

SECTION 4

LINE TERMINATION PANEL TV/LTP/1A

General Description

The Line Termination Panel, Type TV/LTP/1A, forms part of the terminal equalising equipment for the television balanced cable. A general description of this equipment is given in Section 3 of this Instruction.

The panel is normally mounted on the bay containing the remainder of the equalising apparatus; its dimensions are 19 by 3½ in. It incorporates two rows of Musa plugs, which provide terminations for incoming and outgoing circuits, connections between them being made by means of coaxial U-links or coaxial patch cords. The wiring employed varies with each installation, according to local requirements. The following description applies only to features common to all.

The incoming balanced cable is normally brought to a G.P.O. termination, from which it is extended by means of two coaxial cables to two Musa plugs of the line termination panel. These coaxial feeders are used as a binocular pair, the two inner conductors forming a balanced pair. A matching pad of resistors is mounted between the inner conductors of four of the Musa plugs, and a circuit diagram of the pad is shown in Fig. 4.1(a). This pad provides a match between impedances of 186 and 100 ohms. Thus if the input equaliser is Type TV/EQ/7, which has an input impedance of 186 ohms, and the incoming line is a telephone pair of characteristic impedance 100 ohms, the pad can be introduced by means of patch cords to achieve a match. Conversely, if the incoming line has a characteristic impedance of 186 ohms, and the input equaliser is Type TV/EQ/17, with an input impedance of 100 ohms, the pad can again be employed to effect a match. Provision can also

be made for reversing the direction of transmission over the balanced-pair cable by extending the output from a sending amplifier to two Musa plugs at the panel.

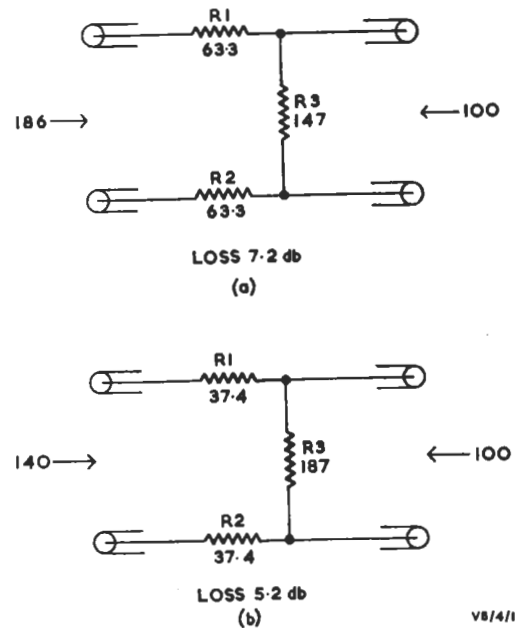


Fig. 4.1. Matching Pads (a) Image Impedance 100 and 186 Ohms (b) 100 and 140 Ohms

In addition to the above, the panel is fitted with an F. and E. socket, which is wired to a pair of Musa plugs. A telephone pair used for video transmission will normally be terminated by an F. and E. plug, which can then be engaged with the fixed socket.