

SHARP  
**Floppy Disk**

Instruction Manual

**MZ-80FD(K)**



**SHARP CORPORATION**



**Note for Users in UK.**  
**IMPORTANT**

The wires in the mains lead of this apparatus are coloured in accordance with the following code:

<b>BLUE:</b>	<b>Neutral</b>
<b>BROWN:</b>	<b>Live</b>

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- \* The wire which is coloured **BLUE** must be connected to the terminal which is marked with the letter **N** or coloured **BLACK**.
- \* The wire which is coloured **BROWN** must be connected to the terminal which is marked with the letter **L** or coloured **RED**.

# INTRODUCTION

Thank you very much for purchasing SHARP Floppy Disk MZ-80FD (K).  
Please read this instruction manual carefully for the proper use of this machine.

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**Extension:**

The Floppy Disk may be extended up to 4 drives (2 units) using the daisy-chain connection. It is therefore important to change the connection of each unit if the extension is made. The extension should be done according to "Method of extension" described hereafter. A wrong connection destroys the drive signal circuit. When extending the disk, an exclusive extension unit MZ-80FDK must be used.

**Ambient temperature:**

The diskette used as a recording medium for the MZ-80FD is sensitive to temperature change: easily expanding or contracting; therefore, the ambient temperature should be kept below 25°C during continuous operation, and below 27°C during intermittent operation.

**Power supply:**

Supply voltage should be local voltage. Excessively high or low voltage could result in faults and thus insufficient performance.

Do not connect the system to the same power line as other apparatus (e.g. a large-scale motor) which cause noise. If the system malfunctions due to the noise from the power line, connect the system to the power line that has been cleared of mixed noise using a power line filter. Turn on or off the system power supply while the diskette is out of the drive, otherwise a malfunction occurs.

**Humidity and dust:**

The Floppy Disk, a precision machine, is easily damaged by excessively high humidity. Do not use this unit in a location that is high in humidity or is dusty. (Working ambient humidity range: 20% to 80%)

**Water and foreign matter:**

It is dangerous to use this unit with water or other liquid or metallic objects such as a needle, pin or the like remaining therein. Take care not to allow any extraneous matter to get into the unit. Especially if any liquid (including water) or powdery matter gets into the unit, be sure to contact the dealer from which you have purchased the unit.

The same caution is required for the diskette. Do not operate the Floppy Disk while smoking or drinking.

**Installing conditions and shock:**

The Floppy Disk consists of precision mechanism and electronic parts. Do not use it in a location that is subjected to too high or too low temperatures, radical temperature changes, much vibration or dust. Do not give any shock to the unit by violently putting or dropping object(s) on it. Keep this unit away from loudspeakers, televisions, tape recorders or other magnetism-generating apparatus, otherwise it may cause a malfunction, or data or text recorded on the diskette may be erased.

Only operate the unit on a level surface. Locate the signal cables (flat cable, etc.) as far as possible from other apparatus and power cords.

# Connection with interface unit

## 1. Connection with interface

Insert the interface card (option: MZ-80FI/O) into the Interface Unit (option: MZ-80I/O) with its parts-fitted side up — any of five card connectors in the interface can be used. Then connect the flat cable (option: MZ-80F15) with the interface card: pass one of the connectors of the flat cable into the interface unit at its rear part, and connect it to the connector on the interface card with their polarity marks aligned. A polarity key is attached to the connector, so take care not to connect the connector the wrong way, otherwise the polarity key is damaged. (See Figure 2.)

Then connect the flat cable to the input connector (printed with "IN") at the rear side of the Floppy Disk with the polarity aligned.

Last of all, connect the accessory braided wire between the MZ-80K and the FG terminal of the MZ-80FD. To connect to the MZ-80K, fasten the braided wire with the screw to the left threaded hole on the rear. Refer to Fig. 3.

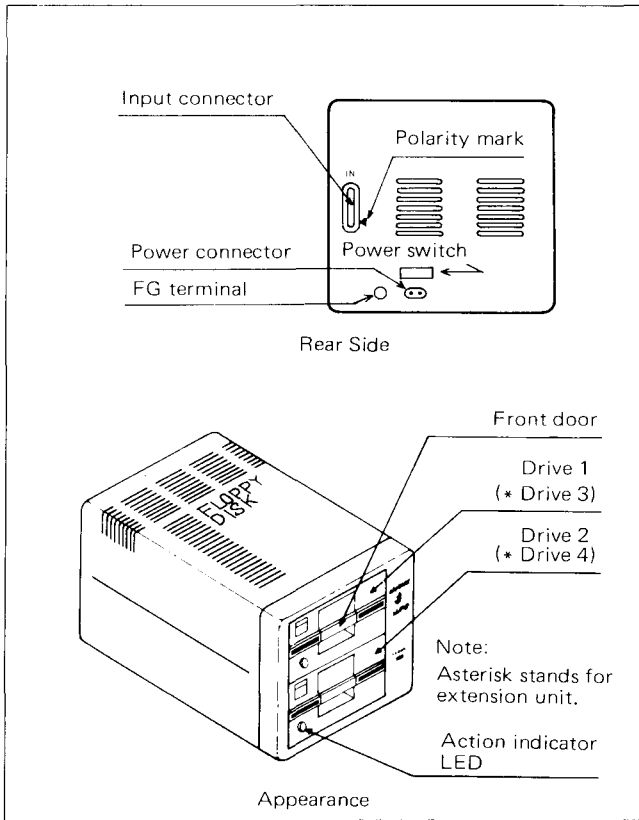


Fig. 1 Floppy Disk

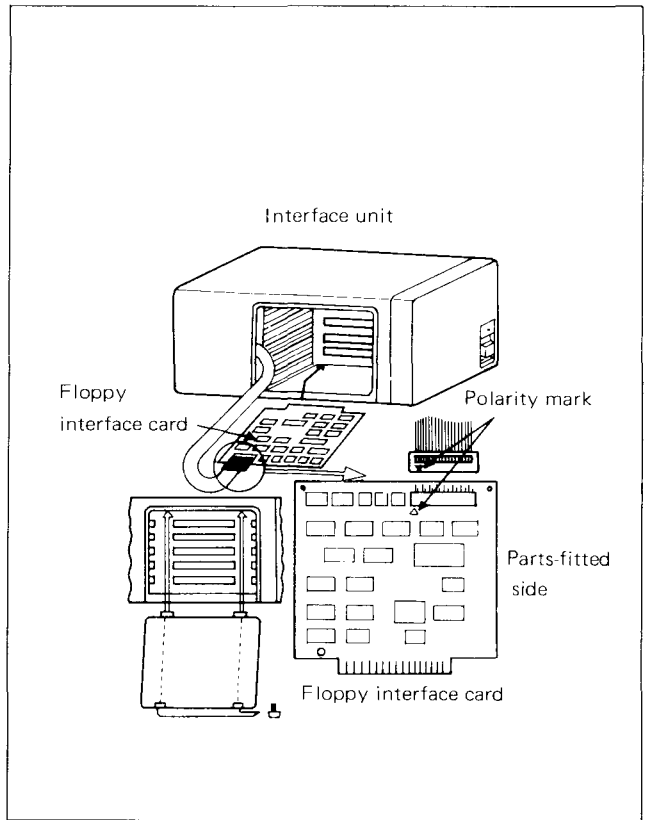


Fig. 2 Insertion of interface card

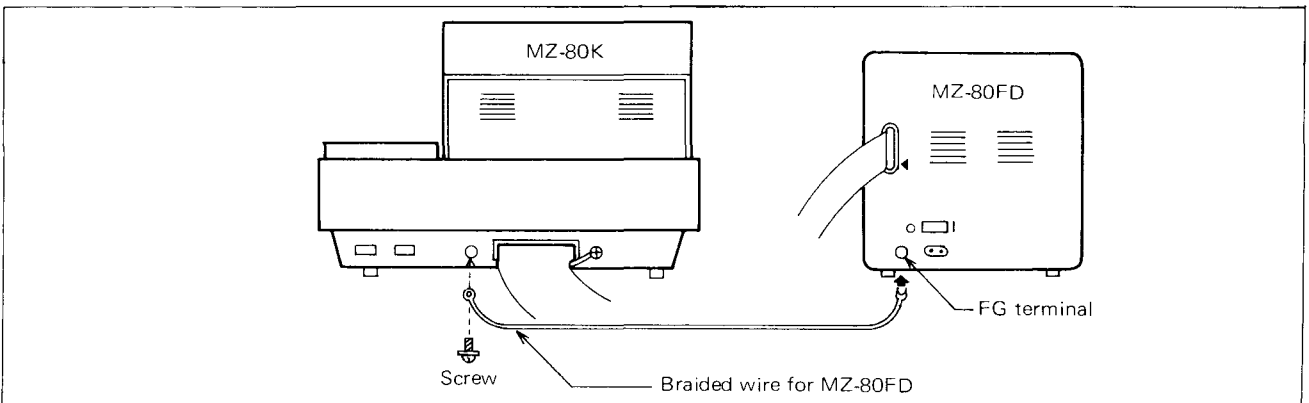


Fig. 3

## 2. Method of extension

It is possible with Disk BASIC to drive two Floppy Disk units (four drives). Use the extension unit MZ-80FDK (drives 3 & 4) when making the extension. (Please order the extension-use unit from the dealer specifying it as "an exclusive unit for extension".) The use of a unit other than the extension-use unit may result in damage to the signal circuit of the Floppy Disk.

Given below is the extension procedure. Carry out the task observing this procedure.

- a) Remove the flat cable from unit 1 (drives 1 & 2).
- b) Connect the flat cable removed in a) above to the input connector (IN) of unit 2 (drives 3 & 4) which is for extension use. (See Figure 4.)
- c) Connect the one connector of extension-use flat cable (MZ-80F05) to the output connector (OUT) of unit 2 [for extension use].
- d) Connect another connector of the said flat cable to the input connector (IN) of unit 1 to which the flat cable removed in a) has been connected.
- e) Connect the accessory braided wire for MZ-80FDK between the FG terminal of the MZ-80FD and one of the MZ-80FDK.
- f) That is all. Be sure to align the polarity marks correctly when connecting.

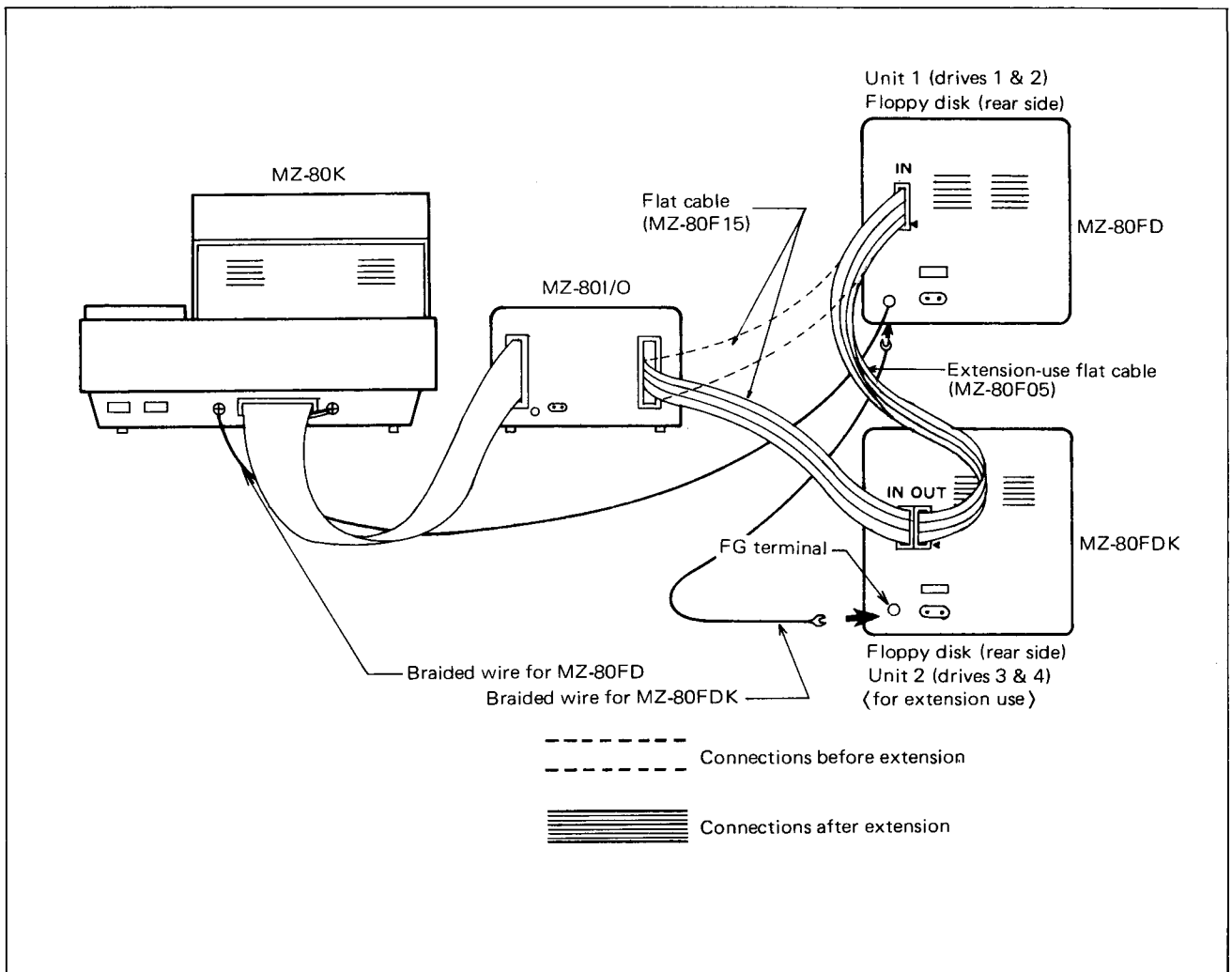


Fig. 4 How to Extend the Floppy Disk

## Operation

All the physical operations needed are to turn the power on or off, and to insert or remove the diskette: every other is carried out through the computer. For the Disk BASIC, refer to the Instruction Manual of MZ-80FMD (option).

### Insertion of diskette:

1. Take the diskette out of the envelope.
2. Open the front door of the Floppy Disk with your finger (See Figure 5).
3. Insert the diskette: put it with its label up into the drive and push it till it will go no more. For the inserting direction, see Figure 6.

### Removal of diskette:

1. Open the front door gently and take the diskette out.
2. Put the removed diskette into the envelope, and put it back in its case.

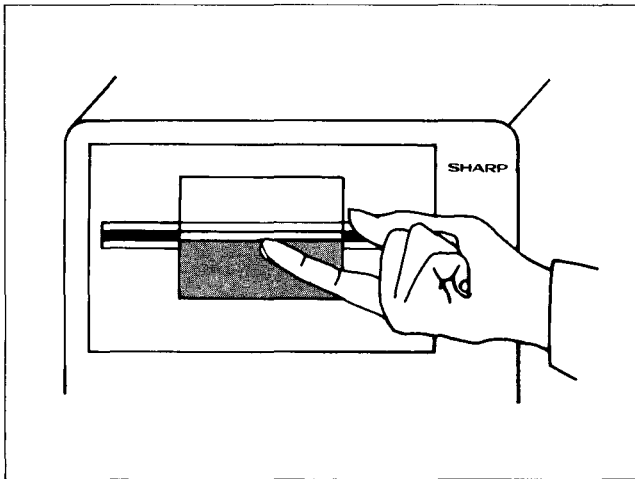


Fig. 5 Operation 1

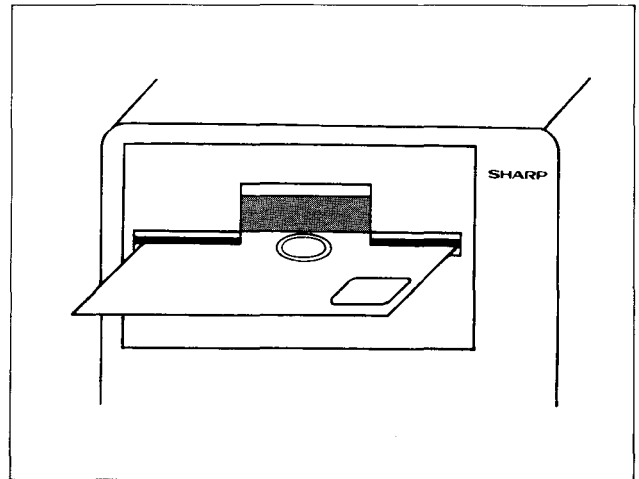


Fig. 6 Operation 2

## Operational precautions

1. Since an anti-crunch mechanism is used in the front door, the front door won't close unless the diskette is fully inserted. If not perfectly inserted, take the diskette out and insert it again properly.
2. The Floppy Disk is provided with write-protection (which prevents the machine from wrongly writing to it). When the write-protection notch of the diskette jacket is covered with the write-protection label, improper writing to it is prevented. In normal use, do not cover the write-protection notch with label or the like.

# Handling the diskette

## 1. As a recording medium:

As a recording medium for the Floppy Disk, a 5.25-inch diskette stored in an exclusive jacket is used. Use the SHARP option diskette (option: MZ-80FBD): the use of an inferior-quality diskette may damage the Floppy Disk unit.

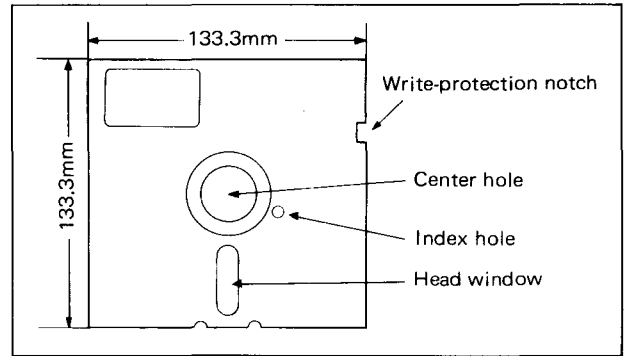
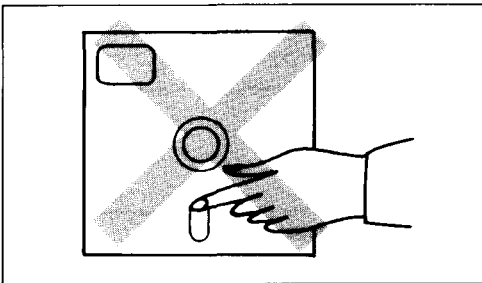
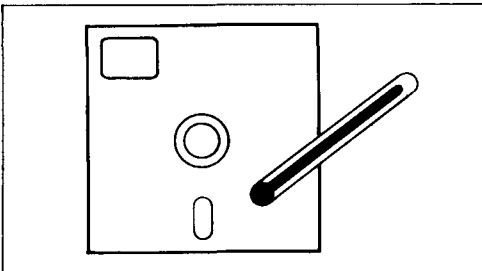


Fig. 7 5.25-inch Diskette

## 2. Notes on the use of diskette

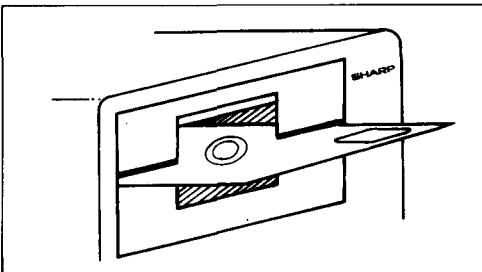


Do not touch the recording surface of the diskette with fingers as this can cause reading and writing errors.

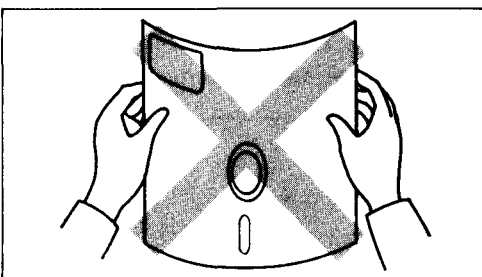


Storage temperature: 4°C to 50°C (ambient temperature)

Do not expose it to the direct sunlight, nor put it in a place where the temperature is over 50°C, otherwise the jacket is likely to warp and distort.

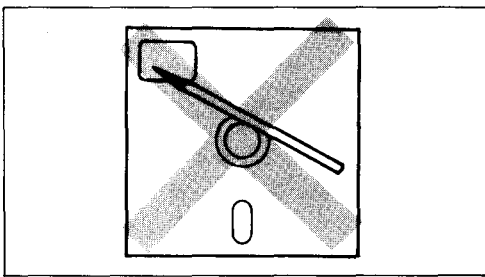


Insert the diskette straight into the unit till it stops. Then close the front door carefully. Rough handling can damage the diskette.

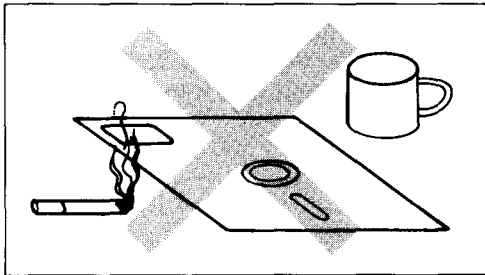


Do not bend or fold the diskette. A deformed diskette makes reading and writing impossible.



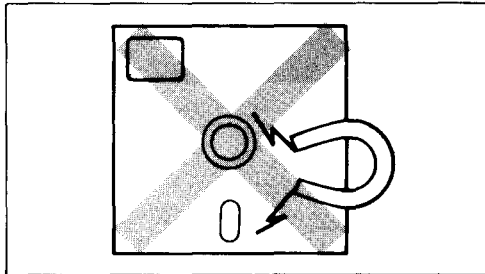


The index label should be filled in before it is attached to the jacket. If it is filled in after it has been attached to the jacket, use a soft-point pen. Do not use a ball-point pen, pencil.

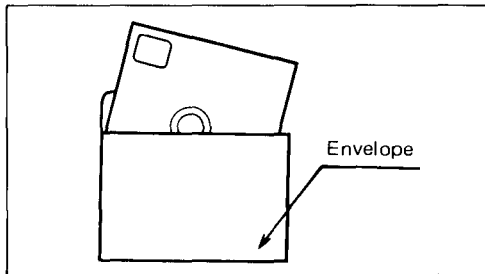


Do not handle the diskette or Floppy Disk while you smoke or drink. If the diskette is soiled, the data or programs stored on the diskette may be spoiled.

### 3. Notes on the storage of diskette:

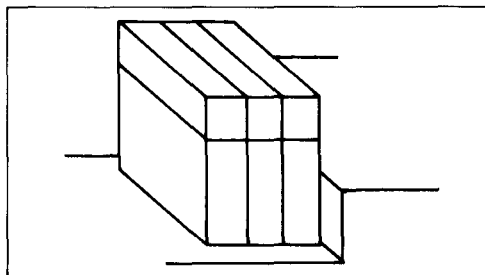


Never put a magnet near the diskette. A magnet ring or magnet necklace may also affect the stored data. Be sure not to use magnetic objects when the diskette is handled. Any apparatus that generates magnetism should be also kept from the diskette: for example, a monitor screen of a computer, cassette tape recorder, home television set, etc.

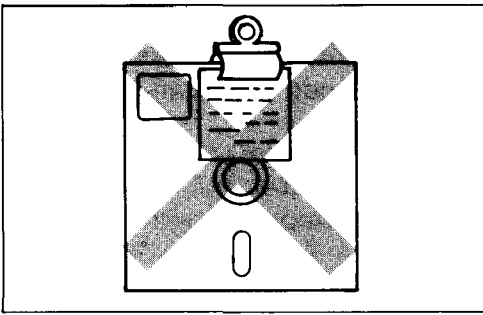


When not in use, be sure to keep the diskette in the envelope. Form a habit of putting the diskette into the envelope immediately after it is taken out of the drive. Such a habit will prevent nearly all the problems resulting from wrong diskette handling. The master diskette should be loaded on the Floppy Disk only when it is used; and when not in use, keep it in the envelope.

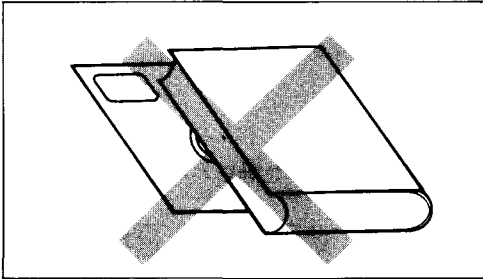
The envelope is made of special material which works against static electricity, humidity, etc. So, make sure again all the diskettes are kept in the envelopes.



For keeping, put the diskette-containing envelope in the container box, and put it up in an erect position. Do not keep it in an inclined position, or in a position that may make the diskette warp.



Do not use a paper holder or paper clip in a way as shown in the figure.



Do not put heavy object(s) on the diskette. Keep the diskette in its specified place whenever it is not in use.

## Specifications

Memory capacity	143K bytes/drive (286K bytes/unit)
No. of tracks	70
No. of sectors	16 (per track)
Working conditions	4 to 25°C
	28 to 80% (relative humidity)
Rated voltage	Local Voltage 50Hz
Power consumption	40W
Outer dimensions	205mm(W) x 320mm(D) x 200mm(H)
Weight	7.9kg
Accessories:	
Power cord	1 pc.
Braided wire	1 pc.
Instruction manual	1 copy
Option:	
Floppy interface card	MZ-80FI/O
Disk BASIC	MZ-80FMD
Flat cable for connection	MZ-80F15, MZ-80F05

Specifications subject to change without prior notice for improvement.

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