

## SALES SERVICE BULLETIN NUMBER 179B

Communication Receiver, Model GPR

Series 90



The GPR Receiver is a 15 tube double conversion superheterodyne 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

<b>FREQUENCY RANGE:</b>	.54 to 31 megacycles in six bands.
<b>BAND CHANGE:</b>	By means of a front panel switch.
<b>TYPE OF RECEPTION:</b>	AM, CW, and MCW signals. FS when used with appropriate Audio type Frequency Shift Converter.
<b>TUNING SYSTEM:</b>	Accurately calibrated main tuning dial plus auxiliary dial with full electrical bandspread.
<b>ANTENNA INPUT CIRCUIT:</b>	75 ohms unbalanced, 300 ohms balanced with built-in ferrite transformer providing accurate matching.
<b>ANTENNA TRIMMER:</b>	Front panel control permits peaking of antenna circuit.
<b>BFO CIRCUIT:</b>	Variable Frequency BFO.
<b>SENSITIVITY:</b>	Less than 5 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.
<b>IMAGE RATIO:</b>	Better than 60 db
<b>AVC CHARACTERISTICS:</b>	With an 80 db change in the input signal, the output remains constant within 12 db.
<b>SELECTIVITY:</b>	Variable in six steps from 200 cycles to 5 kilocycles, 5 crystal and 1 non-crystal position.
<b>OUTPUT IMPEDANCE:</b>	4, 8, 16, and 600 ohms.
<b>HUM LEVEL:</b>	Better than 60 db.
<b>OUTPUT POWER:</b>	2 watts high quality audio output.
<b>INPUT POWER:</b>	105-125 volts, 50/60 cycles, approximately 90 watts.
<b>NOISE LIMITER:</b>	A highly effective Noise Limiter circuit is provided.
<b>METERING:</b>	Calibrated "S" meter.
<b>AUDIO SELECTIVITY:</b>	Specially designed Audio Selectivity control with variable bandwidth.
<b>FRONT PANEL CONTROLS:</b>	Main Tuning Dial Bandspread Dial Band Switch Antenna Trimmer Selectivity Switch Crystal Phasing Control Audio Filter Switch Audio Filter Bandwidth Control Standby Switch Dial locks

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  
SSB Selector Switch.

ACCESSORY FACILITIES ON  
REAR PANEL:

Utility AC Outlet  
Utility Power Socket provides  
6.3 v .6 amp. 250 v .01 amp.  
Emergency Power Input  
Coaxial IF Output for SSB.  
Audio Input for SSB.

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  
(b) Rack Mounting

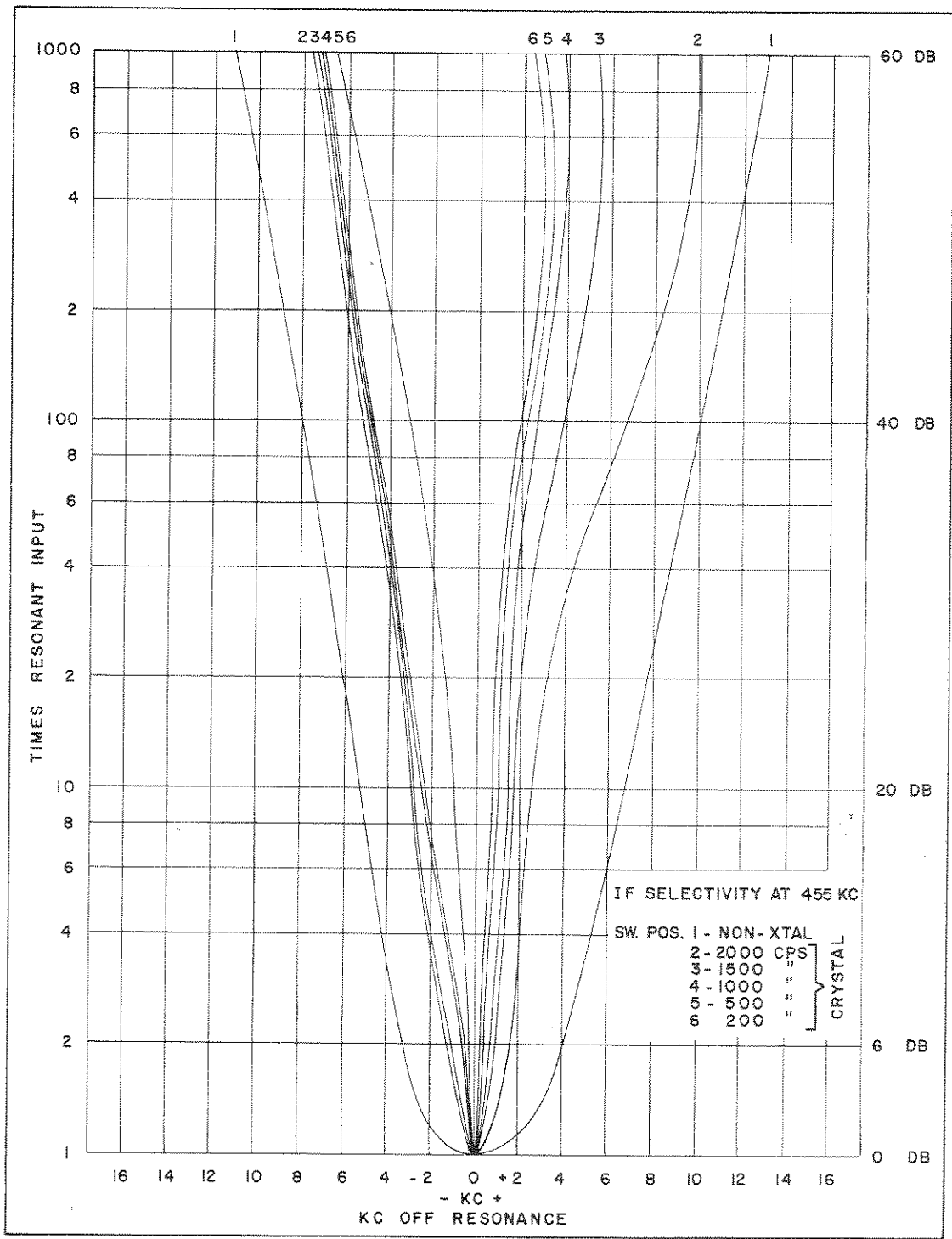
20'' wide x 10'' high x 15'' deep.  
19'' wide x 8-3/4'' high x 14'' deep.

WEIGHT:

Net - 52 lbs.  
Gross - 63 lbs. packed for domestic.  
110 lbs. packed for export.

TUBE COMPLEMENT:

6AB4	Grounded Grid Input RF Amplifier
6CB6	2nd RF
6AU6	1st Converter
6AG5	Oscillator
6BE6	2nd Converter and Oscillator
6BA6	IF Buffer Amplifier
3- 6BA6	IF Amplifiers
6AL5	Detector and Noise Limiter
6AG5	BFO
12AX7	AVC and Audio Amplifier
6V6	Output
OA2	Regulator
5U4G	Rectifier



IF Selectivity Curves, Model GPR, Series 90

L01055/2-1/2M

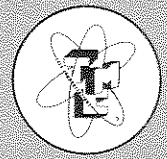
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