

VHF AND UHF 100W BASE/REPEATERS

Icom America Systems

IAS-100W_V IAS-100W_U

***The Power of 100 Watts
and 100% Duty Cycle.***



To the right: The heart of the system (IC-FR3000/IC-FR4000 Series), surrounded by several of the available options to fit any configuration or need.



Our 100 watt repeater offers more features for less.

When an emergency breaks, you can't afford to spend time worrying about your communication system's performance or capabilities. That's why Icom America Systems (IAS) offers more standard features and hardware in our 100 Watt system than any of our competitors -- **for less money!** Unlike other standard packages, your 100 Watt repeater/

base will arrive ready-to-use and custom-built to your specific communication needs. It's compatible with your existing equipment, or it can be the foundation for your communications' network. We take the guesswork out of setting up a communication system so you can focus on what you do best -- **saving lives and averting crises.**

The standard package includes:

- 100 Watt 100 percent duty cycle
- Multiple CTCSS & DTCS tone memories with 32 memory channels
- Telephone interconnect capability
- DTMF remote control capability
- Interface cabling with silver plated connectors (custom-cut to resonance)
- Built-in battery back-up capabilities
- Mounting bracket for rack or cabinet
- Technical support

IAS gets you more!

The standard package also includes:

- A.C. surge suppression panel
- Basic tuning, aligning, and programming for your system done in our factory
- Crating and packaging for shipment
- Instruction manual

Additional labor may be required depending on the options chosen

The foundation of a powerful communication system.

Offers more

Options*

Programming software and cables:

- Allows you to edit/program the features and settings of the FR3000/4000
- Programming cable and adapter also required
- Each component (software, cable and adapter)

Microphone

- Available as standard or DTMF

Service manual CD

- Contains schematics and detailed theory of operation

Duplexer

- Required if your repeater is using a single antenna

IAS Antenna Switch

- Needed for base operation
- Internal or 19" rack-mountable

Cabinets

- Available in 30", 46", and 60" sizes
- Includes locking, louvered doors and cable access ports
- Factory assembled

Racks

- Available in 28", 48", 63", and 70" sizes
- Includes custom assembly and mounting, hardware; factory-assembled

Remote Control Panels: Tone, DC or IP

- Allows remote control of your repeater/base
- Rack mount available
- Tone remote desk sets available



Shown above: One possible configuration of many, depending on options ordered.

**This list includes the most commonly requested additions to the standard package, and does not encompass our full list of options available. Contact us to find out which options you require to meet your specific communication needs.*

communication system.

STANDARD FEATURES

- Master/Slave backup operation by connecting two repeaters/bases
- Self-check function checks for internal errors and alerts with a beep sound or with a phone call
- Accessory connector (D-sub 25-pin) for connecting to external devices
- 5-Tone relay function
- CW ID transmitter (DTMF or 5-Tone also selectable)
- Password and kill/stun function for security
- 16-digit alphanumeric display convenient for base station operation
- A programmable button gives access to a customized function

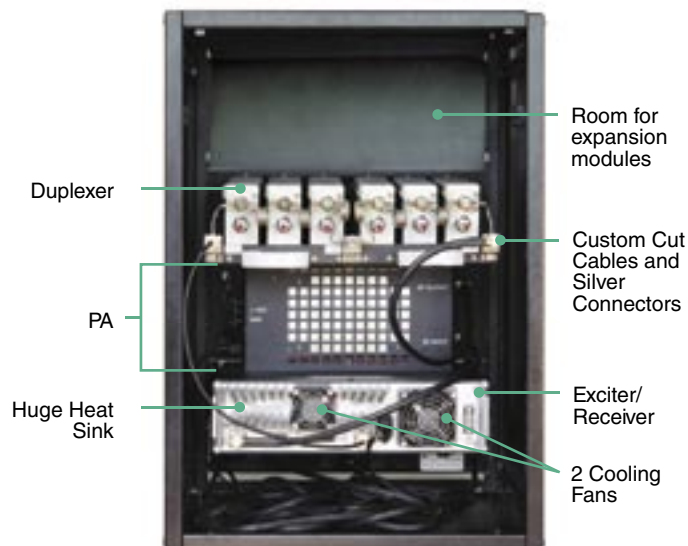
SPECIFICATIONS

GENERAL

- Frequency coverage:
 - IC-FR3000: 150–174MHz
 - IC-FR4000: 400–430MHz, 450–480MHz,
- Number of channels: 32 channels
- Channel spacing: 12.5/25kHz
- PLL channel step: 5, 6.25kHz (2.5kHz, VHF repeater operation only)
- Frequency stability:
 - IC-FR3000: ±2.5ppm
 - IC-FR4000: ±1.5ppm (U.S.A. version), ±2.5ppm (Other versions)
- Operating temperature range: –30°C to +60°C; –22°F to +140°F
- Power supply voltage:
 - (depending on version) 100–120V AC (50/60Hz), 220–240V AC (50/60Hz), 13.6V DC
- Current drain (at 13.6V DC):

TX	IC-FR3000 (at 50W)	15A
	IC-FR4000 (at 50W)	20A
RX	Max. audio	2A typ.
	Stand-by	1A typ.
- Antenna impedance: 50Ω (Type-N×2)
- Dimensions (W×H×D): 410 × 110 × 360 mm; 16 ⁵/₃₂ × 4 ¹¹/₃₂ × 14 ³/₁₆ in
- Weight: 12kg; 26.4lb (approx.)

REAR VIEW



Shown above: One possible configuration of many, depending on options ordered.

RECEIVER

- Sensitivity: 0.25μV typ. (at 12dB SINAD)
- Adjacent channel selectivity: 70dB (wide) 60dB (narrow)
- Spurious response: 70dB
- Intermodulation rejection ratio: 70dB
- Hum and noise ratio: 40dB (wide) 34dB (narrow)
- Audio output power: 2.5W typ. at 10% distortion with a 4Ω load
- External speaker connector: 2-conductor 3.5 (d) mm (1/8")/4Ω

TRANSMITTER

- Output power: 50W (high), 10W (low) selectable (at 13.6V DC)
- Max. frequency deviation: ±5.0kHz (wide) ±2.5kHz (narrow)
- Spurious emissions: 70dB
- Adjacent channel power: 70dB (wide) 60dB (narrow)
- Hum and noise: 40dB (wide) 34dB (narrow)
- Microphone impedance: 600Ω (8-pin modular)

Measurements made in accordance with EIA/TIA-603-A. Compatibility of functions for use with a telephone line may not work in some countries. All stated specifications are subject to change without notice or obligation.

Icom America Systems

Systems for People Who Make Smart Choices

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