

SALES SERVICE BULLETIN NUMBER 196A

Single Sideband Converter, Models MSR
CV-591()/URR
CV-657/URR



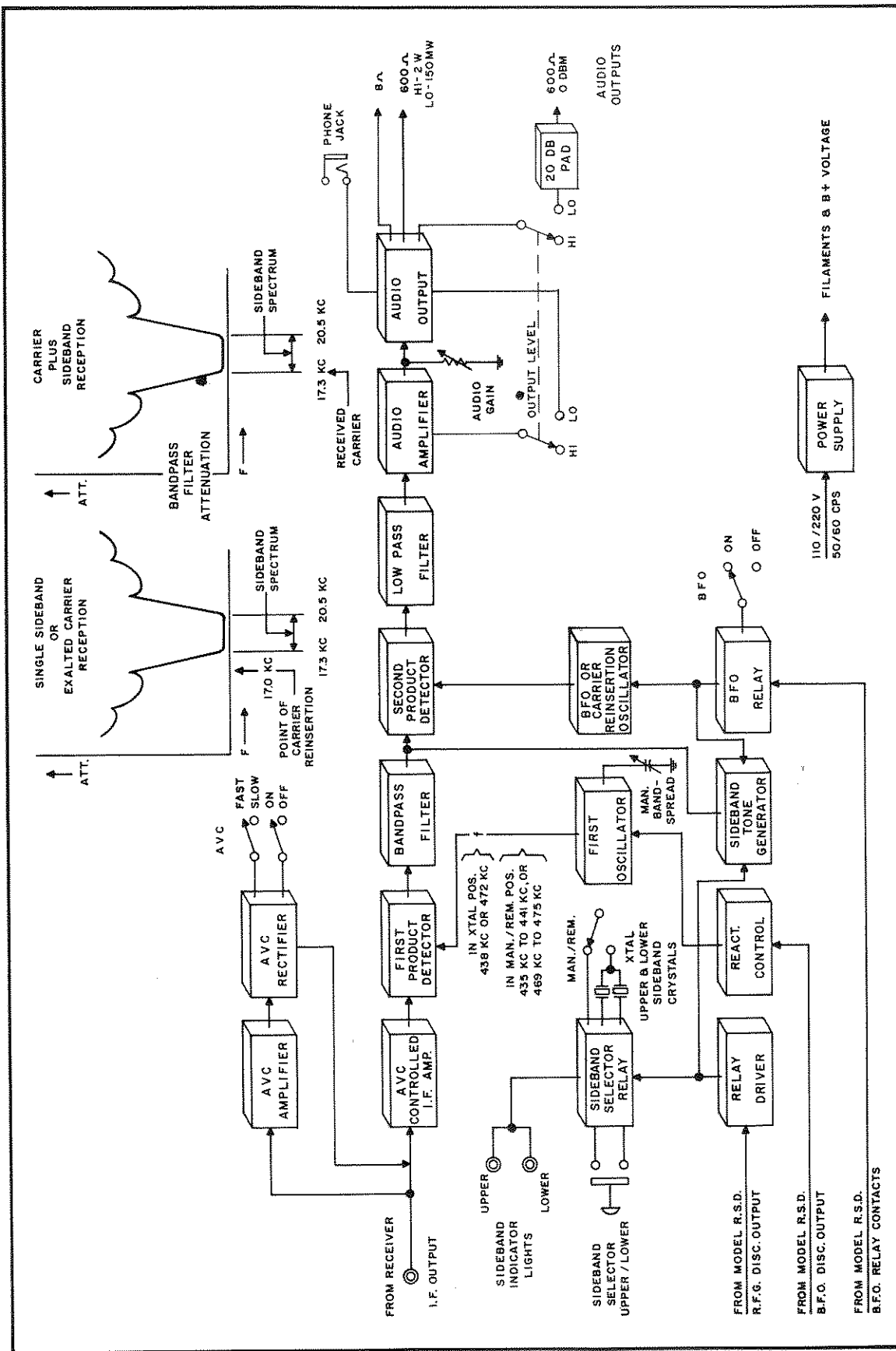
The TMC Model MSR, Single Sideband Converter is a receiving device which will greatly improve the operation of any receiver. The MSR provides Selectable Side Band reception of SSB or AM signals, improved CW-MCW reception, exalted carrier AM, simultaneous reception of AM and FS with one receiver, and bandpass tuning. The MSR may be used for local or remote operation.

The combination of a specially designed bandpass filter circuit and a frequency band-spread oscillator provides sharp discrimination between a desired signal and any undesired interference.

The combination of the filter and mixer circuit together with a highly stable carrier reinsertion oscillator make possible the reception of all of the above mentioned receiving modes.

TECHNICAL SPECIFICATIONS:

TYPES OF RECEPTION:	SSB - Selectable Sideband CW-MCW AM - Selectable Sideband Exalted Carrier AM Simultaneous AM-FS
SIDEBAND SELECTION:	Upper or Lower Sideband by means of Crystal or Calibrated BandSpread Oscillator.
REMOTE CONTROL FEATURES:	Selection of Upper or Lower Sideband Selection of Mode of operation AM-CW-MCW-SSB and Exalted Carrier ± 3 Kc BandSpread Tuning AVC ON/OFF BFO ON/OFF



Block Diagram, Model MSR

REMOTE CONTROL FACILITIES: MSR-4 may be used with AN/FRA-19(V) or AN/FRA-501- Remote Control Systems and AN/FRR-49 (V) or AN/FRR-502 - Receiving Systems without any system modification.

INPUT FREQUENCY RANGE: 452-458 Kc. MSR-4
 200 Kc. MSR-3

INPUT VOLTAGE RANGE: 0.1 - 10 Volts RMS.

INPUT IMPEDANCE: 240 K ohms

FILTER CHARACTERISTICS: 3.2 Kc at 3 db Points
 5.2 Kc at 45 db Points

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

AVC SPEEDS: SLOW/FAST

OUTPUT: High - 2 watts - 600 ohms - 8 ohms
 Low - Zero Level - 600 ohms
 150 mw, 600 ohms, 8 ohms

OUTPUT IMPEDANCES: Loudspeaker 8 ohms
 Line 600 ohms
 Head Set - High or Low

FRONT PANEL CONTROLS: Power ON/OFF
 AUDIO GAIN Control
 Sideband UPPER/LOWER Switch
 Sideband Indicator Lighting
 MANUAL/XTAL Switch
 BANDSPREAD Control
 AVC ON/OFF Switch
 AVC FAST/SLOW Switch
 BFO ON/OFF Switch
 PHONES Jack
 Power Indicator

REAR PANEL FACILITIES: IF Input Jack
 Threshold Controls
 AC Power Input
 Audio Output Terminals
 Remote Control Terminal
 HI/LO Output Level Control.

INPUT POWER REQUIREMENTS: 110/220 Volts 50/60
 Cycles, 65 watts

SIZE: 5-1/4" high x 19" wide x 11-1/4" deep

MOUNTING: Standard WE Rack

WEIGHT: 24 lbs. net

TUBE COMPLEMENT: 12AU7 Relay Driver
 12AT7 Amplifier and Oscillator
 12AU7 17 Kc. Oscillator & Audio Amplifier

TUBE COMPLEMENT
(continued)

6J6	Reactance Tube
6AG5	1st Oscillator
6BA6	I.F. Amplifier
6BE6	1st Mixer
6BE6	2nd Mixer
6AQ5	Audio Power Amplifier
5Y3	Power Rectifier
OA2	Voltage Regulator

COMPONENTS
AND CONSTRUCTION:

Equipment manufactured in accordance with JAN/
MIL Specifications wherever practicable.

ORDERING INFORMATION:

NOMENCLATURE	TMC MODEL	DESCRIPTION	SNSN
CV-657/URR	MSR-3	200 kc unit	F5820-543-1496
CV-591A/URR	MSR-4	452-458 kc unit	F5820-543-1593
CY-2435/U	CAB-4	Cabinet, Electrical Equipment. To house single CV-591()/URR.	

MANUALS:

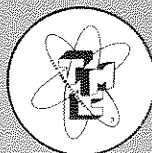
NAVSHIPS	TMC	DESCRIPTION
93112	IN-175	Instruction manual for CV-591/URR
93 210	IN-191	Instruction manual for CV-591A/URR

THE TECHNICAL MATERIEL CORPORATION

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IN CANADA:
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OTTAWA, ONTARIO

COMMUNICATION ENGINEERS