COMMON SYSTEMS
124C AMPLIFIER CIRCUIT

1. PURPOSE OF CIRCUIT

1.1 The purpose of this circuit is to provide information on the 124C amplifier, which is an a-c operated amplifier with built-in power supply.

2. WORKING LIMITS

2.1 None.

3. FUNCTIONS

3.1 The 124C amplifier is designed primarily for use in loud speaker paging systems or test desk to main frame loud speaker systems for use where carbon transmitter source is required.

4. CONNECTING CIRCUITS

4.1 Main frame loud speaker circuit.

DESCRIPTION OF OPERATION

5. GENERAL

5.1 This is an a-c operated amplifier with built-in power supply and employs two stages of amplification, with push-pull arrangement in the final stage and reverse feedback in both stages. The amplifier is equipped with a gain control adjustable over a range of 45 db.

5.2 The input circuit consists essentially of the input transformer (T301), the series resistance (R302), a shunt resistance (R303, a series capacitance (C301), the gain control potentiometer (P301) and the building-out resistance (R301). The network composed of (R303, (C301) and (P301) attenuates the frequencies below 1000 cycles in order to reduce chest and breathing noises when the amplifier with its high gain input works out of an operator's transmitter.

5.3 The four secondary windings on the (T2) output transformer may be connected for operation into any nominal load impedance between 1.75 and 600 ohms.

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