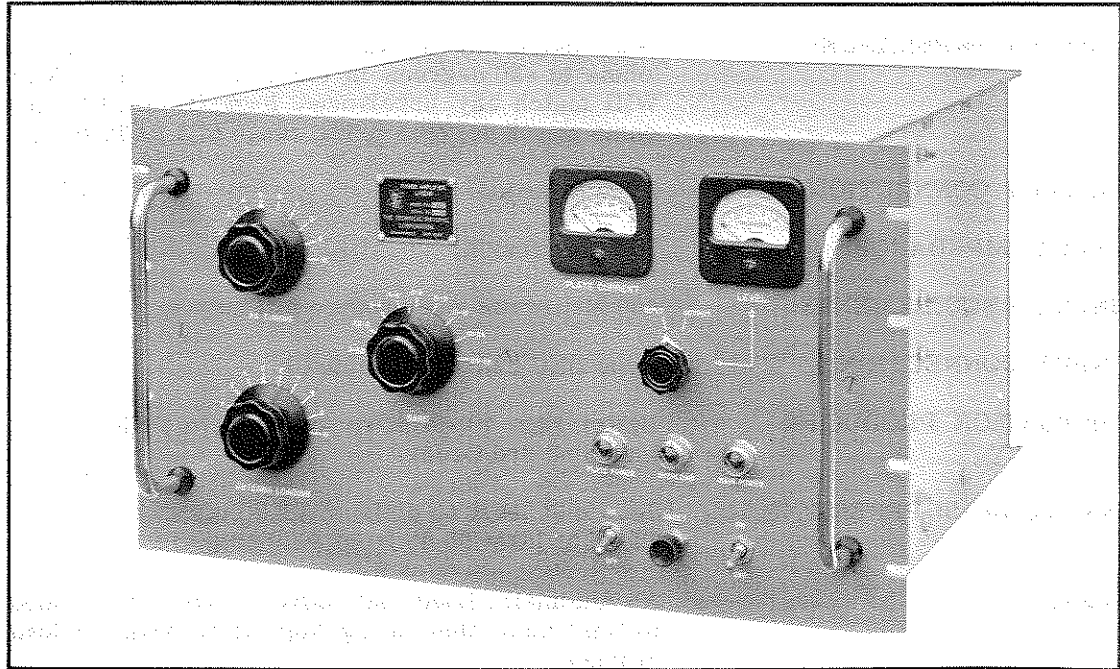


SALES SERVICE BULLETIN NUMBER 204A

Power Amplifier, Linear, Model PAL-350



The TMC Model PAL-350, Linear Power Amplifier is a conservatively rated general purpose amplifier providing 300 watts PEP output over the frequency range 2 to 32 Mcs.

The unit is small and compact, occupying only 10-1/2" of panel space for standard rack mounting, or may be mounted in a cabinet for table top use. The PAL-350 uses a pair of 4X250B Beam Power Amplifiers in parallel to a pi output network providing unbalanced output from 50 to better than 600 ohms.

The combination of the TMC Model SBE-1 Mode Selector Transmitting and the PAL-350 provides a compact transmitting system capable of producing single, double or independent sideband signals with any degree of carrier insertion.

The PAL-350 has been carefully designed, with no compromise in component quality or workmanship, with particular attention to suppression of distortion products, amplifier stability and power supply hum content and dynamic impedance. Full interlock, overload and fuse protection has been provided for the safety of operating personnel and the equipment. A forced, filtered blower system is included as an integral part of the equipment. An effective ALDC (Automatic Load and Drive Control) system has been included to severely limit the distortion produced when high drive peaks or load changes occur.

TECHNICAL SPECIFICATIONS

FREQUENCY RANGE: 2 to 32 Mcs. continuous, bandswitched.

OUTPUT POWER: 300 watts 2 tone PEP
400 watts Key down CW or FS

OPERATING MODES: With appropriate exciter: CW, MCW, SSB, ISB, FS, or Pulse Operation

TUNING: All tuning and bandswitching controls on Front Panel (no plug-in components).

OUTPUT IMPEDANCE: Will match any unbalanced load from 70 to 150 ohms at ± 20 degrees in the range of 2 to 4 Mcs. Will match any unbalanced load from 50 to 600 ohms at ± 45 degrees in the range of 4 to 32 Mcs.

OUTPUT CONNECTION: Type C coaxial

INPUT IMPEDANCE: 70 ohms coaxial

INPUT REQUIREMENTS: 100 Milliwatts will produce full output.

INPUT CONNECTION: Type BNC coaxial (RG-59/U)

DISTORTION PRODUCTS: Better than 40 db down relative to PEP output, including 3rd Order.

HARMONIC SUPPRESSION: Second at least 45 db from PEP output.
Third at least 55 db from PEP output.

ALDC: An Automatic Load and Drive Control is provided to limit distortion during high drive peaks or load changes.

PRIMARY POWER REQUIREMENTS: 115/230 volts 50/60 cps, single phase 750 watts, under 300 watts PEP output conditions.

SAFETY: Full interlock protection. Full overload and fuse protection.

COOLING: Filtered, forced air blower system.

TEMPERATURE HUMIDITY: Designed to operate in any ambient temperature between the limit of 0 degrees and ± 50 degrees C for any value of relative humidity up to 90%.

RUGGEDNESS: Amplifier is designed for mobile application with the addition of shock mounts.

TUBE COMPLEMENT:

2 - 4X250B	RF Amplifiers
1 - 6BA6	ALDC Control
2 - 866A	Rectifiers
2 - OA2	Voltage Regulators
1 - OB2	Voltage Regulators
1 - 6X4	Rectifier

MOUNTING: Standard WE rack

SIZE: 19" wide x 10-1/2" high x 15" deep

WEIGHT: 100 lbs. net

SHIPPING INFORMATION: Weight 150 lbs., Volume 6 cubic feet

COMPONENTS AND CONSTRUCTION: Equipment is manufactured in accordance with JAN/MIL specifications wherever practicable.

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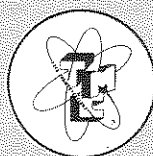
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