# FT-1500M

**50 W 144 MHz FM Mobile Transceiver**

YAESU
*Choice of the World's top DX'ers* SM

VFO
145.000
BUSY/TX

Actual Size

# Raising The Standard for Toughness
# FT-1500M Solid As A Rock

**The Yaesu FT-1500M will go down in history as yet another landmark in radio engineering and further enhances Yaesu's legendary reputation for tough durable construction and precedent setting design.**

Yaesu's FT-1500M, a masterpiece of RF and mechanical engineering, is a trend-setting blend of compactness and functionality. The Yaesu FT-1500M is the most quiet and efficient radio transceiver ever built. Excellent receiver performance, direct keypad frequency entry, Alpha-Numeric Memory System, and 50 Watts of output power, and DB-9 data port are just the start!

## Greater operating Efficiency

Yaesu's FT-1500M represents a technological breakthrough in radio transceiver design! New advances in power amplifier technology combine to provide you with 50 Watts of clean transmit power with enhanced current consumption efficiency. Yaesu's patent pending aluminum die-cast shell construction dissipates heat throughout the entire transceiver chassis and eliminates the need for an external thermally switched cooling fan. This allows the FT-1500M to fit in an incredibly small case size: less than 5 inches square X 1.4 inches high (weighing a mere 960 grams) and offer superior operating specifications as well!

## Better Receiver Performance

The FT-1500M's receiver section is as tough as its construction. It features Yaesu's renowned RF ATT (Advanced Track Tuning), that allows for outstanding spurious image rejection. The automatic tracking bandpass filter used in the ATT system protects the RF receiver section from strong out-of-band signals that can result in intermodulation and adjacent band interference in lesser quality transceivers! The FT-1500M's wide band receiver covers 137 to 174 MHz. The FT-1500M can monitor Amateur, Public Safety, and Weather Band stations with ease, keeping you in touch with all the action in your community!

## Easy Data Interfacing

For packet operation at either 1200 bps or 9600 bps, The FT-1500M is conveniently equipped with a DB-9 data jack located on the rear chassis for neat and organized data interfacing. The DATA jack provides connection points for transmit data, receiver audio, PTT, and ground. Signal levels, bandwidths, and impedance levels are all optimized for the user selected data rate for maximum throughput.

# FT-1500M
## 50 W 144 MHz FM Mobile Transceiver

Actual Size

## Extensive Memory System

The FT-1500M includes a total of 149 memory channels, including 130 "regular" memories, 9 pairs of subband-limit memories, and an instant-recall "Home" channel you can program with frequently-used repeater information. Al I memory channels will store CTCSS enc/dec, user selected power output level, scanning status ("Skip" or "Stop"), and user programmed Alpha-Numeric titles.

## Alpha-Numeric Channel Display

Memory channels may be displayed either with the channel frequency or a personalized Alpha-Numeric title for easy channel recognition. Up to six letters, numbers, or characters are conveniently programmed from the FT-1500M control panel or optional ADMS-2F PC software.

## MH-48B6J DTMF Direct Access Microphone

The backlit MH-48B6J Microphone allows direct keypad frequency entry and memory channel recall. With the PTT button keyed the MH-48B6J allows manual entry of DTMF tones for autopatch use. The FT-1500M also includes an 8-memory, 16-digit DTMF autodialer. Four user-programmable keys on the microphone may be configured for easy control of user selectable operating functions.

## 50-Tone CTCSS Encode and Decode Built In

For easy repeater access or silent monitoring of busy channels, CTCSS Encoder and Decoder circuits are built into the FT-1500M. CTCSS data may be stored independently in each memory channel. The FT-1500M includes a CTCSS "Tone Search Scan" feature which lets you search for the CTCSS tone on an incoming signal.

## Selectable Power Output

Power output levels are user selectable in four steps: 50/25/10/5 Watts. The power selection can be stored into memory, allowing you to conserve power while operating on strong local repeaters. Current drain at full (50 W) power output is 8 Amps maximum, much less than any other radio transceiver.

## Weather Band Memory Bank

The FT-1500M includes a separate 10-channel Weather Band Memory Bank for quick and easy access to NOAA weather broadcast information in your area without having to scan through your regular memories! Alpha-Numeric titles may be programmed for Weather Band channels, as well!

## Versatile Scanning Capability

The FT-1500M's high-speed scanning function includes a choice of scanning modes: carrier drop or time delay. Scanning is provided in the memories, the Weather Band, the VFO, or a limited VFO sub-band. You can program any memory to be skipped during scanning, too.
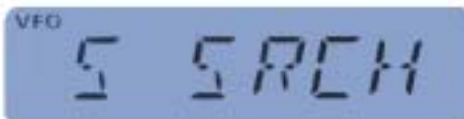
## Smart Search™

The Smart Search™ feature may be used to automatically program a special bank of up to 31 memory channels, based on radio activity. Smart Search™ will sweep either the entire band or the portion of the band within the programmable band-scan limits, and will load frequencies on which activity is found. Smart Search™ is very helpful when visiting an area for the first time, allowing you to identify and automatically program channels where the action is!

## Wide/Narrow Deviation Selection

For operation in areas of extreme channel congestion, the FT-1500M may be set to a "Narrow Deviation" mode which will set the transmitter deviation at ±2.5 kHz.

## Convenient Programming Menu

The Menu system includes 35 transceiver settings, alphabetically arranged, allowing the operator to "Set and Forget" many operating parameters of the FT-1500M. The Menu may be accessed either via the top-panel's [SET] key or the microphone's [A] key or programmed with the optional ADMS-2F software kit.

## And Much More. . .

Additional features include: ●Supply Voltage Display ●Transmit Time-Out Timer (TOT) ●Automatic Power-Off (APO) ●Automatic Repeater Shift ●S-Meter RF Squelch ●Bell Alert CTCSS Paging ●Priority Channel Revert during Scan

### General

| | |
|---|---|
| Frequency Range | :TX 144-148 MHz |
| | RX 137-174 MHz |
| Channel Step | :5/10/12.5/15/20/25/50/100 kHz |
| Frequency Stability | :Better than ±10 ppm |
| | (−20°C to +60°C) |
| Mode of Emission | :F2, F3 (G3E) |
| Antenna Impedance | :50 Ω, unbalanced |
| Supply Voltage | :13.8 V DC(±10 %), |
| | negative ground |

Current Consumption(typical) :
  RX:less than 0.6 A(signal)
    Less than 0.3A(squelched)
  TX:8 A(50 W)/6 A(25 W)/
    3 A(10 W)/2 A(5 W)

Operating Temperature Range :
  −20°C to +60°C(−4 F to +140 F)

Case Size :127(W)×35(H)×126(D) mm
  (5"×1.4"×4.9") (w/o knobs)

Weight :990g(2.2 lb.)

### Transmitter

| | |
|---|---|
| Output Power | :50/25/10/5 W |
| Modulation Type | :Variable Reactance |
| Maximum Deviation | :±5 kHz/±2.5 kHz |
| Spurious Radiation | :Better than −60 dB |
| Microphone Impedance | :2 kΩ |

### Receiver

| | |
|---|---|
| Circuit Type | :Double-Conversion Superheterodyne |
| Intermediate Frequencies | :21.7 MHz & 450 kHz |
| Sensitivity(for 12 dB SINAD) | :Better than 0.2 $\mu$V |
| Selectivity(−6/−60 dB) | :12 kHz/28 kHz |
| IF Rejection | :Better than 70 dB |
| Image Rejection | :Better than 70 dB |
| Maximum AF Output | :3.5 W into 4 Ω@10% THD |

Specifications subject to change without notice or obligation.

External Speaker
**SP-7**

High-Power External Speaker
**MLS-100**

AC Power Supply(25A)
**FP-1023**

AC Power Supply(30A)
**FP-1030A**

Memory channel programming is a breeze with the optional ADMS-2F™ Windows PC Programming Software. The handy kit includes a 3-1/2" diskette and a programming interface cable. Use your computer to create and store frequency files for each city you visit, or FOR cloning groups of transceivers for public-service events!

PC Programming Software™
**ADMS-2F Windows**

## Control and Switches

UP/DWN:
  Scanning/Memory Channel Selection

Keypad: Direct Frequency Entry,
Memory Recall, DTMF Entry,
XCVR Commands

PTT: Press to Transmit

P1: Programmable Key
  Default Function: Monitor (Squelch Off)

P2: Programmable Key
  Default Function: Smart Search

VOL: Volume Control

MHz(SET):
Tuning in 1-MHz steps;
Hold for 1 Sec. for Menu Mode

REV(DW):
  Repeater Reverse;
  Hold for 1 Sec. for Dual Watch

LOW(A/N):
  TX Power Selection; Hold for 1 Sec.
  for Alpha-Numeric Channel Labels

D/MR(MW):
  Selects Dial or Memory Operation;
  Hold for 1 Sec. to Store a Memory

LOCK: Disables Microphone Keys
  (PTT Locking available)

LAMP: Keypad Illumination On/Off

P4: Programmable Key
  Default Function:
  Repeater Reverse

P3: Programmable Key
  Default Function:
  Tone Search

DIAL: Main Tuning Dial,
  Memory Channel Selector

Versatile Mounting Options
The FT-1500M's Mobile Mounting Bracket allows the transceiver to be mounted above or below a mounting surface.

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. 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.