

## **KaWin "Readme" Notes**

Thank you for evaluating KaWin. This readme file contains information you may need. Please read this file in its entirety before starting KaWin for the first time. Information is offered on the following topics:

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### **What is KaWin and should I be interested?**

KaWin is software for digital RF data communications. KaWin offers access to the full capabilities of Kantronics TNCs. KaWin combines the power of the Kantronics Host Mode and a native Windows operator interface with a rich feature set.

You should be interested in KaWin if you prefer to use the Windows environment, own a fast computer and are ready to exploit the full capabilities of Kantronics TNCs.

### **System Requirements.**

TNC. One to four Kantronics TNCs. KAMs must have version 7.0 firmware or later. All other Kantronics TNCs must have version 5.0 firmware or later.

Minimum Computer System. A Windows capable computer system, with a 386DX-25 or better CPU, 8MB or more memory, hard disk drive, VGA display, one serial port and MS Windows95, MS Windows 3.11 or Windows for Workgroups 3.11.

Recommended Computer System. KaWin's ability to enhance your on- the-air performance is strongly influenced by the speed and capacity of your computer system. Recommended is a computer system that runs Windows very well - a 486DX-33 or better CPU, 8MB+ memory, accelerated super-VGA display, and as many serial ports (with 16550 UARTs and unique IRQs) as you have TNCs and Windows for Workgroups 3.11 or Windows95.

### **Operator Requirements.**

The KaWin user interface and the KaWin documentation, including this help file, assume a level of technical competence in digital, audio and RF technology that

is consistent with attainment of the US Technician Class, or better, amateur radio license. In addition, while KaWin conforms to the design guidelines for user interface to Windows applications, it is not intended to be an introductory course in Windows. KaWin, the KaWin documentation, and the author's commitment to provide technical support, ASSUME A WORKING KNOWLEDGE OF WINDOWS.

### **Installing KaWin.**

KaWin is distributed as a single, self-extracting compressed file, KAWINxxx.EXE. The file KAWINxxx.EXE will decompress on execution, or may be decompressed with any tool that is compatible with PKZIP 2.04g. Decompress all files to a single directory (default is c:\kawin) which we'll call the KaWin home directory. Name it anything you like and locate it on any drive that is read/write accessible to your Windows system. The KaWin home directory does not need to be in your search path.

Installation of KaWin places NO files in any directory other than the KaWin home directory and modifies NO system files. If your AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI and WIN.INI files currently provide good Windows performance, they should be fine for KaWin. All of KaWin's executable and run-time files, configuration files and this help file should all reside in the KaWin home directory. As you further configure KaWin, you may wish to create separate directories for some of the other files KaWin will use.

KaWin requires that the file VBRUN300.DLL be present in your WINDOWS/SYSTEM directory. VBRUN300.DLL is included in the diskette distribution of KaWin, as VBRUN3.EXE, but including its 400kb in the download distribution file would unnecessarily burden the vast majority of users who already have this file. If you do not already have this file, look for it where you found KaWin, the KaWin home page, or the KaWin FTP site, the Microsoft Download Service, or almost any BBS (as a compressed file, VBRUN3.EXE, VBRUN300.EXE or VBRUN300.ZIP).

KaWin will communicate with TNCs on any com port that your Windows installation supports. Windows 3.11 users should use ControlPanel/Ports to define the characteristics of the port(s) you will be using, including IRQ. Windows95 users will find these settings in ControlPanel/System/DeviceManager/Ports. Use the highest Baud Rate that your TNC is capable of (9600 for most Kantronics TNCs) and select Hardware Flow Control. The serial communications drivers that are included with Windows for Workgroups 3.11 and Windows95 are superb and KaWin never misses a beat with these drivers.

Please note that the Windows Control Panel default IRQ setting for ports COM3 and COM4 conflict with those for COM1 and COM2. You cannot communicate successfully without a unique Base I/O Port Address and IRQ for each port that is in concurrent use. KaWin cannot help you resolve these conflicts.

In addition to IRQs 4 and 3, IRQs 5 and 7 and sometimes IRQ 2 are available. Most serial port hardware can be configured to at least some of these. IRQs 5 and 7 are documented as being used by the parallel ports. Current versions of

MSDOS and Windows do not use these IRQs to communicate with the parallel ports and they can usually be used successfully on COM3 and COM4. In any case, your hardware settings for Base I/O Port Address, and IRQ must agree with the software settings in the Windows Control Panel in order for KaWin to communicate successfully with your TNC(s).

KaWin is now installed. If you use the Windows 3.11 Program Manager as your shell and would like to have a KaWin icon to click to start up KaWin, add it to any program group you like with the following steps:

- \* Open the selected program group by double-clicking on its icon.
- \* Select File/New then click Program Item and OK.
- \* Type "KaWin" as the Description (without the "quotes").
- \* Tab to Command Line and click on Browse.
- \* Find the KaWin home directory that you created above and double-click on KAWIN.EXE.
- \* Click on OK (no Working Directory is necessary).

Windows95 users may want to create a shortcut to KaWin in their Start menu by dragging KaWin.exe, with the right mouse button, to an appropriate directory under Windows/StartMenu/Programs or the desktop and then selecting "Create Shortcut Here".

Now, you may start KaWin by any of the following methods:

- \* Click on the KaWin icon in Program Manager,
- \* Double-click the KaWin.exe file in File Manager,
- \* Click File/Run and enter "c:\kawin\kawin.exe<Enter>" (without the "quotes") in either Program Manager or File Manager, or
- \* Launch KaWin from your favorite program launcher.
- \* Windows95: Click the "Start" button and navigate through "Programs" to click on the KaWin icon.

### **Configuring Your TNC.**

KaWin applies a light touch to controlling your TNC, and wherever possible, avoids taking command of a TNC's operating parameters from you. KaWin controls only those parameters that are absolutely required (e.g. INTERFACE HOST). Even those few parameters may be automatically restored by selecting the appropriate option in the Option/Configure/Tncs&Radios dialog. Only five TNC parameters might be left changed on exit:

- \* MONITOR is always left OFF to reduce the probability that your TNC's buffers overflow.
- \* INTFACE is left at HOST (preferred) or TERMINAL according to your selection in Option/TNCs&Radios.
- \* PMODE (Kam only) is set to the HF mode at time of exit.
- \* CWTONE (Kam only) is set to the value set in HF Preferences/CW.
- \* CWSPEED (Kam only) is set to the value set in HF Preferences/CW.

KaWin provides dialogs that streamline control of a few other parameters that need frequent changes (e.g. HF Mode dialog), but leaves the setting of most TNC parameters up to you. Every parameter change issued to a TNC, whether set by you or KaWin, is recorded in the "cmds" context for that TNC. You can see

exactly what KaWin is doing, and enter your own commands there also. This also means that KaWin does not prevent your setting of new parameters as Kantronics adds new features to the firmware of your TNC. KaWin is obsolescence resistant!

KaWin starts most quickly if your TNC(s) are already in Host mode. If you are already using your TNC with other software, and if that software offers the option of exiting in host mode, do it. While you're at it, make note of the com port you are connected to and the TNC/computer port data rate that your TNC is set to - the ABaud command will provide the data rate answer. KaWin performs best at 9600+ BPS. KaWin will negotiate the 9600 BPS setting with a TNC that is fresh out of the box, or has just been restarted through a hardware reset or the RESTORE DEFAULTS command.

With your TNCs connected to the corresponding serial ports of your computer, and the Windows com ports configured to match, start KaWin. Select Option/Configure/TNC and select the first available TNC. Select the appropriate TNC type ("Single port" includes the Kpc-3 and "Other dual port" includes the Kpc-9612 and Kpc-4), com port and data rate. KaWin offers only those com ports that Windows does not report as already busy - busy ports include the port your mouse is connected to. Supply a name for this TNC and for its attached Radio(s) and check the "Auto open at every startup" box. You should probably delay changes to the other parameters in this dialog until you are more familiar with KaWin. Before you return to a terminal mode program you will need to uncheck the "Close in Host Mode" box, but it's best to leave it checked during your KaWin testing.

Next, select Open TNC. The Configure dialog will close and the cmds context for this TNC will appear. If the Windows port settings and your serial port hardware agree, and your computer to TNC cabling is correct, you should see some action right away. If your TNC was not in Host mode before, KaWin will complain about the first host mode open attempt failing and bob and weave a bit as it finds the data rate. If KaWin gives up on this, try cycling the power ON/OFF on your TNC and then press <Enter> to repeat the attempt to open the TNC.

At this point you will come face to face with the first of the nag screens. Tips on how to live with these during your test are included below. For now, just read the nag message and press <Enter> to continue.

Any TNC parameters that need changing can be handled now, by clicking on the cmds context selection tab labeled with the name you just assigned to this TNC (should already be the selected context if you're following this in sequence). You will not see the "cmd:" prompt, nor do you need to type a <ctrl-c> to get the TNC's attention. This context is always in command mode and always ready to take your commands, enter them just as they are documented in your Kantronics Reference Manual.

### **Recommended TNC parameters:**

MYCALL This MUST be set to your call sign! An optional SSID may be appended. Registration of KaWin is tied to this call sign - get it right!

**MYPBBS** This MUST also be set to your call sign! An optional SSID (-1 is customary) should be appended. There are more identification parameters (all starting with MYxxx) in the TNC user manual.

**AUTOOCR 0** KaWin handles word wrap - don't fight it.

**MAXUSERS** Something reasonable, but probably less than the maximum of 26, or even the default of 10. KaWin handles high values of this parameter better than any other program, but it still chews up TNC memory if you don't connect to 26 stations at one time. MAXUSERS command causes the TNC to perform an immediate reset, and will not be accepted if there are any outstanding connects.

**USERS** Set to the same value as MAXUSERS.

**CD SOFTWARE** This is not required by KaWin, but packet operation with Kantronics TNCs is so much easier with this setting. This permits open-squelch operation of your receiver.

**PERSIST, SLOTTIME and RESPTIME** are the three most abused parameters in packet radio. Be reasonable, and work with other packet users in your area to develop a workable consensus value for these three.

**HEADERLN OFF** saves space in the receive windows for monitor contexts.

**MSTAMP ON** this is what you saved the space for.

**PBBS 10** allocates 10 Kbytes for PBBS messages and leaves most of the TNC memory to buffer connected packets when the computer is turned off.

**CODE AMTOR APLINK** for KAMs only, not required.

**CODE RTTY LCRTTY** for KAMs only, and again, not required.

Except for the MAXUSERS parameter, all of these settings are included in the sample TNC command file, KAWIN.TNC, included in the KaWin distribution files. The MAXUSERS command causes the TNC to perform an immediate reset, and, if included in a TNC command file, all further commands will be flushed during the reset. A PERM command is included in the KAWIN.TNC file for those TNCs with volatile memory. This command is not recognized and not needed by Kams, but it does no harm either.

Many parameters that are critical to terminal mode programs, such as PACLEN and those that control TNC/computer handshaking, are not applicable to Host mode - so don't worry about them. If you started from factory defaults with a TNC other than a KAM, this is a good time to PERM. That will save the settings you just made as well as saving the TNC/computer port data rate for quicker startup next time.

**Nag Screens.**

By this time you may have encountered KaWin's first nag screen. Unregistered KaWin trials are limited in duration by a time-based nag meter. This **nag meter starts running only after you send outgoing data**, and expires eight minutes later at which time KaWin will shut down. Once started, the nag meter is visible as a progress bar behind the status bar clock. I apologize to you for this gross inconvenience, but please hear me out.

The potential user base for KaWin is very small: (1) Kantronics TNC users, who (2) use their TNC enough to appreciate the benefits of host mode, and (3) prefer a native windows application. There aren't very many of us yet! Without these awful nag screens, you and about 25% of the users of KaWin would register. To recover my investment in KaWin with only 25% registration compliance, the registration fee would have to be 400% of the current modest fee! I don't want to do that to you.

These nag screens provide you the opportunity to test the full KaWin program in your own shack before making any financial commitment, and help to insure that you don't bear the financial burden of the freeloaders.

### **Evaluation Strategy.**

So, how do you Evaluate KaWin without losing your temper to the nag screens? Easy:

First session - concentrate on getting your first TNC configured and open. As long as you do not connect, or key your HF rig, the nag meter will remain idle. Use this time to explore the KaWin menus and to peruse the features of KaWin, like: copy text from any of the receive windows and paste it into your favorite editor, or browse through the myriad of configurable options. With a KAM you can exercise the HF mode features using the "non-connected" modes (CW, Rtty, Ascii, and all FEC modes). Oh! There's no point in trying the Register menu item until you have a registration code. You may monitor traffic on all your radios, in all modes if you have a Kam, without worrying about the nag meter.

Second session - having saved your configuration in the first session, your TNC will be up and ready in seconds. When you're ready, use the Connect menu to connect to a familiar BBS or DX cluster to get more of the feel of the program. You'll notice immediately that all commands have accelerator keys and the most used ones have shortcut keys. Click the right mouse button on the tab that shows the name of your radio plus "mon", and select Watch command to split the screen and add channel activity to your display Any context can be "watched" in this way. Keep an eye on the nag meter progress - you'll get a reminder with three minutes remaining. That's a good time to disconnect or drop the link before the nag meter gets you

The KaWin Help file can be opened at any time by double-clicking the filename, kawin.hlp, in the file manager or Windows95 Explorer. And remember, those nag screens go away permanently with your personalized registration code.

### **Registration.**

Registration of KaWin is just US\$79, and may be paid by VISA/MasterCard by fax or snail mail or even online (see the KaWin Home Page), but please don't register until you are convinced that KaWin is right for you. A registration application and instructions are waiting in the help file (see Contents, Registration, you can't miss it!)

### **KaWin Lite Registration.**

KaWin Lite registration is a special opportunity for owners of a single Kantronics Kpc-3 or other Kantronics single-port TNC. With KaWin Lite registration you enjoy all the features and benefits of KaWin, with a very simple limitation: KaWin Lite registration is ONLY valid when used with one, single-port, Kantronics TNC - such as a Kpc-3. KaWin Lite registration fee is US\$39.

KaWin Lite is NOT a separate program. KaWin Lite registered users use exactly the same KaWin program, and the KaWin Lite registration will turn off that ugly nag meter just like the full registration, as long as these simple conditions are met:

- I. Only one TNC is defined in Option/TNCs&Radios,
- II. That TNC is the first TNC in the list (TNC 1), and
- III. That TNC is configured as type, "All single port".

If you comply with those three simple rules you can enjoy the benefits of KaWin registration at a bargain price. But remember, whenever any of those three conditions are NOT met, KaWin will behave as an unregistered program.

### **Updating with KAWUPxxx.EXE.**

KAWUPxxx.EXE updates your KaWin 6.0 or later files. If you have not updated to KaWin 6.0 or later, please install all newer files from the complete KAWINxxx.EXE distribution file. You will also need the latest KAWIN.HLP help file which is distributed as KAWINHLP.EXE.

73, Igottago... Stan ..

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