

GROUP FADER PANEL PA8/302

See also AM5/7

Introduction

The PA8/302 is a unit in the Type-D range of sound equipment, first used in the Broadcasting House Continuity Suites, mounted in the cubicle continuity desk DK2/17*. It contains the twin group faders and amplifiers for a stereo pair of A and B circuits, and provides prehear facilities.

General Description

The equipment is mounted in a CH1/35A chassis having overall dimensions of 230 mm by 57 mm by 280 mm. Carried on the front panel are the twin-ganged fader Type 2PNN/33Q/1S and the non-locking pushbutton prehear switch. Inside the chassis the equipment is mounted on three printed circuit boards, No 1 carrying the amplifiers and associated components, No 2 a relay (CM) and No 3 the two input transformers. Also on board No 2 are two 250-mA antisurge fuses for the amplifier and lamp supplies.

Circuit Description (Fig. 1)

The left and right stereo inputs are taken to identical chains consisting of a 1:9 input transformer followed by a ganged fader, which together with the input shunt resistor give an input impedance of about 20 ohms, and an AM5/7 amplifiers. The main output is taken via a 1200-ohm resistor, and the prehear output is taken from the amplifier output via a 3.45-kilohm resistor and the prehear key.

The echo circuits from the echo selection unit PA8/304 are routed through this panel and these circuits are completed by contacts of the CM relay operated by the fader off-normal switch via the switching transistor, TR1. The relay provides contacts for other switching circuits.

*Not covered in Technical Instructions, but described in a Designs Department handbook 3.142(74)

General Data

Power Supplies

Amplifiers	24 volts 26 \pm 2 mA d.c., positive to PLB2/6, negative to PLB2/5
Lamps and Relay	12 volts d.c., positive to PLB2/2, negative to PLB2/1

Impedances[†] (as used in DK2/17)

Source	about 50 ohms
Input	20 ohms (normally with 24 ohms in parallel)
Main load	56 ohms
Prehear load	62 ohms
Main output	1.2 kilohms
Prehear output	3.45 kilohms

Levels[†] (as used in DK2/17)

Input	-57.0 dB
Main output with fader at maximum	-34.5 \pm 0.5 dB into 56 ohms
Prehear output with fader at maximum	-42.6 \pm 0.5 dB into 62 ohms

Frequency Response[†]

100 Hz to 10 kHz	\pm 0.1 dB relative to 1 kHz
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Checking Line-up Levels

The procedure for making an accurate check on Line-up levels is given in DDHB 3.142(74) Part III.

[†]Both channels.