RX-320D HF Receiver

RX-320D "PC RADIO" SHORTWAVE RECEIVER

THE FIRST DRM-SOFTWARE COMPATIBLE OFF-THE-SHELF RECEIVER IS HERE!

With DRM software, digital audio broadcasting capable!

THE FUTURE OF SHORTWAVE

Ten-Tec's RX-320D PC Radio - only $ 349.00 factory direct

Go to Ten-Tec's online store to purchase the RX-320D by clicking here

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Thinking about purchasing the RX-320D PC Radio?

You can download the latest version of the software and judge the look and feel of the program before buying the radio.

Click here to download the RX-320D software!

The introduction of the original Ten-Tec RX-320 HF DSP "PC Radio" in 1998 marked the first time that the power of a personal computer could be harnessed and dedicated to superb quality shortwave listening. Instead of traditional discrete electronic components inside the radio, the RX-320 utilized digital signal processors inside the 'black box' and used your personal computer for the horsepower to run the radio. Replacing components with software code resulted in less cost to manufacture the radio, and vastly better receiver performance than could be afforded at the same price with a traditional component-based shortwave radio.

A wealth of fascinating and enjoyable worldwide listening is a mouse click away on your PC. Starting with local AM broadcasts (same as the AM dial in your car), this band is more active than it has been in decades offering in-depth news, sports and talk radio. After dark, this same band takes you half way across the country!

Most countries broadcast programs around the globe on nearly a dozen international shortwave broadcast bands. In English, and nearly every other language, you can hear both world and local news from their viewpoint. Programs also include cultural and political topics and even music you may never have heard before. These bands also provide a wealth of information during times of international crisis. Ham radio operators are spread out across nine bands, sometimes talking across town to friends, and often to other hams 1000's of miles away. To round out the listening choices you will hear military operations, commercial airlines and even CB radio.

Now, the future of shortwave radio has arrived in the form of digital audio broadcasting. Digital Radio Mondiale (DRM) provides vastly superior reception quality over traditional AM broadcasts. Many world governments have already mandated the future discontinuance of AM SW broadcasts in favor of DRM.

This product was designed for two types of people: the PC user who has never listened to shortwave and the experienced listener who appreciates the powerful marriage of PC and the shortwave hobby. The manual includes a phenomenal beginner's guide written by respected author and columnist, Joe Carr, K4IPV.

The RX-320D is a standalone, black box that only requires access to a serial port and one megabyte of free hard drive space for the software. It runs Windows 3.1, Windows ? 95/98, Windows XP. No need to go inside your PC or tie up an accessory slot. PC Radio includes a built-in telescoping whip antenna or listening range can be significantly extended with a simple external wire antenna.

As with most Windows ? programs, you can launch the RX-320D, tune in an interesting station and then put it in the background while you do other PC tasks. In fact, you could surf the Web and listen to shortwave at the same time!

Like conventional shortwave receivers, the RX-320D tunes from 100 kHz to 30 MHz. But the similarity stops there. This is a true Digital Signal Processing or "DSP" based receiver. This cutting edge, software based technology dramatically reduces the number of individual electronic components inside. This makes it possible to provide features only dreamed of in previous receivers in this price class. Even the most experienced shortwave enthusiasts will marvel at the basic performance.

Included with the RX-320D are a detachable, collapsible whip antenna, the RX-320D graphical user interface software on a 3.5 inch floppy disc, serial port cable for connection to your PC, cable for connecting the 12 kHz I-F output to your PC soundcard for DRM, wall transformer for connection to 110 VAC mains, and an operation manual that includes the shortwave guide written by Joe Carr.

Ten-Tec remains on the cutting edge of receiver technology by offering 12 kHz I-F DRM output capability for the new Digital Radio Mondiale (DRM) digital broadcasting standard in the new model RX-320D.

Digital Radio Mondiale is a consortium of radio and electronics manufacturers from around the world that banded together in the late 1990's to create a universal digital system for the AM broadcasting bands below 30 MHz -- shortwave, mediumwave and longwave. The system that was created also bears the name of the group; Digital Radio Mondiale. DRM is

the world's only non-proprietary, digital system for shortwave, mediumwave and longwave with the ability to use existing frequencies and bandwidth across the globe. There are extensive Q&A's addressed about the system, how it works, and how it will be used on the official DRM web site at www.drm.org/newsevents/globfaqs.htm

Decoding DRM transmissions requires additional software (not provided with RX-320D). Presently the most commonly used DRM decoding software used is the freeware program DReaM, which does require the user to compile computer code in order to be used in its freeware form. A licensed binary version (for plug-and-play DRM operation) of the DReaM program is now available from DXTra, Inc., through their website at www.dxtra.com

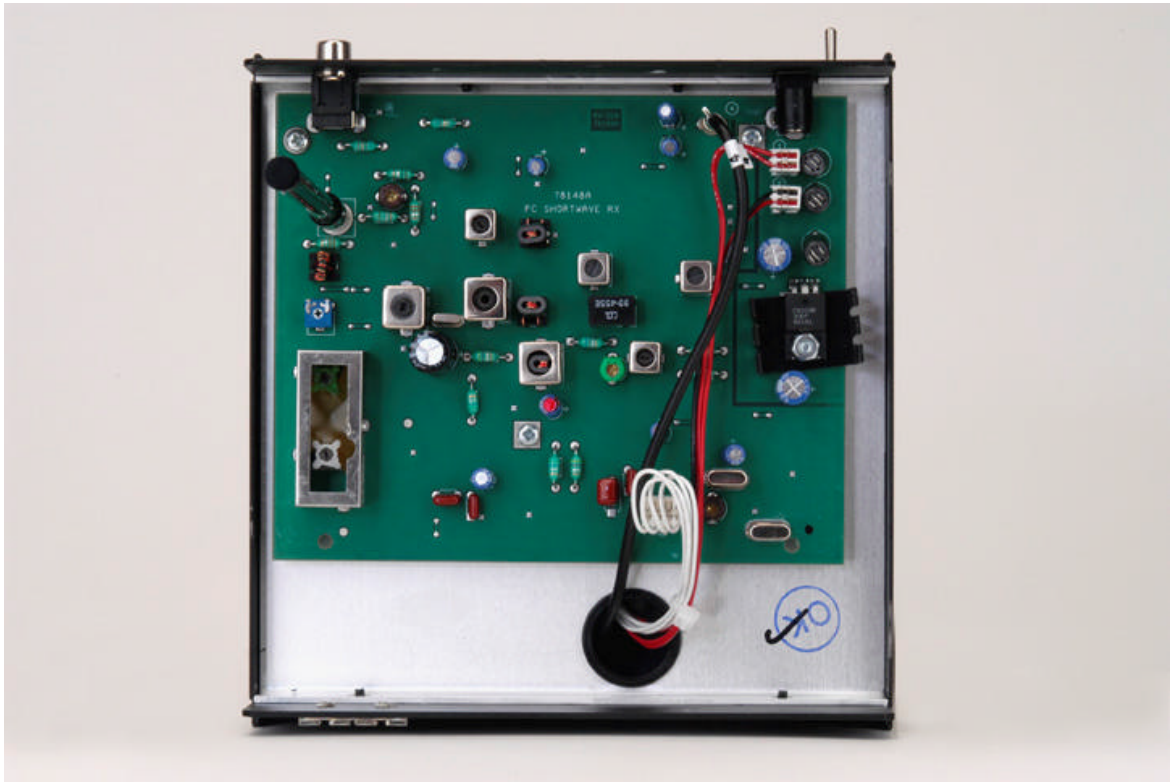
For additional DRM information:

www.drm.org is the DRM consortium website.

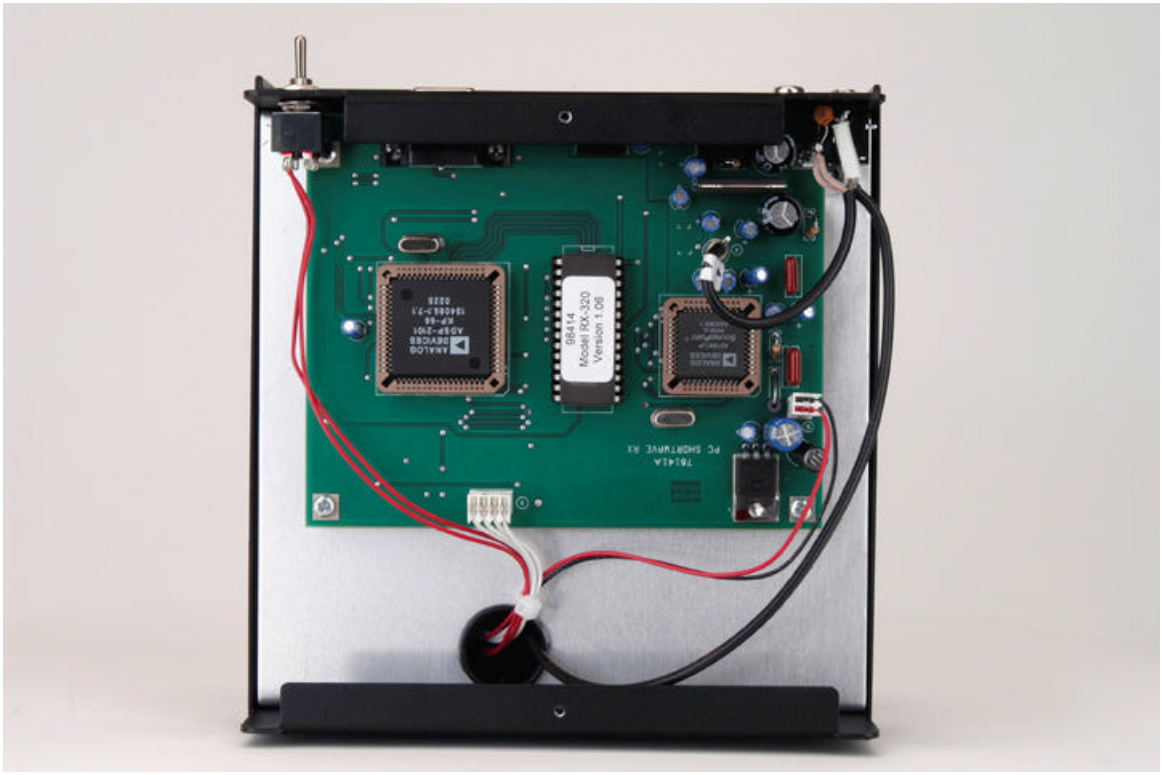
www.drmrx.org is the DRM Software Radio website.

RX-320D front view, with collapsible whip antenna (detachable)

RX-320D rear view



RX-320D top view, cover removed



RX-320D bottom view, cover removed

Reviews of the RX-320 (some referenced below) have been outstanding on their commentary for value vs. performance. If the referenced reviews below aren't proof enough, we encourage you to pick an Internet search engine like Google or AltaVista and search under 'Ten-Tec RX-320', 'RX-320 reviews', or similar to see even more feedback.

For independent reviews of the RX-320 and RX-320D, click the links below:

Radio Netherlands web site. RX-320 Review

December 1998, Journal of the North American Shortwave Association

North American Shortwave Association Review

See the RX-320 review in the February 1999 issue of Popular Communications magazine.

See the RX-320D and WinRadio G303i side-by-side comparison review by Lee Reynolds in the August 2003 issue of Monitoring Times magazine.

See the RX-320 review in QST magazine, March 1999

The SWBC DX and Listening web page review

www.r390a.com/html/ten_tec_rx-320.html

Yahoo(tm) Groups located at http://groups.yahoo.com/ has two active email discussion groups regarding the RX-320 receiver, comprised of thousands of email messages dating back to March 1999.

Looking for even more powerful capability for the RX-320D?

Dxtra's WorldStation? software adds additional features to the

RX-320D
Dxtra, Inc., is a Ten-Tec authorized value-added reseller and is licensed by the DRM consortium to distribute executable binary copies of the DReaM DRM software decoding package.

Click here to visit the DXTra web site

There are many third party software developers that have written alternative software for the RX-320D receiver and other Ten-Tec computer controlled HF products.

Click here for a representative listing

MODEL RX-320D SPECIFICATIONS:

MODES: AM, LSB, USB, CW

FREQUENCY RANGE: 100 kHz - 30 MHz

FREQUENCY ACCURACY: +/- 100 Hz at 25 degrees C.

MEMORIES: Limited only by available RAM in PC, virtually any PC will store 1000's of stations.

SENSITIVITY:

MODE	B/W	Sensitivity
AM (80% mod @ 1 kHz)	6 kHz	.64 uV for 12 dB S+N/N
CW/SSB	2.5 kHz	.3 uV for 10 dB S+N/N

SELECTIVITY: 34 IF-DSP bandwidth filters built-in. 300 Hz, 330 Hz, 375-750 Hz in 75 Hz steps, 750-3000 Hz in 150 Hz steps, 3000-6000 Hz in 300 Hz steps, 8 kHz.

THIRD ORDER INTERCEPT: + 10 dBm

DYNAMIC RANGE: 90 dB @ 2.4 kHz bandwidth at 50 kHz spacing

I-F FREQUENCIES: 1st I-F 45 MHz, 2nd I-F 455 kHz, 3rd I-F 12 kHz

I-F REJECTION: > 60 dB

IMAGE REJECTION: > 60 dB

I-F OUTPUT: Center frequency, 12 kHz; bandwidth > 10 kHz; level approx. 2 V pk-pk into 600 ohms, sound-card compatible.

ANTENNA: 50 ohm unbalanced for external antenna. High impedance at telescoping whip connection, automatically switched out of line when external antenna connected.

PC INTERFACE: Industry standard serial interface on DB9 connector

CONNECTIONS: + DC input, DB9 for serial port, external antenna, line output to sound card, I-F output, external speaker.

POWER REQUIRED: < 500 mA at 13.5 - 15 VDC, wall transformer 110 VAC supplied

AUDIO: 1 watt at 4 ohms. > 1 v p-p output into 600 ohms (typical to drive a sound card).

CONSTRUCTION: 2 epoxy-glass PC boards, aluminum chassis, steel top and bottom

SIZE: HWD 3" x 6.25 " x 6.5"

WEIGHT: 2.5 lbs (1.14 kg)

All specifications are typical, and subject to change without notice