

SPECIFICATIONS

GENERAL	
Receiver*1	0.030-60.00 MHz*3
Transmitter*1	1.800-1.999, 3.500-3.999, 5.255-5.405*2, 7.000-7.300, 10.100-10.150, 14.000-14.350, 18.068-18.168, 21.000-21.450, 24.890-24.990, 28.000-29.700, 50.000-54.000 MHz
Frequency coverage	
Mode	USB, LSB, CW, RTTY, PSK, AM, FM
Number of channels	101 (99 regular, 2 scan edges)
Antenna connectors	SO-239 x 2 (50 Ω unbalanced (Tuner off)) BNC x 1 (RX antenna In/Out)
Power supply requirement	13.8 V DC ±15%
Power Tx	23 A (at 100 W output power)
consumption Rx	3.0 A typical (Standby), 3.5 A (Maximum audio)
Operating temperature range	0 °C to +50 °C; 32 °F to 122 °F
Frequency stability	Less than ±0.5 ppm (0°C to +50°C; 32°F to 122°F)
Frequency resolution	1 Hz (fine)
Dimensions (W x H x D) (projections not included)	340 x 118 x 277 mm; 13.4 x 4.6 x 10.9 in
Weight (approximately)	10 kg; 22 lb
TRANSMITTER	
Output power (HF/50 MHz)	SSB/CW/FM/RTTY/PSK: 1-100 W, AM: 1-25 W
Modulation system	SSB: Digital P.S.N. modulation AM: Digital Low power modulation FM: Digital Reactance modulation
Spurious emissions	HF bands: Less than -50 dB 50 MHz band: Less than -63 dB
Carrier suppression	More than 50 dB
Unwanted sideband	More than 50 dB
Microphone impedance	600 Ω
RECEIVER	
Receiver system	Direct Sampling Superheterodyne
Intermediate frequency	12 kHz
Sensitivity*4	0.1-1.799 MHz: 1.8-29.999 MHz: 28.0-29.7 MHz: 50-54 MHz:
SSB/CW (at 10 dB S/N)	- 0.15 μV - 0.12 μV
AM (at 10 dB S/N)	6.3 μV 2.0 μV - 1.0 μV
FM (at 12 dB SINAD)	- 0.5 μV 0.3 μV
*4 HF: Preamp 1 ON, 50 MHz; Preamp 2 ON, BW: SSB/CW=2.4 kHz, AM=6 kHz, FM=15 kHz	
Squelch sensitivity (Threshold)	SSB: Less than 3.2 μV (Preamp ON) FM: Less than 0.3 μV (Preamp ON)
Selectivity (Sharp filter shape)	More than Less than
SSB (BW: 2.4 kHz)	2.4 kHz/-6 dB 3.4 kHz/-40 dB
CW (BW: 500 Hz)	500 Hz/-6 dB 700 Hz/-40 dB
RTTY (BW: 500 Hz)	500 Hz/-6 dB 800 Hz/-40 dB
AM (BW: 6 kHz)	6.0 kHz/-6 dB 10 kHz/-40 dB
FM (BW: 15 kHz)	12.0 kHz/-6 dB 22 kHz/-40 dB
Spurious and image rejection	HF bands: More than 70 dB 50 MHz band: More than 70 dB (Except for ADC Aliasing)
Audio output power	More than 2.0 W (at 10% distortion with an 8 Ω load)
TUNER	
Frequency range	1.9-50 MHz bands
Matching impedance range	16.7 Ω-150 Ω unbalanced (VSWR better than 1:3)
Tuning accuracy	VSWR 1: 1.5 or less
Tuning time	2-3 seconds (average) (Maximum 15 seconds)

All stated specifications are subject to change without notice or obligation.

Supplied accessories: (May differ depending on version)
• Hand microphone, HM-219 • DC power cable • Fuses • Plugs

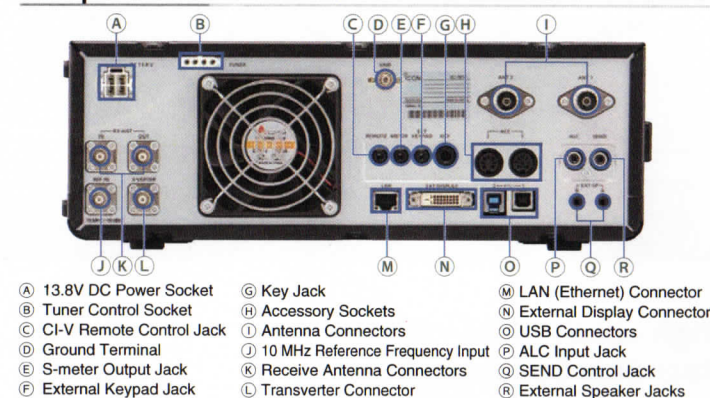
OPTIONS

Some options may not be available in some countries. Please ask your dealer for details.

PS-126 DC POWER SUPPLY 13.8 V DC, 25 A max. output.	AH-4 HF+50 MHz AUTOMATIC ANTENNA TUNER Covers 3.5-54 MHz with a 7 m (23 ft) or longer wire antenna.	AH-2b ANTENNA ELEMENT Covers 7-54 MHz. For use with AH-4.	AH-740 AUTOMATIC TUNING ANTENNA Covers 2.5-30 MHz (amateur band). OPC-2321 is required.
HM-219 HAND MICROPHONE Same as supplied.	AH-710 FOLDED DIPOLE ANTENNA Covers 1.9-30 MHz bands.	AH-5NV NVIS KIT Fiberglass mobile mounting antenna element for use with AH-740. Covers 2.2-30 MHz (amateur band) with AH-740.	
EXTERNAL SPEAKERS SP-23 4 audio filters, headphone jack SP-33 Wooden box speaker SP-34 4 audio filters; headphone jack	DESKTOP MICROPHONES SM-30 Compact, lightweight electret microphone. SM-50 Dynamic microphone with [UP/DOWN] switches and a low cut function.	RS-BA1 IP REMOTE CONTROL SOFTWARE For use with RS-BA1	IC-PW1/PW1EURO HF+50 MHz 1 kW HF LINEAR AMPLIFIER

- **CT-17:** CI-V LEVEL CONVERTER
- **MB-121:** CARRYING HANDLE
- **OPC-420:** CONTROL CABLE for use with AH-4 (10 m)
- **OPC-2321:** CONTROL CABLE for use with AH-740 (6 m)
- **SP-35L:** EXTERNAL SPEAKER Compact mobile speaker with 6 m; 19.7 ft cable.

Rear panel view



“Dual” HF Excitement RF Direct Sampling Evolution



Icom Inc. 1-1-32, Kamiminami, Hirano-Ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 www.icom.co.jp/world **Count on us!**

Icom America Inc. 12421 Willows Road NE, Kirkland, WA 98034, U.S.A. Phone: +1 (425) 454-8155 Fax: +1 (425) 454-1509 E-mail: sales@icomamerica.com URL: http://www.icomamerica.com	Icom (Europe) GmbH Communication Equipment Auf der Krautweide 24 65812 Bad Soden am Taunus, Germany Phone: +49 (6196) 76685-0 Fax: +49 (6196) 76685-50 E-mail: info@icomeurope.com URL: http://www.icomeurope.com	Icom France s.a.s. Zac de la Plaine, 1 Rue Brindjone des Moulinais, BP 45804, 31505 Toulouse Cedex 5, France Phone: +33 (5) 61 36 03 03 Fax: +33 (5) 61 36 03 00 E-mail: icom@icom-france.com URL: http://www.icom-france.com	Shanghai Icom Ltd. No.101, Building 9, Caifuxingyuan Park, No.188 Maotang Road, Chedun Town, Songjiang District, Shanghai, 201611, China Phone: +86 (021) 6153 2768 Fax: +86 (021) 5765 9967 E-mail: bjicom@bjicom.com URL: http://www.bjicom.com
Icom Canada Glenwood Centre #150-6165 Highway 17A, Delta, B.C., V4K 5B8, Canada Phone: +1 (604) 952-4266 Fax: +1 (604) 952-0090 E-mail: info@icomcanada.com URL: http://www.icomcanada.com	Icom Spain S.L. Ctra. Rubi, No. 88 "Edificio Can Castanyer" Bajos A 08174, Sant Cugat del Valles, Barcelona, Spain Phone: +34 (93) 590 26 70 Fax: +34 (93) 599 04 46 E-mail: icom@icomspain.com URL: http://www.icomspain.com	Icom (Australia) Pty. Ltd. Unit 1 / 103 Garden Road, Clayton, VIC 3168 Australia Phone: +61 (03) 9549 7500 Fax: +61 (03) 9549 7505 E-mail: sales@icom.net.au URL: http://www.icom.net.au	Asia Icom Inc. 6F No. 68, Sec. 1 Cheng-Teh Road, Taipei, Taiwan, R.O.C. Phone: +886 (02) 2559 1899 Fax: +886 (02) 2559 1874 E-mail: sales@asia-icom.com URL: http://www.asia-icom.com
Icom Brazil Rua Itororó, 444 Padre Eustáquio Belo Horizonte MG, CEP: 30720-450, Brazil Phone: +55 (31) 3582 8847 Fax: +55 (31) 3582 8967 E-mail: sales@icombrasil.com	Icom (UK) Ltd. Blacksola House, Altra Park, Heme Bay, Kent, CT6 6GZ, U.K. Phone: +44 (0) 1227 741741 Fax: +44 (0) 1227 741742 E-mail: info@icomuk.co.uk URL: http://www.icomuk.co.uk		

New and Powerful Dual Receive Rig RF Direct Sampling Taking You to the Next Level



Actual size

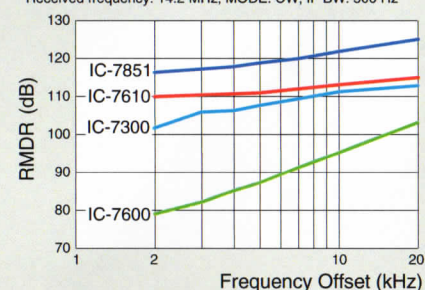
Innovative RF Direct Sampling System Achieves to 110 dB* (typical) of RMDR

The RF direct sampling system directly converts the analog signals to digital signals, and collectively puts the data through FPGA (Field Programmable Gate Array) processing. The master clock uses a high precision oscillator which excels in low-noise characteristics. This makes it possible to provide superior receive and transmit performance, extremely low phase noise as well as high RMDR (Reciprocal Mixing Dynamic Range).

* At 2 kHz frequency separation.

RMDR Characteristics

* Received frequency: 14.2 MHz, MODE: CW, IF BW: 500 Hz



Independent Dual Receiver Receives Two Bands Simultaneously

The sub receiver works independently of the main receiver. The dual receiver is perfect to simultaneously monitor two bands and two modes. Independent AF/RF knobs for the main and sub bands improve usability.

DIGI-SEL Preselector Firmly Shuts Out Interference Signals

Both main and sub receivers are equipped with DIGI-SEL (digital preselector) units. The DIGI-SEL has steeper skirt characteristics than normal bandpass filters, so it rejects out of band strong interference such as broadcast stations, and prevents cross modulation.



DIGI-SEL Unit

High-speed, High-resolution Real-time Spectrum Scope

The real-time spectrum scope of the IC-7610 shows main and sub band conditions. It provides class-leading performance in resolution, sweep speed and a 100 dB of dynamic range. The waterfall screen allows you to find weak signals by showing spectrum change over time. The audio scope function shows the FFT scope and oscilloscope.

	IC-7610	IC-7600
Span width	5 kHz–1000 kHz	5 kHz–500 kHz
Resolution	1 pixel minimum*	20 pixel minimum*
Sweep Speed	Max. 30 frames/second (approximate)	Max. 4 frames/second (approximate)
Display Dynamic Range	100 dB	80 dB
Dual Receiver	Yes	No (Single)

* Number of pixels shown at the 60 dB level, when receiving a signal.

7-inch Color Display with Touch Screen Function

The large 7-inch color display shows various operating and setting information at a glance in high resolution (800 × 480 pixels). The combination of the touch screen and the Multi-function control knob offers smooth, intuitive and speedy operation.

Other Features

- Built-in high-speed automatic antenna tuner
- Newly designed large speaker housing offers superior sound quality, making use of the high-purity received signal
- SD card for saving various setting information and recording communications* * An SD card is required separately.
- Digital IF filter and digital twin PBT for interference rejection
- IP remote control capability with the optional RS-BA1
- External monitor connection with a DVI-D port