

Icom IC-7300 Specifications and Features Page

Icom IC-7300 – Output power:
100W (25W AM)



RX Frequencies:
0.030-74.800



Receiver type:
Direct sampling

You can find most this information on the [Icom America website](http://www.icom.com)

(I have added a few things).

Icom IC-7300 Features:

- USB port (rear)
- CI-V jack (rear)
- ALC and SEND jacks (rear)
- CW jack (rear)
- Speaker jack (rear)
- Accessories port (rear)
- Mic and phones jack
- ANF, MNF, NR, NB
- Twin Pass band tuning
- 1 antenna connection
- Built-in automatic antenna tuner
- 101 channels (99 regular, 2 scan edges)
- SD memory card slot for saving data
- Multi-function meter
- Spectrum scope with waterfall. Fixed and Center mode.
- Audio scope with oscilloscope
- CW functions: full break-in, CW reverse, CW auto tuning
- VOX
- SSB, CW, RTTY, AM, FM modes
- RTTY (FSK) thru PC and/or decode on LCD

Icom IC-7300

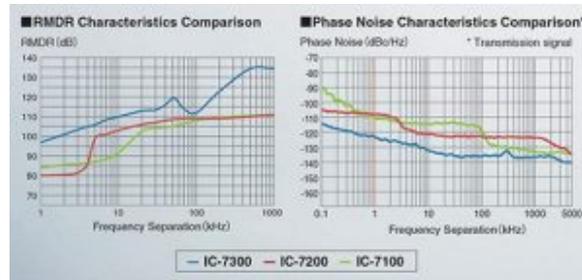
RF direct sampling system

The Icom IC-7300 employs an RF direct sampling system, where RF signals are directly converted to digital data. Then processed in the FPGA (Field-Programmable Gate Array), making it possible to simplify the circuit construction as well as reduce noise that can mask weak signals.

RMDR and phase noise characteristics

The IC-7300's RMDR is about 97dB* (typical value) improving

the Phase Noise characteristics by about 15dB (at 1 kHz frequency separation). The superior Phase Noise characteristics reduce noise components for both receive and transmit signals.



Click for larger image.

15 discrete band-pass filters

The RF Direct Sampling is protected by an array of bandpass filters. The signal passes through one of the fifteen bandpass filters, where signals outside the passband are rejected. To reduce the insertion loss, the IC-7300 utilizes High Q factor coils.



Click for larger image.

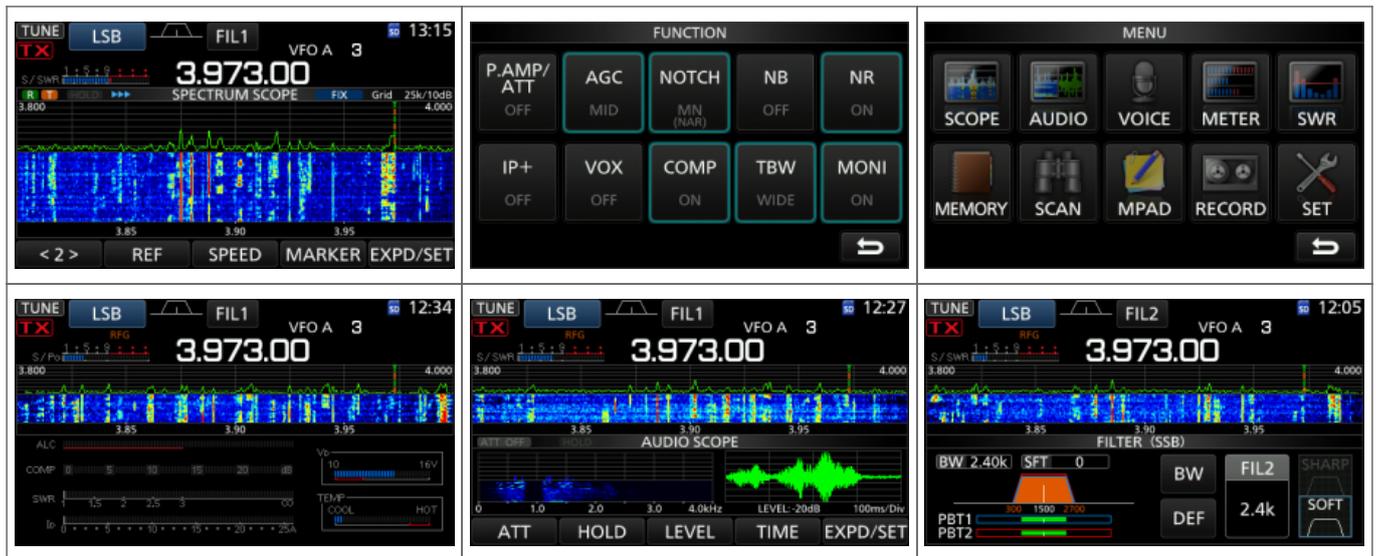
Icom IC-7300 color touch screen

The large 4.3" color TFT touch LCD offers intuitive operation of functions, settings, and various operational visual aids such as the band scope, waterfall function, and audio scope.

Like on the high-end rigs, the waterfall shows a change of signal strength over a period of time and allows you to find

weak signals that may not be apparent on the spectrum scope.

Use the audio scope function to observe various AF TX/RX characteristics such as microphone compressor level, filter width, notch filter width and keying waveform in the CW mode. Image below shows the Audio scope with the waterfall function and the oscilloscope.



Sources:

[Icom America – IC-7300](http://www.icomamerica.com)