they relapse into waiting for the interval and the good bits, if any.

It may be suspected that I have written this as a prelude to a hard-luck story, or to a cover-up. Not so; there is nothing to cover up. The sound at Drury Lane renders Sullivan's mock heroic grandeur (which is really grand) and Gilbert's rapid verbal fencing with apparent ease. Not having any direct hand in it, I feel free to say so and to say that this achievement is the greater when the difficulties of the work are recalled. Rehearsals of musicals nearly always begin by being too loud, and the days of discussion experiment and rehearsal during which the level is brought down are usually dark ones. No-one who has suffered them once would willingly suffer them again, but they seem almost impossible to avoid, although they are invariably the result of misunderstanding.

For instance, it seems to a privileged and relatively idle bystander - me, that is, that long before rehearsals started, a misapprehension existed at "Pirates" of the band sound, and that one particular decision based on this misapprehension had to be dealt with by much hard work and plain speaking. Simply described, the music of 'Pirates' is Sullivan's music but not played on Sullivan's orchestra. The new orchestra is small wind and brass sections with two bass-players, five keyboards, drum kit and two very big tuned percussion batteries. There are obvious balance problems within such an instrumentation even before the vocal line is considered, and in retrospect it seems equally obvious that the usefulness of a sound equipment in redressing the balance was over-estimated. Sullivan's music is as wittily allusive and deftly characterised as Gilbert's libretto and demands a certain manner of performance, whatever the instrumental balance. The musicians must be allowed to perform the music of (for instance) vengeance and pursuit with a certain grim vigour if it is to have any meaning. Bringing up the level of trumpets and keyboards to confront the parade-ground bass drum and cymbals resulted in levels best described as improbable. Had comparable vocal levels been possible (and they weren't) they would have been painful and ridiculous. The love music presented equal difficulty; Sullivan's sustaining and cushioning string band is replaced by electric keyboards and percussion. With disconcerting difficulty the flutes were made loud enough to live with cymbal rolls; the resulting music was then hopelessly wrong for Frederick's "Maiden breast" song.

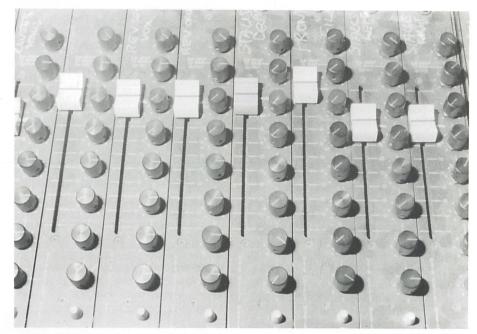
These difficulties are familiar in kind to most sound technicians, I imagine; since "Pirates" had already been produced in the States, they had been foreseen, and the American solution was applied at Drury Lane of appointing a sound operator specifically to run the orchestral balance, leaving the vocals to another operator. Readers of CUE will see immediately one danger in this arrangement. At points in rehearsals an operator will push his level in order to assess the effectiveness of what he is doing; inevitably the other operator will

respond with more level and for the same good reason. No mere disposition of faders or allocation of responsibilities will prevent the resulting climb in level and meaningless scramble of memories which the operators are left with after such rehearsals. This was indeed the state of affairs at an alarmingly late stage in the "Pirates" production period. The eventual solution to this difficulty was achieved by conductor and musicians by playing at a level which, once heard, was obviously right. At first sight, this perhaps seems a defeat for the sound equipment and its guardians, but the best way to secure a musical balance must surely be to leave it to the musicians, especially when they have been placed in an orchestra pit. After all, that is what musicians are for, what they are good at. Conversely, I would say that a music that cannot be got to sound right by musicians is a music that I probably

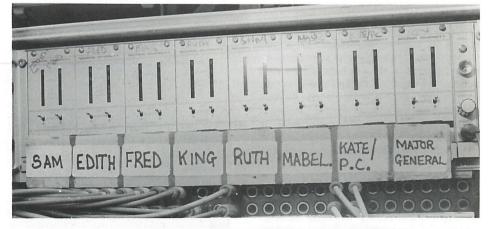
would not understand if I heard it.

Dividing the work of sound control into two jobs seems to have been irrelevant to the difficulty; and I would say it was a mistake. The climb in level described above persists (though not at Drury Lane) all too often through rehearsal into performances; the methodical training by the operator of his own memory is abandoned; and training a reserve operator becomes a lengthy and complicated affair. I must confess to an irritated suspicion that a sound which is too complex for one operator to manage may be too complex to listen to — again, in a musical.

The "Pirates" sound operators work at the rear of stalls, beneath Drury Lane's overhanging grand circle. Considered on its merits as a position for monitoring the sound of the performance, this isn't good. Current practice in sound equipment for



The master output faders of the Trident desk with the operators labelling just legible. The eight level controls alongside each fader control the level of eight subgroups into the master output. The faders for these subgroups are immediately below the master faders and, perhaps confusingly, directly in line with them.



Eight of the ten radio microphone receivers are in this rack. Each receiver channel contains two receivers and a switch which automatically routes to the rack output whichever receiver is currently offering the better signal. The equipment performs to Micron's familiar high standard and is compatible with the more usual single-receiver equipment.