

- KTM -

A FILE FOR ALL SEASONS

Kentrol aims to provide the Kenwood user with a consistent, easy-to-use interface for ANY radio model that allows computer control. It accomplishes this aim in two ways: standard Toolbar and Tuner window layouts, and a standard memory file format. The Toolbar and Tuner designs mean that you can move from rig to rig effortlessly, without having to learn new ways of doing things. The .KTM standard memory file format lets your memories move with you, and lets memory contents be transferred from radio to radio.

HOW IT WORKS

Every .KTM file that Kentrol generates has room for 100 duplex memories, which is the maximum memory capacity of any existing Kenwood model. When you use the File Open command to open an existing .KTM file or start a new one with the File New command, you have access to the entire file. When you load the memories into your radio, Kentrol automatically loads the right number and type (simplex/duplex) of channels and if necessary converts modes your radio doesn't support to the most appropriate available modes.

CHANNEL NUMBERS

Kentrol numbers channels from 00 to 99. When opened in an editable memory file window, a .KTM file is 100 lines long, one line per channel.

The information is presented in the following sequence:

channel # TAB frequency 1 TAB mode 1 TAB remarks TAB frequency 2 TAB mode 2

You can cut, copy, paste and otherwise edit everything. Make sure every line is complete but don't worry about duplicate channel numbers. Kentrol re-numbers by line when it saves the file.

RADIO MEMORY LAYOUTS

Kenwood seems to have some difficulty deciding how to implement memory channels on its radios. So far it has used four different ideas:

1. **Banked, simplex channels** are found only on the TS-940S, the first Kenwood HF radio which is computer-controllable. The 940 has four banks (1-4) of ten channels (00-09) each. There is a bank switch on top of the radio and a channel selector on the front panel which operates only on the selected bank. Kentrol converts all this nonsense into a single set of 40 channels (00-39) and, because they are simplex channels, uses only mode 1 and frequency 1.
2. Continuously numbered **simplex channels** are found in the R-5000 (00-99), the TS-440S (00-89) and the TS-140S (00-09). Only mode 1 and frequency 1 are used.
3. **Duplex (Split) channels** first appeared in the TS-440S (90-99) and are used in all later models, notably the TS-140S (10-19) and TS-450/850S (00-89). Splits can be both cross-band and cross-mode. Thus, Kentrol uses both mode 1 & 2 and frequencies 1 & 2 in loading and reading split memories.

4. **Non-split duplex channels** made their first appearance in the TS-140S (20-30) and are also used in 50-series models (90-99). Kenwood calls them 'programmed band markers'. Frequency 1 defines the bottom of a range and frequency 2 the top. Mode 2 must be set the same as mode 1. In memory channel mode Kentrol will treat them as simplex channels, set to frequency 1.

NB: *Channels of this type cannot be reliably over-written by software. The **only** reliable method is to clear the memories first, then upload. See your manual for how to clear. The simplest approach is to put the same thing in channels 90-99 in every file.*

I can only hope that Kenwood will realize what a lame idea the 'programmed band markers' are, and either replace them with a better system or just abandon them. Until that happens, they are a potential source of confusion.

AMBIGUOUS CHANNELS

Internally, all duplex channels store information in exactly the same format. This means that memory files created from a TS-850S may confuse a TS-140S by storing cross-mode splits in channels 20-30, where the 140 expects same-mode ranges, and vice versa. Probably the worst problems are between the 50 Series and the 440 over channels 90-99. If you load a normal split (from a 440) into any of channels 90-99 on a 50-series radio, it will lock up the CPU, requiring a reset, so CHECK BEFORE YOU LOAD. There are NO conflicts among radios prior to the 850.

MODE CONVERSIONS

All relevant Kenwood models directly support AM, FM, LSB, USB and CW modes. All except the TS-140S and TS-50S support either FSK or AFSK. Kentrol provides a software AFSK mode for the 140 and 50 and will automatically use it when loading a channel. The CWN (140) or CW-R (50-series) mode is automatically converted to plain CW on all other radios, and the FSK-R mode (50-series) is converted to FSK.

The Fax mode is uploaded to the radio as offset USB. To have it shown in Fax Mode in the Memories window, you must select "Update as Fax" from the Options menu. If you choose "Update Memories" instead, you will see the offset frequencies in the Memories window, in USB mode.