



**PORTABLE  
MICROPROCESSOR-  
CONTROLLED  
MULTIMODE  
TRANSCEIVERS**

**FT-290R  
FT-690R  
FT-790R**





# PORTABLE MICROPROCESSOR- CONTROLLED MULTIMODE TRANSCEIVERS

Yaesu is proud to present a new concept in VHF and UHF operating. These are fully self-contained portable transceivers, providing full-feature multimode performance from an internally powered package smaller than many FM-only units. Powered by Ni-Cd or alkaline C-cells, these transceivers offer power output of 2.5 watts (VHF) or 1 watt (UHF), giving excellent range for field station applications.





# FT-290R

FT-290R/FL-2010/FP-80A

FT



## FEATURES

### Multimode Operation

Never before possible from such a compact package, multimode operation is yours to enjoy with the FT-290R, -690R and -790R. The FT-290R and -790R include USB, LSB, CW, and FM operation, while the FT-690R is designed for USB, CW, AM, and FM. With CW and SSB activity at an all-time high, you won't be left out of the satellite or DX action!

### Advanced Microprocessor Control

Recent technological advances in microprocessor circuitry bring you a wide variety of convenience features never before possible even in much bulkier transceivers.

Selectable synthesizer steps, up/down scanning from the microphone, priority channel operation, and ten memories with memory scan can all be called up with fingertip ease.

### LCD Readout

A large, easy-to-read Liquid Crystal Display provides display of the operating frequency, as well as indication of a number of control functions. The LCD readout, clearly visible under conditions of bright sunlight, is backed up by an illuminating lamp for nighttime operation while portable or mobile.

### Programmable Synthesizer Steps

The optimum synthesizer steps for SSB/CW operation are very different from those used for channelized FM. That's why Yaesu gives you the flexibility of two synthesizer steps per mode: 100 Hz or 1 kHz on SSB and CW, and 5/10 kHz\* on VHF and 25/100 kHz on UHF FM. (In some countries, 12.5/25 kHz steps are provided, per local requirements.) When changing modes from SSB/CW to FM, the transceiver is automatically set to the nearest FM channel when you start scanning, so as not to miss standard channels because of the mode change.

\* 10/20 kHz in FT-690R

### Ten Memories

As many as ten memories can be stored in the transceiver's recall of frequencies. The prior memory is recalled by checking a memory key a few seconds before scanning (FM mode is clear). Memory scan is a built-in feature that is estimated to be used by many operators.

### Dual VFO

The FT-290R features a dual VFO system that provides tremendous flexibility in day-to-day operation. The VFO memory scan feature allows you to scan a portion of



YAESU  
*The radio.*

# FT-690R

FT-690R/FL-6010/MMB-11



## ACCESSORIES





## SPECIFICATIONS

**Common to all Models**

**Power Requirements:**  
8 C-size alkaline or Ni-Cd battery cells  
External: 8.5-15.2 VDC  
Memory backup: built-in lithium battery

**Antenna impedance:**  
50 ohms

**Case size:**  
58(H) x 150(W) x 195(D) mm

**Weight:**  
1.3 kg without batteries

**TX carrier suppression:**  
better than 40dB

**TX unwanted sideband:**  
better than 40dB down

**TX audio response:**  
300-2700 Hz (-6dB)

**TX FM deviation:**  
±5 kHz

**Microphone impedance:**  
600 ohms

**RX image rejection:**  
better than -60dB

**Audio output impedance:**  
8 ohms

**Audio output power:**  
1 watt

Repeater Reverse Function available upon special request.

FT-290R	FT-690R	FT-790R
<p><b>GENERAL</b> Frequency coverage (MHz): 144-146 or 144-148 (per local regulations)</p> <p><b>Modes:</b> SSB (USB, LSB) CW and FM</p> <p><b>Synthesizer steps:</b> SSB/CW: 100 Hz/1 kHz FM: 5/10 kHz or 12.5/25 kHz</p> <p><b>Antenna connector:</b> SO-239 type (on rear)</p> <p><b>Current consumption:</b> 70 mA receive 800 mA transmit (2.5W RF, FM)</p> <p><b>TRANSMITTER</b> <b>Power output:</b> 2.5W at 12V</p> <p><b>Spurious radiation:</b> better than -60dB</p> <p><b>Tone burst frequency:</b> 1800 Hz (U.S.A.) 1750 Hz (others)</p> <p><b>RECEIVER</b> <b>Circuit type:</b> SSB/CW: single conversion superhet FM: double conversion superhet</p> <p><b>Intermediate frequencies:</b> 1st IF: 10.81 MHz 2nd IF: 455 kHz (FM)</p> <p><b>Sensitivity:</b> SSB/CW: 0.5 μV for 20dB S/N FM: 0.25 μV for 12dB SINAD</p> <p><b>Selectivity:</b> SSB/CW: 2.4 kHz (-6dB) 4.1 kHz (-60dB) FM: 14 kHz (-6dB) 25 kHz (-60dB)</p>	<p><b>GENERAL</b> Frequency coverage (MHz): 50-54</p> <p><b>Modes:</b> SSB (USB) CW, AM and FM</p> <p><b>Synthesizer steps:</b> SSB/CW/AM: 100 Hz/1 kHz FM: 10/20 kHz</p> <p><b>Antenna connector:</b> SO-239 type (on rear)</p> <p><b>Current consumption:</b> 70 mA receive 800 mA transmit (2.5W RF, FM)</p> <p><b>TRANSMITTER</b> <b>Power output:</b> 2.5W at 12V</p> <p><b>Spurious radiation:</b> better than -60dB</p> <p><b>Tone burst frequency:</b> 1800 Hz</p> <p><b>RECEIVER</b> <b>Circuit type:</b> SSB/CW: single conversion superhet AM/FM: double conversion superhet</p> <p><b>Intermediate frequencies:</b> 1st IF: 10.81 MHz 2nd IF: 455 kHz (FM)</p> <p><b>Sensitivity:</b> SSB/CW/AM: 0.5 μV for 20dB S/N FM: 0.25 μV for 12dB SINAD</p> <p><b>Selectivity:</b> SSB/CW: 2.4 kHz (-6dB) 4.1 kHz (-60dB) AM: 4 kHz (-6dB) 15 kHz (-60dB) FM: 14 kHz (-6dB) 25 kHz (-60dB)</p>	<p><b>GENERAL</b> Frequency coverage (MHz): 430-440</p> <p><b>Modes:</b> SSB (USB, LSB) CW and FM</p> <p><b>Synthesizer steps:</b> SSB/CW: 100 Hz/1 kHz FM: 25/100 kHz</p> <p><b>Antenna connector:</b> BNC</p> <p><b>Current consumption:</b> 100 mA receive 750 mA transmit (1W RF, FM)</p> <p><b>TRANSMITTER</b> <b>Power output:</b> 1W at 12V</p> <p><b>Spurious radiation:</b> better than -50dB</p> <p><b>Tone burst frequency:</b> 1800 Hz (U.S.A.) 1750 Hz (others)</p> <p><b>RECEIVER</b> <b>Circuit type:</b> SSB/CW: double conversion superhet FM: triple conversion superhet</p> <p><b>Intermediate frequencies:</b> 1st IF: 67.3 MHz 2nd IF: 10.7 MHz 3rd IF: 455 kHz (FM)</p> <p><b>Sensitivity:</b> SSB/CW: 0.16 μV for 10dB S/N FM: 0.25 μV for 12dB SINAD</p> <p><b>Selectivity:</b> SSB/CW: 2.4 kHz (-6dB) 4.1 kHz (-60dB) FM: 14 kHz (-6dB) 25 kHz (-60dB)</p>

Specifications subject to change without notice or obligation.



**YAESU MUSEN CO., LTD.**  
C.P.O. BOX 1500,  
TOKYO, JAPAN

**YAESU ELECTRONICS CORPORATION**  
P.O. BOX 49,  
PARAMOUNT, CA 90723