# **KENTROL for WINDOWS**

Copyright 1991-1994 by Brian Gilhuly VE3BGB

#### Version 4.30

### WHAT KENTROL IS

Kentrol is shareware. Please read and respect the terms of licence explained in the Registration section of this document.

Kentrol is a Windows 3x control program for Kenwood HF transceivers and the R-5000 receiver, which has built-in logging and memory management capabilities. Kentrol auto-detects the TS-940/440/140/680S, the R-5000, the TS-950/850/450/690S and the TS-50S and may also work with any other radio which uses the Kenwood control language.

#### HOW KENTROL WORKS

Within a single on-screen main window, Kentrol displays and manipulates three kinds of 'objects': *radios, memory sets* and *logs*.

Normally, Kentrol automatically opens (connects to) your main radio when it starts, but you can choose to be offered a selection of radios or open a memory or log file. The toolbar provides buttons for all key functions, including keyboard frequency entry. Toolbar buttons are accessible depending on which of the specific windows is in use.

Each open *radio* displays a **Tuner Window** and a **Memories Window**, unless the radio is a TS-50S in which case there is only a Tuner Window. The active source (VFO or memory) can be selected from the toolbar. Registered users can click a button to transmit. Split operation, including cross-band, cross-mode splits is provided for the VFOs.(Registered users only). Split memories in each transceiver are recognized and displayed.

In addition to the standard modes built into your radio, Kentrol adds FAX MODE, which automatically combines upper sideband with a 1.9 kHz offset so you can tune directly to the fax frequencies listed in text sources. For rigs that lack an FSK mode of their own, Kentrol provides it as well.

The Tuner Window.tunes VFOs and selects memory channels using a scroll bar interface. You can tune any source at any time, independent of which you are listening to or transmitting on. Enter frequencies directly from the keyboard or via the tuning scroll bar.

The bandspread of the scroll bar can be full range; a single Megahertz; a ham, broadcast, maritime mobile or aeronautical mobile band; or a ham sub-band. The Sub button automatically sets mode and tuning step according to frequency, following US, Canadian, Japanese and ITU Region I band plans. Vertical arrow buttons allow you to jump up and down a band or megahertz at a time. Jumps when Sub is selected are to the next correct sub-band so, for example, it skips 30m in Phone mode, and steps through the standard time station frequencies. The AutoScroll button moves the bar along through the range you have selected. Jump bands or change sources while autoscrolling. In memory mode empty channels are skipped automatically.

Simultaneously, the Memories Window displays the contents of your radio's memories so you can select any memory with a single click. A button in the Memories Window provides direct access to any channel whose contents you want to change. Kentrol gives the TS-940S 40 consecutively numbered memories to replace the normal 4-bank system.

*Memory Sets* are also objects in their own right, and can be opened into **Memfile Windows**. There they can be annotated (up to 50 char per memory), are fully editable, printable (registered copies only, but everybody gets print preview) and can be saved to files and loaded into the radio's memories as you wish. Multiple memory files can be opened simultaneously so you can copy and paste between them. Or copy from logs to memory sets. Sample memory files are included. The TS-50S does not support any memory operations. With that exception, Kentrol uses the same memory file format for all radios, so files are fully transferable between rigs.

Kentrol automatically *logs* UTC date and time, frequency, mode and band, along with your choice of text fields, to a pure delimited ASCII log file. View, edit and print (registered only) log files in Kentrol or load them into a spreadsheet or database program to sort and categorize your loggings.

#### HARDWARE REQUIREMENTS

An 80286, 80386 or 80486-based ibm-compatible pc with at least one serial port, running Windows 3.1 in standard or enhanced mode. Basic functions are accessible from the keyboard, but some operations require a mouse. Display resolution can be vga or better, so Kentrol works fine on most laptop and notebook pcs.

Any Kenwood transceiver with a serial port. Please note that the TS-440S, TS-940S, TS-140S and the R-5000 receiver require that you install two \$4 ICs to enable the serial port. The RADIOS.TXT file outlines features specific to particular models. Because the TS-50S has such computer control limitations, owners of that rig should be sure to read RADIOS.TXT before running Kentrol with their radio.

A level translator to match the TTL-level serial port in the radio with the RS232C-level port in the computer. The Kenwood IF-232C is such a translator, but plans are readily available to build your own. If you build, you will need a cable to connect to the radio and even if you buy, you will need a serial cable to your computer.

If your translator and cables don't connect the CTS and DSR lines, you must use the Windows Control Panel to disable hardware flow control. An IF-232C with 8-conductor cable DOES connect them, which is preferable.

#### **GETTING STARTED WITH KENTROL**

Just run SETUP.EXE, switch on your radio and IF-232C interface, then run Kentrol. It will bring up the "New Object" dialog. Choose "radio" and Kentrol will prompt you for configuration info on the radio. Apart from the Comm port, which has to be set correctly, you can safely accept all the default settings. Then it will read your radio's memories into a file; all before opening the tuner window. This takes a minute or two; subsequent start-ups are almost instant.

Most of the program documentation is in the Help system, so you have to be running Kentrol to read it. BROWSE THE HELP INDEX THE FIRST TIME YOU RUN KENTROL for all the details, but don't worry; the Tuner window which is in the foreground when the program starts is very easy to use. Open the sample file BRIANS.KTM to see how annotated memories look.

## TROUBLESHOOTING

If Kentrol doesn't connect with the radio at start-up with everything connected and turned on; exit, switch the radio off and on, and try again. It is advisable to quit Windows 3.1 after a GPF to tidy up memory, but there should be no need to re-boot.

If Kentrol hangs at start-up, it is probably a serial port conflict in Windows. Windows 3.1 proudly advertises that multiple ports are possible, but that is true ONLY if your serial port can be set to interrupts other than IRQ3 or 4. Such ports do exist, but they are exceedingly rare and somewhat expensive. If you have one, you already know about it. What Win 3.1 does do for the rest of us is permit switching from COM1 to 3 or 2 to 4 at will, so long as only one of each pair is in use at any time.

If Kentrol gets out of synch with your radio while it's running, select RESET (on the Options Menu).

If your radio beeps so much while running Kentrol that it's driving you mad, read NOBEEP.TXT, then turn it off.

## **VERSION HISTORY**

- Ver 1.00 -- first shareware release (Sept. 91)
- Ver 1.01 -- keyboard interface introduced
- Ver 1.10 -- support for TS-940S banked memories added -- band logging introduced
- Ver 1.20 -- standard keyboard interface (ctrl-key combos) -- default settings for models not specifically supported
- Ver 1.30 -- built-in bandspread for aeronautical and marine SSB bands -- default US ham sub-bands, Canadian option
  - -- revamped Sub-Band Mode tuning features
- Ver 1.40 -- Service Menu instantly tunes band set of your choice -- dynamic menus adjust choices for active window
- Ver 2.00 -- new look Tuner, with new Bandspread features (Jan. 92)
  - -- hypertext Help system
  - -- Monitor Icon introduced
  - -- TS-140S added to supported radios
  - -- improvements, fixes for the TS-940S
- Ver 2.01 -- corrects .INI bug in 2.0
- Ver 2.10 -- Transmit button added (registered copies)
  - -- Split operation introduced (registered copies)
  - -- variable bandwidth support on the 940/950 (registered copies)
    - -- handier controls on transceiver tuners
- Ver 2.20 -- User-defined bands introduced. -- provides software AFSK mode for the TS-140S
- Ver 2.30 -- Loads Programmed Band Markers (140/850) into User bands -- tuning step shown in Tuner window

- Ver 2.40 -- Windows 3.1 aware (Apr. 92) -- Keyboard tuning added
- Ver 2.50 -- full Windows 3.1 compatibility
- Ver 3.00 -- Toolbar (Dec. 92)
  - -- new look Tuner
    - -- full '50-series support, includes S-meter
    - -- "Hot Spot" buttons provide instant recall
- Ver 3.01 -- direct printing of log contents
- Ver 3.10 -- international edition, supports ITU Regions 1 & 2
- Ver 3.20 -- Terminal Window added
- Ver 3.21 -- improved handling of blank memories on '50-series
- Ver 4.00 -- new interface, internals (Jan. 94) -- too many changes to list
- Ver 4.01 -- improved support for 450/690/50/950SDX
- Ver 4.02 -- improved 940 support -- various fixes
- Ver 4.10 -- Fax Mode added
- Ver 4.11 -- Shortcut Keys added, more informative Status Bar -- 50-series filters now read on every mode change
- Ver 4.12 -- full search & replace for memory and log windows -- auto offset on 440 fsk memory downloads
- Ver 4.20 -- Japanese bandplan built in -- enhanced band-stacking registers
- Ver 4.30 -- user-selectable fine tuning steps (Jun. 94) -- Autoscroll enhanced for cw and fsk bands

#### REGISTRATION

As pointed out at the top of this note, Kentrol is shareware. That means it is *not* public domain software, *not* free. Users are required to register and obtain a licence to use the software.

You are welcome, indeed encouraged, to try Kentrol out for a reasonable period of time to decide whether you like it. If you don't, I thank you for your interest and wish you well; if you could find the time to tell me why you don't find Kentrol useful, I would be extravagantly grateful.

If you do go on using Kentrol, you are legally and morally obliged to obtain a user licence.

Kentrol can be registered on-line via CompuServe. The cost is charged to your credit card, and your customised software and manual are sent immediately, by airmail. You always receive the very latest version of Kentrol.

To register on-line, type GO SWREG at any CompuServe prompt, then just follow the instructions. Please note that Kentrol has two different registration IDs; one is for US and Canadian users, the other for everybody else. The price for on-line registration is the same as by mail.

To register by mail, please send your name, address, callsign, diskette size and radio model, along with a cheque or money order for \$59.95 (US funds) or \$74.95 (Canadian), for orders from the US or Canada (US\$69.95 for all other orders), to:

Brian Gilhuly, 76 McDonald Street S., Arnprior, ON, K7S 2W5, Canada

Registered users will receive:

- -- the latest version of Kentrol, customised with your callsign and/or name
- -- full printing, transmit and split operation capability
- -- variable bandwidth on the 940/950/850
- -- lots of additional memory files
- -- a file conversion utility for old-style .kts files
- -- a 40 page printed manual
- -- access to telephone support.
- -- free upgrades

Questions and bug reports are welcome, to the above address or via CompuServe or the Internet.

73 -- VE3BGB, June 27, 1994

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