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PC-PAKRATT OPERATION

Welcome to PPWIN

PC-PakRatt 2.1 for Windows 3.x is designed to take advantage of the non preemptive multitasking environment Windows has to offer. PC-PakRatt 2.1 for Windows 3.x, referred to as PPWIN throughout, offers a graphical interface for your TIMEWAVE TNC and makes your job of operating much easier.

Here are some of the features of PC-PakRatt 2.1 for Windows 3.x:

- Dual port operation with TIMEWAVE's DSP-2232 or PK-900.
- Dual TNC operation with any of TIMEWAVE's TNCs including the PK-232, PK-900, DSP-1232/2232, DSP 232, PK-88, PCB-88, PK-96 ,PK-12, IDR-96 as well as R.L. Drake's TNC270 TNC Radio.
- Independent operating windows for each TNC and for each radio port on the DSP-2232 or PK-900.
- Mode dependent status bars and customized buttons to facilitate operation.
- Separate TNC parameter values for VHF and HF Packet.
- ASCII and Binary File transfers in Packet and PACTOR. ASCII transfers in all other modes. Packet File transfers can take place while conversing on another Packet channel.
- Separate CQ and SK macros for AMTOR, BAUDOT, ASCII, MORSE & PACTOR. Custom buttons in the status bar to execute these macros. PC-PakRatt 2.1 for Windows 3.x executes the proper macro for each mode.
- Support for quick call sign exchanges.
- Up to 50 macros for each TNC.
- Support for automatic Packet Node connections.
- Separate QSO logs for each TNC.
- Separate transmit buffers for each Packet channel.
- Separate Packet Monitor channel.
- Ability to 'Paste' text from the ClipBoard to the Transmit buffer and 'Copy' text from the Scroll Back buffer.
- Ability to send a file to the Mail Drop and save individual messages in the Mail Drop to an ASCII file. Mail Drop messages can be saved to disk when the program exits and re-loaded when the program runs.
- Support for BBS operation; click on a message # to automatically bring up a 'Quick BBS' command menu.
- Supports quick callsign exchange in Morse, Baudot, ASCII, AMTOR and PACTOR.

- Scroll Back buffer size (default 64K) can be increased to 256K bytes for each operating window.
- ANSI Graphics Support.
- Supports communications with TIMEWAVEs LogWindows Program.
- Monitor window to display unproto packets while operating packet on any TNC or Port.

Help File Conventions

Certain conventions are used throughout this Help file.

Blue refers to keys on your keyboard. For example: Press ESC means to press the ESCAPE key on your keyboard.

Slate refers to characters you type exactly. For example: Type [HB 1200].

Magenta refers to words you fill in with your own text. For example: Type DE your callsign.

Red refers to a hint or a warning. For example: Don't turn your TNC off while the PPWIN is running.

Green refers to a Cross Reference. For example: See Also Index.

BOLD refers to buttons or menu items.

This help file will usually refer to buttons and icons by displaying the actual button or icon. The buttons in the help file are only images and are not really active.

Files Menu

This menu allows you to load and/or save the TNC1 and TNC2 parameters. This menu also allows you to change the default printer setup.

Load TNC1 Parameters
Reads the TNC1 parameters from disk. If Fast Initialization is on, the TNC will be re-initialized.

Load TNC2 Parameters
Reads all the TNC2 parameters from disk. If Fast Initialization is on, the TNC will be re-initialized.

Load All Parameters
Reads both TNC1 and TNC2 parameters from disk. If Fast Initialization is on, the TNCs will be re-initialized.

Save TNC1 Parameters
Saves the TNC1 parameters to disk.

Save TNC2 Parameters
Saves the TNC2 parameters to disk.

Save All Parameters
Saves both TNC1 and TNC2 parameters to disk.

Load/Init TNC1 Parameters
Reads all the parameters from disk and initializes TNC1 if the operating window is open.

Load/Init TNC2 Parameters
Reads all the parameters from disk and initializes TNC2 if the operating window is open.

Load/Init All Parameters
Reads all the parameters from disk and initializes the TNCs which have windows open.

Printer Setup
Calls the Windows Printer Setup. This is the same as opening the Control Panel and choosing Printer Setup.

Exit
Causes the program to terminate.

When the program exits and if you have specified an exit macro, the macro will execute before the program terminates. The exit macro will not execute ifyou double-click on the in the upper left hand corner of the operating window.

Also, if the Save Mail drop messages box was checked, the program will save any Mail drop messages to disk when quitting the program. If the HostMode on Exit box is not checked, the TNC will be placed back into Human mode.

Edit Menu

This menu allows you to Copy selected text from the scroll-back buffer to the ClipBoard and/or paste text from the ClipBoard into the transmit buffer.

Copy
Copies the selected text from the scroll-back buffer into the ClipBoard. Once the text is in the Clip-Board it may be pasted into the transmit buffer or used in another Windows application.

Paste
Pastes text data from the ClipBoard into the transmit buffer to be sent. Data in the ClipBoard may originate from the scroll back buffer with the Copy command (see above) or from another Windows application.

TNC Menu

To begin operating, a TNC window must be first opened by choosing the TNC to operate. PPWIN supports up to two TNCs and with a DSP-2232 or a PK-900, a separate operating window for each radio port.

Open TNC1:PK-232
Opens TNC1 operating window (In this example TNC1 is a PK-232)

Open TNC1 Port 2
Opens TNC1: Port 2 operating window (if applicable)

Open TNC2:PK-88
Opens TNC2 operating window (In this example TNC2 is a PK-88)

Open TNC2 Port 2
Opens TNC2, Port 2 operating window, if applicable. (The PK-88 has only one port so this will be grayed)

Open Monitor Window
Opens the Packet Monitor Window to allow displaying of unproto packets from any TNC or port.

PPWIN will identify the type of TNC that is attached to TNC1 and TNC2 when the program is run for the first time. For example, if a PK-232MBX is attached to TNC1, DSP-2232 would be replaced with TNC1:PK-232MBX and TNC1 Port 2 would be grayed and inactive. (Since the two radio ports on the PK-232 do not support simultaneous operation)

Once a TNC window has been opened, the menu will change to Close TNC1:DSP-2232.

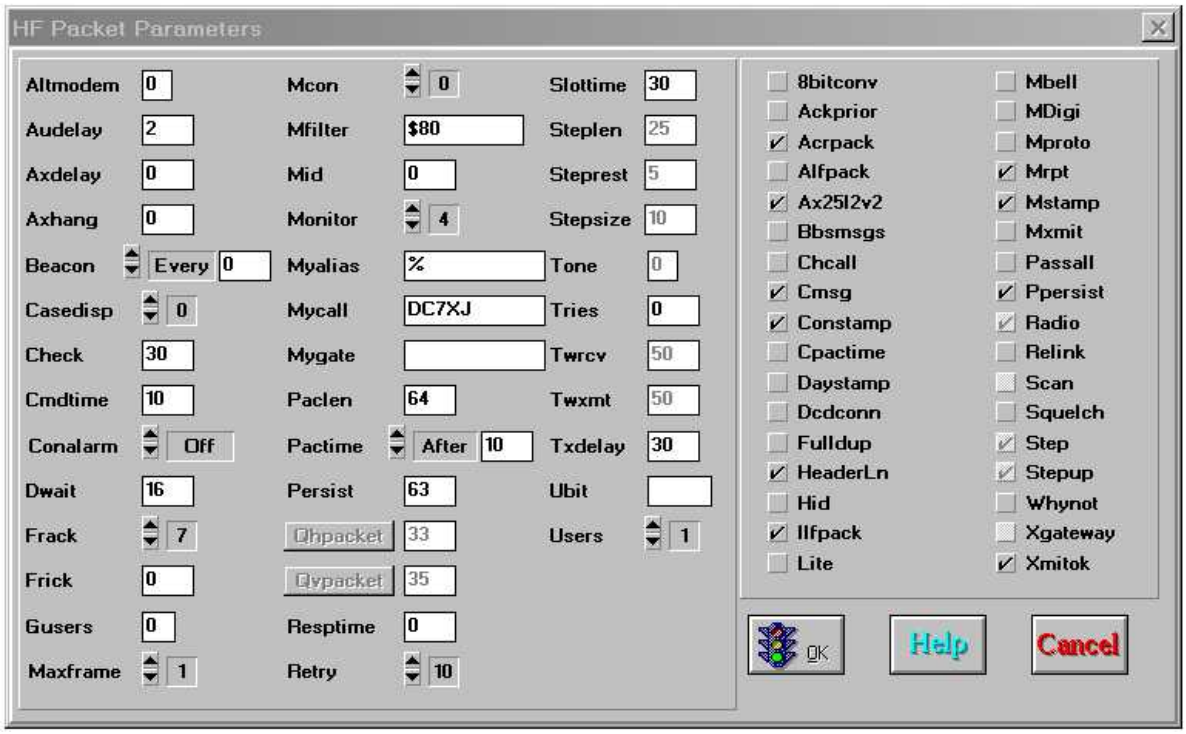
Parameters Menu

The Parameters Menu will allow you to change the values for the TNC's parameters and the state of the TNC.

TNC1 Parameters

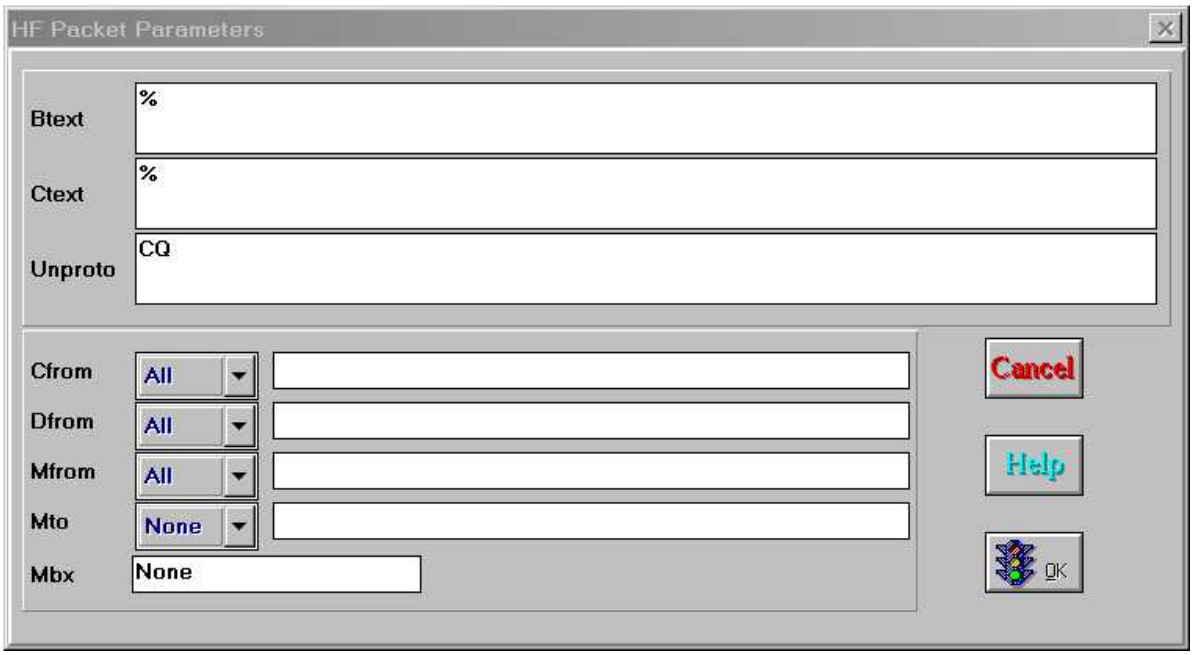
TNC1 HF Packet Params

Contains most of the HF Packet parameters.



TNC1 HF Packet Msg Params

Contains parameters such as BTEXT, CTEXT and UNPROTO as well as CFROM, DFROM, MFROM, MTO and MBX.



TNC1 Port 2 Params
All Port 2 parameters. (Only applies to a DSP-2232 or PK-900)

TNC1 VHF Packet Params
Contains most of the VHF Packet parameters.

TNC1 Hi Speed Packet Params
Contains most of the VHF Packet parameters for high baud rate operation.

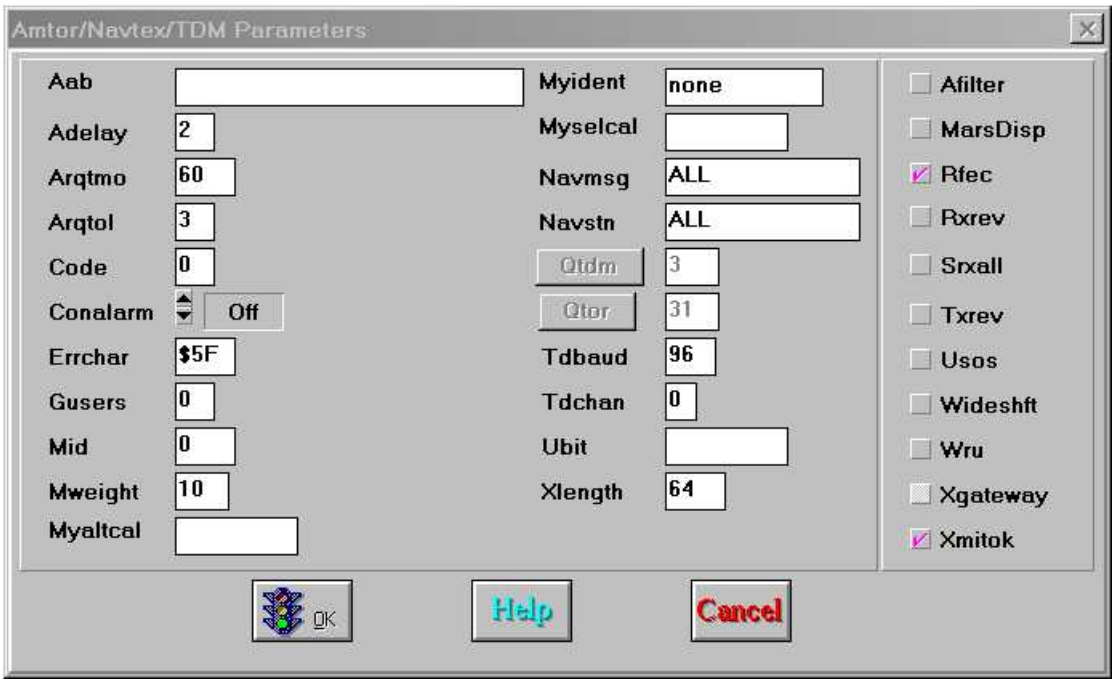
TNC1 VHF Packet Msg Params
Contains parameters such as BTEXT, CTEXT and UNPROTO as well as CFROM, DFROM, MFROM, MTO and MBX.

TNC1 Hi Speed Packet Msg Params
Contains parameters such as BTEXT, CTEXT and UNPROTO as well as CFROM, DFROM, MFROM, MTO and MBX. for high baud rate operation

TNC1 Port 2 VHF Params
All Port 2 VHF parameters. (Only applies to a DSP-2232 or PK-900)

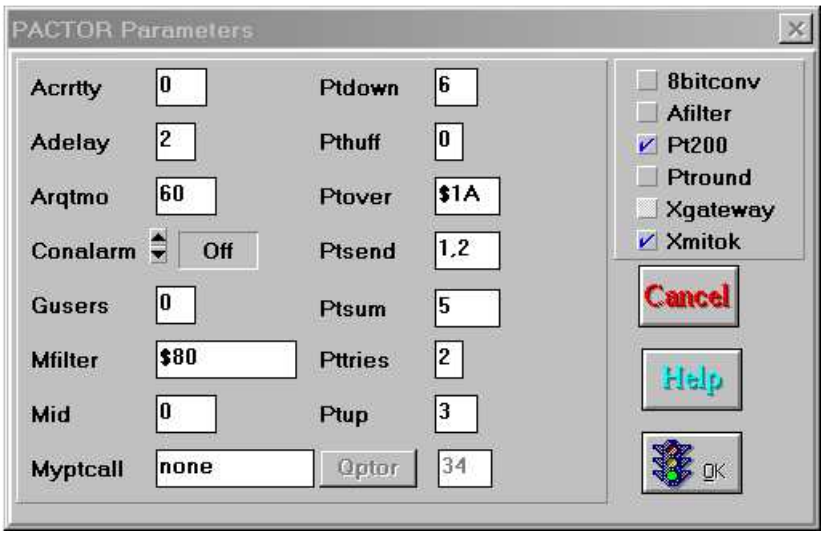
TNC1 Port 2 Hi Speed Params
All Port 2 parameters for high baud rate operation. (Only applies to a DSP-2232 or PK-900)

TNC1 AMTOR/NAVTEX/TDM Params
AMTOR, NAVTEX and TDM parameters.



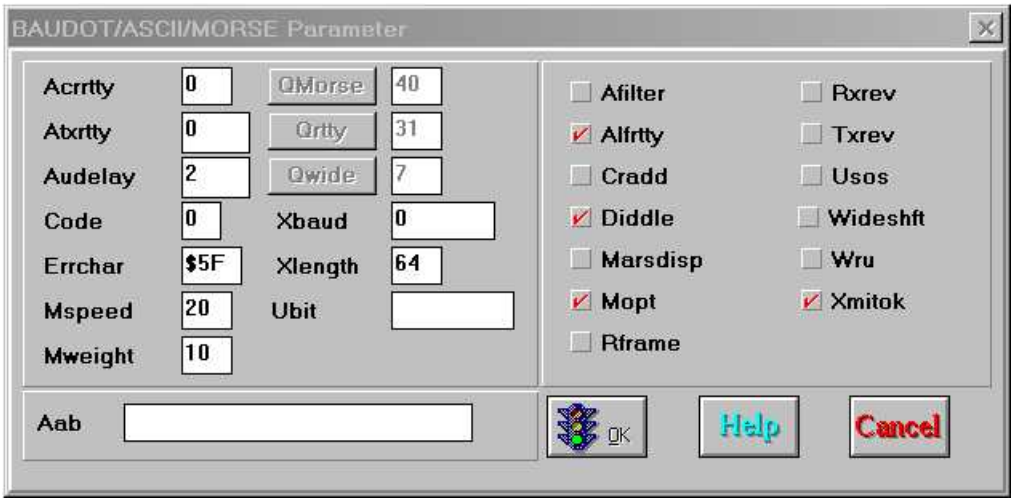
TNC1 PACTOR Params

PACTOR parameters. (requires PACTOR firmware)



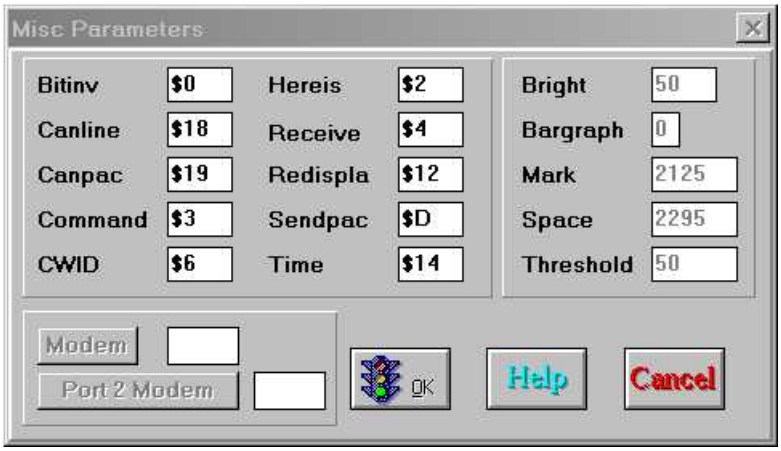
TNC1 BAUDOT/ASCII/MORSE Parms

BAUDOT, ASCII and MORSE parameters.

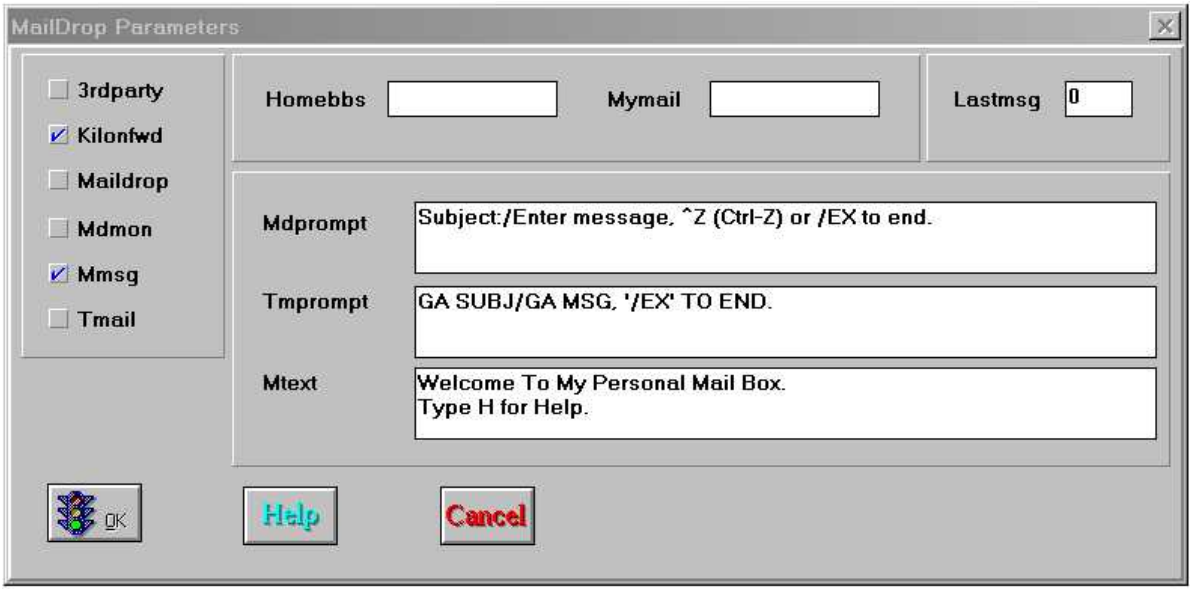


TNC1 Misc. Params

Miscellaneous TNC parameters.



TNC1 MailDrop Params
All MailDrop parameters for TNC1.



TNC2 Parameters

TNC2 HF Packet Params
All HF Packet parameters.

TNC2 HF Packet Msg Params
Contains parameters such as BTEXT, CTEXT and UNPROTO as well as CFROM, DFROM, MFROM, MTO and MBX.

TNC2 Port 2 HF Params
All Port 2 parameters. (Only applies to a DSP-2232 or PK-900)

TNC2 VHF Packet Params
All VHF Packet parameters.

TNC2 Hi Speed Packet Params
Contains most of the VHF Packet parameters for high baud rate operation.

TNC2 VHF Packet Msg Params
Contains parameters such as BTEXT, CTEXT and UNPROTO as well as CFROM, DFROM, MFROM, MTO and MBX.

TNC2 Hi Speed Packet Msg Params
Contains parameters such as BTEXT, CTEXT and UNPROTO as well as CFROM, DFROM, MFROM, MTO and MBX. for high baud rate operation

TNC2 Port 2 VHF Params
All Port 2 VHF parameters. (Only applies to a DSP-2232 or PK-900)

TNC2 Port 2 Hi Speed Params
All Port 2 parameters for high baud rate operation. (Only applies to a DSP-2232 or PK-900)

TNC2 AMTOR/NAVTEX/TDM Params
AMTOR, NAVTEX and TDM parameters.

TNC2 PACTOR Params
PACTOR parameters. (requires PACTOR firmware)

TNC2 BAUDOT/ASCII/MORSE Params
BAUDOT, ASCII and MORSE parameters.

TNC2 Misc Params
Miscellaneous TNC parameters.

TNC2 MailDrop Params
All MailDrop parameters for TNC2.

A TNC window must be open before any of the TNC parameter dialogs can be accessed. The TNC Port 2 parameter menu items will be disabled (grayed) unless the TNC is a DSP-2232 or PK-900. The PACTOR parameter menu items will be disabled if the firmware in the TNC does not support PACTOR.

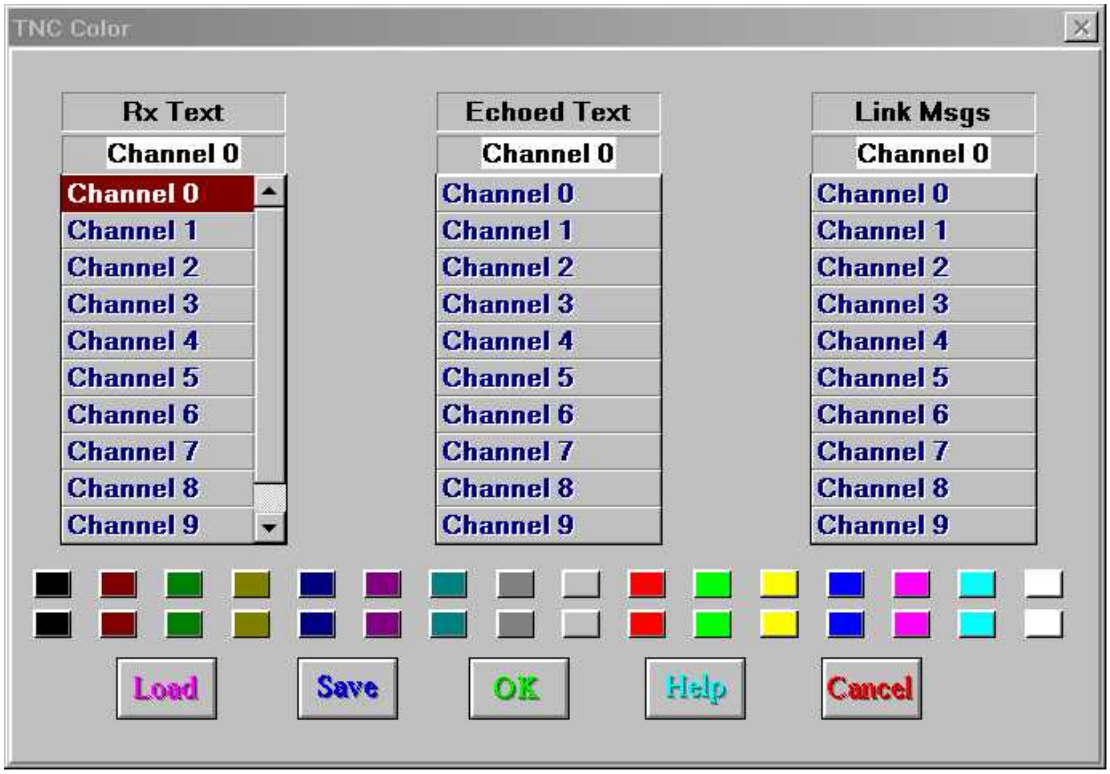
Configure Menu

Load Configuration *Loads the program configuration for both TNCs from disk.*

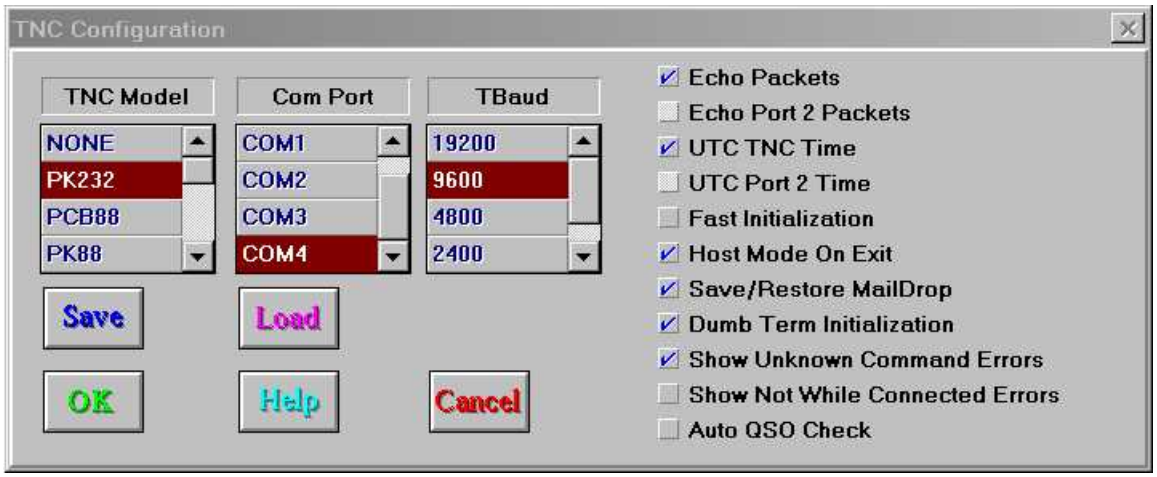
Save Configuration *Saves the program configuration for both TNCs to disk.*

TNC1

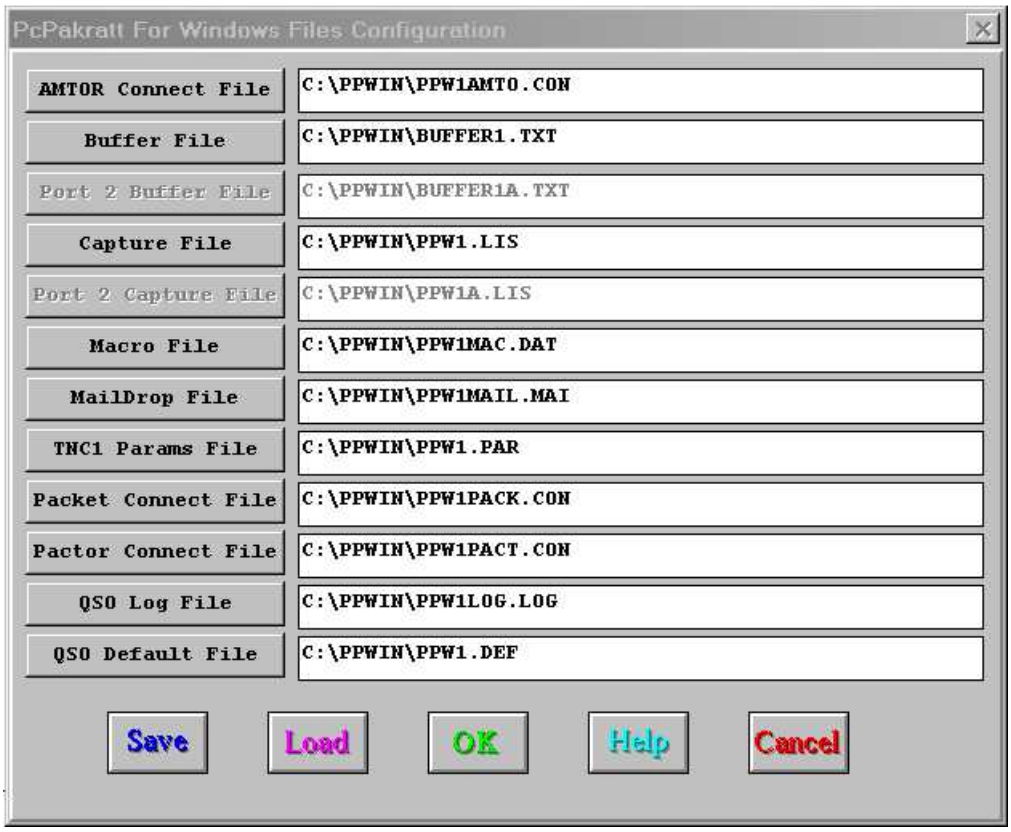
Set Color *Set the received text colors for TNC1.*



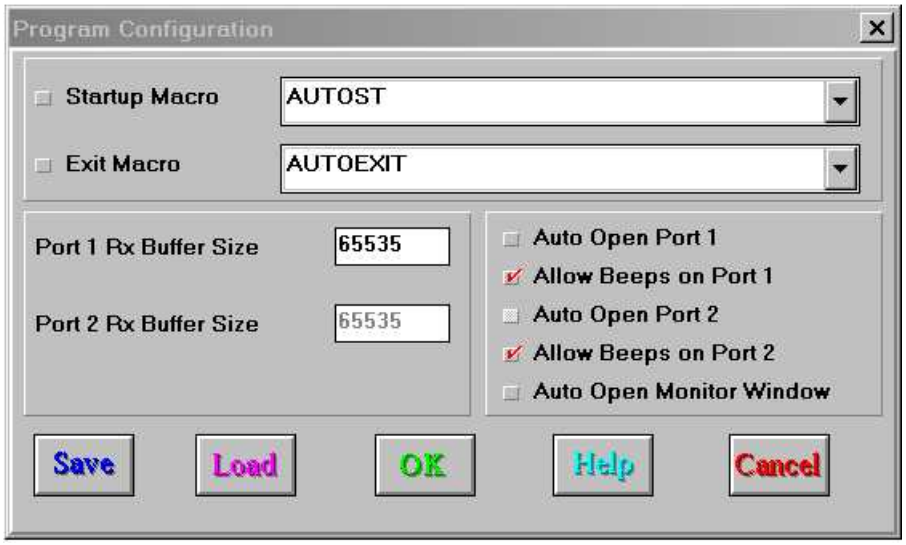
TNC Configuration *Set the TNC type, COM Port, baud rate & program parameters for TNC1.*



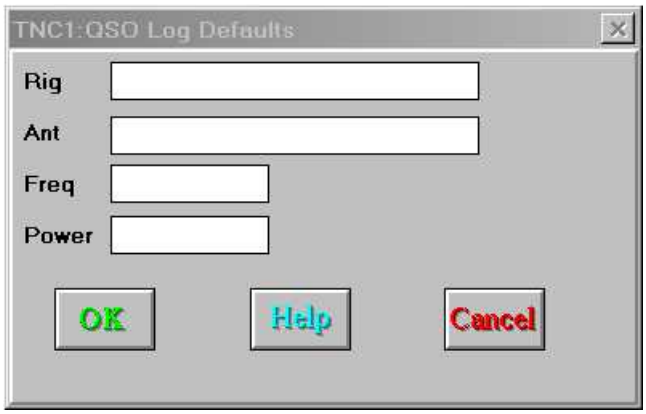
Program Files *Set program filenames and paths for TNC1.*



Program Configuration *Set Port Auto Open, start/exit macros, & RX buffer size for TNC1.*



QSO Log Defaults *Set default values for the TNC1 QSO log.*



TNC2

Set Color *Set the received text colors for TNC2.*

TNC Configuration *Set the TNC type, COM Port, baud rate & program parameters for TNC2.*

Program Files *Set program filenames and paths for TNC2.*

Program Configuration *Set Port Auto Open, start/exit macros & RX buffer size for TNC2.*

QSO Log Defaults *Set default values for the TNC2 QSO log.*

Set Font *Brings up the Font selection menu for both TNCs.*

Choose Font *This allows you to set the font used in the receive and trans mit windows. Note that Windows will not show the program default font (OEM Fixed Font).*
The TERMINAL fonts which can be installed using the FONTS application in the Windows Control Panel will show the IBM screen graphics characters used in many MS-DOS applications and in PACTOR pictures.

Select OEM Fixed Font *Reset to the default OEM Fixed Font.*
The OEM Fixed Font properly displays control characters and the IBM screen graphic characters. This font is a fixed pitch font.

Choose Printer Font *Selects a font to be used in printing.*

Specify Editor *Allows you to specify your favorite text editor (or any other applica tion of your choosing) that can be called from the Tools menu. The default is Write.exe.*

Reset Rx Window Colors *Allows you to reset the Rx Window colors back to the current de-faults. When receiving ANSI graphics, the screen colors may be left at some undesirable color. This features allows you to reinstate the de-fault colors for the Rx window.*

The TNC type, COM Port, and baud rate should be set first.

PPWIN supports COM Ports 1-4. The setup of these COM Ports must be done through the Windows 3.1 Control Panel 'Port Setup' applet. For OS/2 2.1, refer to the OS/2 help for the COM and VCOM driver parameters.

Do not assign a TNC to a COM Port which shares the same port address or IRQ with another COM Port which is in use!

Tools Menu

The Tools menu allows you access to several of the more popular Windows applications and applets.

Control Panel *Call the Windows Control Panel applet.*

Notepad *Call Windows Notepad.*

Write.exe *Call Windows Write. The program called here can be changed with the "Specify Editor" option in the Configuration Menu.*

ClipBoard *Call the Windows ClipBoard Viewer.*

Sync With Log Windows *Polls Log Windows To begin commications. If Log Windows is running, the in the TNC Status Dialog will change from*  to  .

Terminate Log Windows Link *?*

Window Menu

Arrange Icons *Arranges the icons at the bottom of the Main Window.*

Cascade *Cascades the open windows.*

Tile Vertically *Tiles windows vertically.*

Tile Horizontally *Tiles windows horizontally.*

Save TNC1 Port 1 Position *Saves the location and size of the operating window for TNC1 port-1.*

Save TNC1 Port 2 Position *Saves the location and size of the operating window for TNC1 port-2.*

Save TNC2 Port 1 Position *Saves the location and size of the operating window for TNC2 port-1.*

Save TNC2 Port 2 Position *Saves the location and size of the operating window for TNC2 port-2.*

Save Program Position *Saves the location and size of the operating window for the PC-Pak Ratt 2.1 for Windows 3.x program.*

Save Monitor Window Position
Saves the location and size of the Packet monitor window.

Help Menu

Welcome to PC-PakRatt 2.1 for Windows 3.x
Calls the Windows Help program and displays the Welcome to PC-PakRatt 2.1 for Windows 3.x topic.

Technical Support *Shows how to obtain technical support for TIMEWAVE products.*

Firmware *Shows the program version and the TNC(s) firmware dates. (If the TNC is open)*

About... *Shows the Copyright information and program author.*

TNC PARAMETERS

Please refer to the manual of the data controller that you use!

Packet Parameters

ACKPRIOR	CONNECT	ILFPACK	MXMIT	STEP
ACRPACK	CONPERM	LITE	MYALIAS	STEPLEN
ALFPACK	CONSTAMP	MAILDROP	MYCALL	STEPREST
ALTMODEM	CPACTIME	MAXFRAME	MYGATE	STEPSIZE
AUDELAY	CSTATUS	MBELL	PACLEN	STEPUP
AX25L2V2	CTEXT	MBX	PACTIME	TCLEAR
AXDELAY	DAYSTAMP	MCON	PASSALL	TIME
AXHANG	DCDCONN	MDIGI	PERSIST	TONE
BBSMSGS	DFROM	MDMON	PPERSIST	TRIES
BEACON	DIRECT	MFILTER	QHPACKET	TXDELAY
BTEXT	DISCONNE	MFROM	QVPACKET	UBIT
CASEDISP	DWAIT	MHEARD	RADIO	UNPROTO
CFROM	FRACK	MID	RELINK	USERS
CHCALL	FRICK	MODEM	RESPTIME	WHYNOT
CHECK	FULLDUP	MONITOR	RETRY	XGATEWAY
CMDTIME	GUSERS	MPROTO	SCAN	XMITOK
CMSG	HBAUD	MRPT	SENDPAC	
CODE	HEADERLN	MSTAMP	SLOTTIME	
CONALARM	HID	MTO	SQUELCH	

AMTOR Parameters

AAB	AUDELAY	HEREIS	MYSELCAL	TXREV
ACHG	CODE	ID	NUMS	UBIT
ACRRTTY	CONALARM	LOCK	QTOR	USOS
ADELAY	CONSTAMP	MARSDISP	RECEIVE	WIDESHFT
AFILTER	CWID	MID	RFEC	WRU
ALIST	DAYSTAMP	MDMON	RXREV	XGATEWAY
AMTOR	DCDCONN	MFILTER	SELFEC	XLENGTH
ARQ	DIRECT	MODEM	SRXALL	XMITOK
ARQTMO	ERRCHAR	MWEIGHT	TCLEAR	
ARQTOL	FEC	MYALTCAL	TIME	
ARXTOR	GUSERS	MYIDENT	TMAIL	

BAUDOT/ASCII/MORSE Parameters

8BITCONV	CODE	MARSDISP	QWIDE	TXREV
AAB	CRADD	MFILTER	RBAUD	UBIT
ABAUD	CWID	MODEM	RCVE	USOS
ACRRTTY	DIDDLE	MOPT	RECEIVE	WIDESHFT
AFILTER	DIRECT	MSPEED	RFRAME	WRU
ALFRTTY	ERRCHAR	MWEIGHT	RXREV	XBAUD
AUDELAY	HEREIS	NUMS	TCLEAR	XLENGTH
ATXRTTY	ID	QMORSE	TIME	XMIT
BITINV	LOCK	QRTTY	TXDELAY	XMITOK

PACTOR Parameters

8BITCONV	CONSTAMP	MODEM	PTROUND	TMAIL
AAB	CWID	MWEIGHT	PTSEND	UBIT
ACHG	DAYSTAMP	MYPTCALL	PTSUM	UCMD
ACRRTTY	DCDCONN	OVER	PTTRIES	WRU
ADELAY	DIRECT	PT200	PTUP	XLENGTH
AFILTER	ERRCHAR	PTCONN	QPTOR	XGATEWAY
ARQTMO	GUSERS	PTDOWN	RCVE	XMITOK
ARXTOR	HEREIS	PTHUFF	RECEIVE	
AUDELAY	MDMON	PTLIST	TCLEAR	
CONALARM	MFILTER	PTOVER	TIME	

MailDrop Parameters

3RDPARTY	LASTMSG	MDPROMPT	MYGATE	TMPROMPT
HOMEBBS	MAILDROP	MMSG	MYMAIL	UBIT
KILONFWD	MDMON	MTEXT	TMAIL	

Dual Port Parameters

ACKPRIOR	DWAIT	MID	PERSIST	STEPLEN
AUDELAY	FRACK	MODEM	PPERSIST	STEPREST
AX25L2V2	FRICK	MONITOR	RADIO	STEPSIZE
AXDELAY	FULLDUP	MRPT	RELINK	STEPUP
AXHANG	HBAUD	MPROTO	RESPTIME	TXDELAY
BEACON	HID	MTO	RETRY	UNPROTO
CFROM	LITE	MYALIAS	SCAN	USERS
CHECK	MAXFRAME	MYCALL	SLOTTIME	VHF
CMSG	MBELL	PACLEN	SQUELCH	
DFROM	MFROM	PASSALL	STEP	

Misc. Parameters

AFILTER	CANLINE	DIRECT	OK	SENDPAC
BARGRAPH	CANPAC	HEREIS	QSIGNAL	SPACE
BITINV	COMMAND	MARK	RECEIVE	TIME
BRIGHT	CWID	MODEM	REDISPLA	UBIT

NAVTEX/TDM Parameters

ARQE	MARSDISP	NAVTEX	TDBAUD	WIDESHFT
CODE	MODEM	NUMS	TDCHAN	
ERRCHAR	NAVMSG	QTDM	TDM	
LOCK	NAVSTN	RXREV	UBIT	

Dumb Terminal Parameters

5BIT	CONMODE	FLOW	PASS	RESTART
6BIT	CONVERSE	KISS	PRCON	SAMPLE
ACRDISP	CSTATUS	KISSADDR	PRFAX	TRACE
ANSAMPLE	DAYTIME	MDCHECK	PROUT	TRANS
AUTOBAUD	DISPLAY	NEWMODE	PRTYPE	TRFLOW
CALIBRATE	DSPDATA	NOMODE	QDATA	TXFLOW
CANLINE	EAS	NUCR	QFAX	WHYNOT
CANPAC	ECHO	NULF	QLOAD	WORDOUT
CMDTIME	ESCAPE	NULLS	REINIT	XFLOW
COMMAND	EXPERT	OPMODE	RESET	

Signal Parameters

BITINV	OK	QWIDE	TXREV
CODE	QSIGNAL	RXREV	WIDESHFT

Please refer to the manual of the data controller that you use!

CONFIGURATION

Configure Menu

Load Configuration *Loads the program configuration for both TNCs from disk.*

Save Configuration *Saves the program configuration for both TNCs to disk.*

TNC1

- **Set Color** *Set the received text colors for TNC1.*
- **TNC Configuration** *Set the TNC type, COM Port, baud rate & program parameters for TNC1.*
- **Program Files** *Set program filenames and paths for TNC1.*
- **Program Configuration** *Set Port Auto Open, start/exit macros, & RX buffer size for TNC1.*
- **QSO Log Defaults** *Set default values for the TNC1 QSO log.*

TNC2

- **Set Color** *Set the received text colors for TNC2.*
- **TNC Configuration** *Set the TNC type, COM Port, baud rate & program parameters for TNC2.*
- **Program Files** *Set program filenames and paths for TNC2.*
- **Program Configuration** *Set Port Auto Open, start/exit macros & RX buffer size for TNC2.*
- **QSO Log Defaults** *Set default values for the TNC2 QSO log.*

Set Font *Brings up the Font selection menu for both TNCs.*

- **Choose Font** *This allows you to set the font used in the receive and trans mit windows. Note that Windows will not show the program default font (OEM Fixed Font).*

  The TERMINAL fonts which can be installed using the FONTS application in the Windows Control Panel will show the IBM screen graphics characters used in many MS-DOS applications and in PACTOR pictures.

- **Select OEM Fixed Font** *Reset to the default OEM Fixed Font.*

  The OEM Fixed Font properly displays control characters and the IBM screen graphic characters. This font is a fixed pitch font.

Choose Printer Font *Selects a font to be used in printing.*

Specify Editor *Allows you to specify your favorite text editor (or any other application of your choosing) that can be called from the Tools menu. The default is Write.exe.*

Reset Rx Window Colors *Allows you to reset the Rx Window colors back to the current defaults. When receiving ANSI graphics, the screen colors may be left at some undesirable color. This features allows you to reinstate the default colors for the Rx window.*

The TNC type, COM Port, and baud rate should be set first.

PPWIN supports COM Ports 1-4. The setup of these COM Ports must be done through the Windows 3.1 Control Panel 'Port Setup' applet. For OS/2 2.1, refer to the OS/2 help for the COM and VCOM driver parameters.

Do not assign a TNC to a COM Port which shares the same port address or IRQ with another COM Port which is in use!

TNC Configuration

The TNC Configuration Dialog contains three List Boxes, the first to define the TNC model, the second to define the COM Port and the third to define the baud rate between the TNC and the computer (TBAUD). This Dialog also contains switches (Check Boxes) which controls how the program interacts with the TNC.

TNC Models *The TNC List Box allows you to specify the TNC model attached to TNC1 or TNC2 (depending on which configuration Dialog you opened). PC-PakRatt 2.1 for Windows 3.x supports all of TIMEWAVE's controllers from the PK-88 to the DSP-2232.*

The TNC model can not be changed while the TNC operating window is open.

COM Port Selection *The COM Port List Box allows you to specify which COM Port to use for the specified TNC (TNC1 or TNC2).*

The TNC COM Port can not be changed while the TNC operating window is open.

Do not assign a TNC to a COM Port which shares the same port address or IRQ with another COM Port which is in use !

Windows 3.1 and OS/2 2.1 handle COM port contention problem fairly well. You will not be able to access the TNC if there is an IRQ conflict.

In Windows 3.1, the COM port addresses and IRQ numbers are defined in the Ports applet in the Control Panel. If you plan to use COM Port 3 or 4, check the setup of these ports as they may not represent your COM board setup. For OS/2 2.1, refer to the OS/2 help for the COM and VCOM drivers.

If the COM Port selected is NONE, PPWIN will run in demo mode. PP-WIN will not attempt to communicate with your TNC.

Computer Baud Rate *The baud rate between the computer and TNC (TBAUD) must also be specified. The baud rate between the computer and TNC must be agree before the two can communicate. If you try to access your TNC and the baud rates are different you will receive an error message saying that the TNC can not be accessed.*

If the operating window is open, PPWIN will issue the proper TBAUD command, RESTART the TNC and reset the computer's COM port.

Program Switches *Also in this Dialog are Check Boxes which determine how the TNC and Program operate. If the Check Box is checked, the program acts as follows:*

Echo Packets *Transmitted packets are echoed to the receive window as they are sent to the TNC.*

Echo Port 2 Packets *Transmitted packets are echoed as they are sent to the DSP-2232s or PK-900s Radio Port 2.*

UTC TNC Time *Sets the TNC time to UTC time and highlights the UTC time and date displayed in the operating window Status Bar. When this box is unchecked, the local time entered in your PC is highlighted and used to set the TNC time.*

UTC Port 2 Time *Highlights the UTC time and displays the UTC date in the operating window Status Bar for radio port 2. The TNC time is controlled by UTC TNC Time. (DSP-2232 or PK-900 only).*

Fast Initialization *TNC parameters are not initialized when the TNC operating window is opened. When not checked, the parameters are in itialized each time the TNC window is opened. Fast Initializa tion will save time when starting PC-PakRatt 2.1 for Windows 3.x but is not recommended if other programs besides PC-Pak Ratt 2.1 for Windows 3.x will be used.*

Note that the parameters are always loaded if the TNC has been reset or is not in the Host mode when PC-PakRatt 2.1 for Windows 3.x starts.

Host Mode on Exit *The TNC is left in Host Mode when the program terminates. When not checked, the TNC is placed back in Human Mode.*

Remaining in Host mode after exiting the program is a good idea. It allows the TNC to save data that it may receive when the computer is off such as when another packet station con nects to you.

If you will be using other programs besides PC-PakRatt 2.1 for Windows 3.x however, you may want to un-check this box. This may make starting your other program easier. Remem ber though, if you do not remain in the Host mode on Exiting the program, you may loose data when the computer is off.

Save/Restore Mail drop *PC-PakRatt 2.1 for Windows 3.x can automatically save any messages in the Mail Drop to disk when the program termi nates and re-load the TNC when the program starts. The TNC is RESET when messages are loaded in to the TNC to prevent duplicate messages.*

If you have the battery back-up in your TNC enabled, we rec ommend that you do not check this box and simply let the battery hold your MailDrop messages. If you have disabled the battery back-up to make it easier to run other programs besides PC-PakRatt 2.1 for Windows 3.x, then you may want to check the box and automatically save and restore your Mail Drop messages.

Dumb Term Initialization *When checked, the TNC is initialized after leaving the Dumb terminal mode. This is a good idea to prevent any problems that might occur from accidentally changing any parameters in the Dumb Terminal mode.*

Show Unknown Command Errors

When checked, TNC Unknown Command errors are displayed when they occur. This option may be turned off for TNCs with older firmware or without the PACTOR option installed.

Show Not While Connected Errors

When checked, TNC 'Not While Connected' errors are displayed during initialization. This option may be turned on if desired, when this box is checked, error messages will be dis played during initialization should another station be connected to the TNC.

Auto QSO Check *When checked and if the QSO Log is open, PC-PakRatt 2.1 for Windows 3.x will display the QSO information for the station just connected to (in Packet Only). Since each TNC has it's own log, the respective QSO Dialog must be opened first. This also works when the QSO Log is minimized.*

Be sure and select the SAVE parameters option if you want the changes you make to be saved for the next time you run the program.

Setting TNC Parameters

PC-PakRatt 2.1 for Windows 3.x maintains separate parameter files for TNC1 and TNC2 parameters. The parameters for both TNCs can be loaded or saved individually or in concert. The parameter file names are specified in the Program Configuration Dialog).

The parameter Dialogs are divided by operating mode.

HF Packet Parameters
VHF Packet Parameters
Dual Port Parameters
Port 2 HF Parameters (If TNC is Dual Port)
Port 2 VHF Parameters (If TNC is Dual Port)
AMTOR Parameters
NAVTEX/TDM Parameters
PACTOR Parameters
BAUDOT/ASCII/MORSE Parameters
Mail Drop Parameters
Dumb Terminal Parameters
Signal Analysis Parameters
Miscellaneous Parameters

VHF Packet parameters are loaded in to the TNC when the TNC mode is changed to VHF Packet. Likewise, HF Packet parameters are loaded when the TNC is changed to HF Packet . PPWIN remembers the last Packet mode used so parameters are only reloaded when you go from HF to VHF packet , not when you go to HF Packet to AMTOR and back to HF Packet.

Some parameters show up in multiple parameter dialogs because they affect more than one mode. Because of this, those parameters which are in multiple dialogs will affect other modes. Changes to the parameters will immediately be sent to the TNC when you press the **OK** button. For example, if you change the value of MYCALL, PPWIN will update the TNC when you click on the **OK** button to close the Dialog. If PPWIN is in VHF Packet mode, changing any of the HF Packet parameters will effect the state of the TNC since the TNC is updated when the **OK** button is clicked.

Parameters can be saved or re-loaded from disk by selecting **LOAD PARAMETERS** and **SAVE PARAMETERS** in the File Menu. The TNC can be re-initialized by selecting **LOAD/INIT TNC1 PARAMETERS, LOAD/INIT TNC2 PARAMETER** and **LOAD/INIT ALL PARAMETERS**.

TNC parameter Dialogs can not be accessed while in Dumb Terminal mode since the TNC is no longer in Host mode.

MACROS

The Macro Dialog contains a List Box all of the macros that currently exist for a particular TNC. Each TNC has it's own Macro File and it's own set of Macros. If the TNC is a PK-900 or DSP-2232, the macros are shared between Port 1 and Port 2.

Up to 50 macros can be stored in the macro file. The Macro files can be changed from the Program Files option from the Configure Menu.

To Execute a macro, click the left mouse button on the name of the macro you wish to execute and then click on the OK Button. You can also double click on the macro name to execute the macro. Click on the Quit Button to close the dialog box if you do not wish to execute any macros.

The following macro names has a special meaning for PC-PakRatt 2.1 for Windows 3.x.

```
CQ-AMTOR....CQ macro for AMTOR
CQ-BAUDOT...CQ macro for BAUDOT
CQ-ASCII....CQ macro for ASCII
CQ-PACTOR...CQ macro for PACTOR
CQ-MORSE....CQ macro for MORSE
SK-AMTOR....Terminate link macro for AMTOR
SK-BAUDOT...Terminate link macro for BAUDOT
SK-ASCII....Terminate link macro for ASCII
SK-PACTOR...Terminate link macro for PACTOR
SK-MORSE....Terminate link macro for MORSE
EQUIP-LIST..Equipment list macro
```

AMTOR, BAUDOT, ASCII and MORSE Status Bars all have a **CQ**, **SK** and **EQ** Button. When the **CQ** or **SK** Button is clicked in AMTOR, the macro CQ-AMTOR (or SK-AMTOR) is executed.

The EQUIP-LIST macro in generic to all operating modes.

PPWIN also allows you to assign Macros to the ALT-1 through ALT-0 keys. This is done by beginning the macro name with M1- (for ALT-1), M2- (for ALT-2) and so forth. These macros are not specific to any operating mode.

For example to attach a macro to ALT-1, you would title your macro M1-MYMACRO. To attach a macro to ALT-5, you would title your macro M5-MYMACRO.

Once a macro is executing, the Status Bar displays the word "Macro". A macro can be canceled by clicking  (on the Status Bar) or typing ALT-M.

To Edit a macro, select the macro from the List Box, then click on the Edit Button. The Macro Edit Dialog will then appear. From here you can edit both the macro name and the contents of the macro.

To add a new macro, click on the Add Button. The Macro Edit Dialog will appear and you can begin to create a new macro.

To Delete a macro, select the macro from the List Box then click on the Delete button. The selected macro will be removed from the List Box and deleted from the file.

See the Macro Edit section for more information on Macros.

Adding & Editing Macros

The Macro Edit Dialog allows you to create a new macro or edit an existing macro. The Macro Edit Dialog is selected when you click on the **Add** or **Edit** Button in the Macro Dialog. Once inside the Macro Edit Dialog, the procedures for creating and editing macros are the same.

To enter or change the title of the macro, move the cursor to the Title Edit Box using the tab key or the mouse. Enter or edit the existing macro name.

Macro titles are not limited by MS-DOS and can be up to 40 characters in length.

To enter or change the macro text, move the cursor to the bottom Edit Box using the tab key or the mouse. Do not hit the ENTER key as ENTER is equivalent to clicking the mouse on the OK button (in a Windows Dialog Box). To place a carriage return in to an Edit Box, type CTRL-ENTER instead. Macros can be up to 1024 characters. The Edit Box will not accept more than 1024 characters. You can also copy text into the Edit Box from the ClipBoard by typing CTRL-INS.

Unlike earlier versions of PC-Pakratt, the Windows Edit Box can not accept most control characters. To get around this problem, PPWIN has a special convention for handling control characters. The control sequence must be enclosed by [ ] and the control sequence is entered as ASCII.

For example, to enter a Control-D into your macro, type [^D].

The control sequence must be enclosed in [ ] or PC-PakRatt 2.1 for Windows 3.x will sent the characters ^ and D to the TNC rather than the CTRL-D character.

PC-PakRatt 2.1 for Windows 3.x allows you to directly enter TNC commands into your macro. This is especially handy with the AUTOSTART and AUTOEXIT macros where commands such as 'Monitor 0' can be entered to automatically disable packet monitoring when quitting PC-PakRatt 2.1 for Windows 3.x.

As with control characters, the TNC command must be enclosed by [ ]. The TNC command must however be specified using the Host Mode Mnemonic. Host Mode mnemonics are listed in the command section of the TNC operating manual and in the TNC Parameters section of these Help Files.

As an example, to tell the TNC to go into FEC mode (such as for calling CQ-AMTOR), enter into your macro [FE]. If you look up the FEC command in the TNC Parameters section of these help files, you will notice that the Host mode command is 'FE'. PPWIN takes care of changing the Status Bar. When a TNC parameter is changed, the value is updated in the program as well.

As an example, to enter an AMTOR FEC CQ call, you would enter [FE]CQ CQ CQ CQ CQ DE K1ABC K1ABC (KABC KABC)[^D]

Note that the macro is ended with a CTRL-D. If you terminate the macro with the TNC command [AM], the TNC will be placed in AMTOR standby before all text is transmitted. The CTRL-D allows the TNC is transmit all the characters in it's buffer before going back to receive.

OPERATING WINDOWS

Packet Operation

Key Definitions:

ALT-A: Calls the MailDrop Dialog.
ALT-B: Sets the Packet radio baud rate HBAUD.
ALT-I: Issues an ID command to the TNC.
ALT-M: Calls the Macro Dialog.
ALT-Q: Refreshes the windows.
ALT-R: Clears Receive Window and Scroll Back Buffer.
ALT-S: Holds/Releases Transmit Buffer.
ALT-U: Initiates a File Capture.
ALT-V: Toggles Radio ports on the DSP-1232 Only.
ALT-X: Calls the File Transfer Dialog.
ALT-Y: Clears Transmit Window and sends TCLEAR to the TNC.
ALT-Z: Changes the Operating Mode.

SHIFT-INS: Pastes text from the ClipBoard into the TX window.
PgUP: Calls the Scroll Back Buffer.
HOME: Calls the QSO Log Dialog.
END: Calls the Mheard Dialog.

PRINT Screen: Saves incoming data to the printer.

F3: Calls the CONNECT Dialog.
F4: Issues a DISCONNEct command.
F6: Toggles the HF Packet LITE feature on/off.
^F6: Issues a FREE memory inquiry.
F7: Toggles the MailDrop Monitor (MDMON) on/off.
Sh-F7: Toggles MAILDROP on/off.
F8: Toggles CONPERM on/off.
Up: Increases the Packet Channel.
Dn: Decreases the Packet Channel.

Button Descriptions:

Toggles the RX window from the Display ALL mode to the Display individual CHannel mode. When the Mode is Display CHannel, the button changes to 

.

Hold/Release transmit buffer. When pressed, the data you type into the transmit buffer will be held until this button is released.

Packet Connect. Brings up the packet Connect dialog and allows you to connect to other Packet stations.

Packet Disconnect. Initiates the packet Disconnect process when you are through talking to the other station.


Clears the transmit window and issues a TCLEAR, command to the TNC.

Clears the receive window and the Scroll Back Buffer.

Opens the File Transfer Dialog.

Opens and Displays the Macro Dialog. If clicked while a macro is executing, the Macro in progress will be terminated.

ID Performs a Packet Identification of your station if HID is also checked.

Displays the MailDrop Dialog. If there is mail in the MailDrop for the SYSOP, the button will turn white (with 7/92 firmware or newer).

Turns on the File Capture to begin saving incoming received text to disk. When a File capture is in progress the button is stays depressed. Click on the depressed button to stop the File Capture.

File Capture hold/release button. When a File Capture is taking place, the button changes to . Clicking on the button while it is green will temporarily pause the File Capture. The button then will change to . Clicking on the button will change it back to green and the File Capture will continue. When the File Capture is terminated, the button returns back to gray.

Saves incoming data so it can to be printed. When data is being saved, the button will change to . Click on the button again to stop saving data and spool the data to the printer. Be sure to set the Printer font and point size before printing.

Opens and Displays the QSO Log Dialog.

Calls the MHEARD Dialog to show a list of the most recently heard packet stations.

Makes a packet connection 'permanent' toggling the CONPERM command on/off. The button is depressed when a packet link is 'CONPERMed'.

Enables/Disables sending received data to Log Windows. When data is to be sent to Log Windows, the button will change to . Communications with Log Windows must first be started from the Tools Menu.

Toggles the HF packet LITE feature on/off. When LITE is ON, the button changes to .

Toggles MAILDROP on/off. When MAILDROP is on, your packet MailDrop is available to remote stations wishing to log on to your MailDrop. The button will change to when your MailDrop is available for others to use.

Toggles the MailDrop Monitor feature (MDMON) on/off. When MDMON is on, the button changes to .

Packet connects are initiated by pressing . PPWIN will then display the Connect Dialog. The dialog contains a List Box to hold the callsigns of stations you frequently connect to. To add a callsign to the list, type the callsign in the Edit Box and click on **ADD**. The call will be added to the list and saved to disk. To Establish a connect, either double click on a callsign in the List Box or type the callsign in the Edit Box and click on **OK** or press Enter. To Delete a callsign from the list, click on the callsign to select it and press **DELETE**.

To establish connect through multiple NET/ROM or <TheNet> compatible packet nodes, separate the node callsigns with a semicolon. For example:

MLB;C ORL;C N4PZM

This example will allow you to connect to N4PZM using first the MLB then the ORL nodes. The connect Dialog will not return back to the operating screen until all connections have been made. If any of the connections fail, the Dialog will close. The Dialog will also show the progress of each connect in the path.

You can close the Connect Dialog and the connect process will stop after the connect in process completes (or fails).

PPWIN maintains a separate connect file for each TNC.

AMTOR Operation

Key Definitions:

ALT-A:	Calls the MailDrop Dialog.
ALT-I:	Sends the ID command to the TNC.
ALT-L:	Sends the LOCK (Ltrs) command to the TNC.
ALT-J:	Toggles ARXTOR.
ALT-M:	Calls the Macro Dialog.
ALT-N:	Sends the NUMS command to the TNC.
ALT-Q:	Refreshes the windows.
ALT-R:	Clears Receive window and Scroll Back Buffer.
ALT-S:	Holds/Releases Transmit Buffer
ALT-U:	Initiates a File Capture.
ALT-V:	Toggles Radio ports on the DSP-1232 Only.
ALT-X:	Calls the File Transfer Dialog.
ALT-Y:	Clears Transmit window and sends TCLEAR to the TNC.
ALT-Z:	Changes Operating Mode.
SHIFT-INS:	Pastes text from the ClipBoard into the TX window.
PgUP:	Calls the Scroll Back Buffer
HOME:	Calls the QSO Log Dialog.
END:	Sends a '+?' if linked in ARQ.
PRINT Screen:	Saves incoming data to the printer.
PgDn:	Quick Call Exchange terminate by a +?.
^PgDN:	Quick Call Exchange terminate by a ^D.
F3:	Starts an FEC AMTOR transmission.
Sh-F3:	Starts a SELFEC transmission.
F4:	Starts ARQ AMTOR call to another station.
F6:	Toggles RXREV on/off.
Sh-F6:	Toggles TXREV on/off.
^F6:	Issues a FREE command check to the TNC.
F7:	Toggles the MailDrop Monitor (MDMON) command.
Sh-F7:	Toggles the TMAIL command on/off.
F8:	Places the TNC in AMTOR Standby.
F9:	Starts the AMTOR Listen (ALIST) mode.
Sh-F9:	Grabs the ARQ link with the ACHG command.

Button Descriptions:

 Hold/Release transmit buffer. The transmit buffer can hold up to 1000 characters. PPWIN will beep of more than 1000 characters are entered while the buffer is being held.

 Toggles the ARXTOR command on and off.

 FEC. The Button allows you to make an FEC AMTOR transmission such as for calling CQ or when in a "roundtable" AMTOR contact. This button stays depressed when TNC is in FEC transmit mode.

 SELFEC. This button initiates a SELective FEC transmission. The Button stays depressed while transmitting.

 The ARQ Button opens the ARQ AMTOR Link dialog and allows you to make an ARQ call to another station. This button stays depressed when in ARQ mode.

 The ALIST button enters the AMTOR Listen mode allowing other AMTOR stations to be monitored. The Button stays depressed when in ALIST.

 This Button returns the TNC to AMTOR Standby receive when pressed.

 This Button transfers to the PACTOR screen and enters the PACTOR Listen mode when pressed.

 This button grabs the link from the ARQ AMTOR station you are linked to with the ACHG command. You must be linked with another AMTOR station to use this feature.

 Opens the File Transfer Dialog. Only ASCII transfers are permitted in AMTOR.

 Clears the transmit window and issues a TCLEAR, command to the TNC.

 Clears the receive window and the Scroll Back Buffer.

 Displays the MailDrop Dialog window. If there is mail in the Mail Drop for the SYSOP, the button will turn white (with 7/92 firmware or newer).

 Turns on the File Capture. When a File capture is in progress the button is stays depressed. Click on the depressed button to stop the File Capture.

 File Capture hold/release button. When a File Capture is taking place, the button changes to  . Clicking on the button while it is green will pause the File Capture. The button then will change to  . Clicking on the button will change it back to green and the File Capture will continue. When the File Capture is terminated, the button returns back to gray.

 Saves incoming data so it can to be printed. When data is being saved, the button will change to  . Click on the button again to stop saving data and spool the data to the printer. Be sure to set the Printer font and point size before printing.

 Opens and displays the QSO Log Dialog.

 Opens and displays the Macro Dialog. If clicked while a macro is executing, terminates the macro.

LOCK Forces Letters should the printing suddenly shift to Figs due to a received error.

ID Sends an ID command to the TNC.

RXREV Toggles the RXREV command on/off.

TXREV Toggles the TXREV command on/off.

NUMS (BAUDOT and AMTOR only) Forces Numbers should the printing suddenly shift to Letters due to a received error.

WRU This button toggles the WRU feature of the TNC on/off enabling other stations such as APLINK and AMTOR BBS stations to automatically determine your callsign. See the AAB command for a description of what to enter.

LVW Enables/Disables sending received data to Log Windows. When data is to be sent to Log Windows, the button will change to LVW. Communications with Log Windows must first be started from the Tools Menu.

CQ Calls CQ by executing the CQ-AMTOR Macro.

SK Executes the SK-AMTOR Macro.

EQ Execute the EQUIP-LIST Macro.

MAIL DROP Toggles TMAIL on/off. When TMAIL is on, the button changes to MAIL DROP and your AMTOR MailDrop is available to any other AMTOR station who links to you in ARQ.

MDM Toggles MDMON on/off. When MDMON is on, the button changes to MDM and you will monitor any other station linked to your AMTOR MailDrop.

ARQ links are initiated by pressing ARQ. SELFEC transmissions are initiated by pressing SFEC. PPWIN will then display the AMTOR Dialog. The dialog contains a List Box to hold the callsigns of stations you frequently link to.

To add a callsign to the list, type the callsign in the Edit Box and click on **ADD**. The will be added to the list and saved to disk. To Establish an ARQ link, either double click on a callsign in the List Box or type the callsign in the Edit Box and press **OK** or press Enter. To Delete a callsign from the list, click on the callsign to select it and press **DELETE**.

BAUDOT/ASCII Operation

Key Definitions:

ALT-B: Changes the Baudot (RBAUD) or ASCII (ABAUD) radio baud rate.
ALT-I: Sends the ID command to the TNC.
ALT-L: Sends the LOCK (Ltrs) command to the TNC.
ALT-M: Calls the Macro Dialog.
ALT-N: Sends the NUMS command to the TNC.
ALT-Q: Refreshes the windows.
ALT-R: Clears Receive window and the Scroll Back Buffer.
ALT-S: Holds/Releases Transmit Buffer.
ALT-U: Initiates a File Capture.
ALT-V: Toggles Radio ports on the DSP-1232 Only.
ALT-X: Calls the File Transfer Dialog.
ALT-Y: Clears Transmit window and sends TCLEAR to the TNC.
ALT-Z: Changes Operating Mode.

SHIFT-INS: Pastes text from the ClipBoard into the TX window.
PgUP: Calls the Scroll Back Buffer.
HOME: Calls the QSO Log Dialog.
PRINT Screen: Saves incoming data to the printer.
PgDn: Quick Call Exchange terminate by a ^D.
^PgDN: Quick Call Exchange terminate by a ^D.

F3: Places the TNC into Baudot or ASCII XMIT.
F4: Places the TNC into Baudot or ASCII RCVE.
Sh-F4: Sends the LOCK (Ltrs) command to the TNC.
F6: Toggles receive reverse (RXREV) on/off.
Sh-F6: Toggles transmit reverse (TXREV) on/off.
^F6: Issues a FREE command check to the TNC.
F9: Toggles the WIDESHFT command on/off.

Button Descriptions:

Hold/Release transmit buffer. The transmit buffer can hold up to 1000 characters. PPWIN will beep of more than 1000 characters are entered while the buffer is being held.

Places the TNC in Baudot or ASCII receive (RCVE) mode.

Places the TNC in Baudot or ASCII transmit (XMIT) mode.

Sends an ID command to the TNC.

Displays the File Transfer Dialog.

Clears the transmit window and issues a TCLEAR command to the TNC.

Clears the receive window and the Scroll Back Buffer.


Saves incoming data so it can to be printed. When data is being saved, the button will change to  . Click on the button again to stop saving data and spool the data to the printer. Be sure to set the Printer font and point size before printing.

 Turns on the File Capture. When a File capture is in progress the button is stays depressed. Click on the depressed button to stop the File Capture.

 File Capture hold/release button. When a File Capture is taking place, the button changes to  . Clicking on the button while it is green will pause the File Capture. The button then will change to  . Clicking on the button will change it back to green and the File Capture will continue. When the File Capture is terminated, the button returns back to gray.

 NUMS (BAUDOT and AMTOR only) Forces Numbers should the printing suddenly shift to Letters due to a received error.

 LOCK Forces Letters should the printing suddenly shift to Figs due to a received error.

 Displays the QSO Log Dialog.

 Opens and Displays the Macro Dialog. If clicked while a macro is executing, terminates the macro.

 Toggles the RXREV command on/off.

 Toggles the TXREV command on/off.

 Toggles the WIDESHFT command on/off.

 This button toggles the WRU feature of the TNC on/off enabling other stations to automatically determine your callsign. See the AAB command for a description of what to enter.

 Enables/Disables sending received data to Log Windows. When data is to be sent to Log Windows, the button will change to  . Communications with Log Windows must first be started from the Tools Menu.

 Executes the CQ-BAUDOT or CQ-ASCII Macro.

 Executes the SK-BAUDOT or SK-ASCII Macro.

 Execute the EQUIP-LIST Macro.

PACTOR Operation

Key Definitions:

ALT-A: Calls the MailDrop Dialog.
ALT-I: Sends the ID command to the TNC.
ALT-J: Toggles ARXTOR.
ALT-M: Calls the Macro Dialog.
ALT-Q: Refreshes the windows.
ALT-R: Clears Receive window and the Scroll Back Buffer.
ALT-S: Holds/Releases Transmit Buffer
ALT-U: Initiates a File Capture.
ALT-V: Toggles Radio ports on the DSP-1232 Only.
ALT-X: Calls the File Transfer Dialog.
ALT-Y: Clears Transmit window and sends TCLEAR to the TNC.
ALT-Z: Changes Operating Mode.

SHIFT-INS: Pastes text from the ClipBoard into the TX window.
PgUP: Calls the Scroll Back Buffer.
HOME: Calls the QSO Log Dialog.
END: Sends a ^Z if connected to another PACTOR station.
PRINT Screen: Saves incoming data to the printer.
PgDn: Quick Call Exchange terminate by a ^Z.
^PgDN: Quick Call Exchange terminate by a ^D.

F3: Starts a PTSEND transmission.
F4: Starts PACTOR Connect with the PTCONN command.
^F6: Issues a FREE command check to the TNC.
F7: Toggles the MailDrop Monitor (MDMON) command.
Sh-F7: Toggles the TMAIL command on/off.
F8: Places the TNC in PACTOR Standby.
F9: Starts the PACTOR Listen (PTLIST) mode.
Sh-F9: Grabs the PACTOR link with the ACHG command.

Button Descriptions:

Hold/Release transmit buffer. The transmit buffer can hold up to 1000 characters. PPWIN will beep of more than 1000 characters are entered while the buffer is being held.

Toggles the ARXTOR command on and off.

When this button is pressed, the PACTOR Standby mode is entered.

PTLIST. When this button is pressed, the PACTOR Listen mode is entered. This is the mode which monitors other PACTOR stations.

When this button is pressed, the PACTOR Connect dialog box appears letting you connect with other PACTOR stations using the PTCONN command.

Press this button to start an FEC PACTOR transmission with the PTSEND command. Use PT-SEND for calling CQ (or simply press the CQ Macro) or for round table PACTOR conversations.

This button grabs the link from the PACTOR station you are connected to with the ACHG command. You must be connected to another PACTOR station to use this command.

 ALIST. The Button automatically transfers you to the AMTOR operating screen and enters the AMTOR Listen mode.

 When this button is pressed, the PT200 command is enabled letting PACTOR automatically switch to 200 baud if conditions are good. This will speed traffic flow when conditions permit.

 Opens the File Transfer Dialog.

 Clears the transmit window. If double clicked, issues a TCLEAR, command to the TNC.

 Clears the receive window and the Scroll Back Buffer.

 Displays the MailDrop Dialog window. If there is mail in the MailDrop for the SysOp, the button will turn white (with 7/92 firmware or newer).

 Turns on the File Capture. When a File capture is in progress the button is stays depressed. Click on the depressed button to stop the File Capture.

 File Capture hold/release button. When a File Capture is taking place, the button changes to  . Clicking on the button while it is green will halt the File Capture. The button then will change to  . Clicking on the button will change it back to green and the File Capture will continue. When the File Capture is terminated, the button returns back to gray.

 Saves incoming data so it can to be printed. When data is being saved, the button will change to  . Click on the button again to stop saving data and spool the data to the printer. You will be prompted by the Printer Setup Dialog and the Font Dialog to specify and set up your printer. Be sure to set the Printer font and point size before printing.

 Opens and Displays the QSO Log Dialog.

 Displays the Macro Dialog. If clicked while a macro is executing, terminates the macro.

 Enables/Disables sending received data to Log Windows. When data is to be sent to Log Windows, the button will change to  . Communications with Log Windows must first be started from the Tools Menu.

 Executes the CQ-PACTOR Macro.

 Executes the SK-PACTOR Macro.

 Execute the EQUIP-LIST Macro.

[?] Toggles TMAIL on/off. When TMAIL is on, the button changes to **[?]** and your PACTOR MailDrop is available to any other PACTOR station who connects to you.

 Toggles MDMON on/off. When MDMON is on, the button changes to  and you will monitor any other station connected to your PACTOR MailDrop.

Signal Analysis Operation

The Signal Identification and Analysis Mode (SIAM) allows a wide variety of digital signals to be automatically analyzed so they can be copied by your multimode TNC. The TNC will listen to a signal for a few seconds and the display the type of signal and its speed. You then can decide whether or not to copy the signal.

Tuning in the FSK signal properly is critical to successful SIAM operation. SIAM can only decode a signal properly if it is tuned correctly.

- Make sure your transceiver is either in LSB or FSK depending on your TNC /radio setup.
- Turn any IF-shift and Pass band Tuning controls to the center or OFF position.
- Tune you receiver carefully across the band looking for the distinctive 2 tone sound of an FSK signal.
- The received signal is tuned properly when the tuning indicator is spread out and looks something like  .
- If you are using a PK-232MBX or PK-900 adjust the THRESHOLD control so that the DCD indicator lights when properly tuned to the RTTY station. If you are using a DSP data controller, make sure the volume from the receiver is high enough light the DCD LED.

After about 15 seconds, your TNC should respond with the mode, baud rate, the state of RXREV and the % confidence the signal is what the TNC thinks it is. For example:

```
0.47 50 Baud,   BAUDOT,   RXREV OFF
```

When you click on the OK and a valid mode has been determined by the TNC, PPWIN will set the TNC to the proper operating mode and adjust RXREV and the baud rate if necessary.

 Clears the receive window and the Scroll Back Buffer.

 Toggles the WIDESHFT command on/off.

PPWIN also allow you to change the values of CODE and BITINV. If you have a PK-900 or DSP data controller the QSIGNAL and QWIDE commands can be set as well. Click on the appropriate control to change the parameter.

Other parameters that affect the Signal Identification mode can be found in the Signal Parameters help topic.

MORSE Operation

Key Definitions:

ALT-I:	Sends the ID command to the TNC.
ALT-L:	Sends the Speed LOCK command to the TNC.
ALT-M:	Calls the Macro Dialog.
ALT-Q:	Refreshes the windows.
ALT-R:	Clears Receive window and the Scroll Back Buffer.
ALT-S:	Holds/Releases Transmit Buffer
ALT-U:	Initiates a File Capture.
ALT-V:	Toggles Radio ports on the DSP-1232 Only.
ALT-X:	Calls the File Transfer Dialog.
ALT-Y:	Clears Transmit window and sends TCLEAR to the TNC.
ALT-Z:	Change Operating Mode.

SHIFT-INS:	Pastes text from the ClipBoard into the TX window.
PgUP:	Calls the Scroll Back Buffer
HOME:	Calls the QSO Log Dialog.
PRINT Screen:	Saves incoming data to the printer.
PgDn:	Quick Call Exchange terminate by a ^D.
^PgDN:	Quick Call Exchange terminate by a ^D.

F3:	Places the TNC into Morse XMIT.
F4:	Places the TNC into Morse RCVE.
Sh-F4:	Sends the Speed LOCK command to the TNC.

Button Descriptions:

 Hold/Release transmit buffer. The transmit buffer can hold up to 1000 characters. PPWIN will beep of more than 1000 characters are entered while the buffer is being held.

 Places the TNC in Morse receive (RCVE) mode.

 Places the TNC in Morse transmit (XMIT) mode.

 Displays the File Transfer Dialog.

 Clears the transmit window and issues a TCLEAR command to the TNC.

 Clears the receive window and the Scroll Back Buffer.

 Saves incoming data so it can to be printed. When data is being saved, the button will change to  . Click on the button again to stop saving data and spool the data to the printer. Be sure to set the Printer font and point size before printing.

 Turns on the File Capture. When a File capture is in progress the button is stays depressed. Click on the depressed button to stop the File Capture.

 File Capture hold/release button. When a File Capture is taking place, the button changes to  . Clicking on the button while it is green will pause the File Capture. The button then will change to  . Clicking on the button will change it back to green and the File Capture will continue. When the File Capture is terminated, the button returns back to gray.

 Sends the Morse Speed LOCK command to the TNC.

 Displays the QSO Log Dialog.

 Opens and Displays the Macro Dialog. If clicked while a macro is executing, terminates the macro.

 Enables/Disables sending received data to Log Windows. When data is to be sent to Log Windows, the button will change to  . Communications with Log Windows must first be started from the Tools Menu.

 Executes the CQ-MORSE Macro.

 Executes the SK-MORSE Macro.

 Execute the EQUIP-LIST Macro.

PPWIN also allow you to change the values of your transmitted Morse speed in Words per minute (MSPEED) and the dot-dash ratio with the MWEIGHT command. Click on the appropriate up/down control to change the parameter. Other parameters that affect Morse operation are described in the Baudot/ASCII/Morse Parameters help topic.

NAVTEX/TDM Operation

Key Definitions:

ALT-L: Sends the LOCK (Ltrs) command to the TNC.
ALT-N: Sends the NUMS command to the TNC.
ALT-Q: Refreshes the windows.
ALT-R: Clears Receive window and Scroll Back Buffer.
ALT-U: Initiates a File Capture.
ALT-V: Toggles Radio ports on the DSP-1232 Only.
ALT-Z: Changes Operating Mode.

PgUP: Calls the Scroll Back Buffer
HOME: Calls the QSO Log Dialog.
PRINT Screen: Saves incoming data to the printer.

F6: Toggles RXREV on/off.
^F6: Issues a FREE command check to the TNC.

Button Descriptions:

 ARQE. Press this button to enter the ARQE receive mode. The Button will stay depressed when in ARQE mode.

 TDM. Press this button to enter the TDM receive mode. The Button will stay depressed when in TDM mode.

 NAVTEX. Press this button to enter the NAVTEX receive mode. The Button will stay depressed when in NAVTEX.

 Clears the receive window and the Scroll Back Buffer.

 Saves incoming data so it can to be printed. When data is being saved, the button will change to  . Click on the button again to stop saving data and spool the data to the printer. Be sure you have selected the printer font and point size before printing.

 Turns on the File Capture. When a File capture is in progress the button is stays depressed. Click on the depressed button to stop the File Capture.

 File Capture hold/release button. When a File Capture is taking place, the button changes to  . Clicking on the button while it is green will pause the File Capture. The button then will change to  . Clicking on the button will change it back to green and the File Capture will continue. When the File Capture is terminated, the button returns back to gray.

 LOCK (Ltrs) Forces Letters should the printing suddenly shift to Figs due to a received error.

 NUMS Forces Numbers should the printing suddenly shift to Letters due to a received error.

 Toggles the RXREV command on/off.

 Opens and displays the QSO Log Dialog.

 Toggles the WIDESHFT command on/off.

Dumb Terminal Operation

Key Definitions:

SHIFT-INS: Pastes text from the ClipBoard into the TX window.
HOME: Calls the QSO Log Dialog.
END: +?
PRINT Screen: Saves incoming data to the printer.

Button Descriptions:

 Clears the transmit window and issues a TCLEAR command to the TNC.

 Turns on the File Capture. When a File capture is in progress the button is stays depressed. Click on the depressed button to stop the File Capture.

 File Capture hold/release button. When a File Capture is taking place, the button changes to  . Clicking on the button while it is green will pause the File Capture. The button then will change to  . Clicking on the button will change it back to green and the File Capture will continue. When the File Capture is terminated, the button returns back to gray.

 Opens and Displays the Macro Dialog. If clicked while a macro is executing, terminates the macro.

 Saves incoming data so it can to be printed. When data is being saved, the button will change to  . Click on the button again to stop saving data and spool the data to the printer. Be sure to set the Printer font and point size before printing.

 Opens and Displays the QSO Log Dialog.

 Opens and Displays the File Transfer Dialog.

 Pastes the contents (up to 1024 characters) from the ClipBoard to the transmit window (in the form of a Macro).

Packet Monitor Window

Key Definitions:

ALT-Q: Refreshes the windows.
ALT-R: Clears Receive Window and Scroll Back Buffer.
ALT-U: Initiates a File Capture.

PgUP: Calls the Scroll Back Buffer.
HOME: Calls the QSO Log Dialog.
END: Calls the Mheard Dialog.
PRINT Screen: Saves incoming data to the printer.

F3: Toggles the Port 1 button for TNC1.
F4: Toggles the Port 1 button for TNC 1.
F5: Toggles the Port 1 button for TNC 2.
F6: Toggles the Port 2 button for TNC 2.

Button Descriptions:

Enables displaying unproto data from Port 1. Then button will change to 

when displaying of unproto packets is enabled. The 

button works similiarily. The label to the right of these buttons denotes which TNC is affected.

 Clears the receive window and the Scroll Back Buffer.

 Turns on the File Capture to begin saving incoming received text to disk. When a File capture is in progress the button is stays depressed. Click on the depressed button to stop the File Capture.

 File Capture hold/release button. When a File Capture is taking place, the button changes to  . Clicking on the button while it is green will temporarily pause the File Capture. The button then will change to  . Clicking on the button will change it back to green and the File Capture will continue. When the File Capture is terminated, the button returns back to gray.

 Saves incoming data so it can to be printed. When data is being saved, the button will change to  . Click on the button again to stop saving data and spool the data to the printer. Be sure to set the Printer font and point size before printing.

In order for the Packet Monitor Window to display data, The TNC and port must be in Packet mode. This window will not display nonpacket data nor will it display data which directed towards a specific channel; only unproto data will be displayed.

The Packet Monitor Window receives its data from the respective TNC window, so if there are no TNC windows open, data is not being received from the TNC and nothing will be displayed in the monitor window.

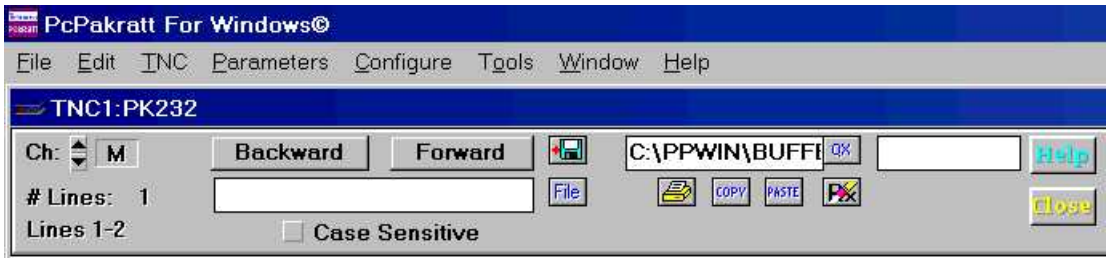
Data from a tnc will be displayed in the same color same Monitor Channel for that tnc. For example, data from TNC 2 will be displayed in the same color as the Monitor channel for TNC 2.

While connected, MCON should be set to 4 or higher to be able to display unproto packets in the monitor window.

SCROLL BACK BUFFER

There is a separate Scroll Back buffer for each TNC, and each radio port if you are using a DSP-2232 or PK-900 dual port TNC.

To view the contents of PC-Pakratt's Scroll Back buffer, press the PgUP key or click on the receive window's scroll bar. The Status bar will change to reflect that you are in the Scroll Back mode as shown below. The # of lines in buffer and the current lines being displayed are shown in the lower left hand corner of the Status bar.



Use the scrollbar or Shift-PgUp and Shift-PgDn to navigate around the buffer.

The status bar shows the current Packet Channel, the # of lines in the buffer and the current lines displayed. In Packet, use the UP/DOWN Arrows or Arrow Buttons to change the Packet Channel. In non-packet modes, the UP/DOWN Arrows are disabled.

Incoming data will be held in a 10K byte temporary buffer until you exit the Scroll Back buffer. If the temporary buffer overflows, PPWIN will beep every time new data arrives and is thrown away. The data stored in the temporary buffer transferred to the Scroll Back buffer when you return to the operating window.

The following features are available in the Scroll Back buffer.

Backward *Searches backwards through the buffer for the selected string immediately below the button.*

Forward *Searches forwards through the buffer for the selected string immediately below the button.*

Case Sensitive
If checked, text searches will be case sensitive.

Find *Select a file to store the contents of the buffer. Once a file is selected, the filename is placed in the Edit Box above.*

QX *If you have selected the callsign of the station you are currently working, pressing the QX button places the call in the QX buffer Edit Box to the right. A faster way to enter the callsign into the QX buffer is to point at the desired callsign with the mouse and double-click the right mouse button. This callsign can then be used with the PgDn key for "Quick exchanges". See the "Quick Call Exchange" section below for more information.*

It is not necessary to be in the scroll back buffer to use this feature.

Close *Close the Scroll Back buffer & restore the Status Bar to the mode you were in previously. Pressing ESC will also close the Scroll Back buffer.*

 *Saves the contents of the buffer (or the selected text) to a file specified in the Edit Box to the right.*

 *Writes the buffer or selected text to the printer.*

 *Copies the highlighted text into the ClipBoard.*

 *Pastes the contents (up to 1024 characters) from the ClipBoard to the transmit window in the form of a Macro.*

 *Clears the Scroll Back Buffer.*

While the Scroll Back Buffer is being displayed. Text can be entered in the Transmit window and the Text will be sent to the TNC and transmitted just as it would be normally.

Selecting Text

Text can be selected by moving the mouse cursor over the desired text while holding down the left mouse button. Once the text is selected, it can be copied to the ClipBoard by pressing  .

Text that is highlighted can be inserted in to the Quick Call Exchange Edit Box by pressing  . Double clicking the right mouse button while pointing to a callsign will also place the call in the Quick Call Exchange Edit Box without pressing the QX button.

Text that is copied into ClipBoard can be again copied to any Edit Box, such as the Search and QX Edit Box by pressing CTRL-INSERT. Once the text is copied into the ClipBoard, the text can be pasted into the TX window by pressing  .

To clear the highlight text, click the right mouse button.

Quick Call Exchange

PPWIN helps to automate the callsign exchange process. When a callsign is entered in the Quick Call Exchange buffer, PPWIN will execute a call exchange when you press the PgDn key. Your callsign is grabbed from the value of MYCALL (HF Packet Parameters). In AMTOR, the +?, sequence is added, in PACTOR the <Ctrl-Z> sequence is added and for other modes, a CTRL-D is appended. The exchange is entered in to the Transmit window as a Macro.

For example, if the call entered in to the Quick Call buffer was N4ABC and your call entered into MYCALL was DC7XJ the exchange would be:

in AMTOR:	N4ABC DE DC7XJ +?
in PACTOR:	N4ABC DE DC7XJ ^Z
in BAUDOT, ASCII or MORSE:	N4ABC DE DC7XJ ^D

The Ctrl-PgDn key executes the call exchange and always attaches a ^D to the end of the exchange in AMTOR and PACTOR as well as BAUDOT, MORSE and ASCII. This is handy for the final AMTOR or PACTOR transmission of the conversation. The ^D at the end will cause the AMTOR Link or PACTOR Connection to be terminated ending the QSO.

A Quick Call Exchange can not be executed when a Macro is currently in progress.

Text Searching

To search for a particular string in the buffer, enter the text in the Search Edit Box in the Scroll Back Status Bar. If you check the **Case Sensitive** Box, the search will be case sensitive. That is to say, lowercase characters are matched only to lowercase characters. If the Checkbox is not checked, the lowercase characters will be matched to both lower and uppercase characters and vice versa.

To begin the search, click on the **Forward** or **Backward** buttons. If a match is found, the line containing the match will be displayed as the 1st line at the top of the receive window and the matching text will be highlighted. If no match was found, a message box will appear stating so. To continue search, simply continue to click on either the **Forward** and **Backward** buttons.

Saving the Buffer

To save the contains of the buffer to a file, click on the button. The contains will be saved to the file shown in the box next to the button. The default is BUFFER1.TXT for TNC1 (and BUFFER1A.TXT for TNC1, Port 2). If text has been highlighted, only the highlighted text will be saved.

Printing the Buffer

To print all or part of the buffer, the procedure is the same as for saving the buffer to disk except you will need to click on the button to begin printing.

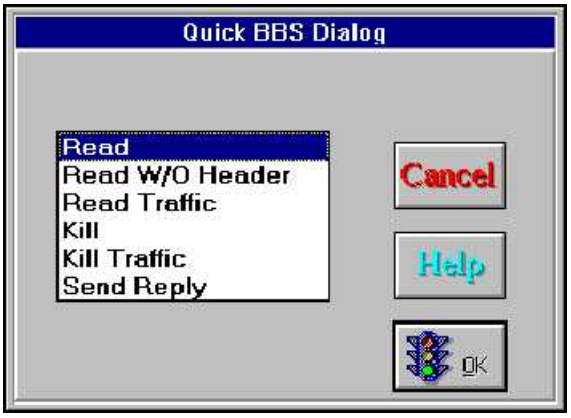
BBS Support

PPWIN offers support for frequent BBS users. By highlighting a message number (in the Scroll Back Buffer) or double-clicking the left mouse button while pointing at a message number, PPWIN will offer a dialog box with BBS commands. This simplifies many common BBS operations such as READing and KILLing messages. Once a BBS command is selected, PPWIN will issue the command to the Transmit window as a macro. A BBS command can not be issued while macro is currently being executed.

See BBS Support for more information.

BBS Support

PPWIN offers support for frequent BBS users. By highlighting a message number (in the Scroll Back Buffer) or double-clicking the left mouse button while pointing at a message number, PPWIN will display a dialog box with BBS commands as shown below.



This simplifies many common BBS operations such as READing and KILLing messages. Simply select the desired option from the dialog box above and click OK or press Enter. Once a BBS command is selected, PPWIN will issue the command to the Transmit window as a macro.

Most BBS allow commands to be queued so you can select and execute a number of BBS commands, then close the Scroll Back buffer to begin receiving the messages. Note that all known BBS systems support the Read and Kill commands in the dialog. The other commands may not be supported by all systems.

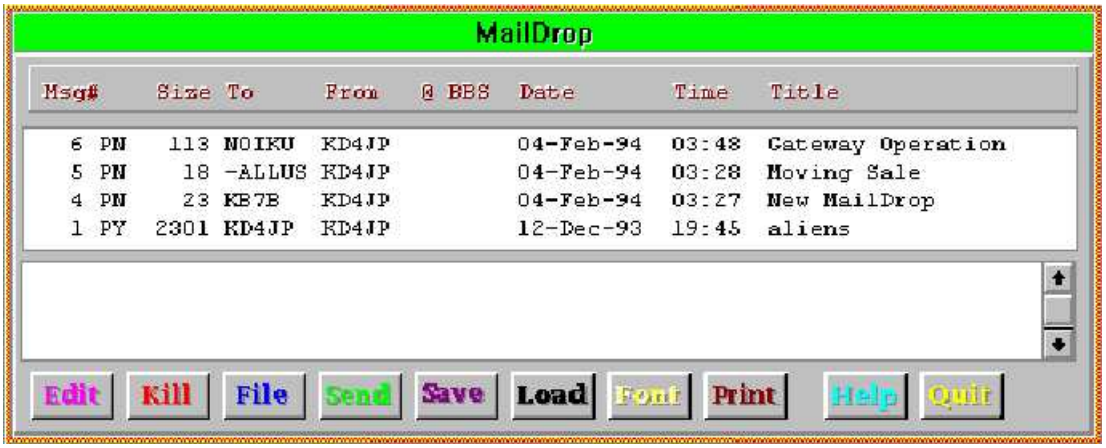
A BBS command can not be issued while macro is currently being executed.

Mail Drop Operation

The MailDrop in your TIMEWAVE TNC or data controller operates in Packet, AMTOR and PACTOR modes. To access the MailDrop from any of these modes press the button on the Tool Bar.

Before other stations can access your MailDrop, you must enter your MYMAIL callsign and enable the MailDrop by pressing the button. Also, be sure and review the MailDrop Parameters in the Parameter menu if you are unfamiliar with A.E.A. MailDrop operation.

PC-PakRatt 2.1 for Windows 3.x gives you full control over your TNC's Mail Drop. When the Mail Drop Dialog opens, the messages in the TNC are listed and displayed near the top of the window in an area called the message List Box as shown below.



To **Read** a message, double-click on the message in the List Box. The message text will then be displayed in the Read box immediately below. To save the message that is presently being displayed in the Read box, click on the **File** button. The file dialog will appear prompting you for a file name to save the message to.

To **Print** a message, the message must first be read. The font selected as the default printer font will be used. The printer font is selected from the Configure Menu.

To delete a message, the message must first be selected from the List Box. Once a message is selected, click on **KILL**.

To edit a message header, first select the message then click on **Edit**. The Edit Message Dialog will allow you to change the status of the message and change the source/destination/BBS callings.

To Load Mail Drop messages from disk, click on the **Load** Button. Do not worry, the TNC will not be RESET.

To Save Mail Drop messages to disk, click on the **Save** Button.

The **Font** button allows you to change the font used in the MailDrop dialog. The default is a Terminal font. The Terminal font supports all 256 possible characters from the IBM PC characters. Other fonts, such as Arial, only support a limit set of characters.

To enter a message in to the MailDrop, click on the **Send** button. The MailDrop Send Dialog will allow you to send messages to your MailDrop.

The MailDrop dialog can also be sized (in the horizontal dimension only) to take maximum advantage of your screen resolution.

To close the MailDrop dialog, click on the **Quit** button.

Editing Mail Drop Messages

To edit a message header, first select the message then click on Edit. The Edit Message Dialog will allow you to change the status of the message and change the source/destination/BBS callsigns.

Message Status

Private
Message can only be read by the SYSOP (you) or the destination station.

Traffic
Message is designated as traffic.

Bulletin
Message is designated as a bulletin message which can be read by anyone.

Reverse Forward
Message will be forwarded to the BBS designated by HOMEBBS.

Read
Message will be tagged as having been read.

Not Read
Message will be tagged as not being read.

Click on the **OK** button to have the changes take effect.

Sending MailDrop Messages

To send a message, first enter the title of the message in the Title Edit Box. Next enter the callsign of the station to receive the message (including the @ BBS if applicable) in the Call Edit Box.

Now enter the message text in the Message edit Box at the bottom of the window as shown. When the message is ready to send, click on the **Send** Button. The **Clear** Button clears the title, callsign and Message edit Boxes.

Text can be pasted from the clipboard to any of the edit boxes by pressing CTRL-INS. To place a carriage return in to your message, type CTRL-ENTER.

To send an ASCII text file, click on **File** button. The File Dialog will appear and prompt for a text file. The contents of the file will be entered in to the message Edit Box. Then press **Send** to send the message to the TNC. Remember always to enter a title and a destination callsign before pressing **Send** otherwise PC-Pakratt will not know whom to send the message to.

The **Font** button allows you to change the font used in the MailDrop dialog. The default is a Terminal font. The Terminal font supports all 256 possible characters from the IBM PC characters. Other fonts, such as Arial, only support a limit set of characters.

To close the Mail Drop Send Dialog, click on **Quit** or press ESC.

QSO Log

PC-PakRatt 2.1 for Windows 3.x' QSO log allows you to maintain a database of your contacts. Each TNC has it's own QSO Log Dialog and database file. The DSP-2232 and PK-900 Port 1 and Port 2 windows share the same QSO facilities.

The QSO Log is opened by clicking on the  button which is displayed in the Status Dialog of each operation window. The QSO Log Dialog is an independent window which can be any where on the Desktop. Also that the upper right hand corner of the QSO Log window contains a Minimize button so the Log can be out of sight and still active (Minimized). This is handy since it allows the 'Auto QSO Check' feature to be work even when the QSO Log is out of sight.

The QSO Log contains fields for:

† Callsign	† Name	
† Freq.	† QTH	
Time	Antenna	
† Date	Rig	
10-10 #	Operator	
Power	RST	Your RST
† Mode	QSL Sent	QSL Received
Comments		

Fields which have an † are also search fields. To search for an entry in your log, check one of these boxes and press the **FORWARD** or **BACKWARD** buttons. PPWIN will attempt to find the next entry which matches. One of the fields must be checked for a search to be conducted.

PPWIN uses the checked fields to match all or part of the same field in the log. For example, if you enter J4PZ as the callsign, PPWIN will find a match if your log contains NJ4PZ, J4PZA or KJ4PZQ. Also long as the entry in the log contains the same sequence of letters, a match will be found.

Delete *Deletes the Log Entry currently displayed.*

Clr Entry *Clears all the fields in the Dialog, but does not delete the displayed entry.*

Overwrite *Overwrites the current entry.*

Save *Saves the data to the end of the Log file.*

Print *Allows you to print the current entry or all of the entries. You also have the choice of printing the entries as a QSL label or as they are shown in the Dialog. You also have the option to print all or some of the comments for each QSO entry printed. See also QSO Log Print Menu.*

1st Entry *Displays the 1st entry in the Log.*

Last Entry *Displays the last entry in the Log.*

Prev *Displays the previous entry in the Log.*

Next *Displays the next entry in the Log.*

Time/Date *Places the current time and date into the Log.*

Defaults *Places the QSO Log Defaults and the current time/date into the log. The Defaults file contains the Operator, rig, antenna and power. These values can be specified in the TNC Configuration Menu (under TNC and QSO Log Defaults). The QSO Log database file can be specified under the TNC Configuration Menu, under TNC Program Files*.

QSO Log Print Menu

PC-PakRatt 2.1 for Windows 3.x allows you to print the entries in your QSO Log. When the **PRINT** button is selected from the QSO Log Dialog, the QSO Log Print Menu is displayed.

When the OK Button is clicked, the selected entries are sent to the printer or to a file if the 'Print To File' option is selected. Be sure you have set up your printer for Windows by selecting the Printer Setup option from the Files Menu. Also be sure to select a printer font and print size from the Select Font option in the Configure Menu.

Printing QSO Entries

Print QSO *Prints the currently displayed entry*

Print Matching QSOs
Prints all entries which match the fields selected. The fields to be matched are shown in the Print menu. Check the box next to the fields which are to be used as keywords in the search. Remember, PPWIN matches the text in the field if the database contains the sequence of characters in the keyword. See the description in the QSO Log section for details.

Print All QSOs *Prints all entries in the database file.*

Printing Comments

Prompt Remarks *PPWIN prompts you for each of the 3 comments in the entry, for each entry to be printed.*

Print All Remarks *All comments are printed automatically.*

Don't Print Remarks
Comments are not printed at all.

Printing Style

Print As QSL *PPWIN prints each entry as a QSL Label.*

Print as LOG *PPWIN prints each entry as it appears in the QSO Log.*

Destination

Print to File *PPWIN prints each entry to the specified file. The default is QSO.BUF.*

Print to Printer *PPWIN prints each entry to the printer.*

Number of Line Between Entries
PPWIN places the number of specified blank lines between each entry. If the number is specified as 99, a form feed is placed between each entry.

Selecting Modems

The DSP or PK-900 modems can be selected from many of the Parameter Dialogs. Each of these dialogs contains the respective modem parameters for each mode. For example, the Packet Parameters Dialogs contain the parameters QVPACKET and QHPACKET. The AMTOR Parameters Dialog contains QTOR and QTDM. The Baudot/ASCII/Morse Parameters Dialog contains QRTTY, QWIDE and QMORSE. The Parameters Dialog for the DSP-1232 and -2232 contains the QPTOR command.

To change the modem, for example QVPACKET, click on the QVPACKET button. The Modem Dialog will then be displayed. The dialog contains a List Box which is filled with the modems available to your DSP or PK-900 TNC. Double click on the modem to select it and return back to the parameter dialog. Now, when you click **OK**, QVPACKET will be updated. If the TNC mode is VHF Packet, the parameter MODEM will be also be set to QVPACKET. If the TNC is in AMTOR and you change QTOR, MODEM will be set to the value of QTOR. Remember you can always get a DIRECTory of available modems by clicking on a Q-modem button.

PPWIN polls the DSP or PK-900 for the modem directory if the file PPW1.MOD does not exist (PPW2.MOD for TNC2). If the modem firmware date is different than that stored in the file(s), the file(s) are re-created with the new modem directory. The modem directory stored in these files are what PPWIN uses in the Modem Dialog.

MISCELLANEOUS

Gateway Operation

The Gateway command in TIMEWAVE data controllers now supports a "node" function as well as the cross-port digipeater function previously supported. The dual connection function, called a "node" by other manufacturers, is still called a "gateway" by us.

The old gateway functioned as a digipeater between Ports 1 and 2. MYGATE works the same as MYALIAS, except that incoming packets from one port are digipeated out the other port.This cross-port digipeater function uses end-to-end acknowledgments. This means that an I-frame sent by the local station must be received correctly by both the digipeater and the remote station. The acknowledgment of the I-frame must similarly pass from the remote station through the digipeater and arrive at the local station intact. If there are any errors in either hop, the whole I-frame/acknowledgment cycle must start over.

Fortunately, this is now a thing of the past. The new Gateway is a node.

The Gateway now supports local acknowledgments. This function is available in all TIMEWAVE packet radio TNCs. Instead of digipeating through the MYGATE callsign, a station may now connect to the MYGATE callsign, then instruct the gateway to set up another connection, either on the same radio port or the opposite port. The station's I-frames are acknowledged by the Gateway locally, rather than by the remote station through a digipeater. The Gateway itself now has the responsibility of seeing that the I-frame gets to the remote station.

There are two new commands supporting the new Gateway functions:

GUSERS sets the maximum number of stations allowed to establish connections with the callsign MYGATE.

XGATEWAY turns ON and OFF the ability to allow cross-port connections in the PK-900 of DSP-2232 dual port products.

The requirements for Gateway connection are:

- If Port 1 is to be used, OPMODE must be PACKET, AMTOR or PACTOR.

Port 2 is of course always PACKET.

- RADIO must be set to enable the appropriate port(s).

- A modem supporting the appropriate port(s) and operating mode(s) must be selected.

- MYCALL must be set for each radio port to be used.

- MYGATE must be set to some callsign, but not the same as MYCALL, MYALIAS or MYMAIL.

- GUSERS must be set to 1, 2 or 3.

Once connected to the Gateway, the user is dealing with a command processor similar to that in a BBS. Command responses start with "+++" to show that they came from the Gateway command processor, rather than the "***" from a TNC (or "###" from a competitor's product). "+++" was chosen because the "+" is present in the AMTOR character set while the other examples are not.

Here is what a user sees when using the Gateway as a packet node. In this example, MYGATE is set to N7ML-7, and the user connects to N7ML-7:

```
cmd:c n7ml-7

*** CONNECTED to N7ML-7
+++ N7ML Gateway. Type ? for help.
de N7ML-7 (B,C,D,J,L,N,S,?) >
```

The first line is the user's command to his own TNC. The second line is the connect message from the user's TNC. At this point the user is connected to the Gateway in a "Command" mode. The third line is the greeting and the fourth is the command prompt from the Gateway. The user types "**? <Return>**" to get help:

```
B(ye)          Log off gateway
C(onnect) n    Connect to station 'n'
C n STAY       Stay connected to gateway when 'n' disconnects
D(isconnect)   Cancel a connect attempt
J(heard)       Display stations heard
L(isten)       Toggle monitoring
N(odes)        Display nodes heard
S(end)         Broadcast unproto
de N7ML-7 (B,C,D,J,L,N,S,?) >
```

BYE – This is similar to the Bye command found in the TIMEWAVE Maildrop and BBS stations. The Gateway initiates a Disconnect. Alternatively, the user may initiate the Disconnect.

CONNECT – Similar to the TNC's Connect command for Packet mode. Also used to connect in AM-TOR and PACTOR, instead of using the ARQ and PTCONN commands respectively. For a packet connection, the user may specify a string of digipeaters:

```
c w1aw via w2xy, w1xxz
```

The Gateway now tries to establish a connection with W1AW as the destination, and the user's callsign as the source, with a difference: the user's SSID is decremented by one, to avoid protocol conflicts on the same frequency.

Here is an example of the frames sent in establishing a typical connection:

```
USER>GATE [C]
GATE>USER (UA)
GATE>USER [I]:
   +++ N7ML Gateway.  Type ? for help.
   de GATE (B,C,D,J,L,N,S,?) >
USER>GATE (RR)
USER>GATE [I]:
   c remote
GATE>USER (RR)       USER-15>REMOTE [C]
                     REMOTE>USER-15 (UA)
GATE>USER [I]:
   +++ CONNECTED to REMOTE at GATE
USER>GATE (RR)
USER>GATE [I]:
   hello.
GATE>USER (RR)       USER-15>REMOTE [I]:
                       hello.
```

```
                        REMOTE>USER-15 (RR)
                        REMOTE>USER-15 [I]:
                           Yes?
GATE>USER [I]:          USER-15>REMOTE (RR)
                           Yes?
USER>GATE (RR)
```

Once the remote connection is established, the Gateway notifies the user of the connection and then goes from "Command" mode into a "Converse" mode. Now anything the user sends goes to the remote station as data, instead of to the Gateway as commands.

When the remote station disconnects, normally the user will also be disconnected from the Gateway. Typing out the word STAY as the last argument in the Connect command ("c remote stay") makes sure that if the remote station disconnects, the user will remain connected to the Gateway. If the connect attempt to a remote station retries out, or the remote station is busy, the Gateway sends the user a "Retry count exceeded" or "(Remote) busy" message but stays connected to the user even if the word STAY was not specified.

DISCONNECT (Cancel a connect attempt) – Since the user remains in command mode until the connection is established, there is no need to wait the full number of retries to attempt a different connection. The user may send the Gateway a Disconnect command, which cancels the Connect command the same way as in the local TNC's command mode. The user stays connected to the Gateway even if the word STAY was not used in the original Connect command. The Disconnect command may be used at any time before the connection is established, regardless of any preceding commands.

Once a connection is established and the Gateway is in QSO mode, the user can end the connection either by sending a Bye command to the remote station if the remote supports it, or by issuing a disconnect frame using the local TNC's Disconnect command. The user's disconnecting from the Gateway causes the Gateway to disconnect the other side of the link.

JHEARD – The Gateway TNC sends its MHEARD list to the user. The Gateway TNC's DAYTIME and DAYSTAMP commands affect the display. In the DSP-2232 and PK-900, the designators "p1" and "p2" show the port on which each station was heard. A maximum of 18 stations is kept in the JHEARD list.

LISTEN – The Gateway toggles monitoring on or off. The Gateway monitors only on the radio port selected by the user (see "Port" below), using the appropriate operating mode.

NODES – The Gateway sends the user a list of nodes heard. The format is the same as that of the JHEARD command. The difference is that a callsign is put in the Nodes list only if the monitored packet was a UI frame with a PID of CF (NET/ROM) or CD (IP). A maximum of 10 stations is kept in the Nodes list. The Gateway owner clears the nodes list and the MHEARD list simultaneously with the same command.

SEND – The Gateway TNC responds with

```
+++ Sending.  To end, type '='.
```

and sends all subsequent data in the broadcast format appropriate to the selected port's operating mode. The data characters are held until the user sends a carriage return, whereupon the held data is broadcast.

In all operating modes, the user can stop sending unproto by sending the "=" character. The Gateway then issues a command prompt. The "=" character should not be used within the user's

broadcast text.

Cross port gateway:

The requirements for cross-port Gateway connection are, in addition to the above:

- OPMODE must be PACKET, AMTOR or PACTOR.
- If AMTOR is to be used, MYSELCAL must be set.
- If PACTOR is to be used, MYPTCALL must be set.
- If AMTOR or PACTOR are to be used, the DCD threshold must be set so that the DCD display is lit if and only if signals are present.
- RADIO must be set to RADIO 1/2 (both ports enabled).
- Modems supporting the appropriate OPMODE on Port 1 and Packet on Port 2 must be selected.
- XGATEWAY must be ON.

Packet to Packet:

Here is what a user sees when using a cross-port Gateway as a packet node:

```
cmd:c n7ml-7

*** CONNECTED to N7ML-7
+++ N7ML Gateway. Other port (2) is 1200 bps Packet. Type ? for help.
+++ Access: Port 1, 1200 bps Packet. Your ID is KB7B-15.
de N7ML-7 (B,C,D,J,L,N,P,S,?) >
```

There is extra information showing which radio port the user is on and the configuration of the other radio port. The Help ("?") display shows an additional command:

```
P(ort) 1/2    Access Port 1 or 2
```

PORT – Changes the port on which the user wishes to connect, listen and broadcast. At the time the Packet user connects to the gateway, access is always on the same radio port, so a Port 2 Packet user must always set PORT 1 in order to establish cross-port connections. Typing "Port" by itself shows the current value of PORT, the operating mode on that port, and the user's ID to be used on that port. Port 1 AMTOR and PACTOR users always access only Port 2 (Packet), so the Port command is not implemented for them.

LISTEN – None of the Gateway TNC's local commands affect monitoring; packet frames are shown to the user as if MONITOR and MCON were set to a value of 4 (UI, I, C, D, UA and DM frames).

Other than that, monitoring behaves as if all other commands were set to their default values (no MPROTO, etc.).

SEND – The Gateway sends UI frames with a destination of "CQ". The source field is the user's callsign with the SSID decremented by one.

Packet to AMTOR:

Here is what a Port 2 Packet user sees when crossing over to AMTOR:

```
cmd:c n7ml-7

     *** CONNECTED to N7ML-7
     +++ N7ML Gateway.  Other port (1) is AMTOR.  Type ? for help.
     +++ Access:  Port 2, 1200 bps Packet.  Your ID is KB7B-15.
     de N7ML-7 (B,C,D,J,L,N,P,S,?) >

p 1

     +++ Access:  Port 1, AMTOR.  Your ID is KKBB.
     de N7ML-7 (B,C,D,J,L,N,P,S,?) >
```

At this point there are two ways to establish an AMTOR link. One is to call a known station directly:

```
c nbcd

     +++ CONNECTED to NBCD at N7ML-7
     +++ Note:  Over = "+?", End = <CTRL-D>.  You're sending.

n7bcd de kb7b - hello +?

     HI THERE.  ...
```

Keeping in mind that only one station can transmit at a time. The packet user must end each transmission with "+? <Return>" to let the remote station respond. Either station may end the communication; if it is to be the user, a <CTRL-D> within the user's packet frame tells the Gateway to shut down the AMTOR link.

The other way to set up a link is to call CQ in AMTOR FEC and wait for an ARQ response:

```
s

     +++ Sending.  To end, type '='.
     cq cq cq de kb7b selcal kkbb
     cq cq cq de kb7b selcal kkbb
     pse k=
     de N7ML-7 (B,C,D,J,L,N,P,S,?) >
     +++ CONNECTED to ? at N7ML-7
     +++ Note:  Over = "+?", End = <CTRL-D>.  You're receiving.
     KB7B DE VE7ZZY HI NAME IS RALPH +?
     hello ...
```

Note that the Gateway reports "CONNECTED to ?". When using four-character identification, AMTOR has no provision for identifying the calling station. The caller generally identifies within the transmission text.

LISTEN - The Gateway TNC is placed in ARQ Listen mode (Mode L). If the Gateway TNC's ARXTOR command is ON, it will also copy AMTOR FEC (Mode B).

SEND - The Gateway is placed in AMTOR FEC (Mode B) transmit mode. Transmission ends when the user sends "=".

Packet to PACTOR:

Here is what a Port 2 Packet user sees when crossing over to PACTOR:

```
cmd:c n7ml-7

      *** CONNECTED to N7ML-7
      +++ N7ML Gateway.  Other port (1) is PACTOR.  Type ? for help.
      +++ Access:  Port 2, 1200 bps Packet.  Your ID is KB7B-15.
      de N7ML-7 (B,C,D,J,L,N,P,S,?) >

p 1

      +++ Access:  Port 1, PACTOR.  Your ID is KB7B.
      de N7ML-7 (B,C,D,J,L,N,P,S,?) >
```

One way to establish a PACTOR link is to call a known station directly:

```
c n7bcd stay

      +++ CONNECTED to N7BCD at N7ML-7
      +++ Note:  Over = <CTRL-Z>, End = <CTRL-D>.  You're sending.hello.
...
```

The other way is to call CQ in PACTOR Broadcast mode and wait for a response:

```
s

      +++ Sending.  To end, type '='.
      cq cq cq de kb7b
      cq cq cq de kb7b
      pse k=
      de N7ML-7 (B,C,D,J,L,N,P,S,?) >
      +++ CONNECTED to VE7ZZY at N7ML-7
      +++ Note:  Over = <CTRL-Z>, End = <CTRL-D>.  You're receiving.
      KB7B DE VE7ZZY - Hello  ...
```

Keeping in mind that only one station can transmit at a time, the packet user must end each transmission with "<CTRL-Z> <Return>" to let the remote station respond. Either station may end the communication; if it is to be the user, a <CTRL-D> within the user's packet frame tells the Gateway to shut down the PACTOR link.

LISTEN – The Gateway TNC is placed in PACTOR Listen mode. If the Gateway TNC's ARXTOR command is ON, it will also monitor AMTOR FEC and ARQ. Use the "Port" command to see which mode is being copied, if in doubt.

SEND – The Gateway is placed in PTSEND mode. The transmission ends when the user sends "=".

AMTOR to Packet:

If XGATEWAY is OFF, the TNC accepts AMTOR calls to MYSELCAL as normal AMTOR link-ups. If XGATEWAY is ON, an AMTOR call to MYSELCAL results in access to the Gateway and therefore Packet mode on Port 2. The callsign in MYGATE plays no part in Gateway access from AMTOR.

The AMTOR MailDrop has priority over the AMTOR Gateway. This means that if TMAIL is ON, linking to MYSELCAL accesses the MailDrop. The user may type the new MailDrop command "G" to access the Gateway; this surrenders the MailDrop to possible access by other users. There is no command in the Gateway to return to the MailDrop.

If a Packet user is already connected to the Gateway on Port 2 and has issued the "PORT 1" command to access AMTOR, the Gateway detects AMTOR calls only to the packet user's selcall, not MYSELCAL.

There is no PORT command for AMTOR access. The AMTOR user is given access to Packet on Port 2 automatically.

An AMTOR station linked to the Gateway command processor does not need to send "+?" to let the Gateway transmit. The Gateway detects the carriage return at the end of the line and seizes the link to give the command response, then gives transmission back to the user by ending the transmission with "+?".

Once a packet connection has been established on Port 2, the Gateway seizes the AMTOR link on Port 1 only when it has data to send to the user, then gives the link back by ending the transmission with "+?".

Here is what an AMTOR user sees when connecting to the Gateway:

```
cmd:arq nnml

      +++ N7ML GATEWAY.  TYPE ? FOR HELP.
      +++ ENTER YOUR CALLSIGN: +?
      kb7b
      +++ ACCESS:  PORT 2, 1200 BPS PACKET.  YOUR ID IS KB7B-15.
      KB7B DE N7ML-7 GA+?
```

One way to establish a Packet connection is to call a known station directly:

```
j

      18:30:56  P2 N7BCD
      KB7B DE N7ML-7 GA+?

c n7bcd stay

      +++ CONNECTED TO N7BCD AT N7ML-7
      +?
      hello
      HI, NAME IS WALT ...
```

The other way is to call CQ in Unproto mode and wait for a response:

```
+++ SENDING.  TO END, TYPE '='.
+?
cq de kb7b-15 from amtor=
KB7B DE N7ML-7 GA+?
+++ CONNECTED TO N7BCD AT N7ML-7
+?
HI, NAME IS WALT.  WHAT DO YOU MEAN BY 'FROM AMTOR'?
hello ...
```

One thing to keep in mind when accessing VHF Packet from AMTOR is that the data rates on the two radio ports are widely different. In reading a long message from a packet BBS, the BBS sends the entire message to the Gateway Packet port, then may time out and disconnect before the message has completed transmission on the AMTOR port. The Gateway buffers the data, so none of the message is lost. But on the Packet side, the BBS has wasted time waiting for the next command, preventing other stations from using the BBS.

LISTEN – Port 2 Packet frames are shown to the user as if MONITOR and MCON were set to a value of 4 (UI, I, C, D, UA and DM frames). Some TNC monitoring characters are translated for AMTOR:

```
L

      +++ LISTENING ON
      KB7B DE N7ML-7 GA+?
      P2 N7BCD)W1AW (C)
      P2 N7BCD)W1AW (D)
      +?

L

      +++ LISTENING OFF
      KB7B DE N7ML-7 GA+?
```

SEND – The Gateway sends UI frames with a destination of "CQ". The source field is the user's callsign with the SSID decremented by one. The Gateway holds the data characters until the user sends a carriage return, whereupon the held data is broadcast.

PACTOR TO Packet:

If XGATEWAY is OFF, the TNC accepts PACTOR calls to MYPTCALL as normal PACTOR link-ups. If XGATEWAY is ON, a PACTOR call to MYPTCALL results in access to the Gateway and therefore Packet mode on Port 2. The callsign in MYGATE plays no part in Gateway access from PACTOR.

The PACTOR maildrop (TMAIL ON) has priority over the PACTOR Gateway. The maildrop command "G" gives access to the Gateway, as in AMTOR (see above).

If a Packet user is already connected to the Gateway on Port 2 and has issued the "PORT 1" command to access PACTOR, the Gateway detects PACTOR calls only to the packet user's callsign, not MYPTCALL.

There is no PORT command for PACTOR access. The PACTOR user is given access to Packet on Port 2 automatically.

A PACTOR station linked to the Gateway command processor does not need to send the PTOVER character to let the Gateway transmit. In "command" mode, the Gateway detects the carriage return at the end of the line and seizes the link to give the response, then gives transmission back to the user. Once a packet connection has been established on Port 2, the Gateway seizes the PACTOR link on Port 1 only when it has data to send to the user, then gives the link back.

Here is what a PACTOR user sees when connecting to the Gateway:

```
cmd:ptconn n7ml

      +++ N7ML Gateway.  Type ? for help.
      +++ Access:  Port 2, 1200 bps packet.  Your ID is KB7B-15.
      KB7B de N7ML (B,C,D,J,L,N,S,?) >
```

One way to establish a Packet connection is to call a known station directly:

```
      18:30:56  p2 N7BCD
      KB7B de N7ML (B,C,D,J,L,N,S,?) >

c n7bcd stay

      +++ CONNECTED to N7BCD at N7ML-7
      hello
      hi, name is walt ...
```

The other way is to call CQ in Unproto mode and wait for a response:

```
s

      +++ Sending.  To end, type '='.
      cq de kb7b-15 from pactor=
      KB7B de N7ML (B,C,D,J,L,N,S,?) >
      +++ CONNECTED to N7BCD at N7ML-7
      Hi, name is Walt.  What do you mean by "from pactor"?
      hello ...
```

LISTEN – Port 2 Packet frames are shown to the user as if MONITOR and MCON were set to a value of 4 (UI, I, C, D, UA and DM frames).

```
L

      +++ Listening ON
      KB7B de N7ML (B,C,D,J,L,N,S,?) >
      p2 N7BCD>W1AW [C]
      p2 N7BCD>W1AW [D]

L

      +++ Listening OFF
      KB7B de N7ML (B,C,D,J,L,N,S,?) >
```

SEND – The Gateway sends UI frames with a destination of "CQ". The source field is the user's callsign with the SSID decremented by one. The Gateway holds the data characters until the user sends a carriage return, whereupon the held data is broadcast.

Error Messages to The Remote User:

"Bad"

An invalid callsign in response to the AMTOR prompt "Enter your callsign."An invalid callsign as one of the arguments in the Connect command. An invalid argument to the Port command.

"Too many"

Too many callsigns in the Connect command.
Arguments in the Bye, Disconnect, Jheard, Listen, Nodes or Send commands.

"Too long"

Command longer than 85 characters.PACTOR callsign in Connect command was longer than 8 characters.

"Range"

Port command argument not "1" or "2".

"Callsign"

No argument in the Connect command.

"What?"

Unrecognized command.

"?VIA"

Connect command: second argument was not "STAY" or "VIA".

"Not during connect"

While a connect attempt was in progress, the user issued a Listen, a Send or another Connect command, or tried to change Ports. User must first type the "Disconnect" command.

"Already disconnected"

User issued the Disconnect (abort) command when no connect was in progress.

"Need MYSelcal"

Packet user tried to make an AMTOR connect, but the Gateway TNC's MYSELCAL was not set.

"None heard"

The Jheard or Nodes list is empty.

"Channel busy"

Connect or Send command while there is AMTOR or PACTOR activity on the channel. Gateway uses synced radio DCD to determine activity.

"Port busy"

Connect, Listen or Send command on a packet port where all multi-connect channels are being used. Attempt to use the Port command to access a port whose operating mode is not Packet, AMTOR Standby or PACTOR Standby. Port 2 user attempt to access AMTOR or PACTOR Port 1 if it was already in use by another Port 2 Packet user of the Gateway.

"Not while listening"

While listening, the user issued a Send or Connect command, or tried to change Ports. User must first type "Listen" again to toggle listening off.

Miscellaneous:

Every 9½ minutes, the Gateway sends a Packet ID frame containing the Gateway callsign. The ID frame is sent even if the HID command is OFF.

In translating AMTOR or PACTOR input to Packet output, the Gateway bundles the characters and sends them in packets every 10 seconds. The AMTOR/PACTOR user should be aware that the Packet station may receive the data characters anywhere from 0 to 10 seconds later.

No-activity timers: When the TNC's CHECK timer runs out on a packet channel involving the Gateway, the Gateway stations are disconnected. CHECK defaults to 5 minutes. For AMTOR and PACTOR Gateway access, if "Traffic" status has not been achieved for 5 minutes, the Gateway terminates the link gracefully, and disconnects any related packet connection on Port 2.

The MDMON command controls the monitoring of Gateway activity in addition to monitoring Maildrop activity.

To operate AMTOR or PACTOR modes normally (no gateway), disable the cross-mode gateway by setting XGATEWAY OFF. Subsequent remote calls to MYSELCAL or MYPTCALL will go to the operator, not the gateway.

The gateway owner should take care that changes in the OPMODE, RADIO or MODEM command settings will not ruin a remote user's gateway session. Check the CSTATUS before changing the TNC's configuration.

It is important to set the DCD threshold on the AMTOR/PACTOR radio port so the DCD display follows the presence or absence of signals. This prevents the Gateway Send and Connect commands from interfering with other stations. If DCD is active at the time of a command that transmits, the Gateway sends the remote user a "Channel busy" message.

The Gateway owner may set ARXTOR ON and leave OPMODE set to PACTOR. This gives both AMTOR and PACTOR users access to the Gateway (and/or the maildrop).

The Gateway owner may set up upper/lower case AMTOR operation for better Packet interfacing by setting CODE 2 (Cyrillic method) or CODE 7 (APLINK/Martinez method, to be added shortly). The remote AMTOR user must of course set comparable commands in his own TNC.

The local TNC commands CTEXT, CMSG, MTEXT and MMSG have no effect on Gateway operation.

PPWIN.INI Parameters

PCPakRatt 2.0 for Windows 3.x creates a .INI file during the it's initial installation. Normally the user will not need to made changes to this file. The exception is when using higher screen resolutions (1024×768 or higher) with some graphics boards. The higher screen resolutions can cause the Status Dialog not to be sized correctly, thus cutting off the bottom of the dialog and some of the text windows. (This seems to be particularly necessary for folks running OS/2 in 1024×768 mode with the 32 bit S3 video drivers). The problem is caused by differences in the report size of the font being used for the Status window.

PPWIN allows for a variable to be specified in the .INI to increase the size of the Status Window so all text windows in the Dialog can be seen. This entry will have to be added manually. The format of this variable is:

[STATUS_DLG]

OFFSET=##

Where ## is the number of pixels to add to the height of the status dialog.

The other parameters in the .INI control the default directory for PPWIN, the state of the LogWindows connection, information regarding the monitor window as well as the size and state of the Main and child windows. These keys should not be changed by the user.

LogWindows Interface

PcPakRatt 2.0 for Windows 3.x provides a TNC interface for LogWindows. Data being received or echoed by the TNC can be sent to LogWindows. Likewise data typed in LogWindows transmit window canbe send to PcPakratts transmit window (in the form of a macro). PcPakratt acts as a data engine for LogWindows. All PcPakratt functions are still enabled while communicating with LogWindows. LogWindows 2.0 or greater is required.

To allow all this to happen, PcPakratt must first become aware that LogWindows is running. To do this, select the Sync With LogWindows menu item from the Tools Menu. If LogWindows is not running, PcPakratt will report an error.

If LogWindow is running and the two programs have synced. the  button found in the TNC Status Dialogs will change to  . To allow a particular TNC window to communication with LogWindows, click on the button. The button will change to  . To stop communications with LogWindows, click on the button again so it is no longer depressed.

Only one TNC window may communication with LogWindows at a time. By clicking on the LW button in a different TNC window will enable that window to communicate with LogWindows and stop the previous window from communicating with LogWindows.

PcPakRatt 2.0 for Windows 3.x automatically saves which window last had talked with LogWindows.

PcPakRatt 2.0 for Windows 3.x periodically polls LogWindows to verify it is there. If LogWindows is terminated, PcPakratt will sense this and stopping polling and sending data to LogWindows. The LW buttons will also become grayed.

When PcPakratt terminates, it also informs LogWindows so it will know not to try to send any more data to PPWIN. The link with LogWindows can also be terminated from the Tools Menu.

When operating Packet, the state of the 

button effects the data sent to Log Widnows. When the button is up, all data is sent to LogWindows. When the button is depressed, 

, only data sent to the current channel (as shown in the Status Dialog) will be echoed to LogWindows.

Refer to your LogWindows operation manual for more information on LogWindows operation.

ANSI Graphics With PcPakRatt 2.0 for Windows 3.x

Because PcPakRatt 2.0 for Windows 3.x is a true windows program and ANSI graphics were designed for a DOS text screen there are some special considerations for designing ANSI graphics which will be send to others using PcPakRatt 2.0 for Windows 3.x. There are also a few considerations when receiving graphics..

For Best Results...

The receive ANSI graphics, 8BITCONV must be set on ON and MFILTER must be set to 0. The program and receiving window should maximized to reduce many of the limitation described later on in this section.

For the best results, all lines should end with a <CR>. PcPakRatt 2.0 for Windows 3.x displays text in terms of lines and sizes lines according to the width of the window. Control sequences still can be used to set the position of text on a line however, this may cause the graphics to appear over text that is received after the graphics if the window is repainted. Graphics which do not have a <CR> and use only escape sequences to set the text position may not be displayed properly if the receiving window is not large enough for the graphic. Using the scroll back buffer to review a graphic can have some interesting effects if the graphic does not contain any <CR> at the end of each line. However, the scroll back buffer can be refreshed using the ALT-Q key.

Graphics should only be large enough to display the message. Graphics which are made to fit in a standard 80×25 text window may not fit on the receiving stations display. It also takes much more time to send a graphic like this since they are typically padded with blanks. In Pactor, characters which have an ASCII value greater than 127 (like the line drawing character set) can not be compressed. These characters will slow down the effected baud rate of the transmission.

Saving ANSI Graphics Sequences

Graphics which are being reviewed can be saved to a file by using the file capture function of the program. Graphics can also be copied in to the clipboard from the scroll back buffer. Graphics then can be pasted in to the transmit window, a macro or a mail message.

Limitations

The background color of the receive window is determined by the default color at the time of display. Normally the color is set by the Windows Control Panel – window color. However, an ANSI graphic may change the background color of the display. If the receive window is forced to repaint (because the receive was hidden by another window, the user pressed ALT-Q & etc.), the window background will be set to the current color of the background. This may cause areas of the graphics to be a different color than what was intended by the author.

The following scenios are possible when receiving an ANSI graphics picture using PcPakRatt 2.0 for Windows 3.x.

A) ANSI Graphics which do not contain <CR> at the end of each line and/or use the A, B, H or f sequence to control the Y position.

1) If the receive window height is more than high enough to display a graphic:

   a) The graphic will be displayed normally and the text that follows will be displayed normally.

   b) If the window scrolls, the graphics will scroll off the screen.

   c) If the window is re-painted, the last 'X' lines will not be displayed. X' varies with the size of the screen. Characters incoming after that will be displayed.

   d) The scroll back buffer will scroll up correctly. When scrolling down, the entire graphic may not be displayed correctly unless the entire window is forced to be repainted.

   e) When returning to the receive window after reviewing the scroll back buffer, if the graphics is still visible on the screen, the last X lines will not be displayed. Incoming text will be displayed.

   f) If the receive window is repainted, the current default background color will be used. Normally this color is white. If repainting occurs while a graphic is being painted, the background color being used at the time will be used.

2) If the received graphic's height is greater than the receive window height

   a) The last lines of the graphic will overwrite the last line in the window.

   b) Incoming text will be put at the end of the last line.

   c) If the window is re-painted, the graphic will be repainted, text after the graphic will not be displayed. Also the next incoming line may not be displayed. Further lines will be displayed.

   d) Once enough lines have been received so no part of the graphic is displayed, the receive window will behave normally.

   e) If the receive window is repainted, the current default background color will be used. Normally this color is white. If repainting occurs while a graphics is being painted, the background color being used at the time will be used.

B) ANSI Graphics which do contain <CR> at the end of the line and do not use the H or f sequence to control the Y position.

1) Text & graphics will be displayed normally (if the width of the window is wide enough to properly display the line otherwise the line will wrap like text).

2) Scroll back buffer will behave normally.

3) If the receive window is repainted, the current default background color will be used. Normally this color is white. If repainting occurs while a graphics is being painted, the background color being used at the time will be used.

C) Text without graphics will display normally.

D) Misc.

1) The background color is set by the ANSI escape sequence. If an ESC[2] sequence is sent, the screen is cleared using the current background color.

2) Clicking the mouse on the receive window while in the scroll back mode forces a paint incase text was hilited or unhilited.

3) A backspace may cause the screen to be repainted if the BS forces the current text position to be on a different line.

4) A window overlapping the receive window will cause the receive window to repaint the part of the window covered. The window is repaint from the top of the invalidated region to the bottom of the receive window.

5) The receive window is displayed in terms of lines. Lines are set by either a <CR> or when the X position exceeds the width of the window. The lines are re-adjusted when the window is sized.

6) Scrolling causes a portion of the window to be invalidated forcing the receive window to repaint part of the window. When scrolling up, the last line on the receive window is repainted, when scrolling down, the top line is invalidated.