

COMMUNICATIONS RECEIVER

IC-R1500



Icom proudly announces the debut of the new mobile receiver IC-R1500. It covers from 0.01 to 3299.999MHz in all modes (0.495-1300MHz only in SSB and CW modes) and versatile functions such as multi-channel monitor, bandscope and IF shift function support efficient and effective reception.

PC connection with the USB cable is possible to allow PC interface operation, if desired.

SELLING POINTS

- **0.01 to 3299.999MHz wideband coverage with SSB, CW, AM, FM, WFM modes**
- **User selectable interface — on screen or remote control**
- **Multi-channel monitor function**
- **Max. 60 ch/sec high speed scanning***
* Depending on PC's capability.
- **VSC, CTCSS and DTCS tone squelch**
- **Two types of bandscope**
- **Optional DSP unit, UT-106**

FEATURES

Wideband receiver

The IC-R1500 covers 0.01–3299.999MHz* in all modes (0.495–1300MHz only in SSB and CW modes). 1Hz fine tuning resolution is available in all bands. When connected to a PC, all functions are controllable from mouse click or keyboard input.

* Frequency range depends on version.

Remote controller head*

The IC-R1500 is supplied with remote control head for mobile or base station use. Green, amber and yellow backlit color are selectable allowing the user visual enjoyment to compliment their listening enjoyment.



Max. 60 channel/second high speed scan

The IC-R1500 has a Max. 60 channel/sec. high speed scan capability*. This superior scanning power allows the utmost efficiency when searching a wide frequency range. Auto memory write scan searches for a signal, and when a signal is detected, the received frequency is automatically stored into an auto memory write channel bank.

* Tuning step is 100kHz or less in program scan mode.

- Full scan
- Mode select scan
- Programmed scan
- Memory scan
- Priority scan
- Tone scan
- Bank scan
- Skip scan
- Auto memory write scan
- program skip scan
- Program skip area scan

VSC, CTCSS, DTCS tone and S-meter squelch

The VSC (Voice squelch control) opens the squelch only when a modulated signal is detected and ignores unmodulated, beat noise signals. The CTCSS and DTCS tones provide quiet stand-by while waiting for a matched tone signal. In addition to a regular noise squelch system, the S-meter squelch release the AF mute, when only signals stronger than the pre-set S-meter level are received. And more, the pocket beep function alerts you with a beep sound when a matched tone signal is received.

DSP capability

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

Other Noise reduction functions

- IF filter selection
- IF shift function (SSB/CW mode only)
- Noise blanker (SSB/CW/AM mode only)...Eliminates pulse type noise such as engine ignition.
- 20dB RF attenuator (approx, below 1300MHz)
- AFC function (Auto Frequency Control)...Automatically compensates for frequency drift in FM mode and keys the receiver tuned to the center frequency of the tuned station. (BW: 6KHz or 15KHz)
- AGC function ... Fast/slow setting is possible

Other features

- Weather alert function (U.S.A. version only)
- DTMF tone decoder
- Duplex operation
- Recording function ... Allows you to store received audio on the PC in WAV format
- Tuned bandpass filters for VHF/UHF bands
- 1000 memory channels can be stored
- All IC-PCR1500 functions are available, when connected to a PC

Rear view



SPECIFICATIONS

Specifications described below are target values. They may be subject to change.

■ GENERAL

- Frequency coverage : 0.010–3299.999MHz*
 Guaranteed range 0.495–3000.000MHz
 * Cellular bands are blocked in the U.S.A. version.
 France 0.010– 29.999*, 50.200– 51.200,
 87.500– 108.000, 144.000– 146.000,
 430.000–440.000, 1240.000–1300.000MHz
 * Guaranteed range 0.495–29.999MHz
- Mode : AM, FM, WFM, USB*, LSB*, CW*
 * 0.01–1300MHz only.
- Usable temperature range :
 With controller 0°C to +60°C; +32°F to +140°F
 Without controller –10°C to +60°C; +14°F to +140°F
- Frequency stability : Less than ±3ppm on the
 basis of 25°C (–10°C to +60°C)
- Tuning steps : 1Hz (minimum)
- Power supply : 12.0V DC ±15%
- Current drain (12.0V DC):
 Max. audio 0.85A typ.
 Stand-by 0.7A typ.
- Antenna Impedance : 50Ω (BNC)
- Dimensions (W×H×D, projections are not included) :
 Main unit 146×41×206 mm; 5¾×1½×8⅝ in
 Controller 111×40×26.5 mm; 4¾×1⅝×1⅜ in
- Weight (approx.) :
 Main unit 1200g; 2.6lb
 Controller 200g; 7oz (including cable)

■ RECEIVER

- Receiver system : Triple-conversion
 superheterodyne
 + Down converter
- Intermediate frequencies : 1st 266.70MHz,
 2nd 10.70MHz
 3rd 450kHz (Except WFM)
- Sensitivity (Less than) :

	SSB, CW	AM	FM	WFM
0.495–1.799MHz	5.0μV	25μV	–	–
1.8–49.999MHz	0.5μV	2.5μV	0.63μV*2	–
50–699.999MHz	0.4μV	2μV	0.5μV	1.4μV
700–1300.000MHz	0.5μV	2.5μV	0.63μV	1.8μV
1300*1–2299.999MHz	–	–	5.6μV	18μV
2300–3000.000MHz	–	–	18μV	56μV

*1 1300.000001MHz *2 28–49.999MHz
 SSB, CW BW=2.8kHz, AM BW=6.0kHz at 10dB S/N
 FM BW=15kHz, WFM BW=230kHz at 12dB SINAD

- Selectivity :
 SSB, CW, AM More than 2.8kHz/–6dB
 SSB, CW, AM, FM More than 6.0kHz/–6dB
 FM, AM More than 15kHz/–6dB
 FM, AM, WFM More than 50kHz/–6dB
 WFM More than 230kHz/–6dB
- Audio output power : More than 500mW at 10%
 distortion with an 8Ω load
- Ext. speaker connector : 2-conductor 3.5 (d) mm
 (1/8")/8Ω

PC REQUIREMENTS

- Microsoft® Windows® XP/2000/ME/98SE
- Intel Pentium®III 450MHz or faster (Pentium® 4 recommended)
- Hard disk with minimum 50 MB of free disk space
- Minimum 128 MB of memory (256Mb or more recommended)
- Display with 1024 x 768 pixel resolution, high color
- USB 1.1

Note

- CD-ROM or DVD drive is required for software installation
- Mouse or other compatible pointing device
- USB audio dropouts or gaps may occur, because of a lack of PC power.
- Additional hard disk space is required for recording sound or storing scope data.

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OPTIONS

- AD-113A/E* AC ADAPTOR: Same as supplied. (* New item)
- CP-12L CIGARETTE LIGHTER CABLE WITH NOISE FILTER
- OPC-254L DC POWER CABLE

For use of the receiver with an external power supply. (12V DC required)

- UT-106 DSP UNIT :Provides noise reduction and auto notch filter functions.
- SP-10 EXTERNAL SPEAKER: For all-round mobile operation. Cable length: 1.5 m; 4.9 ft
- OPC-1156 CONTROLLER EXTENSION CABLE

Extends the supplied separation cable 3.5 m (11.5 ft). A modular connector is supplied with the cable.

Supplied accessories:

- AC adapter, AD-113A/E*
- Controller
- Controller cable, 3.4m; 11.2ft
- Control software (CD)
- Antenna
- USB cable

(* Depending on version)

