

TECHNICAL INSTRUCTIONS

DIVISION 3

LOW FREQUENCY AMPLIFIERS

CONTENTS

A separate sheet is devoted to each amplifier and these are filed in alphabetical-cum-numerical order according to the codes assigned to the amplifiers.

Details of the O.B. amplifiers are given in Division 7.

Notes regarding Testing Information supplied

For all amplifiers inserted in the direct programme chain, information is given under the heading 'Test Data,' detailing the 600 ohm test gain and limits for the 600 ohm test frequency response characteristic. These figures describe the performance of the amplifier when terminated on both sides with 600 ohms, and are given in preference to those for the actual working conditions, because at stations equipped with a transmission measuring set they can be more conveniently determined. The method of measurement in each case is given in the section dealing with the A.C. testing apparatus, and the information included under the heading 'Sending Level for 600 ohm Tests' indicates the conditions under which the 600 ohm test measurements should be made.

The voltage gain, of course, depends upon the actual conditions of working and will generally differ from the 600 ohm test figure. A figure for the working voltage gain is given in the case of all amplifiers for conditions approximating to those under which the amplifiers normally operate.

Under the heading 'Supply Data' figures are given for the anode feed to all the stages of the amplifier, although in practice provision is generally made for reading only the total anode feed. If any particular stage is suspected of being faulty its anode current is best checked by inserting a piece of paper between one end of the anode resistance of the valve in question and its clip so as to insulate the resistance from the holder. An avometer or suitable milliammeter can then be connected across the disconnection thus introduced. The anode current of a particular stage should not be read by withdrawing the other valves in the amplifier, since in general the L.T. is supplied through a common filament resistance and/or choke, and the withdrawal of valves will cause the filament volts to rise on the valves still left in the circuit.