

**PORTABLE
MICROPROCESSOR-CONTROLLED
MULTIMODE TRANSCEIVERS**



FT-290R / FT-690R



PORTABLE MICROPROCESSOR-CONTROLLED MULTIMODE TRANSCEIVERS

FT-290R

FT-690R



Yaesu is proud to announce a new concept in VHF operating. The FT-290R and FT-690R are fully self-contained portable transceivers, providing multimode performance from a battery-powered package smaller than many FM-only units. Powered by Ni-Cd or alkaline C-cells, these transceivers boast a power output of 2.5 watts minimum, for extended range under field conditions.

FEATURES

Multimode Operation

Never before possible from such a compact package, multimode operation is yours to enjoy on the FT-290R and FT-690R. The FT-290R includes 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 Display

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 display, highly readable under conditions of bright sunlight, is backed up by an illuminating lamp for nighttime operation while portable or mobile.

● FT-290R/FL-2010/FP-80A/YM-49



Programmable Synthesizer Steps

The optimum synthesizer steps for SSB/CW operation as opposed to FM operation are very different. That's why Yaesu gives you the flexibility of two synthesizer steps per mode: 100 Hz or 1 kHz per step on SSB and CW, and 5 kHz or 10 kHz per step on FM. In some countries, 12.5 kHz/25 kHz steps are provided, per local requirements. When changing modes from SSB/CW to FM, your FT-290R/690R is automatically set to the nearest 5 kHz or 10 kHz channel when you start scanning, so as not to miss standard channels because of the mode change.

Ten Memory Channels

As many as ten frequencies may be stored into memory, for quick recall of favorite operating slots. The priority feature allows you to

check a favorite frequency every few seconds, with automatic halting (FM mode) when the channel is clear or busy, as desired. Memory backup is provided by a built-in lithium cell, with an estimated lifetime of five years.

Dual VFO System

The FT-290R and FT-690R feature a digitally synthesized dual VFO system, which provides tremendous flexibility in day to day operation. For example, one VFO may be set up in the SSB portion of the band, and the other in the FM subband, for immediate QSY when changing modes.

Convenient Features

Among the many features adding to the convenience of these transceivers are a built-in telescoping antenna, a high-performance noise blanker, a high/low power switch, and a battery condition meter. A

clarifier (offset tuning) allows you to follow unstable or Doppler-shifted signals. And there's easy interface to our FTS-32 CTCSS Encoder/Decoder or FTS-32AE CTCSS Encoder, synthesized tone boards for today's high-technology repeaters.

Full Line of Accessories

See your Yaesu dealer for details of the quality line of accessories for the FT-290R and FT-690R. These include the YM-49 Remote Speaker Microphone with scanning controls; MMB-11 Mobile Mounting Bracket; FL-2010 2 meter 10 watt amplifier, FL-6010 6 meter 10 watt amplifier (not available in U.S.); FLC-11 Leather Carrying Case; and the CSC-1 Vinyl Carrying Case. Your Yaesu dealer also has available NiCd C-Cells and the NC-11B Battery Charger. Stop by and try the FT-290R and FT-690R today!

SPECIFICATIONS

FT-290R

GENERAL

- Frequency coverage:**
144 – 148 MHz; 144 – 146 MHz
(as per your local regulations)
- Modes of operation:**
SSB (USB, LSB), CW and FM
- Synthesizer steps:**
SSB/CW: 100 Hz, 1 kHz
FM: 10 kHz, 20 kHz (12.5 kHz, 25 kHz,
depending on local requirements)
- Power requirements:**
8 x C-size dry battery cells or
8 x C-size Ni-Cd battery cells
External: 8.5 – 15.2 V DC
Memory backup: built-in lithium
battery cell
- Current consumption:**
70mA on receive;
800mA on transmit (2.5W RF, FM)
- Antenna impedance:**
50 ohms
- Case size:**
58(H) x 150(W) x 195(D) mm
- Weight:**
1.3kg. without batteries

TRANSMITTER

- Power output:**
2.5 watts at 12 volts
- Carrier suppression:**
Better than 40 dB
- Spurious radiation:**
Better than 60 dB
- Unwanted sideband suppression:**
Better than 40 dB
- Tone burst frequency:**
1800 Hz (U.S.A. model)
1750 Hz (other models)
- Frequency response:**
300 – 2700 Hz (-6 dB)
- FM deviation:**
±5 kHz
- Microphone impedance:**
600 ohms

RECEIVER

- Circuit type:**
SSB/CW: Single conversion
superheterodyne
FM: Double conversion
superheterodyne
- Intermediate frequencies:**
1st IF 10.81 MHz
2nd IF 455 kHz (FM)
- Sensitivity:**
SSB/CW: 0.5µV for 20 dB S/N
FM: 0.25µV for 12 dB SINAD
- Selectivity:**
SSB/CW: 2.4 kHz at 6 dB down;
4.1 kHz at 60 dB down
FM: 14 kHz at 6 dB down;
25 kHz at 60 dB down
- Image rejection:**
Better than -60 dB
- Audio output impedance:**
8 ohms
- Audio output:**
1 watt @10% THD

FT-690R

GENERAL

- Frequency coverage:**
50 – 54 MHz
- Modes of operation:**
SSB (USB), CW, AM and FM
- Synthesizer steps:**
SSB/CW/AM: 100 Hz, 1 kHz
FM: 10 kHz, 20 kHz (12.5 kHz, 25 kHz,
depending on local requirements)
- Power requirements:**
8 x C-size dry battery cells or
8 x C-size Ni-Cd battery cells
External: 8.5 – 15.2 V DC
Memory backup: built-in lithium
battery cell
- Current consumption:**
70mA on receive;
800mA on transmit (2.5W RF, FM)
- Antenna impedance:**
50 ohms
- Case size:**
58(H) x 150(W) x 195(D) mm
- Weight:**
1.3kg. without batteries

TRANSMITTER

- Power output:**
2.5 watts at 12 volts
AM 0.8 watts
- Carrier suppression:**
Better than 40 dB
- Spurious radiation:**
Better than 60 dB
- Unwanted sideband suppression:**
Better than 40 dB
- Tone burst frequency:**
1800 Hz (U.S.A. model)
- Frequency response:**
300 – 2700 Hz (-6 dB)
- FM deviation:**
±5 kHz
- Microphone impedance:**
600 ohms

RECEIVER

- Circuit type:**
SSB/CW: Single conversion
superheterodyne
AM/FM: Double conversion
superheterodyne
- Intermediate frequencies:**
1st IF 10.81 MHz
2nd IF 455 kHz (FM)
- Sensitivity:**
SSB/CW/AM: 0.5µV for 20 dB S/N
FM: 0.25µV for 12 dB SINAD
- Selectivity:**
SSB/CW: 2.4 kHz at 6 dB down;
4.1 kHz at 60 dB down
AM: 4 kHz at 6 dB down;
15 kHz at 60 dB down
FM: 14 kHz at 6 dB down;
25 kHz at 60 dB down
- Image rejection:**
Better than -60 dB
- Audio output impedance:**
8 ohms
- Audio output:**
1 watt @10% THD