3 ½ 1.44MB Floppy Disk Drive

USER’S GUIDE

[Diagram of a 3 ½ inch floppy disk drive with labels for '3 1/2" Diskette Insertion Window', 'Activity Button', and 'Eject Button']

[Logo of HI-VAL]
Introduction
Thank you for purchasing the HI-VAL 1.44MB floppy disk drive. This product is intended for use in IBM® PC/XT/AT® compatible computers. This drive allows you to expand the usefulness of your present computer by providing a 3 ½” diskette compatibility.

This quality drive will provide trouble-free operation for your computer system if properly installed. Please read the entire USERS guide thoroughly before you begin the installation. Use a high density controller with optional BIOS to support 3 ½ high density drives, if this option is not available on your system BIOS. If you have questions or comments on the installation, please contact HI-VAL Technical Support at the telephone or Email address listed on the back page of this guide.

Tools You May Need
Depending on the design of your computer, you may need the following tools to complete the installation

- A Flat blade screwdriver
- A Phillips screwdriver
- Needle-nosed pliers

Handling the 1.44 Floppy Drive
Your 1.44 drive must be handled with care. Avoid applying undue force or abnormal strain to the spindle motor, stepping motor or printed circuit board. Avoid placing your fingers on the printed circuit board. It is best to hold the 1.44 drive by the diecast frame, as indicated by the arrows in Figure A. Never loosen the fixing screw of the printed circuit board, etc.

Preparing your Computer for the 1.44 Floppy Installation

1. Unplug your computer.
2. Detach all input and output devices from your computer, such as the printer, keyboard, monitor, etc.
3. Remove cover from your computer. Refer to your computer system manual for this procedure.
4. If you are replacing a current floppy, note the cables that are connected to your floppy disk drive, as these same cables will be required to install your MagiSpin 1.44. The floppy interface cable is a flat “ribbon type, and the power connector consists of the 4 separate wires attached to a single connector. See Figure B.
5. Your system may also have a single ground wire attached to the floppy disk drive. Carefully remove all cables from your floppy disk drive.
6. If you do not have a 3½” inch drive bay, then you will need to obtain a 5 ¼” adapter kit. This kit is available at most computer retail stores, or contact our Tech support for information on this kit.
7. Install the 1.44 drive into an available 3½” drive bay

CAUTION: TURN OFF YOUR COMPUTER AND UNPLUG IT FROM THE AC POWER SOURCE BEFORE Installing THE DRIVE FAILURE TO DO SO MAY RESULT IN ELECTRIC SHOCK OR DAMAGE TO YOUR COMPUTER.
Configuring for Drive A: or Drive B:

Use a standard IBM PC compatible floppy ribbon cable with a twist at the end connector (Figure C).

A) To configure your drive as the A: drive, connect the Floppy Drive to Connector A: on the flat "ribbon" cable. Connector A: is the end connector of the cable as shown in Figure C.

B) To configure your drive as the B: drive, connect the Floppy Drive to Connector B: on the flat "ribbon" cable. Connector B: is the end connector of the cable as shown in Figure C.

C) Connect the ground cable if your system requires it.

Notes on Installing your Floppy Drive:

Slide the drive into any available 3½" high bay. Make sure the mounting rails are aligned into the marking slots.

Locate your system's floppy drive ribbon cable. The cable may be keyed to assist with alignment. If yours is not keyed, it should be attached so that the color strip (red or blue) face the center of the drive/jumper block). This is Pin #1.

1. Re-attach power connector.
2. Replace the cover to your computer.
3. Re-attach all input and output devices.
4. Plug in the computer power cable.
# Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator light never turns on when executing READ or WRITE to floppy</td>
<td>Make sure that the interface cable and power cable is properly connected.</td>
</tr>
<tr>
<td>Indicator light comes on as soon as power is applied and stays on</td>
<td>The ribbon cable may be reversed. Check Pin #1 orientation.</td>
</tr>
<tr>
<td>Drive type mismatch during boot</td>
<td>Check CMOS setup for correct drive type. If the indicator light comes on, check for head recalibration to Track 00; if it doesn’t, drive may be malfunctioning.</td>
</tr>
<tr>
<td>Invalid media or Track 00 bad when formatting.</td>
<td>Attempting to format an HD diskette to 720K or DD diskette to 1.44MB. Drive is not properly set in CMOS setup, or controller card is not configured correctly. Check setup by referring to controller documentation.</td>
</tr>
<tr>
<td>The same directory is displayed for different diskettes.</td>
<td>Controller card is not receiving a disk change signal. Check the drive for the correct strap setting. Pin #34 on the ribbon cable may be broken, or the disk drive is malfunctioning.</td>
</tr>
<tr>
<td>Drive not ready error reading drive X.</td>
<td>No diskette is inserted in the drive or the motor is not spinning. Drive may need service.</td>
</tr>
<tr>
<td>General Failure reading Drive X.</td>
<td>Diskette not formatted. Drive out of alignment. DSDD disk formatted to 1.44MB HD disk formatted for 720K. Use correct disk.</td>
</tr>
<tr>
<td>Sector not found error</td>
<td>Head seek error or drive out of alignment.</td>
</tr>
</tbody>
</table>
Contacting IOM Holdings

If you experience problems with this HI-VAL product and you cannot find an answer in the previous troubleshooting sections, you can contact IOM Holdings Technical Support Staff.

Please have the following information ready when you call:

- The name of the product you are having problems with.
- The operating system and processor (CPU) you are using.
- A detailed description of the problem.

You can contact IOM Holdings Technical Support staff at the following numbers:

<table>
<thead>
<tr>
<th>Phone:</th>
<th>(714) 953 - 0589 (M-F 8:00AM - 5:00 PM PST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fax:</td>
<td>(714) 543 - 0802 (24 Hrs)</td>
</tr>
<tr>
<td>e-mail:</td>
<td>Go to <a href="http://www.hival.com/support/contact.htm">http://www.hival.com/support/contact.htm</a> and fill out the form.</td>
</tr>
<tr>
<td>Internet:</td>
<td><a href="http://www.hival.com">http://www.hival.com</a></td>
</tr>
</tbody>
</table>
| Mail:             | IOM Holdings Incorporated  
|                   | 1300 E. Wakeham Ave. 
|                   | Santa Ana, CA 92705 |