

# FT-757GX

## SPECIFICATIONS

### TRANSMITTER

**Frequency range:**

160 m band	1.5 to 1.99999 MHz
80 m band	3.5 to 3.99999 MHz
40 m band	7.0 to 7.49999 MHz
30 m band	10.0 to 10.49999 MHz
20 m band	14.0 to 14.49999 MHz
17 m band	18.0 to 18.49999 MHz
15 m band	21.0 to 21.49999 MHz
12 m band	24.5 to 24.99999 MHz
10 m band	28.0 to 29.99999 MHz

**Tuning steps:**  
10 Hz and 500 kHz (band step)

**Emission types:**  
LSB, USB (A3J/J3E\*), CW (A1/A1A\*),  
AM (A3/A3E\*), FM (F3/G3E\*)  
\* New emission designation per WARC '79

**Power Output:**  
SSB, CW, FM 100W (PEP/DC)  
AM 25W (Carrier)

**Carrier suppression:**  
better than 40 dB below peak output

**Unwanted sideband suppression:**  
better than 50 dB below peak output (1 kHz tone)

**Spurious radiation:**  
better than 50 dB below peak output

**Audio response:**  
better than -6 dB from 300-3000 Hz

**3rd order intermodulation distortion:**  
better than -40 dB below peak output (14 MHz, 100W)

**Frequency stability:**  
better than ±10 ppm from 0-40°C  
after 15 min. warm up

**Modulation type:**  
A3J: Balanced Modulation  
A3: Low Level Modulation  
F3: Variable Reactance Modulation

**Maximum FM deviation:** ±5 kHz  
**Output impedance:** 50 ohms (nominal, unbalanced)  
**Microphone impedance:** Low (500 to 600 ohms)

### RECEIVER

**Frequency range:** 500 kHz to 29.99999 MHz (continuous)  
**Circuit type:** Triple conversion superheterodyne

**Clarifier range:** Unlimited  
**Sensitivity:** (CW, SSB and AM figures measured for 10 dB S+N/N)  
\*1.5 ~ 30 MHz \*\*500 kHz ~ 1.5 MHz  
SSB, CW-W, FSK  
\*better than 0.25 μV \*\*better than 2.0 μV  
CW-N  
\*better than 0.16 μV \*\*better than 1.25 μV  
AM  
\*better than 1.0 μV \*\*better than 8.0 μV  
FM  
better than 0.6 μV for 12 dB SINAD

**Intermediate frequencies:**  
1st IF: 47.060 MHz  
2nd IF: 8.215 MHz  
3rd IF: 455 kHz  
FM IF: 455 kHz

**Image rejection:** better than 70 dB  
**IF rejection:** better than 70 dB  
**Selectivity (adjusted for maximum IF width)**

	-6 dB	-60 dB
SSB, CW-W, FSK	2.7 kHz	4.5 kHz
CW-N	600 Hz	1.3 kHz
AM	6 kHz	18 kHz
FM	15 kHz	30 kHz

NOTE: These figures apply as maximum bandwidths with Width control set to maximum.

**Dynamic range:** better than 100 dB (CW-N, 14 MHz)  
**Audio output power:** 3 watts minimum (into 4 ohms, with less than 10% THD)

**Audio output impedance:** 4 to 16 ohms

### GENERAL

**Voltage:** 13.4 V DC

**Power consumption:**

Receiver	2 A
Transmit (100W output)	19 A

**Dimensions (WHD):**  
approximately 238 mm x 93 mm x 238 mm; w/o feet and knobs, but w/heatsink

**Weight:** approximately 5.0 kg

**YAESU**

HF ALL MODE TRANSCEIVER

**FT-757GX**

- TRIPLE CPU INT. CONTROL
- CAT SYSTEM EXT. CONTROL
- GENERAL COVERAGE RECEIVER
- 100W PEP RF OUTPUT
- LSB, USB, CW, AM, FM MODES
- CW FULL BREAK-IN KEYING
- IAMBIC MEMORY KEYS
- DUCT FLOW COOLING SYSTEM

BREAK-IN KEYS  
SEMI FULL MAN AUTO  
SPEED 0 5 10

FROM:

TO:

STAMP  
HERE



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



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Printed in Japan

# FT-757GX

## YAESU ALL MODE TRANSCEIVER



**CAT SYSTEM**



Blending the finest features of the latest HF transceivers into a volume smaller than any predecessor, and actually simplifying circuitry and construction at the same time, the FT-757GX includes three microprocessors to give you all this and more . . .



## OPTIONS

- MH-188 Hand-held Microphone
- MD-188 Desk-top Microphone
- FC-757AT Automatic Antenna Tuner
- FAS-1-4R Remote Antenna Selector (use w/FC-757AT)
- FP-757GX Switching Power Supply
- FP-757HD Heavy-duty Power Supply
- FP-700 Standard Power Supply
- FTV-700 monoband V/UHF Transverter (w/o Band Module)
- FTV-6M 6m Module for FTV-700
- FTV-2M 2m Module for FTV-700
- FTV-70cm 430MHz Module for FTV-700
- FIF-65 Interface Unit for Apple II
- FIF-232C Interface Unit for IEEE RS-232C bus



### Dual VFOs and Eight memories

The dual A-B VFO scheme is augmented by complete, single button VFO/memory swap and bi-directional transfer functions, allowing simpler split-frequency operation than ever before. Memories store the entire frequency, for transceiver or general coverage reception, so bandswitching becomes unnecessary. All VFO and memory data is backed up by a lithium battery so there is no need to keep power connected.

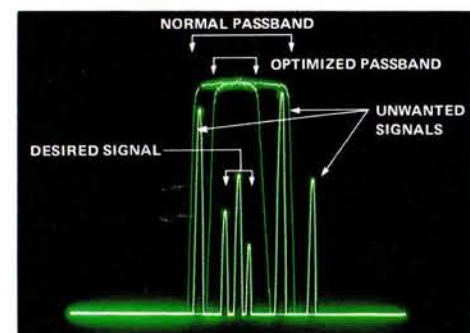
### Programmable Memory Scanning

The FT-757GX can scan between any two adjacent memories programmed by the operator, through the entire frequency range or any selected portion. Automatic scan stop threshold can be set by the RF Gain and Squelch controls.

### All Accessories Installed

Every item normally sold as an extra is installed at the factory and provided as standard, including AM and FM modes, a 600Hz narrow CW filter, iambic keyer with dot-dash memory, 25kHz marker generator, IF shift and width filters, effective

noise blanker and AF speech processor . . . all at no extra charge.

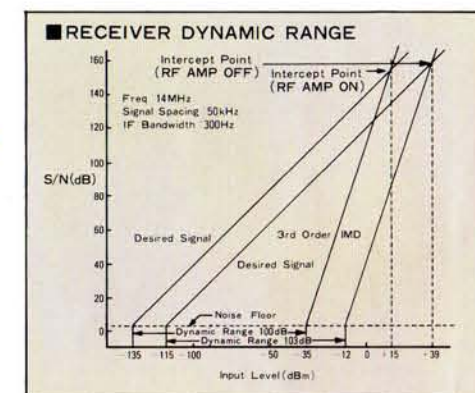


### CAT System

Yaesu's Computer Aided Transceiver (CAT) System provides for external control of VFO frequency and memory functions from the operator's personal computer when linked with the CAT Interface Unit. (4800 Baud TTL level)

### High-Performance General Coverage Receiver

With Yaesu's unsurpassed IF shift/width system, switchable AGC and 20dB attenuator, as well as switchable RF preamp, the FT-757GX can provide a dynamic range in excess of 100dB in CW narrow. The noise blanker is designed for excellent blanking of the "woodpecker", with noise blanker AGC adjustable on the front panel.



### True All Mode Transceiver

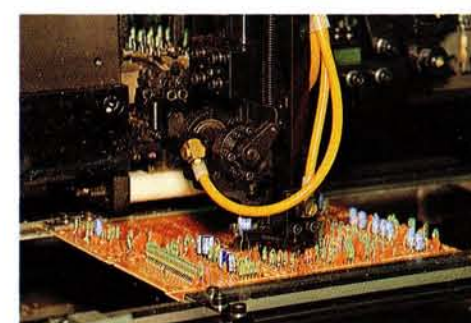
Along with sideband selectable SSB and QSK CW, AM and FM are included as standard features, for both receive and transmit. No optional boards or filters to buy. Squelch operates on all modes.

### Full Duty Cycle

The remarkable new heatsink design includes a whisper-quiet cooling fan, with a new duct flow cooling system that incorporates the heatsink right into the body of the transceiver. This allows forced-air circulation through the chassis and increases the cooling surface area substantially, permitting 100W PEP/DC output at 100% transmitter duty cycle in all modes.

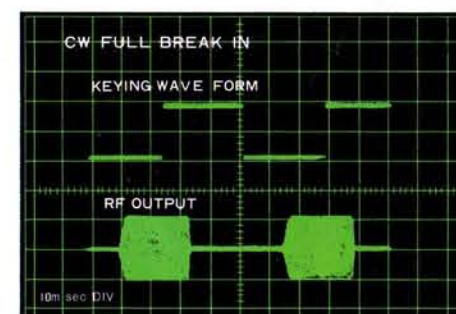
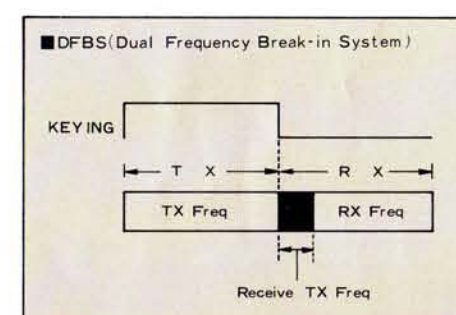
### CAD/CAM Design and Construction

FT-757GX printed circuit boards are laid out by computer, and then assembled by the computer-controlled automatic insertion system, vastly improving reliability and quality control, while offering features never before possible at such a low price. Compare the cost-versus-features and performance with any other radio or brand.



### Full Break-in CW

Special features for CW operation include top cover switch-selectable semi break-in or QSK, and a built-in iambic keyer with dot-dash memory in a newly-designed Yaesu LSI IC, also adjustable on top of the transceiver . . . not an option. During split frequency QSK operation the FT-757GX checks the transmit frequency momentarily when switching to receive.



### Novel Control Layout

Only the controls needed during actual operation are on the front panel, keeping it uncluttered and extremely convenient to operate. Presettable controls and connectors are all on the rear panel, including VOX gain, anti-trip and delay, AM carrier and SSB processor levels, marker switch, remote controller I/O port, external speaker and Hi-Z AF outputs, patch input and external ALC, and band data for the FC-757AT Automatic Antenna Tuner.



### Easiest Operation of All

The three microprocessors in the FT-757GX handle most of the routine switching and adjusting functions usually done by hand or by discrete circuits in earlier gen-

eration equipment. The actual simplicity of the discrete circuitry in the FT-757GX guarantees a new level of reliability, while unparalleled operating flexibility can be extended virtually without limit through your external computer.

### Choice of Power Supplies

Because of the full duty cycle capabilities of the FT-757GX, Yaesu is making a number of different power supplies available to match different operating requirements. The FP-757GX is a compact switching supply capable of high duty cycle operation (for short periods). The FP-757HD is a series regulator type supply also capable of high power demand, but is about the same size as the transceiver and includes an internal cooling fan and loudspeaker. The FP-700 is a series regulator supply capable of intermittent duty, such as full power SSB and CW or reduced power RTTY, FM and AM, and also includes a loudspeaker.

### Matching Automatic Antenna Tuner

Surpassing any previous designs, the FC-757AT Automatic Antenna Tuner includes its own microprocessor and lithium-

backed memory to allow pushbutton storage in RAM of optimum tuner settings on a particular antenna and band, so that once a frequency is tuned (automatically) the tuner settings are stored for almost instant resetting at a later time, with no need to transmit. The fast, reliable automatic tuning system covers a broad range of SWRs, with a manual override capability for particularly difficult matching situations. The FC-757AT also includes a built-in 50-ohm dummy load and automatic SWR calculating system and meter, as well as a dual range RF wattmeter. The FAS-1-4R Remote Antenna Selector can be used with the FC-757AT to select up to four antennas right at the top of a tower, with only one feedline and a control line to the station. Once programmed, the right antenna is selected automatically when you change bands at the transceiver.

