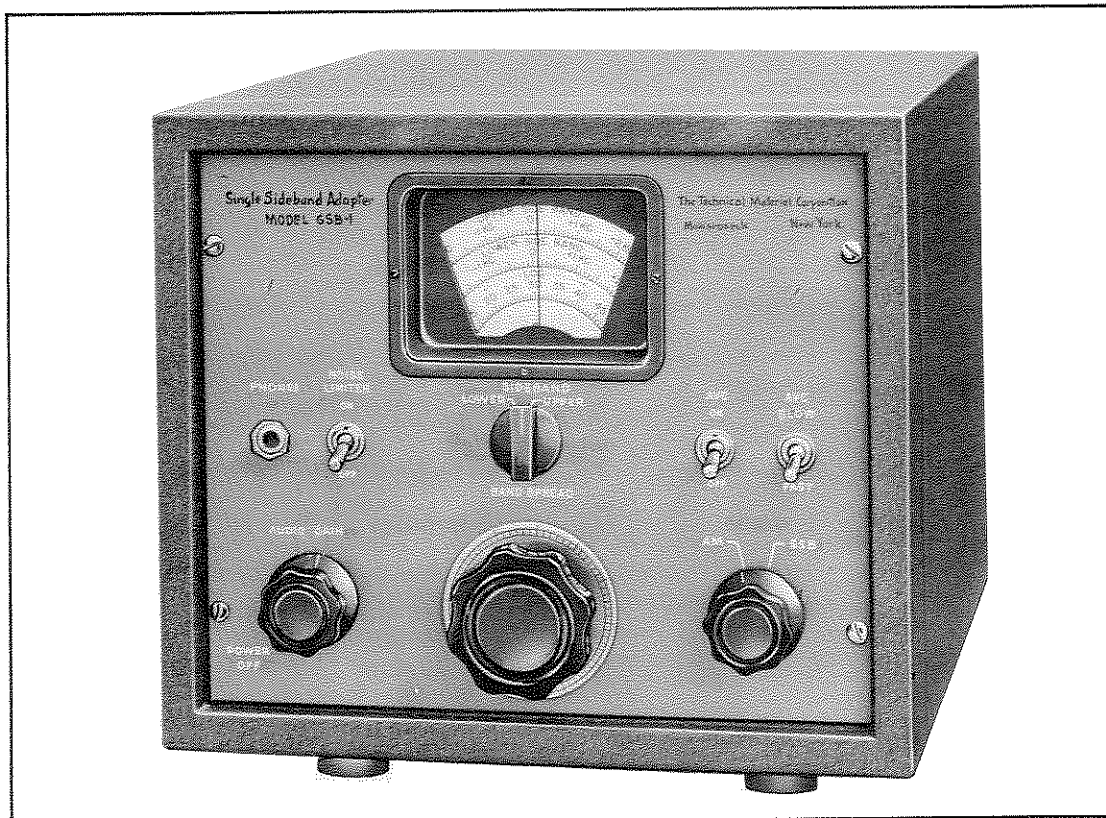


## SALES SERVICE BULLETIN NUMBER 194A

### Single Sideband Adapter, Model GSB-1



The TMC Model GSB, Single Sideband Adapter is a filter type slicer permitting accurate and simple tuning of SSB signals.

The 455 Kc input is converted to a low frequency by means of a mixer and oscillator combination which allows selection of either sideband. The difference frequency is fed to a carefully designed and manufactured bandpass filter, which restricts the band width to 2.5 Kc at the 6 db points. This filter is so effective that the skirt width at 50 db is only 3.5 Kc. The filter output, in turn, is fed through a second mixer, or product detector, where it is combined with a stable 17 Kc local oscillator. The result is once again passed through a filter having a cutoff at 5 Kc, thus eliminating all unwanted mixer products. The output is a relatively noise and interference free audio signal.

The TMC Model GSB contains a number of features which make it a more useful device. Since single sideband signals require critical frequency adjustment, this unit has been provided with electrical band spread which reduces tuning to the point of greatest simplicity and ease. In addition, AVC is provided within the Model GSB, over and above that which already exists within the receiver, thus serving to further prevent powerful local stations from overloading the slicer. A noise limiter, which reduces impulse peaks, has also been included in this unit.

A built-in audio amplifier and output stage eliminates the need for going back into the receiver for audio amplification. Output is provided for loudspeaker, 600 ohm line

and headset use. An independent output jack permits the use of an external audio amplifier if desired.

The Model GSB-1 although designed for use with the Model GPR-90 receiver (which already provides the proper terminals) may be used with any receiver which will provide .3 volts (rms) R.F. input at approximately 455 Kc.

### FRONT PANEL CONTROLS:

1. Power ON/OFF Switch
2. Bandsread
3. Upper-Lower Sideband Selector Switch
4. SSB-AM Selector Switch
5. AVC ON/OFF Switch
6. AVC FAST/SLOW Switch
7. Noise Limiter ON/OFF Switch

### TECHNICAL SPECIFICATIONS:

**FREQUENCY RANGE:** 452-458 Kc.

**TYPE OF RECEPTION:** AM, SSB (upper or lower), CW.

**IF INPUT VOLTAGE RANGE:** 0.1-10 volts (rms).

**INPUT IMPEDANCE:** High from IF.

**AUDIO OUTPUT:** At output jack (before audio amplifier) 0.3 volts (rms) for 0.3 volts (rms) input.  
Impedance to match audio grid  
At terminals (after audio amplifier) 1 watt.  
Impedance-  
Loudspeaker-6, 8, 16 ohms  
Line- 600 ohms  
Headset- High or Low

**AVC CHARACTERISTICS:** With 40 db change in input, output remains constant within 9 db.

**INPUT POWER:** 115 volts, 50/60 cycles, 55 watts.

**SIZE:** 12'' wide x 10'' high x 15'' deep.

**SHIPPING DATA:**

|  | WEIGHT  |           |
|--|---------|-----------|
|  | NET     | GROSS     |
|  | 27 lbs. | 31 lbs. * |
|  |         | 57 lbs.   |

**DIMENSIONS**  
\*Carton- 14'' wide x 13-1/2'' high x 17'' deep.  
Export- 15'' wide x 16'' high x 20'' deep.

### COMPONENTS AND CONSTRUCTION:

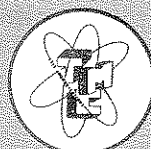
Equipment manufactured in accordance with JAN specifications wherever practicable.

## THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD

MAMARONECK, NEW YORK

CABLE  
TEPEI  
MAMARONECK, N.Y.



COMMUNICATION ENGINEERS

IN CANADA:  
TMC (CANADA) LTD.  
OTTAWA, ONTARIO