

RECEIVER TYPE SX28

SUMMARY OF DATA

PURPOSE

MF and HF receiver outfit fitted in some R.N. Shore Wireless Stations.

TYPE OF RECEPTION

C.W. or Voice

FREQUENCY RANGE

550 kc/s to 43 Mc/s in 6 ranges.

The intermediate frequency is 455 kc/s.

PHYSICAL DATA

	Height	Width	Depth	Weight
Table Cabinet	10"	20½"	14½"	75 lb
Rack dust cover	8½"	17½"	14½"	
Panel dimensions	8½"	19"		



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BRIEF TECHNICAL DESCRIPTION

The SX28 has two RF stages preceding a pentagrid mixer valve. A separate frequency change oscillator cathode coupled is employed. On Bands 1 and 2 there is one RF stage only in use to enable high fidelity reception on these bands. Intermediate frequency voltages from the mixer valve are fed to a three stage IF amplifier and also an AGC and noise limiter circuit. These provide AGC to the RF and mixer stages, and noise limiting voltages to the signal grid of the first IF amplifier. The degree of interstation and noise suppression is manually controlled. Following the first IF amplifier is a switched six position selectivity band-pass filter incorporating a crystal. The third IF amplifier valve is a double diode pentode and provides signal and AGC rectification. AGC voltages from this stage control the first IF amplifier. LF output from this stage is fed into a twin triode phase inverter. This is followed by a push-pull output stage which is transformer coupled to a phone jack, loudspeaker, and line terminals. An S meter can be switched in. A separate beat frequency oscillator coupled to the signal diode is employed for C.W. reception.

ELECTRICAL CHARACTERISTICS

C.W. Sensitivity:-

Range 1 and 2 5.0 ± 2 microvolts) 20 db signal to
Range 3 to 6 2.5 ± 1 microvolt) noise ratio

Selectivity:-

I.F. Broad 6 db down. 12 kc/s
I.F. Sharp 6 db down. 4.1 kc/s

Output Impedance:-

5000 ohms and 500 ohms.

M.C.W. Sensitivity (for .05 watts output):-

Bands 1 to 5 - 2µV or under
Band 6 - 4µV

Power Output:-

8 watts undistorted

There is a front panel phone jack and also an input jack to the audio amplifier which disconnects the rest of the receiver at this point.

POWER REQUIREMENTS AND CONSUMPTION

110 or 220V A.C. 25-60 cycles. 138 watts.

HEAT DISSIPATION

138 watts.

AERIAL SYSTEM

Approximate input impedance 400 ohms provision for balanced or unbalanced inputs.

REMARKS

This is an American receiver.

HANDBOOK

U.S. Navy.

ESTABLISHMENT LIST

Nil.

INSTALLATION SPECIFICATION

Nil. (Installation information is contained in handbook).