

The radio... **YAESU**

# ***HF Enthusiasm***

***Single Side Band DNA passed down over 70 years***

## ***FTX-1 series***

**HF/50/144/430MHz ALL MODE TRANSCEIVER**

### ***FTX-1 Field***

10W Version for Field Operation

### ***FTX-1 optima***

10W Field Operation and 100W Base Station



The Image is showing "FTX-1 optima" using a third-party stand for the Field Head.

\*Stand is not included

# FTX-1 series

## HF/50/144/430MHz ALL MODE TRANSCEIVER

### No Future without the Past

*Dawning of a new era for Wide-Coverage Transceivers with Epoch-making features from the pioneer of Single-Side Band radios for over 70 years*

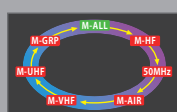
- 1 HF/VHF/UHF** | MAG (Memory Auto Grouping) : Memory Channels are automatically grouped and can be recalled by Band Groups – HF, VHF, UHF and others.
- 2 HF/VHF/UHF** | QMB (Quick Memory Bank) : Frequency, mode and all settings and parameters of the current receiving signal can be quickly stored and recalled.
- 3 VHF/UHF** | PMG (Primary Memory Group) : PMG channels can always be scanned and heard - which is useful when watching the channels Club members use to communicate.
- 4 VHF/UHF** | AMS (Automatic Mode Select) : AMS automatically determines whether the receiving signal is C4FM Digital or FM and sets the receiver to the appropriate mode.



QMB (Quick Memory Bank)



PMG (Primary Memory Group)



MAG (Memory Auto Grouping)



AMS (Automatic Mode Select)

Transmit Frequency Band	160 Meters	80 Meters	40 Meters	30 Meters	20 Meters	17 Meters	15 Meters	12 Meters	10 Meters	6 Meters	2 Meters	70 cm
Receiver Frequency	0.03MHz ————— 174MHz											400MHz-470MHz
	10 50 100 400 Frequency [MHz]											

\* Guaranteed within Amateur band only

## FTX-1 Field 10W Version for Field Operation

6W with the supplied Battery / 10W with external DC power supply for Field Operation



Included items: • Field Head • SBR-52LI Li-ion Battery • SSM-75E Hand microphone

## FTX-1 optima 10W Field Operation and 100W Base Station

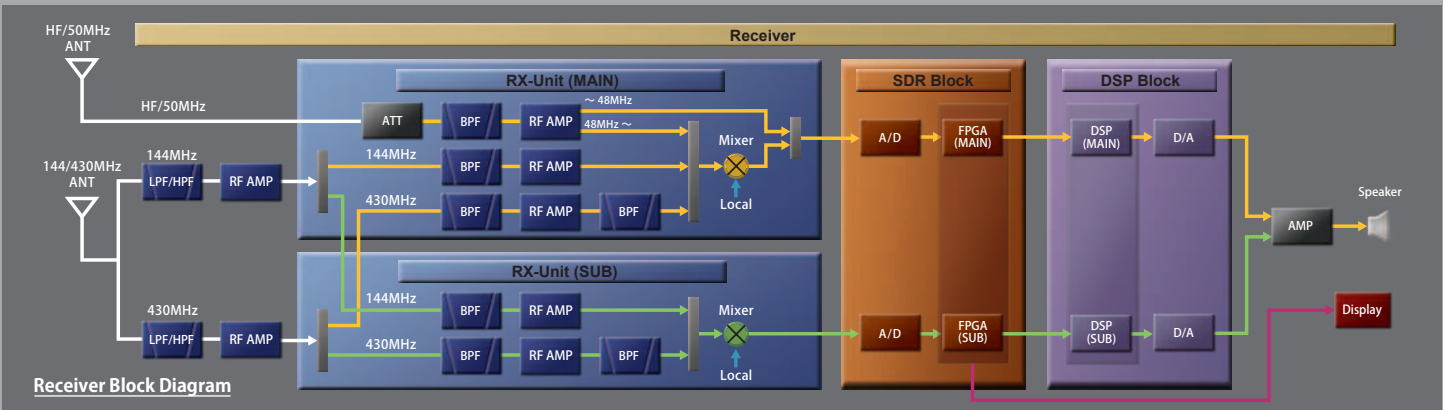
Expanding the fun with 100W RF power amplifier for Base Station in addition to Field Operation



Included items: • Field Head • SBR-52LI Li-ion Battery • RF Power Amplifier • SSM-75E Hand microphone

## The YAESU RF-Front End with Superb Interference Rejection

While the FTX-1 is compact, it boasts excellent proximity two-signal characteristics thanks to a powerful RF Front-End design with 10-divided BPF (Band Pass Filter) in amateur bands from HF through UHF and RF amplifier with a low NF (Noise Figure) which is excellent in intermodulation characteristics. In addition, a high-purity 110.592MHz oscillator circuit configuration supplies a high-quality sampling clock signal with excellent C/N characteristics to the A/D converter.

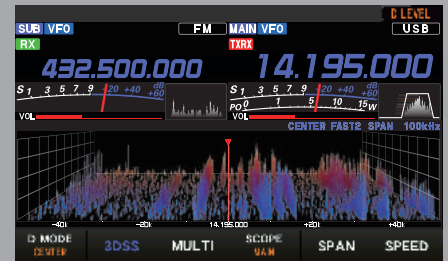


## Equipped with 3DSS (3-Dimensional Spectrum Stream) High-Resolution 4.3-inch TFT Color Touch Panel Display

The large 4.3-inch wide full-color touch panel display affords outstanding visibility and intuitive management of the operating frequency, meters and main function settings.

### 3DSS (3-Dimensional Spectrum Stream)

The 3DSS Real-time spectrum scope presents the constantly changing band conditions in three dimensions (3-D). The signal strength flows in time to the rear of the screen, then an operator can intuitively view the constant changes in a signal's strength. The frequency can also be instantly changed on the scope screen by touching the peak of desired signal.



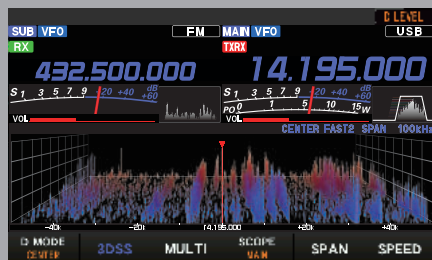
3DSS Display

### 3 Display Modes are switchable according to the User's preference and usage

With one-touch operation, the user can switch between 3 display modes to suit operation usage and preferences.

#### Dual-Band Display (Right/Left)

Horizontal Dual-Band Display showing MAIN on right side/ SUB on left side



#### Dual-Band Display (Up/ Down)

Vertical Dual-Band Display showing MAIN on upper side/ SUB on lower side



#### Single-Band Display

Single-Band Display showing only the receiving signal status of operating band



## Various Functions support Comfortable Operation

True Dual-Band Operation including C4FM/C4FM Simultaneous Receive

Super-DX expands the Communication Range

Memory Channel Scope

FUNC (Function) Dial useful to change and recall settings

"PRESET" mode suitable for FT8 operation

Compatible with WIRELESS-X\*, APRS® Data Communication

\*Wires-X will be available from August 2025

QRP Mode to set output power to 5W and below

VFO Mode Indicator presents the current operation status at a glance

Micro SD Card Slot

Versatile Array of functions for CW Operation

C4FM Digital Technologies: Outstanding Audio Quality, AMS etc..

Convenient Functions for FM Mode



## Accessories for Field Head

### SBR-52LI

Lithium Ion Battery Pack  
10.8V 6,400mAh  
(Supplied with FTX-1 Field/  
FTX-1 optima)

6W stand-alone operation is possible by attaching the SBR-52LI to rear of the Field Head (5W for QRP)  
※10W with an external power supply

- The image is the rear of Field Head attached with SBR-52LI



### FC-80

HF/50MHz 10W  
Automatic Antenna Tuner  
• supplied with spacer

FC-80 is light and thin automatic antenna tuner which can be attached to rear of the Field Head. By using the supplied spacer, FC-80 and SBR-52LI or SCF-1 can be combined to attach to the rear of the Field Head.

- The image is the rear of the Field Head attached with FC-80



\*Cannot be attached with SBR-52LI simultaneously

### SCF-1

Cooling Fan

When operating with an external DC power supply, SCF-1 can be installed to rear of the Field Head for effective cooling for a continuous transmission such as data communication. No tools are necessary for installation, and it can be quickly replaced by SBR-52LI as necessary.

- The image is rear of the Field Head attached with SCF-1



### FC-90

HF/50MHz 10W Long wire/ 50Ω  
compatible Automatic Antenna Tuner

FC-90 is a compact automatic antenna tuner compatible with both long wire and 50Ω antenna. By connecting with a cable, it can be installed close to the antenna.

- FC-90



### SPG-1

Protection Guard



### SSM-75E

Hand Microphone



### YH-77STA

Lightweight  
Stereo Headphone



### FGPS-5

GPS Antenna Unit



### Bluetooth®

BU-6  
Bluetooth Unit



\*BU-6 must be installed in the radio

### Bluetooth®

SSM-BT20  
Bluetooth Headset



\*not connectable directly to the Field Head

### FC-40

Long wire compatible  
External Auto Antenna Tuner



### SPA-1

100W (144/430MHz: 50W)

RF Power Amplifier

Option for FTX-1 Field  
(supplied with FTX-1 optima)

HF/50MHz Automatic Antenna Tuner, 2.5W High-Quality and powerful speaker, HF/50MHz 2 ANT terminals are equipped.



### MHG-1

Side Carry Handle  
(for SPA-1 only)



### ATAS-25

Active Tuning Antenna  
(Manual Type)

Max. Input Power:  
HF/50 MHz: 100 W (SSB/CW, 50% Duty)  
50 W (AM/FM)  
144/430 MHz: 50 W (ALL MODE)

\*When operating with the Field Head, 13.8V external power supply is necessary.

ATAS-120A  
Active Tuning Antenna  
(Automatic Type)

Max. Input Power: 120 W (SSB)



### ATBK-100

Antenna Base Kit  
for ATAS-120A  
(For Base operation  
on 6m, 2m or 70cm band)



## Desktop Microphones

### M-1

Reference  
microphone



### M-100

Dual element  
microphone



### M-90D

Desktop  
Dynamic  
microphone



### M-90MS Kit

Dynamic  
microphone  
Stand Kit  
\*Microphone stand  
is not included



Microphone stand  
Installation image

### M-70

Desktop  
microphone



## Specifications

General	
Tx Frequency Range	1.8MHz - 450MHz (Specified performance, Amateur bands only) 70MHz - 70.5MHz (Specified performance, UK Amateur bands only)
Rx Frequency Ranges	30kHz - 174MHz, 400MHz - 470MHz (operating) 1.8MHz band - 430MHz band (specified performance, Amateur bands only)
Emission Modes	A1A (CW), A3E (AM), J3E (LSB, USB), F3E (FM), F7W (C4FM), F1D, F2D
Frequency Steps	1*/5/10/20Hz (CW/SSB/AM), 5/10/20Hz (FM) *FINE tuning "ON"
Antenna Impedance	50Ω, unbalanced
Operating Temperature Range	+14°F to +122°F (-10°C to +50°C)
Frequency Stability	±0.5ppm (after 1 minute @+14°F to +122°F [-10°C to +50°C])
Supply Voltage	DC10.8V (SBR-52LI) DC13.8V ± 15% (EXT DC Jack)
Power Consumption (Approx.)	Rx (no signal) 0.6A, Rx (signal present) 0.9A Tx (Field, 6W) 2.5A, Tx (Field, 10W) 3A, Tx (optima, 100W) 21A
Dimensions (W x H x D)	FTX-1 Field: 8.4" x 3.5" x 2.2" (213 x 89 x 55mm) FTX-1 optima: 8.4" x 3.5" x 9.4" (213 x 89 x 240 mm)
Weight (Approx.)	FTX-1 Field: 2.75 lbs (1.25kg) FTX-1 optima: 8.6 lbs (3.9kg)
Transmitter	
Power Output	FTX-1 Field: 0.5 - 6W (0.5 - 1.5W AM Carrier) @ SBR-52LI 0.5 - 10W (0.5 - 2.5W AM Carrier) @ EXT DC 13.8V FTX-1 optima: HF/50MHz: 5 - 100W (5 - 25W AM Carrier) 144/430MHz: 5 - 50W (5 - 13W AM Carrier)
Modulation Types	J3E (SSB): Balanced A3E (AM): Low-Level (Early Stage) F1D, F2D, F3E (FM): Variable Reactance F7W (C4FM): 4-level FSK
Maximum FM Deviation	±5.0kHz / ±2.5kHz (Narrow)
Harmonic Radiation	Better than -50dB (1.8MHz - 29.7MHz Amateur bands) Better than -63dB (50MHz Amateur band) Better than -60dB (144/430MHz Amateur bands)
SSB Carrier Suppression	At least 60dB below peak output

■ 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.

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# YAESU

Radio for Professionals

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