

FTdx-400

TRANSCEIVER



YAESU



SPECTRONICS INTRODUCES THE YAESU FT DX 400 TRANSCEIVER

Latest arrival on the American scene, **SPECTRONICS** offers the ultimate in professional equipment for the amateur. **YAESU** engineers have looked into the future to provide the present day amateur with a complete station in one package. Except for the addition of a microphone and speaker no other accessories are needed to be "on the air".

Standard equipment built-in to the FT dx 400 includes power supply, dual calibrators (100 KC and 25 KC), CW sidetone and break-in capability, fully adjustable VOX system, and varactor controlled clarifier offers receiver offset tuning capability.

The FT dx 400 features full frequency coverage on all amateur bands 10 through 80 meters. In addition the built-in oscillator can be switch selected to provide 4 crystal controlled channels, which is especially convenient for net operation.

This hybrid transceiver uses 18 tubes and 42 semi-conductors in circuitry designed to optimize the natural advantages of each. Printed circuit boards are used throughout guaranteeing highly reliable electrical specifications.

Receiver dual conversion coupled with a 1.6 shape factor crystal lattice filter, provides sharp 2.3 KC receiver selectivity at the -6 DB points.

The gear driven dial mechanism features zero backlash and easy locking provision. Unaffected by temperature or humidity changes, the dial mechanism can be relied upon in any climate. Main dial calibration consists of 10 KC incremental divisions from 0 to 500 KC and 500 to 1000 KC. Vernier dial is calibrated 0 to 50 KC in 1 KC divisions. Vernier dial accuracy is better than 500 CPS when calibrated to the nearest 25 KC point.

The FT dx 400 was planned and designed for the American amateur utilizing standard electronic parts readily available from local sources. **SPECTRONICS** maintains service facilities and in addition guarantees all parts except tubes for a period of one year.

Ask your dealer for a demonstration DX trip with the FT dx 400.

CONTROL FUNCTIONS:

MODE CONTROL offers selectable upper or lower sideband, transmitter tune position, CW and AM transceiver mode.

BAND SELECTOR selects complete amateur bands 80 through 10 meters plus provisions for three additional 500 KC bands.

The 10 meter band is divided into four 500 KC segments designated 10A, 10B, 10C, and 10D for non-critical tuning.

RF-AF-ANL CONTROL provides receiver section volume controls all centered in one handy location. RF and AF concentric controls with push pull AF knob for automatic noise limiter operation.

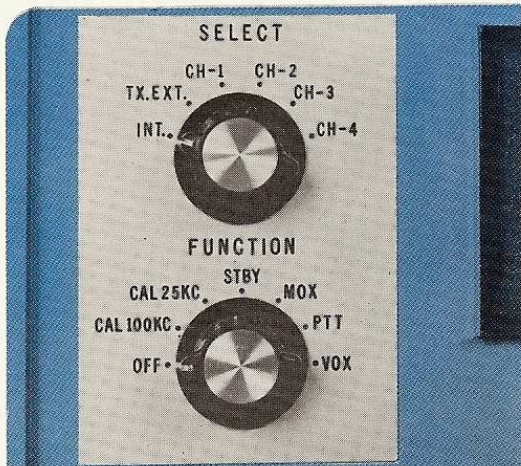
AGC AND PRESELECTOR CONTROL are combined for ease in immediate selection of fast or slow AGC rate for any signal mode CW, SSB, or AM. The preselector features very sharp bandwidth and brings those weak signals up to a readable level.

METER AND MIC GAIN CONTROL provides immediate indication of proper mic gain setting simply by checking the allowable (ALC) meter movement. Switching the meter to (IC) position indicates output tube current. When the meter is switched to the power output position (PO) the operator is provided with an indication of relative power output. The meter is automatically switched to measure "S" units when transmitter is inoperative.

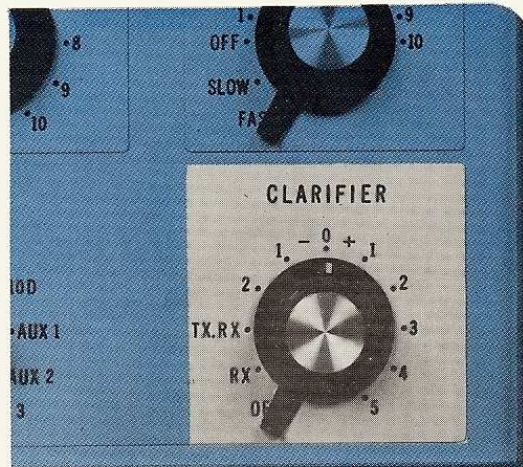
PLATE TUNING CONTROL features clearly marked band setting and is properly located adjacent to the preselector for ease of transmitter tune up.

LOADING CONTROL completes the compact grouping of controls required for transmitter tune up and maximum operating efficiency.

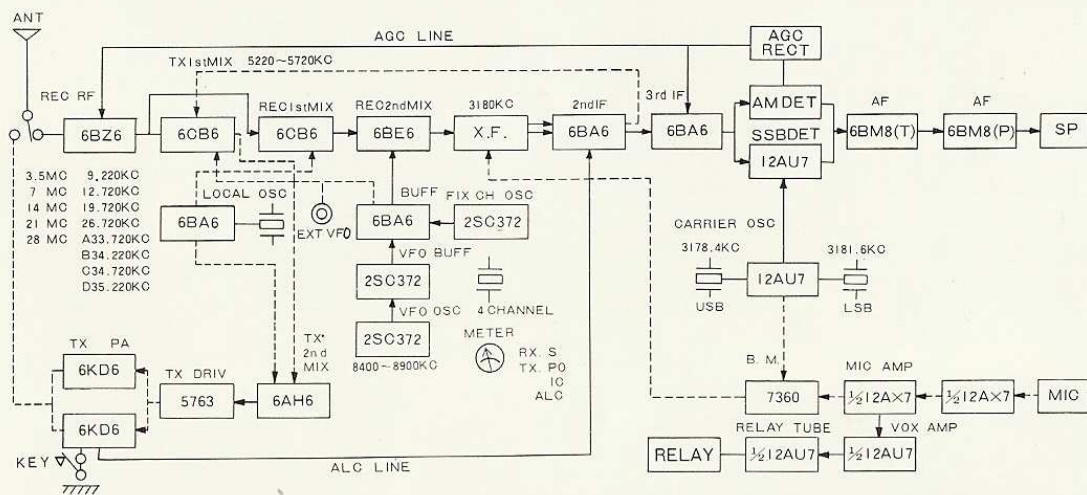
VOX CONTROLS are readily accessible under latched top cabinet panel. Antitrip, delay, and gain controls are provided which require minimum attention after initial setting.



SELECT CONTROL offers choice of internal or external VFO in addition to four switched crystal controlled positions for convenient preset channel operation. **FUNCTION CONTROL** selects desired transmitter operation **STBY** (Standby Position) **MOX**, (Manual Operation Transmit). **PTT** (Push to Talk), **VOX** (Voice Operation Transmit). In addition, both 100 KC and 25 KC dial calibration may be switch selected. **VOX** and Calibrators are built in to the FT dx 400.



CLARIFIER CONTROL is a new feature not normally available on present amateur equipment. In the RX position this control allows the operator to vary only the receiver frequency ± 5 KC for sharp signal reception. The control can also be placed in the TXRX position providing simultaneous control of both transmit and receive frequencies over a 10 KC range.



SPECIFICATIONS

FREQUENCY RANGE:

3.5-4 Mc, 7-7.5 Mc, 14-14.5 Mc,
21-21.5 Mc, 28-30 Mc (3 more 500 KC
receiver bands can be added)

FREQUENCY STABILITY:

Less than 100 c/s drift in any 30 minute
period after warm up.

ANTENNA IMPEDANCE:

50 to 120 ohm unbalanced.

MAXIMUM INPUT:

500W P.E.P. SSB, 440W CW, 125W AM.

CARRIER SUPPRESSION:

-40 db

SIDE BAND SUPPRESSION:

-50 db (at 1,000 c/s)

DISTORTION PRODUCTS:

Down at least 25 db

AUDIO BANDWIDTH:

300-2,700 c/s ± 3 db

RECEIVING SENSITIVITY:

0.5 μ V, S/N 20 db (14 Mc SSB)

SELECTIVITY:

2.3 Kc (-6 db), 3.7 Kc (-55 db)

IF AND IMAGE RATIO:

More than 50 db down

AUDIO OUTPUT:

1 watt @ 5% distortion

OUTPUT IMPEDANCE:

8 ohm, 600 ohm

TUBES AND SEMICONDUCTORS:

18 tubes, 9 transistors and 33 diodes

POWER SOURCE:

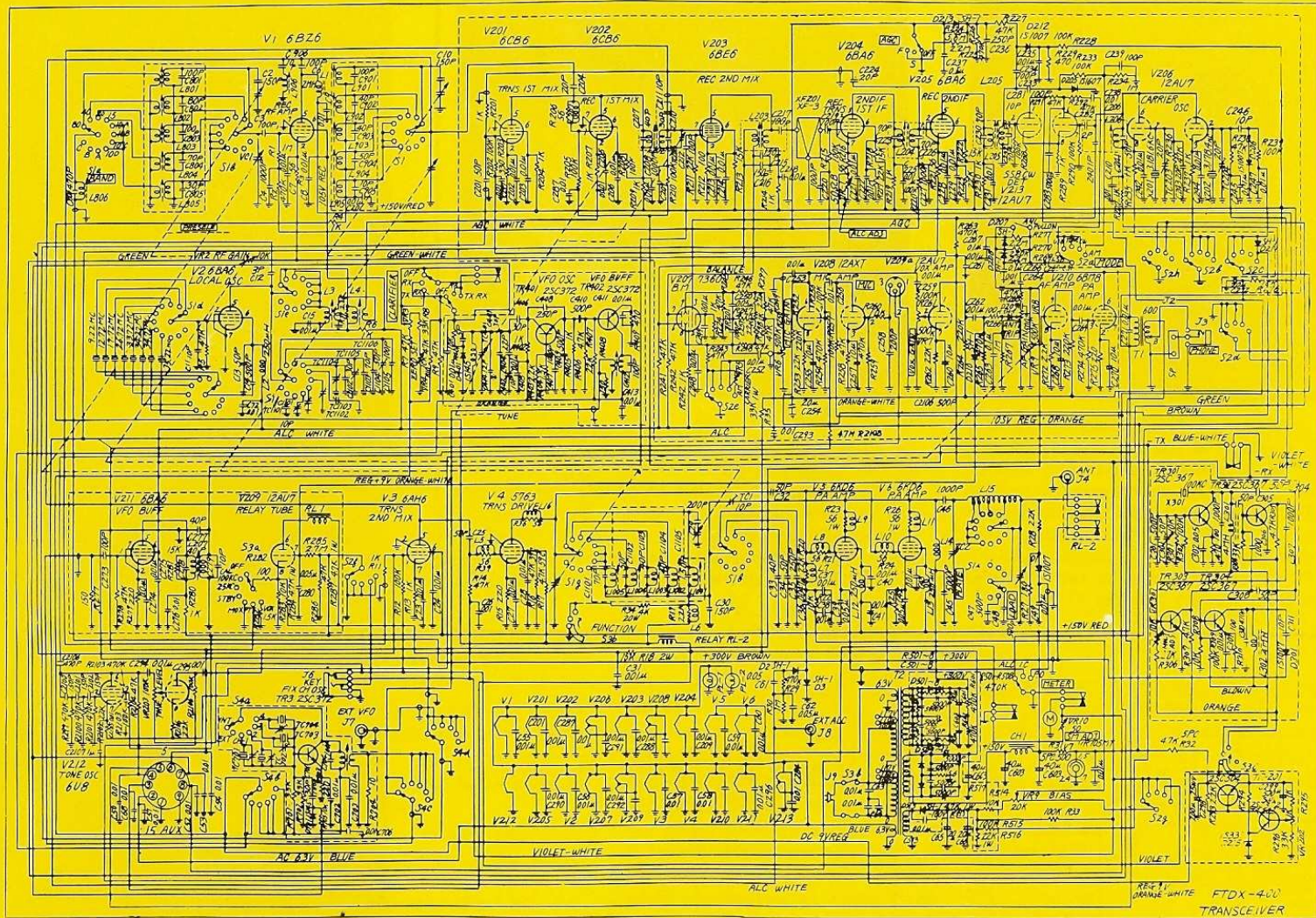
AC 117 or 220V volts, 50/60 c/s

DIMENSIONS:

15 $\frac{3}{4}$ wide, 6 $\frac{1}{4}$ high, 13 $\frac{3}{4}$ deep

WEIGHT:

50 pounds



SPECTRONICS

BOX

CALIFORNIA 90720, U.S.A.