# SCS PTC-IIex Radio Modem

## HF / VHF / UHF

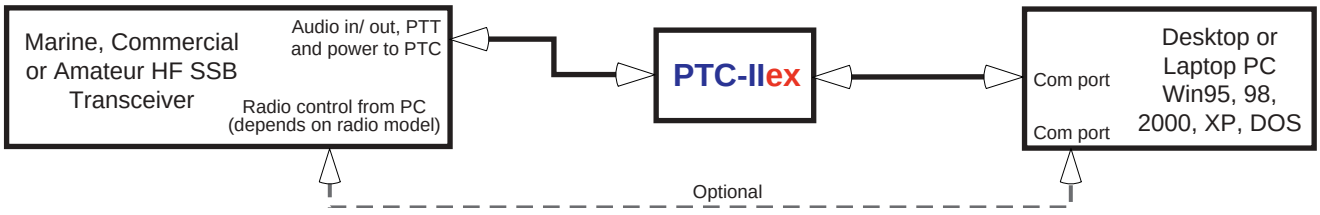
### Fast PACTOR data via SSB radio, upgradable to PACTOR III

**Send email, transfer files, real-time data links and weather information**. The PTC-IIex modem from Special Communications Systems is an affordable PTC data interface between your PC and radio equipment. From the German developers of the PACTOR I, II, and III protocols, comes the IIex with robust PACTOR digital modes. The PTC-IIex will maintain data links in adverse conditions with signals which are inaudible over distances of 6000 miles or more. The IIex has all the performance and features of it's big brother, the PTC-IIpro, with the exception of direct radio control and multiple ports. The PTC-IIex is fully forward compatible with PACTOR III for data rates up to 4800 baud.


back

Powered by a 32 bit Motorola 68360 RISC CPU and 56303 DSP (digital signal processor), the PTC-IIex stands out as superior technology for HF radio data transfers. Packet radio operation for VHF and UHF up to 19.2k baud rates are built in with no additional hardware required.

**Simple installation** with compatible radios from Icom, Kenwood, Yaesu, SGC, Furuno, TenTec, Skanti and others. Use the PTC-IIex with commercial stations WLO, SailMail, MarineNet, OcenMail, CruiseEmail and others world wide, as well as the international network of Winlink amateur radio operators (MBOs) that support PACTOR modes. PC software for MS Windows (95, 98, ME, 2000 and XP) or DOS.




## *Commercial • Government • Amateur • Marine*

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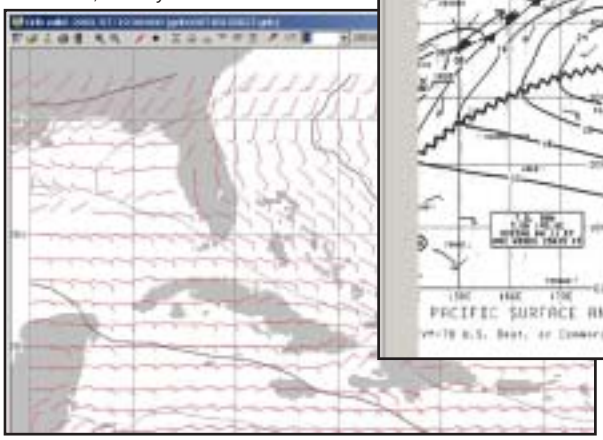
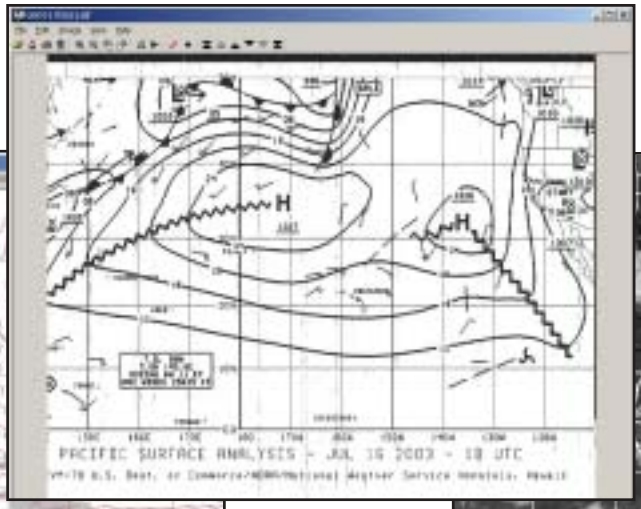
**Distributed by Farallon Electronics 2346 Marinship Way, Suite 101, Sausalito, CA 94965 USA www.farallon.us pactor@farallon.us**

**415-331-1924 415-331-2063/fax** 

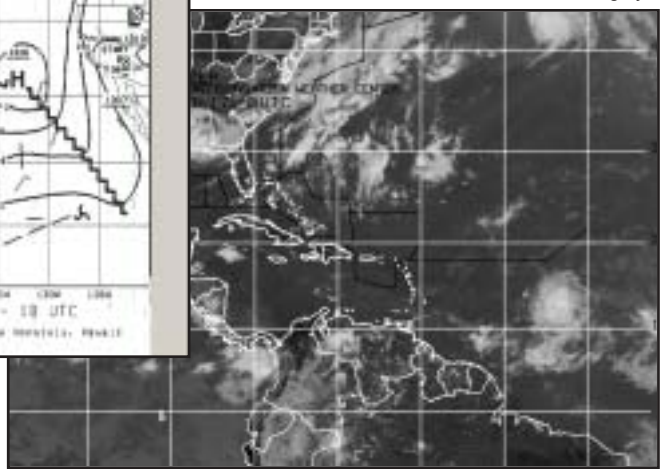
**GRIB data file** showing wind direction, velocity and isobars






**Marine weather fax** of the North Pacific Ocean region. Captured with an Icom radio and PTC modem.

**Marine weather fax** satellite imagery



## Standard Features of the PTC-IIex Hardware

VHF/UHF Packet built in. No extra modules to buy.

Upgradable to PACTOR III mode for 4800 baud operation. Firmware stored in flash memory. Easy update via serial port (RS-232) to a PC.

Equipped for marine WeFAX (AM, FM, Meteosat), NAVTEX, SITOR, RTTY, SSTV and CW operation with reception and transmission. CW operation with automatic speed adaptation using DSP algorithms.

Built in mailbox with comprehensive features. Common access from all modes (PACTOR I, II, III, AMTOR, PACKET).

Mail display at the front panel shows the operator there is new mail. Battery backup for the clock and CMOS RAM. No mail loss when switched off.

All significant link and controller status are displayed on eight front panel bi-color LEDs. Excellent tuning display, 15 LEDs with center function.

The PTC-IIex is usable as a DSP filter (denoiser) with programmable parameters; Auto peak, auto notch, passband filter, inversion, delay line, function generator and more.

Hostmode, extended hostmode, CRC-hostmode. Fully compatible to nearly all modern PC programs. Integrates with FBB/Winlink networking and mailing systems.

## Features of the PACTOR Mode

Fully backwards compatible with all known PACTOR implementations, including automatic mode recognition and selection. The unit always answers in the mode it has been contacted in (PACTOR I, II, III, AMTOR).

Utilizing the latest constraint length convolutional coding technology with full frame interleaving and Viterbi decoder combined with very efficient Memory ARQ algorithms.

Automatic transceiver output power adaptation to the quality of the HF link and the required data throughput.

## Available Options

- PACTOR III Firmware Upgrade
- Pre-made PTC to radio interconnect cables
- GPS data in “Y” cable
- Ferrite chokes, type 31 material for HF suppression

## Specifications

| | |
|---|---|
| Dimensions | 1 11/16 x 4 7/8 x 7 3/16 inches<br>43 x 126 x 183 mm |
| Weight | 19.5 ounces (550g) |
| Voltage | 12 VDC nominal, 20 VDC max |
| Power | 3 watts average |
| PC interface | DB9 serial port, AT type |
| Audio out | 10 to 3000 Mv P-P, 1k ohm impedance |
| PTT | Switched, not greater than 1 amp |
| Audio in | 5 to 1000 Mv RMS. 47k ohms impedance |
| Memory | 2Mb CMOS w/ battery backup |
| Operating temp | 14 to 122 degrees F<br>-10 to 50 degrees C |

Transceiver minimum switching time is 20ms. Check your transceiver for compatibility.

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