

# PROVINCIAL STUDIO AND CONTROL EQUIPMENT

## PART 1. GENERAL ARRANGEMENT

The equipment consists of amplifiers and switching facilities for controlling programmes originating either in the local studios or at O.B. points tied to the station, and for sending such programmes, or for passing on programmes received from the S.B. network, to the outgoing S.B. links or transmitter tie-lines at the appropriate volume. A number of studios are provided for the origination of programmes and these are furnished with microphone and gramophone equipment according to the purpose for which each is designed. Studios intended for the larger musical combinations are generally equipped for a number of microphones and are provided with a listening room containing a mixing desk.

The control room contains the control desks and a number of racks mounting the amplifiers, check receivers, line termination and A.C. testing apparatus, the various jackfields, relays, meters and other associated equipment.

The amplifier equipment comprises 'A' amplifiers associated with the studios and echo room, a DCA amplifier associated with the dramatic control unit, 'B' amplifiers for control purposes, 'D' amplifiers for terminating incoming S.B. links and O.B. lines, and 'C' amplifiers for sending into the outgoing S.B. links and transmitter tie-lines. Associated with each 'B' amplifier in normal use there is a trap valve amplifier and a programme meter amplifier. At certain of the stations check receivers, each with a CPL amplifier operating in its output, are provided together with comprehensive checking facilities for comparing the programme in the output of the 'B' and CPL amplifiers. The studios and listening rooms are equipped with mains-operated loudspeaker amplifiers, type LSM/1 for A.C. mains, or type LSM/3 for D.C. mains.

The normal programme switching operations, including 'B' and 'C' amplifier input switching and cubicle change-over switching, together with the application of the supply voltages to the amplifiers involved, are performed by relays controlled via key switches and punching keys on the S.B. & Operating position. All other switching operations are performed with cords and plugs on jackfields mounted on the apparatus racks.

The control positions are arranged two per desk with a blank panel in the centre and each is equipped with a two-channel fade unit, control potentiometer, programme meter, listening jacks and studio signalling equipment.

The S.B. & Operating position has three panels. The operating panel is in the centre and carries equipment for performing the programme switching operations. The left-hand panel carries a channel indicator, covering both 'B' and 'C' input switching, which shows by means of lamps which programme connections have been set up. It also carries a set of

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### Technical Instructions

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listening keys. The right-hand panel carries a programme meter, a set of programme meter jacks, and the line jacks and calling lamps associated with the S.B. and O.B. control lines and with the studio telephones and station P.B.X. tie-lines. The cords, together with the keys and lamps associated with their circuits, are mounted on the desk in front of this panel.

A cubicle is provided for the control of musical programmes, and where comprehensive checking is required the associated keys are provided on the cubicle position. At certain stations there is an additional cubicle.

For dramatic control purposes either a 6-channel or a 12-channel unit is provided equipped with talking-back and cue and return light facilities. The 6-channel unit is known as DC/2 or DC/4 and the 12-channel unit as DC/7.

The supplies for operating the station are obtained from batteries and the installation includes the necessary switch gear and charging plant.