AUXILIARY PROGRAMME LEVEL METER ME12/8

See also AM20/2

General Description

The auxiliary programme level meter ME12/8 is a unit in the Type-D range of modular sound equipment. It contains a P.P.M. amplifier AM20/2 which may be connected to 23 outlets by a selector switch on the front panel. A pushbutton switch gives an increase in sensitivity of 20 dB. The AM20/2 is a second-grade P.P.M. amplifier, with a similiar performance to the ME12/5 when using the same meters (to ED 1476). It is suitable for checking approximately the levels and programme volumes at miscellaneous monitoring points in a mixer or continuity suite.

The equipment is mounted in a chassis CH1/37G, having overall dimensions of 7 by 2¼ by 10½ inches (17·8 by 5·7 by 26·6 mm).

Diodes D1 and D2 across the input of the amplifier, in conjunction with R4 and R5, are fitted to reduce 17-Hz ringing current which may appear at a selected outlet. Tags B30 and 31 provide an isolated output for L.S. monitoring. Switch S1 connects the base of the first transistor of the amplifier, through C1 to the 0-dB or 20-dB position of the input attenuator. R1 provides the d.c. connection for the transistor base.

Test Procedure

Apparatus Required

Tone Source TS/10
A.C. Test Meter ATM/1
24-volt Stabilised Power Supply
Two McMurdo RS32 Sockets

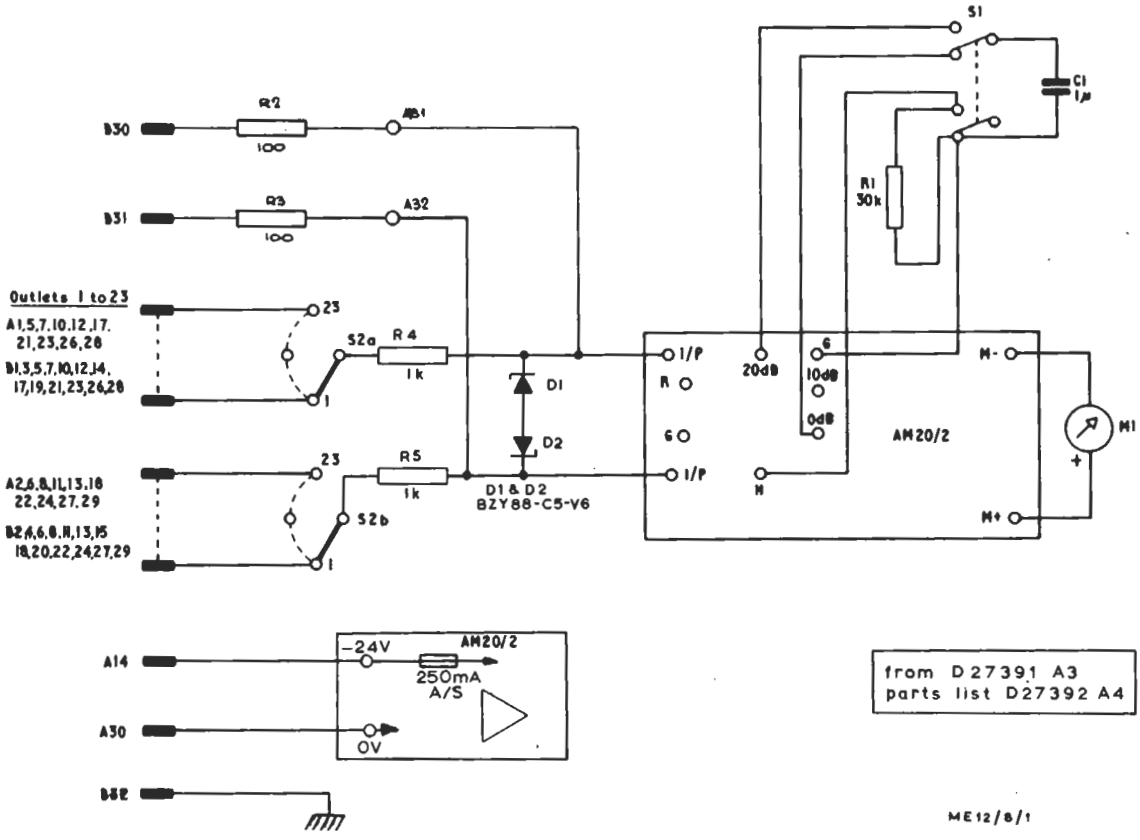

Fig. 1. Circuit of the ME12/8

Circuit Description (Fig. 1)

The input of the AM20/2 is taken via 1-kilohm resistors R4 and R5 to the travellers of the 23-way rotary switch S2, and also via PLA 31, 32 and two 100-ohm resistors R2, R3 to tags PLB 30 and 31.

Test Conditions

Source Resistance 300 ohms

Pushbutton Switch Not operated

Procedure

1. Apply 1-kHz tone at a level of 0 dB to PLA 1 and 2.
2. Set S2 to position 1. The meter should read 4.
3. Decrease the level of tone by 8 dB. The meter should read 2.
4. Increase the level of tone to +8 dB. The meter should read 6.
5. Reduce the input level to −20 dB and operate the pushbutton. The meter should read 4 ±0·5 dB.

Switch Positions

Switch positions 2 to 23 correspond to input pins, PLA 5, 6 : 7, 8 : 10, 11 : 12, 13 : 17, 18: PLB 1, 2 : 3, 4 : 5, 6 : 7, 8 : 10, 11 : 12, 13 : 14, 15 : 17, 18 : 19, 20 : 21, 22 : 23, 24 : 26, 27 : 28, 29 respectively.

The phasing between tags B30, 31 and each input of the selector switch must be checked if the switch wiring has been disturbed during maintenance.

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