SOFTWARE INSTALLATION

Copy the files from the ASW-1410 Program diskette to the root directory of drive C using the MS-DOS COPY command. In order for the ASPI MS-DOS Manager files to be loaded whenever the system is booted, the CONFIG.SYS file must contain the following DEVICE= commands:

DEVICE = ASPI4DOS.SYS
DEVICE = ASPIDISK.SYS

Using any ASCII file editor, add the individual device driver commands to an existing CONFIG.SYS file, or follow the instructions in the MS-DOS Operations Reference Manual to create a new CONFIG.SYS file. FAILURE TO LOAD ALL THE DEVICE DRIVERS IN THE CORRECT ORDER, CAUSES THE PROGRAM TO NOT BE INSTALLED. The following command line options may be added to the device drivers in the CONFIG.SYS file. (Refer to the User's Manual for details.)

DEVICE = ASPI4DOS.SYS (/D) (/P<port address>) (/L) (/V) (/W) (/X<speed>) (/N<bus on time>) (/F<bus off time>) (/I).

MS-DOS provides access to physical hard disk drives C and D. You must use the MS-DOS FDISK and **Format** programs for drives C and D. DO NOT use AFDISK with drive C and D. To use a hard disk partitioned by AFDISK as drive C or D, you must use AFDISK to delete the partitions, and then use MS-DOS **FDISK** to create new partitions.

When starting AFDISK program, it must be run from the root directory of drive C or the AFDISK directory if an AFDISK directory was created. When ready, type:

AFDISK (at the DOS prompt)

and press ENTER. The AFDISK utility is menu driven. Follow the directions on the screen to partition and format the selected SCSI devices. The AFDISK utility also includes an on-line **HELP** file which is accessed by pressing the **F1** key. The AFDISK may be exited at any time without executing by pressing the ESC key and being careful to choose the selections that do not write to or format the disk.

When the SCSI device(s) are successfully partitioned and formatted, reboot the system. This saves any changes made and allows use of the newly installed disk(s) or partitions(s).

AHA-1540/42B Installation Guide

HARDWARE INSTALLATION

The Adaptec AHA-154XB AT-to-SCSI Host Adapter has been designed to operate as shipped in the majority of AT class computers. The host adapter's factory default settings should remain in their original positions. The AHA-154XB is shipped with the following settings:

SCSI Address	7
SCSI Parity	Enabled
Terminators	Installed
Terminator Power	Supplying
Synchronous Negot.	Disabled
DMA Channel	5
Interrupt Channel	11
AT Port Address	330h
AT BIOS Address	DCOOOH, Enabled
BIOS Wait State	0, Disabled
FD Controller	Enabled (AHA-1542B)
DMA Transfer Speed	5 MB/second
Auto Sense	Enable

To Perform Installation:

TURN OFF POWER TO THE SYSTEM AND EXTERNAL EQUIPMENT.

Remove the cover of your AT personal computer to expose the AT bus slots.

Locate an unused AT expansion slot in your AT system. AT type slots can be recognized by the fact that they have 2 edge connectors, one 62-pin and the other 36-pin.

Remove the corresponding system expansion slot cover.

Align the AT I/O Bus Connector on the bottom of the AHA-154X into this AT slot. Use the screw from the corresponding expansion slot cover to secure the AHA-1524X's bracket to your AT system frame.
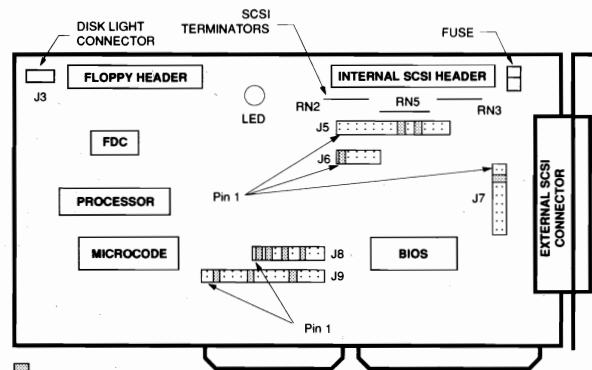
The SCSI bus must also be terminated correctly to ensure proper operation. The first and last physical SCSI devices on the SCSI cable must have terminators installed. All other SCSI devices must have terminators removed.

The SCSI factory-installed Bus terminators on the AHA-154X should be removed if and only if you attach SCSI devices to both an internal and external cable since the internal and external SCSI connectors are the same SCSI Bus.

Attach the SCSI Bus to the host adapter and the peripherals, using either the internal or external connector, making sure that pin 1 orientation is maintained throughout the bus.

Reassemble the system in the reverse order.

Jumper Configuration Reference

DEFAULT SETTINGS AND REFERENCE DIAGRAM

Five sets of jumpers are located on the board to configure user-selectable options. jumpers installed at the factory are shown as "(x)." Those not installed are shown as "o." It should not be necessary to change the jumper settings.

J5—General Control

- o 1 – Synchronous Transfer negotiation enable
- o 2 – Diagnostics (used only at Adaptec)
- o 3 – SCSI Parity disable

o	4	o	x	o	x	o	x	o	x
o	5	o	o	x	x	o	o	x	x
o	6	o	o	o	o	x	x	x	x
		7	6	5	4	3	2	1	0

SCSI Address I.D. (SCSI disks should be set for ID 0 and 1)

o	7	o	x	o	x
(x)	8	o	o	x	x
		7	6	5	0

DMA Channel Select (see also jumper J9)

o	9	o	x	o	x	o	x
(x)	10	o	o	x	x	o	o
o	11	o	o	o	o	x	x
		9	10	11	12	14	15

Interrupt Channel Select (see also jumper J9)

o	12	o	x	o	x
o	13	o	o	x	x
		5.0	5.7	6.7	8.0

DMA Transfer Speed in MBytes/sec

J6 — BIOS/Auto Sense Control

Pin	1	2	3	4	5
	(X)	o	o	o	o

1 – BIOS Enable.
2,3,4 – Not used.
5 – Auto Sense disable.

J7 — Address Selection

- o 1 – Floppy Secondary Address select (AHA-1542B only)

(x)	2	o	x	o	x	o	x	AT I/O Port
o	3	o	o	x	x	o	o	Address
o	4	o	o	o	o	x	x	Select in
		334	330	234	230	134	130	Hexadecimal

o	5	o	x	o	x	BIOS Wait State
o	6	o	o	x	x	Select
		0	100	200	300	in nanoseconds

o	7	o	x	o	x	BIOS Base
o	8	o	o	x	x	Address Select
		DC000	CC000	D8000	C8000	in Hexadecimal

J8 — Floppy Disk Selection (AHA-1542B only)

Pin	1	2	3	4	5	6	7	8
	(X)	(X)	o	(X)	o	(X)	o	o

1 – Floppy enable
2,3 – DMA Request 2 or 3 select
4,5 – DMA ACK 2 or 3 select
6,7 – INT Request 6 or 10 select
8 – Dual Speed enable

J9 — DMA/Interrupt Selection

o	1	DMA Request 0 Select
(x)	2	DMA Request 5 Select
o	3	DMA Request 6 Select
o	4	DMA Request 7 Select
o	5	DMA ACK 0 Select
(x)	6	DMA ACK 5 Select
o	7	DMA ACK 6 Select
o	8	DMA ACK 7 Select
o	9	INT Request 9 Select
o	10	INT Request 10 Select
(x)	11	INT Request 11 Select
o	12	INT Request 12 Select
o	13	INT Request 14 Select
o	14	INT Request 15 Select