MZ DISK INTERFACE

MODEL **MZ-1E14**

INSTRUCTION MANUAL

INTRODUCTION

Thank you for buying the MZ-1E14 SHARP MZ Disk Interface.

The MZ disk interface is used together with the MZ-1F11 MZ disk drive, used with the SHARP personal computer. Before using the MZ disk interface, please read this manual carefully to assure correct operation. Refer to the "Disk BASIC Manual" or "MZ Disk BASIC Manual (5Z008)", if you have any questions.

The contents of this manual are subject to change without notice.

If the product is defective, please contact the store where you bought it.

SHARP is not responsible for damage incurred during, or as a result of, operation.

Caution

1. Do not use this unit where rapid increases or decreases in temperature occur or in a humid or dusty environment. This unit consists of precision parts, such as LSI circuits, that can be affected by the operating environment. Do not expose the unit to direct sunlight.
2. Do not bump or drop this unit.
3. Be careful not to touch the connector with your hand. Static electricity can destroy certain parts.
4. Special attention must be paid when handling disks. Refer to the MZ Disk Drive MZ-1F11 instruction manual and this manual for details.
5. We recommend that you make a copy of the original master disk and use the copy. Store the original master disk in a safe place. (Refer to the MZ disk BASIC manual included with this unit for the procedure for copying a disk.)

Disk protection

1. Follow the instructions on the protective envelope of the disk.
2. When disks are not in use, store them vertically in their envelopes in a disk storage box.
3. Do not place disks near magnetic materials. This may destroy programs and data on the disk.

CONTENTS

OVERVIEW

This interface connects an MZ-700 series personal computer and the MZ-1F11 disk drive. The interface reads the system software (BASIC (5Z-008) etc.) with built-in IPL ROM. (This takes about 8 seconds, not including AUTO RUN.)
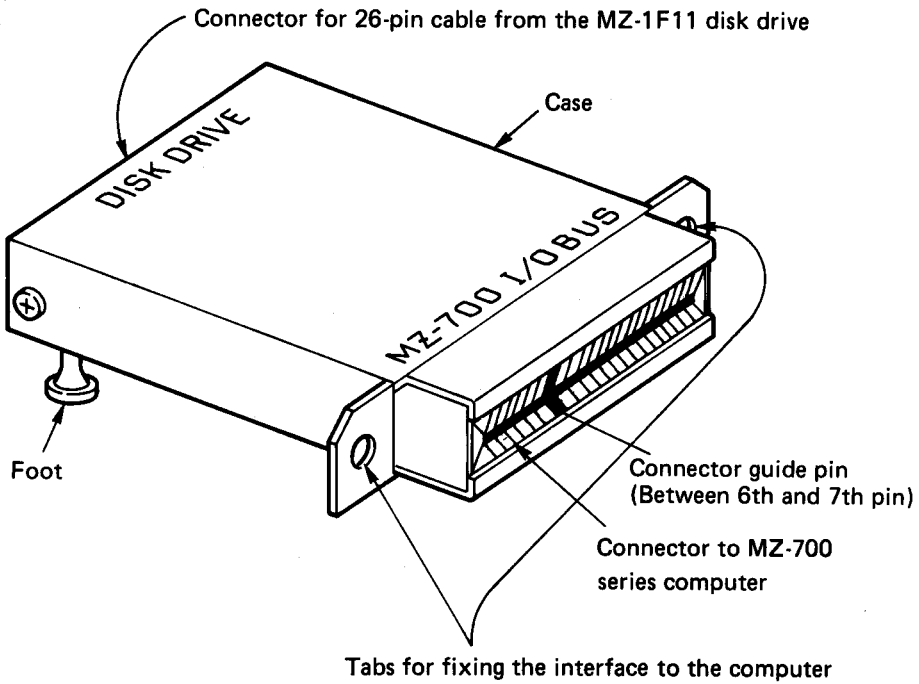Three types of files can be cataloged on a MZ disk:

1. BASIC text file (program)
2. Sequential data
3. Machine-language file (system software, etc.)

Up to 32 files can be cataloged on one side of a disk*. If only one program (file) is cataloged per side, the maximum storage capacity is 64K bytes. As the number of files increases, the storage capacity decreases. This is because a gap is required between files. Sequential data files are blocked and cataloged in units of 1K bytes; the maximum storage capacity of a disk side is about 40K bytes.

*The number of files equals the number of programs or group data entries.

PARTS OF THE INTERFACE

Connector for 26-pin cable from the MZ-1F11 disk drive

Case

DISK DRIVE

MZ-700 I/O BUS

Foot

Connector guide pin
(Between 6th and 7th pin)

Connector to MZ-700
series computer

Tabs for fixing the interface to the computer

To connect the MZ disk drive to an MZ-700 series computer, perform the
following.

1. Remove the data recorder, or the cover (for MZ-711 or MZ-710).

   1) Turn off the power switch of the computer and unplug the AC cord.
      Remove the two screws holding the data recorder from the left rear side of
      the computer. Lift the data recorder out of its mounting. (Figure 1)
   2) Remove the connector (CN1) between the data recorder and the MZ-700
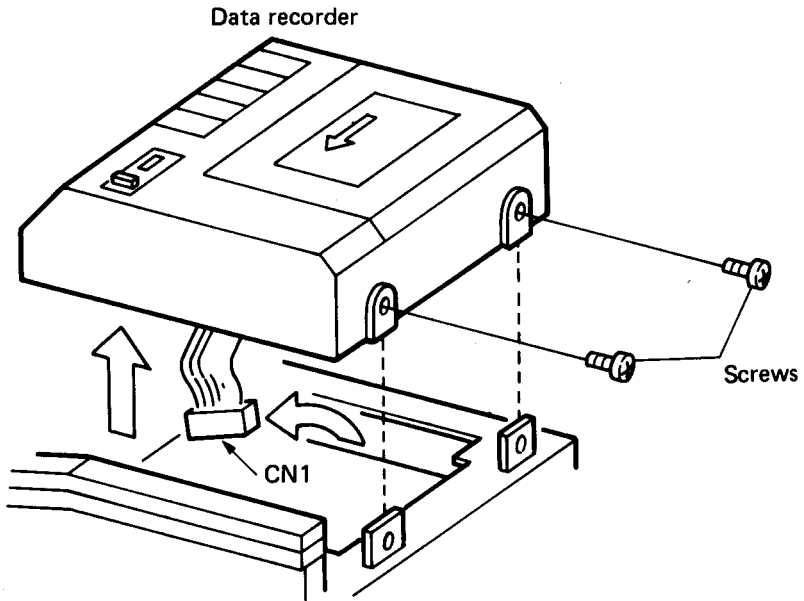   series computer. (Figure 1)

Data recorder

Screws

CN1

Figure 1

Note: When the data recorder is to be used, connect it to the MZ-1F11 con-
nector. (See Figure 4 for details.)

2. Install the MZ-1F11

1) Remove the bottom plate of the MZ-1F11 as follows:

   (1) Unscrew the screws holding the bottom plate at the rear side.

   (2) Remove the bottom plate in the direction indicated by the arrow.

MZ disk drive

Screws

Bottom plate

Front   Rear

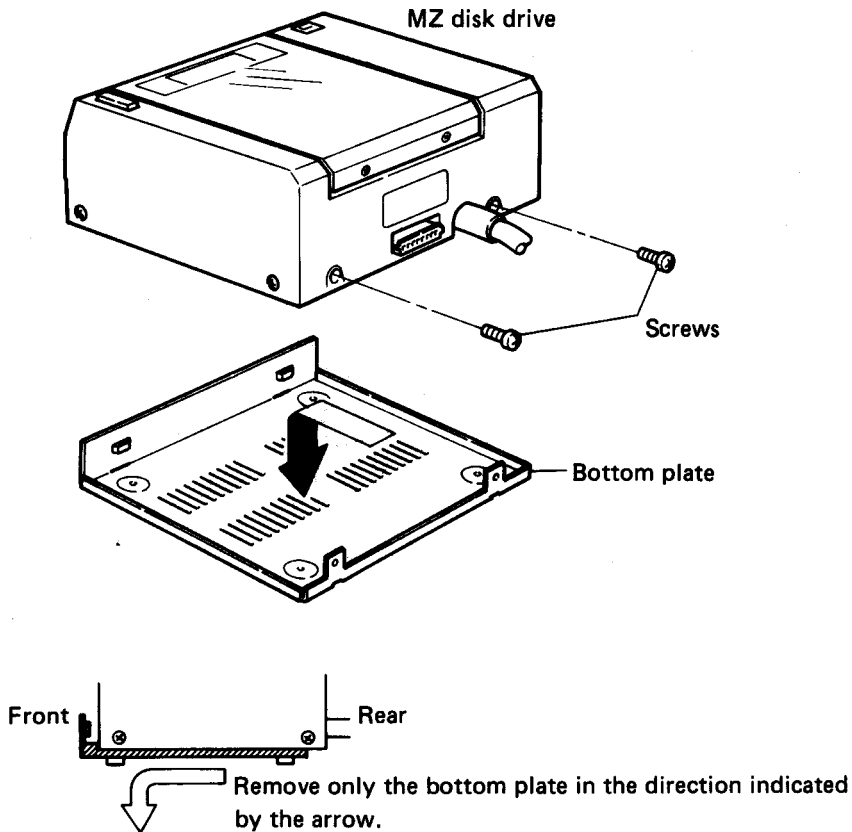Remove only the bottom plate in the direction indicated
by the arrow.

Figure 2

2) Connect CN2 (from the bottom of MZ-1F11) to the connector of the computer main unit that was originally connected to the data recorder. (Figure 3)

3) Mount the MZ-1F11 where the data recorder was originally, using the screws that held the data recorder in place. (Figure 3)
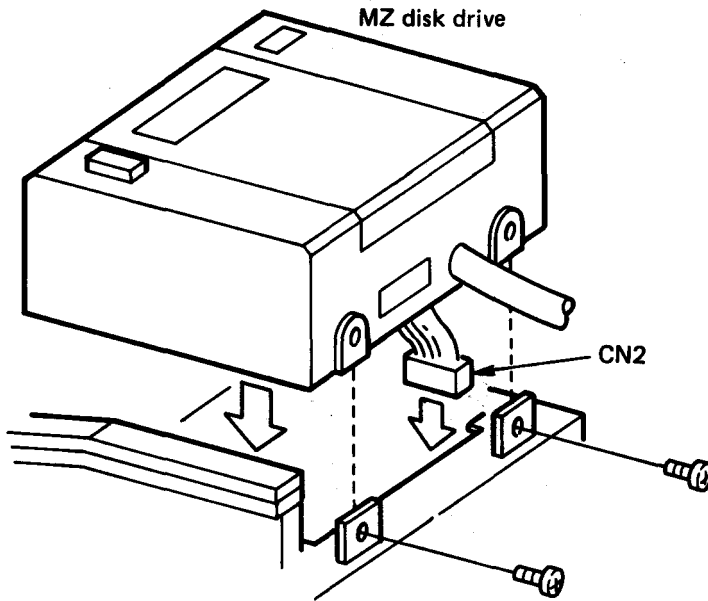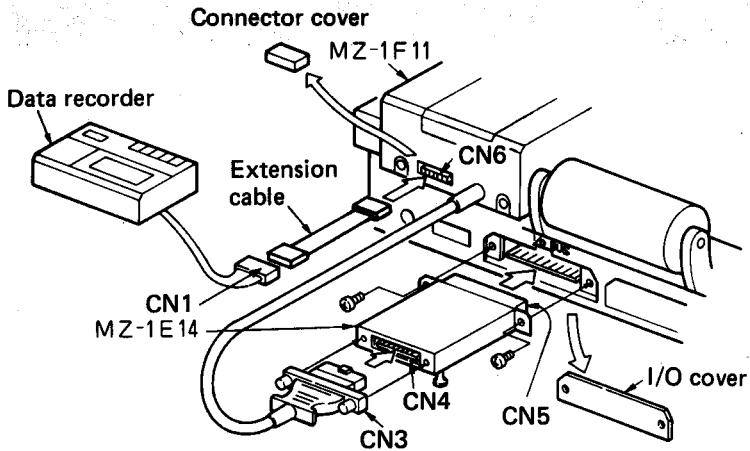

Figure 3

Figure 4

3. Connecting the MZ-1E14 and the MZ-1F11 (Figure 4)

1) Remove the cover for the external output terminal (I/O BUS) at the back of the computer main unit by unscrewing the two screws for mounting the MZ-1F11.

   (These two screws will be used to fix this unit to the computer.)

2) Plug CN5 of the MZ-1E14 into the external output terminal at the back of the computer and secure it with the two screws you just removed.

3) Insert CN3 at the rear of the MZ-1F11 into CN4 of the MZ-1E14 and secure the connection using the screws originally securing CN3.

This completes connection of the MZ-1F11, the MZ-1E14 and the computer.
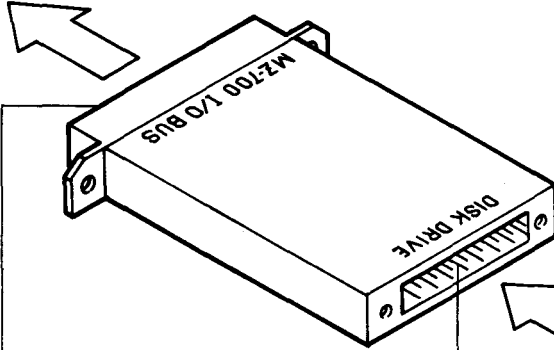
4. Connecting the Data Recorder (Figure 4)

The removed data recorder can be connected as an external unit to the computer as follows:

1) Remove the cover for CN6 from the rear of the MZ-1F11, then insert CN1 from the bottom of the data recorder into CN6.

2) Use the extension cable to be connected to CN1 and CN6, if you prefer more distance between the data recorder and the computer main unit.

This step completes the procedure. Switch on the power, and check operation.

To computer

From MZ-1F11

• - used

COMPONENT SIDE		PATTERN SIDE	
49	A15	50	NMI
47	A14	48	EX INT
45	A13	46	GND
43	A12	44	MERQ
41	A11	42	GND
39	A10	40	IORQ
37	A9	38	GND
35	A8	36	RD
33	A7	34	GND
31	A6	32	WR
29	A5	30	EXWAIT
27	A4	28	M4
25	A3	26	GND
23	A2	24	HALT
21	A1	22	EXRESET
19	A0	20	RESET
17	BUS φ	18	GND
15	D7	16	GND
13	D6	14	GND
11	D5	12	GND
9	D4	10	GND
7	D3	8	GND
5	D2	6	GND
3	D1	4	GND
1	D0	2	GND

COMPONENT SIDE		PATTERN SIDE	
25	+5V	26	GND
23	S1	24	CE
21	RESET	22	SO
19	φ	20	RD
17	M1	18	IORQ
15	D7	16	GND
13	D6	14	GND
11	D5	12	GND
9	D4	10	GND
7	D3	8	GND
5	D2	6	GND
3	D1	4	GND
1	D0	2	GND

SPECIFICATIONS

Model : MZ-1E14

Operating power : +5 VDC ± 5%

Operating temperature : 10°C — 35°C

Operating humidity : 20% — 80% (no condensation)

ROM : IPL ROM (4K bytes), 1 chip

IC : 9 chips

Dimensions : 77 mm (width) x 125 mm (depth) x 16 mm (height)

Weight : 220 g

Accessories : MZ-700 BASIC (5Z008)/utilities master disk 1

MZ blank disk 1

Extension cable for Data Recorder 1

MZ-700 Disk BASIC Manual, MZ-700 MZ disk

BASIC Manual (5Z008), instruction manual

* * * * NOTES * * * *

SHARP CORPORATION

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