CONTROL ROOM
EQUIPMENT

FIG 3.   SIMPLIFIED SCHEMATIC OF DDM HARDWARE

Fortunately, these are both easily and economically accommodated in the ferrite store contained within the computer. Although from the operational point of view this contains a number of stores, it tends to be generally referred to as the Local store in view of its composite construction.

Let us recap. We have provided the system with a central processor capable of performing all the necessary operations, and have connected it to all parts of the system by means of a high-speed electronic exchange network. Connection has been provided not only with the Main store but also with a high capacity Local store in which the computer can temporarily file away the cue and mimic levels which it requires for current reference. This however only represents capability. The computer must now be instructed to interrogate each control in turn and to carry out correctly whatever is demanded by the operator. For instance, part of the instruction sequence would read as follows:

1. Address the top contact of Rocker 28

and see if it has been depressed.

2. If *no* then proceed to top contact Rocker 29. If *yes* then enter "Rocker routine".

The computer cannot think for itself, but given simple rules to follow it can be conditioned to carry out alternative courses of action. Thus, if the top contact of Rocker 28 had been depressed then the instructions would have told the central processor to carry out a small "sub-routine" of instructions which would cause the level of the channel dimmer to be raised in response to the operator's command. This having been completed, the computation would then return to the routine interrogation of the remaining Rockers and other contacts. This set of instructions is referred to as the "Program" or "Software".

It is on the subject of software that many popular misconceptions arise. The program for DDM consists of over 4,000 instructions which determine what action the computer must take when each control is operated. This program has been designed

145