The lighting positions can be seen clearer from the section and all of them can be reached from galleries, apart from the two bars under the central "basket". This "basket" has the important effect of decreasing the void above the stage and also means that owing to the short throw and prominent position, the lanterns themselves have a dramatic impact.

The number and positioning of the outputs was underestimated for the operation that is now expected of the system. There are no large voids or roof spaces to run temporary cables—everything is seen and most rigs will be different for each production. It is now clear that we should have found a way of affording a large patch panel to avoid large numbers of circuits being inaccessible at any one time. We are alleviating this by opening up the trunking at points and paralleling out particular circuits.

I have just said that most lighting rigs will be different. We are now into our fourth production. None of the lighting layouts so far have borne any resemblance to each other. It does seem clear that this is one way of enabling the resultant lighting to be particular and appropriate.

The lanterns by and large are a combination of T-spots, 743s and 243s. T54s and the wider T64s in more or less equal numbers were installed, but on the first production we had to convert many of the T64s to the even wider version. The quality and output of the light is excellent, although I still miss the toothed shutters as on our old

264s. The other lanterns were chosen from various manufacturers for the nature and quality of their various light outputs. There seems no substitute for a low voltage beam light and the 2 kW C.C.T. Profiles (without fan) are incredibly light and flexible.

The use of the building by television companies was considered at an early stage. Of course the stage and outer hall at one level makes their movement problems minimal. On the electrics side their outside broadcast units and lighting can be serviced from within the building, due to the $2\frac{1}{2}$ K and 5 K circuits and the provision of an additional 100 A three-phase outlet.

SOUND

Ian Gibson designed and indeed built large sections of the sound system. From his work with the Company at the University Theatre and in the temporary tent, he first created his own brief and then worked within a very tight budget. Like the lighting, the audience in the round and the special nature of the surroundings has offered him enormous scope. The sound can come from on stage, above stage, in the audience, around the audience area, in the main hall space or from any combination. In operation the sound can be rapidly switched or faded between any of the 44 speaker outlets in these spaces.

The basic components of the system are 3 T.R.D. tape recorders (manual to cut down the operational noise), an 8-way mixer totally designed and built by himself. $4 \times$ stereo Crown D.C. 300 W amplifiers, 14×100 W small speakers and 2×200 W big beasts. The smaller speakers can be rigged anywhere and are provided with standard hook clamps whilst the larger units are on wheels.

There are permanently wired in 36 mic. lines for use with an external mixer for musicals, and although the interference pick up from the dimmer circuits is acceptable for our own use, the BBC have had great difficulties with thyristor hum whilst recording regular lunch time concerts. The building after all is an enormous metal grid and the only way they have found is to use the double screened Quad 5 star cable for all mic. runs.