

► ULTRA COMPACT DESIGN

Measuring 6.1" x 2.0" x 8.6" (155 x 52 x 218 mm), The FT-891 is an innovative Multi-band, Multi-mode Mobile/Portable transceiver with Ultra Compact and rugged case design.

Front Panel (Actual size) >>>>>



► 100 Watts Reliable High Power Output

The FT-891 provides stable 100W (25W AM) high power output. High reliability is assured by the transmitter careful circuit design with efficient thermostatically-controlled Dual internal fans and the diecast chassis.



Thermostatically-controlled Dual Internal fans

► IF DSP provides effective and optimized QRM rejection

The 32 bit high speed floating Point DSP (max 3000 MIPS) provides effective cancellation/reduction (DNR) of the random noise that is frequently frustrating in the HF frequencies. Also: the AUTO NOTCH (DNF) automatically eliminates the dominant beat tone. The CONTOUR, and the APF, are very effective receiver noise reduction tools in the HF bands operations. The YAESU original DSP QRM and noise reduction functions are provided.



32-bit High Speed Floating Point DSP

► Automatic-Matching 100 Memory Antenna Tuner (Option)

The FC-50 is a microprocessor-controlled antenna tuner that is designed specifically for the FT-891. The FC-50 can be easily coupled with the FT-891.



► Specifications

• General

Frequency Range	Tx: 1.8 - 54 MHz (Amateur bands only) Rx: 30 kHz - 56 MHz	Supply voltage	13.8 VDC $\pm$ 15%, negative ground
Channel Step	2/5/10 Hz (SSB, CW), 10/100 Hz (AM, FM)	Current Consumption (typical)	Rx: 2.0 A (signal present) Tx: 23 A
Frequency Stability	SSB/CW/AM: $\pm$ 0.5 ppm [14 °F to +122 °F (-10 °C to +50 °C)] FM: $\pm$ 1 kHz [14 °F to +122 °F (-10 °C to +50 °C)]	Operating Temperature Range	14 °F to +122 °F (-10 °C to +50 °C)
Modes of Emission	A1A (CW), A3E (AM), J3E (LSB, USB), F3E (FM)	Case Size (WxHxD)	6.1" x 2.0" x 8.6" (155 x 52 x 218 mm) w/o knobs
Antenna Impedance	50 Ohms, unbalanced	Weight (Approx.)	4.18 lb (1.9 kg)

• Transmitter

Output Power	SSB/CW/FM: 100 W (AM: 25 W)	Spurious Radiation	Better than -50 dB (1.8 MHz - 30 MHz Amateur bands), Better than -63 dB (50 MHz Amateur bands)
Modulation Type	J3E (SSB), A3E (AM), F3E (FM)	Microphone Impedance	600 Ohms (200 to 10 kOhms)
Maximum Deviation	$\pm$ 5 kHz (Wide)/ $\pm$ 2.5 kHz (Narrow)		

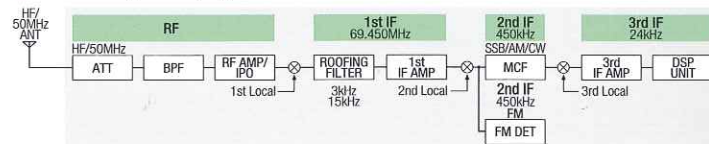
• Receiver

Circuit Type	SSB/CW/AM: Triple-conversion Superheterodyne FM: Double Conversion Superheterodyne	Selectivity	-6 dB / -60 dB
Intermediate Frequencies	SSB/CW/AM: 1st: 69.450 MHz/2nd: 450 kHz/3rd: 24 kHz FM: 1st: 69.450 MHz/2nd: 450 kHz	Mode	SSB/CW 2.4 kHz or better / 3.6 kHz or less CW-N 500 Hz or better / 750 Hz or less AM 6 kHz or better / 15 kHz or less FM 12 kHz or better / 30 kHz or less
Sensitivity	SSB/CW (S/N 10 dB) AM (S/N 10 dB) 5 μ V (0.5 - 1.8 MHz), 1.6 μ V (1.8 - 30 MHz), 1.25 μ V (50 - 54 MHz)	Maximum AF Output	2.5 W 4 ohms with 10% THD
	FM (12 dB SINAD) 0.35 μ V (29 MHz, 50 - 54 MHz)	Audio Output Impedance	4 to 16 Ohms (8 Ohms: nominal)
		Conducted Radiation	Less than 4 nW

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. Precise frequency range may be different in some countries. 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.

► Yaesu Uncompromising Receiver Circuit Design Ensures Excellent Performance

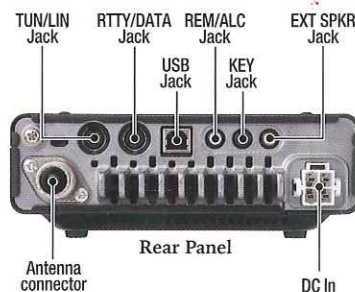
- Triple conversion with a 1st IF • TCXO provides $\pm$ 0.5 ppm High frequency of 69.450 MHz (SSB/CW/AM) frequency stability (-10°C to +50°C)
- 3 kHz roofing filter equipped as standard



Receiver Block Diagram

► Features

- Large dot matrix LCD display with Quick Spectrum Scope
- Three Programmable Front Panel Function Keys are selectable to the user's personal preferences
- USB port allows connection to a PC with a single cable (CAT control, PTT/RTTY control)
- TUN/LIN connector allows connection of optional FC-50 or VL-1000
- Advanced electronic keying (4 to 60 PWM) with FULL BK-IN support
- Support Active-Tuning Antenna system (ATAS-120A, ATAS-25 :Option)



Rear Panel

◀ Supplied Accessories: Microphone MH-31A8J, Mobile Mounting Bracket and DC power cable ▶

► Option

MH-31A8J^{*1} Hand Microphone	MH-36E8J DTMF Microphone	MD-200A8X Ultra-High-Fidelity Desktop Microphone	MD-100A8X Desktop Microphone	YH-77STA Lightweight Stereo Headphone
QUADRA SYSTEM				
VL-1000 : Linear Amplifier (1 kW) VP-1000 : Power Supply CT-58 : Connection cable for VL-1000	FC-40 Automatic Antenna Tuner	FC-50 Automatic Antenna Tuner	ATAS-120A Active Tuning Antenna	
ATAS-25 Active Tuning Antenna	ATBK-100 Antenna Base Kit	YSK-891 Front Panel Separation Kit (Front Panel Bracket, Control cable, Mic Extension cable and Speaker Extension cable included)	FH-2 Remote Control Keypad	CT-39A Packet Interface Cable

*1 The same as the supplied accessory

YAESU
The radio

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