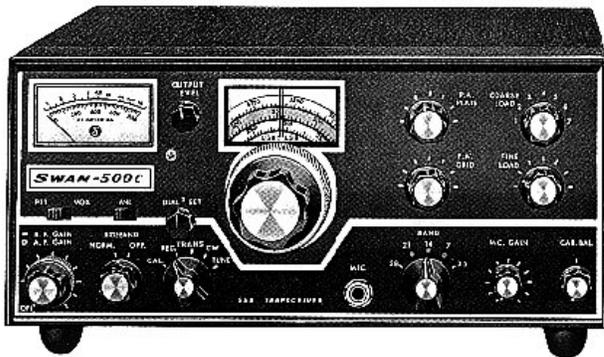


Single Sideband Transceiver

THE SWAN 500



Introduced in 1967 as a deluxe version of the 350, the 500 offered 480 watts PEP-SSB power. The 500C, which was first sold in 1968, offered the same power output but had a 2.7 Kc bandpass for both transmit and receive, 50 db sideband suppression, and grid block CW keying. Pictured here is a deluxe version of the 500C, the SS16, complete with the 16 pole crystal filter. The 500CX was the

final version of this series, and it offered the following improvements in 1970. New AGC circuit with faster attack and controlled decay, amplified automatic gain control (AAGC), 25 kc and 100 kc crystal calibrator, carrier suppression exceeding 60db, improved product detector, and increased AF gain with less distortion. A review of the 500C appears in the April 1969 issue of CQ.

Frequency Ranges

80 meters 3.5 to 4 mc
40 meters 7.0 to 7.450 mc
20 meters 14.0 to 14.450 mc
15 meters 21.0 to 21.450 mc
10 meters 28.0 to 29.7 mc

Power Input

Single Sideband, Suppressed Carrier:
520 watts PEP, minimum all bands
CW:
360 watts, dc input all bands
AM: (single sideband with carrier)
125 watts dc input all bands

Distortion

Distortion products down more than 30db

Unwanted Sideband Suppression

Unwanted sideband down more than 50db

Carrier Suppression

Carrier suppression greater than 60db

Receiver Sensitivity

Less than 0.5 microvolt at 50 ohms impedance for signal-plus-noise to noise ratio of 10db

Transmitter Output

Wide range Pi-network output matches antennas essentially resistive from 15 to 500 ohms impedance, with coarse and fine load adjustment.

Vacuum Tube Complement

V1 6EW6 vfo amplifier
V2 12BE6 transmitter mixer
V3 6GK6 driver
V4 6LQ6 PA
V5 6LQ6 PA
V6 12BZ6 receiver rf amplifier
V7 12BE6 receiver mixer
V8 6EW6 first IF amplifier
V9 12BA6 second IF amplifier
V10 12AX7 product detector / receive audio
V11 6BN8 AGC amplifier / rectifier
V12 6GK6 audio amplifier
V13 6JH8 balanced modulator
V15 12AX7 mic. amplifier / transmit audio
V17 12BA6 100kc crystal calibrator

Power Requirments

Filiments: 12.6 volts, 5.5 amps, ac or dc

Relay: 12 volts dc, 250 ma.

Bias: -110 volts dc, 100ma

Medium voltage: 275 volts dc, 150 ma

High voltage: 800 volts dc, 550 ma. peak transmit

Recommended supplies: 14-117 12 volt dc supply, 117X basic ac supply, 117XC matching ac supply / speaker, 14-C dc converter (for 117-X).

Dimensions and weight

5.5 inches high by 13 inches wide by 11 inches deep
weight 17.25 pounds