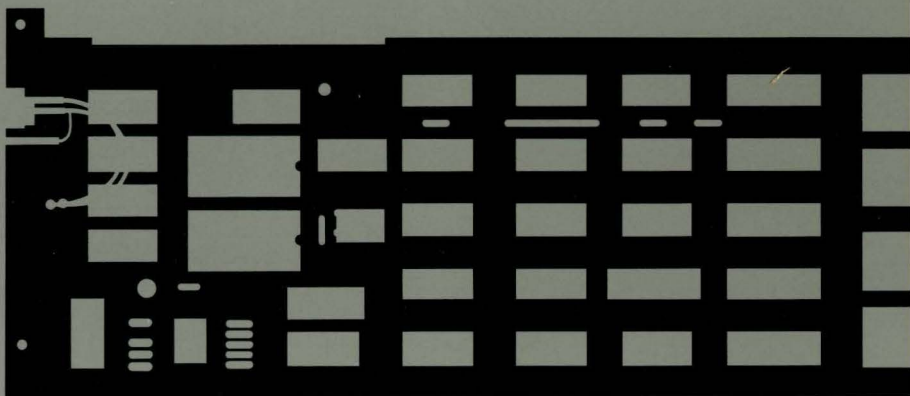


**MultiTech**<sup>®</sup>  
Systems 



**MultiCom 5250**<sup>™</sup>  
Local Adapter Handler

**Owner's Manual**

## **NOTICE TO USER REGARDING RADIO FREQUENCY INTERFERENCE**

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart J of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna.

Relocate the device with respect to the receiver.

Move the device away from the receiver.

Plug the device into a different outlet, so that the device and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

**How to Identify and Resolve Radio-TV Interference Problems**

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004000003454.

**Owner's Manual**  
**P/N 82007300**  
**MultiCom5250 Local Adapter Handler**

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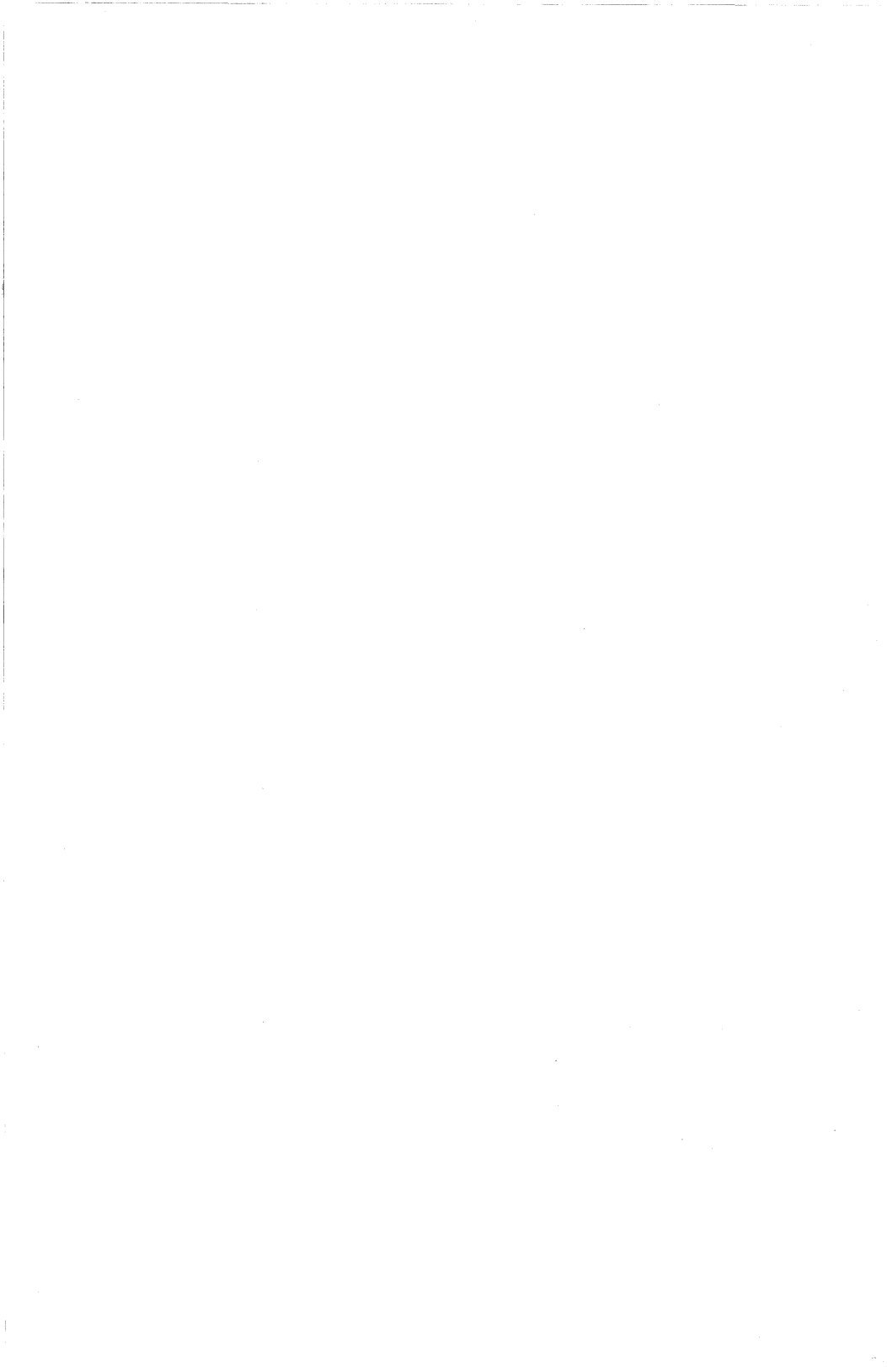
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# **Introduction and Configuration**



## **1.1 Introduction**

The L5250AH™\* 5250 Local Adapter Handler software lets IBM's AS/400™\* PC Support™\* program run on a Multi-Tech 5250 twinax card installed in your PC or Personal System/2™\*. This product replaces the hardware adapter handler supplied with IBM's AS/400 PC Support package.

## **1.2 Requirements**

To run the 5250 Local Adapter Handler, you must have an IBM PC, XT, AT, PS/2 Model 25, 30, 50, 60, 70 or 80, or another personal computer that is compatible with one of these models. Your PC or PS/2 must have the following features:

- At least one disk drive.
- The MS-DOS or PC-DOS operating system, release 3.3 or later, or a compatible operating system.
- IBM's AS/400 PC Support package.
- At least 5K of user memory to use the Adapter Handler, in addition to the user memory AS/400 PC Support requires.
- A Multi-Tech 5250 twinax hardware adapter card.

To run AS/400 PC Support, your PC or PS/2 must be attached to an AS/400 host either directly or via a 5394 controller. Note that 5294 and 5250 Model 12 controller types do not support AS/400 PC Support.



## **1.3 Hardware Installation**

Your PC or PS/2 must have a 5250 twinax card installed to use AS/400 PC Support.

Connect your PC or PS/2 to the 5394 controller or AS/400 with a standard twinaxial cable. This cable must have appropriate connectors on both ends. You can use IBM parts or equivalents. Male connectors are IBM part #7362229; female connectors are IBM part #7362230.

This section presents generic procedures for installing a 5250 twinax card. Read all of these steps before you begin. Also read the instructions or precautions in the documentation that came with your PC or PS/2 and the installation instructions for your particular 5250 twinax card.

Always unplug your PC or PS/2 anytime you install hardware in it. It is important to unplug the machine, rather than just turn it off, because some components have voltages present even when the power is off. Another good precaution to prevent static damage is to ground yourself by touching a metal part of your system before you handle the card. Also be careful not to drop or otherwise damage the card.

1. The 5250 twinax card has groups of switches or jumpers that establish certain electrical connections depending on their settings. They are preset to addresses that probably will fit your needs. See the card's instructions for information on reading and changing the settings.
2. Make sure the new card does not use the same addresses as another card already installed.
3. Make any additional modifications called for in the card's instructions.
4. Turn off your PC or PS/2 and unplug it. Carefully open it. Avoid touching the power supply while working inside.
5. Most PC's and PS/2's have several empty slots located toward the rear of the system unit. You usually can install a card in any empty slot that is the correct size. Make sure the slot is free from obstructions and the metal contacts in the slot and along the edge of the card are clean. Avoid touching these contacts, as you might leave harmful deposits on them.
6. Hold the card by its corners and slide it into the slot as far as it will go. Make sure it is straight and securely in place. In many PC's and PS/2's, you also must insert a screw to hold the card in place.

7. Close your PC or PS/2.
8. Plug one end of the twinaxial cable into the 15-pin socket on the back of the 5250 twinax card. Tighten the screws. A T-shaped connector probably already is connected to the other end of the twinaxial cable. If not, connect it. Finally, connect the twinaxial cable from the 5394 controller or AS/400 to the T-shaped connector.
9. If your PC or PS/2 is not the last station on the line, remember to connect the twinaxial cable leading to the next station. If your PC or PS/2 is the last station, you must "terminate" the twinaxial cable. You may do this either by attaching a cable terminator to the T-connector on the cable or by setting the terminator switch on the 5250 twinax card. See the card's instructions for detailed information on the terminator switch.
10. Plug your PC or PS/2 back in and turn it on. It should function normally.

If your hardware or software does not operate properly after hardware installation, this may be due to conflict between cards. Remove all non-essential cards from your PC or PS/2 and reinsert them one at a time until you identify the conflicting card. See the card's instructions to change conflicting addresses.

## **1.4 AS/400 PC Support Installation**

Type the following command and press Enter to start the AS/400 PC Support installation process:

INSTALL

This command invokes the installation batch file INSTALL.BAT, which is included in IBM's AS/400 PC Support package. The installation process automatically creates a directory named PCS on your PC or PS/2, copies AS/400 PC Support files into that directory and creates the file CONFIG.PCS.

Select either Work Station Emulation or Enhanced 5250 Emulation from the first menu.

The second menu contains the following fields:

Drive Specify the PC drive on which you will run AS/400 PC Support.

Location Specify a name different from any location name already in existence on your AS/400.

System Name Specify the reference name for your AS/400.

You can select any or all of the PC Support functions, as the Adapter Handler supports all of them:

Organizer

Workstation Function

Message Function

Virtual Printer

All files necessary for the function(s) you select will be copied to the specified PC drive.

### **1.4.1 Modifying STARTPCS.BAT**

The AS/400 PC Support package includes an automatic startup batch file named STARTPCS.BAT. When using the Adapter Handler, it is necessary to modify one line in this batch file using a text editor or word processing program.

The first line of STARTPCS.BAT will be similar to the following:

D:\PATH\FILENAME

In this line, D: is the disk drive on which you installed AS/400 PC Support. \PATH is the directory path of the AS/400 PC Support files. FILENAME is the name of IBM's adapter handler, which may be E5250AH.COM, WSEAH.EXE or another name.

Simply replace the filename of IBM's adapter handler in the batch file's first line with L5250AH.COM. This change will cause STARTPCS.BAT to load L5250AH instead of the IBM adapter handler.

Remember to save the edited STARTPCS.BAT file in ASCII form.

Reboot your PC or PS/2 after you modify STARTPCS.BAT.

### **1.4.2 Adapter Handler Installation**

Copy the following files from your L5250AH master diskette into the PCS directory that was created when you installed the IBM software:

- Adapter Handler Program — L5250AH.COM
- Microcode for 5250 Twinax Card — L5250AH.MIC
- Microcode for STWINAX Card — L5250AH.SMC

### **1.4.3 Adapter Handler Configuration**

The L5250AH Adapter Handler is preconfigured with default settings that probably will fit your needs. You may, however, need to reconfigure the software to use settings other than the defaults. You can specify configuration settings by starting the Adapter Handler using a command line with certain options. Following is a description of these options.

The command line used to configure the Adapter Handler has the form:

```
L5250AH -Annnnn -Innnnn -U
```

You may include one or more of these options in any order, separated by one or more spaces.

A sample command line might be:

```
L5250AH -AC800 -I300 -U
```

The Adapter Handler uses a default 5250 twinax card memory address of D000 hex. Use the `-A` command line option to specify a different memory address setting. The setting you specify must match the memory address your 5250 twinax card uses.

The Adapter Handler uses a default 5250 twinax card I/O port address of 368 hex. Use the `-I` command line option to specify a different I/O port address setting. The setting you specify must match the I/O port address your 5250 twinax card uses.

Use the `-U` command line option to update the Adapter Handler's configuration settings. The file `L5250AH.COM` must be in the current directory when you use this option. The Adapter Handler will terminate itself automatically, saving the new settings to use at the next startup time. You will see a message verifying that the configuration settings have been updated.


If you do not specify `-U`, the Adapter Handler will use the specified settings only for the current session.

## **1.5** ***Running AS/400 PC Support***

Make sure you are working from the PCS directory. Make sure your cursor is at the DOS prompt. Enter the following command to start AS/400 PC Support:

**STARTPCS**

This command will invoke the batch file `STARTPCS.BAT`, which you modified to load the `L5250AH` Adapter Handler.



**NOTE:** You can also start the AS/400 PC Support program manually, following instructions in your IBM documentation. The difference is that you should enter L5250AH to start the Adapter Handler instead of entering the command to start IBM's adapter handler.

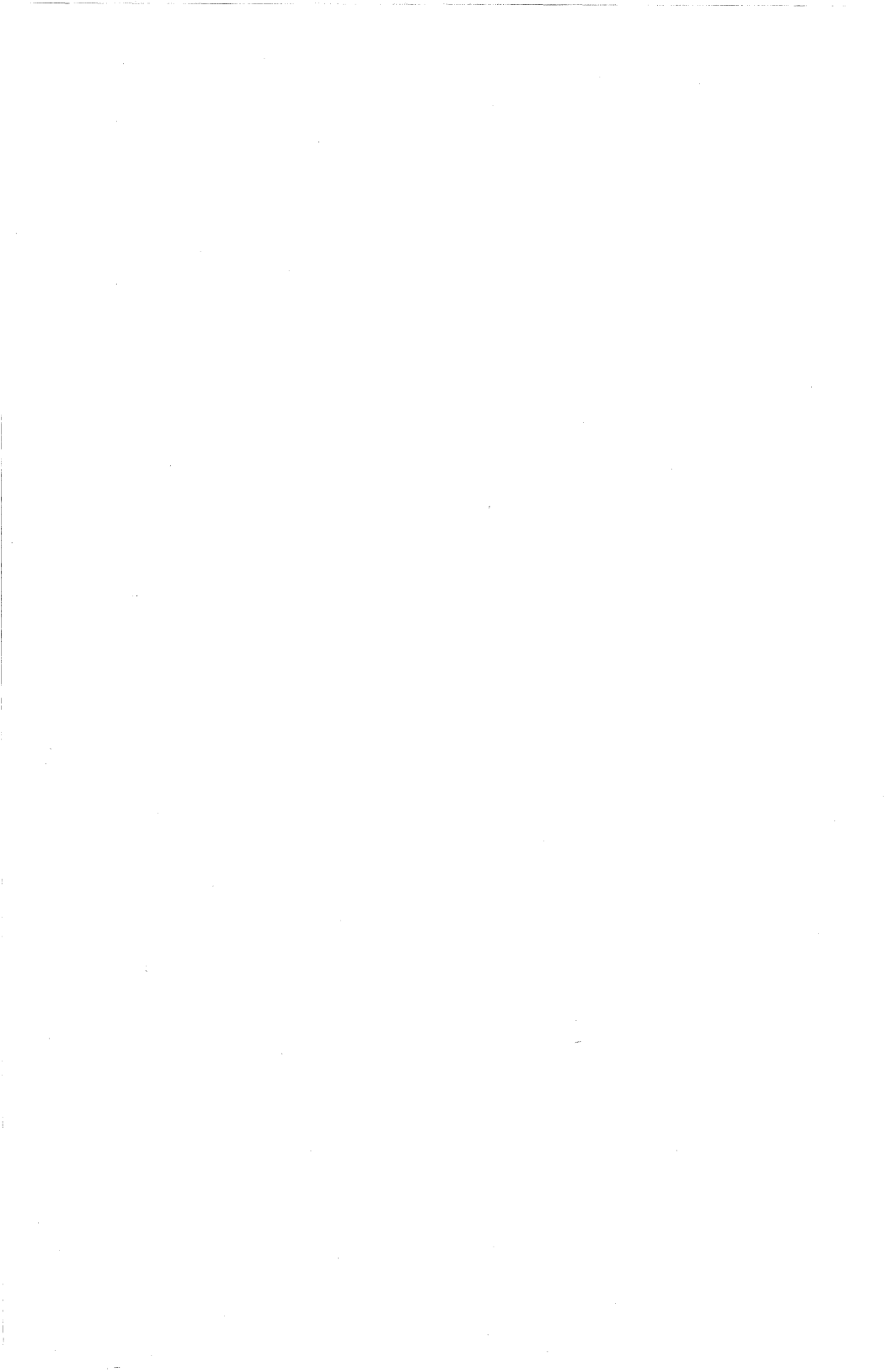
Refer to your IBM documentation for further details on AS/400 PC Support operation.





**Adapter Handler  
Messages**





## **2.1**

### ***Introduction***

Sometimes you will see messages while you are using the Adapter Handler to let you know that an instruction has been completed or to inform you of certain conditions (for example, the command line option you entered is invalid).

You may also get other messages from the AS/400 PC Support program or from the host system. Refer to your IBM documentation for information about those messages.

## **2.2**

### ***Messages Listing***

Following is an alphabetical list of the Adapter Handler messages, their meanings and any action you need to take when they appear.

#### **5250 Adapter Handler already resident.**

You tried to start the Adapter Handler, but it is already running in the background. This message does not indicate an error; it simply tells you that the Adapter Handler is running and ready to use.

#### **5250 emulation adapter not found.**

Possible causes are: There is no 5250 twinax card installed in your PC or PS/2. The card addresses the Adapter Handler is configured to use do not match the switch settings on the card.

#### **5250 microcode mismatch - must be version 4.01 or higher.**

You tried to use an obsolete L5250AH microcode file. Copy the microcode file L5250AH.MIC (or L5250AH.SMC) from your master diskette.

### **5250 microcode not found.**

The program cannot find the file L5250AH.MIC, which contains the microcode for the 5250 twinax card (or L5250AH.SMC, which contains the microcode for the MC5250 card). Check your directory to make sure the microcode file was copied to your working disk or directory.

### **AS/400 PC Support Adapter Handler update failed!**

The Adapter Handler was unable to update its configuration settings with the new settings you specified. Make sure the file L5250AH.COM is in the current directory and that it has not been write-protected.

### **Bad option found on command line.**

You entered an invalid command line option. Reenter the command line, including only valid options.

### **Error loading microcode.**

The file L5250AH.MIC, which contains the microcode for the 5250 twinax card (or L5250AH.SMC, which contains the microcode for the MC5250 card) cannot be read because it has an error. Errors can be caused by a damaged, defective or unformatted disk, exposure to magnets, or data that was partly erased or overwritten.

### **PC Support Adapter Handler configuration updated.**

This message appears after you use the -U command line option. It verifies that the Adapter Handler's configuration settings have been updated with the new settings you specified.

### **Unable to activate board.**

There is a 5250 twinax card installed in your PC or PS/2, but the card is not responding. You probably have a faulty card.

### **Wrong DOS version. Requires version 3.3 or higher.**

The disk operating system currently running on your PC or PS/2 is not MS-DOS or PC-DOS release 3.3 or later, or a compatible operating system, as required by the Adapter Handler. Reboot your PC or PS/2 with a correct version of DOS, and then run the Adapter Handler.



**Service, Warranty  
and Tech Support**



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MC5250 software is licensed by Multi-Tech Systems, Inc. to the original end-user purchaser of the product, hereafter referred to as "licensee". The License includes the distribution diskette, other accompanying programs, and the documentation.

The MC5250, hereafter referred to as "software", consists of the computer program files included on the original distribution diskette.

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## **3.2** **Service**

In the event service is required, equipment may be sent, freight prepaid, to our factory. Return shipping charges will be paid by Multi-Tech Systems. Include a description of the problem, a return shipping address, and a check or purchase order for out-of-warranty repairs. The standard repair charge for an MC5250 card is \$70. Multi-Tech pays the return freight. Send equipment to this address:

**MULTI-TECH SYSTEMS, INC.**  
**2205 Woodale Drive**  
**Mounds View, Minnesota 55112**  
**Attn: Service**

You should also check with the people that supplied you with your equipment on the availability of local service and/or loaner units, in your part of the country. You may call us 1-800-328-9717, or if in Minnesota, at 612-785-3500.

### **3.3**

#### ***Limited Warranty***

Multi-Tech systems, Inc. ("MTS") warrants that its products will be free from defects in material or workmanship for a period of two years from the date of purchase, or if proof of purchase is not provided, two years from date of shipment. MTS MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

This warranty does not apply to any products which have been damaged by lightning storms, water or power surges or which have been neglected, altered, abused, used for a purpose other than the one for which they were manufactured, repaired by the customer or any party without MTS's written authorization, or used in any manner inconsistent with MTS's instructions.

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**MTS WILL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES AND UNDER NO CIRCUMSTANCES WILL ITS LIABILITY EXCEED THE PURCHASE PRICE FOR DEFECTIVE PRODUCTS.**



### **3.4**

## ***Tech Support and BBS***

Multi-Tech has an excellent staff of tech-support personnel available to help you get the most out of your Multi-Tech product. If you have any questions about the operation of this unit, please call Tech-Support at 1-800-328-9717.

Multi-Tech Systems also maintains a Bulletin Board Service (BBS) for its customers. The information available via the BBS includes: new product information, product upgrade data, problem solving tips and a message service for you to leave questions for which you would like additional information. The phone number for the Multi-Tech BBS is (612) 785-9875.

The BBS can be accessed by any asynchronous modems at 9600, 4800, 2400, 1200 or 300 bps.

