SPECIFICATIONS

GENERAL

Frequency coverage	USA	<A band> 0.100000 – 821.999990, 851.000000 – 866.999990, 896.000000 – 3304.999990 MHz* <B band> 108.000000 – 520.000000 MHz * Depending on the receiver version. 0.100000–3304.999990 MHz guaranteed.
	EUR	<A band> 0.100000 – 3304.999990 MHz <B band> 108.000000 – 520.000000 MHz
Mode	<A band>	≤1300 MHz FM, FM-N, WFM, AM, AM-N, SSB, CW, CW-R, D-STAR (DV), P25, dPMR, NXDN-VN, NXDN-N, DCR >1300 MHz FM, FM-N, WFM, AM, AM-N
	<B band>	FM, FM-N, AM, AM-N, D-STAR (DV), P25, dPMR, NXDN-VN, NXDN-N, DCR
Antenna impedance		50 Ω (SMA)
Number of memory channels		2000 regular (100 groups), 200 auto memory write scan, 100 skip, 300 GPS memories
Frequency stability		Less than ±2.5 ppm (–20 °C to 60 °C; –4 °F to 140 °F)
Tuning steps		0.01, 0.1, 1, 3.125, 5, 6.25, 8.33*, 9*, 10, 12.5, 15, 20, 25, 30, 50, 100, 125, 200 kHz * May be available, depending on the operating band and mode.
Power supply requirements		3.6 V DC (with BP-287), 5.0 V DC ±5% (USB)
Battery life		8 hours 20 minutes (Approximate) (with BP-287, continuous receive, 100 mW audio, GPS OFF, Bluetooth OFF)
Current drain (at 3.6 V DC)		AF rated power 330 mA typical Receive standby 200 mA typical Power saved 100 mA typical (FM mode single receive, voice recording OFF, GPS OFF, back light OFF)
Dimensions (Projections not included.)		58 (W) × 143 (H) × 30.5 (D) mm 2.3 (W) × 5.6 (H) × 1.2 (D) in
Weight (Approximate)		310 g, 10.9 oz (With antenna and BP-287 battery pack), 200 g, 7.1 oz (main unit)
Operating temperature range		–20 °C to 60 °C, –4 °F to 140 °F
Bluetooth®		Version: Bluetooth® Ver 4.2, Profile: HFP, HSP, SPP
GNSS		GPS, QZSS

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

Applicable U.S. Military Specifications

Standard	MIL 810G	
	Method	Procedure
Low Pressure	500.5	I, II
High Temperature	501.5	I, II
Low Temperature	502.5	I, II
Temperature Shock	503.5	I–C
Solar Radiation	505.5	I
Rain Blowing/Drip	506.5	I, III
Humidity	507.5	II
Salt Fog	509.5	–
Dust Blowing	510.5	I
Immersion	512.5	I
Vibration	514.6	I
Shock	516.6	I, IV

Also meets equivalent MIL-STD-810-C, -D, -E and -F.

Ingress Protection Standard	
Dust and Water	IP57 (Dust-protection and Waterproof* protection) * One meter depth for 30 minutes.

RECEIVER

Receiving system		Triple conversion superheterodyne + Down converter (A band except WFM) Double conversion superheterodyne (A band WFM, B band)			
Intermediate frequency	<A band>	1st IF : 266.65/266.7/266.75 MHz 2nd IF : 58.0500 MHz (Except WFM), 10.7000 MHz (WFM) 3rd IF : 0.4500 MHz (Except WFM)			
	<B band>	1st IF : 46.3500 MHz	2nd IF : 0.4500 MHz		
Sensitivity Available frequencies and modes differ, depending on A band and B band.	SSB/CW (10 dB S/N)	0.495000 – 1.899990 MHz	: Less than	0.4 µV	
		1.900000 – 14.999990 MHz	: Less than	0.25 µV	
		15.000000 – 29.999990 MHz	: Less than	0.25 µV	
		50.000000 – 53.999990 MHz	: Less than	0.25 µV	
		144.000000 – 147.999990 MHz	: Less than	0.25 µV	
		430.000000 – 449.999990 MHz	: Less than	0.32 µV	
	AM (10 dB S/N)	0.495000 – 1.899990 MHz	: Less than	2.2 µV	
		1.900000 – 14.999990 MHz	: Less than	1.4 µV	
		15.000000 – 29.999990 MHz	: Less than	1.4 µV	
		118.000000 – 136.999990 MHz	: Less than	1.4 µV	
	FM (12 dB SINAD)	28.000000 – 221.999990 MHz	: Less than	0.4 µV	
		222.000000 – 832.999990 MHz	: Less than	0.56 µV	
		833.000000 – 1299.999990 MHz	: Less than	0.56 µV	
		1300.000000 – 1999.999990 MHz	: Less than	1.8 µV	
		2000.000000 – 2699.999990 MHz	: Less than	1.8 µV	
		2700.000000 – 3304.999990 MHz	: Less than	18 µV	
	WFM (12 dB SINAD)	76.000000 – 107.999990 MHz	: Less than	1.8 µV	
	D-STAR (DV) (1% BER)	28.000000 – 29.999990 MHz	: Less than	0.71 µV	
		50.000000 – 53.999990 MHz	: Less than	0.71 µV	
		144.000000 – 147.999990 MHz	: Less than	0.71 µV	
		430.000000 – 449.999990 MHz	: Less than	1 µV	
		1260.000000 – 1299.999990 MHz	: Less than	1 µV	
	NXDN/ dPMR/DCR (1% BER)	136.000000 – 173.999990 MHz	: Less than	0.71 µV	
		350.000000 – 379.999990 MHz	: Less than	1 µV	
		380.000000 – 511.999990 MHz	: Less than	1 µV	
	P25 (5% BER)	136.000000 – 173.999990 MHz	: Less than	0.4 µV	
		400.000000 – 469.999990 MHz	: Less than	0.56 µV	
		763.000000 – 832.999990 MHz	: Less than	0.71 µV	
		833.000000 – 869.999990 MHz	: Less than	0.71 µV	
Selectivity	SSB/CW	More than 1.8 kHz/–6 dB			
	AM/FM	More than 12 kHz/–6 dB, Less than 30 kHz/–60 dB (below 1305 MHz), Less than 30 kHz/–40 dB (above 1305 MHz)			
	WFM	More than 150 kHz/–6 dB			
Audio output power	Internal SP	More than 400 mW (16 Ω load, at 10% distortion)			
	External SP	More than 200 mW (8 Ω load, at 10% distortion)			

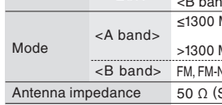
DUALWATCH CAPABILITY

		B band			
		FM/FM-N	AM/AM-N	D-STAR	P25/NXDN/dPMR/DCR
A band	FM (FM/FM-N/WFM)	✔	✔	✔	✔
	AM (AM/AM-N)	✔	✔	✔	✔
	SSB (LSB/USB), CW (CW/CW-R)	✔	✔	–	–
	D-STAR (DV)	✔	✔	†	–
	P25/NXDN/dPMR/DCR	✔	✔	–	–

✔ : Dualwatch, dual recording possible † : Main band has priority, if two DV signals come in at the same time.
–: Single receive only.

OPTIONS

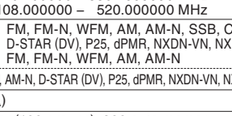
BATTERY PACK AND BATTERY CASE



BP-287 Li-ion, 3.6 V 3280 mAh (typ.), 3120 mAh (min.) . Same as supplied.

BP-293 AA (LR6) × 3 battery case.

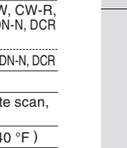
BATTERY CHARGER



BC-223 Charges the BP-287 in 4 hours (approximate). Same as supplied.

BC-123SA/SE

Bluetooth® HEADSET

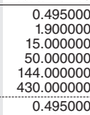


VS-3

EARPHONE

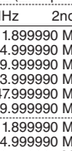
SP-40

BELT CLIP



MB-133 Same as supplied.

CARRYING CASE



LC-189

PROGRAMMING SOFTWARE

• **CS-R30**
Programming software for a Windows® PC.

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.
www.icomamerica.com

Icom Canada
www.icomcanada.com

Icom Brazil
E-mail: sales@icombrazil.com

Icom (Europe) GmbH
www.icomeurope.com

Icom Spain S.L.
www.icomspain.com

Icom (UK) Ltd.
www.icomuk.co.uk

Icom France s.a.s.
www.icom-france.com

Icom (Australia) Pty. Ltd.
www.icom.net.au

Shanghai Icom Ltd.
www.bjicom.com

Your local distributor/dealer:

A4 18NGG507A Printed in Japan

ICOM

IC-R30

COMMUNICATIONS RECEIVER

DUALWATCH × DUAL RECORDING

Receives and Decodes Various Digital Protocols

Decodes Digital Protocols
(P25, NXDN™, dPMR™, D-STAR, DCR)

0.1 – 3304.999 MHz Wideband Coverage

GPS, Bluetooth®, USB Charging and microSD Card Slot

200 Channel Per Second High Speed Scan

Digital and Analog Wideband Communica tions Receiver with Dualwatch and Dual Band Recording Functions

Superior Performance

Decodes Digital Protocols

The IC-R30 decodes various digital protocol signals, including P25 (Phase 1), NXDN™, dPMR™, D-STAR (Digital Smart Technology for Amateur Radio) and Japanese domestic DCR (Digital Convenience Radio).

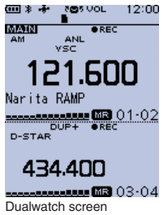
0.1–3304.999 MHz Wideband Coverage

The IC-R30 covers a wide frequency range from 0.1 to 3304.999 MHz, and receives conventional analog signals such as AM, FM, WFM, USB, LSB and CW as well as digital modes*. A ferrite bar antenna for AM broadcasts is built-in, and the earphone cable can be used as an external antenna for FM broadcasts.

* SSB, CW and digital modes: 0.1 MHz–1.3 GHz. Usable frequencies and modes differ, depending on the selected A or B band. See specifications for details.

Dualwatch Operation

The radio can receive on different bands and different modes. For example, HF and UHF signals can be monitored simultaneously. You can scan for other active channels on the B band, while receiving the main signal on the A band.

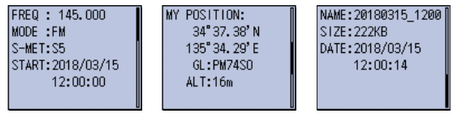


Dualwatch screen

Dual Band Recording Function

The audio of the two bands received while in the Dualwatch mode can be individually recorded onto a microSD card* in the WAV format. The recorded audio can be played back on the receiver or a PC. In addition, frequency, mode, S-meter reading, time, current position data and altitude can be saved with received audio.

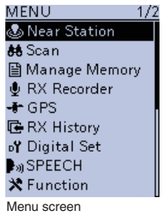
* A microSD/microSDHC card is required.



Information screen of received voice

2.3" Large LCD and Intuitive User Interface

A 2.3 inch large, dot-matrix display is used in the IC-R30. Screens with large amounts of information are clearly and logically arranged. The four direction keypad provides straight-forward operation of all functions.



Menu screen

Convenient Features

High Speed Scan – 200 Channels/Second

The IC-R30 scans approximately 200 channels per second in the A band, and 150 channels per second in the B band. You can quickly find and lock in to a desired signal. The IC-R30 has variety of scan functions.

Near station scan
Using GPS location information and the Memory channels*, the IC-R30 can display and scan up to 50 stations within 160 km from your current location, in proximity order.

* The position data of the stations must be programmed in advance.

Auto memory write scan
Automatically stores received frequencies (up to 200 Ch) during a Programmed scan.

Priority scan
Checks for signals on a frequency every 5 seconds, while operating on a VFO frequency or scanning.

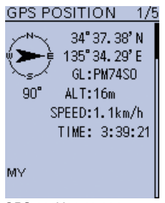
Tone scan
Detects a sub-audible tone frequency or the DTCS code in a received signal.

Program scan, **Memory scan**, **Memory mode scan**, **Group scan**, **Group link scan** and more.

Integrated GPS Receiver

The integrated GPS receiver displays your current position data, course, speed and altitude on the display. GPS data can also be saved in recorded audio files. The IC-R30 can list up up to 50 stations within 160 km from your current location*.

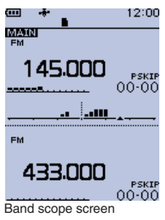
* The position data of each station must be preprogrammed in the Memory channels.



GPS position screen

Band Scope Function

The band scope function enables you to visually search a specified frequency range around the received signal and see the relative received signal strength level. You can jump to the desired signal on the band scope to set the radio to that frequency.



Band scope screen

Speech Function

The Speech function reads out the operating frequency and mode when you rotate the dial knob, or press the [SPEECH] button. This function is convenient for making radio adjustments with the Bluetooth® headset without having to look at the radio.

Actual size

Solid Fundamentals

IP57 Rugged Construction

The IC-R30 has superior IP57 waterproof protection (1 m depth of water for 30 minutes). It can be used in harsh outdoor environments. The radio also passes MIL-STD-810-G specifications.

Up to 8.3 Hours of Long Battery Life

The supplied BP-287 Li-ion battery pack provides 8 hours and 20 minutes* of operation. The optional BP-293 battery case, with AA (LR6) alkaline cells, can be used in as a convenient backup battery.

* The Dualwatch function is ON (A band: continuously receiving, B band: standing by), the Power Save function is set to "Auto (Short)," the internal speaker's volume is set to "20," the GPS function is ON, and the Bluetooth function is OFF.

USB Charging and PC Connection

The built-in USB port has a range of convenient uses. You can charge the IC-R30 in approximately 5 hours,* carry out data transfer (including loading Memory channels) and CI-V remote control.

* Using with a 1 A USB charger. The IC-R30 is Power OFF.

microUSB port

microSD Card Slot for Voice and Data Storage

You can use a microSD card* for data storage. Recording/playback of received audio, RX history log, radio settings and GPS logger data can all be loaded onto the microSD card.

* A microSD/microSDHC is required (up to 32 GB).

microSD card slot

Wireless Operation with a Bluetooth® Headset

With the optional VS-3 Bluetooth® headset, you can wirelessly listen to received audio. The VS-3 has volume UP/DOWN buttons and four programmable buttons to remotely control certain functions.

Bluetooth® headset, VS-3 (option)

And More

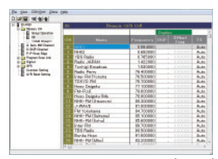
· 2000 regular Memory channels (with an 8-character name) · DTCS and CTCSS tone squelch · VSC (Voice Squelch Control) (FM, FM-N, WFM, AM, AM-N) · AFC (Auto Frequency Control) (FM, FM-N, WFM) · Noise blanker (SSB, CW) · ANL (Auto Noise Limiter) (AM, AM-N) · RF gain control (10 steps) · ATT function (3 steps) · Key lock function · Monitor function · Power save function (3 steps) · Volume or frequency setting with dial or side buttons · Quick menu function · Clock

CS-R30 Optional Programming Software

Using the CS-R30, you can smoothly edit the following settings on a PC;

· Memory channels
· Auto memory write channel groups
· Program scan link name
· Radio settings and digital settings
· Groups
· Scan edges
· GPS memories

OS: Microsoft® Windows®10, Windows®8.1 (* Except for Windows® RT) or , Windows®7



CS-R30 (option)

COMMUNICATIONS RECEIVER

IC-R30

Supplied accessories (* May differ, depending on the receiver version.)

Li-ion battery pack **BP-287**

Rapid charger **BC-223**

AC adaptor **BC-123SA/SE***

USB cable for charging and data transfer

Telescopic antenna

Belt clip **MB-133**

Hand strap