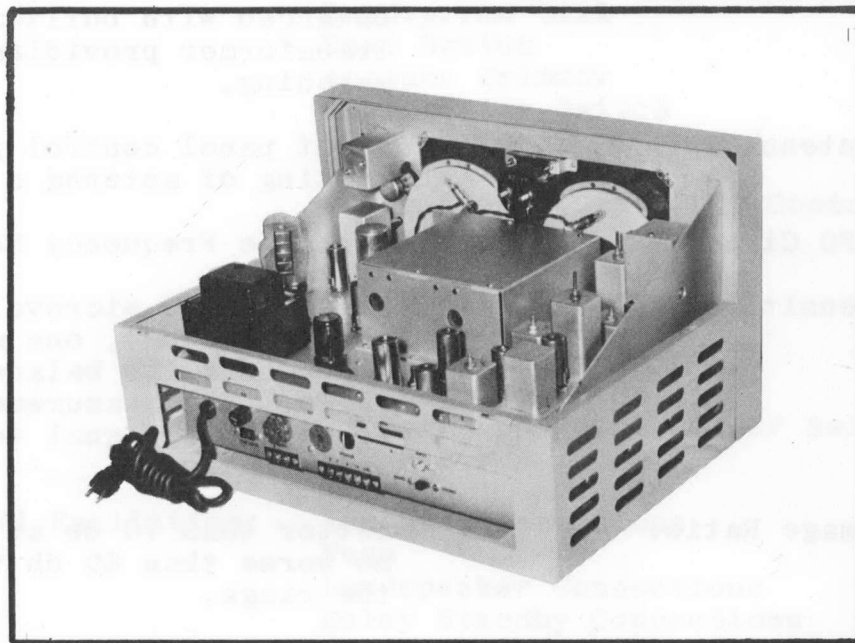


## SALES SERVICE BULLETIN NUMBER 179

Communication Receiver, Model GPR  
Series 90



The GPR Receiver is a 13 tube double conversion super-heterodyne communication receiver covering the frequency range of .54 to 31 megacycles in six accurately calibrated bands with full electrical bandspread.

The unit is housed in an attractive metal cabinet measuring 10" x 15" x 20". The receiver is also available for standard 19" rack mounting if desired.

Nominally operated on 105 to 125 volts 50/60 cycles, the receiver may also be used for battery or vibrapack operation by providing externally 6 volt filament and 180 volt "B" supply.

### TECHNICAL SPECIFICATIONS:

Frequency Range:	.54 to 31 megacycles in six bands.
Band Change:	By means of a front panel switch.
Type of Reception:	AM, CW, and MCW signals. FS when used with appropriate Audio type Frequency Shift Converter.
Tuning System:	Accurately calibrated main tuning dial plus auxiliary dial with full electrical bandspread.

TECHNICAL SPECIFICATIONS: (Continued)

**Antenna Input Circuit:** 75 ohms unbalanced, 300 ohms balanced with built-in ferrite transformer providing accurate matching.

**Antenna Trimmer:** Front panel control permits peaking of antenna circuit.

**BFO Circuit:** Variable Frequency BFO.

**Sensitivity:** Less than 10 microvolts from .54 to 1.5 Mc., one microvolt throughout the balance of the range. All measurements are for a 10 db signal to noise power ratio.

**Image Ratio:** Better than 70 db at 10 Mc. and no worse than 40 db throughout the range.

**AVC Characteristics:** With an 80 db change in the input signal, the output remains constant within 12 db.

**Selectivity:** Variable in six steps from 200 cycles to 5 kilocycles, 5 crystal and 1 non-crystal position.

**Output Impedance:** 4, 8, 16, and 600 ohms.

**Hum Level:** Better than 60 db.

**Output Power:** 2 watts high quality audio output.

**Input Power:** 105-125 volts, 50/60 cycles, approximately 90 watts.

**Noise Limiter:** A highly effective Noise Limiter circuit is provided.

**Metering:** Calibrated "S" meter.

**Audio Selectivity:** Specially designed Audio Selectivity control with variable bandwidth.

**TECHNICAL SPECIFICATIONS: (Continued)**

**Front Panel Controls:** Main Tuning Dial  
Bandspread Dial  
Band Switch  
Antenna Trimmer  
Selectivity Switch  
Crystal Phasing Control  
Audio Filter Switch  
Audio Filter Bandwidth Control  
Standby Switch  
Noise Limiter Switch  
Audio Gain Control  
Phone Jack  
AGC/MANUAL Switch  
BFO ON/OFF Switch  
RF Gain and Power ON/OFF Switch  
BFO Pitch

**Rear Panel Facilities:** Antenna Connections  
Fuse  
Loudspeaker Connections  
Relay Standby Connections  
Phono-ON/OFF Switch  
Phono Input Jack

**Accessory Facilities on Rear Panel:** Utility AC Outlet  
Utility Power Socket provides  
6.3 v .6 amp. 250 v .01 amp.  
Emergency Power Input

**Diversity Operation:** The Model GPR-D is available for diversity application. Provisions are made for external control of the HFO, BFO, and IFO.

**Mounting:** Cabinet or Rack Mounting.

**Size:** (a) Cabinet 20" wide x 10" high x 15" deep.  
(b) Rack Mounting 19" wide x 8-3/4" high x 14" deep.

**Weight:** Net - 50 lbs.  
Gross - 110 lbs. packed for export.

**Tube Complement:**

6CB6	RF
6BE6	1st Mixer
6AG5	HFO
6BE6	2nd Mixer & Oscillator
6BA6	1st IF
6BA6	2nd IF
6BA6	3rd IF
6AL5	Detector - Noise Limiter
6AG5	Beat Frequency Oscillator

**TECHNICAL SPECIFICATIONS: (Continued)**

<b>Tube Complement:</b>	<b>6T8</b>	<b>AVC, 1st Audio</b>
	<b>6V6GT</b>	<b>Audio Output</b>
	<b>5U4G</b>	<b>Rectifier</b>
	<b>OA2</b>	<b>Regulator</b>

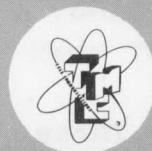
We reserve the right to make changes in the design of our equipment consistent with good engineering practice in order to make improvements in design and to effect economies in manufacture.

L0155/1½M

**THE TECHNICAL MATERIEL CORPORATION**

COMMUNICATION ENGINEERS

P. O. BOX 142  
MAMARONECK, NEW YORK  
CABLE TEPEI NEW YORK, N.Y.



IN CANADA:  
TMC (CANADA) LTD.  
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