

ICOM

Rugged  
MIL-STD 810

COMMUNICATIONS RECEIVER

IC-R6

## The 100 Ch/Sec Wideband Signal "Search Machine"

### 100kHz–1309.995MHz\* wideband coverage

While the IC-R6 receives an ultra wideband frequency range, the radio provides superior sensitivity and receiver characteristics that is unsusceptible to interference. Amateur stations, AM, FM, short wave broadcasts, TV audio\* and a variety of utility communications can be caught and listened to.

\* Frequency range depends on version. Analog TV audio only. Cannot decode digital TV audio.

### 100 channels per second high speed scan

The IC-R6 has 100 channels per second high speed scan capability\*. This superior scanning power allows the utmost efficiency when searching over 1300MHz of spectrum! \* VFO mode scanning.

### 15 hours of continuous receive capability\*

The IC-R6 is energy-efficient, designed to provide many hours of listening enjoyment on a single charge. With the supplied rechargeable Ni-MH cells (1400mAh x2), the IC-R6 provides up to 15 hours of continuous receive capability\*. \* At 50mW output using external speaker.

### 1300 memory channels with 22 memory banks

With 1300 alphanumeric memory channels, 50 scan edges and 200 auto write memories, the IC-R6 gives you flexible scanning. Use the bank link scan feature to choose from and connect any of the 22 memory banks.

### VSC (Voice Squelch Control)

The VSC opens the squelch only when a modulated signal is detected and ignores unmodulated beat noise. It is a handy feature for those listeners who are scanning for talk, news and music, but not data bursts or beacons.

### Multiple power choices

The IC-R6 can be powered by rechargeable Ni-MH cells, or with alkaline batteries. Run the IC-R6 using the AC adapter, BC-196S, or opt for a cigarette lighter cable, CP-18. When used the optional drop-in charger stand BC-194 with the AC adapter or cigarette lighter cable, you can easily start charging the Ni-MH cells, while eliminating the need to connect the power source to the DC power jack of the receiver.



## OTHER FEATURES

- Built-in audio low pass filter
- $\pm 1.0$ ppm high frequency stability (at 25°C)
- Earphone cord antenna for AM aviation as well as FM broadcast
- Ferrite bar antenna for AM broadcast
- 150mW loud audio with internal speaker
- DTCS and CTCSS tone squelch and reverse tone squelch
- Priority watch function with priority beep function
- Optional CT-17, CI-V level converter for remote control
- PC programmable with optional CS-R6
- Receiver-to-receiver cloning (optional OPC-474 required)
- Auto power OFF (0.5–2 hours and end of busy signal)
- Compact, drip-resistant construction
- Duplex operation monitoring
- Automatic LCD backlight
- Dial speed acceleration

- Built-in RF attenuator
- Auto memory write scan stores the detected frequency, mode and tone into a specified memory
- Reversible up/down buttons and dial knob for volume, frequency, memory channel, scan direction and set mode settings
- Optional new tube earphone, SP-27
- Weather channel receive with weather alert (USA version only)

## SPECIFICATIONS

### GENERAL

- Frequency coverage : 0.100–1309.995MHz\*  
(\* Cellular blocked in the U.S.A. version.)  
France 0.100–29.995, 50.200–51.200, 87.500–107.995, 144–146, 430–440, 1240–1300MHz
- Mode : AM, FM, WFM
- No. of memory channels : 1300 regular, 50 scan edges and 200 auto memory write
- Usable temperature range : -10°C to +60°C ; +14°F to +140°F
- Frequency stability :  $\pm 1.0$ ppm (at 25°C)
- Tuning steps : 5, 6.25, 8.33\*, 9\*, 10, 12.5, 15, 20, 25, 30, 50, 100, 125, 200kHz  
(\* Selectable depending on operating bands.)
- Battery requirement : 2 x R6 (AA) size Ni-MH or alkaline cells
- External power supply : 4.5V DC rated (4.5–6.3V with BC-196SA/SD, CP-18A/E)
- Current drain Rated audio : 130mA typ. (Ext. SP, backlight off)  
(at 3.0V DC) Standby : 65mA typ.  
Power save : 30mA typ. (1:4 duty)
- Antenna impedance : 50 $\Omega$  (SMA)
- Dimensions (WxHxD) : 58x86x29.8 mm;  
(Projections not included) 2 $\frac{3}{8}$ x3 $\frac{3}{8}$ x1 $\frac{3}{16}$  in
- Weight (approx.) : 200g; 7.1oz

### RECEIVER

- Intermediate frequencies :  
FM, AM 266.7MHz, 19.65MHz, 450kHz  
WFM 266.7MHz, 19.95MHz, 750kHz
- Sensitivity (except spurious points):  
FM 1.625MHz– 4.995MHz 0.32 $\mu$ V typ.  
(12dB SINAD) 5.000MHz– 29.995MHz 0.25 $\mu$ V typ.  
30.000MHz– 117.995MHz 0.18 $\mu$ V typ.  
118.000MHz– 246.995MHz 0.18 $\mu$ V typ.  
247.000MHz– 469.995MHz 0.18 $\mu$ V typ.  
470.000MHz– 832.995MHz 0.32 $\mu$ V typ.  
833.000MHz– 1029.995MHz 0.28 $\mu$ V typ.  
1030.000MHz– 1309.995MHz 0.35 $\mu$ V typ.  
WFM 76.000MHz– 108.000MHz 1.1 $\mu$ V typ.  
(12dB SINAD) 175.000MHz– 221.995MHz 1.1 $\mu$ V typ.  
470.000MHz– 770.000MHz 1.8 $\mu$ V typ.  
AM 0.495MHz– 4.995MHz 1.3 $\mu$ V typ.  
(10dB S/N) 5.000MHz– 29.995MHz 0.89 $\mu$ V typ.  
118.000MHz– 136.000MHz 0.63 $\mu$ V typ.  
222.000MHz– 246.995MHz 0.63 $\mu$ V typ.  
247.000MHz– 329.995MHz 0.79 $\mu$ V typ.
- Selectivity AM, FM : More than 12kHz/–9dB,  
Less than 30kHz/–60dB  
WFM More than 150kHz/–6dB

- AF output power (at 3.0V DC, 10% distortion) :  
Internal speaker (16 $\Omega$  load) More than 150mW  
External speaker (8 $\Omega$  load) 80mW typ.
- External SP connector : 3-conductor 3.5 (d) mm (1/8")/8 $\Omega$

### Applicable U.S. Military Specifications & IP Rating

Standard	MIL 810 F	
	Method	Procedure
Low Pressure	500.4	I, II
High Temperature	501.4	I, II
Low Temperature	502.4	I, II
Temperature Shock	503.4	I
Solar Radiation	505.4	I
Humidity	507.4	–
Vibration	514.5	I
Shock	516.5	I, IV

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

### Ingress Protection Standard

Water IPX2 (Drip resistant)

### Supplied accessories

- Ni-MH cells\* • AC adapter, BC-196SA/SD\*
- Antenna • Belt clip • Handstrap

(\* Not supplied depending on version)

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

## OPTIONS

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

- **BC-196SA/SD AC ADAPTER**  
4.5V DC, 400mA output. Allows you to power the IC-R6 and charge the supplied Ni-MH battery cells installed in the IC-R6 in 15 hours (approx.). For exclusive use with the IC-R6 and BC-194 only.
- **BC-194 CHARGER STAND**  
Drop-in charger for use with BC-196S or CP-18A/E.
- **CP-18A/E CIGARETTE LIGHTER CABLE**  
6V DC, 1.5A output from 12V cigarette lighter socket.
- **HP-4 HEADPHONE**  
Light weight monaural headphone.
- **SP-13 EARPHONE**
- **SP-27 TUBE EARPHONE**  
Provides clear audio even in noisy environments.
- **LC-146A CARRYING CASE**  
Helps protect the receiver from scratches, etc.
- **CT-17 CI-V LEVEL CONVERTER**  
For receiver remote control from a PC.

- **CS-R6 CLONING SOFTWARE**
- **OPC-478 CLONING CABLE (RS-232C cable)**
- **OPC-478BUC CLONING CABLE (USB cable)**  
Use a PC to easily edit stored memory channel data.
- **OPC-474 CLONING CABLE**  
Used for receiver-to-receiver data cloning.
- **AD-92SMA ANTENNA CONNECTOR ADAPTER**  
Allows you to connect a BNC-type antenna.



BC-196SA/SD



CP-18A/E



HP-4



SP-13

SP-27



LC-146A



CT-17



OPC-474



AD-92SMA

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