

HF/50 MHz Transceiver

**FT-2000**

- IF DSP with WIDTH/SHIFT and Contour Tuning
- First IF Roofing Filters
- Dual In-band Receive
- Ultra-strong Receiver Front End with optional High-Q  $\mu$ -Tune Preselector
- 100 W and 200 W Versions Available



*The radio... YAESU*  
 Choice of the World's Top Drivers

HF/50 MHz Transceiver

**FT-2000** ■ 200 W Version with External Power Supply  
■ 100 W Version with Internal Power Supply

# Excellence The New Milestone



- Both 100-Watt (internal power supply) and 200-Watt (external power supply) versions available

The 100-Watt version may be operated either from AC mains power or from 13.8 V DC.



Photo: 200 W Version with External Power Supply

- Receiver Front End includes VRF (Variable RF Tuning) preselector

Yaesu's renowned VRF (Variable RF Filter), working in conjunction with a carefully-engineered bank of fixed bandpass filters, provides an adjustable first line of defense against strong out-of-band signals. The result is improved Dynamic Range and higher Intercept Point than on other designs with more elementary RF filtering.

- External High-Q Tuning for the 1.8 - 14 MHz bands

(optional  $\mu$ -Tune Units for 160 M, 80/40 M, and/or 30/20 M required)

Yaesu's new  $\mu$ -Tuning System, introduced on the FT Dx 9000, yields ultra-tight RF preselection, thanks to the high Q (300 or more) afforded by the large 1.1 inch (28 mm) diameter coils used in filter construction. As the ferrite tuning slug is passed through the coil structure, the center frequency is adjusted, and the 3 dB bandwidth is approximately  $\approx$ 12 kHz on 1.8 MHz.

# n Every Way n HF DX... FT-2000



Actual Size

■ **First IF Roofing Filters 3 kHz / 6 kHz / 15 kHz included (Main VFO-A)**

The 3 kHz Roofing Filter provides a significant increase in dynamic range under crowded band conditions.

■ **Strong receiver design provides wide dynamic range and high intercept point.**

In addition to the unmatched RF filtering, the FT-2000 design features a robust first mixer and careful gain distribution, for optimum performance.

■ **Wide array of IF-DSP interference-rejection filters (Main VFO-A)**

In addition to DSP-based Variable IF Bandwidth and IF Shift, Yaesu's exclusive Contour tuning allows you to reject or enhance an adjustable segment of the receiver passband, enhancing S/N ratio and incoming signal intelligibility.

■ **Dual Receive (in-band)**

As on the FT-1000MP-series transceivers, the FT-2000 is capable of Dual Receive within the same operating band.

■ **External display port for viewing of RF Scope, Audio Scope, and Oscilloscope displays**

(Optional Data Management Unit and monitor are required)

With the optional (external) DMU-2000 Data Management Unit connected to your monitor (not supplied), you can view a wide range of transceiver status information, as well as RX/TX passband, RF Band Scope, and signal quality displays.



•Specifications (FT-2000 100 W Version)

**General**

Rx Frequency Range: 30 kHz - 60 MHz (Operating)  
160 - 6 m (Amateur bands only)

Tx Frequency Ranges: 160 - 6 m (Amateur bands only)

Frequency Stability: ± 1.0 ppm (after 1 minute)  
± 14° F ~ +122° F (-10° C ~ +50° C)

Operating Temperature Range: 14° F ~ +122° F (-10° C ~ +50° C)

Emission Modes: A1A (CW), A3E (AM), J3E (LSB, USB), F3E (FM), F1B (RTTY), F1D (PACKET), F2D (PACKET)

Frequency Steps: 1.10 Hz (SSB, CW, & AM), 100 Hz (FM)

Antenna Impedance: 50 Ohms unbalanced  
16.7 - 150 Ohms unbalanced  
(Tuner ON 160 - 10 m Amateur bands, TX only)  
25 - 100 Ohms, unbalanced  
(Tuner ON 6 m Amateur band, TX only)

Power Consumption: RX (no signal) 70 VA  
(Input AC 117 V) RX (signal present) 80 VA  
TX (100 W) 450 VA

Supply Voltage: AC 90 VAC - 132 VAC or  
180 VAC - 264 VAC  
DC 13.8 V ± 10%

Dimensions (WxHxD): 16" x 5.3" x 14"  
(410 x 135 x 350 mm)

Weight (approx.): 33 lbs (15 kg)

**Transmitter**

Power Output: 5 - 100 watts (2 - 25 watts AM carrier)

Modulation Types: J3E (SSB): Balanced,  
A3E (AM): Low-Level (Early Stage),  
F3E (FM): Variable Reactance

Maximum FM Deviation: ± 5.0 kHz / ± 2.5 kHz

Harmonic Radiation: Better than -60 dB  
(160 - 10m Amateur bands)  
Better than -70 dB  
(6m Amateur band)

SSB Carrier Suppression: At least 60 dB below peak output

Undesired Sidband Suppression: At least 60 dB below peak output

Audio Response (SSB): Not more than -6 dB from 300 to 2700 Hz

3rd-order IMD: -31 dB @ 14 MHz 100 watts PEP

Microphone Impedance: 600 Ohms (200 to 10 kOhms)

AM (6 kHz, 10 dB S+N/N, 30 % modulation @ 400 Hz)  
3.2 µV (0.1 - 1.8 MHz)  
2 µV (1.8 - 30 MHz)  
1 µV (50 - 54 MHz)  
FM (BW: 15 kHz, 12 dB SINAD)  
0.5 µV (28 - 30 MHz)  
0.35 µV (50 - 54 MHz)

There is no specification in a frequency range without notation

Selectivity (-6/-66 dB): Main VFO-A  
Mode -6 dB -60 dB

CW/RTTY/PKT 0.5 kHz or better 750 Hz or less  
SSB 2.4 kHz or better 3.6 kHz or less  
AM 6 kHz or better 15 kHz or less  
FM 15 kHz or better 25 kHz or less  
(WIDTH: Center VRF: OFF)

Sub VFO-B  
Mode -6 dB -60 dB

CW/RTTY/PKT 1.1 kHz or better 3.0 kHz or less  
SSB 2.2 kHz or better 4.5 kHz or less  
AM 6 kHz or better 25 kHz or less  
FM 12 kHz or better 30 kHz or less

Image Rejection: 70 dB or better  
(160 - 10m Amateur bands)  
60 dB or better (6m Amateur band)

Maximum Audio Output: 2.5 W into 4 Ohms with 10% THD

Audio Output Impedance: 4 to 8 Ohms (4 Ohms: nominal)

Conducted Radiation: Less than 4000 µV

**Receiver**

Circuit Type VFO A: Triple conversion superheterodyne  
VFO B: Double-conversion superheterodyne

Intermediate Frequencies: VFO A: 69.450 MHz/450 kHz/30 kHz  
(24 kHz for AM/FM),  
VFO-B: 40.455 MHz/455 kHz

Sensitivity (RF AMP 2' ON): SSB (2.4 kHz, 10 dB S+N/N)  
2 µV (0.1 - 1.8 MHz)  
0.2 µV (1.8 - 30 MHz)  
0.125 µV (50 - 54 MHz)

Specifications are subject to change, in the interest of technical improvement, without notice or obligation, and are guaranteed only within the amateur bands.

•Rear Panel (100 W Version)




Options

 <b>DMU-2000</b> Data Management Unit <small>(After-market PC display and keyboard are required.)</small>	 <b>SP-2000</b> External Speaker	<b>External µ-Tuning Units (Base Kit required)</b>			 <b>Sub RX Collins CW Narrow Filter*</b> <b>YF-122C (500 Hz)</b> <b>YF-122CN (300 Hz)</b> <small>*One of these two filters may be installed.</small>	 <b>FH-2</b> Remote Control Keypad
		<b>160 M Band</b>  <b>MTU-160</b> µ-Tune Unit	<b>80/40 M Band</b>  <b>MTU-80/40</b> µ-Tune Unit	<b>30/20 M Band</b>  <b>MTU-30/20</b> µ-Tune Unit		

The FT-2000 has not been approved by the FCC. This device may not be sold or leased, or offered for sale or lease, until FCC approval has been obtained.

About this brochure: We have made this brochure as comprehensive and factual as possible. We reserve the right, however, to make changes at any time in equipment, optional accessories, specifications, model numbers, and availability. Precise frequency range may be different in some countries. Some accessories shown herein may not be available in some countries. Some information may have been updated since the time of printing; please check with your Authorized Yaesu Dealer for complete details.

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