

 ICOM

COMMUNICATIONS RECEIVER FOR COMPUTER

# IC-PCR100



● Turn your PC into a wide band receiver

Icom Inc.

# CRUISE THE AIRWAVES WITH YOUR COMPUTER

With plug 'n play installation and an easy-to-use interface, the IC-PCR100 lets you tap into the world of wireless communications—from marine and aviation communications to radio and TV broadcasting—all from your PC!

## ● Multi-function control panel



This panel contains a comprehensive set of controls such as you would find on an advanced communications receiver, including a large frequency readout, band scope, S-meter and keypad.

## ● Simple control panel



This panel contains pre-set station buttons and frequency readout providing simple operation even for beginners—and is small enough that it won't obscure other running applications.

## COMMUNICATIONS RECEIVER FOR COMPUTER

# IC-PCR100

### CONTENTS

- IC-PCR100 Receiver Unit
- Floppy disk
- AC adapter or DC power cable (depending on version)
- Antenna
- RS-232C serial cable



## ● Preferences screen



This screen allows you to select settings for various functions such as scans, band scope and the auto mode function.

## ● Memory list screen

Ch Name	Frequency	Mode	Filter	ATT	TS	TSQL	TSQPT	TSQA	Demod
Ch 10	152.30000 FM	15a	OFF	25a	OFF	OFF	OFF	OFF	Emergency
Ch 01	156.35000 FM	15a	OFF	25a	OFF	OFF	OFF	OFF	Emergency
Ch 08	156.30000 FM	15a	OFF	25a	OFF	OFF	OFF	OFF	Deliver
Ch 12	156.50000 FM	15a	OFF	25a	OFF	OFF	OFF	OFF	Common
WDC1	162.55000 FM	15a	OFF	25a	OFF	ON	OFF	OFF	Weather
WDC2	162.40000 FM	15a	OFF	25a	OFF	ON	OFF	OFF	Weather
WDC3	162.47000 FM	15a	OFF	25a	OFF	ON	OFF	OFF	Weather

Shows all programmed information in memories at a glance and allows easy editing of memory channels.

## ● Band scope screen\*



The bandscope shows signal conditions around a specified frequency.

\*Available only when the simple control panel is selected.

## ● Scan controller screen\*



The scan controller allows you to set various scan functions and settings.

\*Available only when the simple control panel is selected.



## ● Controller screen\*

The function controller allows you to set various receiver functions including receive mode and IF filter.

\*Available only when the simple control panel is selected.

## ■ Two receiver screens

Two receiver screens, *multi-function* and *simple-function*, are available. The *multi-function* screen provides control of all functions on screen, and allows easy searching of signals, etc. The *simple-function* screen provides basic controls such those on a radio or TV set, useful for monitoring fixed frequency signals. Additionally, it is small enough to be placed at the edge of your monitor and viewed while other applications are running.

## ■ Simple set up

A serial D-sub (9-pin) connector provides simple plug and play operation—no need to open the computer's case! Easy to use with both desktop computers or laptops.

## ■ Wide frequency coverage

Wide frequency coverage from 0.01 to 1300 MHz\*1 is featured, allowing the monitoring of diverse communications in AM, FM and TV\*\* broadcasting.

\*some versions do not have continuous coverage  
\*\*audio only

## ■ Unlimited memory channels

Store receive frequencies, mode and attenuator settings, etc. onto your computer's hard disk or a floppy. Available memory channels is only limited by free hard disk space or the number of floppy disks used, however individual files are limited to 1000 memory channels (50 ch x 20 banks).

## ■ S-meter squelch

An S-meter squelch system is built-in. This is convenient when you want to ignore weak signals during scanning, etc.—the squelch will not open until signals stronger than a pre-set signal strength are received.

## ■ Band scope function

Easily find busy frequencies within a specified frequency bandwidth (up to  $\pm 2$  MHz). All signals are viewable on-screen. By clicking a frequency "bar" you can immediately jump to that frequency. The band scope can also be used with the simple-function receiver screen in a separate window. Note that no audio is emitted while the band-scope function is activated.

## ■ Stereo audio output

When receiving FM stereo broadcasting and using external speakers, the IC-PCR100 outputs audio in stereo.

## ■ ANL function

An ANL (Auto Noise Limiter) function is available to reduce noise signals when operating in AM mode. This is convenient when receiving air band communications, etc.

## ■ RF attenuator

An RF attenuator is built-in. This protects receive signals from interference when strong signals are nearby.

## ■ Built-in tone squelch

Built-in tone squelch provides quiet standby since only receive signals containing a matched CTCSS tone signal can be heard.

## ■ Multiple scanning functions

Several scanning functions are available for searching for busy signals within a specified frequency range or from within stored frequencies:

- **Program scan**  
Searches specified frequency band programmed in the Preferences screen.
- **Auto-memory write scan**  
Searches specified frequency band programmed in the Preferences screen and stores busy frequencies into memory channels automatically.
- **Memory scan**  
Searches all memory channels.
- **Mode scan**  
Searches memory channels in a selected receive mode.
- **Select scan**  
Searches selected memory channels—those specified from the memory list.
- **Skip scan**  
Searches memory channels without a "skip" setting.

## ■ Other outstanding features

- Digital S-meter (bar meter)
- Compact body
- Tunable bandpass filter provides stable, high performance receiver operation



## SPECIFICATIONS

## GENERAL

- Frequency coverage : 0.010–1300.000 MHz\*  
(824–849 MHz, 869–894 MHz bands are inhibited for the USA version.)  
\*Specifications guaranteed 0.5–1300 MHz only.
- Mode : FM, AM, WFM
- No. of memory ch. : 1000 ch./file (50 ch. x 20 banks)
- Usable temp. range : 0°C to +50°C; +32°F to +122°F
- Tuning steps : 1, 5, 6.25, 9, 10, 12.5, 15, 20, 25, 30, 50, 100, 500 kHz and 1 MHz
- Frequency stability : ± 5 ppm (0°C to +50°C; at 1300 MHz)
- Power supply requirement:  
(negative ground) 13.8 V DC ±15% or specified AC adapter
- Current drain : PC OFF 100 mA  
(at 13.8 V DC) Standby (Squelched) 600 mA  
Max. audio 700 mA
- Antenna connector : BNC (50 Ω)
- Dimensions : 131(W)×33.5(H)×154.5(D) mm;  
(proj. not incl.) 5<sup>1</sup>/<sub>2</sub>(W)×1<sup>1</sup>/<sub>2</sub>(H)×6<sup>1</sup>/<sub>2</sub>(D) in
- Weight (approx.) : 500 g; 1 lb 2 oz

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

## CONTENTS



- IC-PCR100 Receiver Unit
- IC-PCR100 Software
- Antenna
- RS-232C cable
- AC adapter or DC power cable (depending on version)

## RECEIVER

- Receive system : Triple conversion superheterodyne (except WFM)
- Intermediate freq. : 1st 266.7 MHz  
2nd 10.7 MHz  
3rd 450 kHz (except WFM)
- Sensitivity (except spurious points; typical):

Frequency range	AM (10 dB S/N)	FM (12 dB SINAD)	WFM (12 dB SINAD)
0.5–1.799 MHz	2.5 μV	—	—
1.8–27.999 MHz	1.8 μV	—	—
28–49.999 MHz		0.5 μV	—
50–699.999 MHz	1.0 μV	0.32 μV	0.79 μV
700–1300 MHz	1.3 μV	0.4 μV	1.0 μV

- Selectivity (typical) : FM, AM 6 kHz/–6 dB  
15 kHz/–6 dB  
FM, AM, WFM 50 kHz/–6 dB  
WFM 230 kHz/–6 dB
- AF output power : More than 200 mW\* at 10% dist. with an 8 Ω load  
(at 13.8 V DC) \*100 mW x 2; stereo speakers
- External SP connector: 3-conductor 3.5 (d) mm (1/8") φ 4–8 Ω

## SYSTEM REQUIREMENTS

- Operating system : Microsoft® Windows® 95 or Windows® 98
- CPU : Intel i486 DX4 or faster (Pentium® 100 MHz or faster recommended)
- Hard disk : At least 10 MB of free space
- Memory : At least 16 MB
- Serial port : Serial interface (38400 bps throughout)
- Display : 640×480 pixel resolution or greater (800×600 pixel recommended)

Microsoft and Windows are registered trademarks of Microsoft Corporation in the U.S.A. and other countries. All other products or brands are registered trademarks of their respective holders.

## RADIO FREQUENCY SPECTRUM

100 kHz	300 kHz	3 MHz	30 MHz	300 MHz	1300 MHz
● LF	● MF	● HF	● VHF	● UHF	
• Marine • Radio beacon • Airport ground crew	• Marine • Standard wave • MWL	• SWL • Standard wave • Marine • CB • Amateur radio	• Amateur radio • FM broadcasting • TV broadcasting • Commercial • Marine • Aviation	• Amateur radio • Meteorological satellite • Commercial • TV broadcasting • Aviation • Marine	

Note: Some types of communication listed above cannot be received with the IC-PCR100 due to their mode of propagation (SSB, CW, etc.).

Icom Inc. 6-9-16, Kamihigashi, Hirano-ku, Osaka 547-0002, Japan Phone: 06 793 5302 Fax: 06 793 0013

Count on us!

## Icom America Inc.

Corporate Headquarters  
2380 116th Avenue N.E., Bellevue, WA 98004, U.S.A.  
Phone: (425) 454-8155 Fax: (425) 454-1529  
URL : <http://www.icomamerica.com>

Customer Service  
Phone: (425) 454-7619

## Icom Canada

A Division of Icom America Inc.  
3071 #5 Road, Unit 9, Richmond, B.C., V6X 2T4, Canada  
Phone: (604) 273-7430 Fax: (604) 273-1900

## Icom (Australia) Pty. Ltd.

A.C.N. 906 092 575  
290-294 Albert Street, Brunswick, Victoria, 3056, Australia  
Phone: 03 9387 9666 Fax: 03 9387 0022

## Asia Icom Inc.

#F No. 48, Sec. 1 Cheng-Teh Road, Taipei, Taiwan R.O.C.  
Phone: (32) 2599 1899 Fax: (32) 2599 1874

## Icom (Europe) GmbH

Communication Equipment  
Himmelsteiger Str. 195, D-40225 Düsseldorf, Germany  
Phone: (0211) 346047 Fax: (0211) 333639  
URL : <http://www.icomeurope.com>

## Icom Telecomunicaciones S.L.

"Edificio Can Castanyer" C/ta. Gracia a Matxosa km. 14,750  
08190 Sant Cugat Del Valles Barcelona, SPAIN  
Phone: (93) 583 46 82 Fax: (93) 589 04 46  
E-mail : [icom@ieida.com](mailto:icom@ieida.com)

## Icom (UK) Ltd.

Unit 9, Sea St., Herne Bay, Kent, CT6 5LD, U.K.  
Phone: 01227 741741 Fax: 01227 741742  
URL : <http://www.icomuk.co.uk>

## Icom France S.a

Zac de la Plaine, Rue Brindejoux des Moulins  
BP 5804, 31505 Toulouse Cedex, France  
Phone: 561 36 03 03 Fax: 561 36 03 00  
URL : <http://www.icom-france.com>

Your local distributor/dealer: