

ICOM M802 SSB + SCS PTC-II USB Absolutely the best radio e-mail system



Send e-mail, transfer files, and make real-time data links with the SCS Pactor-II Modem, ICOM's M802 Marine SSB Radio, and Airmail e-mail software. They're the perfect package to make keeping in touch with home from onboard fast and easy.

ICOM's M802 SSB radio offers all the power you need with simplified channel and frequency programming and digital selective calling. Controls mount remotely for convenient operation.

SCS PTC-II Modems with the PTC-III upgrade feature the highest data transfer rates, minimizing power consumed and likelihood of disconnect. They have the best weak signal performance and direct radio frequency control. Just select a station and frequency from the Airmail software database, and your computer and modem do the rest.

Systems include all the components you need—just add the boat and antenna! They're tested for peak performance and programmed for easy operation. Our user's guide, *Understanding Marine SSB Radio*, provides background information about performance, operation, licensing, and installation, and quick start guides are included.

199802 Complete Radio E-Mail System \$4449.00
Includes M802, AT140 tuner with cables and noise reduction, DSC watch antenna kit, copper strap, copper ground plates, antenna wire, PTC-II USB modem, PTC-III software upgrade, modem cables, Airmail software, start-up guides, two hours support (support and system testing only available with complete systems)

192802	ICOM M802 Marine SSB/Ham Radio	\$ 1769.00
192140	ICOM AT140 Antenna Tuner	\$ 439.00
192247	AT140 Control Cable (10 meter)	\$ 71.00
192347	AT140 Coax Cable w/ Line Isolator (10 Meter)	\$ 220.00
191147	HF DSC Watch Antenna Kit	\$ 199.00
198888	SCS Pactor-II USB Modem w/ PTC-III Upgrade	\$ 1098.00
198881	SCS Pactor-II Cable/Support Pack ¹	\$ 115.00
104972	Mscan Meteo Weather Fax Software	\$ 249.00

¹Only available with radio or modem systems purchased from HF Radio On Board; kits for other radios from \$215

E-Mail On Board

No subject generates more interest than e-mail on board. Virtually every cruiser needs to communicate with shoreside; the Internet is now their preferred method.

Cruisers most commonly choose relatively economical HF radio e-mail—whether Ham or SSB. However, they often find that sending data over a radio link is challenging—radio e-mail is simply not as reliable as using a telephone connection, either traditional or satellite. There are countless variables—propagation, radio installation, and antenna performance all play roles in connection quality. We're constantly searching for solutions that stack the deck more in favor of reliability; we think we've found a winning hand with the ICOM M802 SSB and the SCS Pactor-II modem.

SCS PTC-II Modems have the highest HF data transfer rate, the best weak signal performance, and simple direct radio frequency control—they're the robust and easy-to-use radio e-mail modem available. ICOM's M802 is its perfect complement with the highest level of frequency accuracy—critical for making and maintaining data connections. The M802 is designed for 150 watts continuous output, which more than meets data transmission demands. It also requires no hardware or software modification to correctly manage data connections without spurious signals or cumbersome wiring.

We received this e-mail during the '06 Pacific Cup: "Just a note to tell you that all equipment is working flawlessly. The radio programming sure makes operating convenient, and the e-mail with our SCS Modem and ICOM SSB is the slickest thing yet." Many other cruisers think so, too."

HF Radio

Marine Single Side Band or Ham—what's the difference? None—in terms of range, clarity or installation. Both transmit and receive within the 2-30 MHz bands of the radio frequency spectrum, so the laws of physics say that they will work similarly.

There are big differences in licenses and permitted use:

1. License requirements for a marine SSB are the same as for a VHF: a ship's license—endorsed for SSB frequencies—and a Restricted Radiotelephone License.

Yes, you'll still need them, especially if you're bound for foreign waters. No testing is involved—fill out the form and send the FCC your money. See page 19 for licensing details.

2. The minimal, useful license for worldwide Ham use is the General. You must pass a test on radio theory and rules and receive Morse Code at 5 words per minute. The code requirement may be eliminated soon.

3. You cannot use Ham radio to do business that generates profit for you. For example, you can order parts from a supplier—you don't profit from the transaction. Otherwise, you can do many of the same things on Ham radio as on SSB.

Ham and SSB equipment differ. A true marine SSB is designed for simple operation on marine frequencies and can be operated while knowing little of the radio itself. While Ham radio hardware can be modified—illegally—to transmit on marine frequencies, it is more difficult and confusing to operate. Many individuals choose a hybrid radio—type accepted for both marine SSB and Ham frequencies—because it is a true marine SSB that operates like a simple Ham radio at a price comparable to Ham-only transceivers.

Marine Communication

ICOM M710 Simply, the best!

ICOM's IC-M710 radio offers ICOM quality in a marine SSB with Ham capability. Channel presets and a bright alphanumeric display simplify tuning. Rugged construction and the highest quality components provide years of reliable service in the harshest marine environments.



All M710 radio/tuner/cable packages are system-tested to ensure they're performance-ready and programmed for easy SSB, Ham, and e-mail operation.

99710	Complete M710 System (Radio, Tuner, Cables)	\$2099.00
92714	ICOM M710-01 Marine SSB/Ham*	\$1389.00
92711	ICOM AT130 Antenna Tuner*	\$ 399.00

*Performance testing, programming, and installation or operation support are not included with stand-alone radios and tuners

SKYMATE Communications Power for Explorers



Computer not included

Put the power of global satellite technology to work with SkyMate™! Whether you're cruising the coastline or crossing an ocean, SkyMate offers flexible data and messaging services with just the click of a mouse. Keep in touch, view weather forecasts, get assistance, and keep an eye on your boat—it's all possible!

82100	SkyMate 100 Communicator Kit w/ antenna	\$ 1199.00
82513	SkyMate 100 w/ SentryMate Kit Includes bilge, AC sensors; cables; antenna	\$ 1499.00
82555	Platinum Plan (50,000 characters, SentryMate)	\$ 69.99
82556	Gold Plan (20,000 characters, SentryMate)	\$ 34.99
82557	Silver Plan (8000 characters; SentryMate)	\$ 15.99
82559	DryDock Plan (maintains mailbox access)	\$ 4.99

Flush Mounting Brackets

ICOM

Add a professional touch to a panel-mount radio installation with ICOM's Flush Mounting Brackets for marine SSB and VHF radios.

MB75 Bracket for M802*, M604, M504 **\$ 28.00**

*M802's require two brackets—one each for radio and speaker

MB69 Bracket for M422, M402, M304 **\$ 25.00**

MB710 Bracket for M710 **\$169.00**

Ground System Components and Radio Installation Supplies

Complete Cruising Solutions

Complete your installation. Our copper strap is 10 mil x 3" to survive extreme conditions. Connect to the ocean with a copper ground shoe; we recommend two for best e-mail performance. A ground connection kit gives you all the parts to connect strap to two plates. GTO 15 antenna wire connects your backstay to your antenna tuner.

86466 Copper Strap 25' roll **\$ 60.00**

86456 Copper Ground Shoe, 3" x 12", each **\$200.00**

86488 Ground Strap Connection Kit **\$ 19.95**

GTO15 High Voltage Antenna Wire, per foot **\$ 0.85**

Split Lead HF Antenna

GAM Electronics

Eliminate backstay insulators! The *Split Lead Antenna* simply presses onto your existing backstay wire and secures with a plastic clamp. No special tools or rig modifications—installation couldn't be easier.

86189 Split Lead HF Antenna **\$349.95**

Antennas, Mounts, and Coax Cable

Complete Cruising Solutions

Custom Coax Cables are constructed with high-quality .24" diameter super-flexible (minimum bending radius .75") light-weight cable—1/3 the weight, 40% smaller diameter than RG-8U with only .2 db additional loss per 100' at 150 MHz/Marine VHF frequencies. Standard PL259 connector on one end with special "bullet" style connector on the other that can pass through a 3/8" opening before finishing with its matching PL259 adapter. Allow 10 business days for fabrication.

Manta-6 Metz 3 db Masthead Antenna (Stainless) **\$ 36.95**

VHF-8-6 8'-6 db Fiberglass VHF Antenna + 20' Coax **\$139.00**

101SS Stainless 4-way Ratchet Mount (for VHF-8-6) **\$ 40.00**

SSB21-5 3-piece Premium SSB Whip Antenna (Ships UPS) **\$199.00**

VHF21-5 10 db VHF Antenna + 20' Coax (matches SSB21) **\$249.00**

112ASS Swivel Mount + Nylon Support (for SSB/VHF21) **\$ 45.00**

86287 Coax Cable (Specify Length) **\$54.00 plus \$1/foot**

Radio License Study Materials

Gordon West - W5YI

Study at home to pass the Ham and commercial radio examinations.

121767 Technician License Theory **\$ 18.95**

121757 General License Theory **\$ 17.95**

121755 Extra Class License Theory **\$ 19.95**

121766 Technician License Software **\$ 44.95**

121758 General License Software **\$ 39.95**

121756 Extra Class License Software **\$ 39.95**

121764 Ham Operator (All Ham levels; books, software) **\$ 79.95**

121759 GMDSS Elements 7 and 9 Study Guide **\$ 19.95**

121762 GROL Plus Study Guide **\$ 44.95**

121761 GROL Plus Study Software (FCC Elements 1, 3, 8) **\$ 69.95**

Radio installation is critical for successful voice or data operation. Most of our customers successfully install their own radios—here are some tips for you:

1. Antenna systems are critical; however, there are no hard-and-fast rules for developing one. You may need to experiment; generally nothing you can try will make a system NOT work—some things will make it better or worse.

2. Power—not how much capacity you have (amp hours), but how much your system can deliver (amps, voltage drop)—is key. Your electrical system must deliver 25-30 amps to the radio with less than three percent difference between the battery terminals and the radio. Voltage regulation also must be considered; other devices typically run with your radio. It's just like a shower—if you have insufficient water pressure (voltage drop) or the pipes are too small (amps), the water stops flowing when a faucet is opened.

3. Connections between the antenna tuner and the radio must be physically and electrically secure. Early on, we found that many customers did not have the tools, materials, or skill to install RF connections. Now, we manufacture custom cable sets that are secure, water-tight, and electrically optimal; all you need to do is route the cable and connect it to the radio.

Every Complete Cruising Solutions radio ships with our background and installation guide. It covers power requirements and wire sizes, ground plane and antenna designs, and operating procedures. We stock almost anything you'll need for your installation, and we're also available to consult on specifics once we've defined the radio that's right for you.