

PPD-110

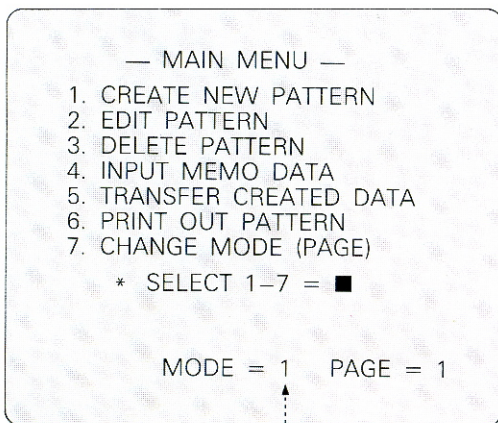
INSTRUCTION BOOK for
PATTERN PROGRAMMING DEVICE

Before using the pattern programming device...

Set the mode of the pattern programming device according to your knitting machine.

MODE 1 ← KH-940 · KH-950i

MODE 2 ← KH-930



The selected mode

See the detailed instructions about mode on page 54.

1

Turn on the power switches of the pattern programming device and the TV set (See pages 3-6).

2

Push the STEP key. The MAIN MENU as shown on the left appears on the screen. The screen indicates the mode which is now set.

MODE 1 is selected when the pattern programming device is delivered. Therefore when you use KH940 or KH950i, you do not have to reset the mode.

(Begin pattern creating without setting the mode).

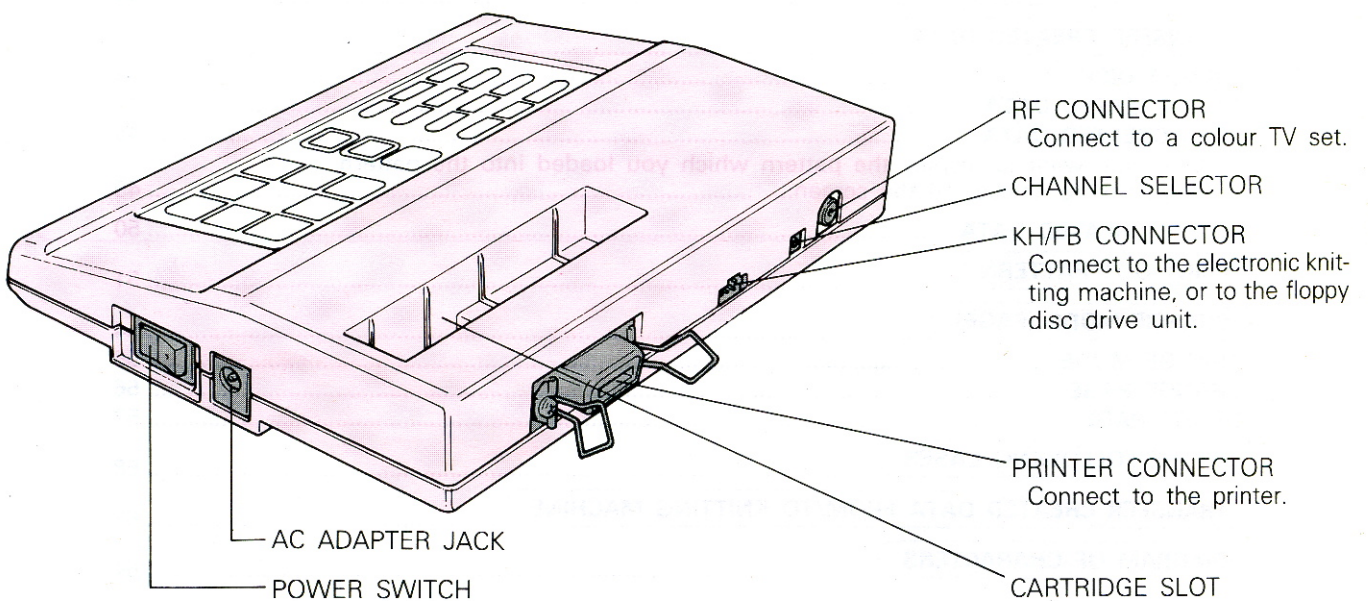
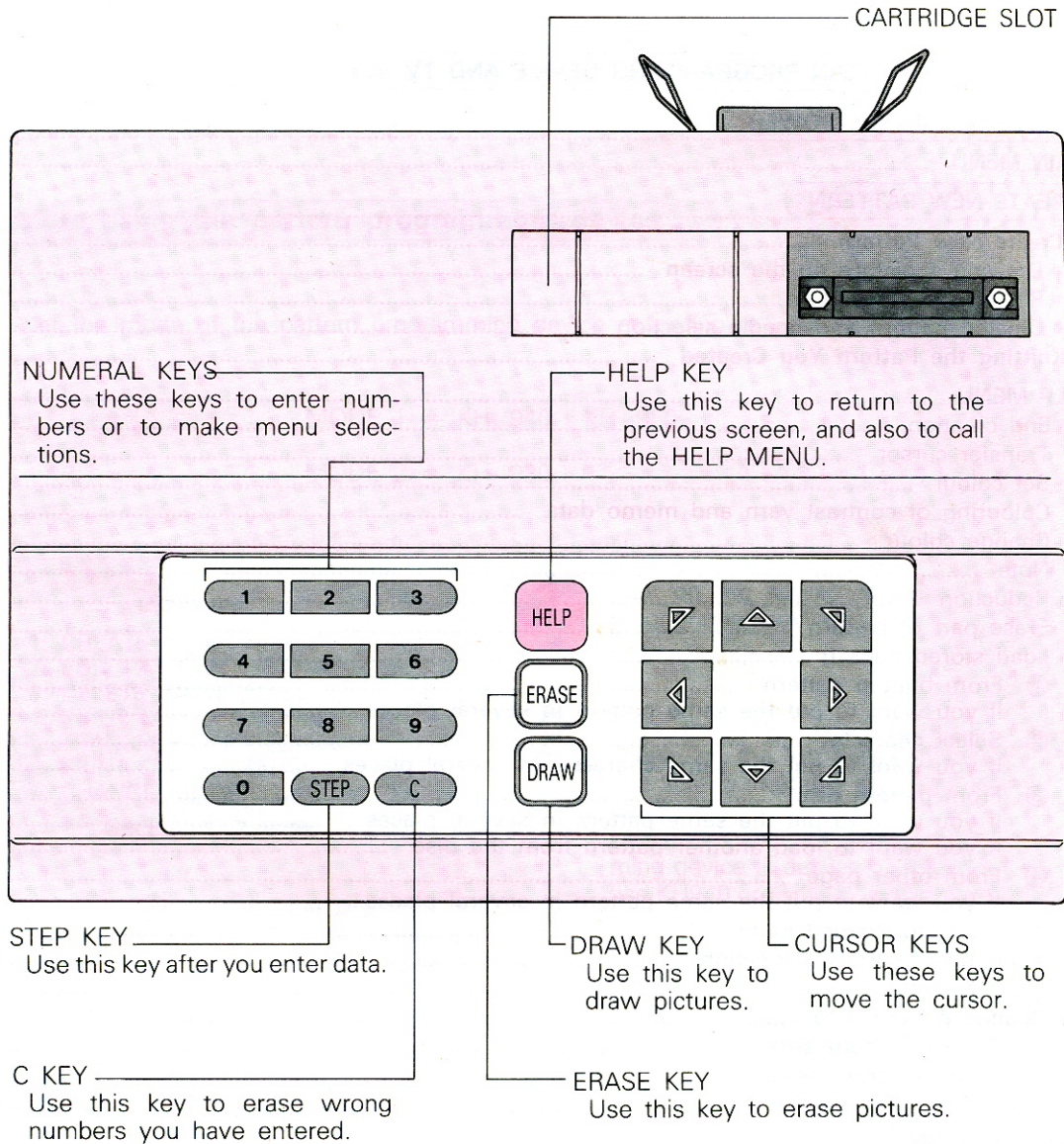
When you use KH930, select MODE 2 (See "CHANGE MODE" on page 55).

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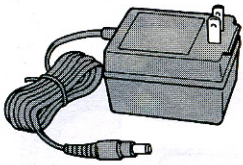
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NAME AND FUNCTION

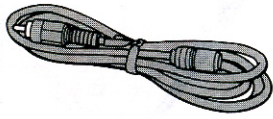
• PATTERN PROGRAMMING DEVICE



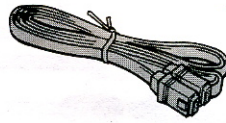
• ACCESSORIES



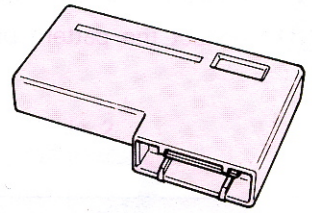
AC ADAPTER



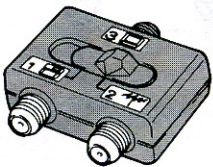
CABLE 1
Connect the pattern programming device and TV set.



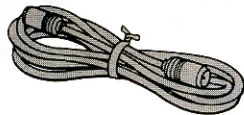
INTERFACE CABLE
Connect the pattern programming device and knitting machine or floppy disk drive unit.



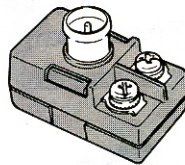
PROGRAM CARTRIDGE
Your pattern is stored in this cartridge, and the battery saves the pattern for 5 years.
*When 5 years have passed from purchasing the pattern programming device, ask a dealer to change the battery.



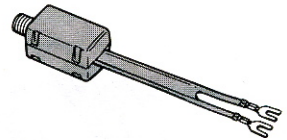
RF SWITCH
(USA, CANADA only)



CABLE 2
(USA, CANADA only)
Connect the TV set and RF switch.

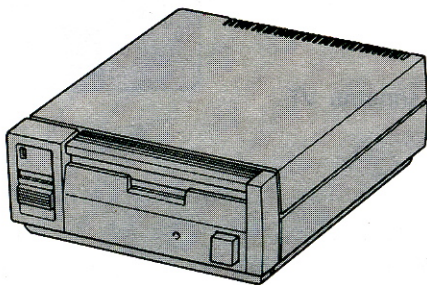


CONVERTER 1
(USA, CANADA only)

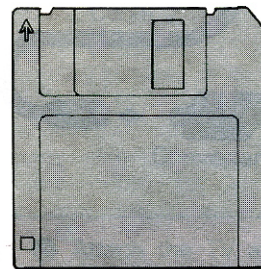


CONVERTER 2
(USA, CANADA only)

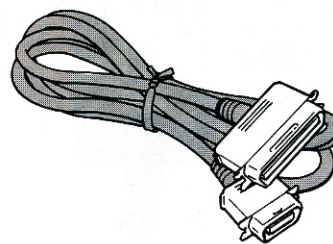
OPTION



FLOPPY DISC DRIVE UNIT



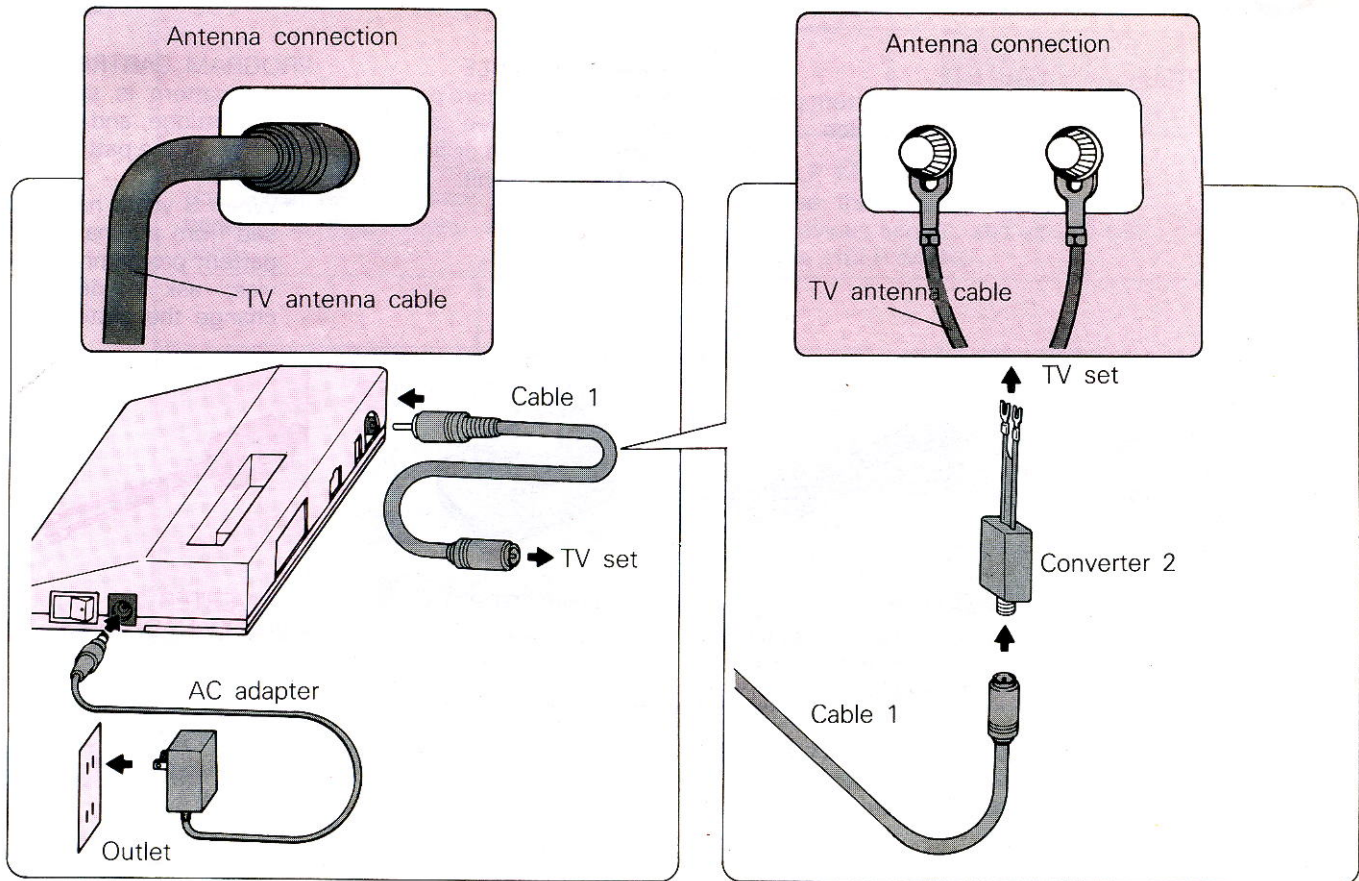
3.5 INCH FLOPPY DISC



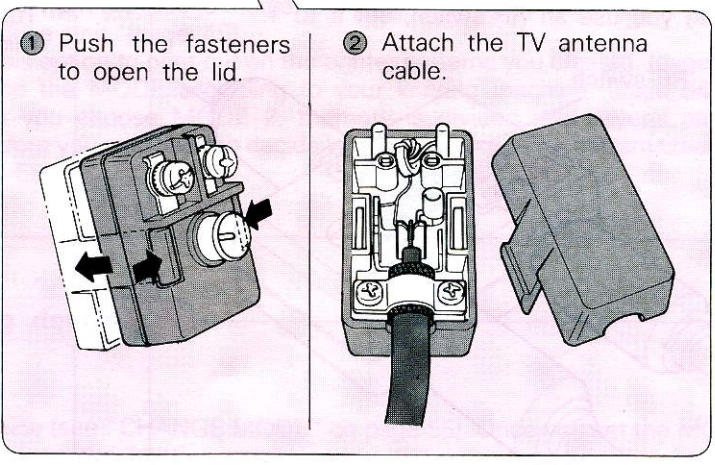
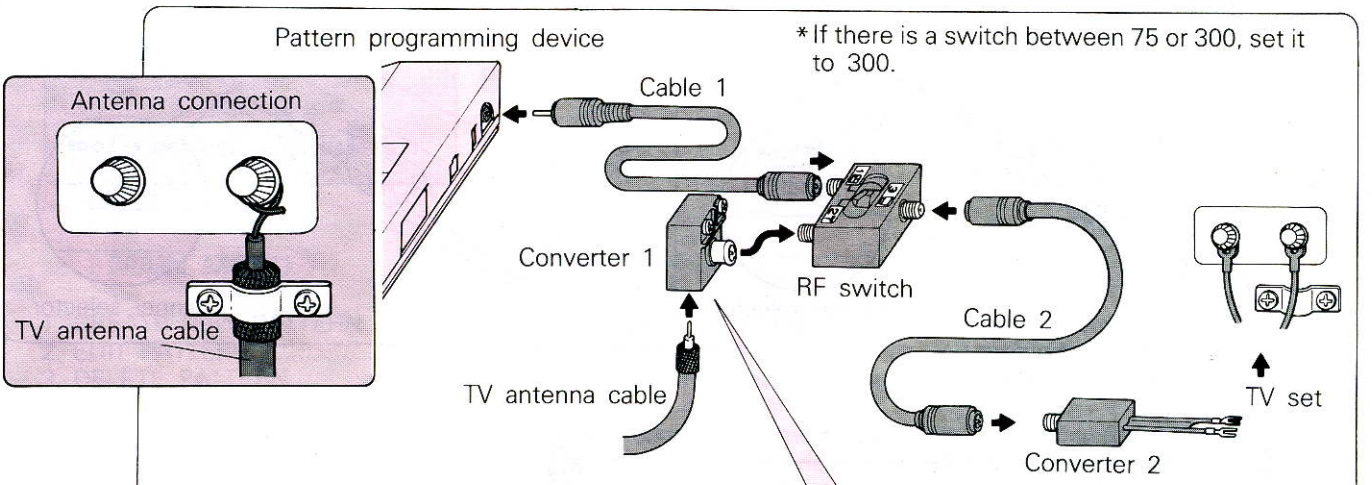
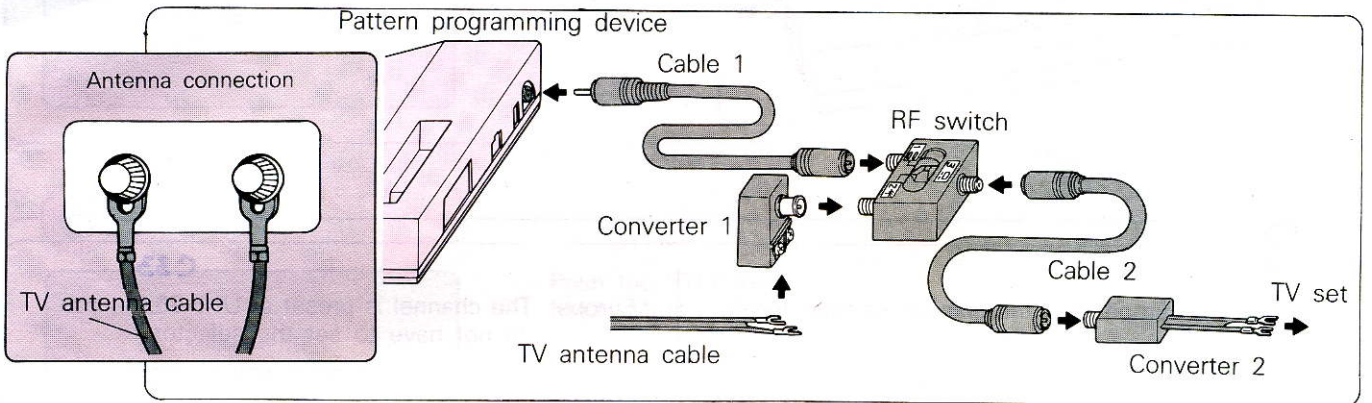
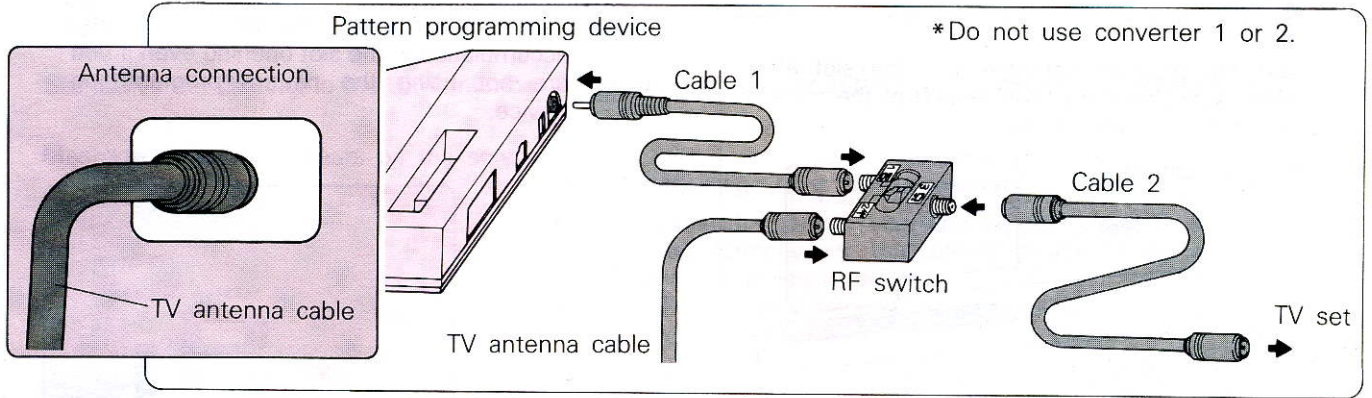
PRINTER CABLE

CONNECTING PATTERN PROGRAMMING DEVICE AND TV SET

- ① Make sure that the power switches of the pattern programming device and TV set are turned off.
- ② Unplug the antenna cable of the TV set.
- ③ Connect the pattern programming device and TV set according to your TV antenna cable as follows.



• CONNECTING THE PATTERN PROGRAMMING DEVICE AND TV SET USING RF SWITCH



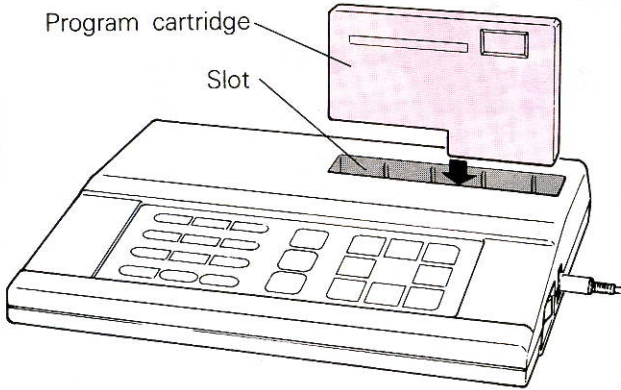
SWITCHING ON THE POWER

1

Insert the program cartridge into the slot after making sure that the power switch of the pattern programming device is off.

Program cartridge

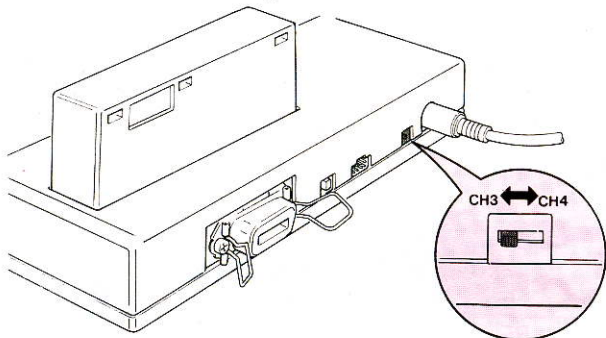
Slot



Note: Leave the cartridge in the slot to avoid dust accumulation in the slot opening even if you are not using the pattern programming device.

2

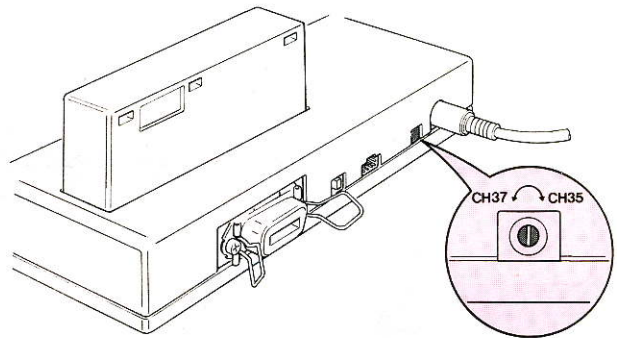
Outside of Europe: Set the channel selector to a channel that is not broadcasting (ex. channel VHF-3).



Channel selector

C 33.

Europe: The channel is preset at UHF-36, so you do not have to set the selector.

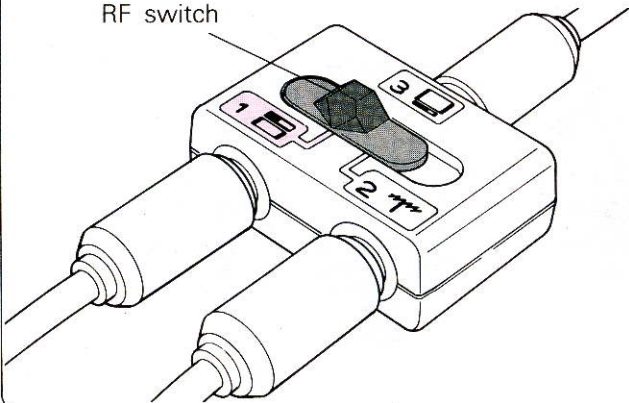


Channel selector

3

When you use an RF switch, set it to 1.

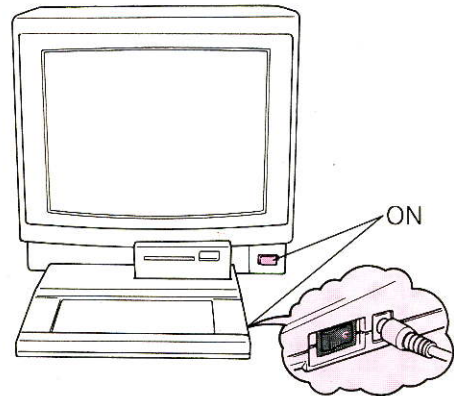
RF switch



*When you watch a TV program, set the RF switch to 2.

4

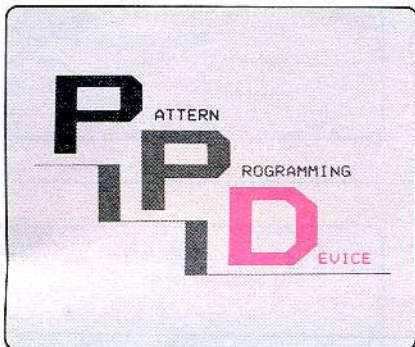
Turn on the power switch to the pattern programming device and TV set.



5

Set the TV set channel to the same number as the channel selector setting of the pattern programming device.

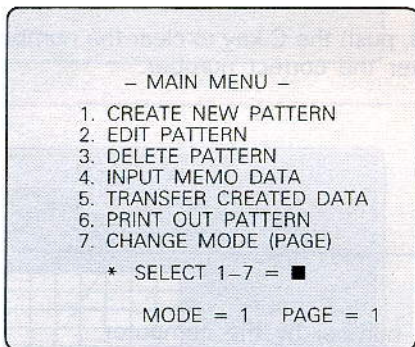
Message as below appears on the screen.



♥ If the message does not appear on the screen...

- Confirm that the pattern programming device and TV set are connected correctly and that power switch of the pattern programming device is on.
- If your TV set has a manual fine tune dial, adjust the picture, referring to the instruction book of the TV.

6



Push the STEP key.
MAIN MENU appears on the screen.

MAIN MENU

1. CREATE NEW PATTERN Use this option to create your own original patterns. (page 7)
2. EDIT PATTERN Use this option to modify patterns you created. (page 42)
3. DELETE PATTERN Use this option to delete an unnecessary pattern, or all the patterns you created. (page 43)
4. INPUT MEMO DATA Use this option to enter memo data with information for pattern knitting, or to modify the memo data already entered. (page 44)
5. TRANSFER CREATED DATA Use this option to save patterns you created on disc, or to load the patterns from the disc to the pattern programming device with the floppy disc drive unit. (page 45)
6. PRINT OUT PATTERN Use this option to print out on the printer patterns you created. (page 51)
7. CHANGE MODE (PAGE) Choose the MODE according to your knitting machine. (page 54)
When you choose MODE 2, memory is divided into several pages. Therefore you also need to decide which page to use for pattern creation. (page 56)

Before using pattern programming device...

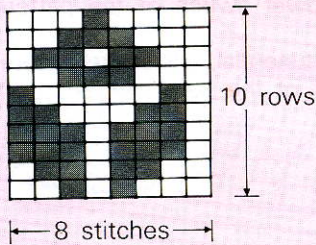
Set the MODE according to your knitting machine (see "CHANGE MODE" on page 55). Once you set the MODE, you do not have to set it again until you change the knitting machine.

CREATE NEW PATTERN (MAIN MENU 1)

♥ Practice the basic operation of the pattern programming device.

1. CREATE NEW PATTERN

ex.



- Create the left pattern.

— MAIN MENU —

1. CREATE NEW PATTERN
2. EDIT PATTERN
3. DELETE PATTERN
4. INPUT MEMO DATA
5. TRANSFER CREATED DATA
6. PRINT OUT PATTERN
7. CHANGE MODE (PAGE)

* SELECT 1-7 = ■

1

Select option 1 from the MAIN MENU.

1

♥ C KEY

If you make a mistake, push the C key to clear the number you entered, and enter the correct number.

Push the STEP key.

STEP

— STITCH-ROW SET UP —

PATTERN No. 901
HOW MANY STITCHES
STITCHES = ■

2

Your pattern is given a number by the computer.

Use this number as a reference on your design sheet to avoid confusion.

♣ The computer allocates number 901 for your 1st pattern, number 902 for your 2nd pattern, and so on automatically.

♥ HELP KEY

Push the HELP key to return to the previous screen.

— STITCH-ROW SET UP —

PATTERN No. 901
HOW MANY STITCHES
STITCHES = ■

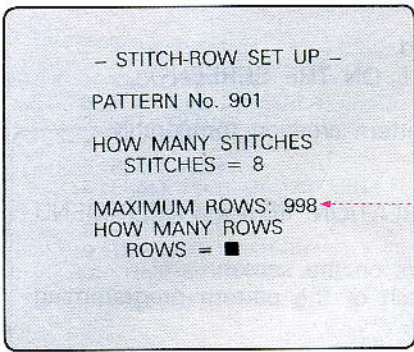
3

Enter the number of stitches.
(You can enter up to 200 stitches).
(ex... 8 stitches)

8

Push the STEP key.

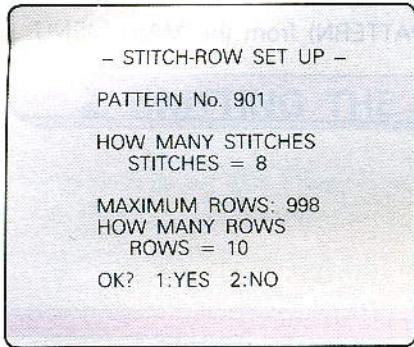
STEP



4 Enter the number of rows.

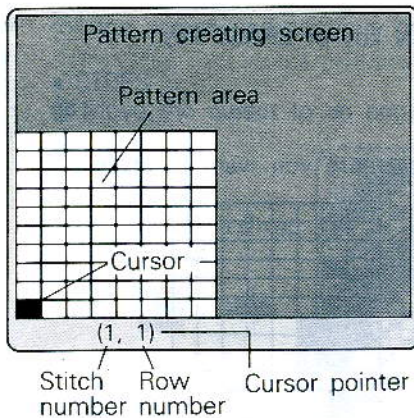
The display shows the maximum number of rows available for your pattern.
 (You can use up to 998 rows in this example).

(ex... 10 rows)



5 Check the number of stitches and rows.

- If the number of stitches and rows are correct, select 1. The screen will advance to the next step.
- If you want to change the number of stitches or rows, select 2. The screen will return to ③.



6 The pattern creating screen appears.

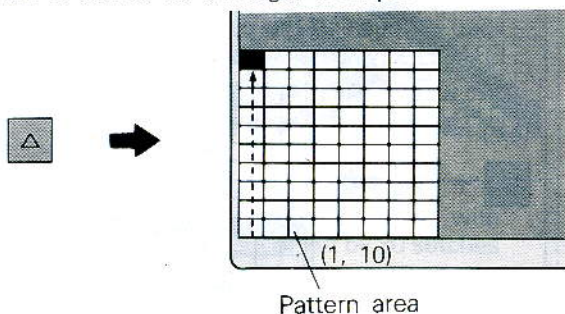
- PATTERN CREATING SCREEN
 There are 48 stitches and 50 rows on the screen.
- PATTERN AREA
 This area has the number of stitches and rows you entered. You can draw a picture in this area.
- CURSOR
 The cursor shows the current location. You fill in the square where the cursor is by pushing the DRAW key.
- CURSOR POINTER
 The cursor pointer shows the location of the cursor by stitch number and row number.

* MOVING THE CURSOR

You can move the cursor using the 8 cursor keys when the pattern creating screen appears. However, the cursor moves only in the pattern area.

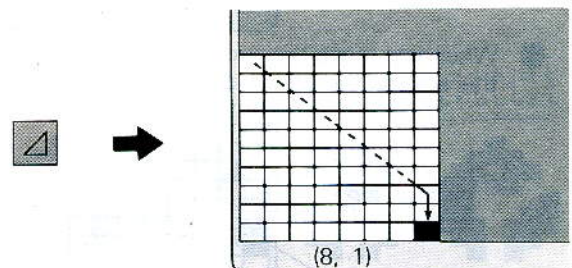
① Use the key.

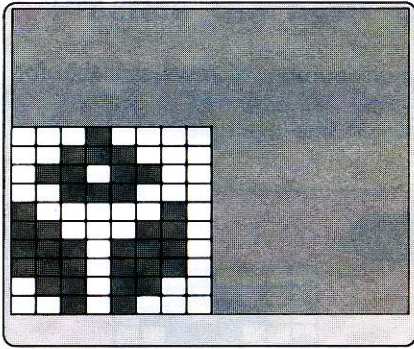
The cursor moves upward by one stitch when you push the key. If you continue pushing the key, the cursor keeps on moving. When it comes to an edge, it stops.



② Use the key.

The cursor moves right-downward diagonally. When it comes to an edge, it moves downward.





- 7** Draw a picture as illustrated.
(see "DRAWING A PICTURE ON THE SCREEN").

♥ When you want to stop pattern creation temporarily...

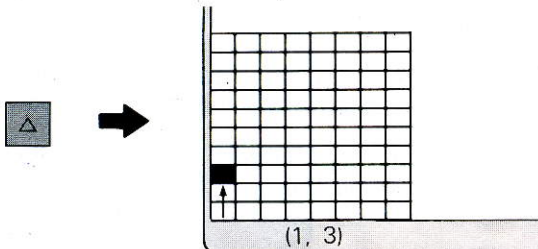
- ① Push the HELP key.
 - ② Choose option 1 (END CREATION) from the HELP MENU and push the STEP key.
The MAIN MENU appears on the screen.
 - ③ Turn off the power switch of the pattern programming device and TV set.
- To continue pattern creation,
 - ① Turn on the power switch of the pattern programming device and TV set.
 - ② Push the STEP key.
 - ③ Choose option 2 (EDIT PATTERN) from the MAIN MENU and continue drawing.
(Refer to page 42.)

Drawing a picture on the screen

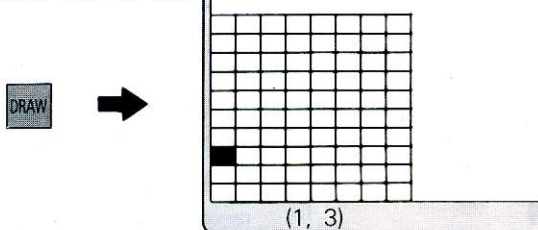
When you draw a picture, use the DRAW key and ERASE key.
Move the cursor where you want to draw or erase, then push the DRAW key or ERASE key.

Drawing

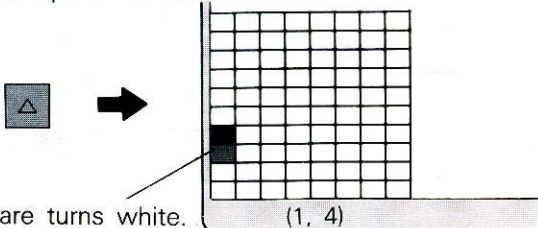
- ① Move the cursor where you want to draw.



- ② Push the DRAW key.
(The blank square will become white after the cursor moves on.)

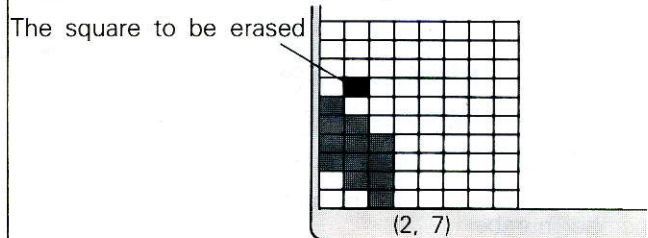


- ③ When you move the cursor, you can check that the square turned white.



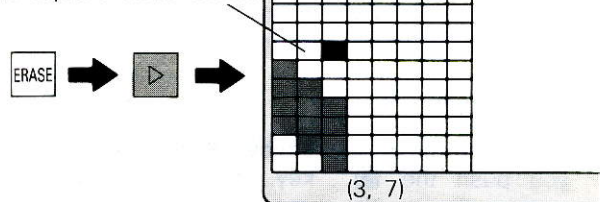
Erasing

- ① Move the cursor where you want to erase.



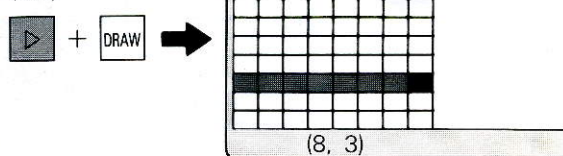
- ② Push the ERASE key and move the cursor.

The square turns blank.



- If you want to draw or erase the straight line, keep on pushing the cursor key and DRAW (or ERASE) key simultaneously.

(ex.)



– HELP MENU –

1. END CREATION
2. TRANSFER CURSOR
3. SET COLOUR
4. CHANGE COLOUR
5. REDUCTION
6. ERASE PART OF PATTERN
7. LOAD STORED PATTERN
8. VARIATIONS
9. TRANSFER PATTERN
10. CHANGE PATTERN AREA

* SELECT 1-10 = ■

8

When you finish drawing, push the HELP key.

HELP

The HELP MENU appears on the screen.

- ♣ You can choose sub function from the HELP MENU. If you choose option 2 to 10, refer to next page.

9

When you want to finish creation, choose option 1 from the HELP MENU and push the STEP key.

1

STEP

The MAIN MENU appears on the screen.

- *You cannot return to the previous screen with the HELP key when you enter 1 and push the STEP key in this step.

2. KNITTING THE PATTERN YOU CREATED

1

Load the pattern data you created with the pattern programming device to the knitting machine. See page 62.

2

You can knit the pattern after the pattern program.

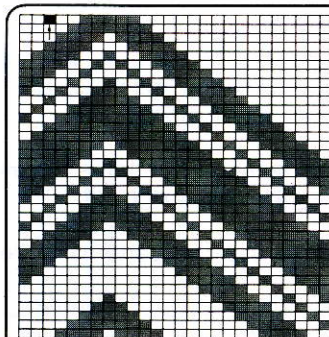
Rolling the screen

If the pattern has more than 48 stitches or 50 rows, roll the screen and continue creation.

• STEPS

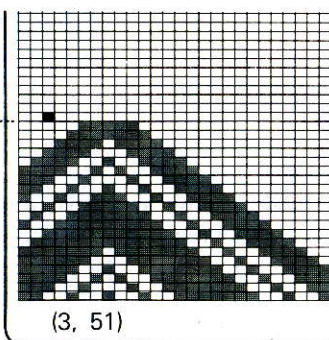
- ① Move the cursor to an edge.

(ex.) When you roll up the screen



- ② Move the cursor further. The screen rolls up.

30 rows



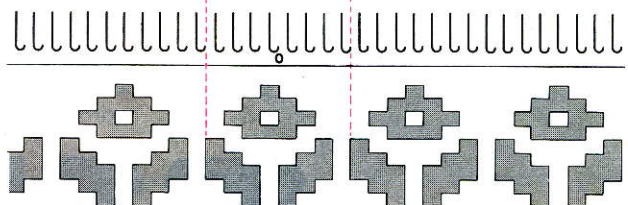
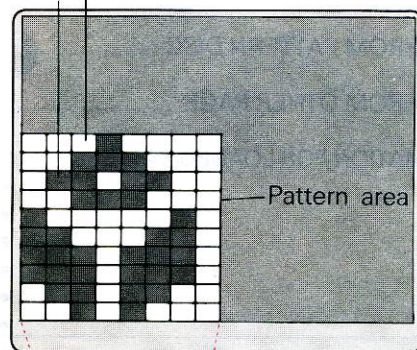
- *The screen rolls up or down by 30 rows with or and rolls right or left by 30 stitches with or .

Created pattern and needle selection

- One square represents one stitch.
- Pattern area represents one pattern repeat. If you program for an all-over pattern on the knitting machine, you can knit the pattern all over the garment.

White square drawn by the DRAW key...
The needle is selected to D position.

Black square...
The needle is selected to B position.



When you are knitting

HELP MENU

— HELP MENU —

1. END CREATION
2. TRANSFER CURSOR
3. SET COLOUR
4. CHANGE COLOUR
5. REDUCTION
6. ERASE PART OF PATTERN
7. LOAD STORED PATTERN
8. VARIATIONS
9. TRANSFER PATTERN
10. CHANGE PATTERN AREA

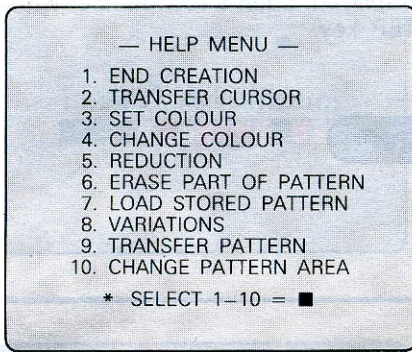
* SELECT 1-10 = ■

- The HELP MENU has subfunctions you can use when working with MAIN MENU 1 (CREATE NEW PATTERN) or 2 (EDIT PATTERN).
- Push the HELP key while the pattern creating screen is displayed and the HELP MENU will appear.

1. END CREATION Use this option to finish pattern creation.
The screen will return to the MAIN MENU. (page 12)
2. TRANSFER CURSOR Use this option to move the cursor directly by specifying the stitch number and row number. (page 12)
3. SET COLOUR Use this option to set the colour of the pattern.
You can see the colour contrast of the pattern. (page 13)
4. CHANGE COLOUR Use this option to change the colour of the pattern. (page 17)
5. REDUCTION Use this option to check the whole pattern by reducing it when you are creating a pattern exceeding 48 stitches and/or 50 rows. (page 19)
6. ERASE PART OF PATTERN Use this option to erase a part of the pattern. (page 20)
7. LOAD STORED PATTERN Use this option to create a new pattern by combining and also modifying a pattern stored in the pattern programming device or disc.
 - 1) FROM BUILT-IN PATTERN Choose this option to use the patterns that are published in the pattern book attached to electronic knitting machine, or created patterns stored in the pattern programming device. (page 21)
 - 2) SELECT CHARACTER Choose this option to create the patterns by combining characters built into the pattern programming device. (page 24)
 - 3) FROM PATTERN DISC Choose this option to use the patterns stored on disc. (page 27)
 - 4) FROM OTHER PAGE Choose this option to use patterns stored on another page.
8. VARIATION FOR LOADED PATTERN Use this option to vary the patterns you choose by option 7 as follows. (page 33)
 - REVERSE
 - UPSIDE DOWN
 - DOUBLE WIDTH
 - DOUBLE LENGTH
 - SUBSTITUTION
 - SPREAD (HORIZONTAL)
 - SPREAD (VERTICAL)
 - NEGATIVE
9. TRANSFER PATTERN Use this option to move patterns in the pattern area.
10. CHANGE PATTERN AREA Use this option to reduce or increase the pattern area that you are creating now.

◆◆◆ 1. END CREATION (HELP MENU 1) ◆◆◆

- To finish pattern creation.



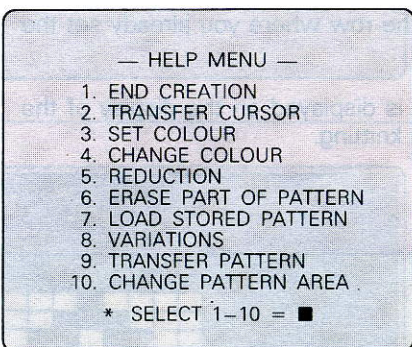
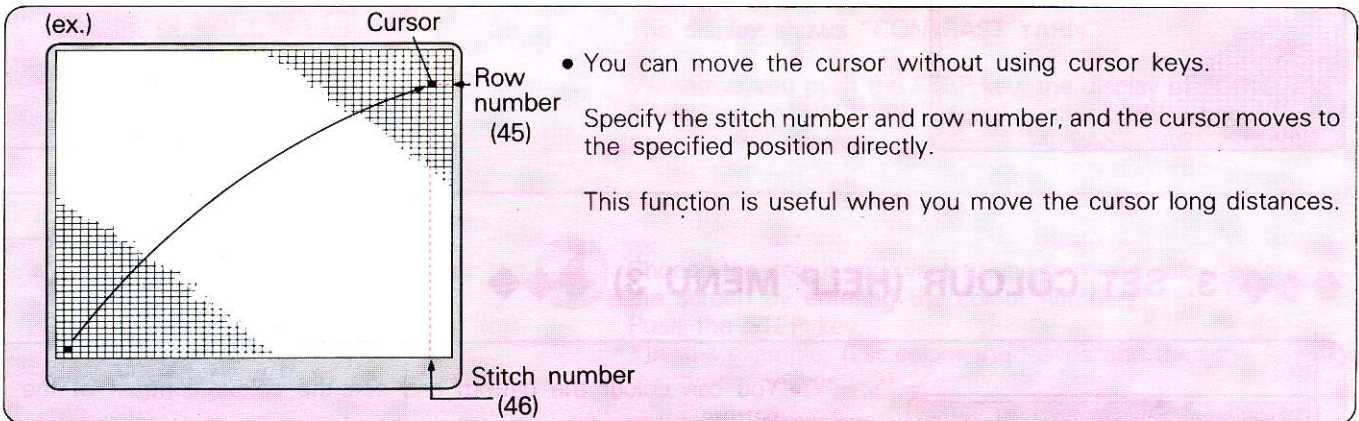
- 1 Choose option 1 from the HELP MENU, and push the STEP key.



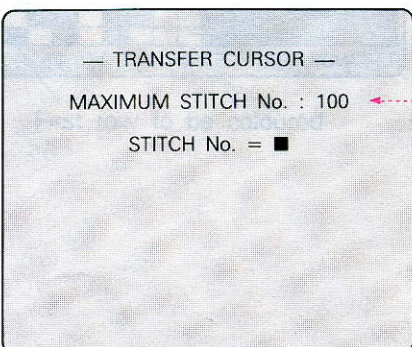
The screen returns to the MAIN MENU, and you have finished pattern creation.

- ♣ Even if you turn off the power of pattern programming device, the battery works to save the created patterns in the memory of pattern programming device.

◆◆◆ 2. TRANSFER CURSOR (HELP MENU 2) ◆◆◆



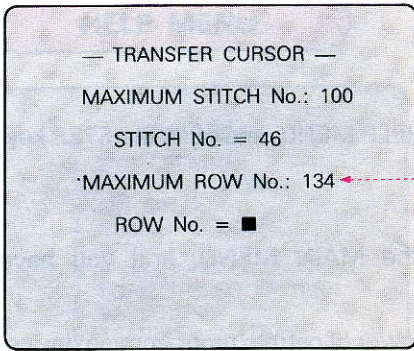
- 1 Choose option 2 from the HELP MENU, and push the STEP key.



- 2 Enter the stitch number where you want to put the cursor.

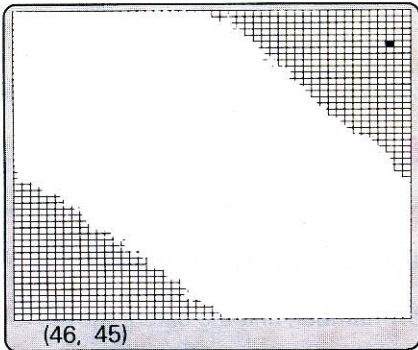
You can move the cursor within the area. The maximum stitch number is displayed. Enter a stitch number within the limit and push the STEP key. (ex. stitch number ... 46)





- 3** Enter the row number where you want to put the cursor.
 Maximum row number is displayed. Enter a row number within the limit and push the STEP key.

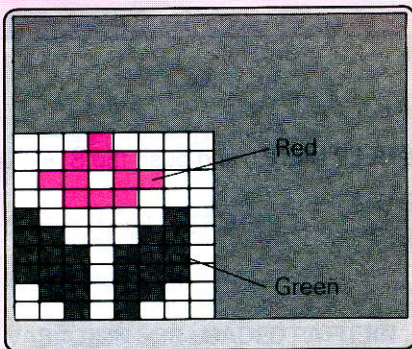
(ex. row number ... 45)



- 4** The pattern creating screen appears, and you can see the cursor which is positioned where you specified.

◆◆◆ 3. SET COLOUR (HELP MENU 3) ◆◆◆

(ex.)

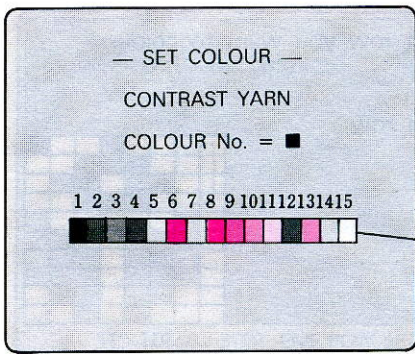


- You can colour the pattern and see the colour contrast of the pattern.
- You can colour both the main yarn and contrast yarn.
- You can set the new colour on the row where you already set the colour.
- Colour data of the contrast yarn is displayed on the display of the knitting machine while you are knitting. (Refer to page 16).



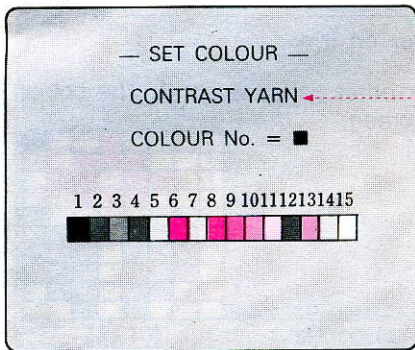
- 1** Choose option 3 from the HELP MENU, and push the STEP key.





Colour palette

2 A colour palette of 15 colours appears on the screen. You can use these colours for colouring.



3 First choose the contrast yarn or main yarn that you are going to colour.

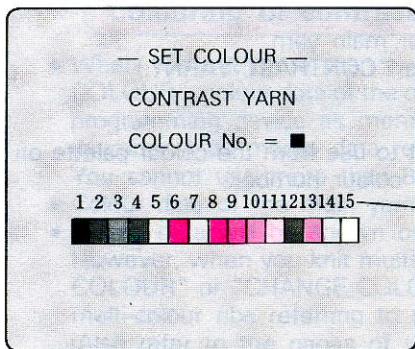
Push the STEP key.

The display shows "MAIN YARN".

Push the STEP key again.

The display shows "CONTRAST YARN".

Whenever you push the STEP key, the display of "CONTRAST YARN" or "MAIN YARN" appears alternately. Choose either one. (In this example choose "CONTRAST YARN".)

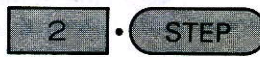


Colour number

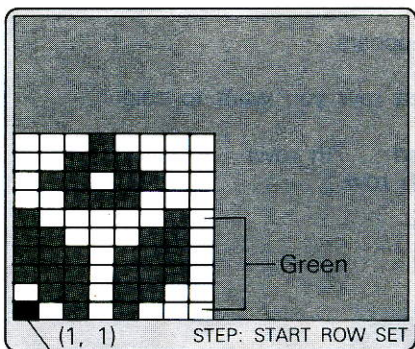
4 Choose the colour you want to use from the colour palette on the screen by entering the colour number.

Push the STEP key.

* In this example, first colour the leaves and then the flower. (ex. green: leaves... 2)



♣ It is convenient to memorize the colour number when you change the colour.



First row to be coloured

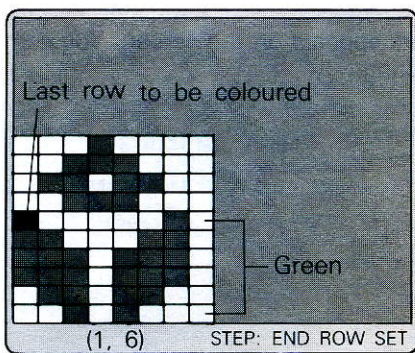
5 Pattern creating screen reappears. Move the cursor to the first row you want to colour.

♣ It does not matter if the cursor is on any stitch.

(ex. first row to be coloured... 1st row)

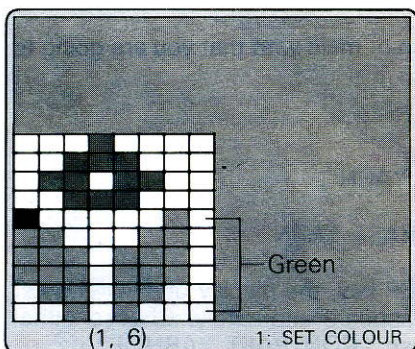
Move the cursor to the first row. Push the STEP key.





- 6** Move the cursor to the last row you want to colour.
 (ex. last row ... sixth row)
 Move the cursor to the 6th row.
 Push the STEP key.

STEP



- 7** The specified part has colour on it.
 ♣ When you want to colour other parts, select 1. The colour palette appears on the screen.
 (ex. Colour the flower.)

1

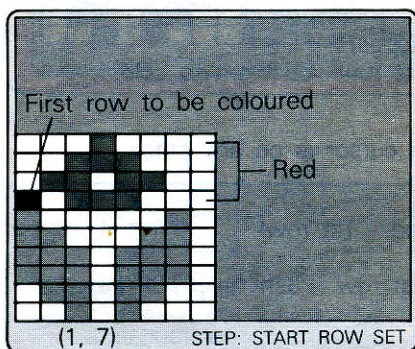


- 8** Choose the contrast yarn or main yarn.
 (ex. In this example choose "CONTRAST YARN".)

- 9** Choose the colour you want to use from the colour palette on the screen by entering the colour number.
 Push the STEP key.

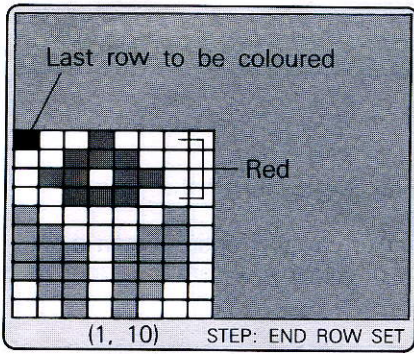
(ex. red: flower ... 8)

8 • STEP



- 10** Pattern creating screen reappears.
 Move the cursor to the first row you want to colour.
 (ex. first row to be coloured ... 7th row)
 Move the cursor to the 7th row.
 Push the STEP key.

STEP

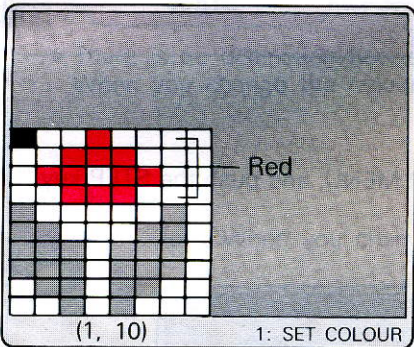


11 Move the cursor to the last row you want to colour.

(ex. last row to be coloured... 10th row)

Move the cursor to the 10th row.
Push the STEP key.

STEP



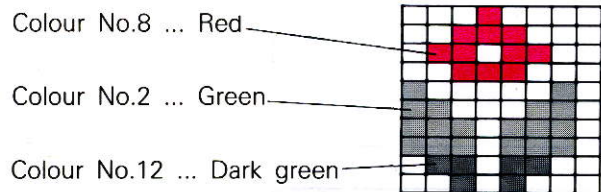
12 The specified part has colour on it.

*When you want to choose other options from the HELP MENU, push the HELP key.

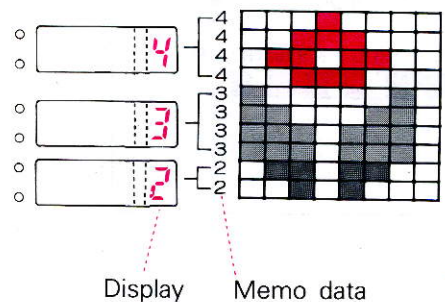
Colouring of contrast yarn and memo data

- When you set more than two colours on the contrast yarn using option "SET COLOUR" and "CHANGE COLOUR", colour data of the contrast yarn will automatically convert to number 2-9 and be stored in the pattern programming device as memo data.
(Number 1 as memo data represents main yarn.)
You cannot use more than 8 colours for the contrast yarn.
- Colour data of the main yarn will not be stored in the pattern programming device as memo data.
- Memo data will be shown on the display of the knitting machine while you knit.
However, when you knit multi-colour ribs setting the KRC key on, memo data you entered working with "SET COLOUR" or "CHANGE COLOUR" will not be converted for multi-colour ribs. Therefore enter memo data for multi-colour ribs referring to page 44.
(Also refer to the pages of memo information for the electronic knitting machine manual.)

(ex.) When you colour contrast yarn as below

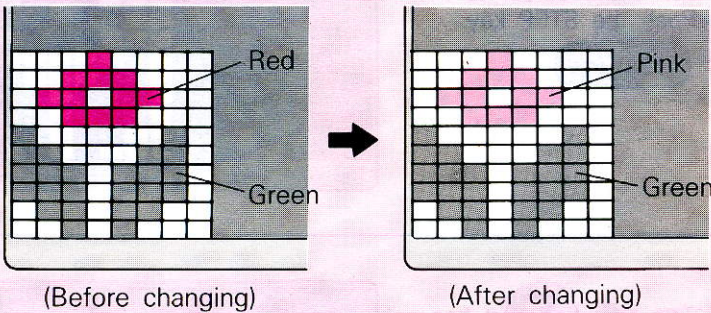


- Each colour is given number 2, 3, 4, ... from the bottom (the number represents contrast yarn).



◆◆◆ 4. CHANGE COLOUR (HELP MENU 4) ◆◆◆

(ex.) You change red into pink.



• You can change the colour of the pattern.

It is convenient to use this option when there are many rows of colour you want to change or stripes, etc.

(Before changing)

(After changing)

— HELP MENU —

1. END CREATION
2. TRANSFER CURSOR
3. SET COLOUR
4. CHANGE COLOUR
5. REDUCTION
6. ERASE PART OF PATTERN
7. LOAD STORED PATTERN
8. VARIATIONS
9. TRANSFER PATTERN
10. CHANGE PATTERN AREA

* SELECT 1-10 = ■

1

Choose option 4 from HELP MENU, and push the STEP key.

4 • STEP

— CHANGE COLOUR —

ORIGINAL COLOUR No. = ■

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



2

Choose the colour you want to change from the colour palette by entering the colour number, and push the STEP key.

(ex. red ... 8)

8 • STEP

— CHANGE COLOUR —

ORIGINAL COLOUR No. = 8

NEW COLOUR No. = ■

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

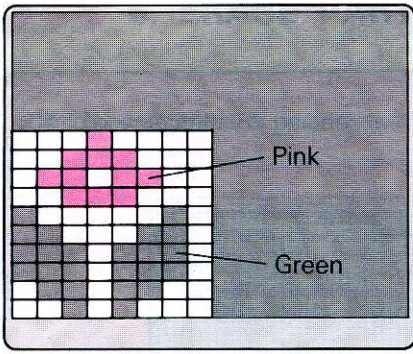


3

Choose the new colour by entering the colour number, and push the STEP key.

(ex. pink ... 13)

1 • 3 • STEP



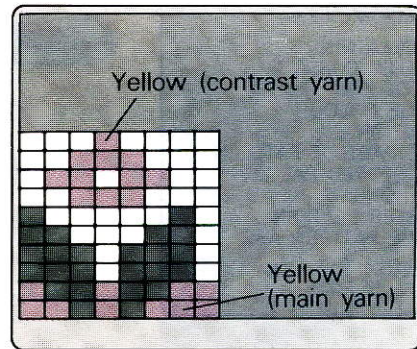
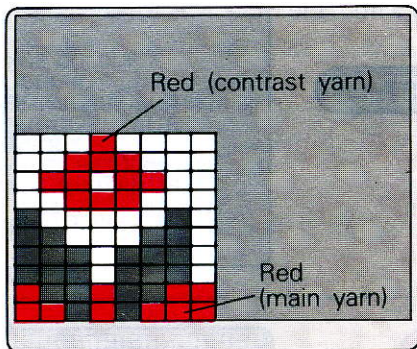
4 The screen returns to the pattern creating screen, and you can see that the colour is changed as you specified.

*When you want to choose other options from the HELP MENU, push the HELP key.

Note

- There is no distinction between the main yarn and contrast yarn in the option of CHANGE COLOUR. When you change the colour, every part coloured in the same colour is changed automatically.

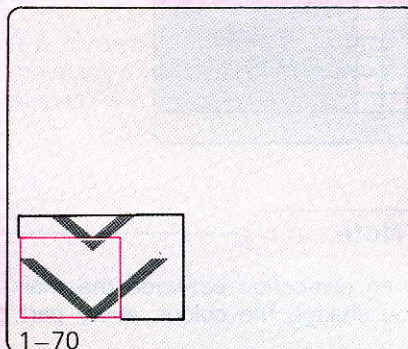
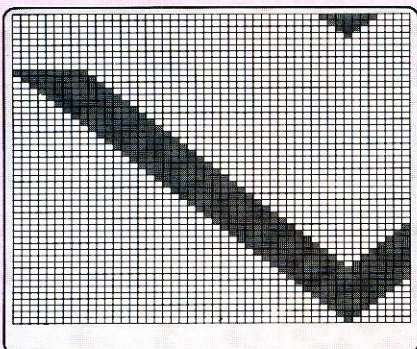
(ex.) When you change red into yellow



◆◆◆ 5. REDUCTION (HELP MENU 5) ◆◆◆

- You can check the whole pattern by reducing it while you are creating a pattern exceeding 48 stitches and/or 50 rows.

(ex.)



— HELP MENU —

1. END CREATION
2. TRANSFER CURSOR
3. SET COLOUR
4. CHANGE COLOUR
5. REDUCTION
6. ERASE PART OF PATTERN
7. LOAD STORED PATTERN
8. VARIATIONS
9. TRANSFER PATTERN
10. CHANGE PATTERN AREA

* SELECT 1-10 = ■

1

Choose option 5 from the HELP MENU, and push the STEP key.

5

STEP

2

You can see the whole pattern that you are drawing now by reducing it.

♣ Reduced pattern screen

- There are 200 stitches and 200 rows on the screen.
- The green frame of square which is shown on the screen indicates the whole pattern area.
- The white frame of square indicates the part of pattern that you can see on the pattern creating screen. When you want to see other parts of the pattern on the pattern creating screen, move the white frame with the cursor keys.
- If you are creating a pattern exceeding 200 rows, you can roll the screen up or down by 180 rows by selecting 1 or 2.

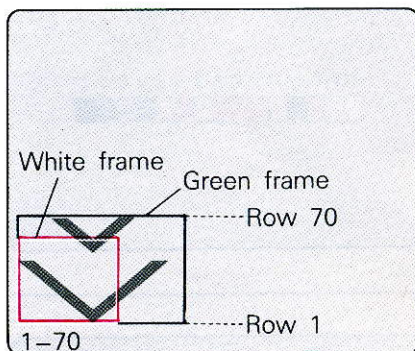
UPWARD → 1 key

DOWNWARD → 2 key

3

Push the STEP key.
The screen returns to the pattern creating screen.

STEP

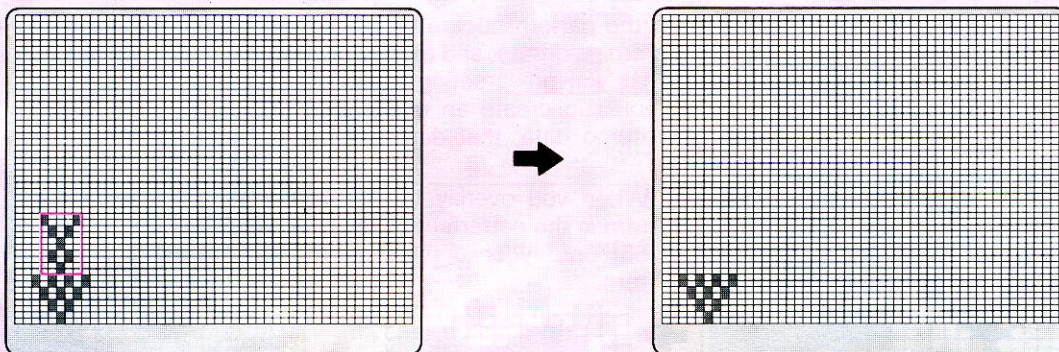


The numbers indicate the top and bottom row of the part of the pattern which is displayed on the screen.

◆◆◆ 6. ERASE PART OF PATTERN (HELP MENU 6) ◆◆◆

- You can erase a part of the pattern by framing the part.

(ex.)



— HELP MENU —

1. END CREATION
2. TRANSFER CURSOR
3. SET COLOUR
4. CHANGE COLOUR
5. REDUCTION
6. ERASE PART OF PATTERN
7. LOAD STORED PATTERN
8. VARIATIONS
9. TRANSFER PATTERN
10. CHANGE PATTERN AREA

* SELECT 1-10 = ■

1

Choose option 6 from the HELP MENU, and push the STEP key.

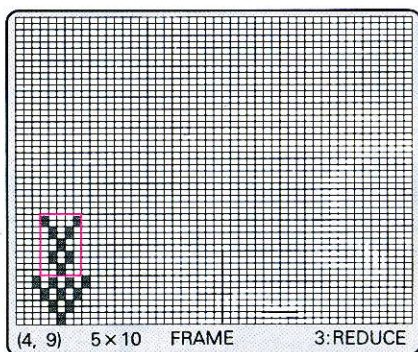
6

STEP

2

Frame the part of the pattern which you want to erase.

- Refer to "FRAMING A PART OF A PATTERN" on page 41.
- If you want to erase the whole pattern part, select 1 and advance to ③



3

The part in the frame will disappear.

Make sure that you erased correctly.

♥ If you check the whole pattern by reducing the pattern...

- ① Select 3. The reduced pattern appears on the screen.
 - * If you want to see another part of pattern on the pattern creating screen, move the white frame with cursor keys.
 - * If the pattern exceeds 200 rows, you can roll the screen up or down by selecting 1 or 2.
- ② Push the STEP key. The screen returns to the pattern creating screen.

- When you have erased correctly, select 1.
- To restore the pattern, select 2.

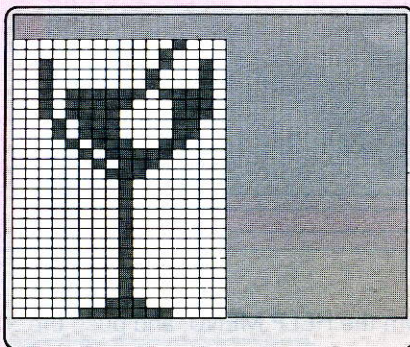
*When you want to choose other options from the HELP MENU, push the HELP key.

◆◆◆ 7. LOAD STORED PATTERN (HELP MENU 7) ◆◆◆

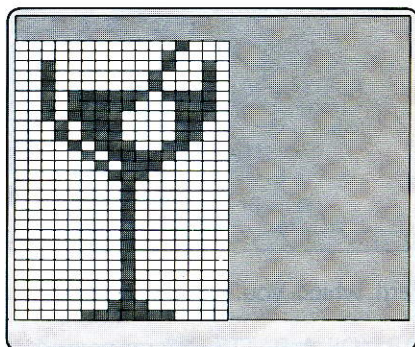
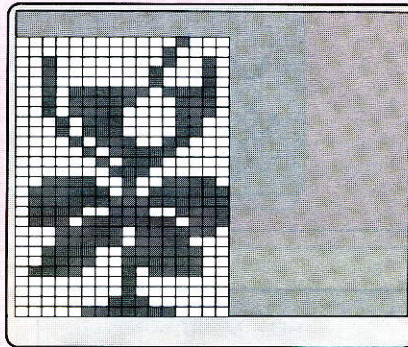
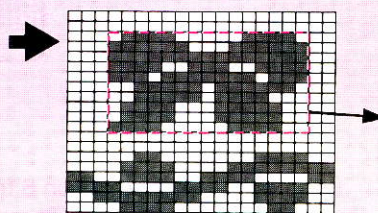
1 FROM BUILT-IN PATTERN

- You can load a pattern that is published in the pattern book attached to electronic knitting machine and the created patterns stored in the pattern programming device, and modify or combine them in order to create a new pattern. (Also, you can load the pattern that you are creating now.)
- If you overlay one pattern onto another, you can create an overlapped pattern.
- If the pattern you are going to load has memo data, that data will not be loaded.

(ex.)



When you overlay the pattern in the pattern book (No. 55) onto your original pattern...



- 1 First, create the pattern of a glass as shown in the illustration. (Refer to steps ①-⑦ page 7-9. Enter the pattern area as below.)

— Pattern area —
 Number of stitches : 16 stitches
 Number of rows : 28 rows

After drawing the pattern of glass, push the HELP key.

— HELP MENU —

1. END CREATION
2. TRANSFER CURSOR
3. SET COLOUR
4. CHANGE COLOUR
5. REDUCTION
6. ERASE PART OF PATTERN
7. LOAD STORED PATTERN
8. VARIATIONS
9. TRANSFER PATTERN
10. CHANGE PATTERN AREA

* SELECT 1-10 = ■

- 2 Choose option 7 from the HELP MENU, and push the STEP key.



— LOAD STORED PATTERN —

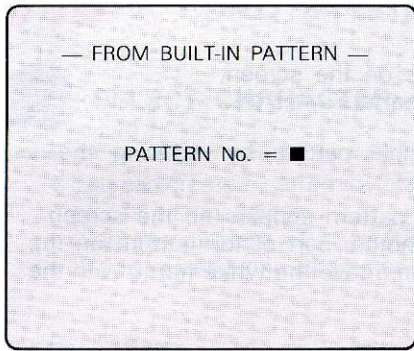
1. FROM BUILT-IN PATTERN
2. SELECT CHARACTER
3. FROM PATTERN DISC
- (4. FROM OTHER PAGE) ←

* SELECT 1-3(4) = ■

- 3 Choose option 1 from menu of LOAD STORED PATTERN, and push the STEP key.

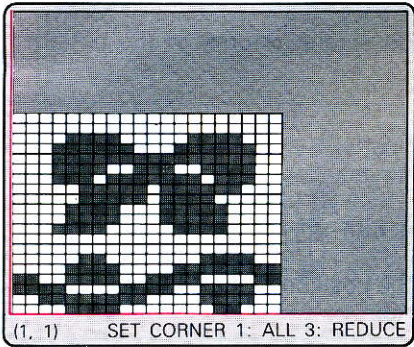


-----This option does not appear on the screen when MODE 1 is set.

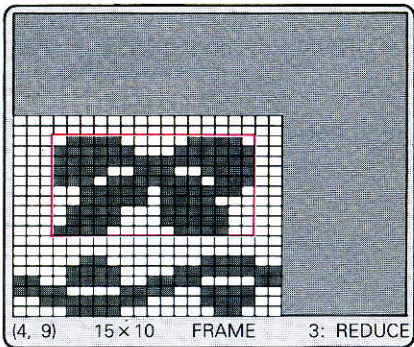


4 Choose the pattern that you want to use from the pattern book attached to the electronic knitting machine or from your created patterns which are stored in the pattern programming device. Enter the pattern number with the numeral keys. Push the STEP key.

(ex. pattern number ... 55)



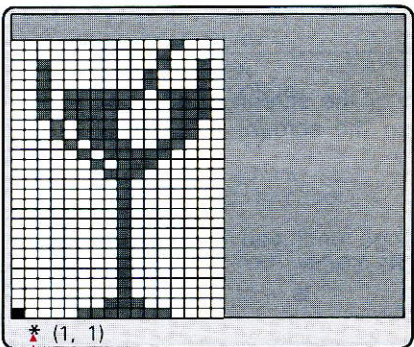
5 The pattern that you specified appears on the screen.



6 Frame the part of the pattern you want to use.

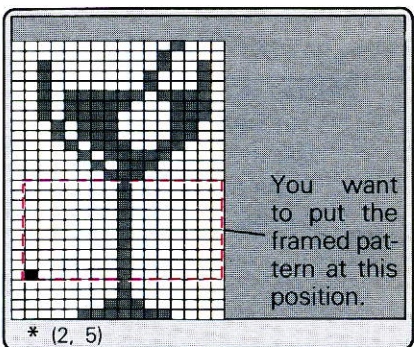
(In this example, use only the ribbon).

- Refer to "FRAMING A PART OF A PATTERN" on page 41.
- If you want to use the whole pattern, push the 1 key and advance to ⑦.



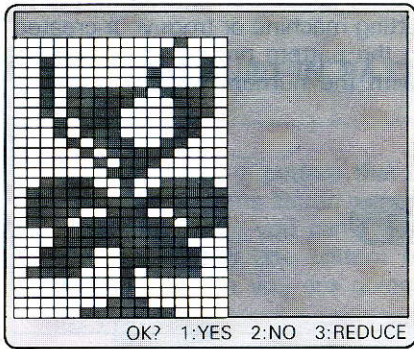
7 The screen returns to the pattern creating screen, and "*" appears on the screen.

This mark indicates that the loaded and framed pattern is ready to appear on the screen.



8 Move the cursor to the lower left corner of the position where you want to put the framed pattern. Push the STEP key.



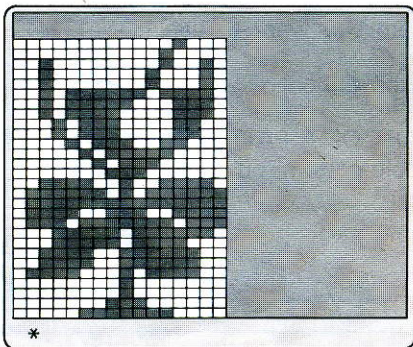


- 9 The framed pattern appears on the screen. Check the position of the pattern.

♥ If you check the whole pattern by reducing the pattern...

- ① Select 3. The reduced pattern appears on the screen.
 - * If you want to see another part of the pattern on the pattern creating screen, move the white frame with the cursor keys.
 - * If the pattern exceeds 200 rows, you can roll the screen up or down by selecting 1 or 2.
- ② Push the STEP key. The screen returns to the pattern creating screen.

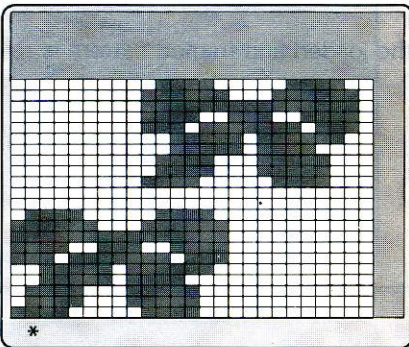
- When the position of the pattern is correct, select 1.
 - * After selecting 1, it sometimes takes a few minutes until the next screen appears. Wait for a while. Do not turn off the power switch.
- When you want to change the position of the pattern, select 2. The screen will return to ⑧.



- 10 Modify the drawing with the DRAW key and ERASE key to complete the pattern.

* When you want to choose other options from the HELP MENU, push the HELP key.

If you want to put the same pattern in several places...



Whenever "*" is on the bottom left of the screen, the loaded and framed pattern is ready to appear on the screen.

Repeat operation steps ⑧-⑨.

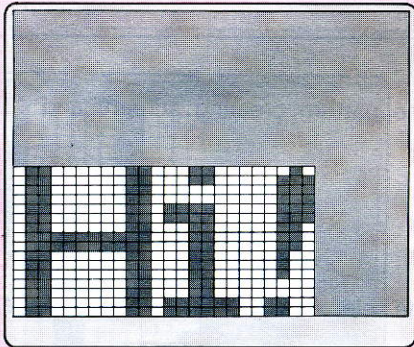
- The framed pattern does not change until you choose another pattern or choose option "END CREATION".

◆◆◆ 7. LOAD STORED PATTERN (HELP MENU 7) ◆◆◆

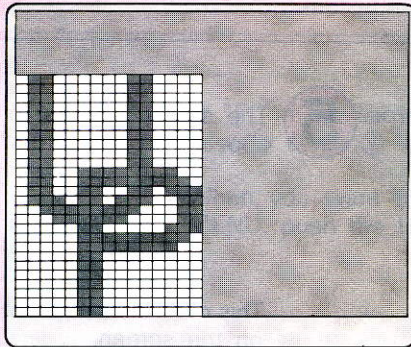
2 SELECT CHARACTER

- You can create a pattern by combining the characters (alphabet, number and so on) that are built into the pattern programming device.
(See the diagram of character on page 64).
- If you overlay one character onto another, you can create an overlapped pattern.

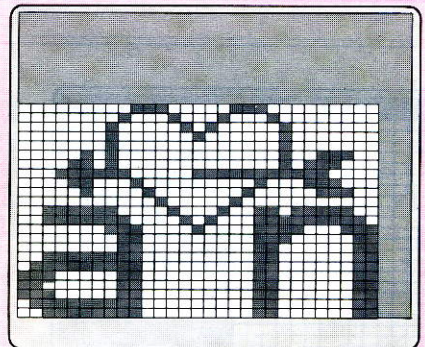
(ex. 1)



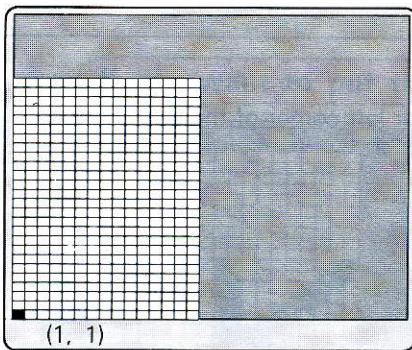
(ex. 2)



(ex. 3)



- This example uses the pattern (ex. 2). Operation for (ex. 1) and (ex. 3) is the same as for (ex. 2).



1

Prepare the pattern creating screen. Refer to steps ①–⑥ on page 7–9. Enter the pattern area as below.

— Pattern area —

Number of stitches: 15 stitches
Number of rows : 26 rows

When the pattern creating screen appears, push the HELP key.

— HELP MENU —

1. END CREATION
2. TRANSFER CURSOR
3. SET COLOUR
4. CHANGE COLOUR
5. REDUCTION
6. ERASE PART OF PATTERN
7. LOAD STORED PATTERN
8. VARIATIONS
9. TRANSFER PATTERN
10. CHANGE PATTERN AREA

* SELECT 1–10 = ■

2

Choose option 7 from the HELP MENU, and push the STEP key.

7

STEP

— LOAD STORED PATTERN —

1. FROM BUILT-IN PATTERN
2. SELECT CHARACTER
3. FROM PATTERN DISC
- (4. FROM OTHER PAGE)

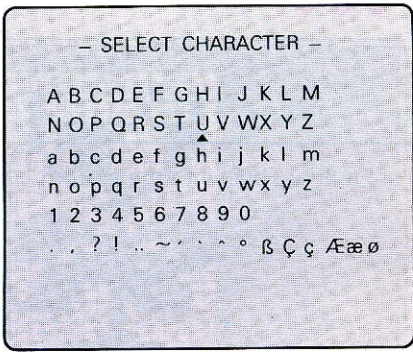
* SELECT 1–3(4) = ■

3

Choose option 2 from the menu of LOAD STORED PATTERN, and push the STEP key.

2

STEP

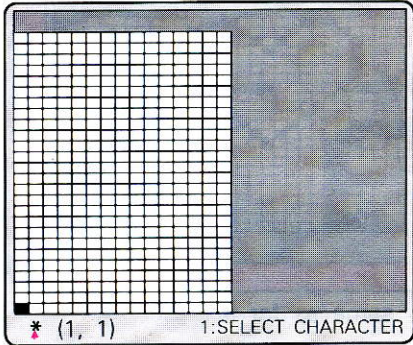


4 Characters appear on the screen.

Using the cursor keys (▲ · ▼ · ◀ · ▶), move the cursor "▲" under the character you want to use.
(ex. Move the cursor "▲" under the "U".)

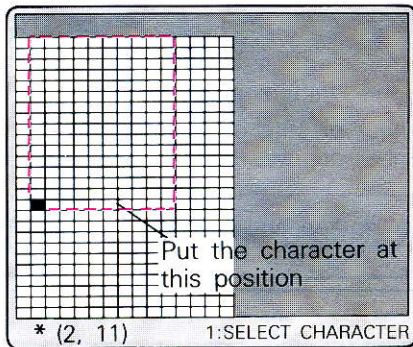
Push the STEP key.

STEP



5 The screen returns to the pattern creating screen, and "*" appears on the screen.

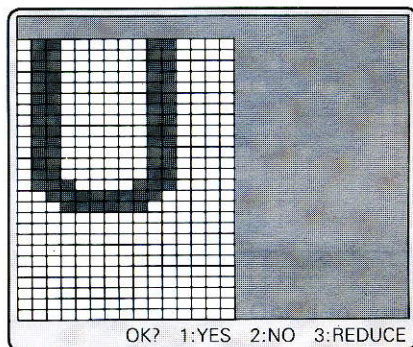
This mark indicates that the selected character is ready to appear on the screen.



6 Move the cursor to the lower left corner of the position where you want to put the character.

Push the STEP key.

STEP



7 The character appears on the screen.
Check the position of the character.

♥ If you check the whole pattern by reducing the pattern...

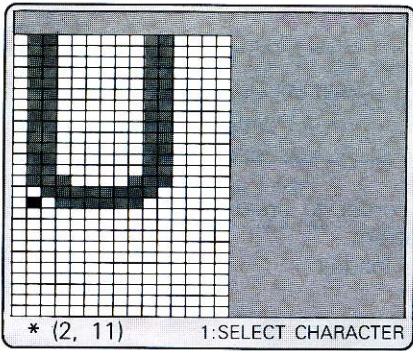
① Select 3. The reduced pattern appears on the screen.
* If you want to see another part of pattern on the pattern creating screen, move the white frame with the cursor keys.

* If the pattern exceeds 200 rows, you can roll the screen up or down by selecting 1 or 2.

② Push the STEP key.

The screen returns to the pattern creating screen.

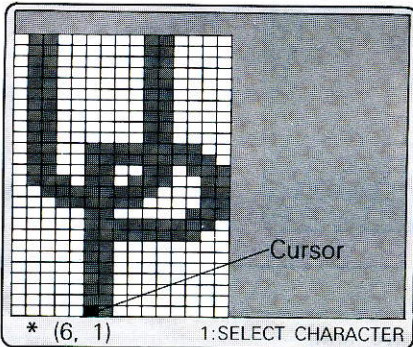
- When the position of the character is correct, select 1.
- When you want to change the position of the character, select 2. The screen will return to ⑥.



8 You have finished setting the character.

♥ If you want to select another character, select 1.
The screen returns to ④.

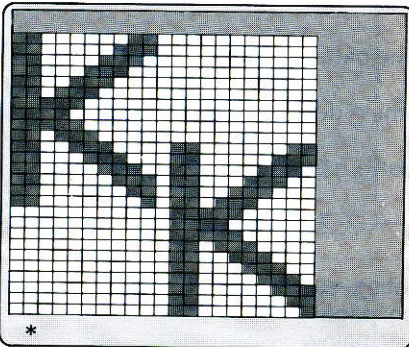
(ex. Choose character "P".)
Select 1.



9 Set "P" in the same way you set "U".
(Refer to steps ④–⑦.)

*When you want to choose other options from the HELP MENU, push the HELP key.

If you want to put the same character in several places...



Whenever "*" is on the bottom left of the screen, the selected character is ready to appear on the screen.

Repeat operation steps ⑥–⑦ on page 25.

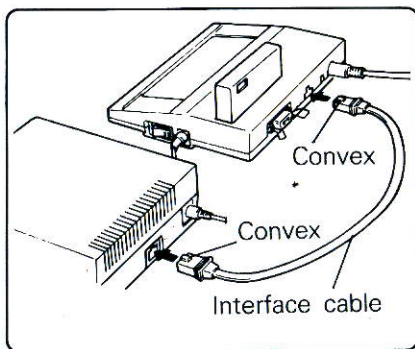
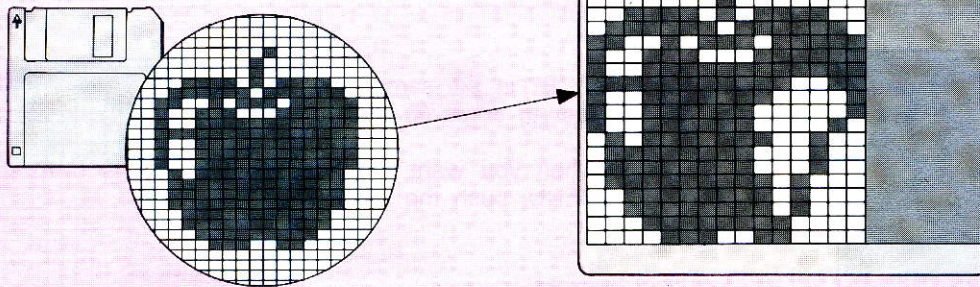
- The character does not change until you choose another character or pattern or you choose "END CREATION".

◆◆◆ 7. LOAD STORED PATTERN (HELP MENU 7) ◆◆◆

3 FROM PATTERN DISC

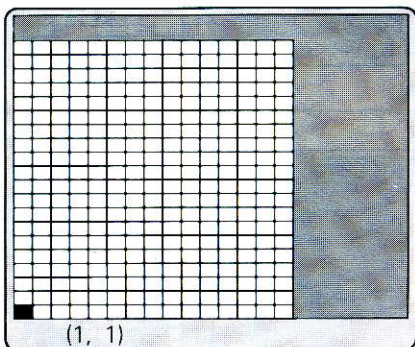
- You can load patterns stored on the disc and modify or combine them in order to create a new pattern.
- If you overlay one pattern onto another, you can create an overlapped pattern.
- If the pattern you are going to load has memo data, the data will not be loaded.

(ex.) Create the "nibbled apple" pattern using the "apple" pattern stored on the disc.



- Preparation of the floppy disc drive unit
- * Please read the instruction manual of the floppy disc drive unit, and also read the "FLOPPY DISC DRIVE UNIT" section of the electronic knitting machine manual.
- * The drive unit should be placed in front of the TV screen and not in the back of the TV screen for it to work normally.

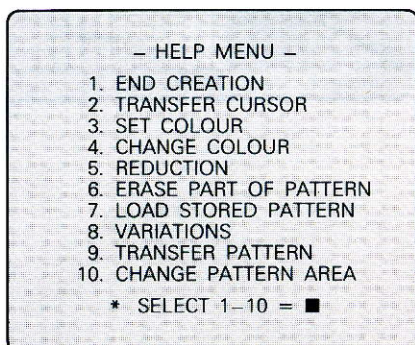
- ① Turn off the power switch of the pattern programming device and drive unit.
- ② Connect the pattern programming device and drive unit with the interface cable.
- ③ Turn on the power switch of pattern programming device and drive unit.



- ① Prepare the pattern creating screen. Refer to steps ①–⑥ on page 7–9. Enter the pattern area as below.

— Pattern area —
 Number of stitches: 15 stitches
 Number of rows : 20 rows

When the pattern creating screen appears, push the HELP key.



- ② Choose option 7 from the HELP MENU, and push the STEP key.



- LOAD STORED PATTERN -
 1. FROM BUILT-IN PATTERN
 2. SELECT CHARACTER
 3. FROM PATTERN DISC
 (4. FROM OTHER PAGE)
 * SELECT 1-3(4) = ■

3 Choose option 3 from the LOAD STORED PATTERN menu, and push the STEP key.

3 • **STEP**

CONNECT INTERFACE CABLE
 TURN POWER ON!
 PUSH STEP KEY!!

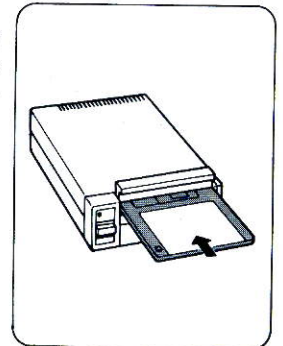
4 After checking that the drive unit is connected to the pattern programming device and the power switch of the drive unit is on, push the STEP key.

STEP

- FROM PATTERN DISC -
 INSERT DISC!
 PUSH STEP KEY !!

5 Insert the disc with the saved pattern you want to use into floppy disc drive unit, and push the STEP key.

STEP



- FROM PATTERN DISC -
 TRACK No. = ■

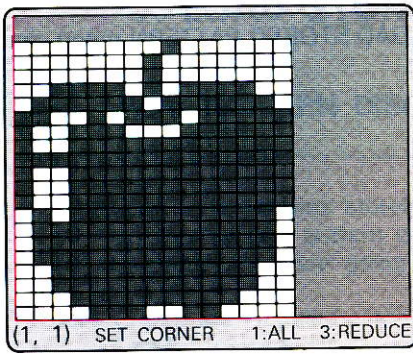
6 Enter the track number where the required pattern is saved with the numeral key, and push the STEP key.
 (ex. track number...1)

1 • **STEP**

- FROM PATTERN DISC -
 TRACK No. = 1
 PATTERN No. = ■

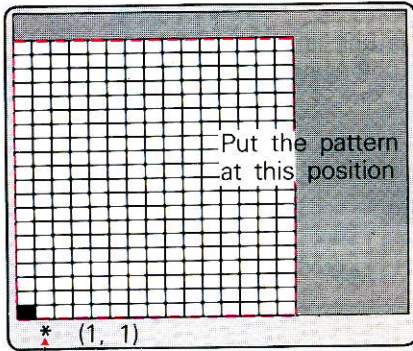
7 Enter the pattern number with the numeral key, and push the STEP key.
 (ex. pattern number...901)

9 • **0** • **1** • **STEP**



- 8** The pattern you chose appears on the screen. Specify the part of the pattern which you want to use. (ex. To use the whole pattern, select 1.)

♥ If you want to use part of the pattern, frame the part referring to page 41.



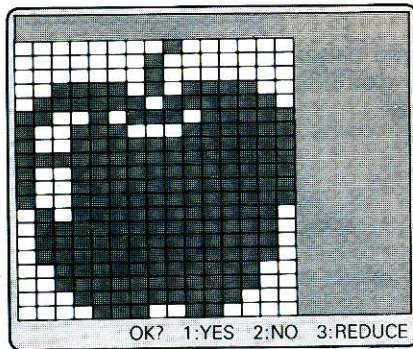
- 9** The screen returns to the pattern creating screen and "*" appears on the screen.

This mark indicates that the loaded and framed pattern is ready to appear on the screen.

Move the cursor to the lower left corner of the position where you want to put the pattern.

Push the STEP key.

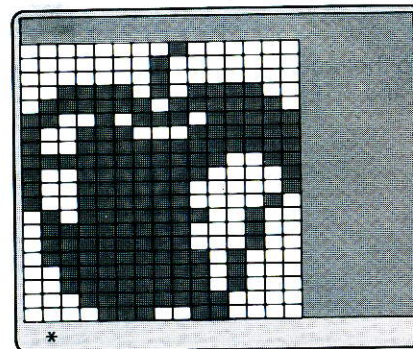
STEP



- 10** The pattern appears on the screen. Check the position of the pattern.

♥ If you check the whole pattern by reducing, refer to ⑧ page 23.

- When the position of the pattern is correct, select 1.
- When you want to change the position of the pattern, select 2. The screen will return to ⑨.



- 11** Modify the drawing with the DRAW key and ERASE key to complete the pattern.

*When you want to choose other options from the HELP MENU, push the HELP key.

If you want to put the same pattern in several places...

Whenever "*" is on the bottom left of the screen, the loaded and framed pattern is ready to appear on the screen. Repeat operation steps ⑨-⑩. The framed pattern does not change until you choose other patterns or you choose option "END CREATION".

If you want to load another pattern from the disc

Push the HELP key and follow steps ②-③ page 27. The screen returns to ⑦ because the pattern programming device stores the track number you loaded before.

- If you use this track, enter the pattern number.
- If you want to load a pattern from another track of the disc or from another disc, push the HELP key to return to ⑤.

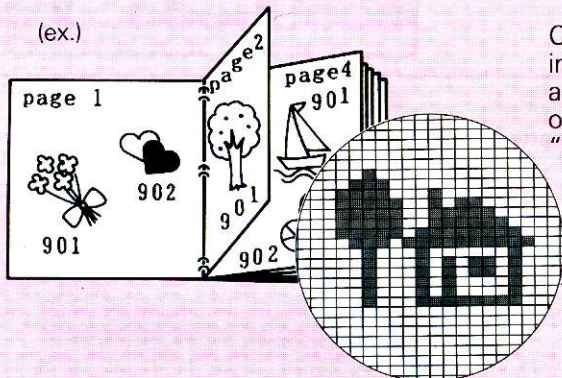
◆◆◆ 7. LOAD STORED PATTERN (HELP MENU 7) ◆◆◆

4 FROM OTHER PAGE

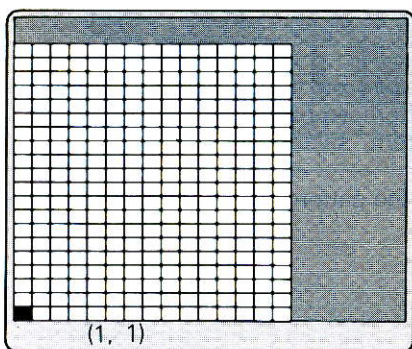
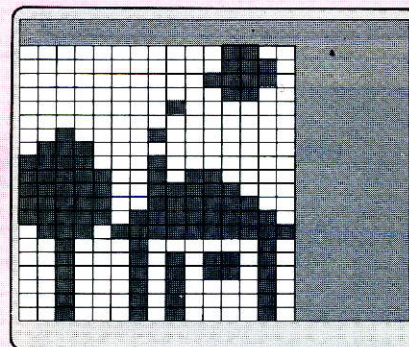
*You can use this option only when you set MODE 2.

- You can load a pattern stored on another page and modify or combine it to create a new pattern.
- If you overlay one pattern onto another, you can create an overlapped pattern.
- If the pattern that you are going to load has memo data, the data will not be loaded.

(ex.)



Create the new pattern using the patterns "house and tree" stored on the other page and adding the "smoke".



- 1** Prepare the pattern creating screen.
Refer to steps ①-⑥ page 7-9.
Enter the pattern area as below.

— Pattern area —
Number of stitches : 15 stitches
Number of rows : 20 rows

When the pattern creating screen appears, push the HELP key.

— HELP MENU —

1. END CREATION
2. TRANSFER CURSOR
3. SET COLOUR
4. CHANGE COLOUR
5. REDUCTION
6. ERASE PART OF PATTERN
7. LOAD STORED PATTERN
8. VARIATIONS
9. TRANSFER PATTERN
10. CHANGE PATTERN AREA

* SELECT 1-10 = ■

- 2** Choose option 7 from the HELP MENU, and push the STEP key.



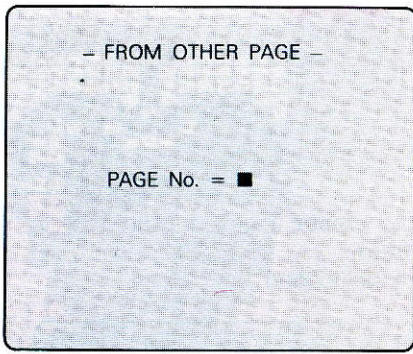
— LOAD STORED PATTERN —

1. FROM BUILT-IN PATTERN
2. SELECT CHARACTER
3. FROM PATTERN DISC
4. FROM OTHER PAGE

* SELECT 1-4 = ■

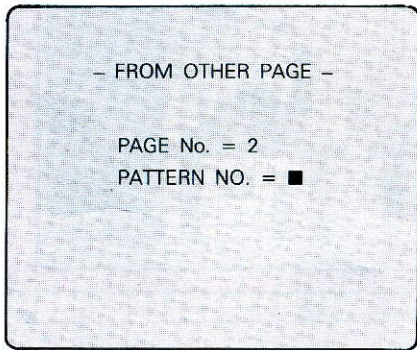
- 3** Choose option 4 from the LOAD STORED PATTERN menu, and push the STEP key.





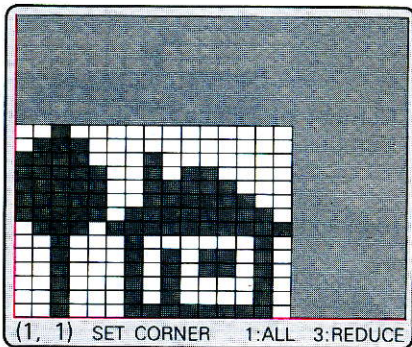
4 Enter the page number where the required pattern is saved, and push the STEP key.

(ex. page number...2)



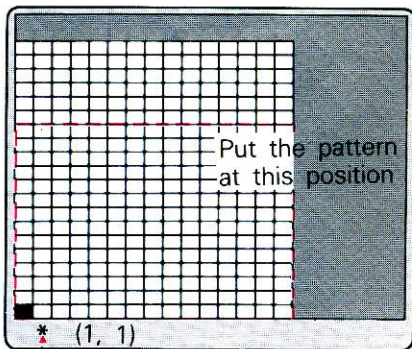
5 Enter the pattern number, and push the STEP key.

(ex. pattern number...901)



6 The pattern you chose appears on the screen. Specify the part of the pattern you want to use. (ex. To use the whole pattern, select 1.)

♥ If you want to use part of the pattern, frame the part referring to page 41.

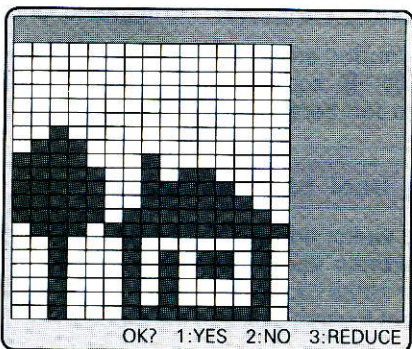


7 The screen returns to the pattern creating screen and "*" appears on the screen.

This mark indicates that the loaded and framed pattern is ready to appear on the screen.

Move the cursor to the lower left corner of the position where you want to put the pattern.

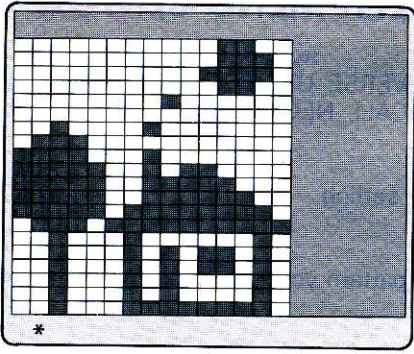
Push the STEP key.



8 The pattern appears on the screen. Check the position of the pattern.

♥ If you check the whole pattern by reducing it, refer to ⑧ page 23.

- When the position of the pattern is correct, select 1.
- When you want to change the position of the pattern, select 2. The screen will return to ⑦.

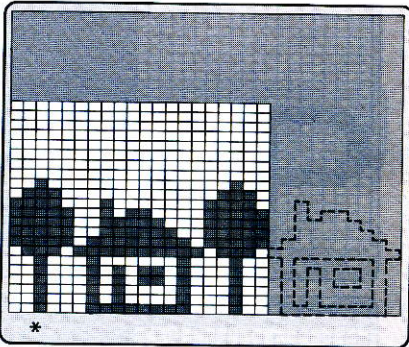


9

Modify the drawing with the DRAW key and ERASE key to complete the pattern.

*When you want to choose other options from the HELP MENU, push the HELP key.

If you want to put the same pattern in several places...



Whenever "*" is on the bottom left of the screen, the loaded and framed pattern is ready to appear on the screen. Repeat operation steps ⑦-⑧.

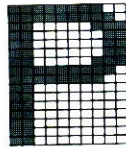
- The framed pattern does not change until you choose another pattern or you choose "END CREATION".

◆◆◆ 8. VARIATIONS FOR LOADED PATTERN (HELP MENU 8) ◆◆◆

You can vary the pattern you chose by option 7 (LOAD STORED PATTERN) into REVERSE, UPSIDE DOWN, DOUBLE WIDTH, DOUBLE LENGTH, SUBSTITUTION, SPREAD (HORIZONTAL), SPREAD (VERTICAL), NEGATIVE.

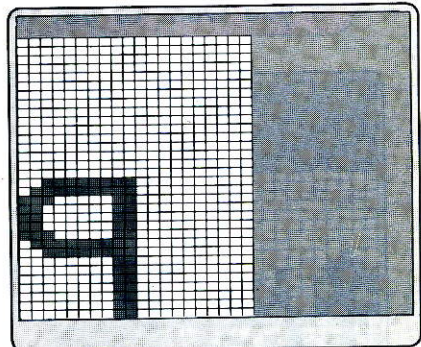
- Variation setting remains unchanged until you set it again.
Any pattern you load using option 7 will be changed according to variation setting.
(When you choose option "END CREATION", all-functions are set to OFF.)
- Variation setting does not change the picture drawn by the DRAW key or the pattern you loaded on the pattern creating screen before you set the variation function.
- You can combine the 8 functions freely.

• Set the **REVERSE** function to ON.



(ex.) loaded pattern

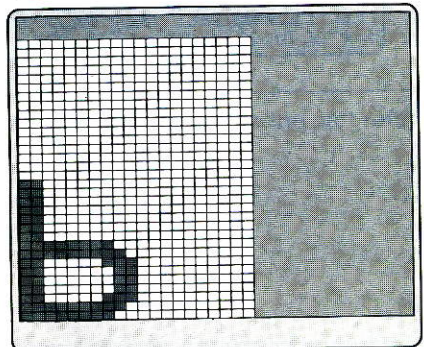
(ex. 1)



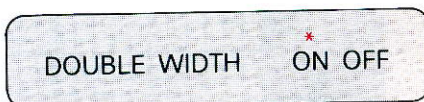
• Set the **UPSIDE DOWN** function to ON.



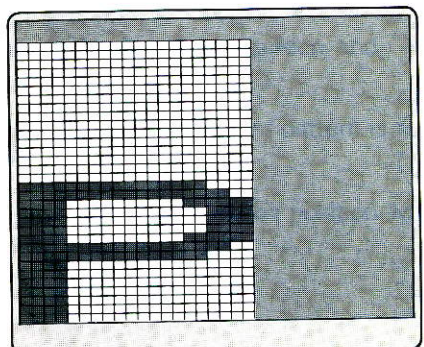
(ex. 2)



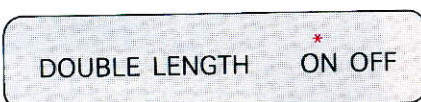
• Set the **DOUBLE WIDTH** function to ON.



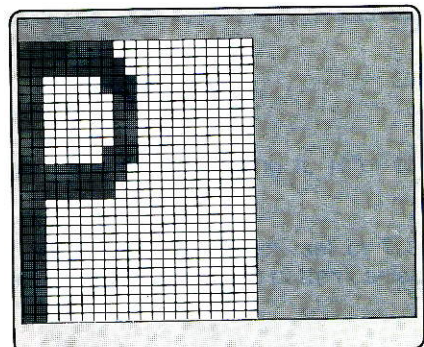
(ex. 3)



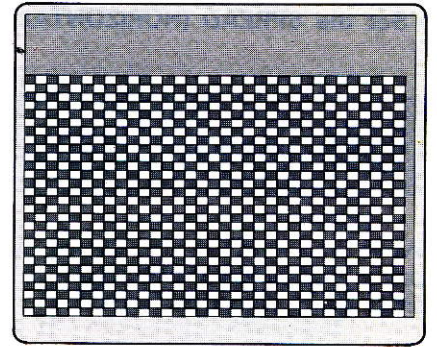
• Set the **DOUBLE LENGTH** function to ON.



(ex. 4)



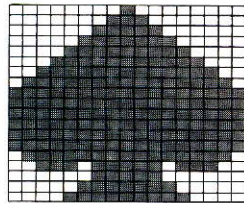
• SUBSTITUTION function



Before loading the pattern



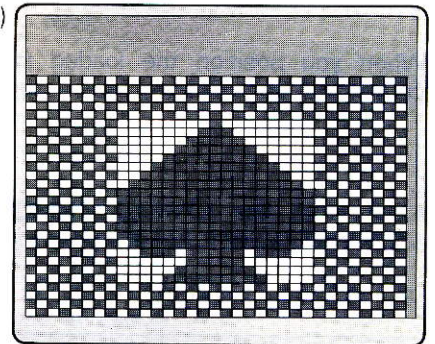
SUBSTITUTION ON OFF



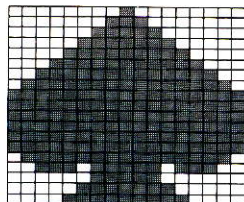
(ex.) loaded pattern



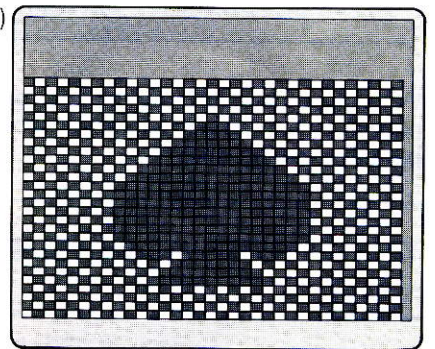
(ex. 5)



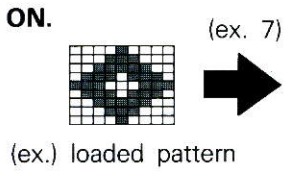
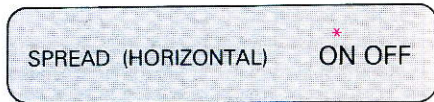
SUBSTITUTION ON OFF



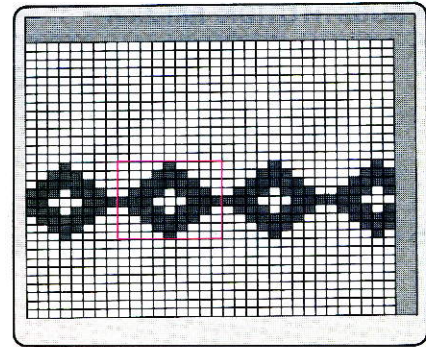
(ex. 6)



• Set the **SPREAD (HORIZONTAL)** function to ON.



(ex. 7)

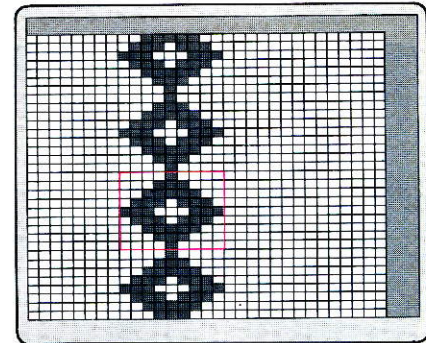


When you position the loaded pattern, the same pattern will automatically repeat to the left and right sides of it.

• Set the **SPREAD (VERTICAL)** function to ON.

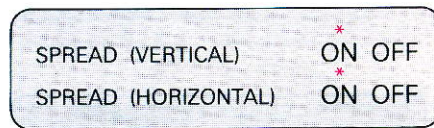


(ex. 8)

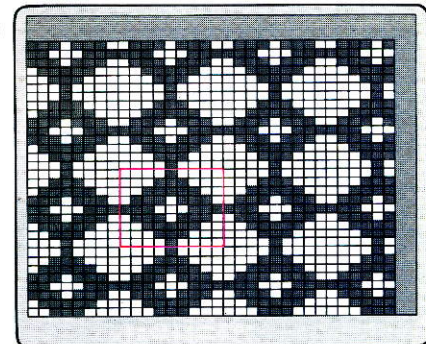


When you position the loaded pattern, the same pattern will automatically repeat above and below it.

• Set both the **SPREAD (HORIZONTAL)** and the **SPREAD (VERTICAL)** functions to ON.

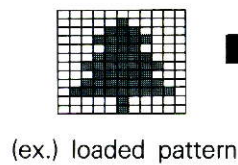


(ex. 9)

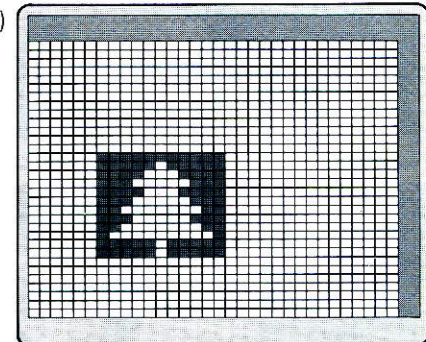


When you position the loaded pattern, the same pattern will automatically repeat around it all over the pattern creating area.

• Set the **NEGATIVE** function to ON.

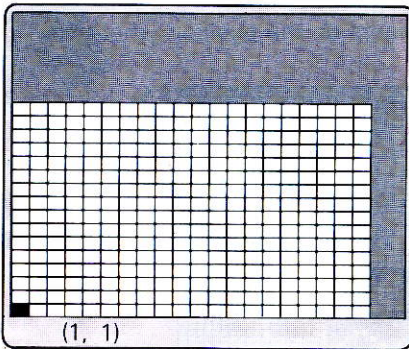


(ex. 10)



• SETTING OF VARIATION FUNCTION

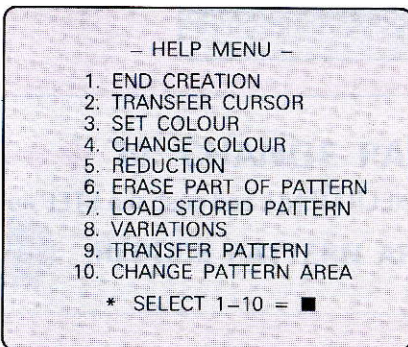
This example uses pattern (ex. 3) on page 33.



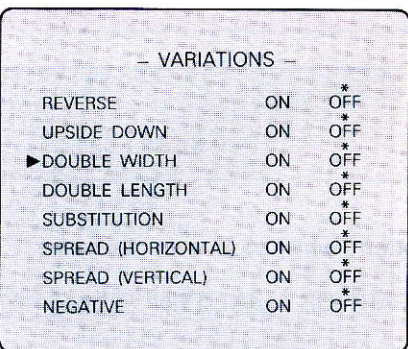
- 1** Prepare the pattern creating screen.
(Refer to steps ①–⑥ on page 7–9.
Enter the pattern area as below.)

(ex. 3) Pattern area
Number of stitches: 20 stitches
Number of rows : 16 rows

When the pattern creating screen appears, push the HELP key.

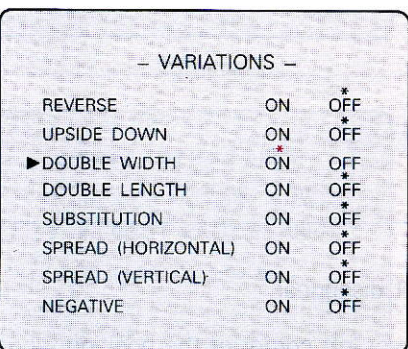


- 2** Choose option 8 from the HELP MENU by entering 8 with the numeral keys, and push the STEP key.



- 3** Using the cursor key (◀·▶), move the cursor "▶" to the function you want to use or cancel.

(ex. Choose the DOUBLE WIDTH.)
Move the cursor "▶" to DOUBLE WIDTH.



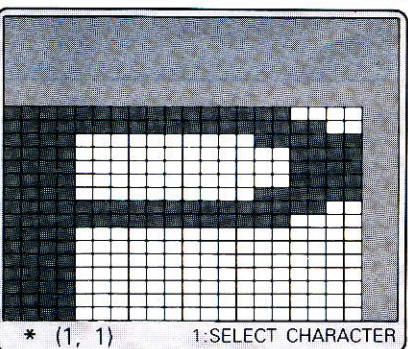
- 4** Using the cursor key (◀·▶), move the asterisk "*" to ON or OFF.

(ex. Set the DOUBLE WIDTH to ON.)



The asterisk moves to ON and now DOUBLE WIDTH function works.

♥ When you want to choose other functions, repeat steps ③–④.



- 5** When you finish VARIATION setting, push the STEP key.
The pattern creating screen reappears.

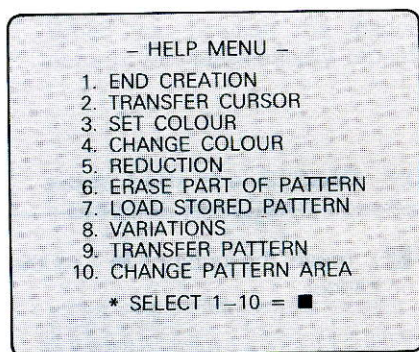
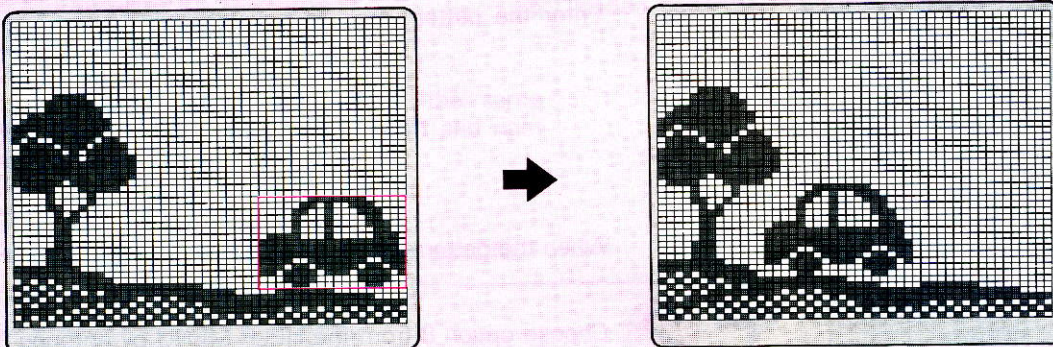


- 6** Push the HELP key and choose option 7 from HELP MENU. Load the character "P" (refer to ②–⑦, page 24–25).
The double width pattern appears on the screen.

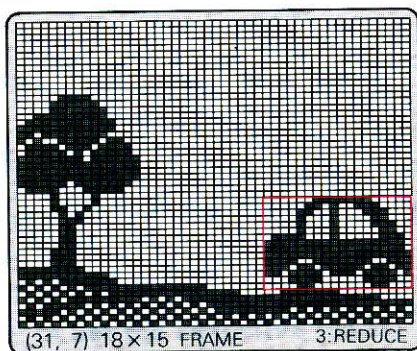
◆◆◆ 9. TRANSFER PATTERN (HELP MENU 9) ◆◆◆

- You can move a part of the pattern by framing the part within the pattern area.
- If the transferred pattern has colours, the colours change according to the colours on the position where you want to put the pattern.

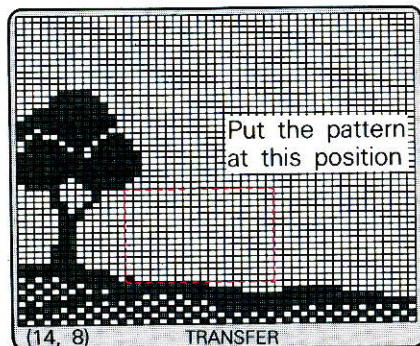
(ex.)



- 1** Choose option 9 from the HELP MENU, and push the STEP key.

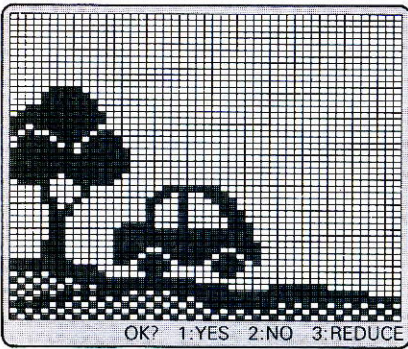


- 2** Frame the part of the pattern which you want to move.
- Refer to "FRAMING A PART OF A PATTERN" on page 41.



- 3** The part in the frame will disappear.
- Move the cursor to the lower left corner of the position where you want to put the pattern.
- Push the STEP key.





4 The pattern appears on the screen.
Check the position of the pattern.

♥ If you check the whole pattern by reducing it...

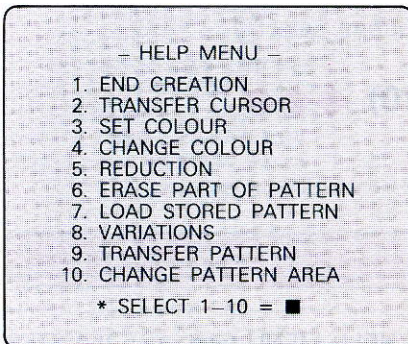
- ① Select 3. The reduced pattern appears on the screen. If you want to see another part of the pattern on the pattern creating screen, move the white frame with cursor keys. If the pattern exceeds 200 rows, you can roll the screen up or down by selecting 1 or 2.
- ② Push the STEP key. The screen returns to the pattern creating screen.

- When the position of the pattern is correct, select 1.
- When you want to change the position of the pattern, select 2. The screen will return to ③.

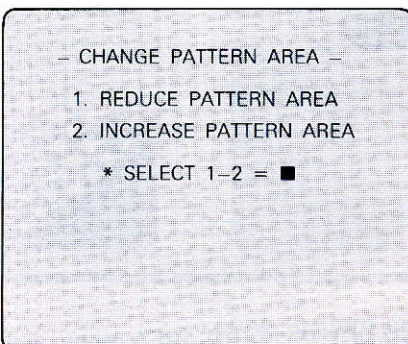
◆◆◆ 10. CHANGE PATTERN AREA (HELP MENU 10) ◆◆◆

1 REDUCE PATTERN AREA

- You can reduce the area of the pattern you are creating now.

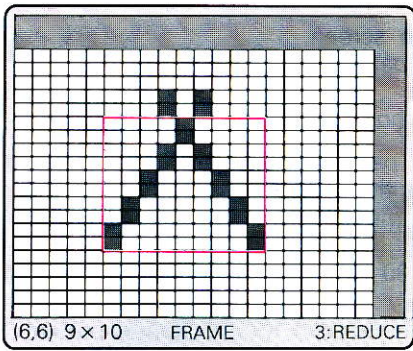


1 Choose option 10 from the HELP MENU, and push the STEP key.

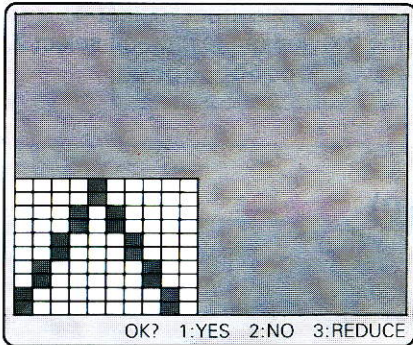


2 Choose option 1 from the CHANGE PATTERN AREA menu, and push the STEP key.





- 3** Frame the part of the pattern which you want to use.
- Refer to "FRAMING A PART OF A PATTERN" on page 41.



- 4** The pattern is reduced to its new area and appears on the screen. Check the new pattern area is correct.

♥ If you check the whole pattern by reducing it...

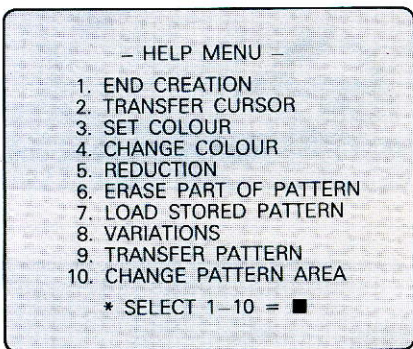
- ① Select 3. The reduced pattern appears on the screen. Check the pattern area.
 - * If you want to see another part of the pattern on the pattern creating screen, move the white frame with cursor keys.
 - * If the pattern exceeds 200 rows, you can roll the screen up or down by selecting 1 or 2.
- ② Push the STEP key. The screen returns to the pattern creating screen.

- When the pattern area is correct, select 1.
- When you restore the pattern, select 2.

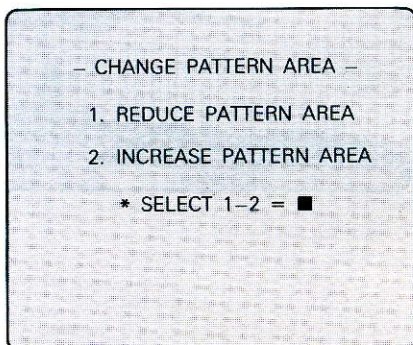
◆◆◆ 10. CHANGE PATTERN AREA (HELP MENU 10) ◆◆◆

2 INCREASE PATTERN AREA

• You can increase the area of the pattern you are creating now.



- 1** Choose option 10 from the HELP MENU, and push the STEP key.



- 2** Choose option 2 from the CHANGE PATTERN AREA menu, and push the STEP key.



– INCREASE PATTERN AREA –
 CURRENT STITCHES = 8
 CURRENT ROWS = 10
 INPUT NEW STITCHES
 STITCHES = ■

3 The display shows the current number of stitches and rows of the pattern.

Enter the new number of stitches, and push the STEP key.
 NOTE: A smaller number cannot be entered.

(ex...12 stitches)



– INCREASE PATTERN AREA –
 CURRENT STITCHES = 8
 CURRENT ROWS = 10
 INPUT NEW STITCHES
 STITCHES = 12
 MAXIMUM ROWS: 872
 INPUT NEW ROWS
 ROWS = ■

4 The display shows the maximum number of rows available for you to use for your pattern.
 (You can use up to 872 rows in this example).

Enter the new number of rows, and push the STEP key.
 NOTE: A smaller number than the current one or a number bigger than the maximum cannot be entered.

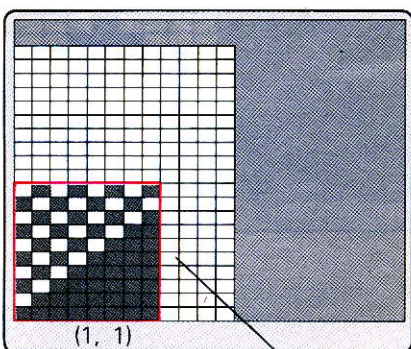
(ex...20 rows)



– INCREASE PATTERN AREA –
 CURRENT STITCHES = 8
 CURRENT ROWS = 10
 INPUT NEW STITCHES
 STITCHES = 12
 MAXIMUM ROWS: 872
 INPUT NEW ROWS
 ROWS = 20
 OK? 1: YES 2: NO

5 Check the number of stitches and rows.

- When number of stitches and rows is correct, select 1. The screen will advance to the next step.
- If you want to change the number of stitches or rows, select 2. The screen will return to **3**.



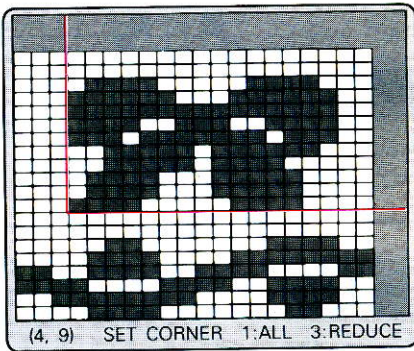
Former pattern area

6 The screen returns to the pattern creating screen, and you can see that the pattern area is increased as specified.

- ♣ The pattern area spreads rightward and upward.
- ♣ When the pattern is coloured before, the part which is spread upward has the colour of the main yarn on the last row of the former pattern. If you draw a picture on that part, the drawn square has the colour of the contrast yarn on the last row of the former pattern.

◆◆◆ FRAMING A PART OF A PATTERN ◆◆◆

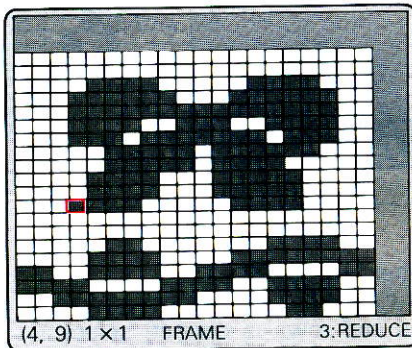
- When you specify the part of the pattern you want to use or erase, frame the part with white square.



1 A cross line is displayed on the screen.

Move the cross line to the lower left corner of the area you want to use or erase.

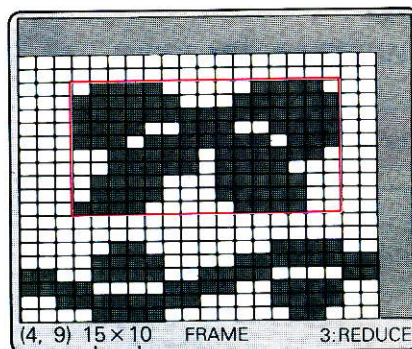
♥ If you want to check the whole pattern by reducing it, refer to the lower part of this page.



2 Push the STEP key.

STEP

Cross line is changed into a white square frame.



— number of rows
— number of stitches

3 Frame the area you want to use or erase with the cursor key. (For example the square expands right-upward with the key.)

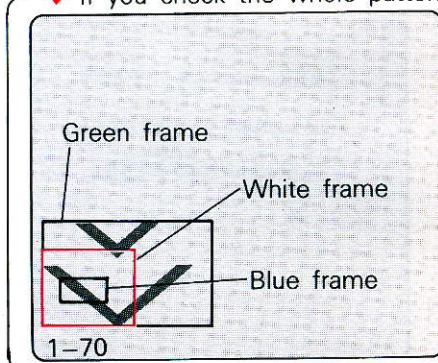
♥ If you want to check the whole pattern by reducing it, refer to the lower part of this page.

After framing, push the STEP key.

STEP

These numbers show the width and length of the framed pattern.

♥ If you check the whole pattern by reducing the pattern...



① Select 3. The reduced pattern appears on the screen.

- * The blue square frame indicates the part of pattern you framed.
- * The green square frame indicates the whole pattern area.
- * The white frame of square indicates the part of pattern that you can see on the pattern creating screen.

If you want to see another part of the pattern on the pattern creating screen, move the white frame with cursor keys.

- * If the pattern exceeds 200 rows, you can roll the screen up or down by selecting 1 or 2.

② Push the STEP key. The screen returns to pattern creating screen.

EDIT PATTERN (MAIN MENU 2)

- You can modify the pattern you created.
- You can use HELP MENU functions when you work with EDIT PATTERN as you do with CREATE NEW PATTERN.

– MAIN MENU –

1. CREATE NEW PATTERN
2. EDIT PATTERN
3. DELETE PATTERN
4. INPUT MEMO DATA
5. TRANSFER CREATED DATA
6. PRINT OUT PATTERN
7. CHANGE MODE (PAGE)

* SELECT 1-7 = ■

1

Select option 2 from the MAIN MENU, and push the STEP key.

2

STEP

– EDIT PATTERN –

PATTERN No.	STITCHES	ROWS
▶901	8	10
902	16	28
903	15	26
904	15	20

2

The list of patterns you created is displayed on the screen.

Using the cursor keys (◀, ▶, ▲, ▼), move the cursor "▶" to the pattern number you want to edit.

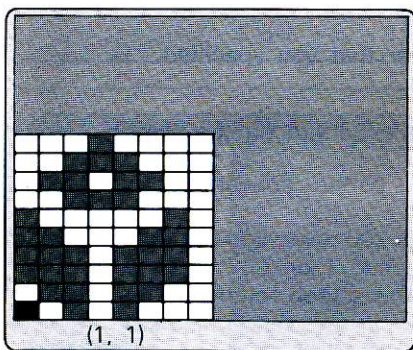
3

Push the STEP key.

STEP

The pattern you chose appears on the screen.

*Edit the pattern using the same procedure as "CREATE NEW PATTERN" (Refer to ⑦-⑧ page 9-10).



♣ When you load the pattern you coloured with option "SET COLOUR" or "CHANGE COLOUR", the pattern on the screen has no colour on it, but memo data remains in the memory as it is.

DELETE PATTERN (MAIN MENU 3)

- You can delete an unnecessary created pattern or all created patterns (saved on the page you are now using).

– MAIN MENU –

1. CREATE NEW PATTERN
 2. EDIT PATTERN
 3. DELETE PATTERN
 4. INPUT MEMO DATA
 5. TRANSFER CREATED DATA
 6. PRINT OUT PATTERN
 7. CHANGE MODE (PAGE)
- * SELECT 1-7 = ■

1

Select option 3 from the MAIN MENU, and push the STEP key.



– DELETE PATTERN –

PATTERN No.	STITCHES	ROWS
ALL OF THE PATTERNS: 10		
901	8	10
▶902	16	28
903	15	26
904	15	20

2

The list of patterns you created is displayed on the screen.

Using the cursor keys (▲·▼), move the cursor "▶" to the pattern number where you want to delete.

- ♥ When you want to delete all the created patterns (saved on the page you are now using), move the cursor "▶" to the item "ALL OF THE PATTERNS"

The number of all the pattern (saved on the page that you are now using).

Push the STEP key.

STEP

– DELETE PATTERN –

PATTERN No. = 902

OK? 1:YES 2:NO 3:REDUCE

3

Confirm the pattern number that you specified.

- ♥ If you want to see the pattern on the screen...

- ① Select 3. The reduced pattern appears on the screen. Check the pattern.
* If the pattern exceeds 200 rows, you can roll the screen up or down by selecting 1 or 2.
- ② Push the STEP key. The screen returns to the previous screen.

- When the pattern number is correct, select 1. The pattern that you chose is deleted and the MAIN MENU will appear on the screen.
- When you want to change the pattern number, select 2. The screen returns to ②.

INPUT MEMO DATA (MAIN MENU 4)

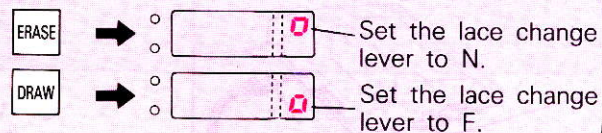
- You can enter memos with information for pattern knitting, and they will be shown in the knitting machine display while you knit.
- You can also easily enter, delete and modify the memo data.
- Use the numeral keys 1-9 and the DRAW and ERASE keys to enter the information.

< INDICATION IN THE DISPLAY >

When you enter pattern knitting information using keys 1-9:



When you enter pattern knitting information using the DRAW and ERASE keys, you can use it to show which lace change lever setting to use, etc.



- MAIN MENU -

1. CREATE NEW PATTERN
2. EDIT PATTERN
3. DELETE PATTERN
4. INPUT MEMO DATA
5. TRANSFER CREATED DATA
6. PRINT OUT PATTERN
7. CHANGE MODE (PAGE)

* SELECT 1-7 = ■

- 1 Select option 4 from MAIN MENU, and push the STEP key.

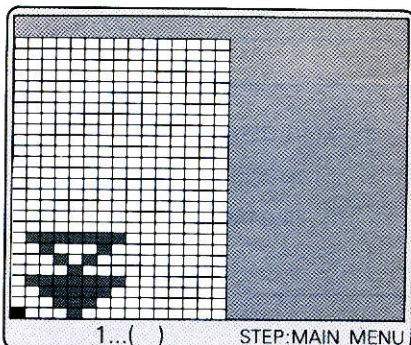


- INPUT MEMO DATA -

PATTERN No.	STITCHES	ROWS
901	8	10
902	16	28
▶903	15	26
904	15	20

- 2 The list of patterns you created is displayed on the screen.

Using the cursor keys (◀ ▶), move the cursor "▶" to the pattern number where you want to input the memo data.



- 3 Push the STEP key, and the pattern that you specified will appear on the screen.



- 4 Move the cursor to the row where you want to input the memo data, and input the memo data with the numeral keys, DRAW key or ERASE key.

(ex. Input 2 on 5th row.)

① Move the cursor to the 5th row.

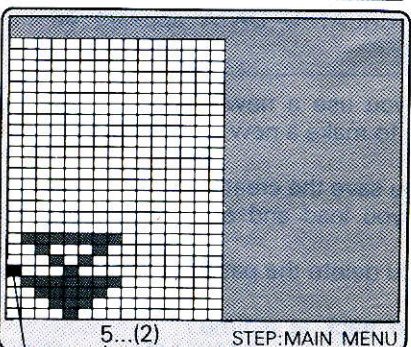
♣ It does not matter if the cursor is on any stitch.

② Enter 2.

♥ If you make a mistake, push the correct key to rewrite the data.

♥ If you clear the memo data, push the C key.

* Continue to input as much memo data as you want.



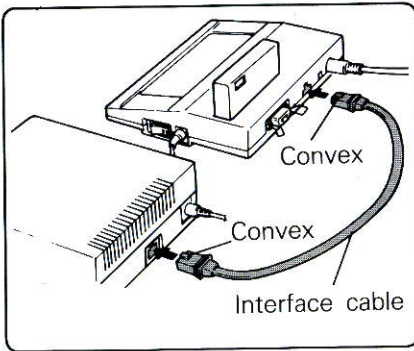
- 5 When you finish inputting memo data, push the STEP key. The MAIN MENU appears on the screen.

Cursor
Memo data
Row number

TRANSFER CREATED DATA (MAIN MENU 5)

- If you use the floppy disc drive unit (option), you can save created patterns on the disc, or load patterns from the disc to the pattern programming device.

* Please read the instruction manual of the floppy disc drive unit and also read the pages of "FLOPPY DISC DRIVE UNIT" of electronic knitting machine.



- Preparation of the floppy disc drive unit
- * The drive unit should be placed in front of the TV screen and not in the back of the TV screen for it to work normally.

- ① Turn off the power switch of the pattern programming device and the floppy disc drive unit.
- ② Connect the pattern programming device and drive unit with the interface cable.
- ③ Turn on the power switch of the pattern programming device and drive unit.

— MAIN MENU —

1. CREATE NEW PATTERN
2. EDIT PATTERN
3. DELETE PATTERN
4. INPUT MEMO DATA
5. TRANSFER CREATED DATA
6. PRINT OUT PATTERN
7. CHANGE MODE (PAGE)

* SELECT 1-7 = ■

1

Select option 5 from the MAIN MENU, and push the STEP key.

5

STEP

CONNECT INTERFACE CABLE

TURN POWER ON!

PUSH STEP KEY!!

2

Check that the drive unit is connected to the pattern programming device correctly and the power switch of the drive unit is turned on. Then push the STEP key.

STEP

— TRANSFER CREATED DATA —

1. FORMAT DISC
2. SAVE CREATED DATA
3. LOAD CREATED DATA
4. DELETE CREATED DATA

* SELECT 1-4 = ■

3

The menu of TRANSFER CREATED DATA appears on the screen.

Choose this option when you use a new disc.

Formatting is the procedure to make a new disc ready to accept your data.

Choose this option when you save the created pattern on a disc. Choose this option when you load and edit the pattern you stored on a disc.

Choose this option when you delete the pattern you stored on a disc.

(The pattern is deleted one track at a time.)

♥ If you want to return the screen to the MAIN MENU, push the HELP key.

◆◆◆ FORMAT DISC ◆◆◆

- Before you can use a new disc to store pattern data from your pattern programming device and electronic knitting machine, you need to prepare the new disc to make it ready to accept data.
- ♣ This preparation process is called "formatting". You can use the disc that you format (and in which you stored the pattern) with the electronic knitting machine when you use the pattern programming device.

REMARK: If you format a disc that has pattern data already on it, this data will be erased.

- TRANSFER CREATED DATA -

1. FORMAT DISC
2. SAVE CREATED DATA
3. LOAD CREATED DATA
4. DELETE CREATED DATA

* SELECT 1-4 = ■

1

Choose option 1 from the menu of TRANSFER CREATED DATA, and push the STEP key.

1

STEP

- TRANSFER CREATED DATA -

* FORMAT DISC *

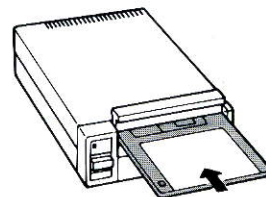
INSERT DISC!

PUSH STEP KEY!!

2

Insert a disc into the drive unit, and push the STEP key.

STEP



- TRANSFER CREATED DATA -

* FORMAT DISC *

NOW FORMATTING...

3

Formatting begins.

*It takes about 100 seconds for the drive unit to finish formatting.

4

When formatting is completed the screen returns to ①.

◆◆◆ SAVE CREATED DATA ◆◆◆

- You can save on a disc the pattern stored by the pattern programming device.
- One track of a disc is used to save all the data in one page of the pattern programming device.

– TRANSFER CREATED DATA –
 1. FORMAT DISC
 2. SAVE CREATED DATA
 3. LOAD CREATED DATA
 4. DELETE CREATED DATA
 * SELECT 1-4 = ■

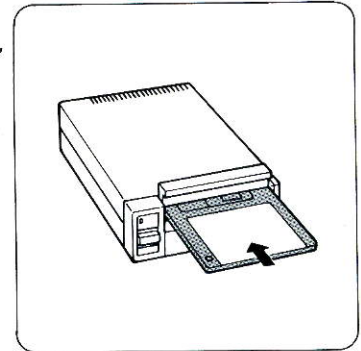
- 1** Choose option 2 from the menu of TRANSFER CREATED DATA, and push the STEP key.

2 • STEP

– TRANSFER CREATED DATA –
 * SAVE CREATED DATA *
 INSERT DISC!
 PUSH STEP KEY!!

- 2** Insert a disc into the drive unit, and push the STEP key.

STEP



– TRANSFER CREATED DATA –
 * SAVE CREATED DATA *
 SEARCHING ...

- 3** The computer of the pattern programming device searches for an empty track.

– TRANSFER CREATED DATA –
 * SAVE CREATED DATA *
 PAGE No. = 1
 OK? 1:YES 2:NO

- 4** When MODE 1 is set...

Proceed to step ⑤.

When MODE 2 is set...

Check that the page number to be saved on the disc is correct. (The screen indicates the page number you are now using.)

- When you save the page indicated on the screen, select 1.
- When you save the other page, select 2.

– TRANSFER CREATED DATA –
 * SAVE CREATED DATA *
 SAVED TRACK No. = 1
 WAIT...

5 The screen displays the track number in which the patterns will be saved, and the storage begins.

– TRANSFER CREATED DATA –
 * SAVE CREATED DATA *
 SAVED TRACK No. = 1
 PUSH STEP KEY!!

6 When storage is finished, the display as shown at left appears.
 Check the track number.
 (Use this number as a reference on your design sheet to avoid confusion.)

Push the STEP key. The screen returns to ①.

STEP

◆◆◆ LOAD CREATED DATA ◆◆◆

- You can load patterns which are saved on one track of a disc into the pattern programming device.

When MODE 1 is set...

When loading the pattern into the pattern programming device all the pattern data in the memory of the pattern programming device will be deleted. If you need those patterns, save them in the disc first.

When MODE 2 is set...

The patterns in one track are loaded onto one page of the pattern programming device. The computer of the pattern programming device searches for an empty page and loads the pattern on that page. You can specify the page where the patterns are loaded. However, if the specified page has patterns they will be deleted when the other patterns are loaded on that page. If you need those patterns, save them in the disc first.

– TRANSFER CREATED DATA –
 1. FORMAT DISC
 2. SAVE CREATED DATA
 3. LOAD CREATED DATA
 4. DELETE CREATED DATA
 * SELECT 1-4 = ■

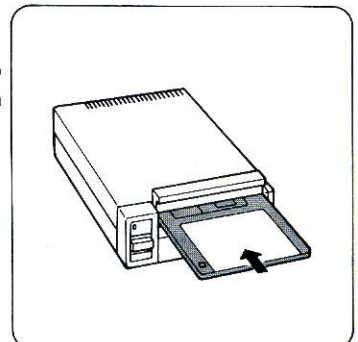
1 Choose option 3 from the menu of TRANSFER CREATED DATA, and push the STEP key.

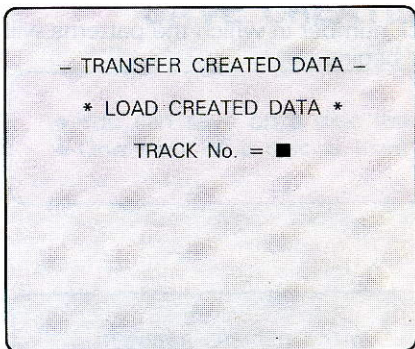
3 • STEP

– TRANSFER CREATED DATA –
 * LOAD CREATED DATA *
 INSERT DISC!
 PUSH STEP KEY!!

2 Insert the disc containing the data for the pattern you wish to load into the drive unit and, push the STEP key.

STEP





- ③ Enter the track number which contains the pattern you want to load, and push the STEP key.
(ex. track number... 1)

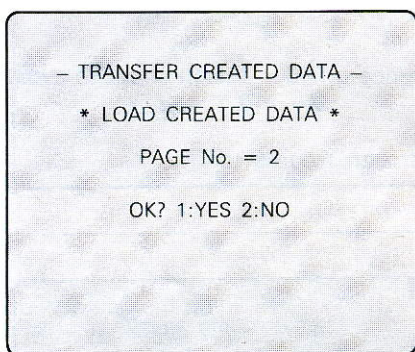


When MODE 1 is set...

Loading begins.
When loading is completed, the screen returns to ①.

When MODE 2 is set...

Proceed to step ④.



- ④ The computer of the pattern programming device searches for an empty page and displays the page number.

- When you load the patterns on the indicated page, push 1 key. Loading begins.
- When you load the patterns on a page other than indicated, push 2 key. Enter the page number where the patterns are to be loaded, and push the STEP key. Loading begins.

♥ If the message "NO EMPTY PAGE" appears...

There is no empty page. The indicated page is the one you are now using.

- When you load the patterns on the indicated page, push 1 key.
(All the patterns on the page will be deleted.)
- When you load the patterns on a page other than indicated...
 - ① Push 2 key.
 - ② Enter the page number where the patterns are to be loaded and push the STEP key. (All the patterns on the page will be deleted.)
- When you want to save the necessary patterns in the disc first...
 - ① Push the HELP key three times, then the menu of TRANSFER CREATED DATA appears.
 - ② Choose option 2 (SAVE CREATED DATA) and save the patterns in the disc. (See page 47).
 - ③ Return to LOAD CREATED DATA.

- ⑤ When loading is completed, the screen returns to ①.

When you want to display the pattern which you loaded into the pattern programming device on the screen...

- ① Push the HELP key. The MAIN MENU appears on the screen.
- ② Select option 2 from the MAIN MENU and follow the steps on page 42.

◆◆◆ DELETE CREATED DATA ◆◆◆

- The saved pattern data stored on a disc can be deleted one track at a time.
- ♣ If you want to delete all the pattern data stored on a disc, carry out the formatting procedure. This will erase all the data.

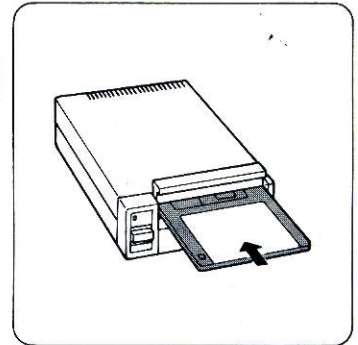
– TRANSFER CREATED DATA –
 1. FORMAT DISC
 2. SAVE CREATED DATA
 3. LOAD CREATED DATA
 4. DELETE CREATED DATA
 * SELECT 1-4 = ■

- 1** Choose option 4 from the menu of TRANSFER CREATED DATA, and push the STEP key.



– TRANSFER CREATED DATA –
 * DELETE CREATED DATA *
 INSERT DISC!
 PUSH STEP KEY!!

- 2** Insert the disc containing the data for the pattern you wish to delete into the drive unit, and push the STEP key.



– TRANSFER CREATED DATA –
 * DELETE CREATED DATA *
 TRACK No. = ■

- 3** Enter the track number you want to delete, and push the STEP key.
 (ex. track number ... 1)



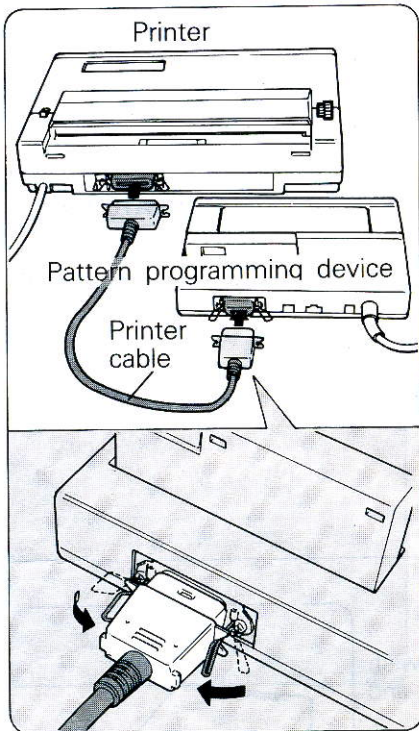
– TRANSFER CREATED DATA –
 * DELETE CREATED DATA *
 TRACK No. = 1
 OK? 1: YES 2: NO

- 4** Check the track number you entered.
- When the track number is correct, select 1. The pattern data of the track number you chose is deleted.
 - When you want to change the track number, select 2. The screen returns to ③.

- 5** When the deletion is finished, the screen returns to ①.

PRINT OUT PATTERN (MAIN MENU 6)

- You can print out the pattern with the optional printer.
It is recommended to use a Brother 9-pin dot matrix printer.



- Preparations for the printer
- *Please read the instruction book accompanying the printer before you use it.

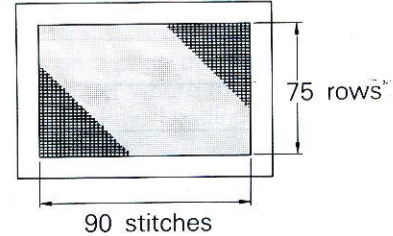
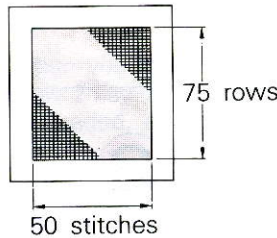
- Turn off the power of the pattern programming device and the printer.
- Connect the printer to the pattern programming device with the printer cable.
- Switch on the power of the pattern programming device and the printer.

Paper size

Select the paper size according to your printer. The printing size (number of stitches and rows) depends on the paper size.

- approx. 21 cm × 30 cm
(8 " × 12 ")

- approx. 38 cm × 30 cm
(15 " × 12 ")



– MAIN MENU –

- CREATE NEW PATTERN
- EDIT PATTERN
- DELETE PATTERN
- INPUT MEMO DATA
- TRANSFER CREATED DATA
- PRINT OUT PATTERN
- CHANGE MODE (PAGE)

* SELECT 1-7 = ■

1

Select option 6 from the MAIN MENU, and push the STEP key.



– PRINT OUT PATTERN –

PATTERN No.	STITCHES	ROWS
901	8	10
902	16	28
▶903	15	26
904	15	20

2

The list of patterns that you created is displayed on the screen.

Using the cursor keys (▲, ▼), move the cursor "▶" to the pattern number which you want to print out.

Push the STEP key.



– PRINT OUT PATTERN –

PAPER WIDTH?

- 21 cm (8 inches)
- 38 cm (15 inches)

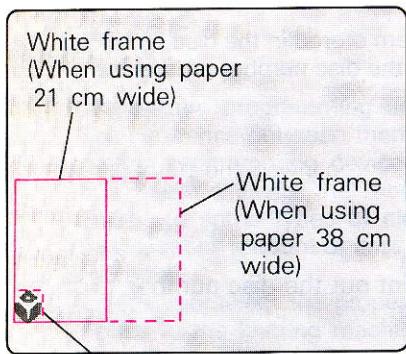
* SELECT 1-2 = ■

3

Select the width of the paper.

(ex. 21 cm)





The green frame indicates the whole pattern area.

4

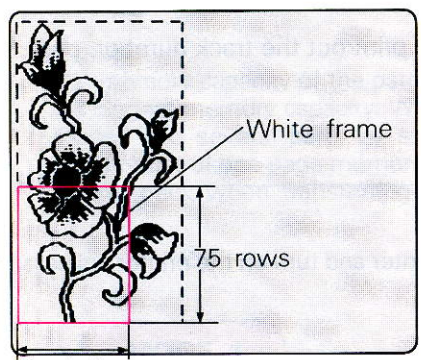
The pattern that you specified is displayed on the screen. The part of a white frame displayed on the screen will be printed out from now on. (The white frame on the screen indicates the pattern size which can be printed on one paper. The white-framed part will be printed out from now on.)

- ♥ When you want to print out a part of the pattern that exceeds 50 (or *90) stitches and/or 75 rows, move the white frame with the cursor key. (Refer to the following column.)
- *When using paper 38 cm wide, the number of stitches in one row is 90.

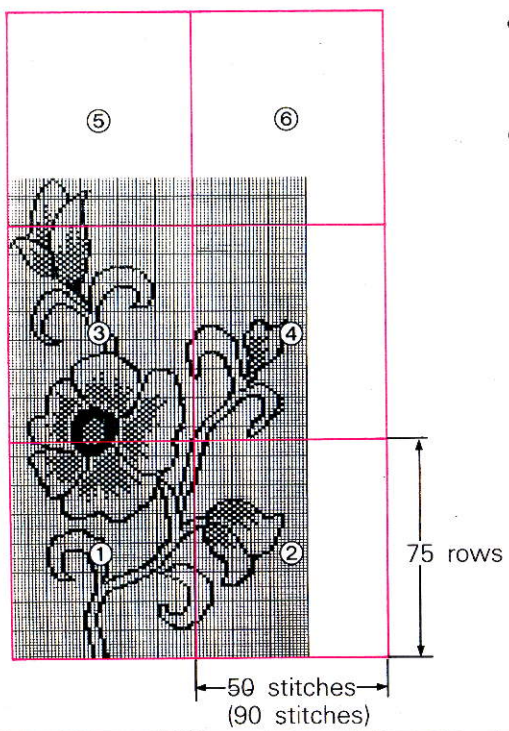
Push the STEP key.

STEP

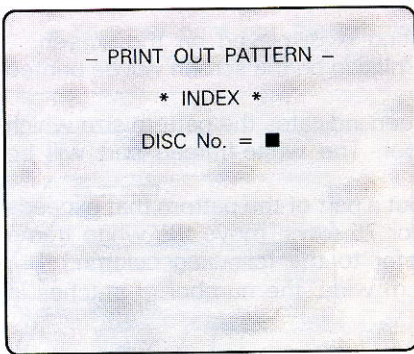
♥ WHEN YOU WANT TO PRINT OUT A PATTERN THAT EXCEEDS 50 (or 90) STITCHES AND/OR 75 ROWS



50 stitches
(90 stitches)



- When the pattern exceeds 50 (or 90) stitches and/or 75 rows, the pattern is divided into a few parts and printed out in the order shown in the figure.
- If you do not want to print out part ①, move the white frame with the cursor key to the part you want to print.
*For example, if you move the white frame to ③, the pattern will be printed out in the order of ③ · ④ · ⑤ · ⑥.

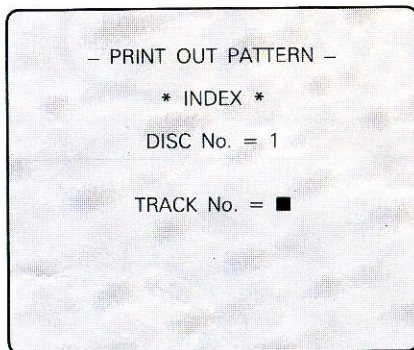


- 5** When you print out the pattern stored in the disc, enter the disc number as a reference, and the disc number will also be printed out.

(ex. disc number ... 1)



- ♥ If you do not need to print out the disc number, push the STEP key only.

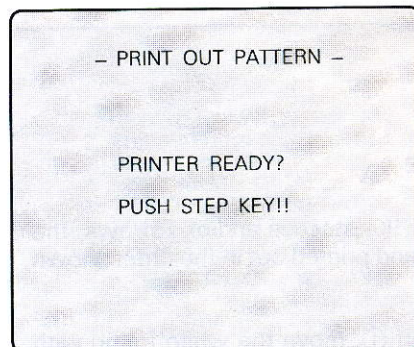


- 6** If you enter the track number as a reference, the track number will also be printed out.

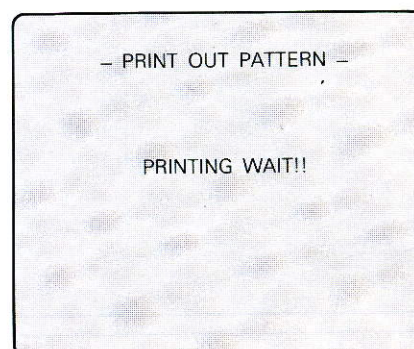
(ex. track number ... 1)



- ♥ If you do not need to print out the track number, push the STEP key only.



- 7** Insert a paper into the printer and turn on the printer online lamp. Push the STEP key.



- 8** Printing out begins.
♥ In the case where the pattern exceeds 50 stitches and/or 75 rows, the screen returns to ⑦ when the printer finishes printing out one paper, then repeats step ⑦.

- 9** When the MAIN MENU appears on the screen, printing will soon be finished.

CHANGE MODE (PAGE) (MAIN MENU 7)

• MODE

The pattern programming device has two modes – MODE 1 and MODE 2.

The difference between them is the amount of knitting data that can be transferred at one time between the pattern programming device and the electronic knitting machine.

You need to select the mode according to your electronic knitting machine.

There are some types of electronic knitting machine which have different memory capacities for created patterns. The amount of data transferred at one time should correspond to the memory capacity of the knitting machine.

Unless you select the proper mode, you cannot transfer the pattern data created with pattern programming device to the knitting machine. In that case you cannot knit the pattern which took great effort to design. Therefore it is very important to select the proper mode before designing the pattern. (HOW TO SELECT THE MODE...See page 55.)

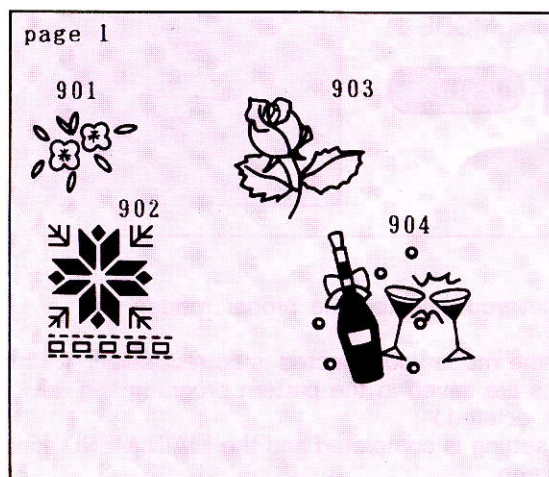
• PAGE

The memory capacity of the pattern programming device is as big as the capacity of the knitting machine with the biggest memory capacity. When you use a knitting machine with smaller memory, the memory capacity is divided into several parts by selecting the proper mode. Each part is called one page.

The amount of one-page memory capacity is as same as the knitting machine memory capacity. It corresponds to one track when transferring the data to floppy disc.

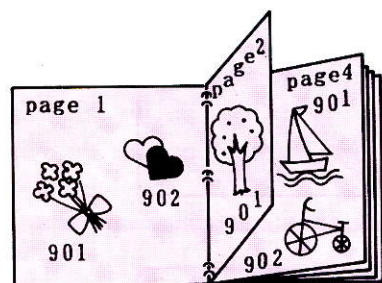
MODE 1

When using a knitting machine with bigger memory capacity, select MODE 1. In this case the memory of the pattern programming device has only one page. Think of it as designing on a big piece of drawing paper.



MODE 2

When using a knitting machine with smaller memory capacity, select MODE 2. In this case the memory of the pattern programming device has 16 pages. Think of it as designing in a drawing notebook with 16 pages.



When you use all the space on one page, use a new page. (HOW TO CHANGE THE PAGE See page 56.)

◆◆◆ CHANGE MODE ◆◆◆

- Select the mode according to your knitting machine. Once you set the mode, you do not have to reset it until you use the different knitting machine.

NOTE: Once you use this option, all the created patterns in the pattern programming device will be deleted. If you need those patterns, save them in the disc first.

– MAIN MENU –
 1. CREATE NEW PATTERN
 2. EDIT PATTERN
 3. DELETE PATTERN
 4. INPUT MEMO DATA
 5. TRANSFER CREATED DATA
 6. PRINT OUT PATTERN
 7. CHANGE MODE (PAGE)
 * SELECT 1-7 = ■
 MODE = 1 PAGE = 1

The screen indicates the mode number and page number you are now using.

- ① Select option 7 from the MAIN MENU, and push the STEP key.

7 • STEP

*If MODE 1 is set now, proceed to step ③.

– CHANGE MODE (PAGE) –
 1. CHANGE MODE
 2. CHANGE PAGE
 3. DELETE PAGE
 * SELECT 1-3 = ■

- ② Choose option 1 from the CHANGE MODE (PAGE) menu, and push the STEP key.

1 • STEP

– CHANGE MODE –
 1. MODE 1
 2. MODE 2
 * SELECT 1-2 = ■

- ③ Select the mode according to your knitting machine, and push the STEP key.

*The screen indicates the model number of the knitting machine for each mode.

(ex. Choose MODE 2)

2 • STEP

– CHANGE MODE –
 1. MODE 1
 2. MODE 2
 * SELECTED MODE = 2
 ALL DATA IS DELETED.
 OK? 1:YES 2:NO

- ④ Check that you selected the proper mode.

- When the mode you selected is correct select 1. (If created patterns are saved in the pattern programming device, they will be deleted.)

Mode setting is completed and the MAIN MENU appears on the screen.

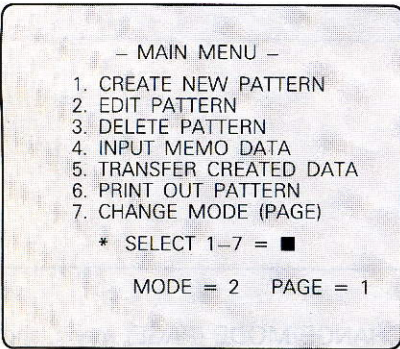
- When you want to change the mode, select 2. The screen returns to ③.
- When you want to stop using this option, push the HELP key until the MAIN MENU appears on the screen.

◆◆◆ CHANGE PAGE ◆◆◆

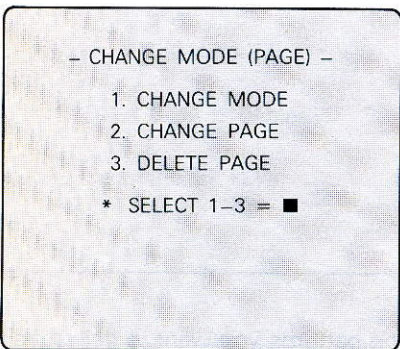
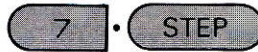
*You can use this option only when setting MODE 2.

- You can select the page.

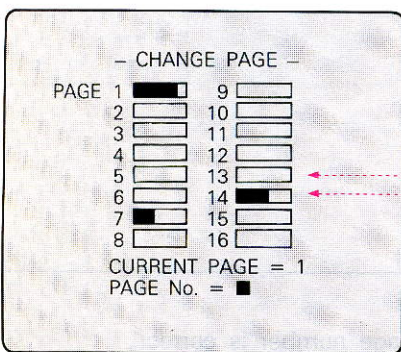
When MODE 2 is selected, the memory of the pattern programming device is divided into 16 pages. You can select any of them.



- 1** Choose option 7 from the MAIN MENU, and push the STEP key.



- 2** Choose option 2 from the CHANGE MODE (PAGE) menu, and push the STEP key.



- 3** The screen shows how much of each page is used.

If the inside of the white frame is empty, the page is empty.

The white part in the frame shows how much of this page is used.

Enter the page number you want to use, and push the STEP key.
(ex. page number...2)



The page number is changed, and the MAIN MENU appears on the screen.

◆◆◆ DELETE PAGE ◆◆◆

*You can use this option only when setting MODE 2.

- All the patterns in the specified page can be deleted at one time.

– MAIN MENU –

1. CREATE NEW PATTERN
2. EDIT PATTERN
3. DELETE PATTERN
4. INPUT MEMO DATA
5. TRANSFER CREATED DATA
6. PRINT OUT PATTERN
7. CHANGE MODE (PAGE)

* SELECT 1-7 = ■

1

Choose option 7 from the MAIN MENU, and push the STEP key.

7

STEP

– CHANGE MODE (PAGE) –

1. CHANGE MODE
2. CHANGE PAGE
3. DELETE PAGE

* SELECT 1-3 = ■

2

Choose option 3 from the CHANGE MODE (PAGE) menu, and push the STEP key.

3

STEP

– DELETE PAGE –

PAGE No. = ■

3

Enter the page number of the patterns you want to delete, and push the STEP key.

(ex. page number...3)

3

STEP

– DELETE PAGE –

PAGE No. = 3

OK? 1:YES 2:NO

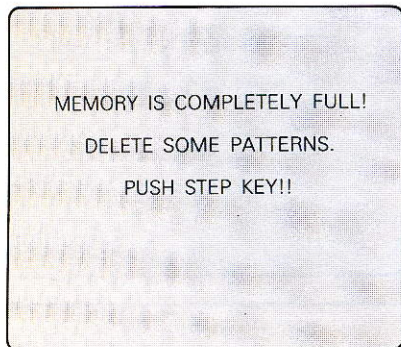
4

Check that the specified page number is correct.

- When the page number is correct, push 1 key. All the patterns in the page will be deleted, and the MAIN MENU will appear on the screen.
- When you want to change the page number, push 2 key. The screen returns to step ③.

IN THE FOLLOWING CASES

If the following message appears on the screen...



Cause

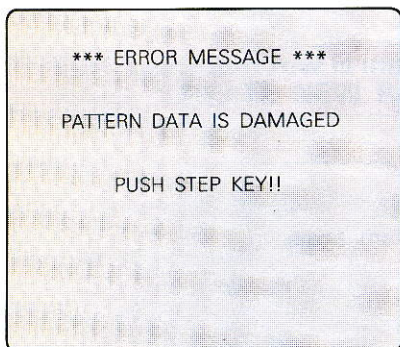
The memory of the page you are now using is full.

Suggested action

When using MODE 1...
Push the STEP key and the MAIN MENU appears.
After deleting unnecessary patterns using "DELETE PATTERN", create your pattern.
If all your patterns are necessary, save them into the floppy disc using the floppy disc drive unit (optional).

When using MODE 2...
Push the STEP key and the MAIN MENU appears.
Using option "CHANGE PAGE", choose a page which has blank space.

If all the pages are full, delete an unnecessary page using option "DELETE PAGE", and use that page for your new pattern.
Or save a page onto floppy disc as you do in MODE 1.



Cause

Pattern data is damaged for some reason, for example, the battery to keep the pattern data is used up.

Suggested action

You can create the pattern after deleting the damaged pattern data, but if the battery energy has been used up, the pattern programming device cannot save the pattern.
Make sure that the battery energy has been used up following the steps below.

- ① Push the STEP key (Damaged pattern data will be deleted).
- ② Choose option 1 "CREATE NEW PATTERN" from the MAIN MENU and enter the pattern area you want.
(ex. 10 stitches × 10 rows)
- ③ When the pattern creating screen appears, push the HELP key.
- ④ Choose option 1 "END CREATION" from the HELP MENU, and turn off the power switch of the pattern programming device.
- ⑤ Wait for a few minutes and turn on the power again.
 - If the screen appears as shown in step ⑤ on page 6, the battery is all right. Continue pattern creation.
 - If the same error message appears, the battery has been used up. Ask the dealer to change the battery.
 - If another error message appears, see the instructions about that message.

*** ERROR MESSAGE ***

THERE IS SOME DEFECT
IN THE CARTRIDGE/MAIN BODY.
IT MUST BE REPAIRED.

PUSH STEP KEY!!

Suggested action

The pattern cartridge or the pattern programming device itself has some defects. Ask the dealer to check them.

*** ERROR MESSAGE ***

DISC TYPE IS WRONG !!
PUSH STEP KEY!!

Cause

The disc type is determined by which mode was used when you transferred the pattern from the pattern programming device to the disc. This screen indicates that the disc type does not correspond to the mode you are now using, or that the optional pattern disc is set in the drive unit though you are now using MODE 1.

*These discs cannot work with option 2 "SAVE CREATED DATA", 3 "LOAD CREATED DATA" and 4 "DELETE CREATED DATA" of MAIN MENU 5 without changing the mode setting.

Suggested action 1

When you insert the wrong disc...

- ① Insert the correct disc.
- ② Push the STEP key.
- ③ The computer starts the program again.

Suggested action 2

When you want to use a pattern in the pattern disc.....
use the functions of HELP MENU 7.

- ① Push the STEP key, and push the HELP key 2 times.
The MAIN MENU appears on the screen.
- ② Referring to page 27, load the pattern from the disc.

*** ERROR MESSAGE ***

THIS DISC HAS NOT BEEN FORMATTED.
OR
THIS DISC IS DEFECTIVE.

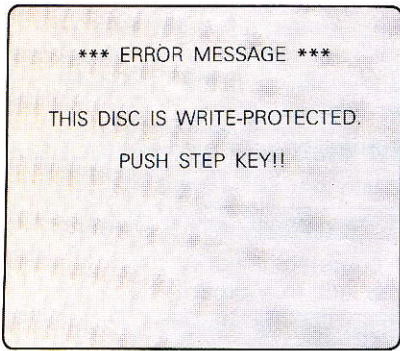
PUSH STEP KEY !!

Cause

This disc has not been formatted, or it has some defects on it.

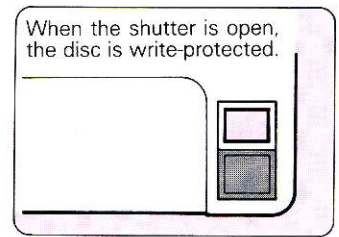
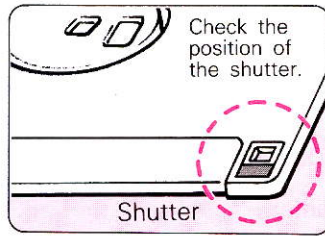
Suggested action

Format the disc (Refer to page 46).
If the disc has some defects, the message "THIS DISC IS DEFECTIVE" appears on the screen while formatting.
In this case you cannot use that disc.
Use another disc.



Cause

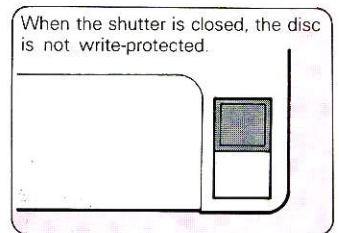
The disc is write-protected.



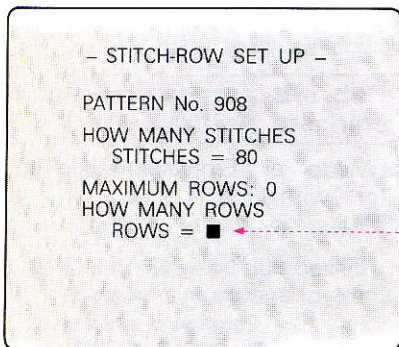
When the shutter is down and the hole is open, you cannot write data onto the disc, and the existing data is protected from accidental erasure.

Suggested action

- ① Push the STEP key.
- ② Remove the disc from the unit. After confirming whether it is all right to cancel the write-protect setting of the disc, cancel it.
- ③ Replace the disc into the unit and push the STEP key. The computer starts the program again.



If the maximum row is indicated as 0 when specifying the pattern area for option "CREATE NEW PATTERN"....



Cause

There is not enough memory for the entered number of stitches.

Suggested action

- Enter a smaller number of stitches than you entered before.
 - ① Push the HELP key.
 - ② Enter a new number and push the STEP key.
- Delete the unnecessary patterns or change the page number if you are using MODE 2.
 - ① Push the HELP key two times. The MAIN MENU appears on the screen.
 - ② Follow the suggested action for the message "MEMORY IS COMPLETELY FULL!" on page 58.

If the display disappears from the screen while programming for using a disc.

Cause

The power switch of the floppy disc drive unit is not turned on, or the drive unit is not connected to the pattern programming device.

Suggested action

- ① Turn off the power switch of the pattern programming device and floppy disc drive unit.
- ② Check that the pattern programming device and the drive unit are connected with interface cable securely.
- ③ Turn on the power switch of the pattern programming device and the drive unit.
- ④ Start all over again.

When the printer does not work

Cause 1

No paper is inserted into the printer, or online lamp of the printer is not turned on.

Suggested action

- ① Insert paper into the printer.
- ② Turn on the online lamp of the printer.

Cause 2

Power switch of the printer is not turned on or the printer is not connected to the pattern programming device.

Suggested action

- ① Turn off the power switch of the pattern programming device and the printer.
- ② Check that the pattern programming device and the printer are connected correctly.
- ③ Switch on the power of the pattern programming device and the printer.
- ④ Turn on the online lamp of the printer.

If the pattern is not printed out normally...

Cause

The DIP switch of the printer is not set correctly.

Suggested action

Referring to the instruction manual of your printer, set the DIP switch "Control Mode" or "Emulation Mode" to Epson FX Compatible and the DIP switch "Auto Line Feed" to "CR+LF" (or "with LF").

If the pattern on the screen is disturbed or indicates that something is wrong, or any key does not function...

Cause

The pattern data in the pattern programming device is damaged. (It may happen if you insert or pull out the program cartridge while the power switch of the pattern programming device is on, or if you touch the connectors.)

Suggested action

Delete the damaged pattern data.

- ① Turn off the power switch of the pattern programming device, then switch on the power.
- ② Select option 7 from the MAIN MENU. Reset the mode referring to p.55 (all the pattern data in the pattern programming device will be deleted).
- ③ Start all over again.

※If more than 5 years have passed since you purchased the pattern programming device, the battery may be used up. Please ask your dealer for advice.

TRANSFER CREATED DATA FROM/TO KNITTING MACHINE

Transferring the data to the knitting machine

In order to knit the pattern created with the pattern programming device you must transfer the pattern data in the device to the knitting machine.

REMARK: When transferring the pattern data to the knitting machine, all the pattern data in the memory of the knitting machine will be deleted.

Transferring the data from the knitting machine

You can transfer all the pattern data in the knitting machine to the pattern programming device.

REMARK: **When setting MODE 1**

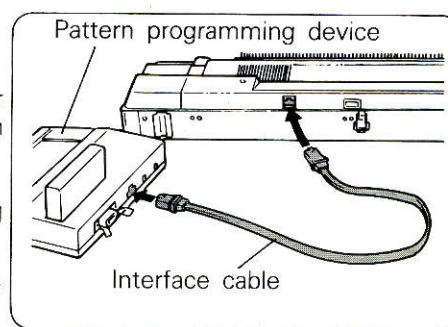
When transferring the pattern data to the pattern programming device, all the pattern data in the memory of the device will be deleted.

When setting MODE 2

All the pattern data in the knitting machine is transferred to an empty page of the pattern programming device. If there is no empty page, delete an unnecessary page with option "DELETE PAGE" before transferring the data.






• When using the KH-940/930

- 1 Switch off the power of the pattern programming device and TV set.
- 2 Disconnect the pattern programming device from the TV set.
- 3 Switch off the power of the knitting machine. Connect the FB connector of the knitting machine to the KH/FB connector of the pattern programming device with the interface cable.
- 4 Switch on the power of the pattern programming device and the knitting machine (check that the ready lamp is lit).
- 5 Operating the necessary procedure on the panel of the knitting machine transfers the created pattern.
Do not operate the pattern programming device.







♥ If the knitting machine does not work normally while transferring the data, turn off the power switch of the knitting machine and pattern programming device, and start from the beginning.

Transferring the data to the knitting machine

- 1 Push the CE key to clear the display.

 - 2 Enter command number 551. This number tells the computer you want to transfer a pattern to your knitting machine.

 - 3 Push the STEP key.

 - 4 When using the KH-940, enter page number 1.

 When using the KH-930, enter the page number to be transferred into the knitting machine.
 - 5 Push the STEP key, and the indication in the display and all the lamps go out.

 Data transfer begins.
 - 6 When the pattern has been transferred, you will hear the buzzer, and the indication and lamps are set.
- ♥ After pattern program, you can knit the pattern transferred to the knitting machine.
(Pattern program: refer to the electronic knitting machine manual.)

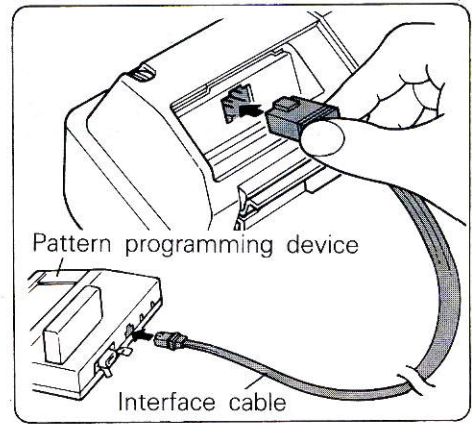
Transferring the data from the knitting machine

- 1 Push the CE key to clear the display.

 - 2 Enter command number 552. This number tells the computer you want to transfer a pattern from your knitting machine.

 - 3 Push the STEP key.
 When using the KH-940, number 1 is indicated on the display and ready lamp and pattern number lamp are lit.

 When using the KH-930, the page number where data will be transferred is indicated.
 - 4 Push the STEP key, and the display and all the lamps go out.

 Data transfer begins.
 - 5 When the pattern has been transferred, you will hear the buzzer, and all the indication and lamps are as they were before you pushed the CE key.
- ♥ When you want to see the pattern transferred to the pattern programming device on the TV screen, work the option "EDIT PATTERN" (See page 42).

NOTE: While the knitting machine is connected with pattern programming device, do not enter the command number 550 and 553.

● When using the KH-950i

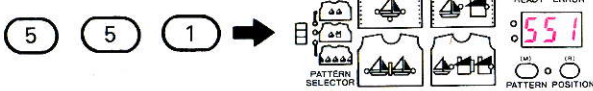
- ① Switch off the power of the pattern programming device and TV set.
- ② Disconnect the pattern programming device from the TV set.
- ③ Switch off the power of the knitting machine. Connect the FB connector of the knitting machine to the KH/FB connector of the pattern programming device with the interface cable.
- ④ Switch on the power of the pattern programming device and the knitting machine (check that the ready lamp is lit).
- ⑤ Operating the necessary procedure on the panel of the knitting machine transfers the created pattern.
Do not operate the pattern programming device.



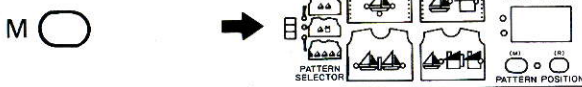
♥ If the knitting machine does not work normally while transferring the data, turn off the power switch of the knitting machine and pattern programming device, and start from the beginning.

Transferring the data to the knitting machine

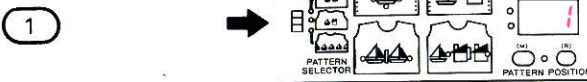
- ① Enter command number 551. This number tells the computer you want to transfer a pattern to your knitting machine.



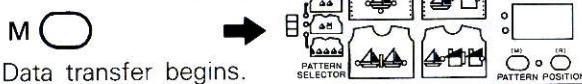
- ② Push the M key.



- ③ Enter number 1.



- ④ Push the M key, and the display and all the lamps go out.



- ⑤ When the pattern has been transferred, you will hear the buzzer, and the indication and lamps are set.
- ⑥ Turn the power switches off and disconnect the Interface cable.

♥ After the pattern program, you can knit the pattern transferred to the knitting machine.

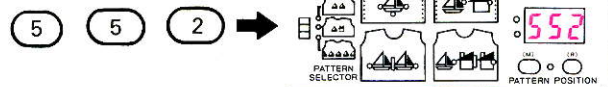
NOTE:

- When you program a pattern created with the pattern programming device, program it as you do "Stitch World" patterns.
- When you program a pattern which is created on a mylar sheet and then modified with pattern programming device...
 - If the pattern has memo data stored by "SET COLOUR", "CHANGE COLOUR", or "INPUT MEMO DATA", work with it as you do "Stitch World" patterns.
 - If the pattern has no memo data, work with it as you do mylar sheet patterns.

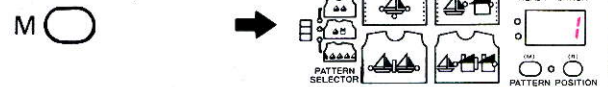
(Pattern program: see the electronic knitting machine manual.)

Transferring the data from the knitting machine

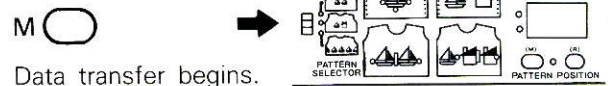
- ① Enter command number 552. This number tells the computer you want to transfer a pattern from your knitting machine.



- ② Push the M key. Number 1 is indicated on the display, and the ready lamp and pattern number lamp are lit.



- ③ Push the M key, and the indication in the display and all the lamps go out.



- ④ When the pattern has been transferred, you will hear the buzzer, and all the indication and lamps are as they are before you entered command number 552.

♥ When you want to see the pattern transferred to the pattern programming device on the TV screen, work the option "EDIT PATTERN" (See page 42).

NOTE: While the knitting machine is connected with pattern programming device, do not enter command numbers 550 or 553.

DIAGRAM OF CHARACTERS

