



## TECHNICAL BULLETIN NUMBER 4005

Receiving Mode Selector  
TMC Model MSR-9  
(CV 1758/URR)



- 455 kc input frequency
- Oven crystal control for extreme stability
- Receiver operation simplified and improved
- Provides USB and LSB from standard receiver
- Manual bandspread control
- Compact design

The Technical Materiel Corporation's Model MSR-9, Receiving Mode Selector (CV 1758/URR), will adapt any standard communications receiver operating with a 455 kc IF output signal to the reception of upper or lower sideband signals. Although the MSR-9 has been designed specifically for the detection of single sideband signals, the filter circuits incorporated within this unit will improve the reception of CW, MCW, AM and FSK signals, by providing sharp discrimination between a desired signal and undesired adjacent interference.

Either upper or lower sideband reception is selected by front panel control. Six kc bandspread tuning in the selected sideband permits rapid fine tuning of the received signal.

Oven control of the sideband crystals permits the use of this adapter for the reception of sideband signals with any degree of carrier suppression. Two MSR-9 units, both operating from the IF output of the same receiver, will provide complete reception of independent (separate information) sideband.

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## Receiving Mode Selector

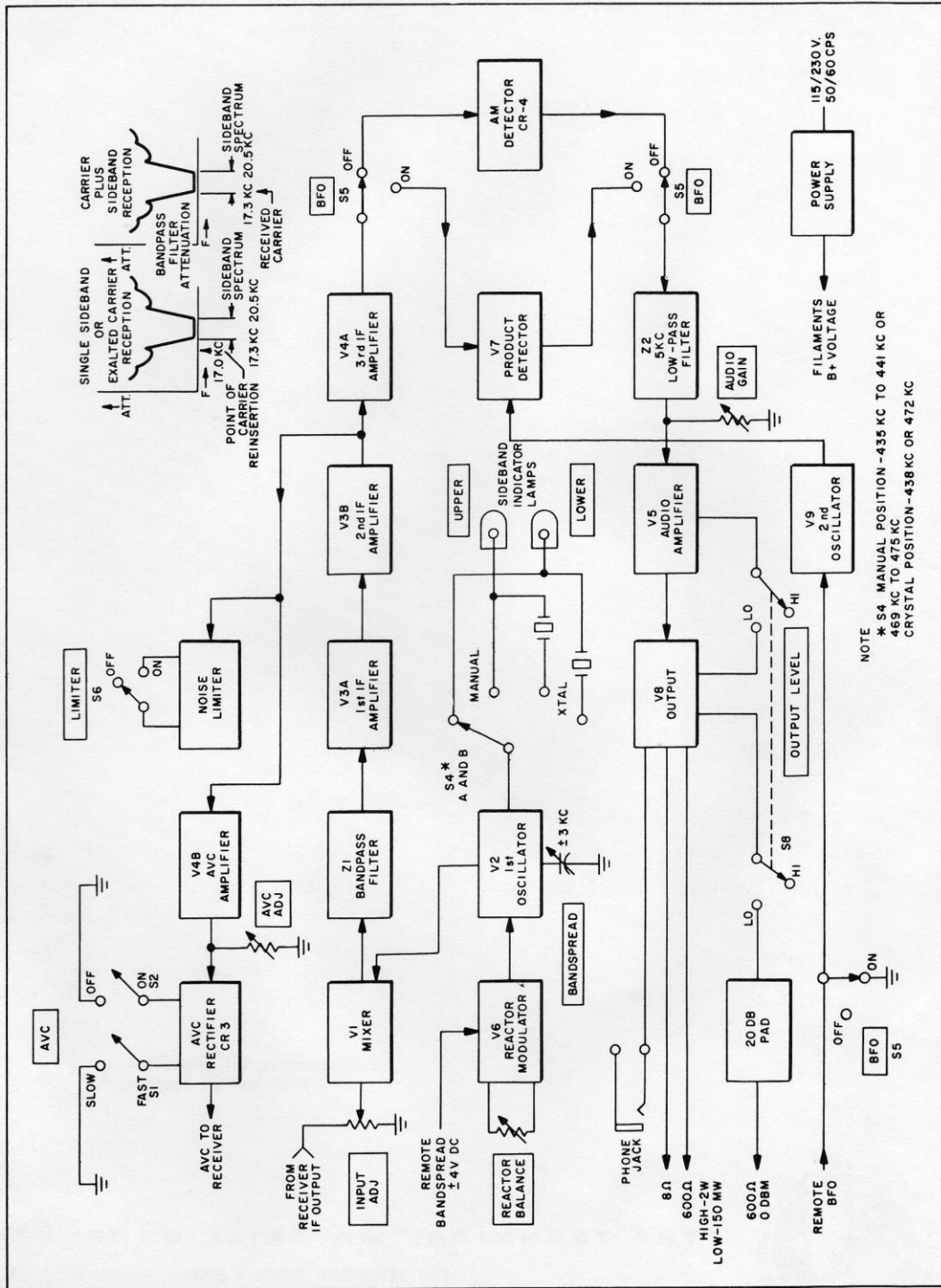
### TECHNICAL SPECIFICATIONS, TMC MODEL MSR-9

INPUT FREQUENCY	455 kc.
MODES OF RECEPTION	SSB upper or lower, AM, CW, FSK, FAX.
INPUT VOLTAGE	1 to 100 mv rms.
INPUT IMPEDANCE	50 ohms.
TUNING BANDSPREAD	$\pm 3$ kc.
AUDIO FILTER CHARACTERISTICS	3 db at 5 kc $\pm$ 500 cps, maximum attenuation equal to or more than -50 db at 17 kc. Maximum passband ripple $\pm$ 0.5 db between 300 and 3500 cps.
*AVC CHARACTERISTICS	With 40 db change in input, output remains constant within $\pm 4.5$ db.
AVC SPEEDS	Slow/Fast.
AUDIO OUTPUT	High 2 watts; 600 ohms, 8 ohms. Low 1 mw; 600 ohms 150 mw; 600 ohms and 8 ohms.
OUTPUT IMPEDANCE.	Loudspeaker 8 ohms. Line 600 ohms. Headset High or low impedance headset may be used.
HUM LEVEL	At least 50 db down from full audio output.
PRIMARY POWER REQUIREMENTS	115/230v, 50/60 cps, single phase, 65 watts.
INSTALLATION DATA	Weight: 28½ lbs. Size: 5¼" h $\times$ 19" w $\times$ 11¼" d.
ENVIRONMENTAL CONDITIONS	Designed to operate in any ambient temperature of 0 to 50° C, and any value of humidity up to 90%
SHIPPING DATA	56 lbs., 4.47 cu. ft.
LOOSE ITEMS	Coaxial mating plug and two (2) instruction books.
NOMENCLATURE.	CV 1758/URR.
FSN	F5820-017-9173 w/o spares.
INSTRUCTION BOOK	TMC IN 4005
COMPONENTS AND CONSTRUCTION	All equipment manufactured in accordance with JAN/MIL specifications wherever practicable.

\*The AVC voltage generated within the MSR-9 is used by the associated receiver. Therefore, these characteristics refer to the operation of the receiver/adaptor when the associated receiver has an AGC curve comparable to TMC Model FFR-3.

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TMC Model MSR-9  
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FUNCTIONAL BLOCK DIAGRAM

## Receiving Mode Selector

We reserve the right to  
make engineering changes

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