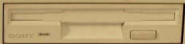
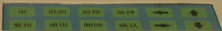


SAVOLDI S.p.A. - Via S. Maria 10 - 20122 Milano - Italy  
Tel. 02 57491 - Telex 32032 SAVOLDI I - Fax 02 57491111



## I Introduction

### 1.1 Features of the disk unit

The computerized disk unit of YD-II model is a new product produced on the basis of the original disk unit according to the requirements of users . It has the following features :

**Easy to carry:** The disk unit takes one-body structure with small volume, light weight, so it is easy thing to deliver or carry .

**Durable to use:** The disk unit takes the dustproof and dampproof thin-film keyboard, a LCD display with backlight adjustment, unique power supply, high-quality diskette driver and iron outer shell. All of these features make it very durable to use.

**Multiple functions:** Besides two necessary basic input and output functions, the disk unit has two assistant functions and one function for controlling the patterns and one self-detect function.

**Simple to operate:** The disk unit is operated under menus, so it is very easy to learn. As soon as you finished reading the manual, you can operate it very simply..

### 1.2 DU and its accessories

The disk unit contains the following components:

One YD- II DU

One power cable

One machine cable

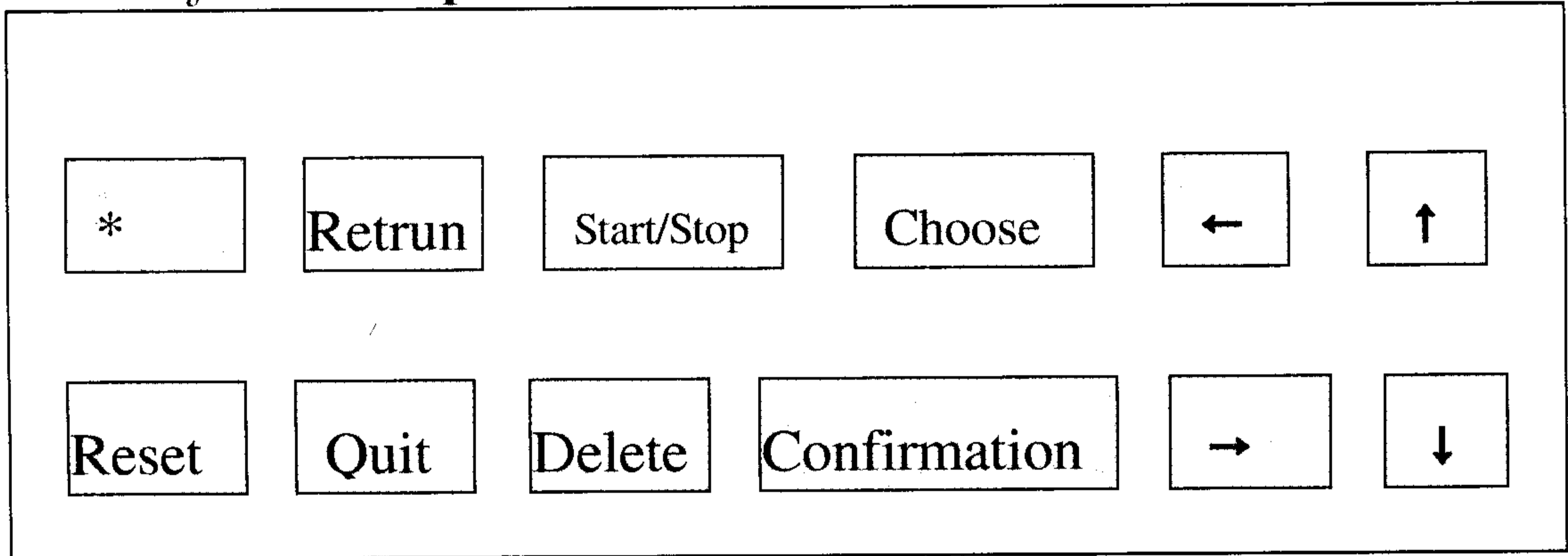
One 3.5 inch diskette

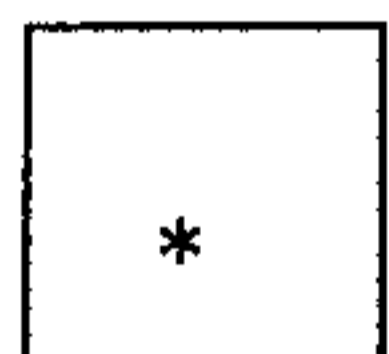

One manual

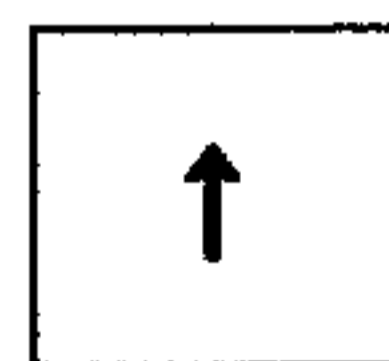
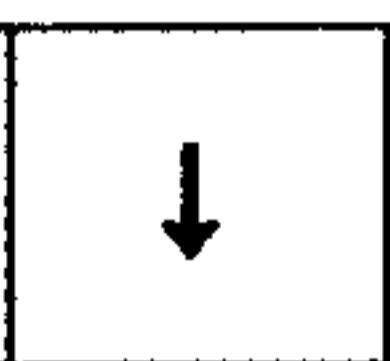
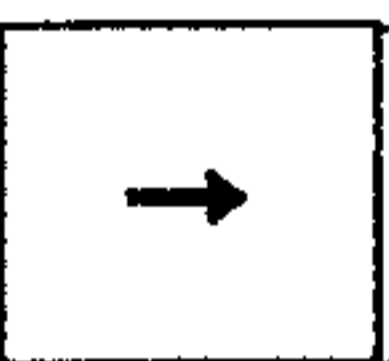

## II Operating specification

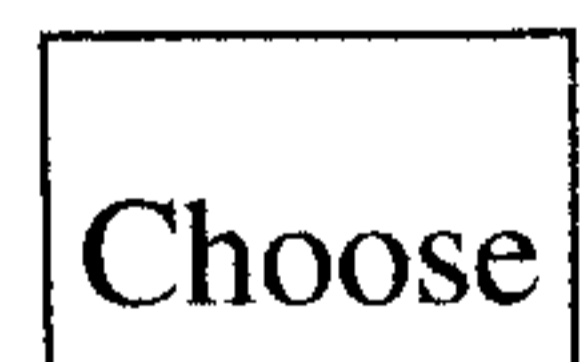
### 2.1 Before operating


#### 2.1.1 Key function specification .



  ( Start/Stop ): The two keys are not used yet.

    :Up/Down/Left/Left/Right Key.

 (Choose): Used only when inputting a pattern. When the cursor points to the library area , press the key , the character referred will be copied into the pattern name area .

 (Delete): Used only when inputting a pattern. If the input pattern name is wrong , move the cursor to the character in the wrong pattern

area or behind the character (when the last character is wrong) . Then the character pointed by the cursor or proceeded the cursor will be deleted by pressing the key .

**Confirmation**

(Confirmation): Confirm the function that the cursor pointed.

**Return**

(Return): Press the key only if you want to return to The upper menu.

**Quit**

(Quit): Press the key only if you want to return directly to the function menu from the present menu .

**Reset**

(Reset): When the information on the screen is not contained in the manual , press the key .

## 2.1.2 LCD menus specification

**2.1.2.1 If you turn on the power supply or press the reset key , the function menu will show as the following :**

Information displayed on the LCD	Function explanation
1 OUTPUT FILE	To output the pattern to a embroidery machine
2 INPUT FILE	To input a pattern from a embroidery machine
3 FILE LNFORMATION	To consult a pattern information
4 DISK SPACE	To check the disk space
5 DELETE	To delete a pattern
6 COPY	To copy a pattern
7 FORMAT	To format a diskette
8 TEST	To self-test the DU



9 DISKTYPE

Extended function

**2.1.2.2 Setup menus after the function menu**

**A Setup menu of the types of embroidery machines**

Information displayed on the LCD	Setup explanation
----------------------------------	-------------------

- |   |         |   |
|---|---------|---|
| 1 | GUOCAN  | To connect a home-made embroidery machine |
| 2 | BARUDAN | To connect a BARUDAN embroidery machine   |
| 3 | TAJLMA  | To connect a TAJIMA embroidery machine    |

**B Setup menu of floppy disc**

Information displayed on the LCD	Setup explanation
----------------------------------	-------------------

- |   |            |                                   |
|---|------------|-----------------------------------|
| 1 | 1.44MB(HD) | To choose a high-density diskette |
| 2 | 720KB(LD)  | To choose a Low-density diskette  |
| 3 | FDR        | To choose a BARUDAN FDR diskette  |

**C Setup menu of the pattern formats**

Information displayed on the LCD	Setup explanation
----------------------------------	-------------------

- |   |     |                                     |
|---|-----|-------------------------------------|
| 1 | DSB | To choose the BARUDAN binary system |
| 2 | DST | To choose the TAJIMA ternary system |
| 3 | FDR | To choose the BARUDAN format        |
| 4 | ??? | To choose any format                |
| 5 | WTN | To choose WUTAN 00 format           |
| 6 | WTM | To choose WUTAN 80 format           |

**2.1.3 Functions specification**

The DU is basically configured to connect any home-made embroidery machine and can read high-density or low-density pattern diskettes of



DST format or DSB format. If you want to connect a TJIMA or DARUDAN embroidery machine to read the patterns of WTN or WTM or FDR format , tell us your special requirement .

## **2.2 Start up the DU**

### **2.2.1 Connect the machine :**

First to connect the power socket at the rear of the DU with the 220V power supply through the power cable , then connect another socket at the rear of the DU with the corresponding socket on the embroidery by way of cable 25D .

### **2.2.2 Start up the DU :**

Turn on the power switch behind the DU, the character '8' will first display on the LCD , then it will get into the function menu as shown in Fig.1.

## **2.3 Input/Output functions**

### **2.3.1 Output a pattern to a embroidery machine**

#### **2.3.1.1 To choose the needed function :**

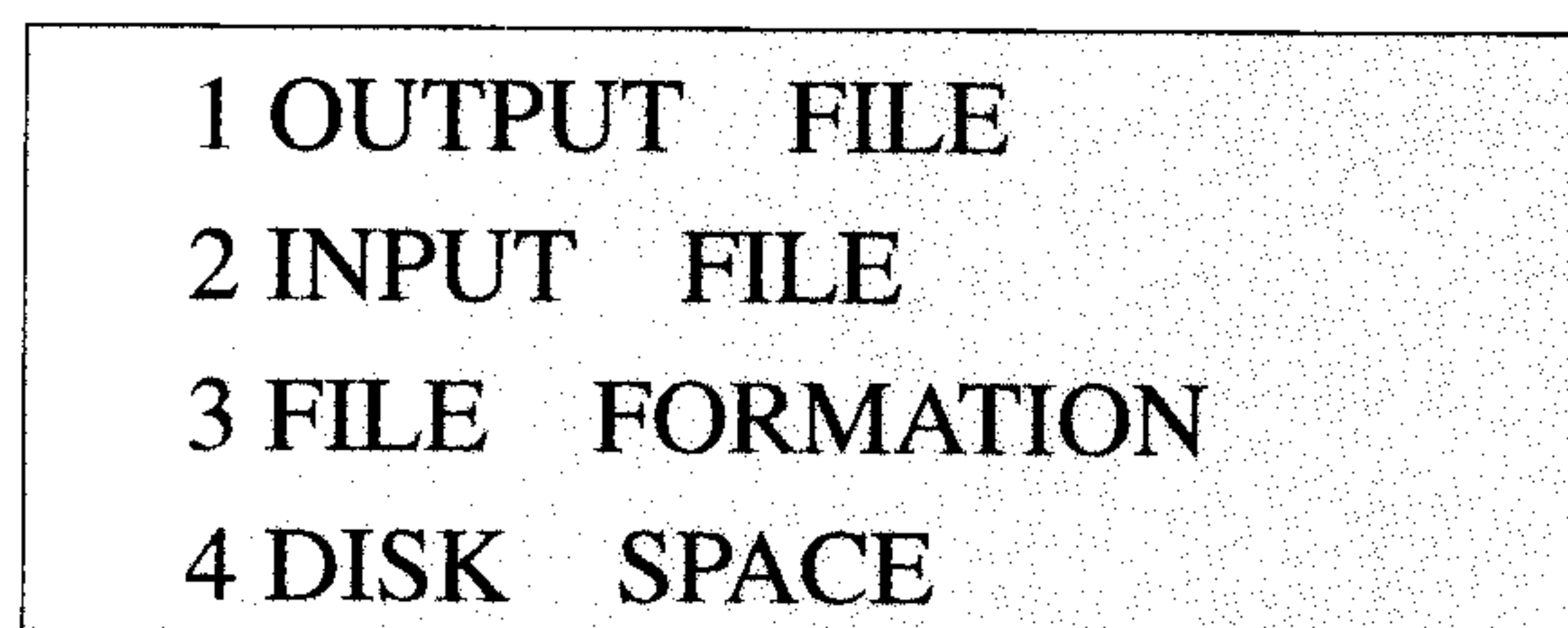


Fig.1

In the function menu, move the cursor to '1', then press 'Confirmation' key, then you will get into the setup menu of the types of embroidery machines function is active.(shown in Fig.2)

### 2.3.1.2 To setup the type of a embroidery machine

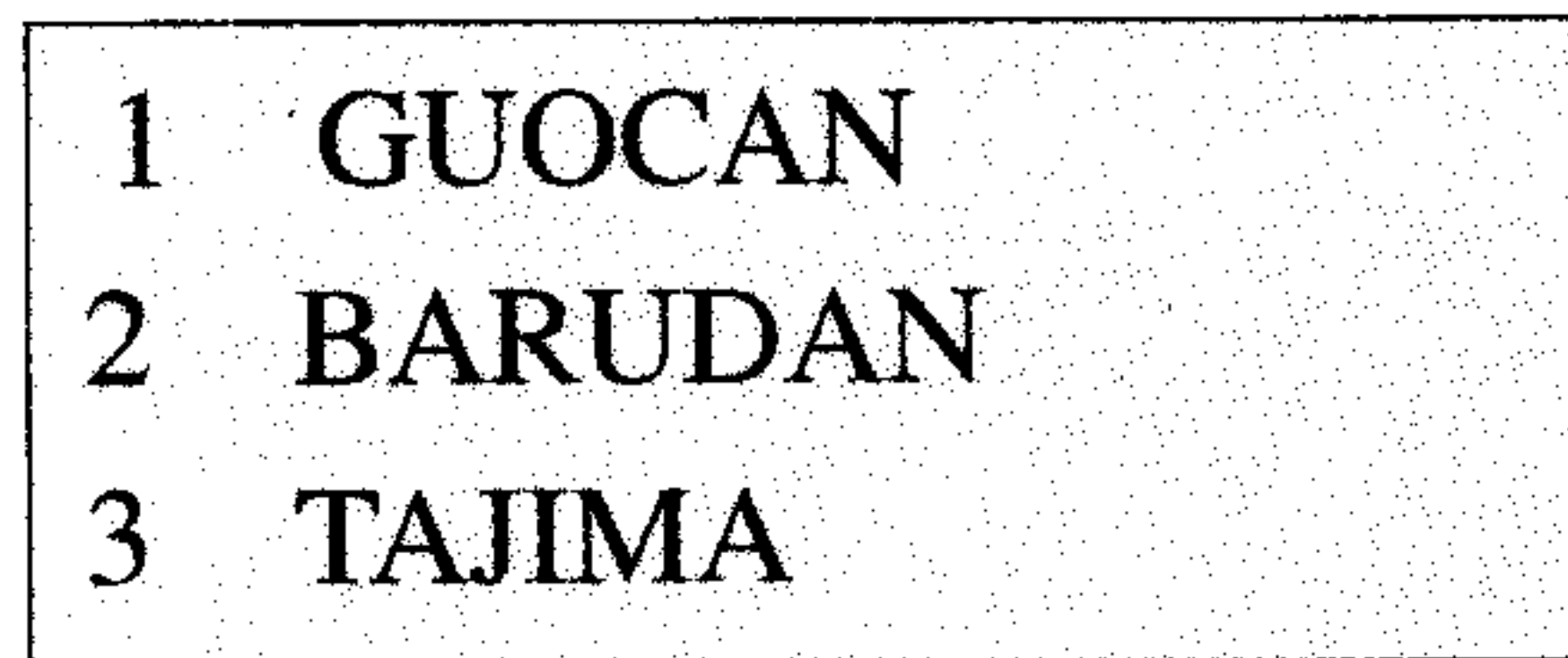



Fig.2

If you choose a domestic embroidery machine , move the cursor to '1'. If you have a BARUDAN embroidery machine , move the cursor to '2', If the cursor points to '3', you have chosen a TAJIMA embroidery machine. Then press 'Confirmation' key, you have completed the setup of the embroidery machine type .

If the information  appears on the LCD , it shows that the ports is wrongly connected and you must connect the interface cable again , press 'Return' key to choose relevant type. After pressing the 'Confirmation' , the setup menu of the types of diskettes will appear . (shown in Fig.3)

### 2.3.1.3 To setup the type of diskette :

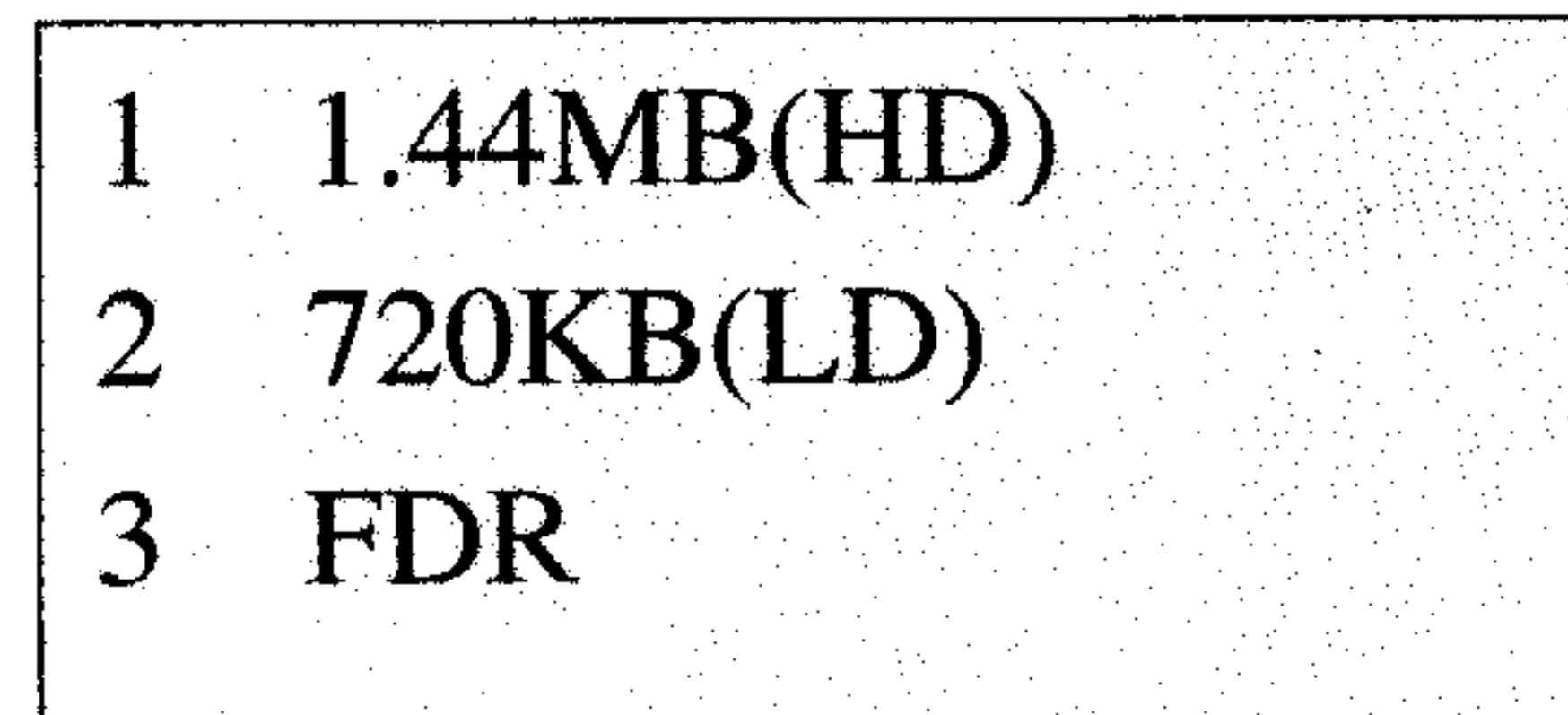


Fig. 3

If you want to output a pattern to a high-density diskette , move the cursor to '1'; if you want to output a pattern to a low density diskette , move the cursor to '2'; if you want to output a pattern to a BARLDAN FDR



diskette , move the cursor to ‘3’, then press the ‘Confirmation’ key . After all of the procedures are done , the setup menu of pattern format will appear .(shown in Fig.4)

### 2.3.1.4 To setup the format of a pattern

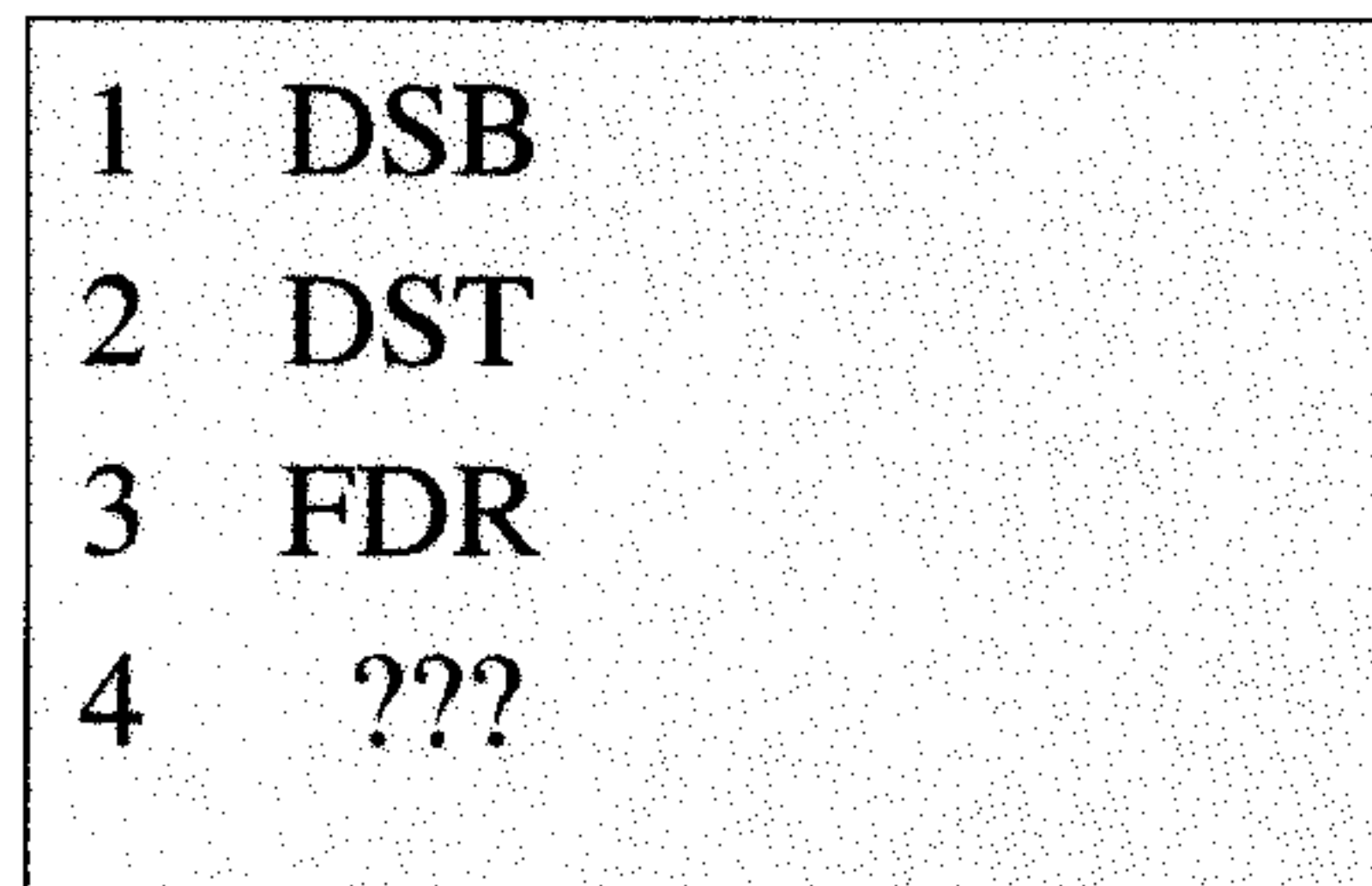


Fig.4

If a pattern has been stored into the diskette in DSB format and will be output to the embroidery machine in DSB format , the cursor will point to ‘1’. If a pattern has been stored into the diskette in DST format and will be output to the embroidery machine in DST format , the cursor will point to ‘2’. If a pattern has been stored into the diskette in FDR format and will be output to the embroidery machine in FDR format , the cursor will point to ‘3’. (If a pattern has been stored into the diskette in WTN or WTM format and will be output to a embroidery in WTN or WTM format , please make your special requirements first) . Then press the ‘Confirmation’ key , the following promptness will appear .

**INSERT SOURCE DISK**

This prompts you to insert the corresponding diskette which you have already setup , then press the ‘**Confirmation**’key .The pattern name input will appear on the screen .

### 2.3.1.5 To choose the pattern name to be input or output

0 1 2 3 4 5 6 7 8 9 A B C D E F
G H I J K L M N O P Q R S T U V
W X Y Z . - # ! ( ) [ ] & \$ % @
NAME:

The first three lines form character library areas . The last line is the inputting area of pattern name .

If you remember the pattern name , move the cursor to the character library area , let it point to the needed character , then press the ‘Choose’ key , the corresponding character will be copied into the pattern name area , Repeat the process until the whole pattern name is copied into the pattern name area , then press the ‘Confirmation’ key . If the following message appears on the LCD , it means that the pattern has not been found , i.e. the pattern has not been stored into the diskette , then press the ‘Return’ key and input the correct pattern name again .

FILE NOT FIND
---------------

If you forget the pattern name , press the ‘Confirmation’ key directly , all the pattern names stored into the diskette will display on the LCD ,then move the cursor to the needed pattern name and press ‘Confirmation’ key , the operation will go into the outputting procedure.

### 2.3.1.6 To output a pattern to the embroidery machine :

If the operation is in outputting procedure , the following message will appear on the LCD .

```
READING : (pattern name)
PLEASE WAIT
```

It means the DU is reading the pattern stored into the diskette . Then the following message will appear on the LCD .

```
NAME: (pattern name)
WAIT OUTPUT FILE
STITCHES : 0
```

It means that the DU is ready to output the pattern . Now you can operate the embroidery machine to accept the pattern . There is something we need to emphasize . If the pattern is in DSB or FDR format , the embroidery machine will adopt function 2 to accept the pattern , if the pattern is in DST format , the embroidery machine will adopt function 3 to accept the pattern . (If the pattern is in other format or the embroidery machine is not home-made , you should make your special requirement first to our company) .

The third line , STITCHES : 0 , shows the stitch number . If the embroidery machine is in waiting state , the number of stitch will be zero . If the 'Confirmation' key on the embroidery machine has been pressed , the following messages will appear on the LCD .

```
NAME : (pattern name)
OUTPUTING FILE
STITCHES : *****
```

### 2.3.2.3 To setup the type of Diskette :

1. 1.44MB(HD)
2. 720KB(LD)

If you want to store a pattern into a high-density diskette , move the cursor to '1'. If you want to store a pattern into a low density diskette , move the cursor to '2'. Then press the 'Confirmation' key . After all of the procedures are done , the setup menu of the formats of patterns will appear .

### 2.3.2.4 To setup the format of a pattern .

1. DSB
2. DST
3. FDR
4. ???

If the embroidery machine output a pattern as in function 5, i, e. in binary DSB format , you must choose '1' . 'DSB' (if you choose other format, tell us please), and move the cursor to '1', then press the 'Confirmation' key , the following message will appear on the LCD .

INSERT OBJECT DISK

It prompts you to insert a high-density or low-density diskette which has been setup before ,then press 'Confirmation' key . If the following message appears:

WRITE PROTECTION

it means the write protect hole is closed . Take out the diskette , open the



write protect hole , press 'Confirmation' key again to enter the pattern name inputting screen .

**2.3.2.5 To input or define the pattern name to be stored into the diskette according to the system defining requirements .**

```
0 1 2 3 4 5 6 7 8 9 A B C D E F
G H I J K L M N O P Q R S T U V
W S Y Z . - # ! () [] & $ % @
NAME:
```

The first three lines form are character library areas . the last line is the pattern name inputting area .

Now you can name the pattern . Move the cursor to the character . In the library areas ,let the cursor point to the needed character , then press the 'Choose' key , the corresponding character will be copied into the pattern name inputting area , repeat the process until the defined pattern name is copied into the pattern name inputting area , then press the 'Confirmation' key .If the following message appears on the LCD .

```
OVERLAY SOURCE DATA ?
****
```

it means that the pattern name has already confirmed . If the earlier pattern name is no longer needed ,press the 'Confirmation' key to overwrite it by the newly input pattern. If the earlier pattern is still needed, press the 'Return' key to redefine the new pattern name .



Or only press the 'Confirmation' key and the system will generate a name according to the its regulation , the following message will display on the LCD .

SELECT : (pattern name)

Then press the 'Confirmation' key , the system will store the input pattern with this name and go into the inputting procedure .

### **2.3.2.6 To input a pattern into the DU .**

When the following messages appear on the LCD ,the DU is ready for mputting a sample .

NAME : (pattern name)  
WAIT INPUT FILE  
STITCHES :\*\*\*\*\*

Now you can operate the embroidery machine to output the pattern. i, e. choose the function 5, then press the 'Confirmation' key on the embroidery machine, the following message will appear on the LCD.

NAME : (pattern name)  
INPUTING FILE  
STITCHES :\*\*\*\*\*

It shows the DU is accepting the pattern and the stitch number also increases.

When all of the stitches have been input, the following message will appear.

WRITING: (pattern name)  
PLEASE WAIT

It shows the DU is writing the pattern to a high-density or low-density diskette in the DSB format with the name you defined or the system generated. When the system finishes writing the pattern, the pattern message will appear on the LCD as the following.

STITCHES : \*  
COLORS : \*  
WIDTH : \*  
HEIGHT : \*

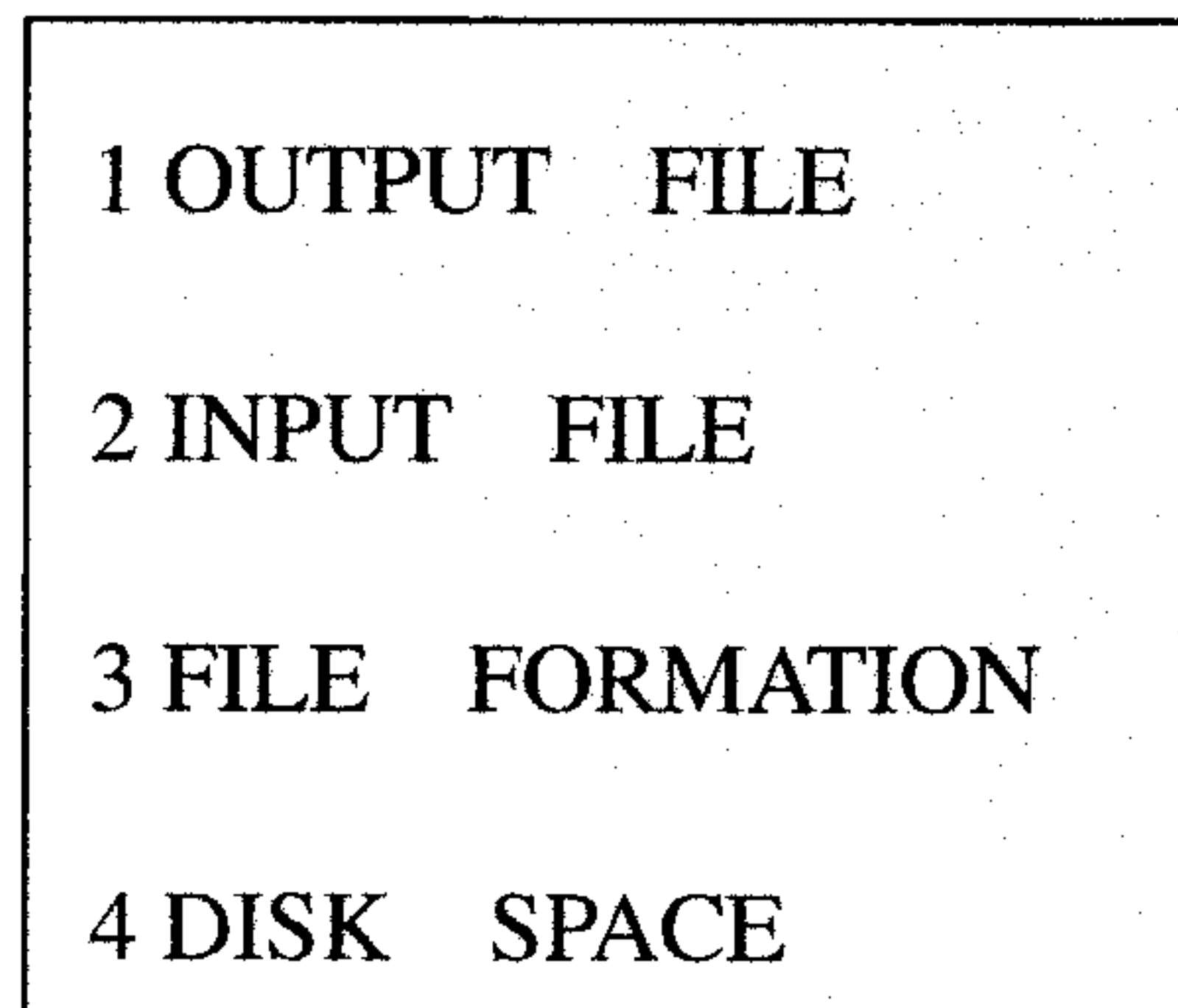
If you want to input another pattern, press the 'Confirmation' key or the 'Return' key to return to the pattern name inputting menu and do all of the above again. If you want to operate other function, press the 'Quit' key to return to the function menu.

## 2.4 How to use the two assistant functions

### 2.4.1 How to consult the pattern information

The function is used to check stitches of a pattern, color-changing times and coordinate values of a pattern(the size of a pattern).When outputting a pattern to a embroidery machine or copy a pattern, this function is quite usable.

### **2.4.1.1 To choose the needed function**



Move the cursor to '3' in the main menu and press the 'Confirmation' key, then, it enter the menu to setup the type of Diskette.

### **2.4.1.2 To setup the type of Diskette :**

This procedures are the same as those shown in section 2.3.1.3. To select 1 or 2 depending on selection of the high-density diskette of low-density diskette into which a pattern has been stored.

### **2.4.1.3 To setup the format of a pattern**

This procedures are the same as those shown in section 2.3.1.4. To select 1 or 2 depends on the DSB format or the DST format of the pattern.

### **2.4.1.4 To input or choose the pattern name**

This procedures are the same as those shown in section 2.3.15

### **2.4.1.5 The pattern information**

After the pattern name has been input or selected and the key 'Confirmation' has been pressed, the pattern information will be displayed on the LCD.

ST:	CO:
( stitches )	( color-changing times )
+X:X	-X:X
( X positive coordinate )	( X negative coordinate )
+Y:Y	-Y:Y
( Y positive coordinate )	( Y negative coordinate )
Ax:	Ay:
(X coordinate of the last stitch)	(X coordinate of the last stitch)

From the pattern information, you may know the stitches, color-changing times and the size of the pattern(+X,-X,+Y,-Y,Ax,Ay).Due to the difference of algorithms and embroidery machine, the chart is only used for reference. If you want to check another pattern's information, press the 'Return' key. If you want to operate other functions, press the 'Quit' key to return to the main menu.

## 2.4.2 How to check the disk space

The function is used to check the free subdirectory numbers and free space in the diskette. It is often used when inputting a pattern into the DU or copying a pattern.

### 2.4.2.1 To select the function

1 OUTPUT FILE  
2 INPUT FILE  
3 FILE FORMATION  
4 DISK SPACE

Move the cursor to '4' on the main menu, then press the 'Confirmation' key, the following message will be displayed on the LCD.

#### **2.4.2.2 To setup the type of Diskette :**

Refer to section 2.3.1.3. To select 1 or 2 depending on selection of the high-density diskette or low-density diskette into which a pattern has been stored, and insert the disk.

#### **2.4.2.3 The disk space information**

After insert the disk, press the 'Confirmation' key. The information will be displayed as follows:

**TOTAL DIRECTORY:**

( the maximum number of the patterns allowed to be stored into the diskette )

**AVAILABLE DIRECTORY:**

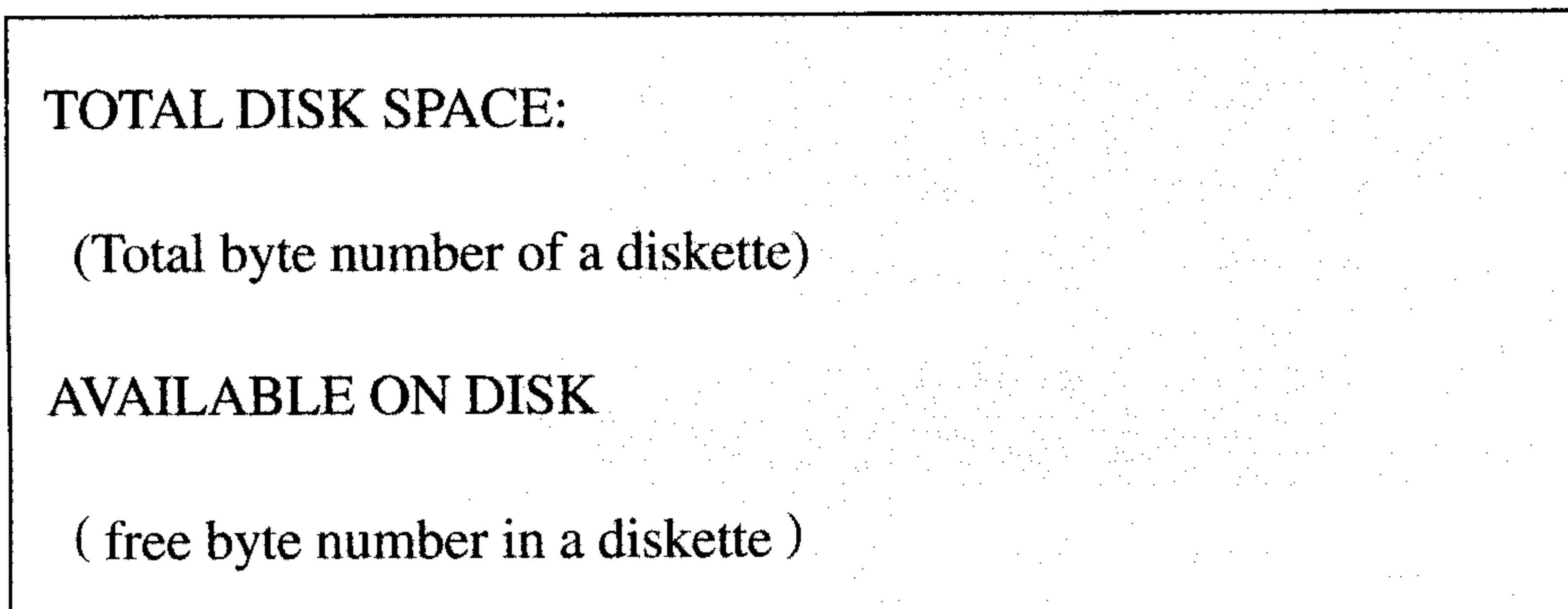
( the number of the patterns which can be stored into the diskette presently )



**NOTICE:**

*Only the number of the patterns which can be stored into the diskette presently is above zero, can the diskette store a pattern. For a high-density diskette, the maximum number of patterns allowed to be stored into is 224 , For a low-density diskette, is 112.*

Press the 'Confirmation' key gain, the following message will appear on the LCD.



**NOTICE:**

*Only the available space divided by three is greater than or equals to the stitches of the pattern to be input or copied, can the diskette be used to store the pattern completely.*

Press the 'Return' key to check another diskette space. If you want to operate other functions, press the 'Quit' key.

**2.5 How to use the four auxiliary functions**

**2.5.1 How to delete a pattern in the diskette**

The function is used to delete some useless patterns in the diskette so as to empty the space to input new patterns from a embroidery machines or copy new patterns into the diskette.

1 OUTPUT FILE
2 INPUT FILE
3 FILE FORMATION
4 DISK SPACE
5 DELETE

Move the cursor to '5' on the main menu, then press the 'Confirmation' key to choose deleting function. Then the following message appears on the LCD.

INSERT SOURCE DISK:
---------------------

Then insert the diskette and press the 'Confirmation' key , system will enter the disk format menu as the following.

1	1.44MB(HD)
2	720KB(LD)

If the inserted diskette is a high-density one or a low-density one, you can move the cursor to '1' or '2' , then press the 'Confirmation' key and the pattern format menu will appear as follows.

- 1. DSB
- 2. DST
- 3. FDR
- 4. ???

Move the cursor and make it point to the format same as that of the pattern to be deleted, then press the 'Confirmation' key and the pattern name menu will appear as follows.

```
0 1 2 3 4 5 6 7 8 9 A B C D E F
G H I J K L M N O P Q R S T U V
W S Y Z . - # ! ( ) [ ] & $ % @
NAME:
```

After entering the name that you want to delete, press the 'Confirmation' key. Then the following message will be shown:

- 1 P001.\*\*\*
- 2 P002.\*\*\*
- 3 P003.\*\*\*
- 4 P004.\*\*\*

Move the cursor and make it point to the pattern name to be deleted, then press the 'Confirmation' key. The indicator in the diskette driver will light up to show the deleting is going on. After the procedure is over, the following message will appear on the LCD.

DELETE END

This means the deleting operation to the end . Press the 'Return' key to delete another diskette space. If you want to operate other functions, press the 'Quit' key.

### **2.5.2 How to copy a pattern**

The function is used to copy a pattern from one diskette to another one.

#### **2.5.2.1 To select the function**

1 OUTPUT FILE  
2 INPUT FILE  
3 FILE FORMATION  
4 DISK SPACE  
5 DELETE  
6 COPY

Move the cursor and point it to '6 'in the main menu, hen press the 'Confirmation' key to select the function.

#### **2.5.2.2 To read a pattern from the source diskette into the DU**

When the following message appear on the LCD:

INSERT SOURCE DISK

Insert the source disk. Then press the 'Confirmation' key . The diskette menu appears as the following.

```
1  1.44MB(HD)
2  720KB(LD)
```

Move the cursor and make it point to the diskette type same as that of the source diskette, then press the 'Confirmation' key. The following menu appears.

```
1  DSB
2  DST
3  FDR
4  ???
```

Move the cursor and make it point to the format same as that of the pattern to be copied, then the following message will appear.

```
0 1 2 3 4 5 6 7 8 9 A B C D E F
G H I J K L M N O P Q R S T U V
W S Y Z . - # ! ( ) [ ] & $ % @
NAME:
```

After inputting the pattern name to be copied , then press the 'Confirmation' key or press it directly, the information will appear as the following.



1	P001.***
2	P002.***
3	P003.***
4	P004.***

Move the cursor and make it point to the pattern name to be copied, then press the 'Confirmation' key to complete input or selecting operation of source pattern. The following message will appear on the LCD.

READING: ( pattern name )
PLEASE WAIT

The disk driver indicator will light up to show the source pattern is being read into the DU. When this process is over, the machine have already finished reading the pattern into the DU..

### **2.5.2.3 To output a pattern in the DU to an object diskette**

After reading the pattern, screen will display:

INSERT OBJECT DISK:
---------------------

Insert object menu then press 'Confirmation' key ,the diskette type menu will display on the LCD as the following.

1	1.44MB(HD)
2	720KB(LD)

Move the cursor and make it to the diskette type same as the inserted diskette, then press the 'Confirmation' key. the pattern format menu will appear as follows.

```
1 DSB
2 DST
3 FDR
4 ???
```

Move the cursor and make it point to the format of the pattern to be copied, then press the and the pattern to be copied will be stored into the object diskette in the selected format. (Note: *The selected format must be same as that of the pattern to be copied.*) The following message will appear on the LCD.

```
0 1 2 3 4 5 6 7 8 9 A B C D E F
G H I J K L M N O P Q R S T U V
W S Y Z . - # ! () [] & $ % @
NAME:
```

You can name the pattern to be stored into the object diskette in the way introduced earlier, then press the ‘Confirmation’ key or just press the ‘Confirmation’ key to make the system name it. If you take the first way, the following message will display on the LCD.

```
SELECT: (pattern name)
```

If you select the name and press the ‘Confirmation’ key, you will finish naming the pattern to be stored into the object diskette. The following message will appear on the LCD.

WRITING: (pattern name)  
PLEASE WAIT

The diskette driver indicator will light to show that the pattern is being written into the object diskette. If the stitch number of the pattern is greater than 30,000, the system will prompt you to insert the source diskette again and then to press the 'Confirmation' key so as to read the source diskette. The system will then prompt you to insert the object diskette to write the pattern into it. You must do the same thing mentioned for several times until the following messages appear on the LCD.

COPY END  
SOURCE: (source pattern name)  
OBJECT: (object pattern name)

Now you have finished copying the pattern. Press the 'Return' key to copy another pattern or press the 'Quit' key to do other operation.

### **2.5.3 How to format a new Diskette**

The function is used to format a new diskette and make it capable of storing patterns.

- 1 OUTPUT FILE
- 2 INPUT FILE
- 3 FILE FORMATION
- 4 DISK SPACE
- 5 DELETE
- 6 COPY
- 7 FORMAT

Move the cursor and make it point to '7' on the main menu, then press the 'Confirmation' key ,the following message will be displayed on the LCD.

INSERT OBJECT DISK:

After inserting a Diskette, the screen will be:

- 1 1.44MB(HD)
- 2 720KB(LD)

Insert the diskette is a high-density one, move the cursor and make it point to '1', then press the 'Confirmation' key . If it is a low-density one, move the cursor and make it point to '2', then press the 'Confirmation' key .The following message will appear on the LCD.

FORMATING(720K OR 1.44M)  
PLEASE WAIT  
TACK: \*\*

It shows that the system has entered the formatting state. The track number increases from zero to seventy-nine twice, then the following message will display on the LCD.

TOTAL DISK SPACE:  
(total byte number of a diskette)  
AVAILABLE ON DISK  
( free byte number in a diskette )

It shows formatting is over. Press the 'Return' key to format another on or press the 'Quit' key to do other operations.

#### **2.5.4 How to test the performance of the DU**

The function is used to test the hardware performance of the DU.

1 OUTPUT FILE  
2 INPUT FILE  
3 FILE FORMATION  
4 DISK SPACE  
5 DELETE  
6 COPY  
7 FORMAT  
8 TEST

Move the cursor and make it point to '8' in the main menu, then press the 'Confirmation' key, the system will begin to self-test. If the following message displays on the screen, it shows that the system works correctly.



YD    year    month    date

PLEASE WAIT

### **III Connection notice between a DU of YD- II Tajima embroidery machine.**

**Note:**

1. If you want to connect the YD- II with a Tajima embroidery machine, please also order a special cable for connection.
2. The Port3.Tajima of YD- II should be selected and you only use the patterns stored in DST format. When the message 'waiting output pattern' appears on the LCD, you can operate the Tajima embroidery machine.
3. You have to operate the machine only by the way of Tajima punch tape and receive the data with binary system of punch tape.

## **IV. Connection notice between a YD-II DU and a Barudan embroidery machine .**

### **Note:**

1. If you want to connect the YD- II with a Barudan embroidery machine, please buy a special cable for connection.
2. The 2. BARUDAN port of YD- II should be selected and you only use the patterns stored in DSB or FDR format. When the message 'waiting output pattern' appears on the LCD, you can operate the BAILINGDA embroidery machine.
3. You have to operate the machine only by the way of BAILINGDA punch tape and receive the data with binary system of punch tape.