<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Output:</td>
<td>100 Watts (33 Watts AM carrier)</td>
</tr>
<tr>
<td>Modulation Types:</td>
<td>JSC (SSB/FM): Balanced, AEs (AM): Linear (Early Stage), 3rd Order Distortion</td>
</tr>
<tr>
<td>Maximum FM Deviation:</td>
<td>550 kHz (class A)</td>
</tr>
<tr>
<td>Harmonic Radiation:</td>
<td>Better than ±70 dB (60 Hz)</td>
</tr>
<tr>
<td>SSB Carrier Suppression:</td>
<td>±50 kHz: 55 dB, ±500 kHz: 65 dB (Selectivity 65-60 dB)</td>
</tr>
<tr>
<td>Audio Response:</td>
<td>±50 kHz: 55 dB, ±500 kHz: 65 dB</td>
</tr>
<tr>
<td>Microphone Impedance:</td>
<td>600 Ohms (200 to 1000 kHz)</td>
</tr>
</tbody>
</table>

**Option**

- MD-206A4T: Peka-Tyke Dynamic Microphone
- MD-106AX: Deluxe Dynamic Microphone
- MH-31AS: Hard Microphone
- MH-36AS: JTFM Hand Microphone
- YH-77STA: Open-Air Stereo Headphone
- MIH-1: Side Carry Handle
- FP-1023 (USA Only): Internal Power Supply (1.8 VDC, 25 A)
- FP-1030: External Power Supply (1.8 VDC, 25 A)
- MMB-90: Mobile Bracket
- VL-1000: Linear Amplifier (1000 Watts, 1.2 VDC, 25 A)
- VP-1000: Power Supply
- CT-11B: Band Data Cable

**Specifications**

| Frequency Range: | 30 kHz to 56 MHz (Wartime) |
| Transmitter: | 100 kHz to 56 MHz (Normal performance) |
| TX Frequency Range: | 160 to 200 m (Amateur bands only) |
| Frequency Stability: | ±1 ppm (at 177°, 25°C, after warm-up) |
| Operating Temperature Range: | -14°F to 122°F, -3°C to +50°C |
| Meters: | 91 T141C4, 91 J144C1, 91 J164C1, 91 J184C1, 91 J204C2, 91 J224C2 |
| TX Frequency Range: | 1.8 MHz to 56 MHz (6 MHz) |
| Frequency Stability: | 21 ppm (21 kHz, 20°C) |
| Receiver: | Double-conversion superheterodyne |
| Intermediate Frequency: | 1st IF: 87.5 MHz, 2nd IF: 24 kHz |
| Sensitivity: | 10 kHz, 0 dB S/N |
| RF Power: | 100 W (peak) |
| Audio Output: | 6.5 kHz, 0 dB S/N |
| Selectivity: | 600 Hz, 0 dB S/N |

**New Features!**

- Key illumination
- Foot Stand
- 300 Hz/500 Hz/2.4 kHz CW IF Filters
- Classically Designed Main Dial and Knobs
- Bundled Dynamic Microphone, MH-21AS

**Contact Information**

- **VERTEX STANDARD CO., LTD.**
  - US Headquarters: 10960 Walker Street, Cypress, CA 90630, USA
  - YAESU UK LTD: 634, Reay Road, Witney, Oxfordshire, OX28 1BZ, UK
  - YAESU HK LTD: 31/F, Tower A, 1 Austin Road, Kowloon, Hong Kong
  - VERTEX STANDARD AUSTRALIA PTY, LTD.: 1040A/294 Bolivia Avenue, Burwood, NSW 3125, Australia

**Website:** [http://www.vxstd.com](http://www.vxstd.com)
Proven performance and technology with YAESU state-of-the-art IF DSP
The ultimate compact HF/50 MHz transceiver – YAESU FT-450D

HF/50 MHz 100 W All Mode Transceiver
FT-450D
with Built-in Automatic Antenna Tuner

The Real DX Receiver!
The 67.999 MHz 4 pole rooter filter (MCF) and a band-pass filters at the RF stages, provide excellent suppression of out-of-band interference.

The interference-fitting begins in the "IF" stages, with a double conversion heterodyne (1st IF 67,999 MHz / 2nd IF 24 kHz) system. The 8 band-pass filters at the IF input help eliminate out-of-band interference, followed by the RF Amp (SSOP30) x 3 that tend to the active DBM (1st local) assure excellent dynamic range. At the 1st IF stage, a powerful 4 pole rooter filter with a 10 kHz bandwidth and excellent shape factor, substantially reduces adjacent signal interference. Then, the YAESU high performance DSP at the 2nd IF stage / 24 kHz permits easy management of AGC, interference rejection, audio tone control, and noise reduction, for clear and quiet reception. The 32 dB IN (Amplifier) and FOC (Intercept Point Optimization) feature allow the operator to optimize the characteristics of the receiver front end to improve receiver dynamic range.

World-Class Performance in an easy-to-operate HF/50 MHz transceiver package with Yaesu's unique IF DSP.

The legendary YAESU IF DSP system, well regarded among top and world-class DX operators, is now available in an easy-to-operate package. The new IF DSP system uses an ANALOG DAC (WAU4W) and DSP (FAC128T-82), with high speed 16-bit, floating point architecture, designed around the Yaesu unique objective of "Enhanced Transmit Signal Quality" and "Advanced Receiving Interference Suppression". These features are named in one name base, FT-450D/50 MHz Transceiver ideal for everyone, new licensee or various DX operator.

Outstanding CW Features

- Selectable 300 Hz/50 Hz/3.4 kHz CW IF Filters
- Built-in Electronic Keyer
- Speed adjustable between 4 WPM and 60 WPM
- Weight (Dot/Dash Ratio) adjustable
- CW TR Memory (80 memories from 30 ms to 3000 ms)
- CW Beater - Up to 118 characters using the CW message keyer
- CW Pitch Adjust (between 400 to 800 Hz, in 100 Hz steps)
- CW Spacing (Zero-Balancing) function
- CW Reverse provides BFO injection from LSB-side instead of default USB-side
- CW Slow Transmitter
- CW Keying on SSB modes
- CW Keying using Up/Down keys on the microphone
- CW Training feature sends random Morse Code via the built-in sidetone generator

Operate anywhere using optional internal or external antenna tuning systems!

The FT-450D's ATU (Automatic Antenna Tuner) includes 100 memories for quick tuning during field operation when using a billet dipoles, etc. In addition, the YAESU original and unique Antenna Tuning Systems, such as the External Automatic Antenna Tuner ATU-150 for mobiles, are ready to be automatically operated with the FT-450D front panel controls.

Large informative Front Panel Display with convenient Control knobs and Pushbuttons

Even though it is a convenient compact size (9 3/4\" x 3\" x 8\") / 229 x 84 x 217 mm), the FT-450D has a large and bright display, almost identical to the original panel. The original LCD negative type display shows the frequency, S-meter, a Graphical indication of RF IF settings, and the DSP Interference Elimination settings (Contour, Notch, DNR, Width and Shift). The icons and function pushbuttons are easy to identify and operate, KPY, MC and PHONE jacks are provided on the front panel for handy access.

The rugged aluminum die-cast chassis with large cooling fan is made for heavy-duty extended high power operation.

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The rugged aluminum die-cast chassis with large cooling fan is made for heavy-duty extended high power operation.

The newly designed push-pull power MOSFET (RF/1000W) amplifiers guarantees powerful and reliable 100 W output power. The FT-450D's rugged 490x320x100mm (19x13x4"") size (WxHxD) is quarter the size of a typical amplifier, and the power amplifier enables long hours of field use or home contesting operation.

Digital Microphone Equalizer
FT-450D has a unique Digital Microphone Equalizer with 10 preset filters. The custom settings may be set to match your voice characteristics for maximum power and punch, designed for optimal DX operation.

DPS VOX Operation
VOX operation is controlled by the DSP system! Easy to use and seamless Voice Operation TX/RX control with this latest technology!

Digital Voice Announcement Feature
FT-450D's 40-voice announcement feature will announce the Frequency, Mode and S-meter readings.

Additional features to support the FT-450D operation:

- Large, Easy-to-read digital 5-meter peak hold capability
- QRM (Quick Memory Bank)
- Key lock
- Phone mode
- Memory backup memory channels that may be separated into as many as 13 Memory Groups / TXW to monitor the transmit frequency when operating on a group engaged is clarifier klunk in / TXO for increased clarity, / TXW for group select / TXO for clarifier klunk in the frequency band
- A memory bank/phone mode
- 7-function key lock feature
- 7-function panel lock feature
- Select for your favorite operating environments
- Clock function
- User Switch to recall a favorite Menu Selection directly / TXO (Transmitter Time Out Time) / TXO: Various Scan functions
- CAT System (D-sub 9 pin for Computer Control)
- Gain control capability with 3x5 Dedicated Microphones Included