

Chapter 2
Quick Installation

This chapter is a quick reference guide for installing your *SpeedMaster* board for proper operation in your system.

This information assumes you are familiar with SCSI device termination and installing boards in a computer. If you are a new user, or find you need more detailed information, please refer to *Chapter 3: Introduction to SCSI* for an overview of the SCSI bus and rules for termination, and *Chapter 4: Hardware Installation*, to install the *SpeedMaster* board in your system.

2-1 Installation Overview

The *SpeedMaster* board can be used in both Plug-and-Play compatible and NON-Plug-and-Play systems.

For Plug-and-Play Systems: The *SpeedMaster* board is fully Plug-and-Play compatible, so if you have a Plug-and-Play system, all you need to do is install the board; then run the self-booting *Drivers Installation* diskette #1. A series of diagnostics tests will be performed to ensure that the I/O subsystem is functioning correctly.

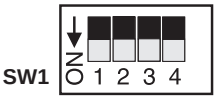
For Non-Plug-and-Play Systems: If you do not have a Plug-and-Play system, a self-booting *Drivers Installation* diskette #1 and a 4-pin DIP switch are provided for running diagnostics and determining a compatible I/O address, DMA channel and IRQ for you.

When you later add new peripherals to your system, simply run the onboard SCSI BIOS Setup Utility (see *Chapter 6: SCSI BIOS Setup Utility*) to configure the hardware. There is no need to run the installation program again.

After completing the hardware setup, refer to *Chapter 5: Software Installation* to install the appropriate drivers for your operating system and devices.

2-2 SW1 DIP Switch

A 4-pin DIP switch is mounted on the edge of the board where you can easily configure the switches from outside the computer case. The following identifies the on / off settings of the switches.



SW1-1 Auto port address increment function (default=*OFF*)

SW1-2 Onboard floppy controller (default=*ON* for *i542; OFF* for *i540)*)

SW1-3 Plug-and-Play support (default=*OFF*) (Set this switch ON **only** if both your computer and operating system fully supports the Plug-and-Play feature)

SW1-4 Not used

2-3 Install the *SpeedMaster*

Perform the following steps to install your *SpeedMaster* board. Then run the installation / diagnostics software to successfully complete the installation.

Like all electronic equipment, your SpeedMaster board is static sensitive. Before opening the anti-static poly bag in which it is packaged, discharge static electricity by touching the computer chassis. Keep the board in its conductive wrapping until it is ready to be installed in your system.

1. Make a backup copy of the *Driver Installation* diskettes that are included with your *SpeedMaster* board.

> ***Replacing or Adding to Existing SCSI Boards.***
>
> If the *SpeedMaster* is to replace an existing SCSI host adapter, remove that board first, as well as any software device drivers for that board.
>
> If you are simply adding the *SpeedMaster* to a system with existing SCSI or IDE controllers, there is no need to change existing boards or software.

2. Make sure all power is OFF and disconnect power cord and external cables from back of computer.
3. Remove the computer cover.
4. Remove the *SpeedMaster* board from its anti-static wrap.
5. Select an available ISA-bus 16-bit expansion slot and remove the slot's cover.
6. Install the *SpeedMaster* board in the expansion slot.
7. Secure the *SpeedMaster* with the removed slot cover's retaining screw.
8. Connect all SCSI devices you want to use.

   For external devices, leave the power OFF. Make sure all signal and power cables are properly connected.

   Although your *SpeedMaster* will automatically set its own *termination* correctly, you must ensure all other SCSI devices are terminated correctly. Only the *last* device on both the internal and/or external SCSI Bus should be terminated. All other SCSI devices should NOT be terminated. (Refer to *Chapter 3.*)

   Follow the directions as specified by each SCSI device's user manual. *Always use "Active Terminators" for your external devices, if needed.*
9. Install and/or connect the floppy drive(s) *(for i542 only)*
10. Replace the computer cover.
11. Reconnect all cables and power cord.
12. Turn your computer ON and run the *system* CMOS Setup utility to set the hard drive configuration. When a *non-SCSI* drive and a *SCSI* drive are both present in your system, the *non-SCSI* hard drive will always be your boot drive (Drive C) and its drive type must be defined in CMOS Setup. The second Drive D parameter must be set to "**Not Installed**" for the SCSI drive.

    In a SCSI only system, CMOS setup must be run and both Drive C and Drive D must be defined as "**Not Installed**".

    The system will reboot when you save the changes and exit.

13. Insert the *Drivers Installation* diskette #1 in Drive A. (Note that this is a bootable 3-1/2" diskette, which requires that drive A: be a 1.44MB floppy drive.)

    If your computer boots from a hard drive, run your BIOS Setup Program and temporarily change the boot disk to drive A. Remember to run the system BIOS Setup program again after installing the *SpeedMaster* to reset your original boot drive.

For Plug-and-Play systems:

a. Reboot your computer. After the system boots, the program will present a "Welcome" screen. If you have a monochrome monitor, press <**F9**>. Otherwise press the <**Spacebar**>.

b. Turn ON the power to your external SCSI devices.

c. Press the <**Spacebar**> to perform diagnostics. A complete test of the *SpeedMaster* and the SCSI subsystem will be completed within a few moments.

d. Select "**Yes**" and press <**Enter**> when the program wants to *Examine* the SCSI Bus and List Devices. Let the program perform its examination and show you a list of devices.

e. Select "**Yes**" if all your connected devices appear on the list. If they don't, select "**No**", and the program will provide troubleshooting tips and ask you to reboot.

f. Follow the prompts to complete. Then, remove the installation disk and reboot your system.

For NON Plug-and-Play systems:

a. Reboot your computer. After the system boots, the program will check the card. Follow the prompts.

   If a display message indicates that there is an I/O address conflict, proceed to the next step.

   If there is no message indicating a conflict, skip to *step e.*

b. Change **Switch 1** on the SW1 DIP switch to **ON**.

c. Press the *Reset Button*, or turn the computer OFF, wait 5 seconds, then back ON. If a conflict still exists, repeat the reboot procedure until a message is displayed that notifies you that the "card is detected".

   You will be instructed to disable the "Auto Port Address Increment" switch.

d. Change **Switch 1** on the SW1 DIP switch back to the **OFF** position and reboot your computer.

e. Select "**Yes**" and press <**Enter**> when the program asks to perform diagnostics. When all tests are successful, press the <**Spacebar**> to continue.

f. Select "**Yes**" and press <**Enter**> when the program wants to *Examine* the SCSI Bus and List Devices. Let the program perform its examination and show you a list of devices.

   Note: The program will display the I/O Port Address, BIOS Address, IRQ and SCSI ID for the *SpeedMaster*. Record this information on *page 1-3* for future reference.

g. Select "**Yes**" if all your connected devices appear on the list. If they don't, select "**No**", and the program will provide troubleshooting tips and ask you to reboot.

h. Follow the prompts to complete. Then, remove the installation disk and reboot your system.

Congratulations! You have completed the hardware installation. Next, you need to install the software for your specific operating system. See *Chapter 5: Software Installation*.