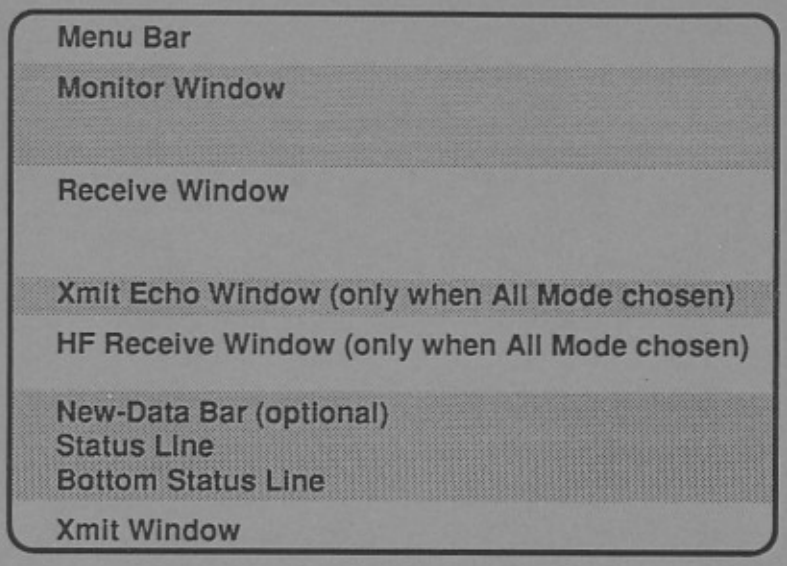
Getting Started with Host Master II+



Kantronics

RF Data Communications Specialists

Printed on recycled paper

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Dear Kantronics Customer,

Congratulations on choosing Host Master, a great program to combine with the Kantronics KAM and family of packet units. This program uses split screens, allows for packet and non-packet operations (with KAM) simultaneously and cuts down dramatically on the use of keyboard commands to your packet unit. We are delighted that you've selected Kantronics and know that you'll enjoy Host Master in combination with the KAM and/or Kantronics packet units.

This booklet is a departure from our earlier manual sets in that it is a 'getting started' booklet and not a complete manual. The Host Master II+ Manual/Reference contains more detailed material on this well-featured and strong program. This booklet is not a substitute for the manual or for your need to read the manual(s) for your TNC in order to gain full benefit of the hardware and software features. If you like 'Getting Started' let us know with comments on the back of your warranty card.

Host Master in combination with the KAM or other Kantronics TNCs gives you the best possible split screen operation. By utilizing the Host mode of the TNC, the program is able to separately display monitored and connected packets and text that you type ahead for transmission. In addition, stream switching, allowing several packet conversations at the same time, is reduced to pushing the Page Up and Page Down keys to change channels. The program eliminates the need to send cumbersome control character sequences to the TNC to support multiple conversations.

In addition Host Master II+ includes new features such as binary file transfers and embedded commands within key activated transmission buffers. For example, you can include the transmission key, text message, date, QSO number and return-to-receive key within a buffer file. One keystroke then allows for transmission of the entire message, a CQ for example. Multiple buffers which can be mode specific are allowed, for example a CQ message for CW and another for RTTY.

How To Use This Book

Who Should Read This Book

Getting Started is designed for users who are new to the Host Master System. Our intent is to give you a quick overview and a small amount of on-the-air experience. To make full use of Host Master, you'll also need to become familiar with the "Host Master II+ Manual/Reference" as well as the manuals for your TNC. If you already have Host Master or are familiar with it through a friend, we'd suggest browsing "Getting Started" and moving on to the larger Manual/Reference.

Conventions, the computer keys and what to type

In this manual the following conventions are used:

TNC commands are in ALL CAPITAL LETTERS

<Return> = return or enter key

<Esc> = escape key

<Home> = home key

<Shift-F1> = hold shift key while pressing F1 key

< > = Any keystroke within angle braces, < >, is a single key or a combination of keys. Combinations are typed as follows: while holding the first named key, press the second key, then release both. For example when you read <Ctrl-F1>: Press and hold the Ctrl key, press the F1 key, release both keys.

Organization

This book is made up of twelve brief chapters.

Chapter 1 ,"This Program and your Station Hardware," explains what computer hardware and radio gear is required to utilize Host Master.

Chapter 2, "An Overview of the Host Master System," presents the big picture. It describes how Host Master works with your computer and radio gear to provide for a complete packet and/or non-packet digital communications system.

Chapter 3, "The Host Master Screen," shows how your computer screen will appear when Host Master is running. Both packet only and packet and/or HF digital mode screen formats are discussed.

Chapter 4, "The Host Master Control Keys and Template," explains which keys are used to control and operate the system.

Chapter 5, "Starting Your Computer," explains how to load the Host Master program into your computer.

Chapter 6, "Installing Host Master," describes how to use the Hostset program to install your choices of features for operation. You'll be able to reinstall at any time by using the Hostset program.

Chapter 7, "Preparing Cabling," explains the cabling you'll have to prepare for your system.

Chapter 8, "Starting Host Master," describes how to start the program, called HM2PLUS.

Chapter 9, "Making that First 'Connect,' Using the TNC BBS," explains in step-by-step instructions how to make a connect. You will connect to the bulletin board inside your packet unit to do this. There is no need to attach a radio at this point. You'll not be transmitting.

Chapter 10, "Listening to RTTY or CW on HF (KAM only)," gives you step-by-step instructions on how to listen to RTTY or CW with Host Master.

Chapter 11, "The Host Master II+ Manual/Reference," presents a brief description about the Host Master II+ Manual/Reference and how to use it.

Warranty Registration

Please fill out and return the warranty registration card now. We need your card in order to inform you later about updates and special announcements.

CHAPTER 1

This Program and Your Station Hardware

Requirements:

A Kantronics packet unit or KAM (these are often referred to as TNCs):

KAM version 5.0 or later,
a KPC-series TNC with version 5.0 or later,
a Data Engine version 2.0 or later,
or any future compatible Kantronics TNC.

An IBM™ or compatible computer with

MS DOS™ version 2.1 or later,
512K or more of memory,
a floppy disk drive and/or hard drive,
a monochrome or color display,
a serial port,
a printer and/or mouse (optional).

Radio Station Equipment (all optional):

an FM radio for VHF and/or UHF operation,
an HF transceiver for HF modes,
an external speaker.

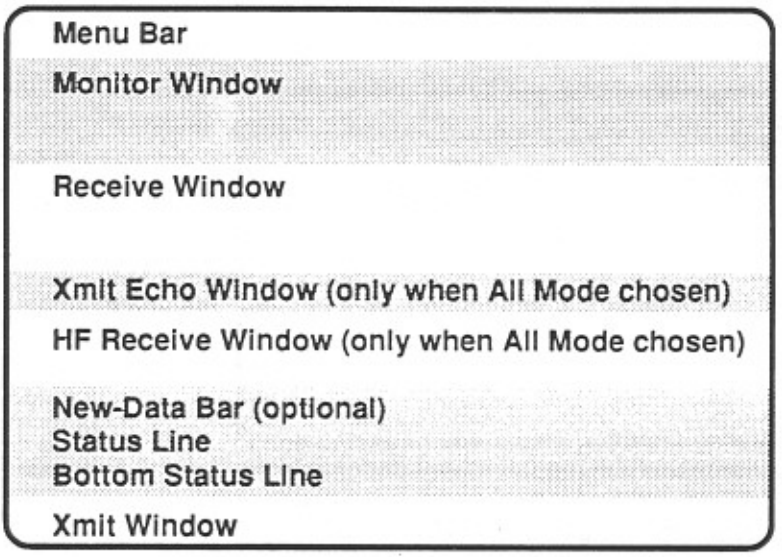
CHAPTER 2

An Overview of the Host Master System

The Host Master program loads in an IBM™ PC or compatible computer and interacts with your TNC and amateur radio gear to provide for a packet and/or HF digital communication system. Host Master supports all of the modes of the KAM, for example, except HF weatherfax reception. The most exciting feature is the ability to operate on both FM (VHF or UHF) and HF at the same time. For example, you can connect and/or monitor on packet on 2-meters while at the same time operating radio teletype (RTTY) on HF.

Operating two modes at the same time is made possible by using the inherent capability of the KAM in conjunction with Host Master. In order to make this convenient for you, Host Master splits the screen into seven horizontal windows, as shown in Figure 2-1 below.

FIGURE 2-1



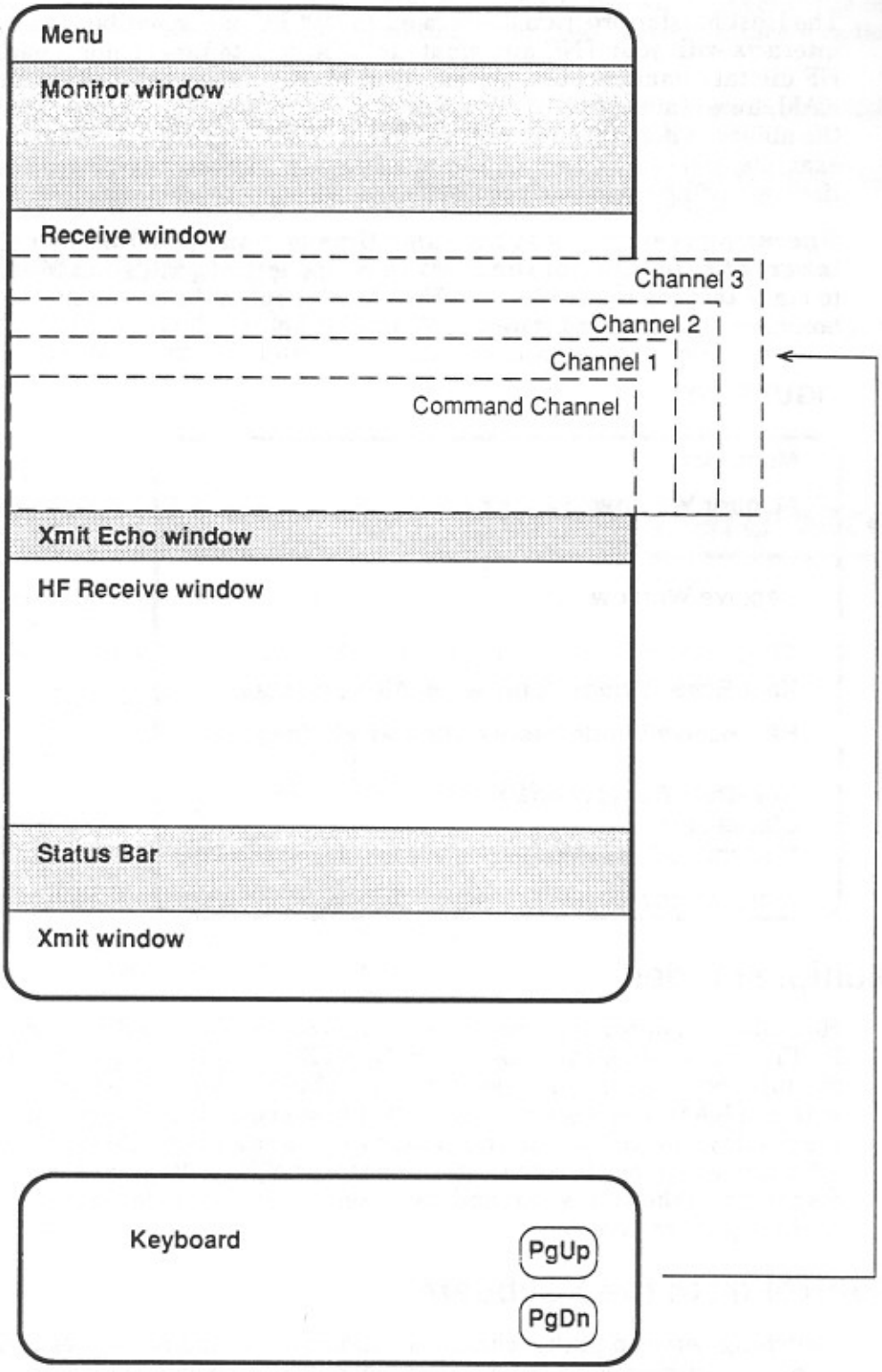
Multiple Modes

Host Master supports packet with all Kantronics TNCs and supports CW, RTTY, ASCII, ARQ, FEC, LAMTOR, NAVTEX and PACKET with the KAM. Simultaneous operation of two modes is supported when Host Master works with the KAM. HF, VHF or UHF packet is supported on the top windows of the display, and HF modes are supported with the Xmit Echo Window and the HF receive window. In either case, the status of Host Master with the TNC is displayed on the status bar, and menu selections are made from the menu bar at the top of the screen.

Control from the Keyboard

Switching between packet channels and/or packet and HF modes is done by using the function keys and various control keys, a few of which are introduced in Chapter 4.

FIGURE 3-1



CHAPTER 3

The Host Master Screen

The full Host Master screen is shown in Figure 3-1. Starting at the top, the windows are as follows:

- The ever-present menu bar, which is used to change parameters and control operation.
- The packet Monitor window, where incoming packets not addressed to you can be monitored.
- The packet Receive window is next, which is used to receive packets addressed to you.
- The Xmit Echo window, which when activated displays data as the TNC sends it to your HF transceiver.
- The HF Receive window, where all non-packet data received on HF is displayed (for use with the KAM only).
- The status bar which displays the status of each of the packet channels and the parameter status of the KAM when operating a non-packet mode such as CW or RTTY.
- The data transmission window which displays what you've typed. These data will be sent to the packet port of your TNC. In the case of the KAM the data will be sent either to the packet port or the HF port, depending upon the status of the keyboard indicator (the left arrow or right arrow, displayed at the bottom right of the status bar).

Multiple Channels

Host Master, as denoted in Figure 3-1, supports multiple packet conversations, a feature of long-standing in all Kantronics TNCs. Before, an operator had to send specific characters to the TNC to switch a conversation to a different channel (also called a stream). Host Master makes multiple conversations much easier by switching with two keys.

By using the page up (PgUp) and page down (PgDn) keys you'll be able to key from channel to channel. The status bar will indicate which channel you are on, and Host Master will let you know when an additional party wants to talk to you – and on which channel!

The following chapter discusses the control keys most commonly used.

CHAPTER 4

The Host Master Control Keys and Template

Two templates are supplied with Host Master. Select the one that fits your pc or compatible keyboard and lay it in place on the keyboard. On the horizontal version the top row is labeled 'Norm.' This means you just press the key indicated. The row below is labeled 'Shift' at the left. This means that all functions in this row must be keyed by first pressing and holding the shift key and then pressing the indicated key. On the vertical version "norm" and shift keys are grouped. Functions indicated in blue use the shift plus function key.

Many key combinations used with the program are not indicated on the template or described within this booklet. More information is available in the reference. The most frequently used keys are discussed below to get you started.

Key	Name	Function
ALT	alt key	returns you to the menu bar
ESC	escape key	returns you to the Command channel or cancels a function
F1	connect 1	generates a packet connect from your TNC
F2	connect 2	generates an HF packet connect (KAM only), generates a packet connect on Port 2 (KPC-4 or DE)
F3	disconnect	disconnects the current packet channel
F7	unproto port toggle	toggles between packet ports 1 and 2 (KAM, KPC-4, DE only)
PgUp	page up	toggles the packet channel number up
PgDn	page down	toggles the packet channel number down
<-	left arrow	toggles keyboard to non-packet HF operation (KAM only)
->	right arrow	toggles keyboard to packet operation (KAM only)

Understanding these keys will be sufficient to take you through a basic packet connect and an example of how to listen to an HF digital mode such as RTTY (with the KAM).

CHAPTER 5

Starting Your Computer

If you have a hard disk follow the steps below to copy your Host Master diskette files onto your system. If you are unfamiliar with DOS and copying diskettes, refer to your computer DOS manual for a more detailed discussion of this process.

1. Making A Backup Copy. The files and the disk are not copy protected. You are authorized to make a backup of the floppy disk(s), or to copy the program to a hard disk drive for your own personal use. We strongly suggest that you make a backup of your disk and keep the original in a safe place.

2. Type:

cd\

and press <Return> to make the root directory of the hard disk the current directory.

3. Type:

md\host

and press <Return> to create the directory for your Host Master.

4. Make the drive that you'll use to copy your Host Master files from the current drive.

5. Type:

copy h*.* c:\host

and press <Return> to copy all files to your hard disk.

6. Change your directory to the Host directory by typing:

cd\host

and press <Return>.

7. Go to next page.

CHAPTER 6

Setting Up Host Master

You do not have to have the TNC attached or powered on to complete this step.

IF YOU HAVE A HARD DRIVE: After copying the Host Master files onto your hard drive run a program called Hostset in order to set parameters and features the Host Master program will use. This is your program setup.

It may be at this early stage that you'll not know which values you'll want for certain parameters. Hostset can be run at any time to change the values you set now. We suggest that you answer only the questions where Hostset doesn't already have a suggested answer. For example,

> You will be asked for your amateur callsign. Just type it in and press <Return>.
>
> You will also be asked for a logger file name. Just press <Return> to pass by this option for now. You can set it later when you want to use this feature.
>
> When the program asks for a file and gives a suggestion such as c:\host\, just use the suggestion.
>
> When the program asks for a communication port (com port) or the baud rate for your serial port, type the values in that you are using or have configured already for your TNC and computer.

IF YOU HAVE A FLOPPY DRIVE SYSTEM: If you are using a floppy disk system, then load the backup copy in drive A and type:

> HOSTSET
>
> Press <Return>. This is your program setup.

It may be at this early stage that you'll not know which values you'll want for certain parameters. Hostset can be run at any time to change the values you set now. We suggest that you answer only the questions where Hostset doesn't already have a suggested answer. For example,

> You will be asked for your amateur callsign. Just type it in and press <Return>.
>
> You will also be asked for a logger file name. Just press <Return> to pass by this option for now. You can set it later when you want to use this feature.
>
> When the program asks for a file and gives a suggestion such as c:\host\, type the drive designator for the drive you have your floppy disk in, for example a:\
>
> When the program asks for a communication port (com port) or the baud rate for your serial port, type the values in that you are using or have configured already for your TNC and computer.

CHAPTER 7

Preparing Cabling

You may or may not have cables already wired for your radio to the TNC and between the TNC and your computer. If not, do so now in order to proceed. Follow the directions in your TNC manual for TNC-radio cabling.

For the TNC-computer cable, you'll need an RS-232 cable that includes five specific wires. For the standard 25-pin computer connector, a cable with point to point wiring for pins 2, 3, 4, 5 and 7 **is required**. If your computer uses a 9-pin communications port (com port), consult the Host Master II+ Manual/Reference for details.

CAUTION. Do not use a full ribbon cable or a cable that includes all twenty five wires. Damage could result to your TNC or computer serial port.

CHAPTER 8

Starting Host Master

After you have your TNC cabled to your computer you can start Host Master. Complete all six steps listed below:

1. Match up the current drive (prompt) with the drive Host Master is in.

2. Turn on your TNC.

3. Type:

HM2PLUS

and press <Return> to start the program.

4. The opening screen will appear and stay for a short duration. Hit the space bar to move on more quickly to the main screen. You'll know you are there when you see the menu on the top line.

5. Host Master will now attempt to establish communication with your TNC. If you don't receive a box specifying "failure to communicate," then Host Master established communication. If so, skip down to the section below with the heading "perming your callsign".

In Case of Trouble or 'Failure to Communicate:'

If you have a new TNC or have just performed a hard reset, a pop-up box will appear informing you that the TNC is sending characters. Select "autobaud" and press <Return>.

However, if the TNC has been permed already with a baud rate different than that you selected with Hostset, you'll have to stop Host Master now, change your computer's serial port baud rate with Hostset to match the TNC, and then start Host Master again. If the TNC has been used for monitoring packets, you may have to declare that when Host Master asks that question on the screen while attempting to establish communication. Use the TAB key to step over to "monitor"

and press <Return>. If you have further problems at this point and the program cannot establish communication with your TNC, see either the "Troubleshooting" and/or "Starting Host Master," in the Host Master Manual/Reference.

Incorrect cabling is a common problem. Another common starting problem is a mismatch in the baud rates of the TNC and computer serial ports. Double check these items and try again.

6. **PERMING YOUR CALLSIGN** At this point you'll want to perm your callsign to avoid typing it in next time.

First, however, type the following to put the TNC in terminal mode:

INT TERM

and press <Return>. Then type:

MON OFF

and press <Return>. This will set your TNC in a non-monitor mode when permed. Then type:

PERM

and press <Return>. (Data Engine users type PERM ALL). Your callsign is now permed.

Now enter:

MON ON

and press <Return> and enter:

INT HOST

and press <Return>.

You are now ready to try a few operations with Host Master and your TNC system.

CHAPTER 9
Making That First 'Connect' with Your Own BBS A Step-By-Step Example

You can practice connecting to another packet station by connecting to the bulletin board in your own TNC first. The radio need not be connected. Follow the steps below to make your first 'at home' connect.

1. Press <Esc> to make sure you are at the Command channel. You can verify this by checking the status bar at the bottom of the screen.

2. Press <PgUp> to move to channel 1 (confirm at status bar),

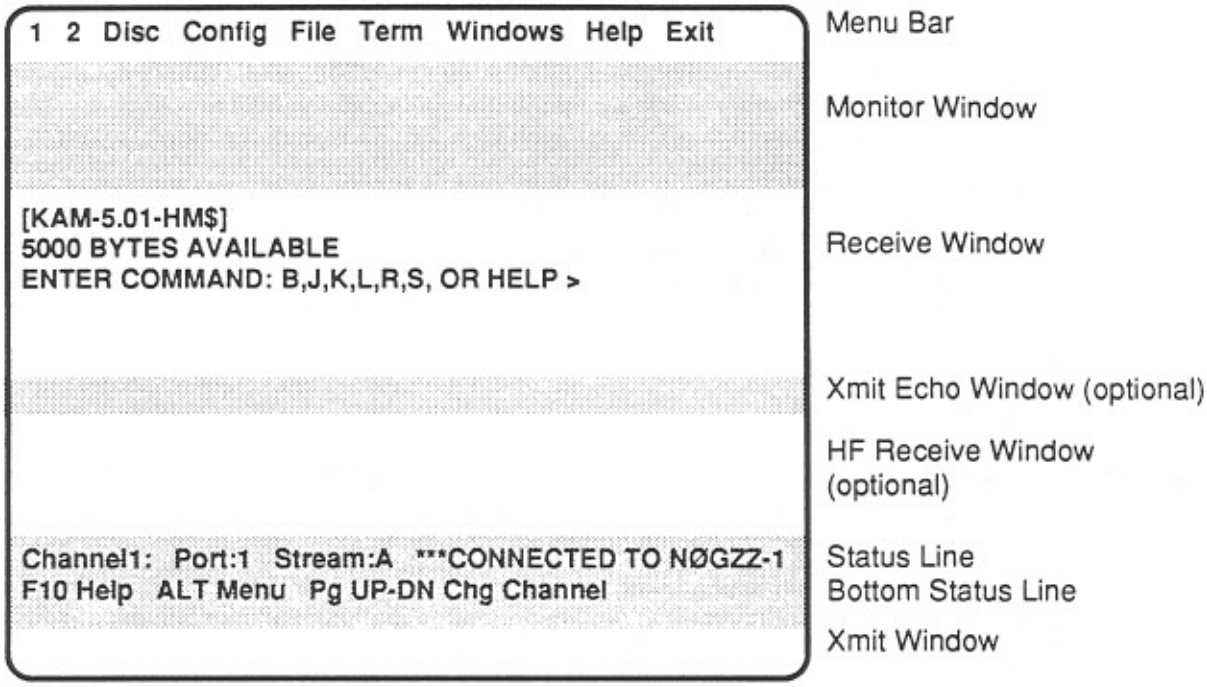
3. Press <F1> (function key one) and Host Master will produce a pop-up box asking you for a callsign, the station you want to connect to.

4. Type your own callsign plus a hypen and a one and press <Return>. For example, if your callsign is NØGZZ, then type NØGZZ-1 and press <Return>.

5. The TNC will respond and your screen will state that you are connected!

Figure 9-1 denotes how your screen should look after this.

FIGURE 9-1



If you are familiar with the TNC mailbox, go ahead and chat. If not disconnect from it. You can read about the mailbox feature later. Step 6 shows how to disconnect.

6. Press <F3> (function key three) and you will disconnect from the TNC BBS.

Summarizing The Packet Connect

As you can see you make packet connects by pressing the connect function key. Host Master then asks you for the station's callsign. Similarly you disconnect from the station by using the disconnect function key. Connecting to a station on the air is the same. Press <F1> and then specify the station's callsign when asked. If the station is there and the channel is not busy, it will respond and you will receive a CONNECTED TO message. You'll then be ready to chat via the keyboards.

CHAPTER 10

Listening to RTTY on HF (KAM Only)

Host Master, when used with the KAM, allows you to send and receive in various HF modes. Let's use RTTY as a short example. Follow these steps:

1. Press <Alt> to highlight the menu at the top of the Host Master screen.

2. Hit the number 2 (not F2) and the Port 2 menu will appear.

3. Select RTTY by typing "R" and pressing <Return>.

At this point Host Master is ready to copy RTTY and may already be doing so in the HF Receive window if you are tuned to a standard 45 baud 170 Hz shift RTTY signal (assume Hostset defaults). See the KAM manual or the Host Master Manual/Reference for details.

4. Once you are finished watching RTTY, press <Alt> to highlight the menu at the top of the screen to make another mode choice.

CHAPTER 11

Using The Host Master II+ Manual/Reference

At this point you should feel comfortable with the basics of Host Master and the Host system. Parameter and mode selection is controlled by utilizing the menu bar at the top of the screen. You always gain access to the menu by pressing the Alt key.

Packet connects are made by using the menu bar or the function keys. When Host Master prompts you for a callsign, you type it in (not including the C for connect!) and it does the rest. You may terminate a packet connection by pressing <F3>.

With the Kantronics KAM, Host Master also allows for sending and receiving in the popular HF digital modes such as RTTY. These modes are selected by choosing menu '2,' the second choice on the menu bar at the top left. These modes are terminated by making another choice.

Expanding the Use of Host Master

This booklet is a limited introduction to the features and capabilities of Host Master. We've tried to give you a quick overview to stretch your imagination about its possibilities. You're now ready to study the Manual/Reference and experiment in depth with Host Master with your TNC. To aid in that process, we've added an index at the back of the Host Master II+ Manual/Reference.

To Exit Host Master

1. Press <Alt> to gain access to the menu.

2. Press the X key and Host Master will display the Exit menu.

3. Press <Return> to exit.