

# only \$895 PEGASUS

As Amateur Radio moves into the 21st century, TEN-TEC is pleased to introduce our vision of future HF transceivers. This revolution combines the power of your PC with a cutting edge IF-DSP design. The marriage of PC, Digital Signal Processing and HF rig has been discussed for some time but TEN-TEC is the first to offer it at such an affordable price. PEGASUS is half the price of earlier competitors with or without front panels !!

TEN-TEC's DSP expertise has been evolving since 1993 when we pioneered "real time" DSP processing. Our discoveries propelled us to a position of prominence in government and commercial ultra-high performance DSP receivers. As a group of dedicated hams, we just couldn't stop there. We set our sights on bringing the many benefits of DSP to our hobby. Take a look at the results:

- 34 receive filters built-in! Pick any 8 for your personal front panel and change them any time at a click of the mouse. 25 choices from 1050 to 8000 Hz bandwidth and 9 more from 300 to 900 Hz for CW and digital mode enthusiasts. 8 optional filters in a conventional HF rig would cost as much as this entire transceiver!
- · Tailor the sound of your sideband transmission with 15 different transmit bandwidths.
- Spectrum Sweep gives you a snapshot of the entire band in just seconds! Find the pileups or scout for a clear spot automatically without touching the tuning knob.
- · VFO has 12 different tuning rates!
- · 1000 memories or more, limited only by RAM in your PC
- · Surf the Web and have a QSO at the same time!

Your PC provides the "virtual" front panel and all the necessary controls. This significantly reduces cost by eliminating expensive front panels, displays, etc. It's now all done in software ! As with most Windows® programs, you can launch the PEGASUS, tune in a frequency and then put it in the background while you do other tasks. In fact, you can surf the Web and have a QSO on the ham bands at the same time!

You don't have to be a computer expert to use PEGASUS. It connects to your PC via one serial port and works with virtually any computer running Windows 3.1, 95/98<sup>®</sup> (minimum of 486 processor). Install the software package on your hard drive (only 1 meg of space needed), attach a power supply, antenna and you're on the air! Point and click any transceiver function with your mouse, or control the transceiver by computer keyboard. For armchair operation, add optional Remote Encoder/Keypad, Model 302.

PEGASUS covers all 9 amateur HF bands plus general coverage on receive. Look at this lineup of digital features: Dual VFO's with SPLIT mode, RIT/XIT, passband tuning, adjustable AGC, variable CW offset with auto-tracking sidetone. 100% duty cycle final so rugged it doesn't require SWR foldback. And last but not least, TEN-TEC's legendary, silky smooth QSK for CW and AMTOR/PACTOR.

Even the best technological advances don't mean much if we hams can't afford them. We think you'll agree, the price may be the most significant achievement of the PEGASUS.

#### **AVAILABLE JULY 1999**

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### GENERAL SPECIFICATIONS

MODES: LSB, USB, CW, RTTY (AFSK), FM, AM receive only FREQUENCY RANGE: Receive - 100 kHz to 30 MHz. Transmit - all ham bands 160-10 meters DISPLAY: provided by customer's PC DUAL VFOs with SPLIT mode. OFFSET TUNING: +/- 10 kHz receive and transmit MEMORIES: limited only by available RAM in PC, virtually any PC will store 1000s of memories FREQUENCY ACCURACY: +/-90 Hz at 25 degrees C at 30 MHz for 1 yr ANTENNA: 50 ohms unbalanced. POWER REQUIRED: 1A receive, 20A transmit @ 12-14 VDC CONSTRUCTION: 5 epoxy glass PC boards, molded front panel, aluminum chassis, texture painted steel cover DIMENSIONS: HWD 10.75" x 5.125" x 11.5" - 27.3 x 13 x 29.2 cm WEIGHT: 9 lbs - 4.1 kg

# TRANSMITTER

RF OUTPUT: 5-100 watts, ALC stabilized.

DC INPUT: maximum 250 watts @ 14 VDC. 100% duty cycle for up to 20 minutes. Continuous duty with customer supplied air cooling of rear panel heat sink.

MICROPHONE INPUT: 200 to 50K ohms. 4 pin, front panel connector accepts microphones with 5 mv (-67 dB) output. Polarizing voltage provided for electrets.

T/R SWITCHING: PTT or VOX on SSB, FAST or SLOW QSK on CW.

CW OFFSET: Programmable 400 to 900 Hz, DSP generated. Sidetone automatically matches offset,

volume adjustable independent of AF GAIN control.

FM DEVIATION: +/- 5 kHz.

METERING: Switchable to forward power, reflected power or SWR.

SSB GENERATION: DSP generated

CARRIER SUPPRESSION: > 50 dB

UNWANTED SIDEBAND SUPPRESSION: > 60 dB at 1.5 kHz tone

THIRD ORDER INTERMOD: 25 dB below two tone @ 100 watts PEP

SPURIOUS OUTPUT: Better than 40 dB below peak power output

## RECEIVER

SENSITIVITY: .35uV typical for 10 dB S+N/N @ 3 kHz bandwidth, SSB mode.
SELECTIVITY: 34 filters built-in; 300 Hz, 330 Hz, 375-750 Hz in 75 Hz increments, 900-3000 Hz in 150 Hz increments, 3.3-6.0 kHz in 300 Hz increments, 8.0 kHz. All 1.5:1 shape factor or better.
DYNAMIC RANGE: 90 dB @ 3 kHz bandwidth at 50 kHz spacing
THIRD ORDER INTERCEPT: +10 dBm
NOISE FLOOR: -126 dBm @ 3 kHz bandwidth
S-METER: Calibrated to 50 uv at S9
ATTENUATOR: -20 dB
PASSBAND TUNING: +/- 2 kHz
I-F FREQUENCIES: 1st 1-F 45 MHz, 2nd I-F 455 kHz, 3rd I-F 12 kHz
I-F REJECTION: > 60 dB typical
IMAGE REJECTION: > 60 dB typical
RECEIVE RECOVERY TIME: less than 20ms, including split mode
AUDIO: speaker - 2 watt @ 4 ohms, line out - > 1 V p-p into 600 ohms