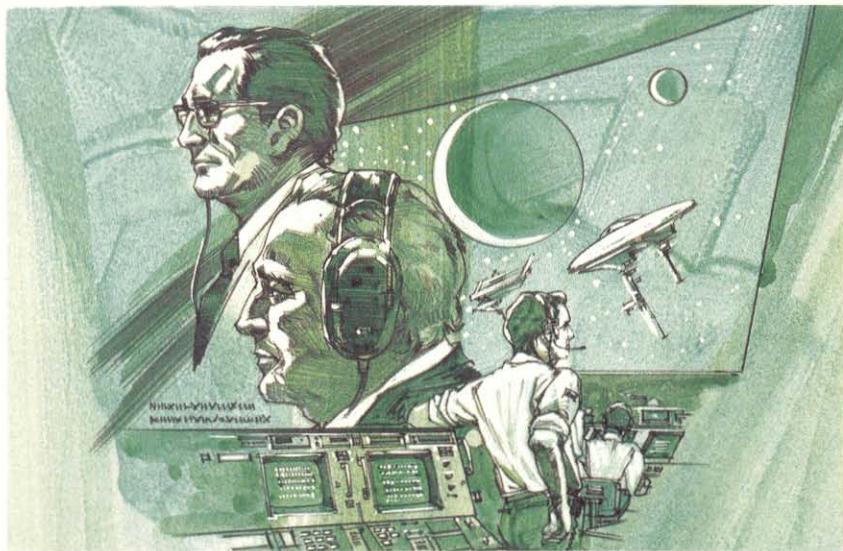


Personal Computer  
**117-700**

**MZ DISK BASIC MANUAL**  
(5Z008)



**SHARP**®

# **MZ DISK BASIC MANUAL**

**(5Z008)**

## **Important Notice**

This manual describes the 5Z008 BASIC interpreter, which is provided with the MZ-700 series personal computer. The MZ disk drive and MZ disk described in this manual refer to the 5Z008 disk drive and the 2.8-inch disk it uses.

- (1) The BASIC interpreter provides all commands used in MZ-700 BASIC. In other words, 5Z008 BASIC is an extension of MZ-700 BASIC.
- (2) Under a multi-purpose MZ-700 personal computer, the system software is completely supported by files in software packs (cassette tape, MZ disk, etc.). System software and the contents of this manual are subject to change, so the user should check file version numbers.
- (3) We assure this software and manual to be free from defects in materials and construction. If the product is defective, please contact the store where you bought it.  
SHARP is not responsible for damage incurred during, or as result of, operation.
- (4) All System software for the MZ-700 series personal computer is original software of the SHARP Corporation, and is covered by copyright: Copying or other reproduction of this software or this manual, in whole or in part, is expressly forbidden without written permission from the SHARP Corporation.

## **Introduction**

**Thank you for buying SHARP MZ Disk BASIC. This software is provided on a MZ disk, and careful attention must be given to the proper use and handling of the MZ disk and the MZ disk drive.**

**Before doing anything else, make a copy of the supplied BASIC (5Z008) disk. Store the original master MZ disk in a safe place and use the work (copy) MZ disk. When you are using the original master MZ disk if an accident occurs, you will be unable to use your computer until you can get a replacement MZ disk from your distributor.**

**Before using MZ DISK BASIC (5Z008), please read this manual carefully all the way through to assure correct operation. It is recommended that you keep this manual and "MZ-700 DISK BASIC MANUAL" for reference whenever you encounter problems related to operation of your computer.**

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## 1. Differences Between MZ-700 BASIC and MZ DISK BASIC (5Z008)

The following commands are extended or new in BASIC 5Z008 and are different from their counterparts in MZ-700 BASIC. Please refer to the "Disk BASIC Manual" for their use.

<Extension>	Reference page in the "Disk BASIC Manual"	<Addition>	Reference page in the "Disk BASIC Manual"
RUN .....	36	DIR .....	35
LOAD .....	37	CHAIN .....	44
SAVE .....	38	KILL # .....	54
MERGE .....	43	DEFAULT .....	55
POPEN# .....	46	EOF (#) .....	56
INPUT # .....	47	LABEL .....	57
WOPEN# .....	48	WAIT .....	58
PRINT # .....	49	SEARCH .....	59
CLOSE # .....	53	XOR .....	65
USR .....	62	NOT .....	65
INP @ .....	63	OR .....	65
OUT @ .....	64	AND .....	65

When using the MZ disk, specify "QD:" as the <device name>.

### Example:

Program file "PROG" can be loaded and executed as follows. (See page 36 of the Disk BASIC Manual.)

- With Disk BASIC, specify "FD1:" as the <device name> to load and execute the file from drive 1.

```
RUN " FD1 : PROG "
```

- With 5Z008 BASIC, specify "QD:" as the <device name> to load and execute the file.

```
RUN " QD : PROG "
```

**BASIC (5Z008)** controls MZ disk drives, cassette recorders, display devices, and printers. The following commands are explained in the "Disk BASIC Manual" but are not used under BASIC (5Z008).

DELETE • INPUT # ( ) • PRINT # ( ) • XOPEN # • LOCK • UNLOCK • RENAME •  
SWAP • INIT

Only INIT " QD : " can be executed (this command formats a MZ disk).

Format    I N I T " Q D : "

..... Formats a MZ disk. When INIT"QD:" is entered, BASIC displays "OK? (Y/N)". If you are ready to format the MZ disk immediately, press  Y . Otherwise, press  N .

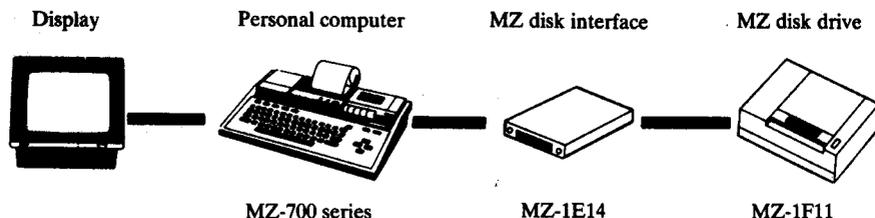
I N I T " Q D : Y "

..... Starts MZ disk formatting without asking.

**Error Message List:**

Refer to page 104 in the "MZ-700 DISK BASIC MANUAL".

## ■ The system configuration of the MZ-700 with MZ disk drive



## ■ First-time operation

For first-time use, you must run the Initial Program Loader (IPL) to perform initial loading. But first connect the MZ disk drive to the computer and insert the BASIC (5Z008) master MZ disk. Close the disk holder of the MZ disk drive. Turn on the computer—BASIC (5Z008) will be loaded automatically and the following will be displayed:

```
BASIC interpreter      MZ-5Z008 VX.XX  
Copyright (C) 1984 by SHARP CORP.
```

```
XXXXXX bytes free
```

```
Ready.
```



## 2. Copy your master MZ disk with the QDCOPY utility.

The QDCOPY utility, which resides on the master MZ disk, copies the contents of one MZ disk to another. Next we will copy the master MZ disk with this utility to make a work MZ disk that you will use. If the copy is damaged or wears out, you can make another copy from the original master MZ disk. Store the master MZ disk in a safe place. Let's run the QDCOPY utility to copy the packed BASIC (5Z008) disk. Enter this —

```
RUN " QDCOPY " 
```

The following screen will be displayed:

QD	Format/Copy	Utility	VX.XX
[ Function ]			
F . . . Format disk			
C . . . Copy disk			
! . . . Boot			
[ Command area ]			
* 			

1) Format the destination disk.

When **F** is pressed, the command area displays the following:

```
[ Command area ]
* F
  Set format disk, ↓ any key █
```

Remove the master MZ disk and insert a new MZ disk, then press any key. The new MZ disk will be formatted then "Ok!" is displayed. Now this is displayed:

```
[ Command area ]
* F
  Set format disk, ↓ any key
  Ok!
* █
```

2) Then press **C** to prepare to read the MZ disk contents into memory. A new screen will be displayed.

```
[ Command area ]
* C
  Insert source disk, ↓ any key █
```

- 3) Put the source MZ disk in the MZ disk drive and press any key. The information will be stored in memory from the source MZ disk, which is to be written to the new MZ disk. Next, the following screen is displayed:

```
[ Command area ]  
  
* C  
Insert source disk, ↓ any key  
Insert destination, ↓ any key █
```

- 4) Insert the destination disk in the MZ disk drive, and then press any key. The information in memory is written to this MZ disk. When it is finished, "Ok!" is displayed. If the disk contents cannot be copied in one operation because the amount of information or the number of files is too great, repeat step 3) and 4) until "Ok!" is displayed.
- 5) After copying is terminated, the screen displays the following:

```
[ Command area ]  
  
* C  
Insert source disk, ↓ any key  
Insert destination, ↓ any key  
Ok!  
* █
```

- 6) This screen indicates that copying is done and the computer is waiting for the next BASIC command. Enter **[!]** (press **[SHIFT]** + **[1]**) to return to the initial screen of the ROM monitor or to read the first OBJ file found.

### 3. DELETE utility

The DELETE utility removes files that are no longer necessary from the MZ disk to help use MZ disk space more effectively. When one or more files cataloged on a MZ disk become unnecessary, store only the files you need to save in memory. After MZ disk initialization, write the memory contents back to the MZ disk. All unnecessary (unstored) files are deleted.

To run this utility, enter the following:

```
RUN "DELETE" 
```

The following screen will be displayed:

```
[ QD File Delete Utility VX.XX ]

      Set Source Disk
      Push Space Key

                                F 5 : Boot
```

- 1) Insert the MZ disk with the files to be deleted into the MZ disk drive and press the space bar. This causes the screen to display the directory of the inserted MZ disk (see the following example).

[ QD File Delete Utility VX.XX ]					
No.	Atr	File Name	Size	Delete	
1	OBJ	ASEM	3 4 6 5 1	No	
2	BTX	TEST	2 9 9	No	
3	OBJ	DATA	7 8 4 0	No	
4	BTX	SAMPLE	1 0 3 4 2	No	
5	OBJ	DATA 2	1 0 6 4	No	

F1:Run	F4:Again	All size	54196
	F5:Boot	Max size	57088

- 2) When the directory is displayed, move the cursor ( **█** ) to a file to be deleted using the **↑** and **↓** keys, then press **Y**. Pressing the **Y** key changes "No" to "Yes". Place "Yes" in the delete column for each file to be deleted. Notice how the value in the "All size" field at the bottom right decreases each time the **Y** key is pressed. If you change your mind, move the cursor to the file again then press **N** to change "Yes" to "No".

Let's delete the "DATA" and "DATA2" files on the previous screen. First move the cursor to DATA, press **Y**, move to DATA2, and press **Y** again. Now the screen looks like this:

[ QD File Delete Utility VX.XX ]					
No.	Atr	File Name	Size	Delete	
1	OBJ	ASEM	3 4 6 5 1	No	
2	BTX	TEST	2 9 9	No	
3	OBJ	DATA	7 8 4 0	Yes	
4	BTX	SAMPLE	1 0 3 4 2	No	
5	OBJ	DATA 2	1 0 6 4	Yes	
F1:Run		F4:Again	All size	4 5 2 9 2	
		F5:Boot	Max size	5 7 0 8 8	

- 3) Files have not actually been deleted yet. Now we press the **F1** key to store "No deletion" file into memory. The bottom right of the screen displays the following message:

File is loading !

- (If "all size" is greater than "maximum size," a memory overflow error will occur.)  
After reading, the bottom right of the screen displays the following message:

Loading ok !  
Set destination disk

- 4) Insert a destination MZ disk in the MZ disk drive if the memory contents are to be written to another MZ disk. Now press **F1** to write all data in memory to the MZ disk. The following message is displayed.

File is saving !

- After writing, the bottom right of the screen displays the following message:

End of job

- 5) The messages displayed at the bottom left of the screen are explained as follows.
- F1 : Run.....** Executes the specified job (Deletes the specified files).
  - F2 : Cont .....** If execution was interrupted (because of an error for example), return the system to the state immediately before the interruption.
  - F4 : Again.....** Returns to the initial screen (initial state).
  - F5 : Boot .....** Returns to the initial screen of the ROM monitor, or reads the first OBJ file found.

Note: Use destination disks when deleting some of files on important source disks. If the **F4** or **F5** key is pressed accidentally if an error occurs while the file contents are being saved on destination MZ disk, the contents stored in memory are deleted. In this case, insert another formatted MZ disk and repeat the procedure until the "End of job" message is displayed.

## 4. Monitor Commands

This chapter explains only the additional monitor commands that are not supported by the MZ-700 ROM monitor. All MZ-700 ROM monitor commands can be used.

### L(QL) command

**Format**            L  
                      QL

**Explanation**    The L and QL commands read programs written in machine language. Enter L to read program from cassette tape, QL to read a program from MZ disk. When "PLAY" is displayed for L, press the PLAY button of the cassette recorder. When the inquiry "FILENAME?" is displayed for QL, enter the name of the file to be read. If no name is entered, the first file on the MZ disk will be read.

**Example**            \*QL   
                      FILENAME? MFILE

### QD command

**Format**            QD

**Explanation**    The QD command displays the directory of all files cataloged on the MZ disk. Use this command to check the names and types of files on a MZ disk.

**Example**            \*QD   
                      OBJ "BASIC"  
                      BTX "PROGRAM"  
                      BSD "DATA"  
                      OBJ "MFILE"

**• Supplements****TRANS utility:**

Refer to page 74 in the "MZ-700 Disk BASIC Manual" for information on this utility. Note that the "QD:" has been added as a <device name>.

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