YAESU
Radio for Professionals

The new Evolving Super-DX + ASP

144/430MHz FM 55/50W **Dual Band Mobile Transceiver**

FTM-150R*ASP*

(FTM-150E*ASP* : Europe)

● **SDX+ASP** — **Super-DX RF Front-End Design and Audio Signal Processor improve reception of weak signals**

● **PMG** — **Up to 5 frequencies can be registered and easily monitored in the Primary Memory Group function**

● **DUAL SPEAKER SYSTEM** — **The front speaker and rear speaker, provides a total of 6W for loud and high quality audio**

Full Featured 55/50W 144/430MHz FM Dual Band Transceiver

FTM-150RASP

《FTM-150EASP: Europe》

Super DX | ASP Audio Signal Processor | Bluetooth® | microSD Card

【PMG: Primary Memory Group】 Up to 5 frequencies can be registered and then easily monitored

The reception status of PMG channels is displayed with a bar graph in the PMG screen. Two channels with signals are automatically received simultaneously.
The AUTO or MANUAL mode is switchable by pressing and holding the Right DIAL knob. In MANUAL mode, transmission and reception will stay on the manually selected channel (Main channel), which is useful for monitoring on one desired channel. A signal received on the other channels is shown on the screen and the audio can be heard, while the Main channel will continue to receive signals.
The AUTO mode simultaneously shows up to two channels when signals are received. Transmit is automatically moved to the first received channel.

Current Frequency
Current Channel (Box around text)
Bar graph of the receiving signals (Clears after 2 seconds)

● The volume of Main channel can be adjusted with the right VOL/SQL knob, and the volume of other channels can be adjusted with the left VOL/SQL knob.

■ MANUAL Mode

Receive and transmit on Main channel. Scan other channels simultaneously.

→ Receive signal on P3 →

Receive signal P3 and audio is heard. Other channels will continue to be scanned.

→ Receive signal on P5 →

Receive signals P3 and P5, and both are heard at the same time. When P5 signal disappears, scanning will resume while hearing P3 audio.

Press and hold the Right DIAL knob

■ AUTO Mode

Receive a signal on P3, receive and transmit on P3. Scan other channels.

→ Receive signal on P2 →

Receive a signal on P2, receive and transmit channel automatically moves to P2. Other channels will continue to be scanned.
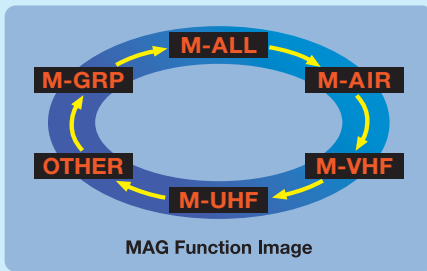
→ Receive signal on P4 →

When a signal is received on P4 while receiving a signal on P2, scan stops and audio on P2 and P4 is heard. Transmit is on P2.

Memory Auto Grouping (MAG)

The Memory Auto Grouping (MAG) function automatically enables Memory Channels to be categorized in each band, and then the Memory Channels can be quickly recalled by Band groups. By pressing the [BAND](SCOPE) key while operating on a Memory Channel, the bands will switch in the order of each band. In "M-GRP" (My Group), memory channels can be set to M-GRP regardless of the frequencies. In "M-ALL", the MAG function is turned off and all memory channels are recalled.

M-ALL
M-GRP — M-AIR
OTHER — M-VHF
M-UHF

MAG Function Image

CFL (Customized Function List) Registering up to 9 Functions Ensures Easy and Smooth Operation

A single-press of the [F] key reveals up to 9 functions and their setting statuses at a glance. The functions may be directly executed, or the settings changed on the same screen.

M->V | KEYPAD | TX PWR
RPT REV | RPT ARS |
| | >

Customized Function List Screen

【Dual Receive】 ←→ 【Scope Operation】

Press and hold the [BAND](SCOPE) key to switch between dual reception and scope operation. The scope screen shows the marker "▼" channel and displays the activity and signal strength of up to 47 channels (up to 23 channels in memory mode) in real time. Rotating the Left DIAL knob moves the center frequency. A received signal at the center frequency is heard. Rotating the Right DIAL knob moves the marker and allows you to receive the signal of the marker frequency. Press PTT to transmit on the marker frequency at any time.

【Dual Receive】

145.360 433.000

Press and hold the [BAND] (SCOPE) key

【Scope Operation】

145.360

Rotate the Left DIAL knob to move the displayed frequency range without moving the center marker

Rotate the Right DIAL knob to move the marker to select the receive frequency

145.740

145.200
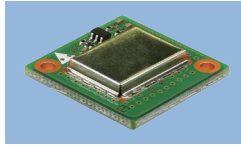
Super-DX
+
ASP (Audio Digital Signal Processor)

Super-DX

The new Super-DX function can increase the RF amplifier gain to improve reception sensitivity when the received signal is weak, making weak signals easier to hear and extending communication range.

ASP: Audio Digital Signal Processor

YAESU's ASP (Audio Digital Signal Processor) is a highly effective noise canceling function that digitally processes the received signal in the AF to separate and remove noise components, bringing out the voice components. The voices difficult to hear buried in noise can be heard with clear audio quality.
ASP works in conjunction with the Super-DX function, which increases reception sensitivity.

Dual Speaker System produces High-fidelity Audio

The total audio output of 6W (3W main unit and 3W front speaker) ensures reliable communication with clear, high-quality sound, even in noisy environments. The 3W front speaker inside the control-head, ensures clear and powerful audio output. The front speaker is positioned inside the front head. Even in separate operation where the main-unit is installed under the seat, comfortable operation is possible without adding an external speaker.
The volume balance between the front speaker and main speaker can be adjusted from 0 to 100% to make it easy to hear depending on the installation situation.

Internal Speaker

Front Speaker

Dual Speaker System Image

Advanced Functions that Ensure Ease of Operation

Wide-band Reception

The FTM-150R/E provides continuous wide-range receiver coverage from 108MHz to 499.995MHz. The communication modes support analog FM modes, and AM (Air band receive).

True Dual Band Operation (V+V/U+U/V+U/U+V), Independent knobs and LED indicators for each band

Two independent receiver circuits provide true dual-band operation, whether in the same band or in different bands (V+V/U+U/V+U/U+V).
In addition, the dial knobs, VOL/SQL knob, and LED indicators for each band are placed independently on the left and right sides of the control head, making it easy to see the status of each band and allowing intuitive operation.

Controls for each band are placed independently on the left and right

High-resolution Graphical Dot-matrix Display

The large, high-resolution full-dot LCD display provides excellent operability with a wide range of functions, including frequency display, PMG function, scope operation, and menu screen, all with an easy-to-understand display.
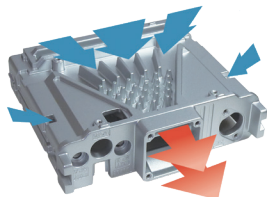
Large 1103 Memory channels

The 999 Memories, 4 "Home" channels and 50 sets PMS Memories are programmable with 8 alpha-numeric characters for easy recognition.

Memory Data Transfer to the VFO Register

By pressing and holding the [BAND] (SCOPE) key when in the Memory mode operation, the memory data of the currently selected Memory Channel can be transferred into the VFO register. VFO operation can be performed without changing the communication setting.

FACC (Funnel Air-Convection Conductor) cooling system, Ensures Stable High-Power Output

FACC Wind Tunnel construction gathers cool air through the wide front opening and side air intakes, and directs it to the final amplifier area and then out the rear cooling fan. This efficient cooling system ensures stable transmit power for sustained long distance communications.
FACC: Funnel Air-Convection Conductor (Wind Tunnel)

Angle variable Swing-head ensures Excellent visibility

Additionally, by attaching the optional Swing-head kit (SJMK-500) to the control-head, flexible angle adjustment is possible. Even when the installation space is limited, operation can be from the best angle.

*Optional control-head extension cable "SCU-62" or "CT-132" is not required.

Swing-head kit: SJMK-500 (Optional) Installation Image

Control-head with Microphone jack

The FTM-150R/E provides microphone connections to either the control-head or the front of the transceiver unit. Comfortable mobile operation is provided with a variety of installation options.

Hands-free Bluetooth® Operation

Installing the optional Bluetooth® unit (BU-5), permits wireless operation using a Bluetooth® headset (SSM-BT20: optional) or a commercially available headset*.
The SSM-BT20 operates for approximately 20 hours on a single charge.

· Although other commercially available Bluetooth® headsets can be used, the operation of all Bluetooth® products is not guaranteed. We recommend using the Bluetooth® headset SSM-BT20.

SSM-BT20
Bluetooth® Headset

Voice Guide and Recording Function

The optional Voice guide unit (FVS-2) announces your current operating frequency, or band change. You can record up to 5 minutes of received audio, or continuously record the last 30 seconds of received audio.

microSD Card Slot

The FTM-150R/E accepts microSD cards (up to 32 GB) for storage of Memory back-up and other useful information. Using an SD card, it is also possible to clone the radio data to other compatible radios.

Other Practical Features

- Large-capacity 1103 Memory channels
- Split Memory function
- Memory Data Transfer to the VFO Register
- VFO band skip function can be set to hide the unused bands
- Built-in: CTCSS; DCS; and Pager (EPCS) encode/decode functions, enable the Selective Call features
- VOX (Voice Activated Transmit) Operation
- Illuminated keyboard to assist operation in dark or poor lighting
- Amber and white selectable backlight color

- Sub-band Off Function that displays frequency in large size numbers

- ARS (Automatic Repeater Shift)
- Automatic Power Off (APO)
- Time-out Timer (TOT)
- DTMF Encode
- DTMF Memory
- Compatible with microSD memory cards
- Keylock function
- NOAA Weather alert: when available in-service area*
  * Check local regulations for availability in your region.

SSM-85D multifunctional microphone with a DTMF provides the user with quick access to major functions (Supplied accessory)

DOWN key   UP key

PTT key

[MUTE] Audio Mute
[1] to [0] Enters the numbers and letters
[*] Changes the VFO/Memory operating modes of the operating band
[#] Changes the VFO/Band scope operating modes
[A] Switches to left side band
[B] Switches to right side band
[C] Adjusts the squelch level
[D] Switches to the scope display
[P1] Second PTT function*
[P2] Recalls HOME channel*
[P3] Selects TX power*
[P4] Switches WX channel or T-CALL*
      (Depends on the transceiver version)
*[P1] to [P4] Assignable from 11 functions

Specifications

General

Frequency Range:	RX:	108 - 137MHz (AIR Band)
		137 - 174MHz (144MHz HAM / VHF Band)
		174 - 400MHz
		400 - 550MHz (430MHz HAM / UHF Band)
	TX:	144 - 148MHz or 144 - 146MHz
		430 - 450MHz or 430 - 440MHz
		(Depends on the transceiver version)
Channel Steps:		5, 6.25, (8.33), 10, 12.5, 15, 20, 25, 50, 100kHz
		(8.33kHz: Only for Air band)
Frequency Stability:		±2.5ppm -4°F to +140°F (-20°C to +60°C)
Emission Type:		F2D, F3E
Supply Voltage:		Nominal 13.8V DC, Negative Ground
Current Consumption:		0.5A (Receive)
		11A (55W TX, 144MHz)
		10A (50W TX, 430MHz)
Operating Temperature:		-4°F to +140°F (-20°C to +60°C)
Case Size:	Radio Unit	5.47"(W) x 1.66"(H) x 5.23"(D) (139 x 42 x 133mm) w/o Fan
	Controller	5.82"(W) x 2.2"(H) x 2.2"(D) (148 x 56 x 56mm) w/o Knob
Weight (Approx.):		2.64 lbs. (1.2kg) Transceiver Unit with Control-head

Transmitter

RF Power Output:	55W (144MHz), 50W (430MHz) / 25W / 5W
Modulation Type:	F2D, F3E: Variable Reactance Modulation
Maximum Deviation:	±5kHz
Spurious Emission:	At least 60dB below
Microphone Impedance:	2kΩ
Data Jack Impedance:	10kΩ

Receiver

Circuit Type:	Double-Conversion Superheterodyne
Intermediate Frequencies:	1st: MAIN 56.75MHz SUB 55.85MHz 2nd: 450kHz
Sensitivity:	0.8µV TYP for 10dB SN (108 - 137MHz, AM)
	0.2µV for 12dB SINAD (137 - 140MHz, FM)
	0.2µV for 12dB SINAD (140 - 150MHz, FM)
	0.25µV TYP for 12dB SINAD (150 - 174MHz, FM)
	0.3µV TYP for 12dB SINAD (174 - 222MHz, FM)
	0.8µV TYP for 10dB SN (300 - 336MHz, AM)
	0.25µV TYP for 12dB SINAD (336 - 420 MHz, FM)
	0.2µV for 12dB SINAD (420 - 470 MHz, FM)
	0.2µV for TYP 12dB SINAD (470 - 550MHz, FM)
Selectivity:	NFM, AM 12kHz / 30kHz (-6dB / -60dB)
AF Output:	3W (8Ω, THD 10%, 13.8V) Front Speaker
	3W (8Ω, THD 10%, 13.8V) Internal Speaker
	3W (8Ω, THD 10%, 13.8V) External Speaker
AF Output Impedance:	8Ω
Strength of secondary radio waves:	4nW and below

■ Specifications are subject to change without notice, and are guaranteed within the amateur bands only.   Frequency ranges and functions will vary according to transceiver version; check with your dealer.

Options

*Optional extension cable "SCU-62" or "CT-132" is not required.

SJMK-500 Swing-head kit	MMB-103 Dash Mount Bracket	Control-head Extension Cable SCU-62 10ft (3m) CT-132 20ft (6m)	MEK-5 Mic Extension Kit 10ft (3m)	BU-5 Bluetooth® Unit	FVS-2 Voice Guide Unit
FP-1030A*1 AC Power Supply (25A)	FP-1023*2 AC Power Supply (23A)	SSM-85D*3 DTMF Microphone	MH-42C6J Microphone	SSM-BT20 Bluetooth® Headset	MLS-100 High-Power External Speaker

*1 US and Asian versions only   *2 US version only   *3 The same as the supplied accessory

Supplied Accessories: ● DTMF Microphone SSM-85D ● Mounting Bracket ● DC Power Cable

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YAESU

Radio for Professionals

VEGETABLE OIL INK

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