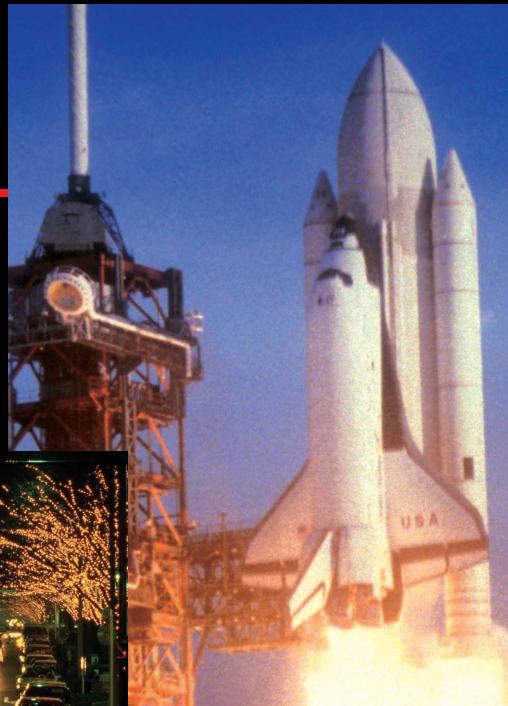


**ICOM**

# COMMUNICATIONS RECEIVERS

**SIMPLY THE BEST**



Icom Inc.



# Discover a world of information and intrigue



COMMUNICATIONS RECEIVER

## IC-R8500

0.1-1999.99999MHz coverage\*

### Various modes for wide range

Various modes are supported for listening not only to amateur bands, FM or TV Broadcast stations, but also marine and avionics. The IC-R8500 covers a wide frequency range continuously from 0.1 to 1999.99999MHz\* with 10Hz resolution. \* Guaranteed 0.1-1000MHz and 1240-1300MHz only ; Some versions have restricted coverage.

### Superior receive characteristics

The IC-R8500 has superior high receive sensitivity over its entire range and the built-in, high quality crystal (TCXO) provides good frequency stability of less than 100Hz below 30MHz; less than 3ppm above 30MHz. A variable tuning system, which is employed in the front-end tuning circuit, improves multi-signal characteristics, ensuring enhanced receiving performance.

### Versatile scanning functions

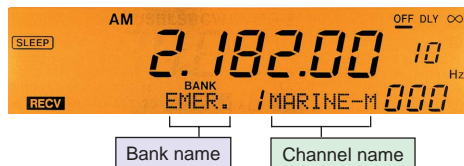
Basic scanning, memory, priority and program scans are available, and for more advanced needs, select scans can also be selected. The VSC (voice scan control) provides efficient scanning by skipping unmodulated signals.

### IF shift and APF function

The IF shift function works efficiently to reject interference from nearby signals, especially in SSB mode. The APF adjusts the peak frequency of the received audio, particularly in CW mode.

### Ample 1000 memory channels

The IC-R8500 has 800 memory channels divided into 20 banks (40 channels each), plus an auto memory write area of 100 channels and a skip area of the 100 channels. Alphanumeric names can be assigned to the channels (up to 8 characters) and banks (up to 5 characters) for easy recognition. Also, there are 20 scan edge memory channels to store 10 sets of frequencies for programmed scan plus 1 priority channel for priority scan.



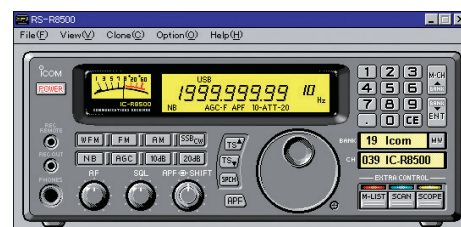
### Other outstanding features

- REC and REC remote terminals for tape recorder control and for recording received signals
- SO-239 type and phono (RCA) antenna connectors for HF bands and type-N for VHF/UHF
- S-meter squelch
- Optional UT-102 Voice Synthesizer
- Sleep timer (30, 60, 90, 120 min. selectable)
- Optional TV-R7100 TV/FM ADAPTER to view TV broadcasts
- Noise blanker, RF attenuator, and selectable AGC
- AFC function tunes the receiving frequency to the center of FM or WFM signals
- RS-232C serial interface connector

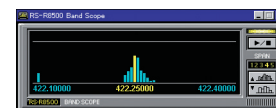
### PC remote control

The optional RS-R8500 software allows you to control the IC-R8500 from your PC. All the receiver functions are available from the front panel screen. The memory channel list and program scan list makes it easier to edit the contents, and the bandscope screen provides a special function that the IC-R8500 does not have. When you find a busy frequency, clicking on the screen will tune to that frequency.

#### ■ Front Panel Screen



#### ■ Bandscope Screen



#### Rear view





# HF/50MHz coverage and innovative features...



HF+50MHz COMMUNICATIONS RECEIVER

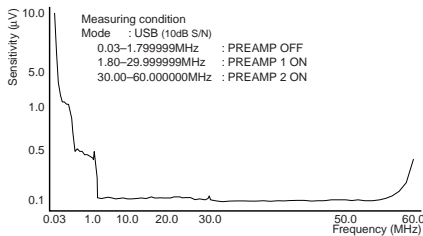
## IC-R75

0.03–60MHz coverage\*1

### High sensitivity receiver circuit

Icom's latest wide band technology provides highly stable receiver sensitivity over the entire receive frequency range: 0.03–60MHz\*1. The IC-R75 makes it easy to catch communications world wide. \*1 Guaranteed 0.1–29.99MHz and 50–54MHz only ; Some versions have restricted coverage.

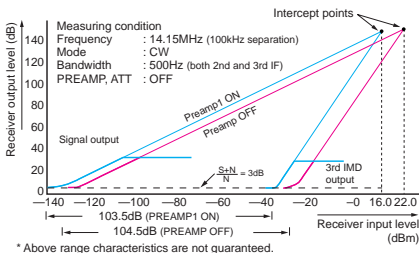
#### • Receive sensitivity characteristics example



### Superior dynamic range

A wide dynamic range of over 100dB, and a well-designed triple conversion system help minimize image and spurious responses for bet-

#### • Dynamic range characteristics example



\* Above range characteristics are not guaranteed.

ter signal fidelity.

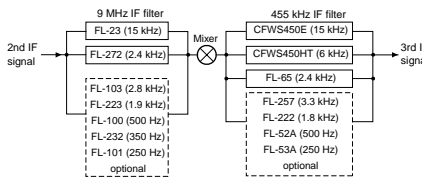
### Twin PBT capability

The twin PBT (Passband Tuning) function electronically narrows or moves the IF passband widths at two stages to get away from interference.

### Flexible filter selection

Up to two optional filters\*2 can be installed, provid-

#### • Filter Construction



ing flexible band width selection.

\*2 One each for 9MHz and 455kHz IF stage.

### DSP capability

With the optional UT-106 DSP unit installed, you can add a noise reduction function which improves the S/N ratio. And the automatic NOTCH filter automatically cuts beat interference. These Digital functions pull out desired signals from noise, and provide superior receive quality.

### Synchronous AM detection

The Synchronous AM detection function mixes

a synchronized (same signal) reference signal with the carrier signal. This works to efficiently reduce distortion of the AM carrier signal for improved audio quality.

### Simple operation

The function display has a large alphanumeric readout that indicates up to 8-character memory names for easy recognition. Often used keys such as mode switches, filter and Tuning Step have been placed above the Tuning Dial for easy access. The front mounted speaker provides clear and easy listening.

### Other features

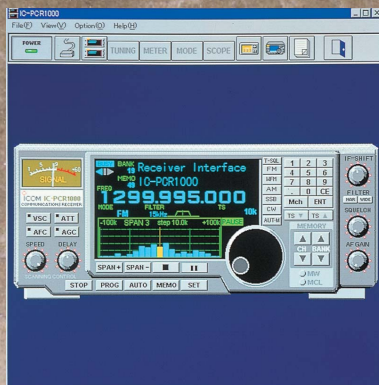
- Optional PC remote control RS-R75 is available
- Internal clock with ON/OFF, sleep timer
- 20dB attenuator and 2-level preamplifier
- 99 memories and 2 program scan edges with 8-digit memory name
- Selectable AGC (FAST/SLOW/OFF)
- Noise blanker for eliminating pulse type noise
- RTTY/CW reverse mode and CW pitch control
- Various scanning functions
- Adjustable LCD backlighting

#### Rear view

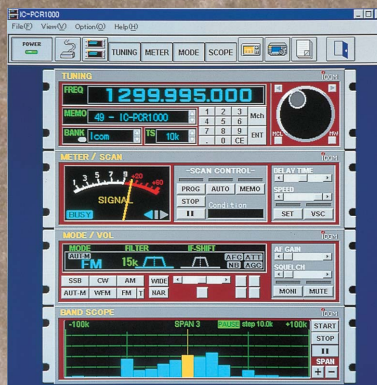




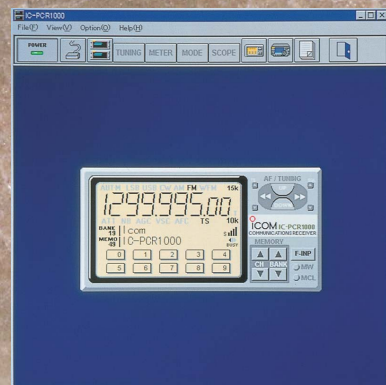
# Bring another world to your computer



**Communications receiver screen**



**Component-type screen**



**Radio screen**

## COMMUNICATIONS RECEIVER FOR COMPUTER

# IC-PCR1000

0.1–1300MHz coverage\*1

### 3 interface screens to choose

The "Communications receiver screen" shows frequency readout, tuning knob, S-meter, and so on – like a typical communications receiver.

The "Component-type screen" shows all available functions divided into 4 components: "TUNING", "MODE/VOL", "METER/SCAN" and "BANDSCOPE".

The "Radio screen" provides the simplest interface for monitoring most listened to stations such as AM/FM broadcasting and TV.

### RS-232C serial connection

The IC-PCR1000 connects to your PC externally – providing diverse compatibility with many computer models, even for laptops. There is no need to open your PC case. Easy to use with both desktop or laptop PC. Installing software is easy.

#### ■ System requirements

Operating System: Microsoft® Windows® 98/98SE, Windows® Me, Windows® 2000, Windows® XP  
 Hard Disk space: At least 10MB of free space  
 Serial Port : An RS-232C (38400 bps or faster)  
 Display : 640×480 pixel resolution or greater



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### Wide frequency coverage

The IC-PCR1000 covers a wide frequency range from 0.01–1300MHz\*1 with WFM, FM, AM, SSB and CW modes.

\*1 Guaranteed 0.5–1300MHz only; Some frequency ranges are restricted depending on version

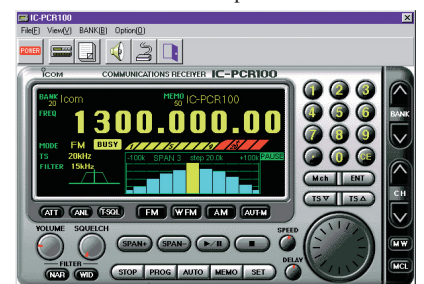
### Real-time bandscope function

The real-time band scope function makes it easy to find busy frequencies. In addition, clicking the busy signal indicator automatically tunes to that frequency immediately. (WFM, FM and AM modes only)

### These great features too

- "IF shift" function for reducing interference by electronically shifting the passband
- Noise blander suppresses pulse-type noise
- The AFC function keeps the center frequency of the tuned station. (FM mode only)
- VSC function detects only modulated signals
- S-meter squelch releases the AF mute when the receiving signal is stronger than the pre-set S-meter level.
- CTCSS tone squelch decoded
- 20dB of RF attenuator
- 9600bps packet communication receivable when connected to a TNC.
- DTMF remote control function controls the computer – activates a program, plays a sound (wav) file or displays a message.
- Optional UT-106 DSP UNIT provides noise reduction and auto notch functions.

#### ■ Multi-function control panel



#### ■ Simple-function control panel



- 2 interface screens
- Wide frequency coverage from 0.01 to 1300MHz\*2
- AM, FM and TV (audio only)
- Stereo audio outputs when connected to speakers

\*2 Guaranteed 0.5–1300MHz only; Some frequency ranges are restricted depending on version

#### ■ System requirements

Intel® i486 DX4 or faster CPU  
 Microsoft® Windows® 95 or Windows® 98  
 Minimum 10 MB of free space on hard drive  
 Minimum 16 MB of memory  
 Monitor with at least 640 × 480 pixel resolution

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COMMUNICATIONS RECEIVER FOR COMPUTER

# IC-PCR100



# Scan, Monitor, Record The Pro's Scanner!

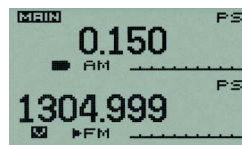
COMMUNICATIONS RECEIVER

## IC-R20

0.150-3304.999MHz coverage\*<sup>1</sup>

### 2 for 1, Dualwatch receive

Until the IC-R20, the capability of monitoring two frequencies required two radios. Whether you need to monitor local public safety, air traffic control, or at the track listening to two drivers, even the play by play from both the local TV and radio station is possible!

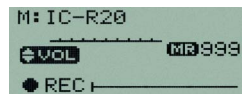


### Shortwave to microwave, Wideband coverage

The IC-R20 covers 150kHz to 3304.999MHz\*<sup>1</sup> in SSB, CW, AM, FM and WFM modes. When receiving in dualwatch, the combination of channels is limited to 150kHz to 469.999MHz (VFO A) and 118MHz to 174.999MHz or 330MHz to 1304.999MHz in AM, FM, WFM modes (VFO B). (\*<sup>1</sup> Depending on version, U.S.A. version is cellular blocked.)

### 4-hour digital recorder

The IC-R20 has an internal 32MB, digital recorder, capable of storing received communications. This feature is useful in a variety of ways, like recording a wireless microphone audio at a meeting. There is also a USB port to download to a computer for storage or to forward to a friend. (PC playback not possible)



### Alphanumeric memory channel

With 1,000 regular memory channels, 200 automatic memory scan channels and 25 pairs of frequency scan edges, the IC-R20 makes it easy to identify received signals with the capability of programming a name to each channel.

### CTCSS, DTCS tone signaling

When multiple users share the same channel, these users use specialized signaling to reduce interference from other users. The two popular signaling formats, CTCSS and DTCS are standard in the IC-R20.

### 11 hours of continuous receive\*<sup>2</sup>

Icom's energy efficient design allows the IC-R20 11\*<sup>2</sup> hours of continuous reception from the internal Li-Ion battery pack. Also, the IC-R20 can operate with 3 AA Alkaline cells, or longer operation as well as charging the internal battery pack is possible from either an optional cigarette lighter cable or the supplied AC adapter. (\*<sup>2</sup> Single receive in FM mode, at Max. AF audio.)

### See your signals

Sometimes hearing a signal is not enough, so the IC-R20 includes a band scope. The bandscope enables you to see signals around a monitored frequency. An additional function of the bandscope is the ability to hear the signal while sweeping a range, so you can see if the signal is modulated.



### Scan features

The IC-R20 is Icom's fastest receiver with 100\*<sup>3</sup> channels per second scanning speed. You can tag memory channels into dynamic banks, ranging from Max. 100 channels per bank (Max. 26 banks) as well as link multiple banks for customized memory bank scanning. Additionally, the IC-R20 offers multiple scanning controls such as scan delay, scan resume for received signal notification. (\*<sup>3</sup> In VFO mode.)

### Other superior features...

- VSC (Voice Squelch Control) opens the squelch only when a modulated signal is detected.
- Offset monitor capability
- Auto squelch and squelch monitor capability
- Built-in attenuator and RF gain control
- Noise blanker, ANL (Auto Noise Limiter), AF filter
- AFC (Auto Frequency Control) function
- PC remote control capability with optional CT-17
- Built-in ferrite bar antenna for AM broadcast
- FM earphone cord antenna capability
- Dial speed up function
- Auto power off and power save functions
- Reversible rotary selector and up/down buttons
- Weather channel\* (\* U.S.A. version only)
- Preprogrammed TV and shortwave channels









# A 'world' of listening that fits in your palm!

COMMUNICATIONS RECEIVER

## IC-R5

0.150-1309.995MHz coverage\*1



### Listen almost anywhere to almost anything

The IC-R5's combination of small size, powerful specifications and outstanding features put you in the action, whether listening in on your favorite driver's car-to-pit radio calls while at the race track, looking for something new while traveling, or catching your favorite radio programs at home.

### Wideband receiver with band switch function

A 0.150-1309.995MHz\*1 wide frequency coverage means virtually anything from AM broadcast to UHF TV audio is fair listening game. Every TV broadcast channel is preprogrammed into this radio.\*2 Listen to AM & FM radio stations, utility communications, and more. The band switch allows you quick access to the operating band. The last used frequency is recalled when the operating band is changed – its like having 12 VFOs\*1 available. This system provides for simple operation!

\*1 Some versions have restricted coverage.

\*2 Depending on version.

### 1250 Alphanumeric memory channels

Make up your own channel names for each of up to 1250 memory channels, and channel recognition is easy! The IC-R5's LCD display lets you use numbers, letters or a combination of both when naming channels and banks. Icom's exclusive Dynamic Memory Scan (DMS) gives you the flexibility to customize and manage the IC-R5's memory banks the way you want or need.

### Convenient power and charging

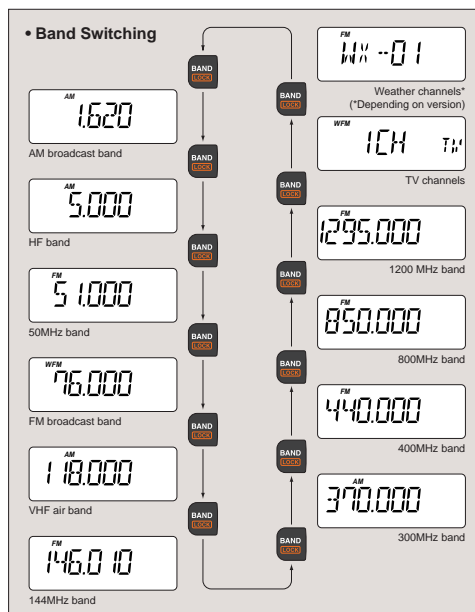
Power on the go is easy, thanks to the IC-R5's ability to operate from a variety of power sources. You may: power the radio via the DC port; or use two "AA" size rechargeable Ni-Cd batteries; or use long storage life "AA" alkalines. A DC jack allows for simultaneous battery charging while operating the radio.

### Computer programmable









With the optional software and cable, IC-R5 programming and cloning are a breeze. Hook your IC-R5 up to a PC and you're ready to customize channel names, scan lists, and more.



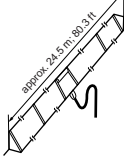





### More outstanding features...






- Built-in ferrite bar antenna for AM broadcast
- FM earphone cord antenna capability
- DTCS and CTCSS tone squelch function
- Offset monitor capability for semi-duplex operation monitoring
- Auto squelch and squelch monitor capability
- Built-in attenuator
- Low-battery indicator and beep
- 30-120 minutes auto power off timer
- LCD backlight with timer
- Auto memory write scan stores the detected frequency, mode and tone into a specified memory
- Priority watch function with beep alert
- Optional antenna connector adapter available (SMA to BNC)
- 100 preprogrammed worldwide shortwave channels\*
- Weather channels with weather alert function\* (\* U.S.A. version only)







# OPTIONS FOR BASE RECEIVERS

	AC ADAPTER	EXTERNAL SPEAKERS				DC POWER CABLE	MOBILE BRACKETS		CARRYING HANDLE
MODEL NAME	AD-55/A/V	SP-7	SP-20	SP-21	SP-23	OPC-023	IC-MB5	MB-12	MB-23
									
IC-R8500	✓	✓	✓	✓	✓	✓		✓	✓
IC-R75	✓	✓	✓	✓	✓		✓		✓
IC-PCR1000									

	REMOTE CONTROL SOFTWARE	EXTERNAL ANTENNAS		CI-V CONVERTER	HIGH STABILITY CRYSTAL UNITS		VOICE SYNTHESIZER	DSP UNIT	
MODEL NAME	RS-R75	RS-R8500	AH-7000	AH-710	CT-17	CR-282 ±0.5ppm	CR-293 ±0.5ppm	UT-102	UT-106
									
IC-R8500		✓	✓ (VHF/UHF bands only)	✓ (HF band only)	✓		✓	✓	
IC-R75	✓			✓ (HF band only)	✓	✓		✓	✓
IC-PCR1000									✓








	9MHz FILTERS								
MODEL NAME	FL-100 CW/RTTY narrow; 500Hz/-6dB	FL-101 CW narrow; 250Hz/-6dB	FL-103 SSB wide; 2.8kHz/-6dB	FL-223 SSB narrow; 1.9kHz/-6dB	FL-232 CW/RTTY narrow; 350Hz/-6dB				
									
IC-R8500									
IC-R75	✓ (One of these 9MHz filters)	✓ (One of these 9MHz filters)	✓ (One of these 9MHz filters)	✓ (One of these 9MHz filters)	✓ (One of these 9MHz filters)				
IC-PCR1000									










	455kHz FILTERS								
MODEL NAME	FL-52A CW/RTTY narrow; 500Hz/-6dB	FL-53A CW narrow; 250Hz/-6dB	FL-222 SSB narrow; 1.8kHz/-6dB	FL-257 SSB wide; 3.3kHz/-6dB					
									
IC-R8500	✓								
IC-R75	✓ (One of these 455kHz filters)	✓ (One of these 455kHz filters)	✓ (One of these 455kHz filters)	✓ (One of these 455kHz filters)					
IC-PCR1000									





: Applicable
  : Not applicable



# OPTIONS FOR HANDHELD RECEIVERS

MODEL NAME	BATTERY ASSEMBLY	CHARGERS					CIGARETTE LIGHTER CABLE	
	BP-206 3.7V/1650mAh (Li-Ion) 	BC-135 DESKTOP CHARGER 	BC-136A/D WALL CHARGER 	BC-149A/D WALL CHARGER 6V DC, 1A output 	BC-153A/D WALL CHARGER 6V DC, 1A output 	BC-156 DESKTOP CHARGER 	CP-18A/E 	
IC-R20	✓			✓		✓	✓	
IC-R3	✓	✓	✓		✓		✓	
IC-R5				✓			✓	

MODEL NAME	CARRYING CASES			CLONING CABLES			CLONING SOFTWARE		
	LC-146A 	LC-151 	LC-158 	OPC-474 Receiver-to-receiver 	OPC-478 Receiver to PC RS-232C cable 	OPC-478U Receiver to PC USB cable 	CS-R3 	CS-R5 	CS-R20 With USB cable 
IC-R20			✓						✓
IC-R3		✓		✓	✓		✓		
IC-R5	✓			✓	✓	✓		✓	

MODEL NAME	ANTENNA ADAPTER	EARPHONE	HEADPHONE	CI-V CONVERTER				
	AD-92SMA BNC to SMA 	SP-13 	HP-4 	CT-17 				
IC-R20		✓		✓				
IC-R3		✓	✓					
IC-R5	✓	✓	✓					

: Applicable
  : Not applicable



# SPECIFICATIONS

	IC-R8500	IC-R75	IC-PCR1000	IC-PCR100	
<b>General</b>	Frequency coverage	U.S.A. version: 0.1–823.99999MHz 849.00001–868.99999MHz 894.00001–1999.99999MHz* Europe version: 0.1–1999.99999MHz* *Guaranteed range 0.1–1000MHz and 1240–1300MHz	0.03–60MHz* *Guaranteed range 0.1–29.99MHz and 50–54MHz	U.S.A. version: 0.01–823.999999MHz 849.000001–868.999999MHz 894.000001–1300MHz* Europe version: 0.01–1300MHz* *Guaranteed range 0.5–1300MHz	U.S.A. version: 0.01–823.999MHz 849.001–868.999MHz 894.001–1300MHz* Europe version: 0.01–1300MHz* *Guaranteed range 0.5–1300MHz
	Modes	USB, LSB, AM, AM-N, AM-W, CW, CW-N*, FM, FM-N, WFM *Optional CW narrow filter required	USB, LSB, CW, RTTY, AM, S-AM, FM	USB, LSB, CW, AM, FM, WFM	AM, FM, WFM
	Frequency stability	±100Hz (below 30MHz) ±3ppm (above 30MHz)	±7ppm (1 hr. after power ON; +25°C)	±3ppm (at 1300MHz: ±0°C to +50°C)	±5ppm (at 1300MHz: ±0°C to +50°C)
	Max. current drain	2.0A at 13.8V DC	1.1A at 13.8V DC	0.7A at 13.8V DC	0.7A at 13.8V DC
	Power supply requirement	13.8V DC ±15% or 117, 220, 240V AC with AD-55	13.8V DC ±15% or 117, 220, 240V AC with AD-55	13.8V DC ±15% or 117, 220, 240V AC with BC-123/BM-104	13.8V DC ±15% or 117, 220, 240V AC with BC-123/BM-104
	Antenna connector	SO-239 (50Ω) and Phono (RCA: 500Ω) for below 30MHz and Type-N (50Ω) for above 30MHz	SO-239 (50Ω), 500Ω terminals	BNC (50Ω)	BNC (50Ω)
	Number of memory channels	1021 (including 20 scan edges, 1priority)	101 (including 2 scan edges)	Unlimited (1000 Ch/file)	Unlimited (1000 Ch/file)
	Dimensions (W)×(H)×(D) (projections are not included)	287×112×309mm ; 115 <sup>1</sup> / <sub>16</sub> ×4 <sup>1</sup> / <sub>32</sub> ×125 <sup>3</sup> / <sub>32</sub> in	241×94×229mm; 9 <sup>1</sup> / <sub>2</sub> ×3 <sup>1</sup> / <sub>16</sub> ×9 <sup>1</sup> / <sub>32</sub> in	127.5×30×199mm; 5 <sup>1</sup> / <sub>32</sub> ×1 <sup>1</sup> / <sub>16</sub> ×7 <sup>7</sup> / <sub>32</sub> in	131×33.5×154.5mm; 5 <sup>5</sup> / <sub>32</sub> ×1 <sup>5</sup> / <sub>16</sub> ×6 <sup>3</sup> / <sub>32</sub> in
Weight (approx.)	7kg; 15.4lb	3.0kg; 6.6lb	1kg; 2.2lb	500g; 1.1lb	
<b>Receiver</b>	Sensitivity SSB, CW, RTTY, AM: at 10dB S/N FM, WFM: at 12dB SINAD	SSB, CW: 0.1–0.5MHz 1.0μV 0.5–1.8MHz 2.0μV 1.8–2.0MHz 0.25μV 2.0–30MHz 0.2μV 30–1000MHz 0.32μV 1240–1300MHz 0.32μV AM: 0.1–0.5MHz 6.3μV 0.5–1.8MHz 13μV 1.8–2.0MHz 3.2μV 2.0–1000MHz 2.5μV 1240–1300MHz 2.5μV AM-N: 1.8–2.0MHz 2.5μV 2.0–1000MHz 2.0μV 1240–1300MHz 2.0μV AM-W: 30–1000MHz 3.2μV 1240–1300MHz 3.2μV FM: 28–1000MHz 0.5μV 1240–1300MHz 0.5μV WFM: 30–1000MHz 1.4μV 1240–1300MHz 2.0μV	SSB, CW, RTTY: 0.1–1.8MHz* <sup>1</sup> 2.0μV 1.8–29.99MHz* <sup>2</sup> 0.16μV 50–54MHz* <sup>3</sup> 0.13μV AM, S-AM: 0.1–1.8MHz* <sup>1</sup> 5.6μV 1.8–29.99MHz* <sup>2</sup> 1.6μV 50–54MHz* <sup>3</sup> 1.0μV FM: 28–29.99MHz* <sup>2</sup> 0.22μV 50–54MHz* <sup>3</sup> 0.2μV * <sup>1</sup> Preamp OFF * <sup>2</sup> Preamp1 ON * <sup>3</sup> Preamp2 ON	SSB, CW: 0.5–1.8MHz 0.56μV 1.8–30MHz 0.28μV 30–50MHz 0.35μV 50–700MHz 0.2μV 700–1300MHz 0.25μV AM: 0.5–1.8MHz 2.5μV 1.8–30MHz 1.4μV 30–50MHz 1.8μV 50–700MHz 1.0μV 700–1300MHz 1.3μV FM: 28–50MHz 0.5μV 50–700MHz 0.32μV 700–1300MHz 0.4μV WFM: 50–700MHz 0.79μV 700–1300MHz 1.0μV	AM: 0.5–1.8MHz 2.5μV 1.8–50MHz 1.8μV 50–700MHz 1.0μV 700–1300MHz 1.3μV FM: 28–50MHz 0.5μV 50–700MHz 0.32μV 700–1300MHz 0.4μV WFM: 50–700MHz 0.79μV 700–1300MHz 1.0μV
	Selectivity	SSB, CW, AM-N: 2.2kHz/–6dB AM, FM-N: 5.5kHz/–6dB AM-W, FM: 12kHz/–6dB WFM: 150kHz/–6dB	SSB, CW, RTTY: 2.1kHz/–6dB 4kHz/–60dB AM, S-AM: 6kHz/–6dB 20kHz/–50dB FM: 12kHz/–6dB 30kHz/–50dB	SSB, CW, AM: 2.8kHz/–6dB AM, FM, SSB, CW: 6kHz/–6dB AM, FM: 15kHz/–6dB AM, FM, WFM: 50kHz/–6dB WFM: 230kHz/–6dB	FM, AM: 6kHz/–6dB 15kHz/–6dB AM, FM, WFM: 50kHz/–6dB WFM: 230kHz/–6dB
	Spurious and image rejection (except IF)	60dB (1.8–30MHz) 50dB typical (above 30MHz)	70dB (Except IF through/ 50MHz band)	Not specified	Not specified
	AF power (at 10% distortion)	2W with an 8Ω load	2W with an 8Ω load	200mW with an 8Ω load	200mW with an 8Ω load
	Ext. speaker connector	2-conductor 3.5 (d) mm ( <sup>1</sup> / <sub>8</sub> )/4–8Ω	2-conductor 3.5 (d) mm ( <sup>1</sup> / <sub>8</sub> )/8Ω	3-conductor 3.5 (d) mm ( <sup>1</sup> / <sub>8</sub> )/4–8Ω	3-conductor 3.5 (d) mm ( <sup>1</sup> / <sub>8</sub> )/4–8Ω



## Applicable U.S. Military Specifications

Icom makes rugged products that meet MIL-STD requirements and strict environmental standards for shock (MIL-810C, D, E) and vibration (MIL-810C, D, E). Look for this logo to determine which models meet these requirements.



# SPECIFICATIONS

	IC-R20	IC-R3	IC-R5		
General	Frequency coverage	U.S.A. version: 0.150–1304.999MHz* 1305.000–3304.999MHz * Cellular blocked. Europe version: 0.150–1304.999MHz 1305.000–3304.999MHz	U.S.A. version: 0.495–815.995MHz 902.000–2450.095MHz Europe version: 0.495–2450.095MHz	U.S.A. version: 0.150–1309.995MHz* * Cellular blocked Europe version: 0.150–1309.995MHz	
	Modes	FM, WFM, AM, USB, LSB, CW	AM, AM-TV*2, FM, WFM, FM-TV*3	FM, WFM, AM	
	Frequency stability	±6ppm (–10°C to +60°C)	±6ppm (–10°C to +50°C)	±6ppm (–10°C to +60°C)	
	Current drain	150mA typ. at rated audio output with 3.7V DC*1	730mA typ. (color LCD ON) at TV reception with 4.5V DC	170mA typ. at rated audio output with 3.0V DC	
	Battery pack or cells	BP-206, 3×AA (R6) Alkaline cells	BP-206, 3×AA (R6) Alkaline cells	2×AA (R6) Alkaline cells	
	External power supply requirement	6.0V DC (with BC-149A/D or CP-18A/E)	3.6–6.3V DC (with BC-153A/D or CP-18A/E)	6.0V DC (with BC-149A/D or CP-18A/E)	
	Antenna connector	BNC (50Ω)	BNC (50Ω)	SMA (50Ω)	
	Number of memory channels	1250 (including 50 scan edges and 200 auto memory write )	450 (including 50 scan edges)	1250 (including 50 scan edges and 200 auto memory write )	
	Dimensions (W)×(H)×(D) projections are not included	60×142×34.8mm; 2 <sup>3</sup> / <sub>16</sub> ×5 <sup>1</sup> / <sub>32</sub> ×1 <sup>3</sup> / <sub>16</sub> in	61×120×32.9mm; 2 <sup>1</sup> / <sub>32</sub> ×4 <sup>2</sup> / <sub>32</sub> ×1 <sup>9</sup> / <sub>32</sub> in	58×86×27mm; 2 <sup>9</sup> / <sub>32</sub> ×3 <sup>3</sup> / <sub>8</sub> ×1 <sup>1</sup> / <sub>16</sub> in	
	Weight (approx.)	320g; 11.3oz (with antenna and battery)	300g; 10.6oz (with antenna and battery)	185g; 6.5oz (with antenna and cells)	
Receiver	Sensitivity SSB, CW, RTTY, AM: at 10dB S/N FM, WFM: at 12dB SINAD	SSB, CW: 0.495–4.999MHz 0.4μV 5–29.999MHz 0.25μV 50–53.999MHz 0.25μV 118–146.999MHz 0.25μV 330–469.999MHz 0.32μV AM: 0.495–4.999MHz 2.2μV 5–29.999MHz 1.4μV 118–135.999MHz 1.4μV FM: 1.620–4.999MHz 0.56μV 5–221.999MHz 0.4μV 330–832.999MHz 0.56μV 833–1304.999MHz 0.71μV 1330–2304.999MHz 5.6μV 2330–2999.999MHz 18μV WFM: 76–108MHz 1.8μV 175–221.999MHz 1.8μV 470–769.999MHz 2.5μV	AM (typical): 0.495–5MHz 1.4μV 5–29.955MHz 1.0μV 118–136MHz 0.79μV 222–329.995MHz 1.0μV FM (typical): 1.625–5MHz 0.32μV 5–470MHz 0.25μV 470–800MHz 0.45μV 800–2000MHz 0.56μV 2000–2300MHz 1.0μV 2300–2450.095MHz 1.8μV WFM (typical): 76–107.995MHz 1.0μV 175–222MHz 1.0μV 470–770MHz 1.8μV	AM (typical) : 0.495–4.995MHz 1.3μV 5–29.995MHz 0.71μV 118–136MHz 0.56μV 222–246.995MHz 0.56μV 247–329.995MHz 0.71μV FM (typical) : 1.625–4.995MHz 0.32μV 5–117.995MHz 0.2μV 118–246.995MHz 0.18μV 247–329.995MHz 0.2μV 330–469.995MHz 0.18μV 470–999.995MHz 0.28μV 1000–1309.995MHz 0.35μV WFM (typical) : 76–108MHz 0.89μV 175–221.995MHz 0.71μV 470–770MHz 1.0μV	
	Selectivity	SSB, CW: 1.8kHz/–6dB AM, FM: 12kHz/–6dB 30kHz/–60dB WFM: 150kHz/–6dB	AM, FM: 12kHz/–6dB 30kHz/–50dB WFM: 150kHz/–6dB	AM, FM: 15kHz/–9dB 30kHz/–60dB WFM: 150kHz/–6dB	
	AF power at 10% distortion	100mW with an 8Ω load	100mW with an 8Ω load	100mW (typ.) with an 8Ω load	
	Ext. speaker connector	3-conductor 3.5 (d) mm (1/8")/8Ω	3-conductor 3.5 (d) mm (1/8")/8Ω	3-conductor 3.5 (d) mm (1/8")/8Ω	

\*1 Single receive, IC recorder OFF.

\*2 One of either NTSC M, PAL B or PAL G systems

\*3 For 900–1300 and 2250–2450MHz ranges only; not available in some versions

\* The LCD display of the IC-R3 may have cosmetic imperfections that appear as small or dark spots. This is not a malfunction or defect, but a normal characteristic of LCD displays.





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