**Specifications**

**General**
- **RF Frequency Range**: 26 MHz - 144 MHz (receiving) 70 MHz - 144 MHz (transmitting)
- **TX Frequency Range**: 144 MHz - 146 MHz (Amateur bands only)
- **Antenna Impedance**: Unspecified
- **Power Consumption**: Less than 1.5 A
- **Supplied Accessories**: AC Power cord, 2 x batteries, Owner's manual

**Transmitter**
- **Output Power**: 150 watts (10 watts AM carrier)
- **Modulation**: AM, FM, NBFM
- **Maximum FM Deviation**: 5 kHz (9 kHz - 10 kHz)
- **Harmonic Radiation**: Better than -40 dB (160 - 180 MHz amateur bands)
- **Audio Response**: 100 Hz to 15 kHz (10 kHz - 20 kHz)
- **Microphone Impedance**: 600 Ohms (1000 Ohms maximum)

**Circuit Type**
- **Intermediate Frequency**: 65 MHz
- **Transmit Bandwidth**: 5 kHz
- **Squelch Sensitivity**: 0.5 μV

**HF/50 MHz All Mode Transceiver FT-450**

**COMPACT HF/50 MHz TRANSCEIVER WITH IF DSP**

**2nd IF DSP**
- Frequency range: 24 kHz

**Options**

**MD-1050**
- Deluxe Speaker Muff (unspecified)

**MD-1060**
- Deluxe Headphones

**MD-1360**
- Deluxe Headphones

**MP-3062**
- Single 8-ohm Headphones

**TY-7727**
- Deluxe Speaker Muff (unspecified)

**MSL-90**
- Deluxe Speaker Muff (unspecified)

**MHC-1**
- Deluxe Headphones

**VU-1000**
- Deluxe Speaker Muff (unspecified)

**VP-1000**
- Deluxe Speaker Muff (unspecified)

**ATAS-1200**
- Active Testing Antenna System

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**ATSK-100**
- Deluxe Speaker Muff (unspecified)

**VERTEX STANDARD CO., LTD.**

**US Headquarters**

**AYAESU EUROPE B.V.**

**AYAESU UK LTD.**

**AYAESU STANDARD HK LTD.**

**AYAESU STANDARD AUSTRALIA P/L.**
Proven performance and technology of **YAESU - state-of-the-art IF DSP**

The ultimate compact HF/50 MHz transceiver - **YAESU FT-450**

**HF/50 MHz All Mode Transceiver**

**FT-450** Automatic Antenna Tuner ATU-450 optional

**FT-450AT** with built-in ATU-459 Automatic Antenna Tuner

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**The Real DX Receiver!**

The 67.595 MHz 4 pole rooftop filter (MCF) and 6 band-pass filters at the RF stage provide excellent supression of out-of-band interference.

The interference rejection begins in the 3rd stage, with a double conversion superheterodyne (1st IF 67.899 MHz / 2nd IF 24 MHz) system. And 6 band-pass filters at the RF input that help to eliminate out-of-band interference. Followed by the 1st IF 24 MHz (2x3) in line to the active BPF (the filter) will provide its excellent dynamic range, with its 14 dB IF stage, a powerful and excellent stage for a 2 pole rooftop (filter) with a bandwidth of 100 Hz, substantially reduces adjacent signal interference. Then, YEASU’s high performance DSP at the 2nd IF stage / 54 MHz permits easy management of AGC, interference rejection, audio time control and noise reduction, for clear and quiet reception. The 24 dB ATU (Automatic) and IPD (Intercept Point Optimizer) features allow the operator to optimize the characteristics of the transverter front end to improve its dynamic range.

---

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

The key feature of the FT-450 DSP system is that it is activated among top and world class DX operators, is now available to the average ham. The new IF DSP system uses an AUDIO IF53538 IC, ANALOG DEVICES, high-performance 16-bit multi-stage architecture. Designed and programmed with unique objectives of “Enhanced Transmit Signal Quality” and “Advanced Receiving Interference Suppression.” These features work in one easy to operate HF/50 MHz Transceiver. Ideal for everyone, new licensee or serious DX operator.

---

**Independent Fast IF SHIFT Control**

Vary the IF SHIFT higher or lower for interference elimination.

**Digital Noise Reduction (DNR)**

The DNR system analyzes the profile of the noise found on the IF and 50 MHz bands. Random noise is reduced and the sound is enhanced.

**DSP VOX Operation**

VOX operation is controlled by the DSP system. Entry smooth and seamless Voice Operated TRVOX control with this latest technology!

---

**Proven performance and technology of **YAESU - state-of-the-art IF DSP**

The ultimate compact HF/50 MHz transceiver - **YAESU FT-450**

**Outstanding CW Features**

- Built-in Electronic Keyer
- Speed adjustable between 5 WPM and 60 WPM
- Weight (24 lbs) adjustable
- CW T/R Recovery Delay programmable from 30 ms to 3000 ms
- CW Return; up to 14 characters using CW message keys or 3 memory keys
- CW Pilot Adjustment (between 200 Hz to 400 Hz in 100 Hz steps)
- CW Splitting (Zero-Detection) function
- CW Receives provides IPD adjustment from 20 dB instead of default USB-mode
- CW Silencer (300 Hz)
- CW Keying on NO modes
- CW Keying using USB keying on the optional Microphone (M-31x or MI-M30x)
- CW keying features random Morse Code via the built-in sidetone generator

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**Operate anywhere using optional internal or external antenna tuning systems!**

(The ATU-459 Antenna Tuner is included in the FT-450AT)

The FT-450’s ATU (Automatic Antenna Tuner) includes 100 memories for quick tuning during field operation when using a mobile dipoles, etc. YAESU’s original and unique Antenna Tuning systems, such as External Antenna Tuner TC-60 or Antenna Tuning Antenna System ATAS-120 for mobiles, are needed to be automatically associated with the FT-450 front panel controls.

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**Additional features to support your operation!**

- Large, easy-to-read digital meter with peak hold function
- 4000-point (128x32) Dynamic Memory Bank (with Memory Search, up to 500 memory channels that can be assigned to individual Antenna Groups)
- ATU can monitor the transmit frequency during transmit operation (RF T/R operation while leaves ATU OFF), etc.
- Built-in DTMF for transmit keying ( cw 13 Freq 97G C, c3 Freq 12G C, etc.) for Digital Voice Recorder, etc.
- Dedicated Data jack for “pass-through” operation (Single Frequency Operation, etc.)
- Built-in Multi-Modes - a radio with a built-in DTMF with Modem, etc.
- Automatic Main Tuning Dial Tones (SW/AM/FM)
- Switches for “local” or “remote” operation
- 20-bit (Transmitter Time Out Timer) Automatic Switch for CW operation
- 3-way (AM/SSB/AM) tuning
- 65-bit processor (16+8+3) for Computer Programming
- Instant capability of using optional Microphone 547EX (incl.)

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