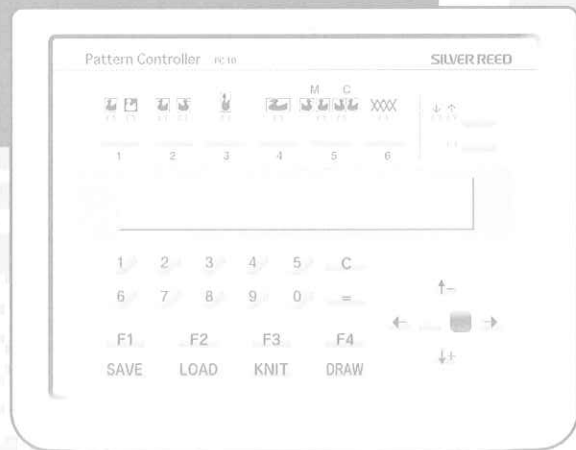


SILVER REED

PC 10

Pattern Controller
Instruction Book



Thank you for buying a Pattern Controller PC 10.

Pattern Controller PC10 is a controller for pattern knitting used with electronic knitting machines manufactured by Silver Seiko Ltd.

PC10 conducts all operations from drawing a pattern to controlling the selection of needle of a knitter while knitting. To make better use of these various functions, read this instruction book completely before use.

PC10 has the following functions.

Drawing a pattern

- By operating keys, you can draw a pattern. By moving a flashing dot on the liquid crystal display to the position you like, you can draw a pattern. Also, it's easy to change or modify existing patterns.
- The maximum size of a pattern that you can draw is 200 stitches by 1000 rows.

Note: To draw a pattern, you don't have to connect PC10 with a knitter.

Knitting a pattern

- Just connect PC10 to an electronic knitter, and the signal is sent to the knitter and you can start knitting a pattern. (There are patterns stored in PC10. Therefore, you can knit a pattern soon.)

● Kinds of patterns that can be knitted with PC10

| | |
|------------------------|--------------|
| Fair isle | Tuck stitch |
| Slip stitch | Weaving |
| Lace | Punch lace |
| Multi-coloured pattern | Single motif |
| Double Jacquard | |

Other patterns knitted using a Rib Knitter

● PC10 has also the following functions to be used while knitting.

Reversing the pattern yarn and the background yarn/Reversing the direction of the pattern

Doubling a pattern vertically/Doubling a pattern horizontally

Facing patterns (Mirror/Chevron)

Double Jackquard

Changing the feeding direction of a pattern/
Stop the feed of a pattern

Using a C Card (Memory Card)

- CF card (compact flash card) is used as C card (Memory Card).
- Pattern that you made is saved on a C card.
- If you just load a pattern from a C card into PC10, you can knit the pattern.
- Using PC10, you can copy patterns from one C card to another C card. (You can copy patterns one by one or the whole patterns in a card.)
- The data stored in a C card can be checked on PC10.

Using the functions of PC10 and C card

- Two different patterns can be combined vertically or horizontally.
- By changing the numbers of stitches or rows of a pattern (by cutting part of a pattern or expanding the area of a pattern), a new pattern can be made.

* CompactFlash™ (Compact Flash) is the registered trademark of US SanDisk Corporation, and it is licensed to CFA (CompactFlash™ Association).

For the safety in operation

Please make sure to read this manual for the safety in operation before using this product. Take good care of this manual and keep it where you can always find it.

This manual contains the alarms and warnings in order to prevent the harm to the purchaser and other persons, lives, or the damage to the properties. Attain complete understandings of the contents before using this product.



WARNING

Conditions that may cause the deaths or serious injuries are given below.

- DO NOT use the product with an abnormal condition such as smoking, strange smell or abnormal sound.
Turn off the product immediately and remove the plug from the outlet, and contact to your dealer.
* It may cause electric shock and fire.
- Under no circumstances, the product must not be disassembled or remodeled.
* It may cause fire due to electric shock or generation of heat.
- DO NOT use the power at the range out of AC100V to 240V under any conditions.
* It may cause fire due to electric shock or generation of heat.
- Use the genuine power cord and AC adaptor attached to the product. DO NOT use these with other appliances.
* It may cause fire due to electric shock or generation of heat.
- When connecting/disconnecting the plug to/from the outlet, make sure to grasp the plug body.
* It may cause fire due to electric shock or generation of heat.
- DO NOT damage, remodel the power cord, or leave it pinched with an foreign articles. Also refrain from using an extension cord or multiple connection.
* It may cause fire due to electric shock or generation of heat.
- DO NOT splash water on the product, or operate it or remove the power cord with wet hands.
* It may cause electric shock.
- When moving or making the maintenance, make sure to remove the power cord.
* It may cause electric shock.
- Clean the blades or pins of the plug periodically after removing it from the outlet.
* It may cause fire due to generation of heat or short circuit.



CAUTION

This shows the conditions that may cause the injuries to persons or damage to the properties due to incorrect operation.

- Disconnect the power plug if the product is not to be used for long period.
* Damaged cord by pulling, or loose and dusty cord may cause electric shock or short circuit.
- Avoid using the product in the place exposed to direct sun or of high temperature and humidity.
* This may have an affect on the product life or it may results in not being able to operate properly.
- Avoid using the product near precision instruments, radio and TV.
* Electromagnetic interference may affect the peripheral equipments around the product..



If any trouble occurs during using the product, please contact to your dealer.

Specification

| | |
|--------------------|--|
| MODEL / NAME | PC10 Pattern Controller |
| POWER (AC Adaptor) | AC100 – 240V 50/60Hz |
| INPUT VOLTAGE | DC19V |
| AMBIENT | Temperature: 5 – 35°C (41 - 95F) Humidity: Below 85%RH(No condensation) |
| DIMENSIONS | 240(W) x 189(D) x 64(H)mm 9.4”(W) x 7.4”(D) x 2.5”(H) |
| WEIGHT | Approx. 990g (Approx. 2.18 lbs.) |

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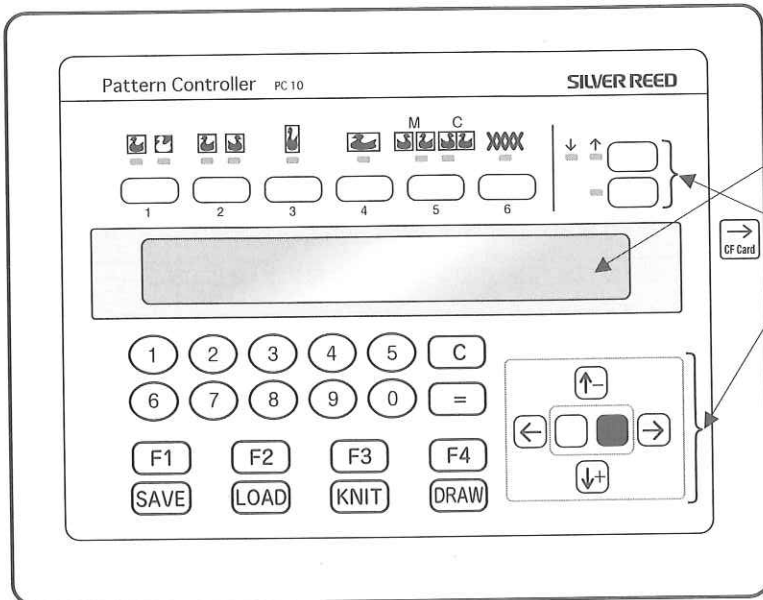
● Messages displayed

Precautions on the handling of PC10

- PC10 must be kept away from the following places.
- Place in direct sunlight or near to heater where the temperature becomes excessively high, place where the temperature becomes excessively low or place with an excessively wide range of temperature
- Excessively humid or dusty
- Near or contact with chemical agents
- Before connecting or disconnecting the plugs, turn off the power.
- To clean the outside of the PC10, wipe with a soft dry cloth or a cloth moistened with water or cleaning solution. Do not use volatile liquid such as benzine and thinner. (The above precautions can be applied to the handling of C card, too.)

● NAMES AND FUNCTIONS OF PRINCIPAL PARTS

Names and functions of principal parts of PC10/Accessories



Liquid Crystal Display (Width: 64 dots, Height: 8 dots)
To display patterns, messages, numbers of stitches and rows, pattern No., etc.

Function Keys (34 keys)
To perform various functions. (See the next page.)

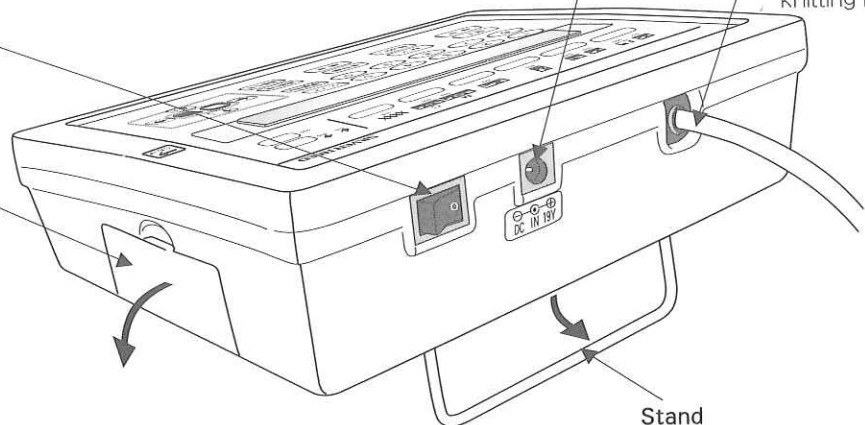
AC Adaptor Connection Part

Extension cord
To connect to the curl cord of the electronic knitting machine.

Power Switch

C Card (Memory Card) Slot

Usually, the slot is covered as shown in the figure. When setting the C card, open the cover to the direction of the arrow.



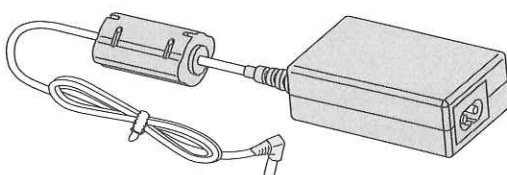
Stand

Raise up the stand as shown in the figure to make it easy to see the LCD.

ACCESSORIES



Power Cord

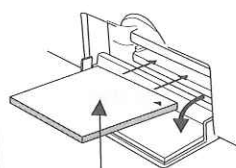


AC Adaptor

How to set a C Card

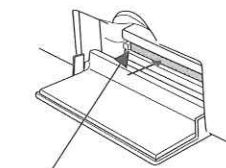
(Refer to page 15 for the use of C card.)

Push the C card fully into the slot.



C card

After setting or removing the C card, close the cover.



To remove the C card, push this lever. The card will come out.

Function of each key

Pattern Keys

- To change the knitting pattern into various shapes.
- "P1" Key for reversing a pattern
- "P2" Key for reversing the direction of a pattern
- "P3" Key for vertical expansion
- "P4" Key for horizontal expansion
- "P5" Key for mirror image
- "P6" Key for Double Jacquard

"C" Key for clear

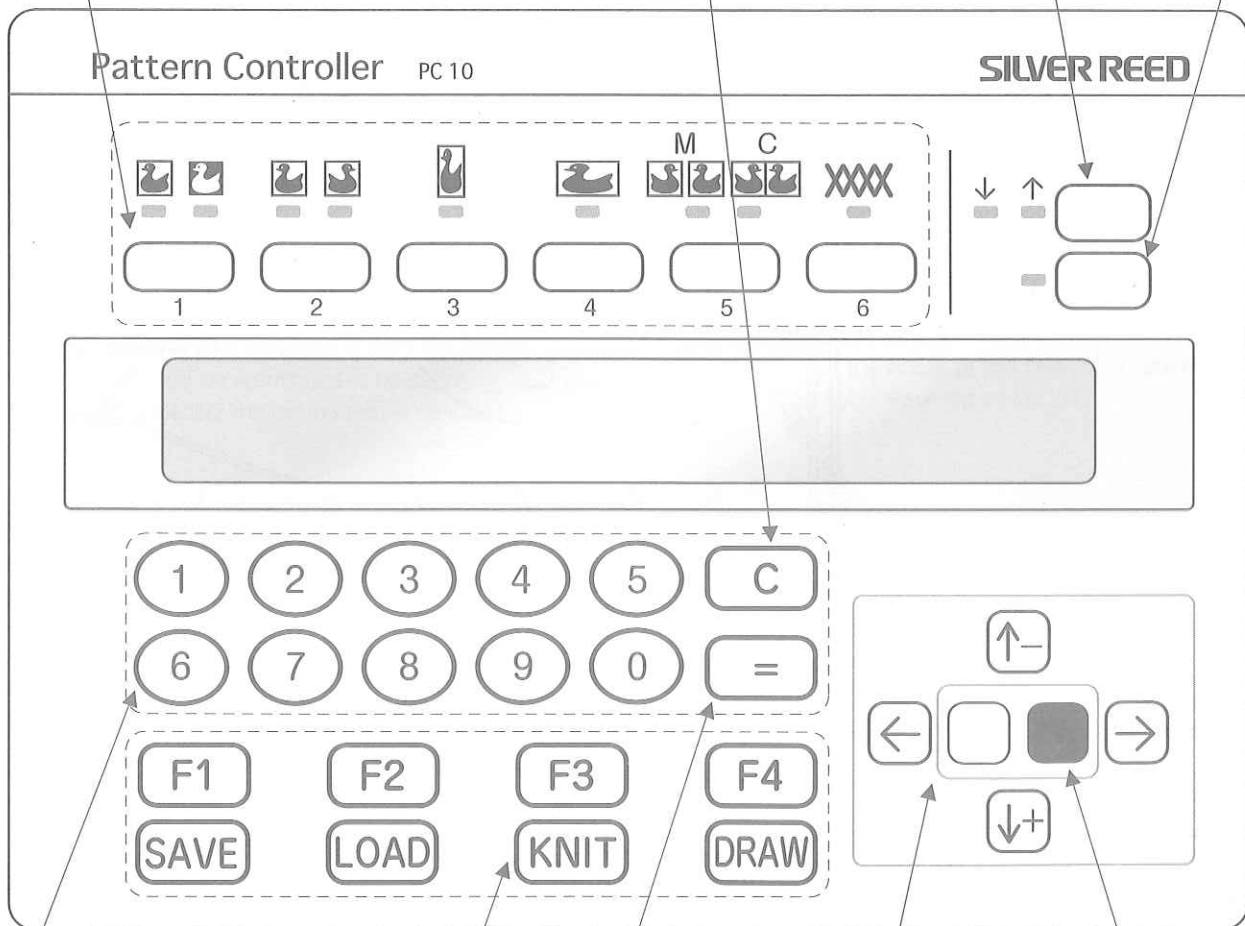
- To cancel the last entry
- To reset (return from) each function

"Feed" Key

- To change the feed direction of the pattern during knitting.

"Stop" Key

- To stop or cancel the feed of the pattern during knitting.



Numeric Keys

- To enter the numbers of rows/stitches, pattern No., etc.

"=" Key (for Set/Start)

- To set values or a function
- To start each function

Pattern Data Set Keys

- To set the presence (black) or absence (white) of a pattern in each grid when drawing a pattern.

Function & Expanded Function Keys

- To perform each function.

Direction Keys

- To move the pattern during knitting.
- To increase the number of rows of the pattern.
- To move the flashing dot while drawing the pattern.

● Let's knit a pattern with PC10.

With PC10, you can knit a pattern as you like by directly operating the keys. Here, let's knit one of the patterns built in the PC10. (Refer to page 24 and the subsequent pages.)

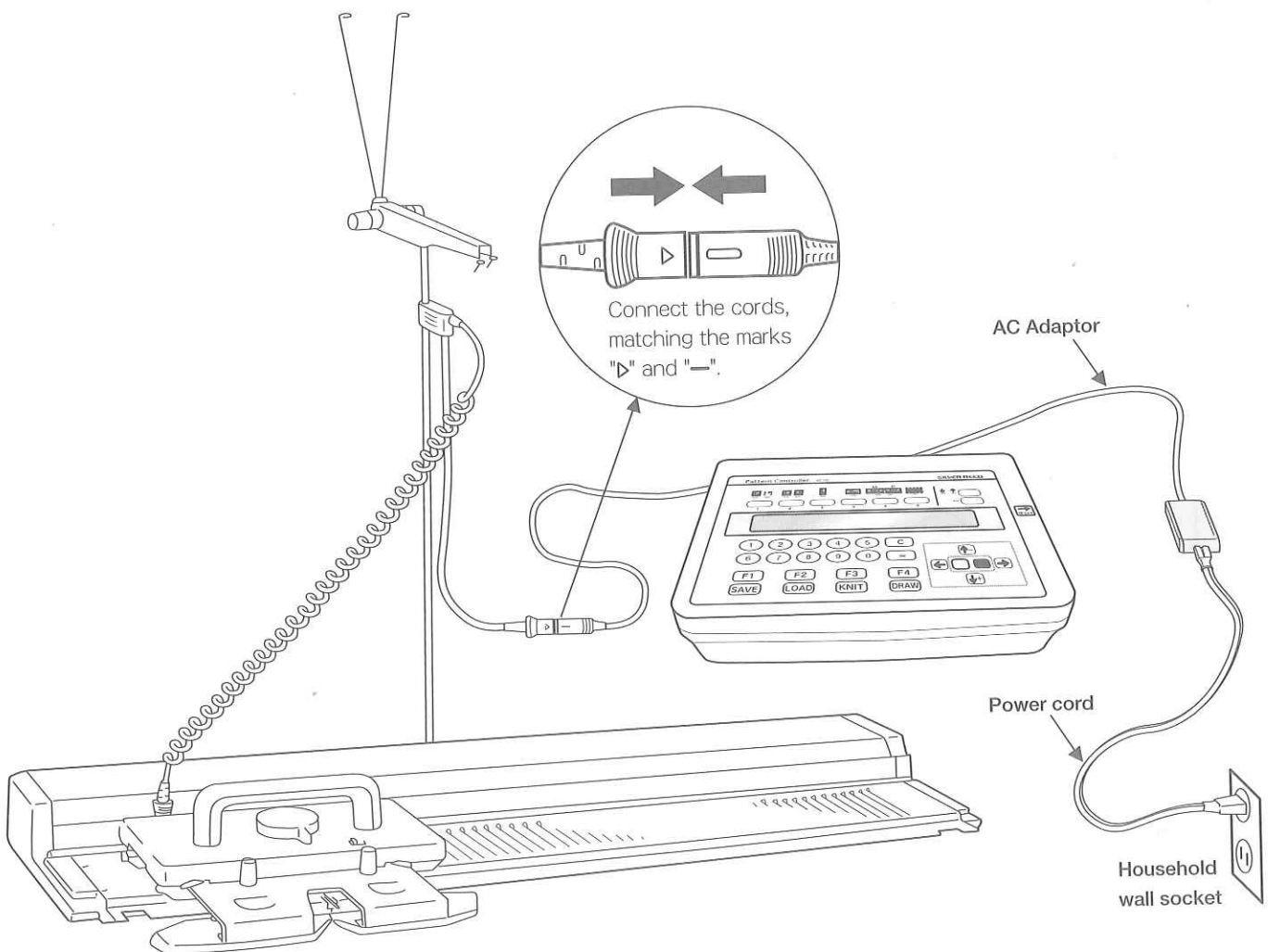
* First, connect PC 10 to the electronic knitting machine.

How to connect PC10 to the electronic knitting machine

1. Set the electronic knitting machine according to the instruction manual of the machine.
2. Connect the extension cord of PC10 to the curl cord of the electronic knitting machine.
3. Connect the AC adaptor to PC10 and connect the power cord. Then, plug the cord into the socket.
4. Turn on the power of PC10.

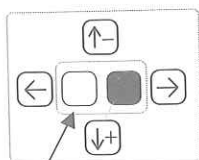
A buzzer sounds and the LCD shows "OK".

OK






Note: Do not plug a cord into a socket or off from a socket while the power is on.

How to adjust the brightness of the LCD



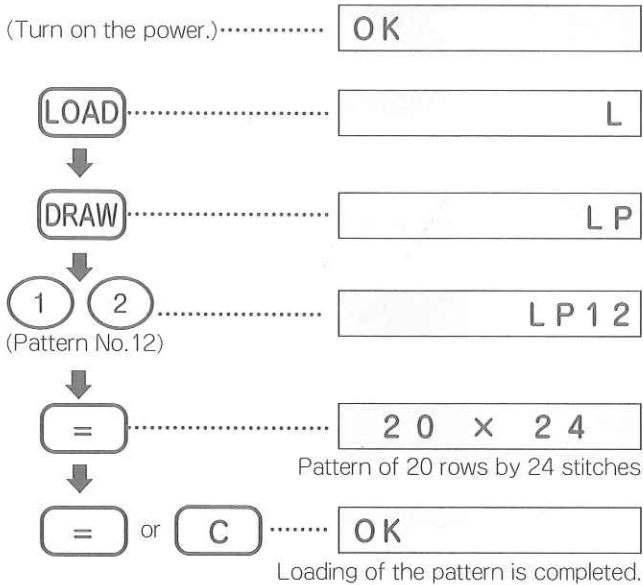
Pattern Data Set Keys

If you want to adjust the brightness of the LCD, use the Pattern Data Set Keys. By pressing the  key, the display becomes darker. By pressing the  key, it becomes brighter. (The brightness of the display can be changed at 16 levels.) Brightness can be adjusted while **OK** appears on the display. After the  Key is pressed and the actual operation starts, adjustment of brightness cannot be performed.

Let's knit the Pattern No. 12 built in the PC10.

How to load a pattern built in PC10

Press the keys as follows:



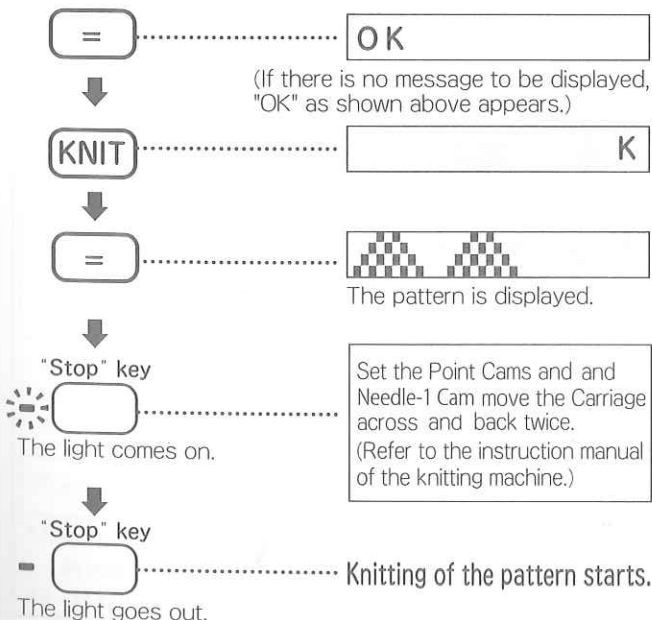
Even if the power is turned off at the time, the present operation status can be kept for about 3 days. By turning on the power again, you can continue the operation.

* If a new pattern is loaded, the last pattern is canceled.

Knitting the built-in pattern loaded from PC10

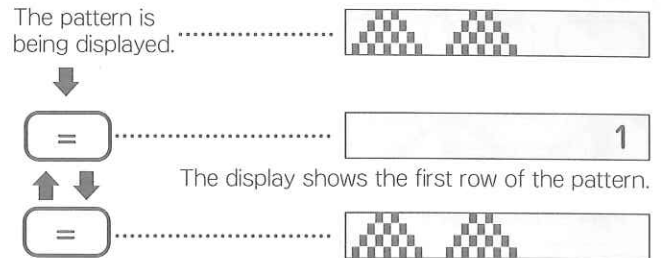
To knit the pattern loaded from PC 10, press the keys as follows:

Conduct the same operation for knitting the pattern loaded from the C card.



Changing the pattern display on the LCD to the numeric display

The display of a pattern on the LCD can be changed to a display with numeric values (rows of the pattern) or symbols.



Either display may be used when knitting.

To stop knitting the pattern

To stop knitting the pattern, press the following key.

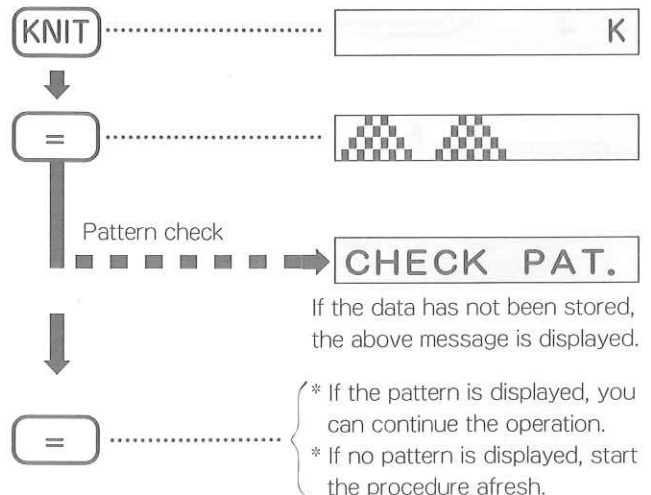


You may turn off the power at this time. If you are going to restart knitting soon, leave the power on.

To re-start knitting the pattern.

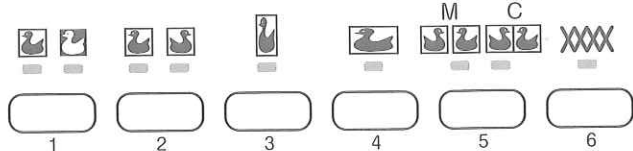
PC10 has the function of storing the loaded data under operation as it is. (For about 3 days)

If you turned off the power, take the following steps before re-start knitting the pattern. Display the pattern, press the "Stop" key (to put the light on), set the Point Cams and Needle-1 Cam and move the Carriage across and back twice without knitting.



● Giving variations to the pattern using the Pattern Keys

Pattern Keys



● Using the Pattern Keys, a pattern can be changed into various shapes.

You can also enjoy the patterns in combination by pressing two or more keys together.

● When the power is turned on, the respective left lights for the "1" and "2" keys come on. The other lights come on by pressing the respective keys. The function with the light on is activated. To cancel the function, press the key again.

Note: The "6" key is used when a rib-knitter is used.

Do not use the key when only this machine is used for knitting.

1

With this key, the black (pattern) area and white (background) area can be reversed.

While doing fair isle knitting, press this key with the yarn in the yarn feeder. The background yarn and the pattern yarn are reversed.

2

The right and left direction of the pattern can be reversed.

If you want to knit a pattern symmetrically on the front body, for example, knit the pattern with the left (Normal) light on and then knit the pattern with the right (Reverse) light on.

To knit letters, draw a pattern normally and knit the letter with the right (Reverse) light on.

Needle-1 Cam Position

3

By pressing this key, the size of the pattern is longitudinally doubled. (Each row on a pattern is knitted twice.)

Vertical Expansion

4

By pressing this key, the size of a pattern is horizontally doubled.

Horizontal Expansion



3

4

By pressing the "P3" and "P4" keys together, the size of the pattern can be quadrupled.

Vertical and Horizontal Expansion

M C

5

The same patterns face each other.

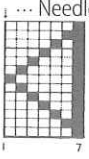
M (Mirror) and C (Chevron) are distinguished by the pivot of the mirror images. With the "M" light on, the pivotal stitches repeat. With the "C" light on, the pivotal stitches do not repeat.

For example, if we use a five stitch pattern:

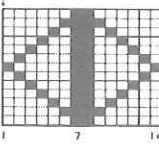
With the "M" light on,
123455432112...

With the "C" light on,
123454321234...

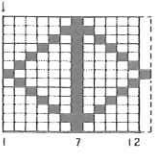
... Needle-1 Cam



1 7

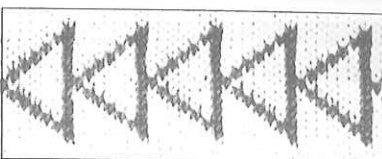


1 7 14

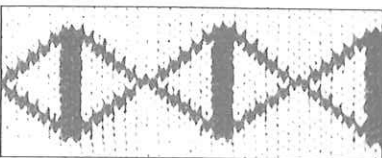


1 7 12

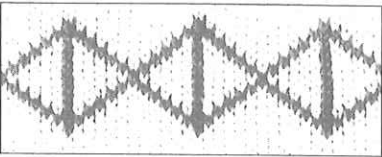
Normal pattern



With the "M" light on

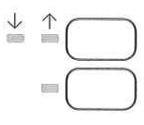


With the "C" light on



If Chevron is selected, the number of stitches in one pattern is obtained by subtracting 2 from double the number of the stitches in the basic pattern.

When doing motif knitting, attention should be paid to the setting positions of the Point Cams and Needle-1 Cam.



"Feed" Key

Two lights show the feeding direction of the pattern.

By pressing the "Feed" key, the feeding direction of a pattern can be changed.

"Stop" Key









Press the "Stop" key....The light comes on. The feed of the pattern stops. This is used for moving the Carriage without knitting or for knitting a striped pattern.

Press the "Stop" key....The light goes out. The pattern is fed as specified and knitted.

Note: Do not press either "Feed" key nor "Stop" key while moving the carriage.

How to apply the Pattern Keys to the respective knitting patterns

○...Can be used.
 ×...Cannot be used.
 △...Can be used with some conditions.

| Key Knitting pattern |   |   |  |  | M C   | XXXX |
|-------------------------|---|---|---|--|--|------|
| Fair isle | ○ ○ | ○ ○ | ○ | ○ | ○ ○ | × |
| Tuck stitch | × ○ | ○ ○ | △*1 | × | △*2 ○ | × |
| Slip stitch | × ○ | ○ ○ | △*1 | ○ | ○ ○ | × |
| Single motif | ○ × | ○ ○ | ○ | ○ | ○ ○ | × |
| Weaving | ○ ○ | ○ ○ | ○ | ○ | ○ ○ | × |
| Punch lace | ○ × | ○ ○ | ○ | ○ | ○ ○ | × |

*1. In tuck stitch and slip stitch, the number of rows that can be knitted is limited. Usually, tuck stitch or slip stitch of four rows or less in vertical expansion can be knitted, but it may not be knitted, depending on the pattern. Do a test knitting.

*2. Do not tuck 2 to 3 stitches or more repeatedly at the connection part of two facing patterns.

Let's draw a pattern with PC10.

On the LCD of PC10, you can draw a pattern freely.

The display shows the area of 64 stitches by 8 rows. If a pattern has a larger size, the whole of the pattern cannot be seen. Therefore, you are recommended to draw a pattern design using plotting paper beforehand.

Drawing a pattern with PC10.

To draw a pattern of 6 rows by 10 stitches, follow the steps below.

(Turn on the power.) **OK**

DRAW **M**

6 **M 6**

First, enter the number of rows.

※ **F4** **M 6 s**

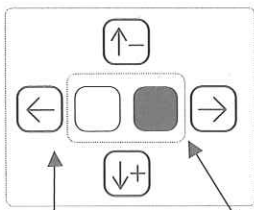
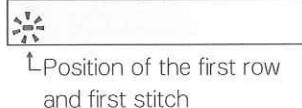
1 0 **M 6 s 1 0**

Enter the number of stitches, "10".

= *** * * * ***

The above display shows that PC10 is under operation.

A flashing dot appears at the bottom left corner of the LCD. A pattern to be drawn starts at the position of the flashing dot.



(Direction Keys) (Pattern Data Set Keys)

The flashing dot can be moved to any position with the Direction Keys (↑, ↓, ←, →). Move the dot to the part that you want to blacken and press the **■** key.

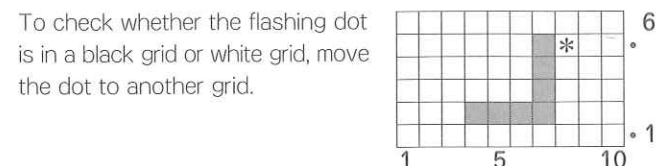
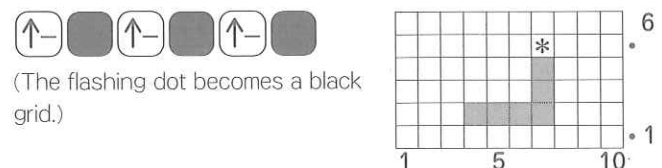
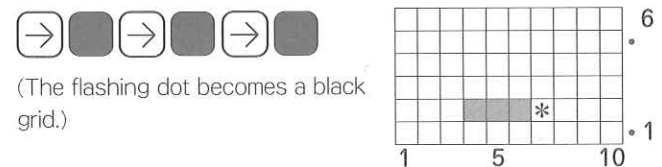
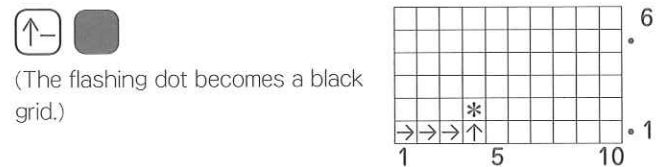
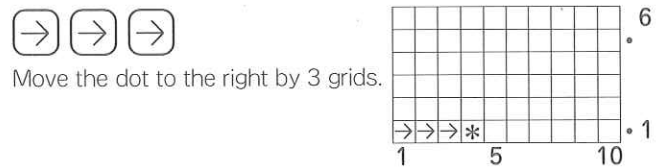
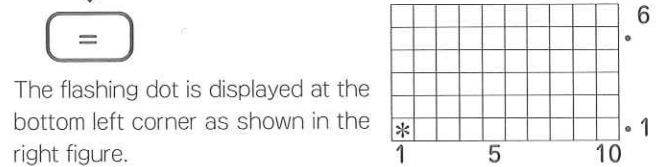
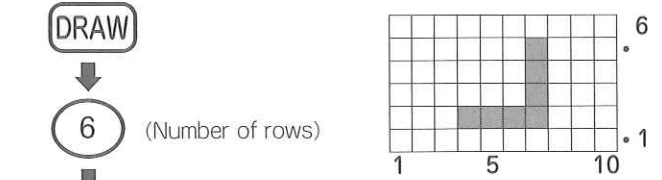
- If you blacken the part that should have been **□** by mistake or if you want to replace the **■** part with **□**, move the flashing dot to the part you want to change and press the **□** key.

- The flashing dot can be moved only within the area for which the numbers of rows and stitches were specified at the beginning. If you try to move the dot out of the area, beeps sound.

Note: If you don't press the **F4** key before entering the number of stitches, 60 is automatically set for the number of stitches.

Let's draw a pattern of 6 rows by 10 stitches.

To draw the pattern of the right figure, press the following keys.



If a pattern having a size larger than the LCD is drawn;

Move the dot to the end of the display and keep pressing the direction key. The area that was not displayed appear one after another. If the dot reaches the limit of the specified pattern area, beeps sound and the dot stops.

To move the dot by 10 rows and 10 stitches at one pressing operation.

To move the dot speedily on a large pattern, press the following key.

F1 The dot moves by 10 rows and 10 stitches.

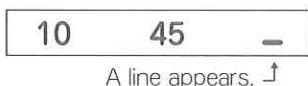


F1 The function is canceled.

When the function of moving the dot by 10 rows and 10 stitches is activated, the flashing intervals of the dot become longer.



If the numerical display is set with the **=** key, a line appears on the bottom right.



Moving the dot to the target position at once

It takes time to move a dot on a large pattern by pressing the direction keys. Then, move a dot to the target position at once as follows:

For example, let us move the dot on the first row and first stitch to the position of the 120th row and 30th stitch.

The dot is flashing on the first row and first stitch while drawing a pattern.



F4 **G**



1 2 0 **G 1 2 0**

Enter the number of rows.



F4 **G 1 2 0 s**



3 0 **G 1 2 0 s 3 0**

Enter the number of stitches.



=

The dot was moved.

The dot is flashing at the position of the 120th row and 30th stitch.

Displaying the position of the flashing dot with numeric values

If you want to know the correct position of the dot while drawing a pattern, display the position of the dot with numeric values as follows:

= **2 5 3 0**

The flashing dot is positioned at the 25th row and 30th stitch, and the grid becomes black.

2 5 3 0

The grid is white.

By pressing the **=** key again, the display is returned to the pattern display.

When there are a buzzer or instruction messages:

= **25 80** **<**

The row number where the flashing dot is positioned

The stitch number where the flashing dot is positioned

This shows whether the grid where the flashing dot is positioned is or .

The instruction symbol (<, *, {, >, }) is displayed.

This displays whether there is a buzzer instruction or not. (With, Without)

Specifying the position where a buzzer sounds

If you want to sound a buzzer on the end row of a pattern or on a row where the color of the yarn is changed, set as follows:

Move the flashing dot to the row where a buzzer should sound and press the **F2** key.

"F2" Symbol for a buzzer

F2

To cancel the setting, press the **F2** key again.

"F2" The symbol disappears.

F2

If the pattern has 61 rows or more:

If the pattern has 61 rows or more, the symbol cannot be seen at the right edge of the pattern display.

Press the **=** key and change the pattern display to the numeric display. The symbol is displayed on the position of the right edge.

F2 → **F2**

Buzzer set

Buzzer cancelled

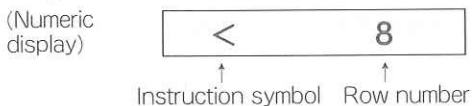
Entering instructions in the instruction columns

You can use the columns on the side of the buzzer column at the far right of the LCD to enter various instruction symbols. Move the flashing dot to the row where you want to put a symbol (at any stitch position on the row), and enter with the numeric keys.

| Enter with a key | Numeric display (The flashing dot is positioned at the 8th row and first stitch.) | | |
|------------------|---|-----|--|
| 0 | 8 | 1 | |
| 1 | 8 | 1 < | |
| 2 | 8 | 1 * | |
| 3 | 8 | 1 { | |
| 4 | 8 | 1 > | |
| 6 | 8 | 1 } | |

(Numeric Key) (Row) (Stitch) (Instruction symbol) (Instruction columns for the pattern display)

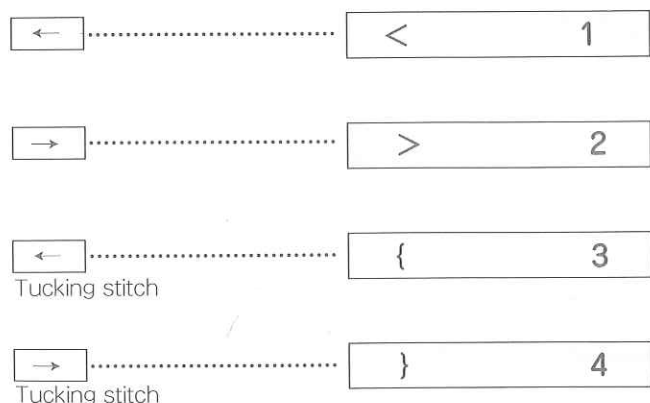
Display while knitting



How to use the instruction symbols

Instruction for changing yarns when you knit Fair Isle
 Instruction for the operating direction of the Lace Carriage and for tucking stitches when knitting in a lace pattern

Operating direction of the Carriage



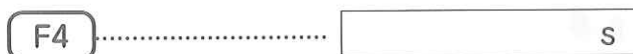
Stopping drawing a pattern

When you complete a pattern, press the following key.



Displaying the numbers of rows and stitches of the pattern stored in PC10

Display the numbers of rows and stitches of the pattern stored in PC10 as follows:



For a Fair Isle pattern, 50 rows × 20 stitches



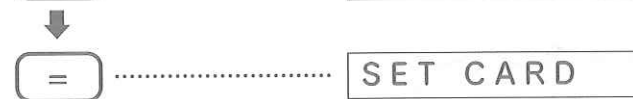
For a pattern in 3 colours, 50 rows × 20 stitches



Storing the pattern you made

If you start a different operation after you made a pattern or the pattern you made is left unused for a long time (over 3 days), the pattern may be erased. Therefore, you must store the pattern in the C card.

Note: A new C card must be formatted before use. Refer to page 15 for the formatting procedure of C card.



Open the cover for the C card slot on the right side of the unit and insert a C card.



The pattern was saved as No. 1 in the C card.



Pull out the C card from PC10.

(You may continue the operation with the C card inserted.)

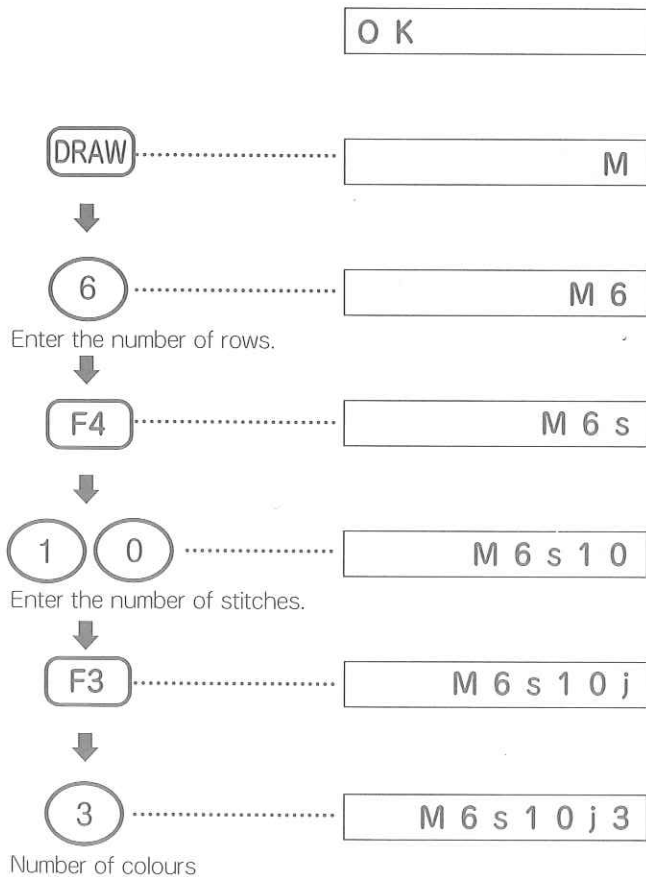
Refer to page 15.

Drawing a pattern in colours

Let's draw a pattern of 6 rows by 10 stitches in 3 colours. Basically, the drawing procedure is the same as that of a normal pattern knitting (Refer to page 10), but the yarn to be used (colour number) should be specified and the pattern data should be entered by each colour.

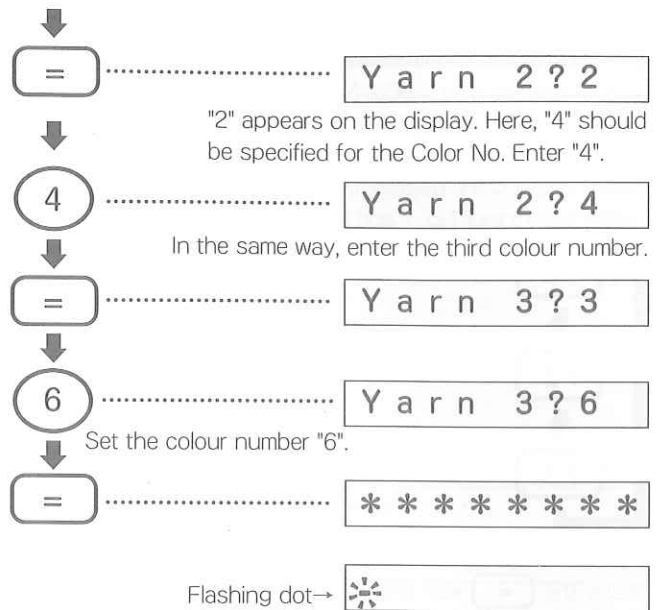
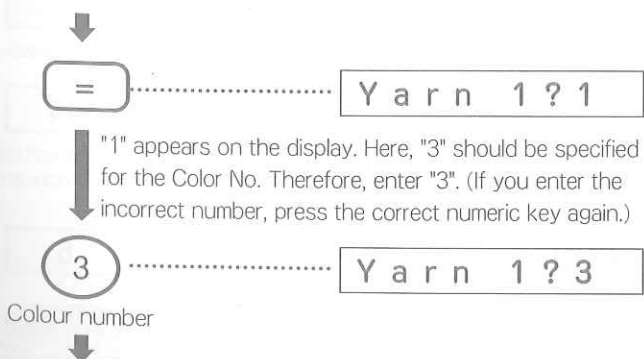
Note: If you don't set the number of stitches, it is automatically set as "60".

If you don't set the number of colours, it is automatically set as Jacquard in 2 colours.



In this pattern, multiple color yarns are used. Specify the yarn numbers as follows:

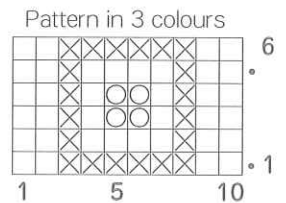
The colour numbers 0-7 can be entered with the numeric keys. In this example, 3 colours, Colour Nos. 3, 4, and 6, are specified as follows:



The flashing dot is displayed on the first row and first stitch, and you can start drawing a pattern. Draw a pattern with the and keys.

Drawing a specific pattern in colours

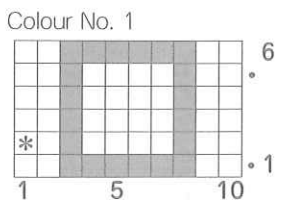
Let's draw the pattern in 3 colours as shown in the right figure. The numbers of rows (6), stitches (10) and colours (3) have already been set.



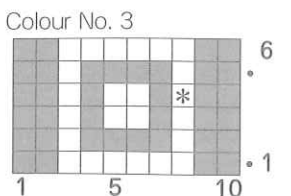
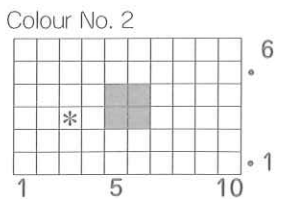
(1) Enter the pattern in Colour No. 1. Move the flashing dot with the Direction Keys and draw the pattern with the and keys.

=Colour No. 1
=Colour No. 2
=Colour No. 3

(2) Press the **F3** key. The display for drawing the pattern in Colour No. 2 appears. In the same way as in Colour No. 1, draw the pattern in Colour No. 2.



(3) Press the **F3** key. PC10 automatically displays the rest of the whole pattern (which is the pattern in Colour No. 3). Therefore, you don't have to enter the pattern in Colour No. 3.

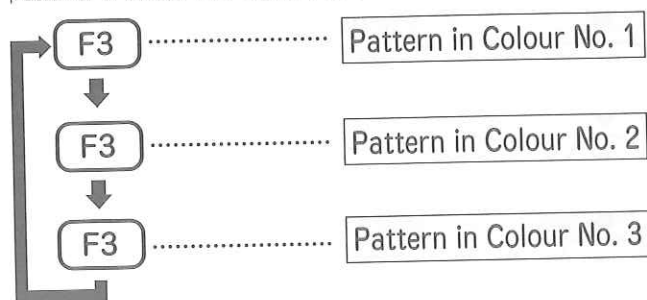


Note: At this time, the flashing dot is on the display, but the and keys cannot be used for entering.

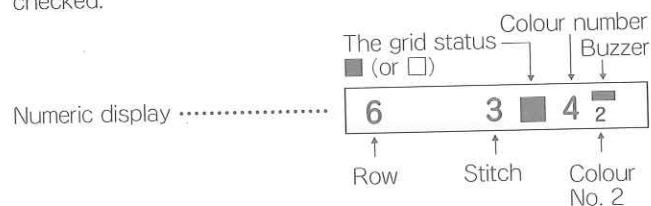
By pressing the **F3** key while drawing a pattern in colours, the display can be changed to show the pattern in Colour No. 1 → Colour No. 2 → Colour No. 3, sequentially.

By changing the display, you can check the pattern while knitting an intricate pattern.

When entering the pattern, be careful not to overlap the patterns in Colour No. 1 and Colour No. 2.



Press the **=** key and change the pattern display to the numeric display. The position of the flashing dot can be checked.



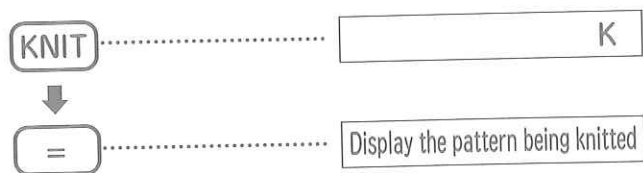
To finish drawing the pattern



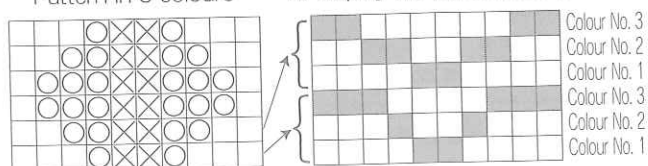
The finished pattern is read as a pattern of 18 rows by 10 stitches.

Example Number of rows (6) × Number of colours (3) = 18 rows

To display the pattern being knitted



Pattern in 3 colours To display the pattern being knitted



- ⊗=Colour No. 1
- ⊘=Colour No. 2
- =Colour No. 3

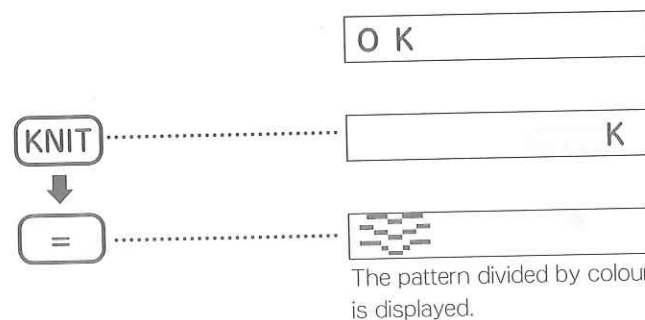
As shown in the above figure, one row of a pattern is displayed in 3 rows.

To knit a pattern in colours

Knit a pattern in colours according to the following procedure.

Load a pattern in colours into PC10 using any of the following ways.

- Draw a pattern with PC10.
- Load a pattern from the C card.
- Load a built-in pattern from PC10.

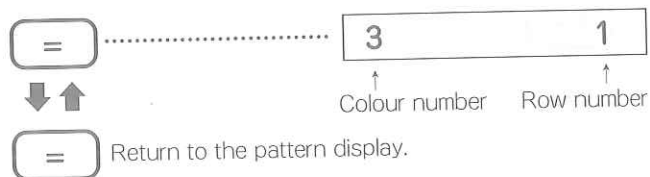


Before knitting, move the Carriage without knitting.

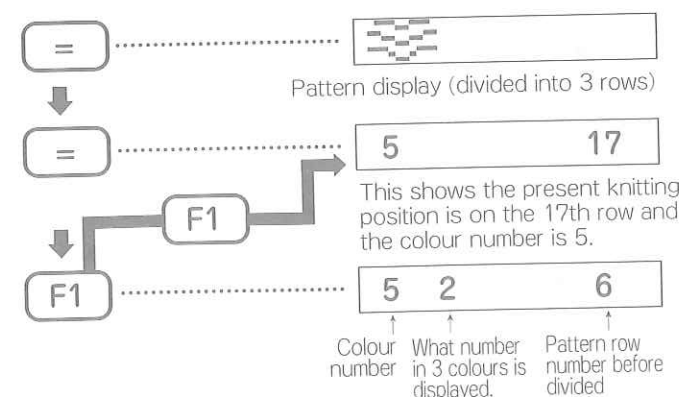
- (1) Press the "Stop" key on PC10. (The light comes on.)
- (2) Move the Carriage to and fro twice without knitting.
- (3) Press the "Stop" key. (The light goes out.)

Start knitting.

By changing the display to the numeric display while knitting, you can see the colour data in figures.



When knitting a pattern in 3 colours, for example, one row of the pattern is divided into 3 rows (one row for one colour). It takes 3 movements of the Carriage to make one row of the pattern. If you want to check the relationship between the three divided rows and the original pattern, use the **F1** key. To return the display, press the **F1** key again.

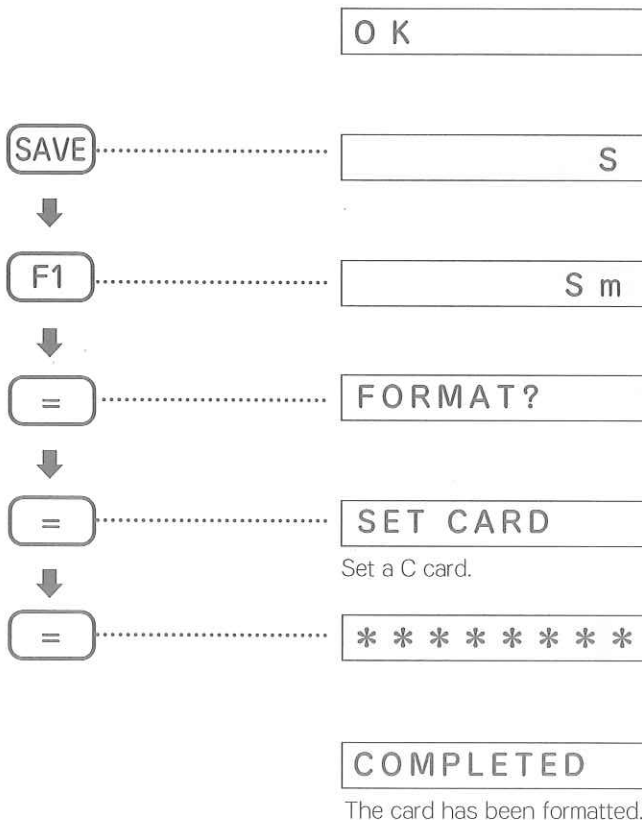


● How to Use a C Card (Memory Card)

To format a C card

If you use a C card supplied with PC10 for the first time or a new CF card (Compact Flash Card) offered commercially, first, format the card according to the following procedure. By formatting, you can also erase all data from the C card that have been used.

Note: Some CF cards that have been used with other electronic devices may not be formatted using the following procedure.



Soon, "OK" will be displayed.

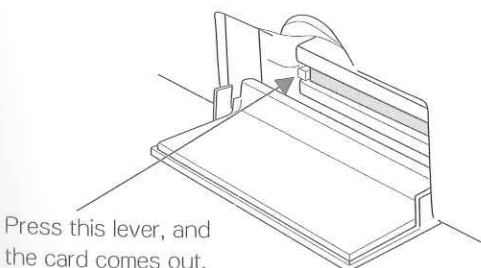
OK

Pull out the C card from PC10. (You may continue the operation with the C card inserted.)

If you want to stop the operation before "COMPLETED" is displayed, press the **C** key.

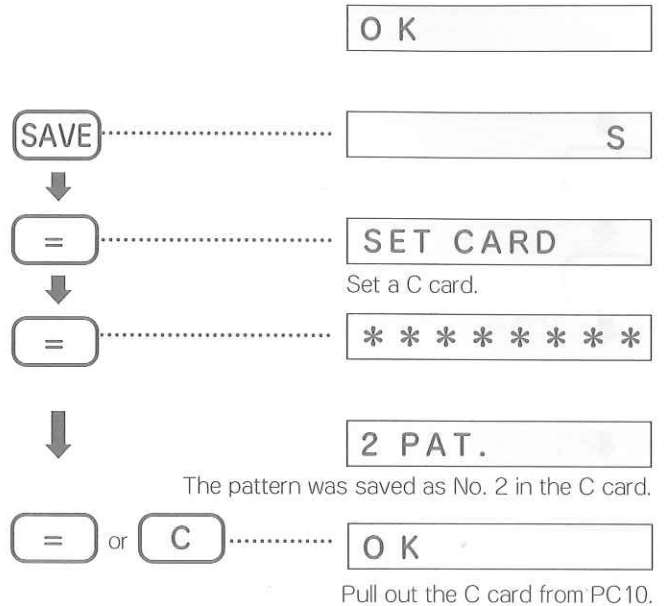
Do not insert or remove the C card while the display shows *****.

How to remove the C card



To store a pattern onto a C card

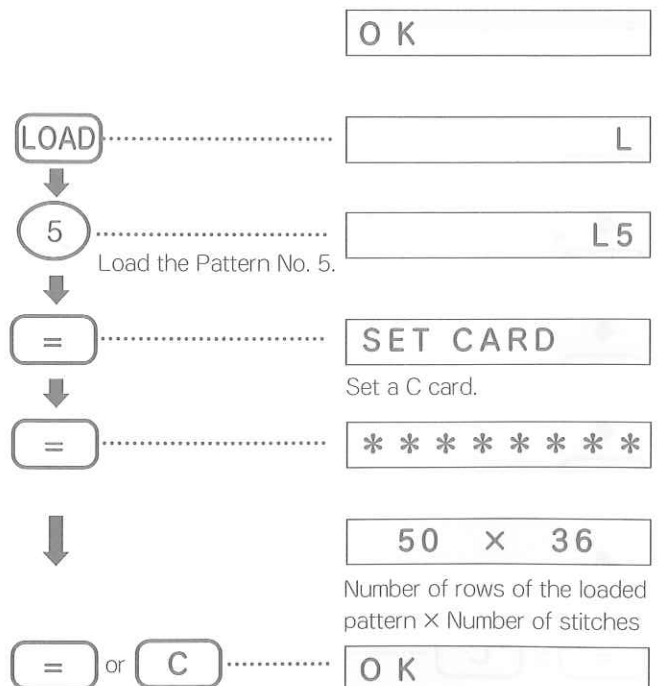
Store patterns you made, patterns loaded from another C card or modified patterns of those built in PC10 in a C card as follows:



To load a pattern from a C card

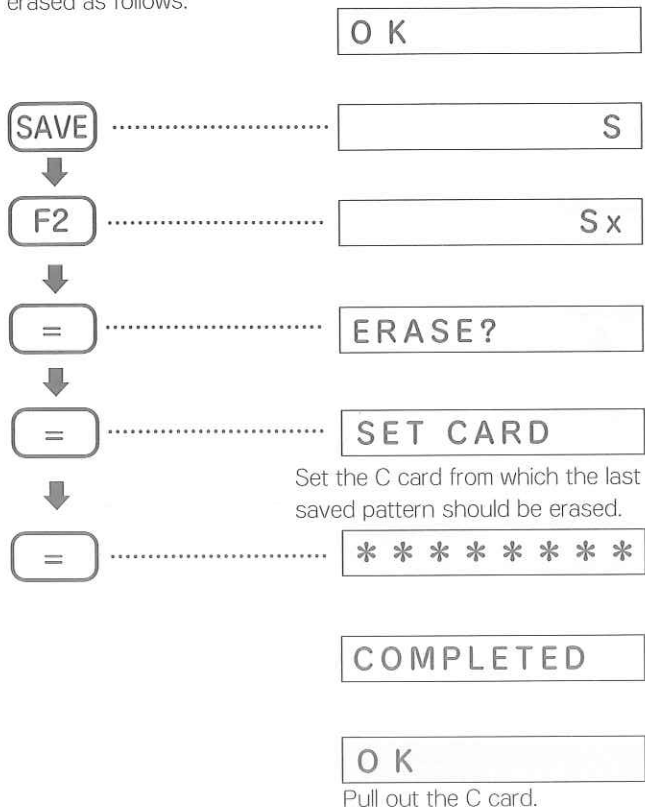
To load a pattern saved in the C card to knit or modify, take the following procedure.

Let us load the Pattern No. 5 as an example.



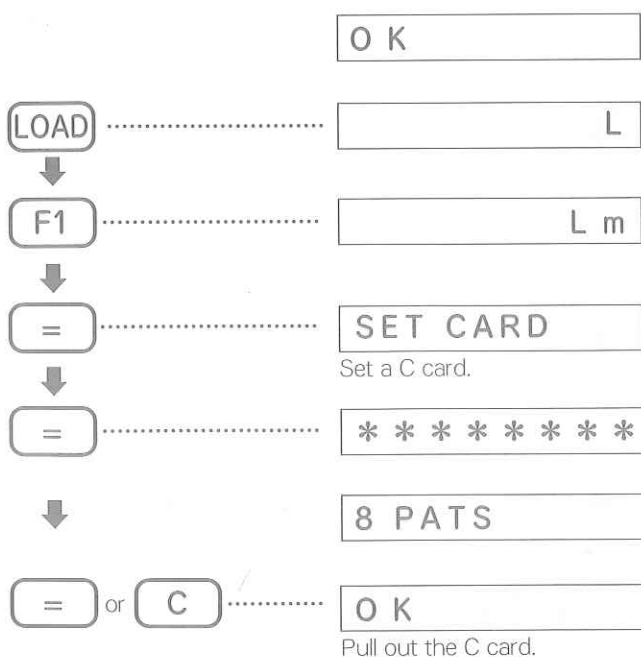
To erase the last pattern from a C card

After you did any wrong operation in saving a pattern or modified a pattern, the last pattern saved in the C card can be erased as follows:



To cancel the operation before ***** is displayed, press the **C** key.

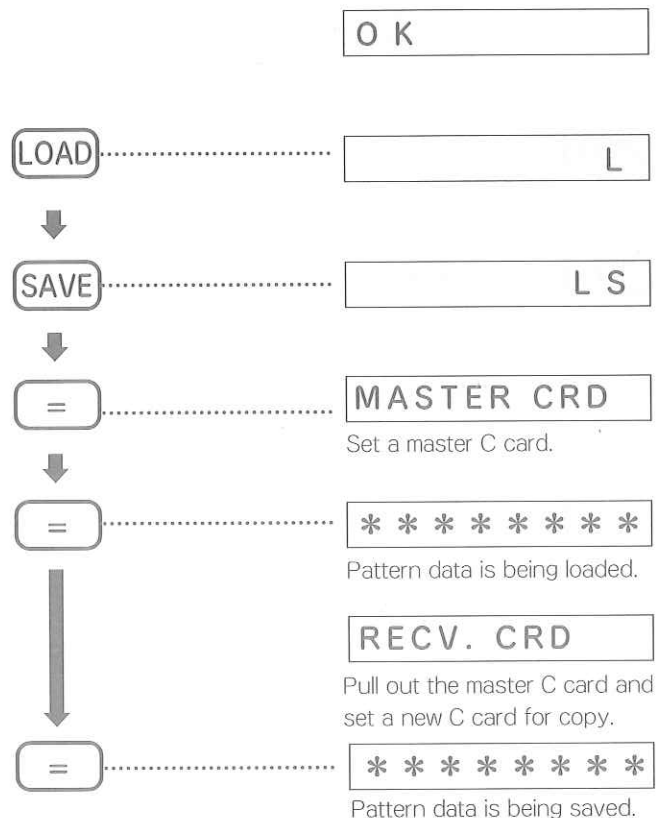
To see how many patterns are on a C card



To copy all patterns from a C card to another C card

The pattern storage capacity of one C card is many times as large as that of PC10. If the amount of patterns stored in the C card is larger than the capacity of PC10, repeat the following operation several times to copy all patterns onto a new C Card.

When all patterns can be copied at one operation:



(The number of copied patterns is displayed.)

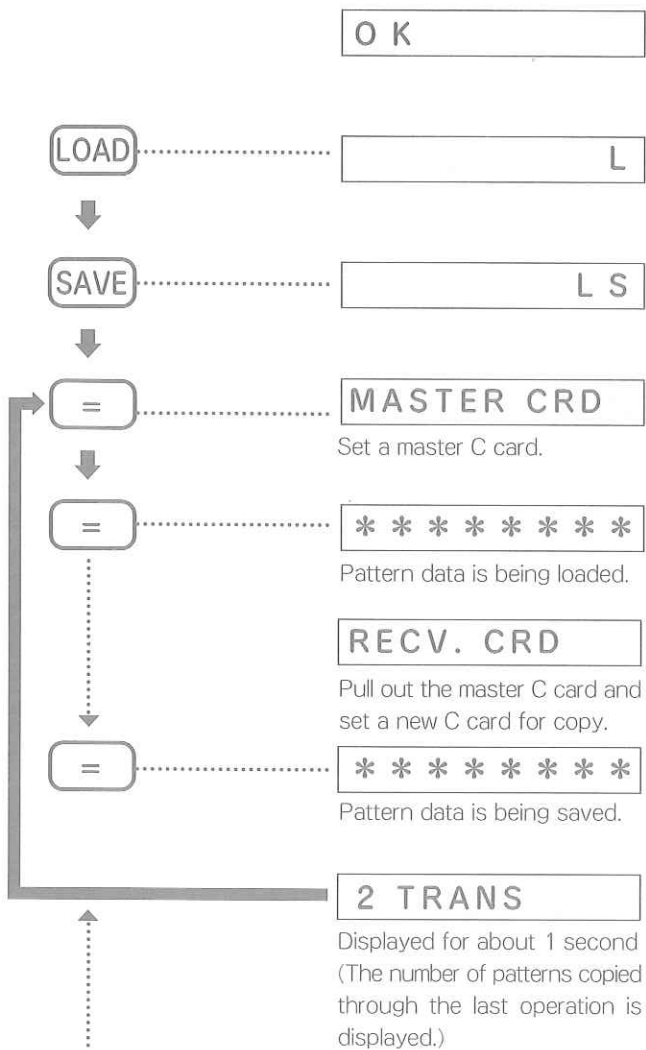
5 TRANS

Displayed for about 1 second

Copying has been completed.

OK

To copy the patterns divided into several parts



Return to the step indicated by the arrow and repeat the procedure until all patterns are copied onto the new card.

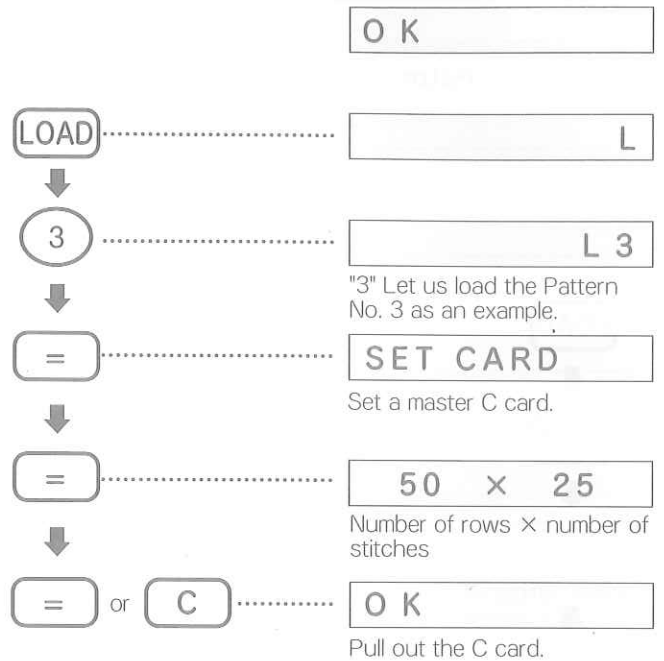
When all patterns are copied, "OK" will be displayed.

OK

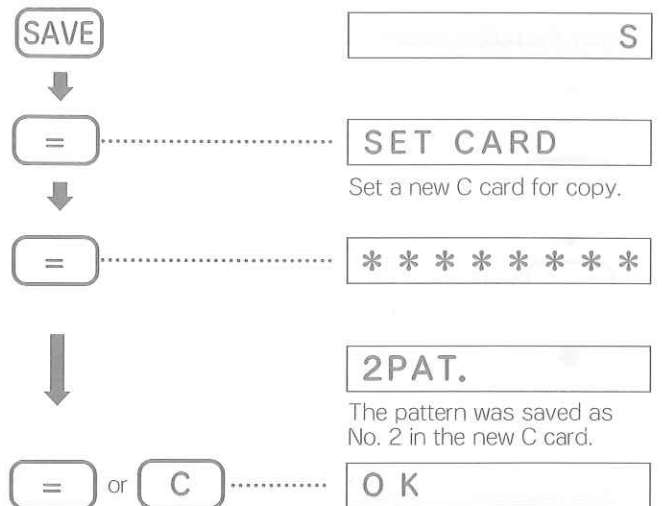
Note: If the new card has some patterns before conducting the above procedure, the existing patterns are erased and replaced with the new patterns copied through the above procedure. Please be careful not to erase any necessary pattern.

To copy a pattern in a C card onto another C card.

The pattern to be copied is loaded from the C card into PC10 and stored in another C card.



Loading of the pattern is completed. Next, the loaded pattern is stored in another C card as follows:

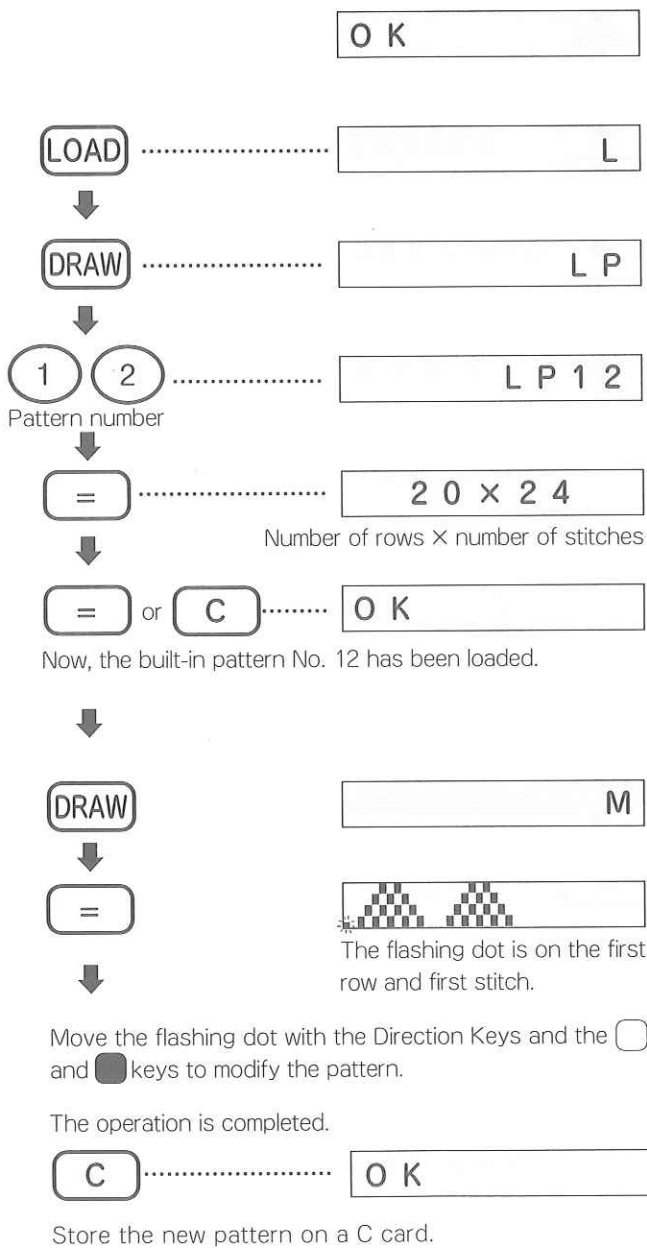


● To make a new pattern by modifying the stored pattern

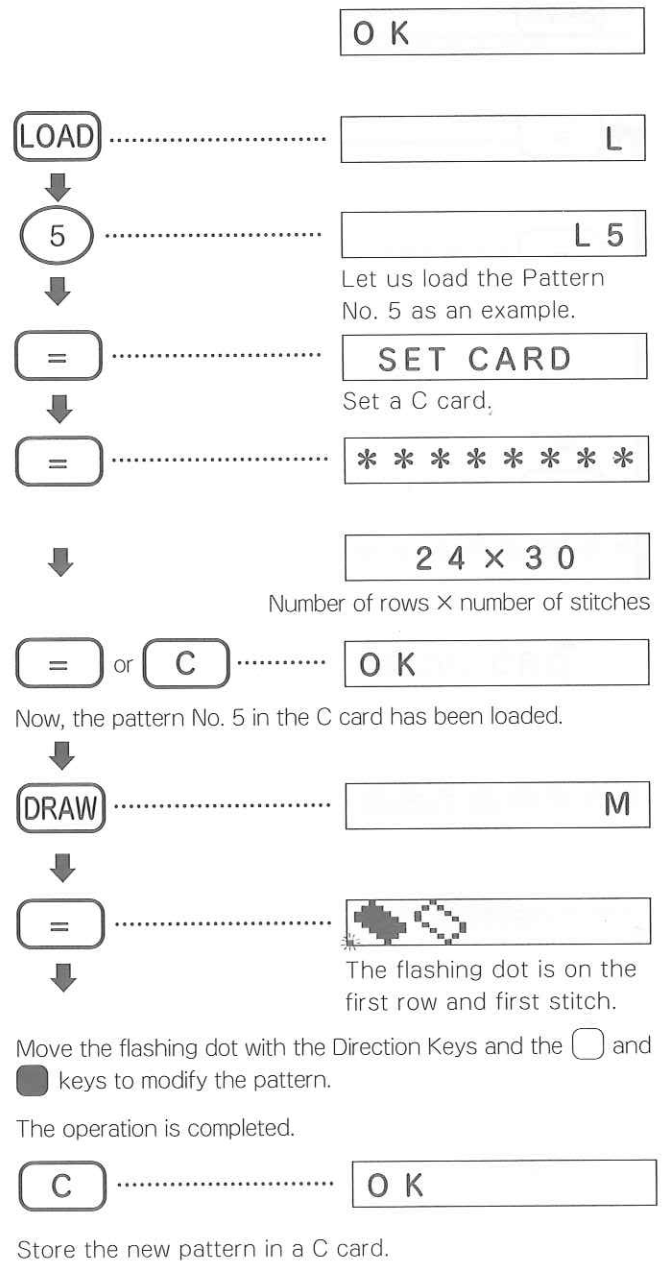
Let's make a new pattern by loading the built-in pattern or pattern stored in a C card into PC10 and modifying it.

Modifying a pattern using a flashing dot

Pattern built-in PC10



Pattern stored in a C card



Changing the number of rows or the number of stitches of a pattern

On PC10, the number of rows and the number of stitches of a stored pattern or a pattern being drawn can be changed as follows:

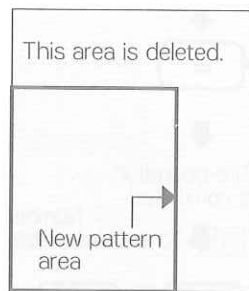
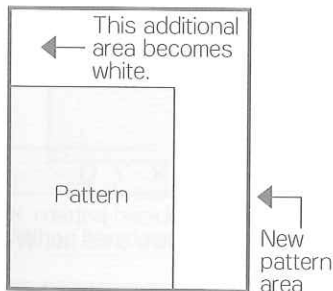
1. Set the new numbers of rows and stitches on PC10.
2. Load the target pattern from the C card into PC10.
3. The loaded pattern is displayed within the area of the previously set numbers of rows and stitches.
4. A flashing dot is displayed in the new specified area. Using the dot, you can modify the pattern.

Note: The pattern can be loaded only from a C card in the area of new numbers of rows and stitches.

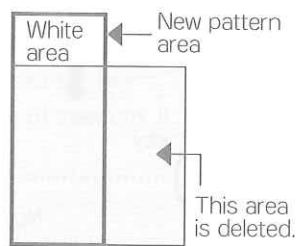
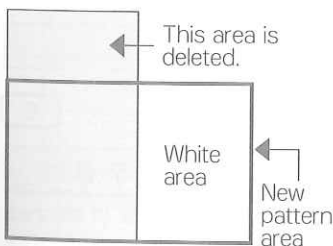
To load a pattern being drawn or pattern built in PC10 into the new area, store the pattern in a C card beforehand.

(To increase the number of rows or stitches of the original pattern)

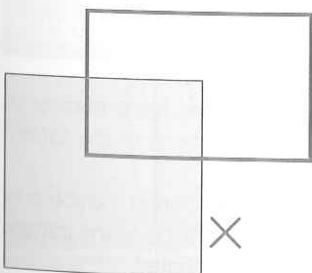
(To decrease the number of rows or stitches of the original pattern)



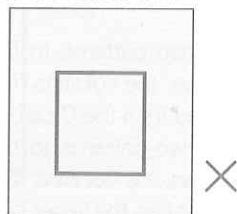
(Other cases)



(The areas as shown below cannot be set.)

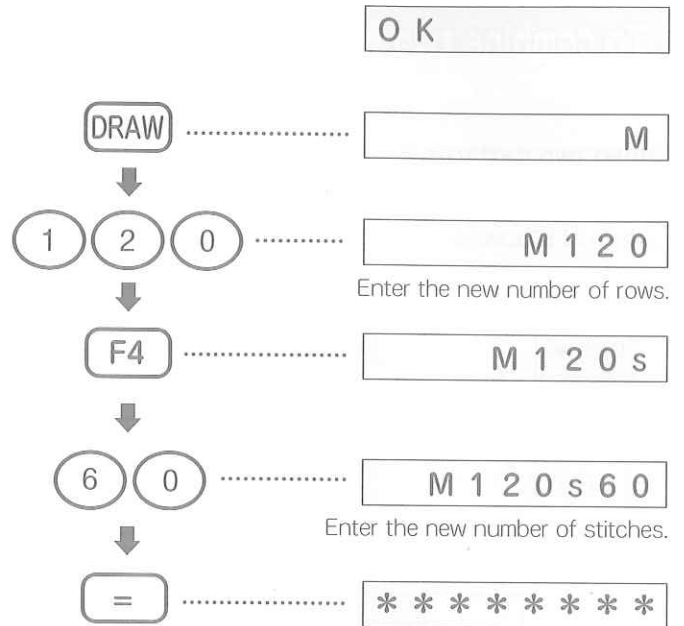


A new area must be specified starting at the first row and first stitch. It is impossible to specify a new area starting at any position other than the first row and first stitch.



Procedure of changing the numbers of rows and stitches

As an example, change the numbers of rows and stitches of the pattern No. 5 in the C card from 95 rows by 45 stitches to 120 rows by 60 stitches as follows.

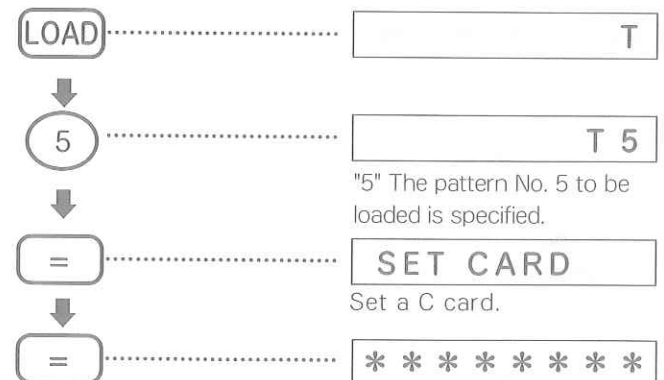


Enter the new number of rows.

Enter the new number of stitches.

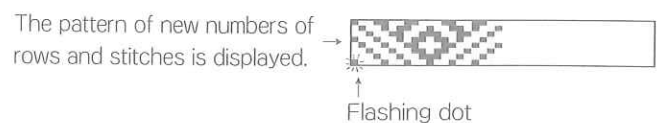
Flashing dot appears.

Now, the new numbers of rows and stitches for the pattern No. 5 has been set. Then, load the pattern from the C card to put it in the new area.



"5" The pattern No. 5 to be loaded is specified.

Set a C card.



Move the flashing dot with the Direction Keys and modify the pattern with the and keys. The increased area of the pattern has a white background. To finish the operation, press the **C** key. Store the new pattern in a C card.

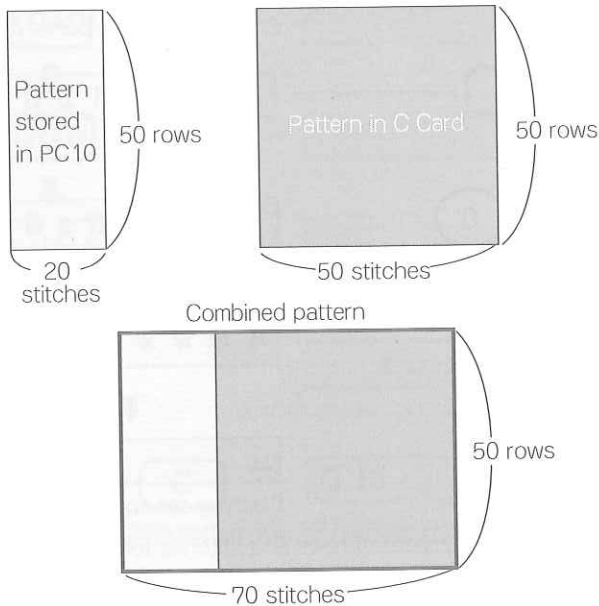
To combine two patterns into one

First, read one pattern into PC10. Then, load the other pattern from the C card and add it to the first pattern.

To combine two patterns side by side (in the direction which the number of stitches is increased)

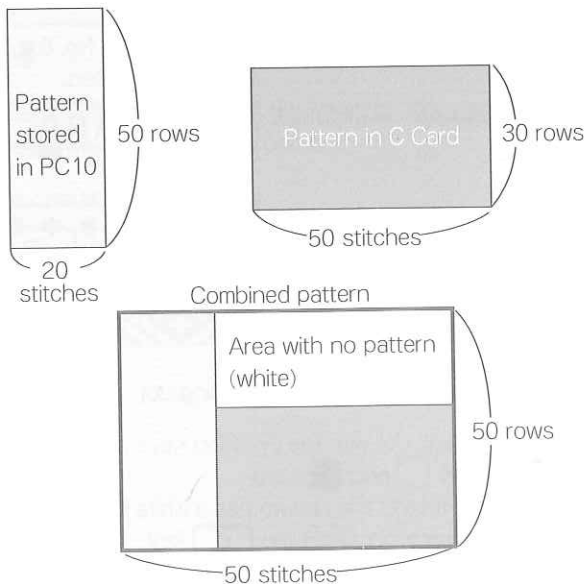
When two patterns have the same number of rows:

In the case where a pattern of 50 rows by 20 stitches and a pattern of 50 rows by 50 stitches are combined side by side:



When two patterns have different numbers of rows:

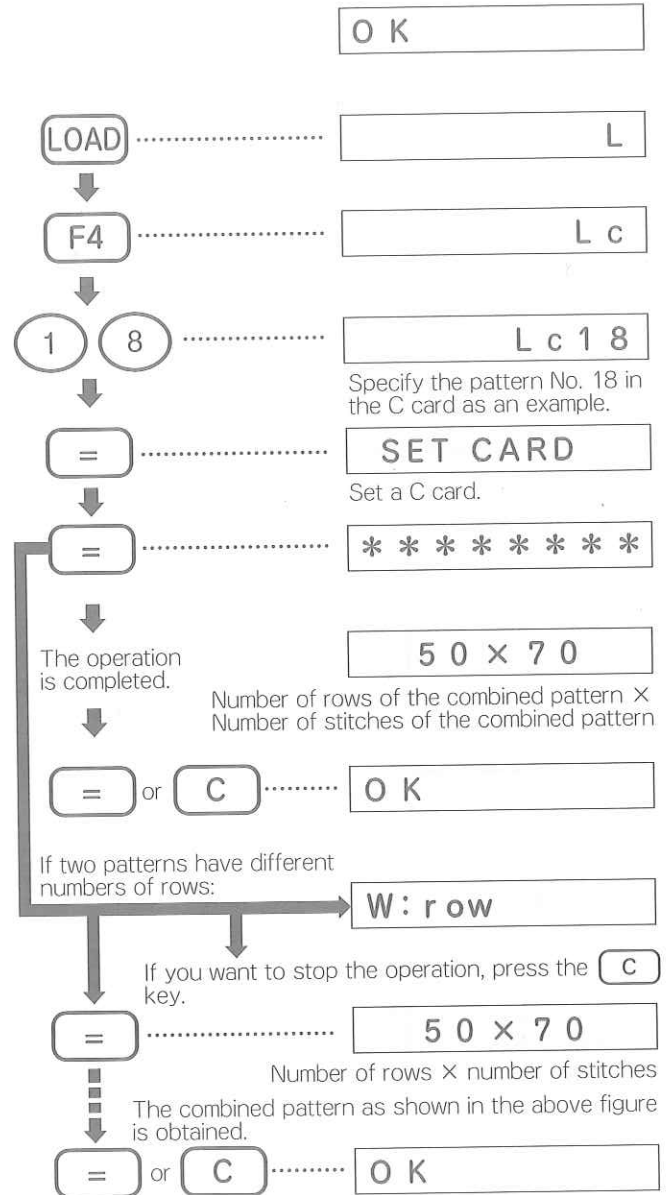
In the case where a pattern of 50 rows by 20 stitches and a pattern of 30 rows by 50 stitches are combined side by side:



Procedure of combining two patterns side by side

Suppose that one pattern has been read into PC10 as a result of any of the following cases.

- A new pattern which was drawn exists.
- A pattern loaded from the C card exists.
- pattern built in PC10 has been loaded.



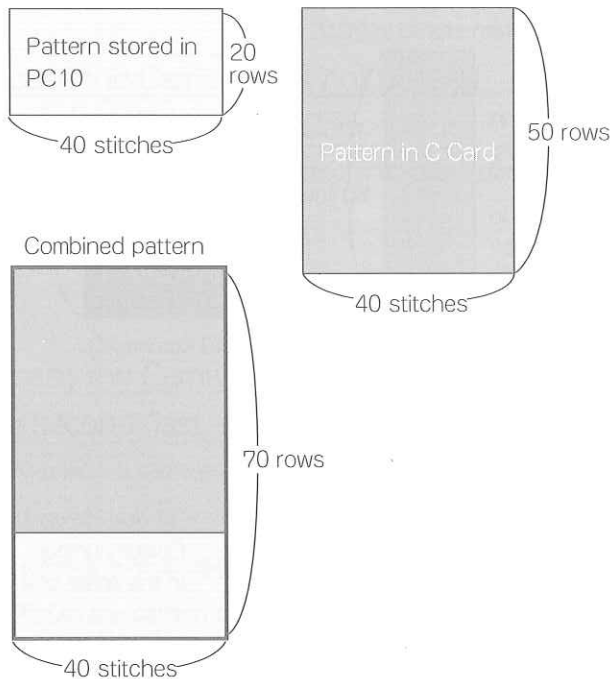
Buzzer column and instruction columns for the combined pattern

- If two patterns to be combined have the same number of rows, the columns for buzzer and instructions of the pattern read from the C card are adopted.
- If two patterns to be combined have different numbers of rows, the columns for buzzer and instructions of the pattern that has the larger number of rows are adopted.

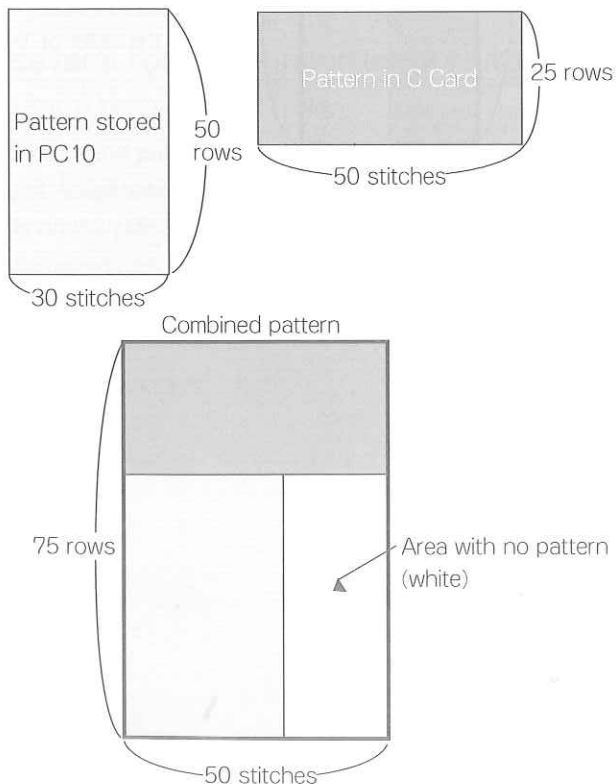
To combine two patterns vertically (in the direction which the number of rows is increased)

Combine the two patterns vertically in the same way as "To combine two patterns side by side".

When two patterns have the same number of stitches:



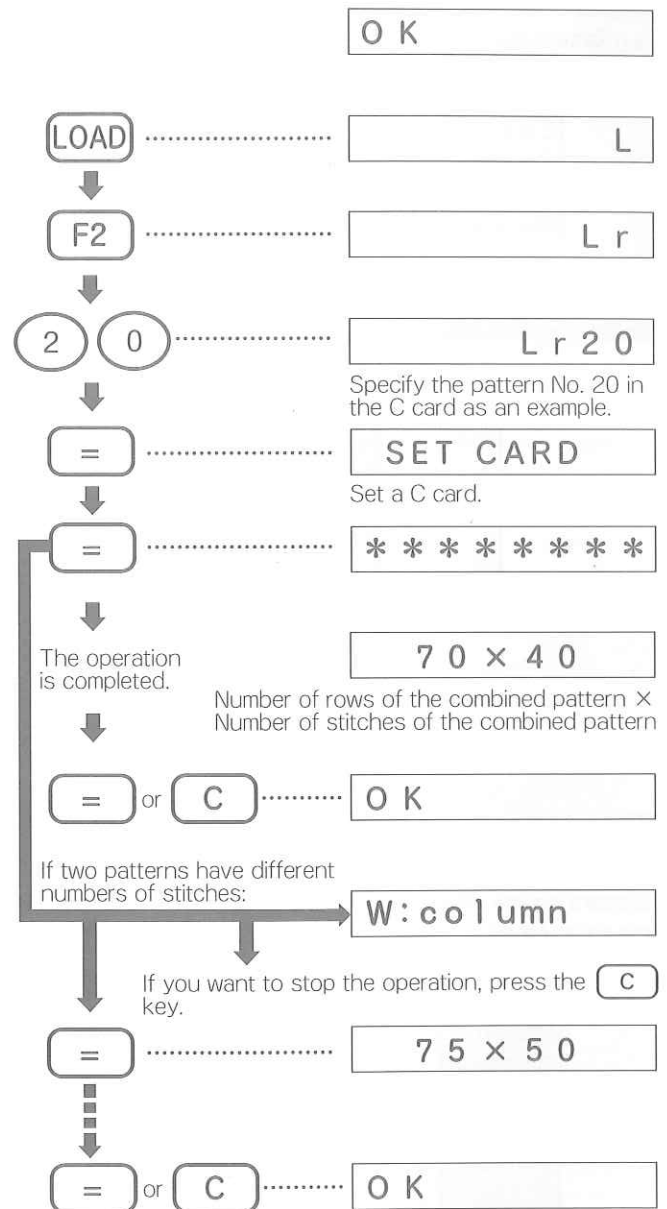
When two patterns have different numbers of stitches:



Procedure of combining two patterns vertically

Suppose that one of two patterns to be combined has been read into PC10.

The other pattern is stored in the C card.

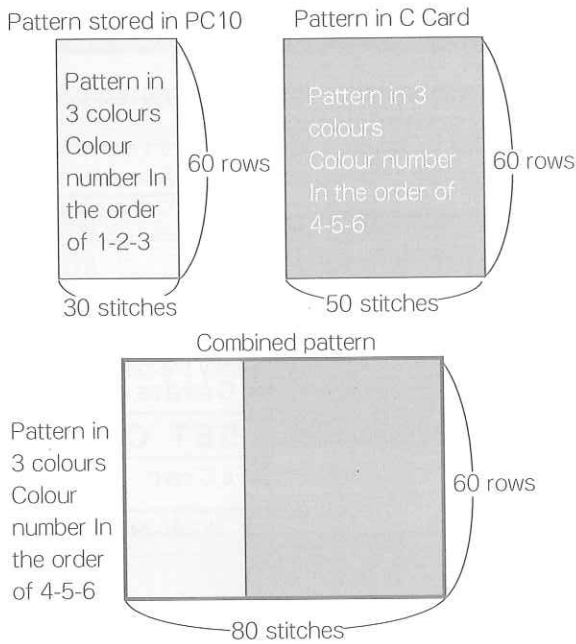


The larger number of stitches is adopted for the combined pattern and the blank area becomes white.

To combine two patterns in colours side by side

The basic procedure is the same as that for normal patterns. When combining two patterns in colours, however, you must specify the colour number, etc.

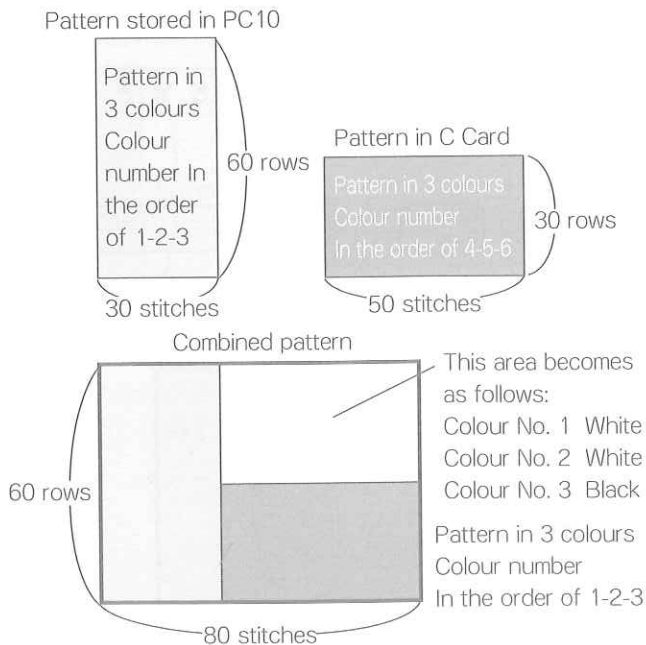
When two patterns have the same number of rows:



The colour number and buzzer column of the pattern read from the C card are adopted. Therefore, the colour number of this example is in the order of 4-5-6.

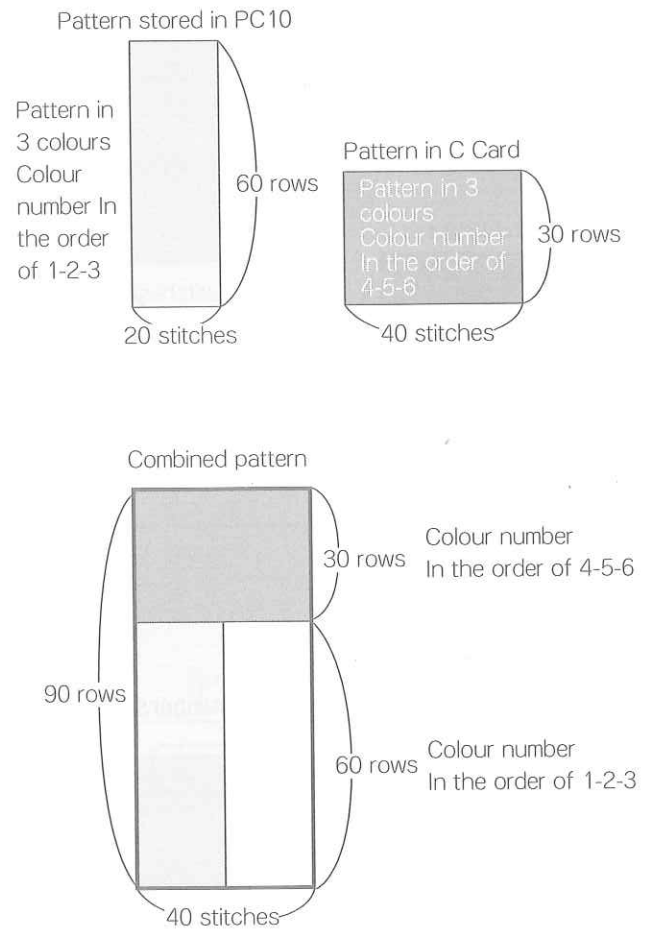
When two patterns have different numbers of rows:

If you continue the operation after **W:column** appears on the display, the combined pattern is as shown in the figure below.



To combine two patterns in colours vertically

- If two patterns to be combined have the same number of colours and the same number of stitches, follow the same procedure as to combine normal patterns vertically.
- If two patterns to be combined have different number of stitches, the larger number of stitches is adopted for the combined pattern.



● What to do if...

List of Pa

If you knit incorrectly while knitting with the PC10...

In case you knit incorrectly or if the Carriage has jammed, take the following procedure.

While knitting with PC10, the pattern is fed every time the Carriage passes the second (the last) Point Cam to proceed to the next pattern. Take the following procedure if you knit incorrectly.

In case the Carriage has not passed the second (last) Point Cam

- (1) Release the Carriage and return it. Then, unravel the incomplete row.
- (2) Continue to knit.

In case the Carriage has encountered the second (last) Point Cam

- (1) Release the carriage and move it in its proceeding direction.
- (2) Unravel 1 row of the knitting.
- (3) Return the released Carriage to the opposite side.
- (4) Return the pattern on the display by 2 rows (which were fed at the above steps (2) and (3)) by pressing the direction key (↑) on the PC10.
- (5) Continue to knit.

If several rows are incorrectly knitted...

- (1) Unravel incorrectly knitted rows.
- (2) Return the pattern on the display by the number of the unravelled rows using the direction key (↑). (If the Carriage is on the side opposite the yarn, move the Carriage to the same side as yarn. If the Carriage is returned without pressing the "Stop" key, then, return the pattern on the display 1 more row.)
- (3) Continue to knit.

If you want to store a pattern onto a C card while knitting the pattern...

- (1) Note the pattern row number displayed on the PC10.
- (2) Press the (C) key. (OK) appears on the display.
- (3) Press the (SAVE) key and do the storing operation.
- (4) If the storing operation of the pattern into the C card is completed and (OK) appears on the display, press the (KNIT) and (=) keys.
- (5) Check the row number.
- (6) Continue to knit.

If you turn off the power while knitting a pattern...

If you turn off the power by mistake, just turn on the power again. PC10 will be activated again. However, the Carriage must be moved to and fro (twice) without knitting. Refer to "To re-start knitting the pattern" on page 7.

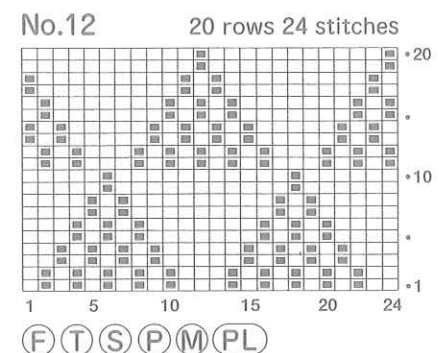
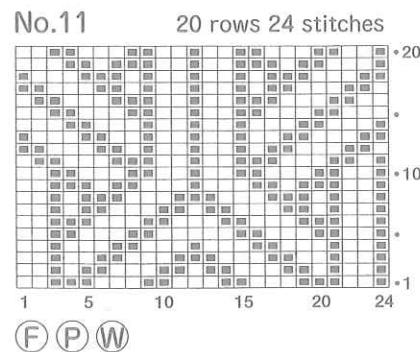
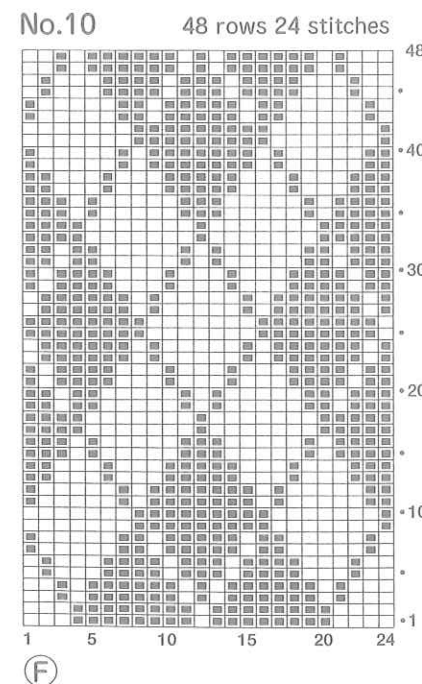
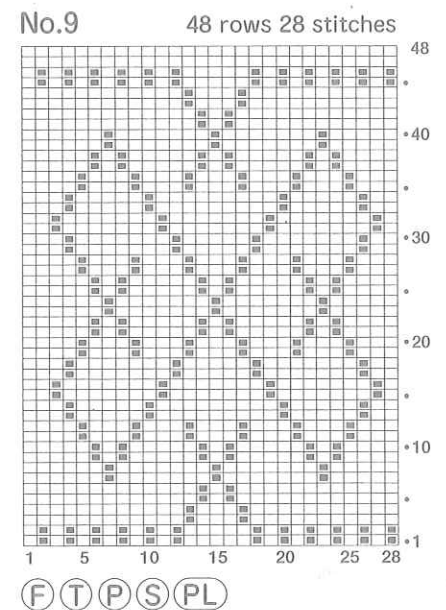
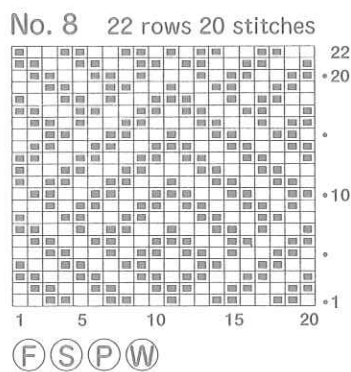
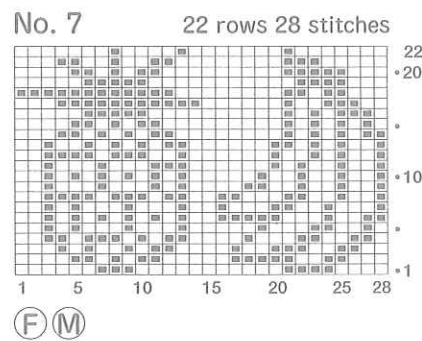
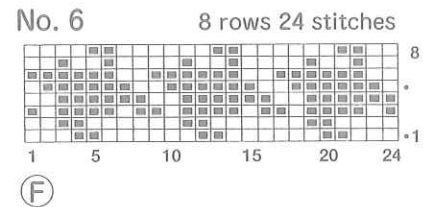
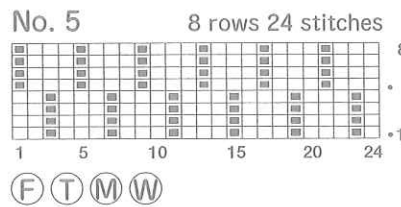
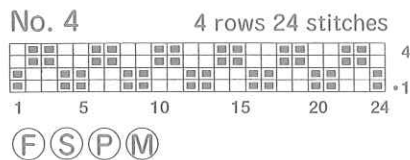
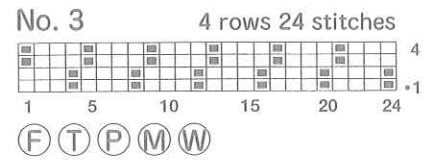
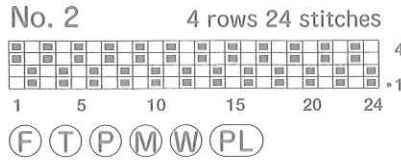
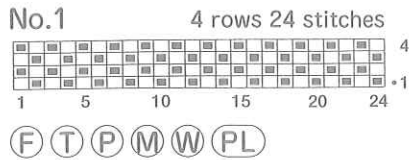
●List of Patterns Resident in the PC10

Patterns for the Carriage.....No.1~No.55

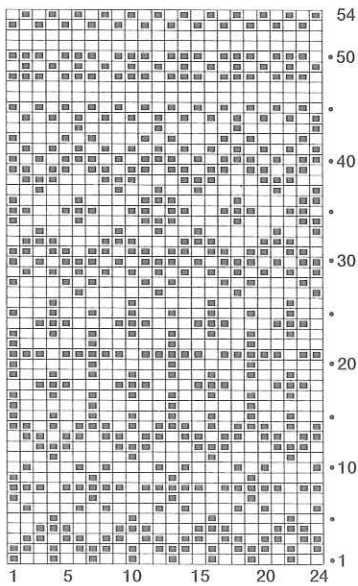
Patterns for the Lace Carriage.....No.56~No.82

Patterns for the Rib Knitter.....No.83~No.100

- ※ (F)Fair isle
- (S)Single motif
- (T)Slip stitch
- (P)Weaving
- (M)Tuck stitch
- (W)Plating
- (PL)Punch lace

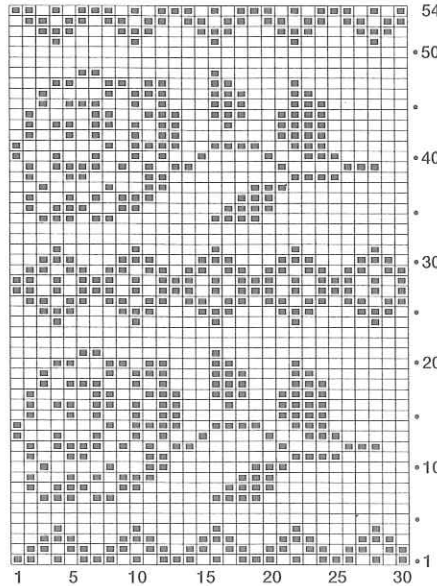


No. 13 54 rows 24 stitches



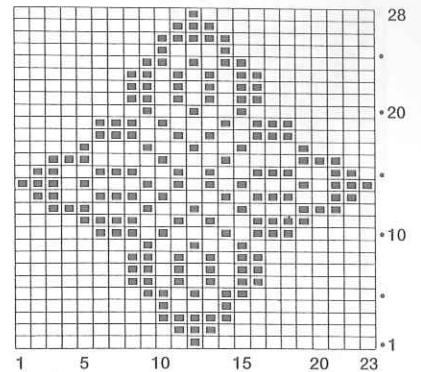
(F) (P)

No. 14 54 rows 30 stitches



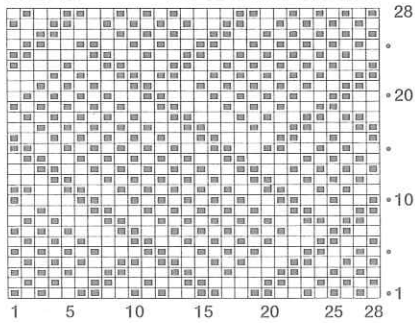
(F)

No. 15 28 rows 23 stitches



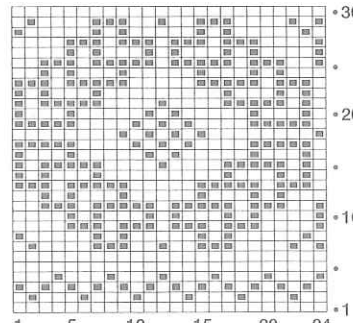
(F) (M)

No. 16 28 rows 28 stitches



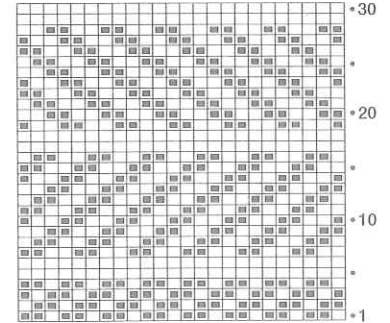
(F) (S) (P) (W)

No. 17 30 rows 24 stitches



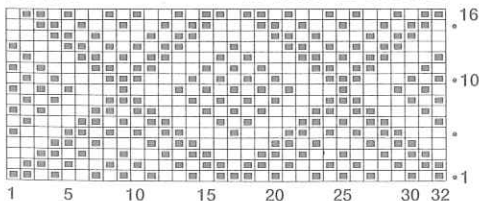
(F)

No. 18 30 rows 24 stitches



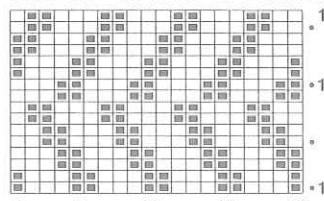
(F) (S) (W)

No. 19 16 rows 32 stitches



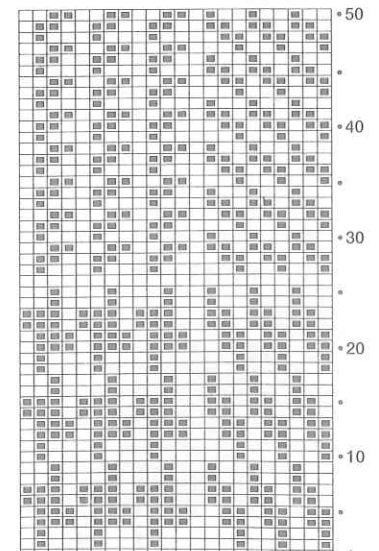
(F) (S) (P) (W)

No. 20 16 rows 20 stitches



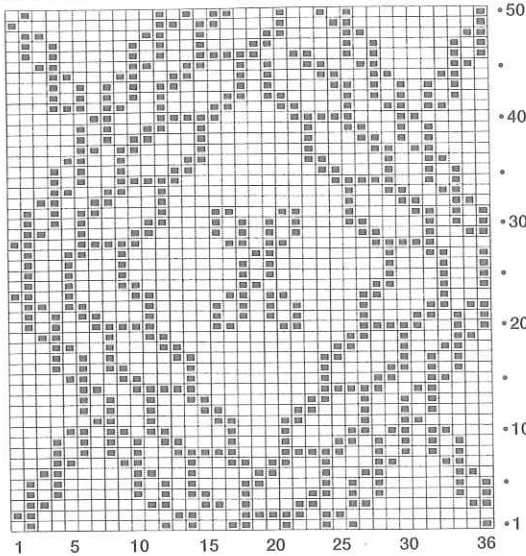
(F) (S)

No. 21 50 rows 22 stitches



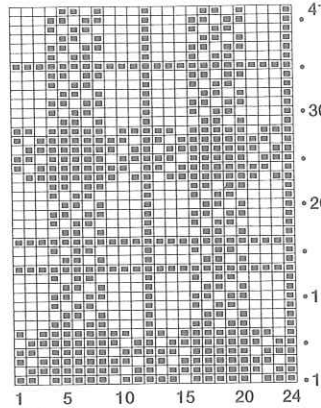
(F)

No.22 50 rows 36 stitches



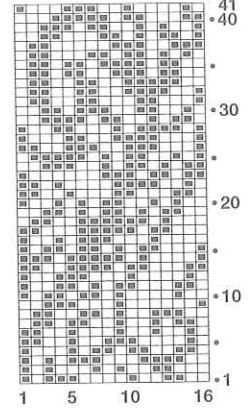
(F) (P)

No.23 41 rows 24 stitches



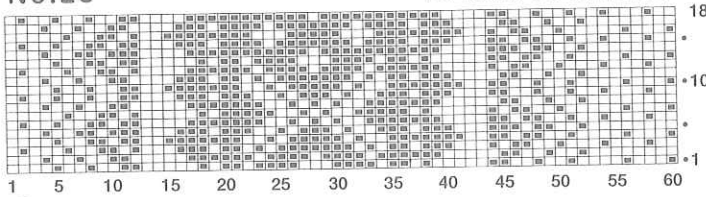
(F)

No.24 41 rows 16 stitches



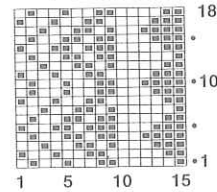
(F)

No.25 18 rows 60 stitches



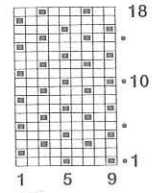
(F)

No.26 18 rows 15 stitches



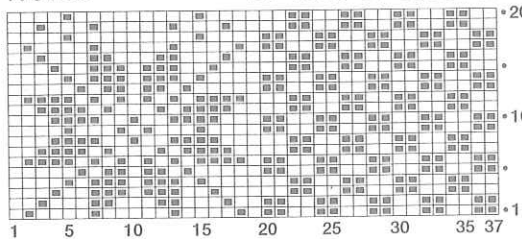
(F)

No.27 18 rows 9 stitches



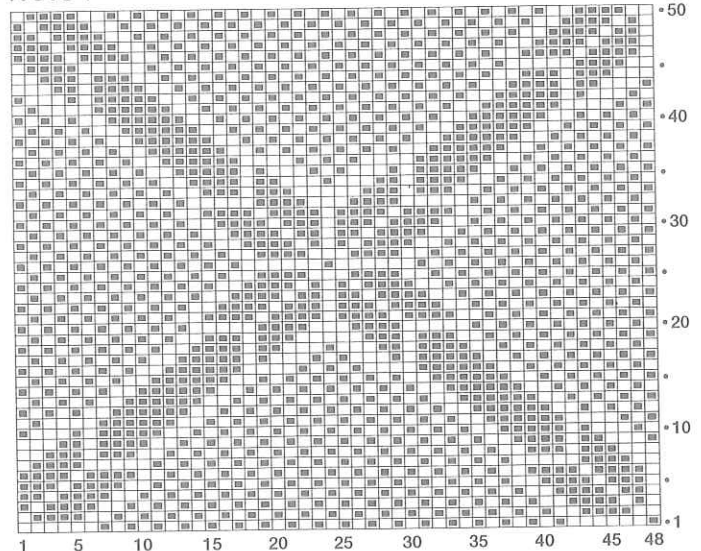
(F)

No.28 20 rows 37 stitches



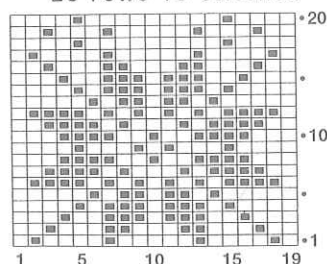
(F)

No.31 50 rows 48 stitches



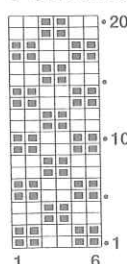
(F)

No.2 20 rows 19 stitches



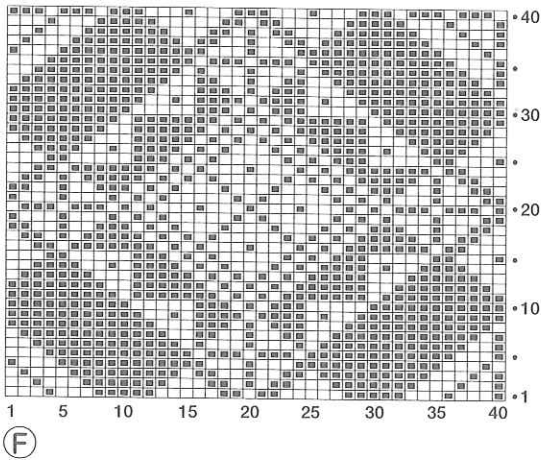
(F)

No.30 20 rows 6 stitches

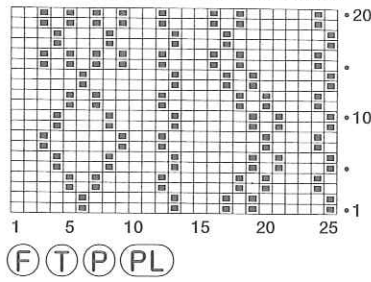


(F)

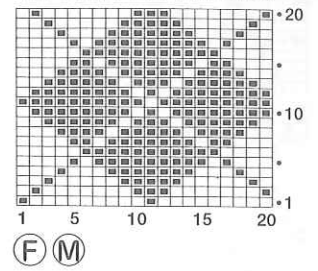
No.32 40 rows 40 stitches



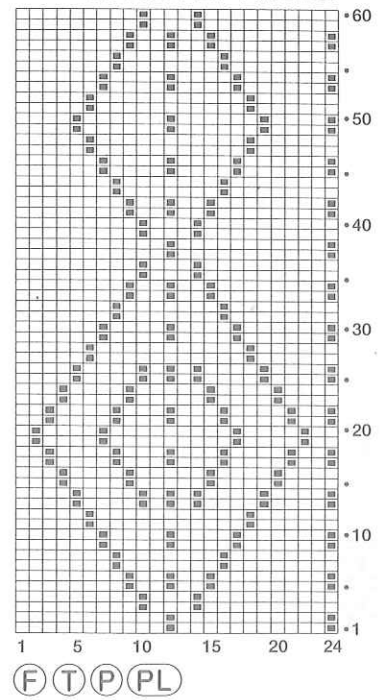
No.33 20 rows 25 stitches



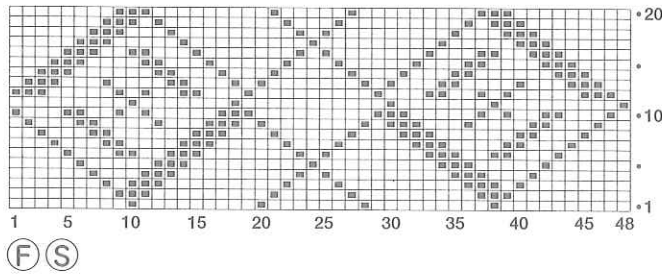
No.34 20 rows 20 stitches



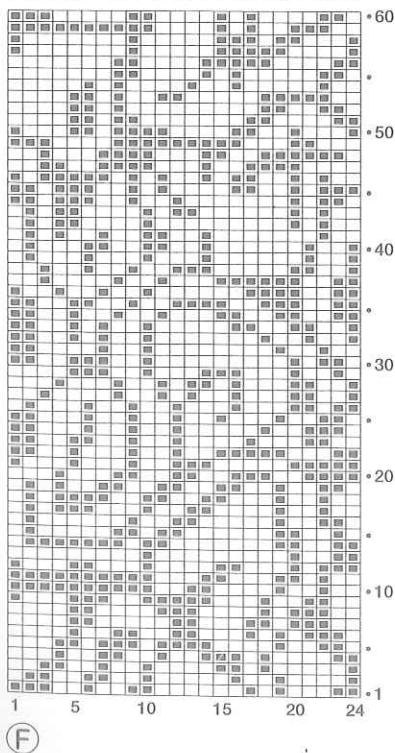
No.36 60 rows 24 stitches



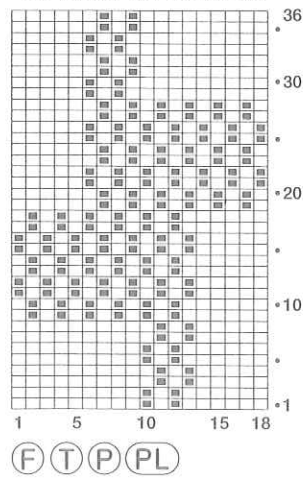
No.35 20 rows 48 stitches



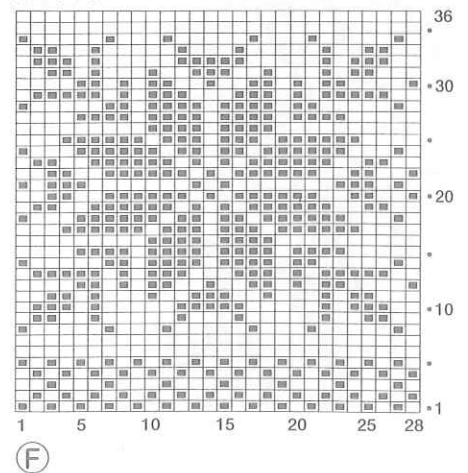
No.37 60 rows 24 stitches



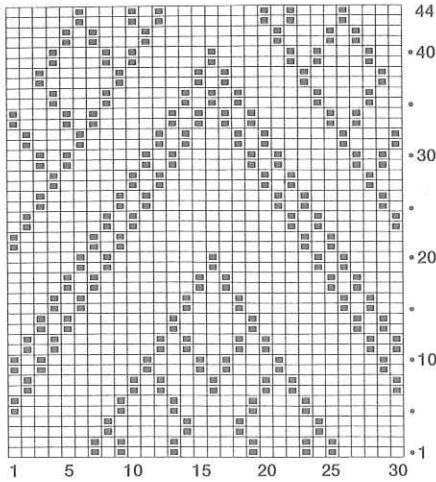
No.38 36 rows 18 stitches



No.39 36 rows 28 stitches

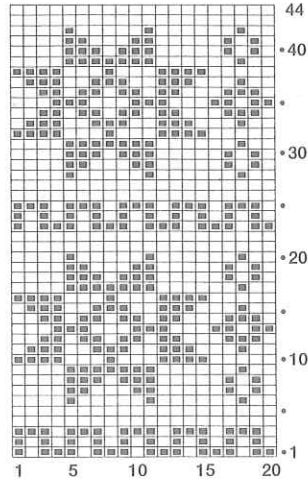


No.40 44 rows 30 stitches



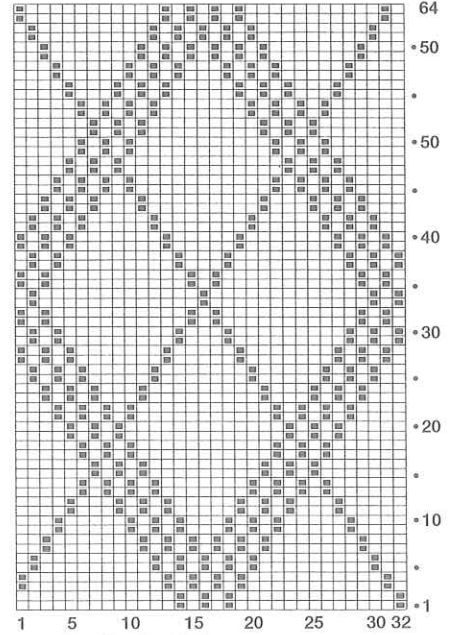
(F) (T) (P) (PL)

No.41 44 rows 20 stitches



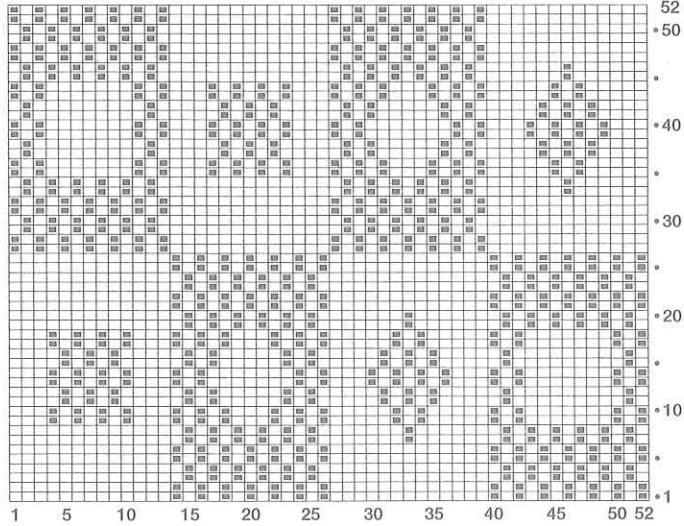
(F)

No.43 64 rows 32 stitches



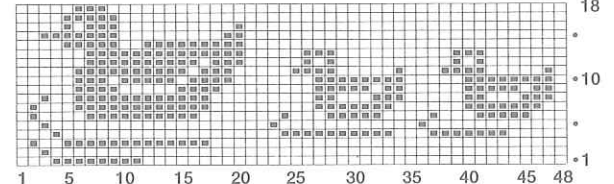
(F) (T) (P) (S) (PL)

No.42 52 rows 52 stitches



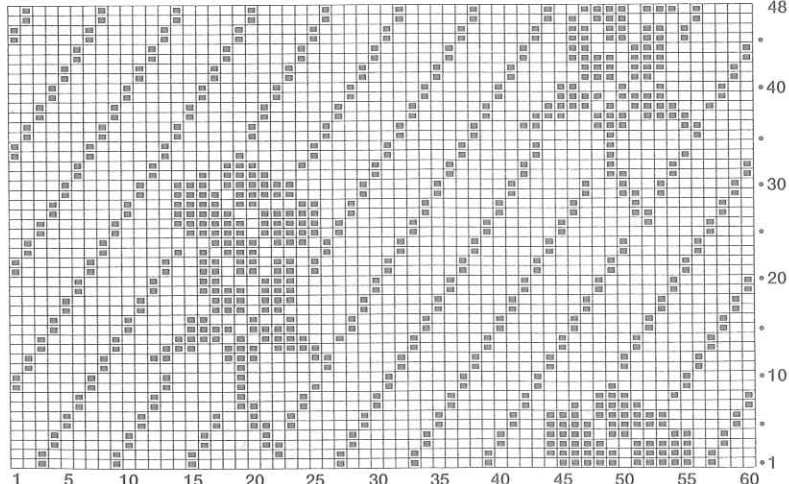
(F) (P)

No.44 18 rows 48 stitches



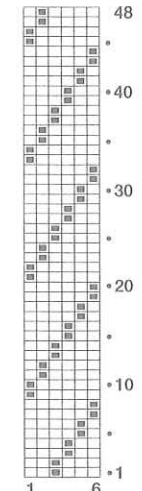
(F) (M)

No.45 48 rows 60 stitches



(F)

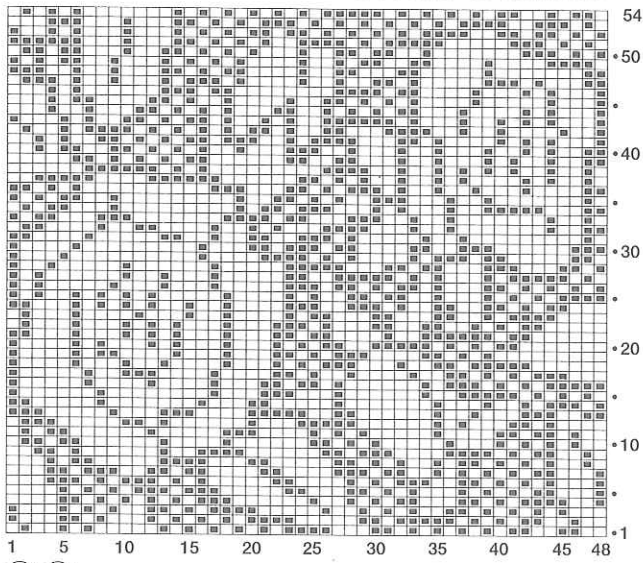
No.46 48 rows 6 stitches



(F) (T) (P) (PL)

No.47

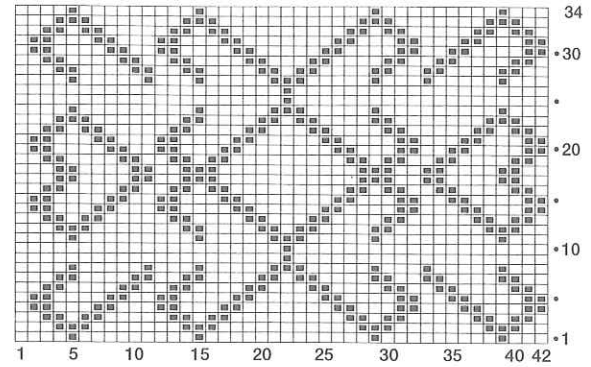
54 rows 48 stitches



(F) (P)

No.48

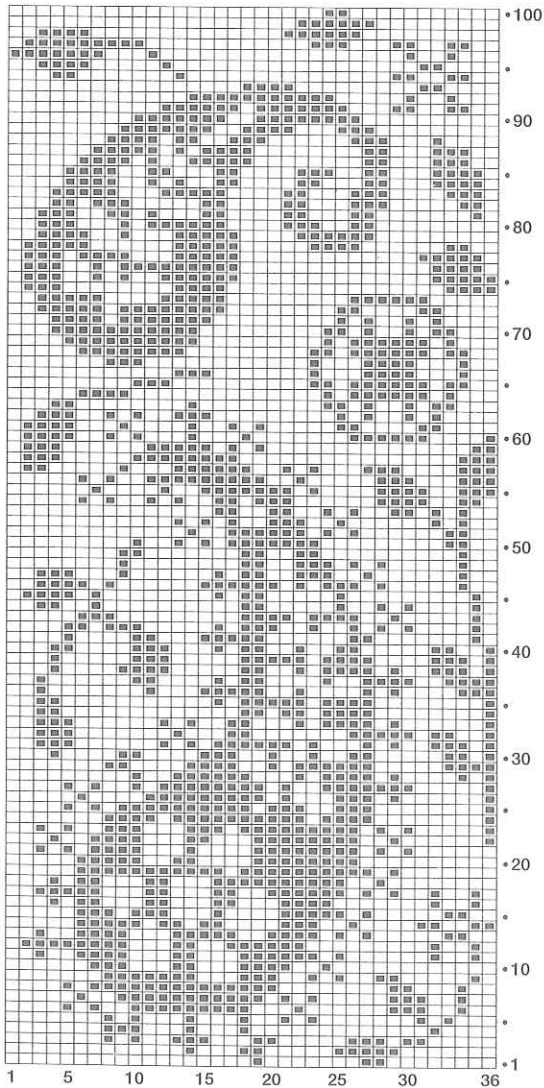
34 rows 42 stitches



(F) (S) (M)

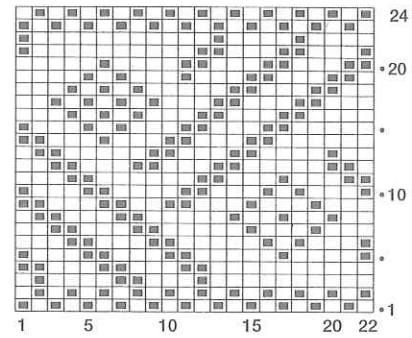
No.49

100 rows 36 stitches



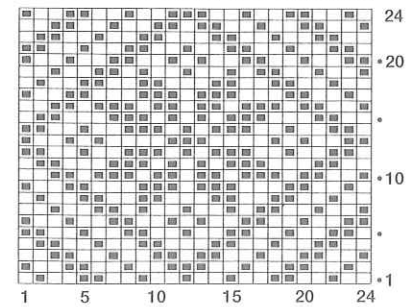
(F)

No.50 24 rows 22 stitches



(F) (S) (P)

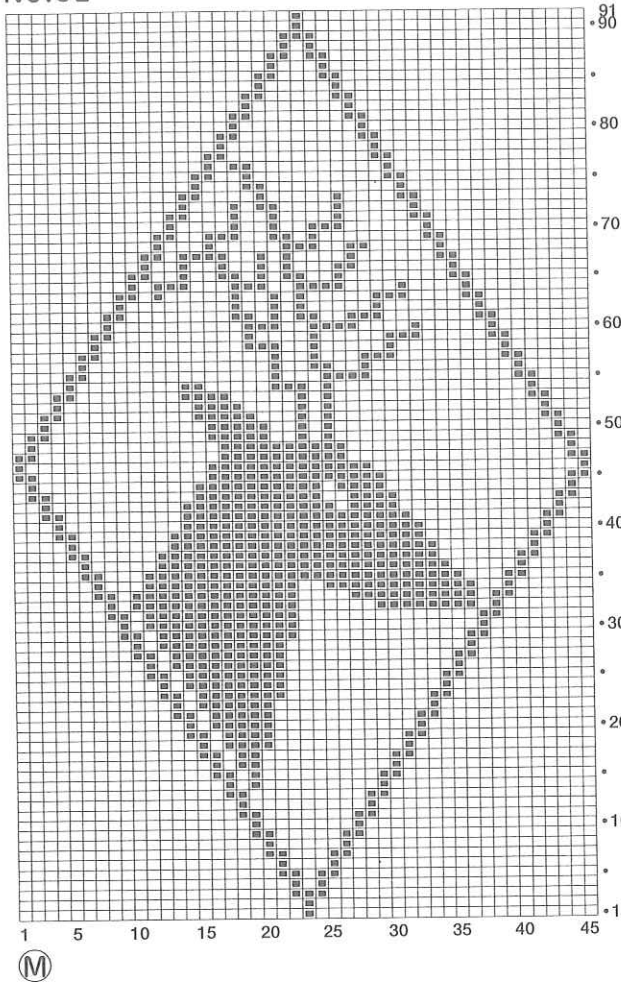
No.51 24 rows 24 stitches



(F) (W)

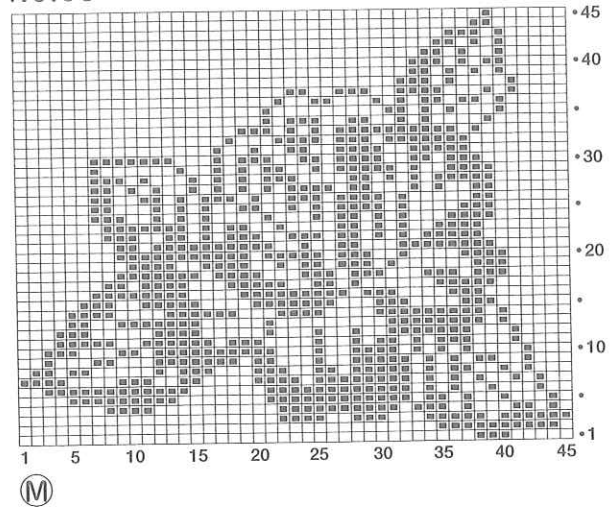
No.52

91 rows 45 stitches



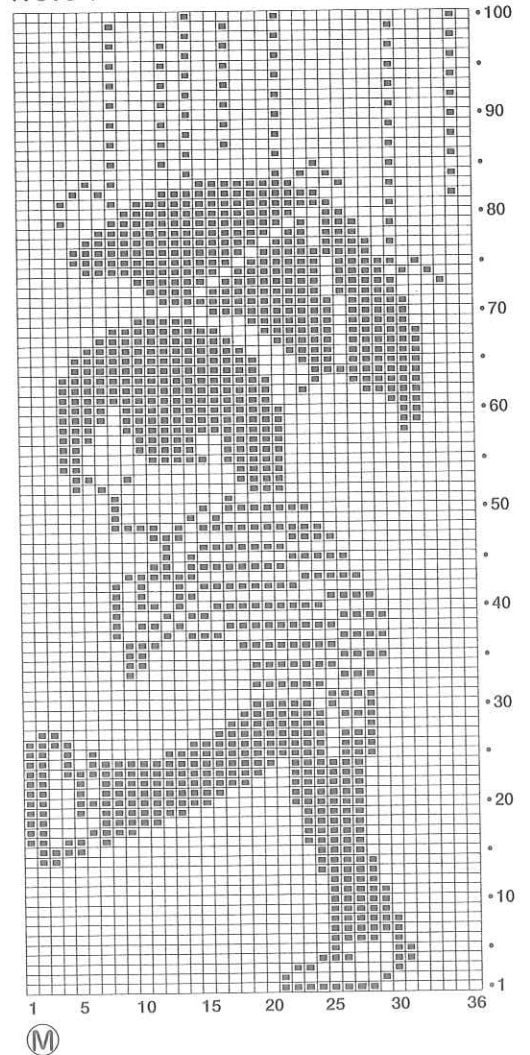
No.53

45 rows 45 stitches



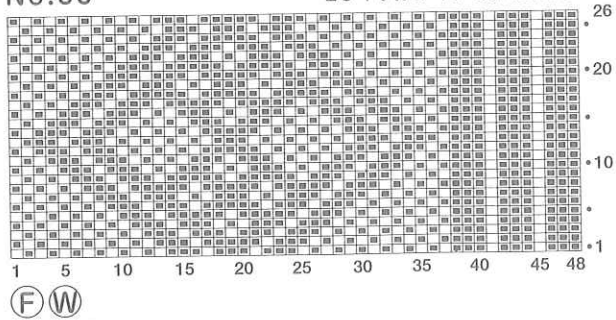
No.54

100 rows 36 stitches

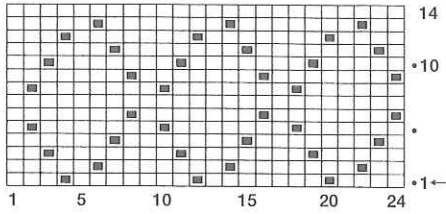


No.55

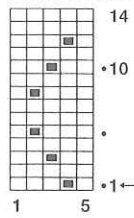
26 rows 48 stitches



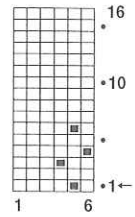
No.56 14 rows 24 stitches



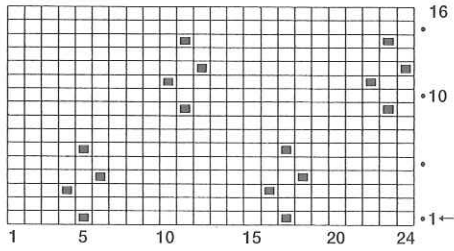
No.57 14 rows 5 stitches



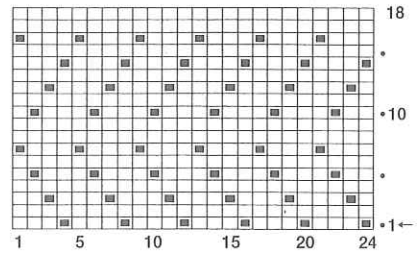
No.58 16 rows 6 stitches



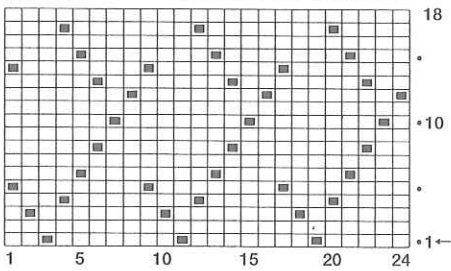
No.59 16 rows 24 stitches



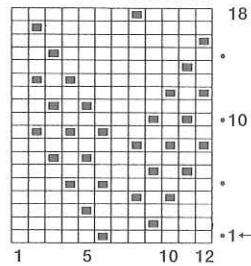
No.60 18 rows 24 stitches



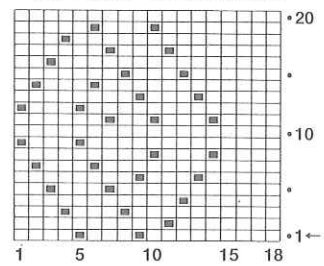
No.61 18 rows 24 stitches



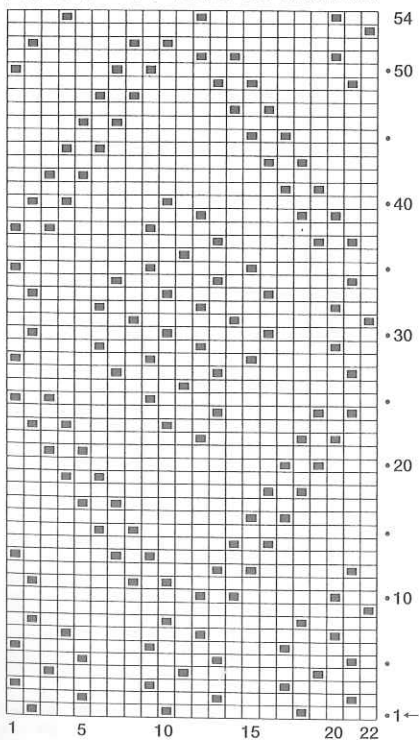
No.62 18 rows 12 stitches



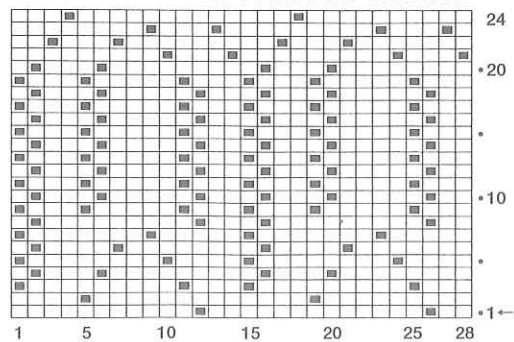
No.63 20 rows 18 stitches

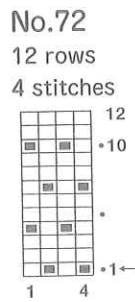
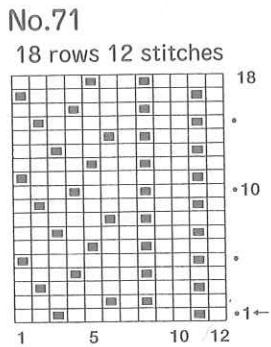
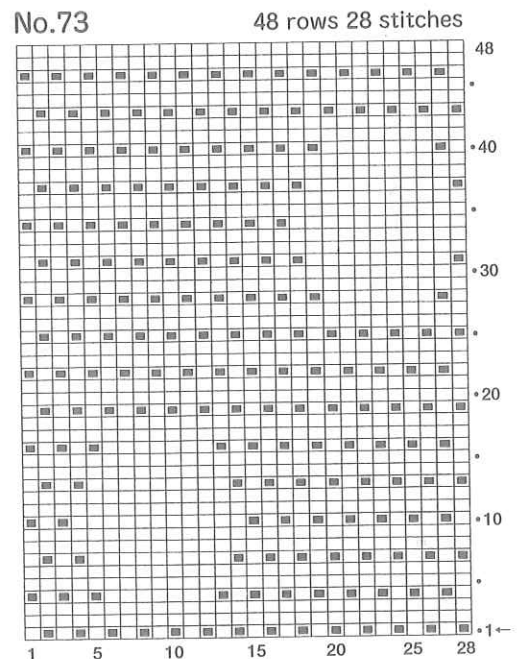
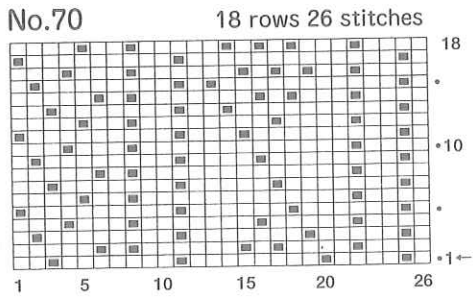
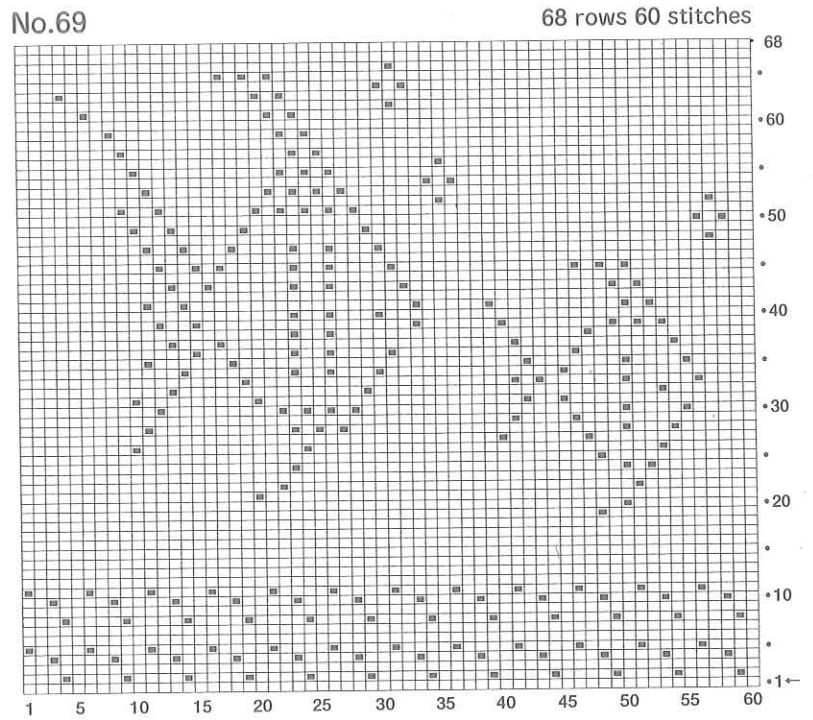
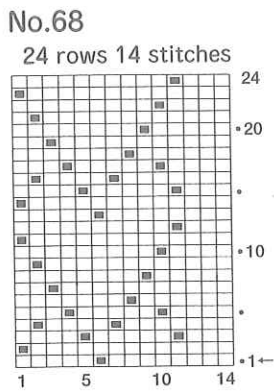
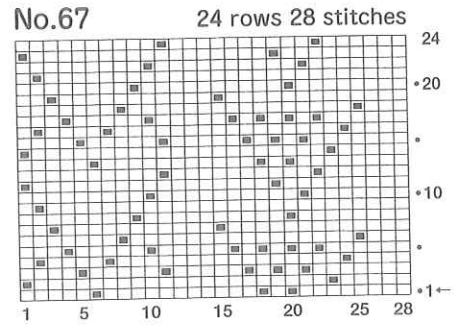
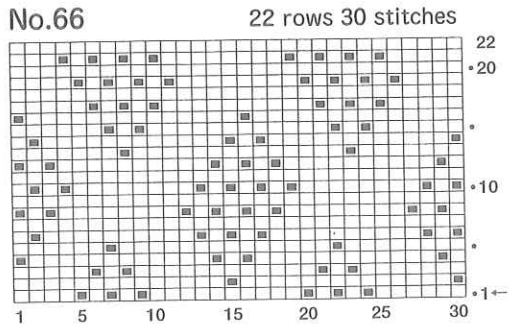


No.64 54 rows 22 stitches



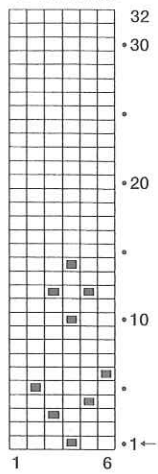
No.65 24 rows 28 stitches





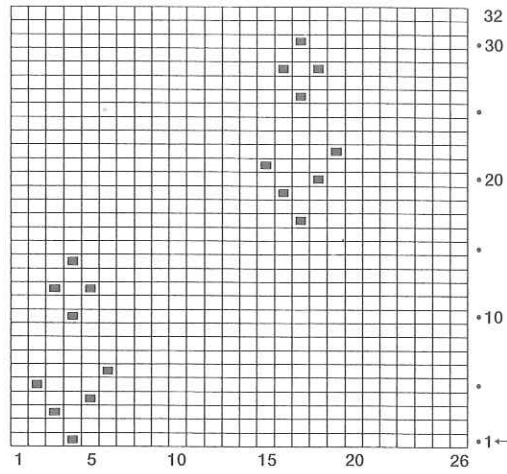
No.74

32 rows
6 stitches



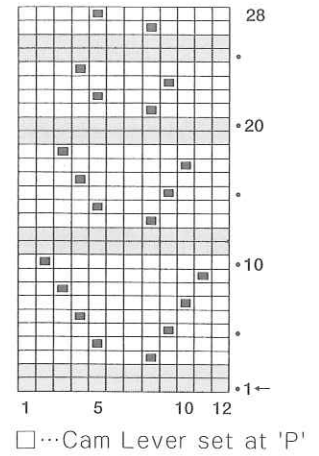
No.75

32 rows 26 stitches



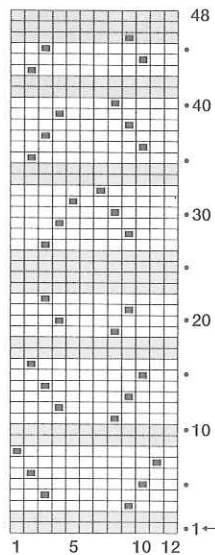
No.76

28 rows 12 stitches



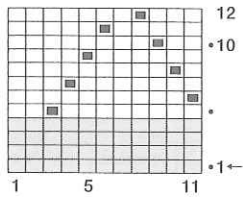
No.78

48 rows
12 stitches



No.77

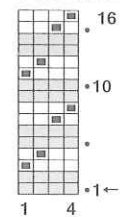
12 rows 11 stitches



□ ...Cam Lever set at 'P'

No.79

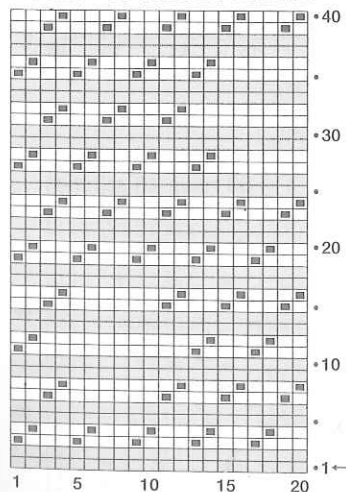
16 rows
4 stitches



□ ...Cam Lever set at 'P'

□ ...Cam Lever set at 'P'

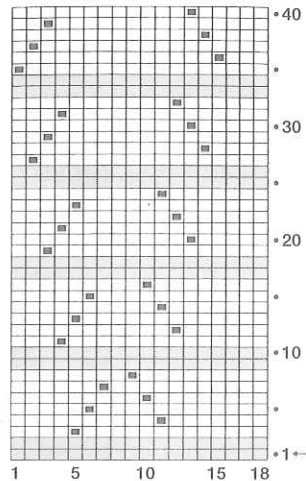
No.80 40 rows 20 stitches



□ ...Cam Lever set at 'P'

No.81

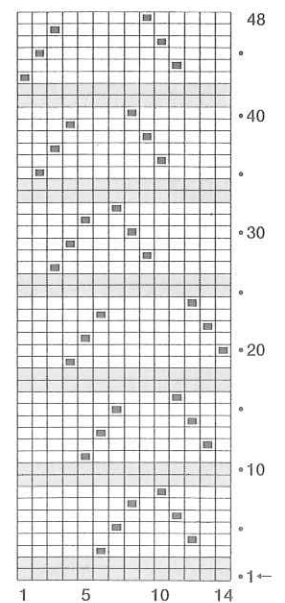
40 rows 18 stitches



□ ...Cam Lever set at 'P'

No.82

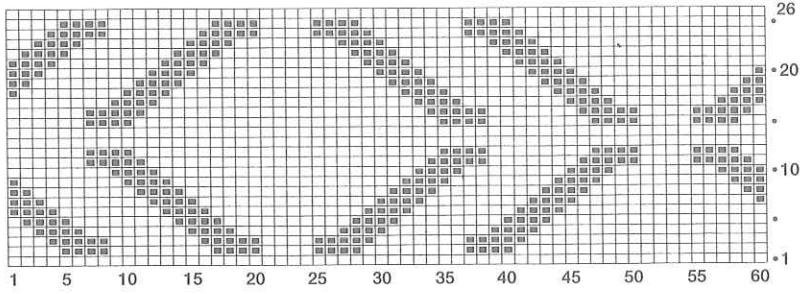
48 rows 14 stitches



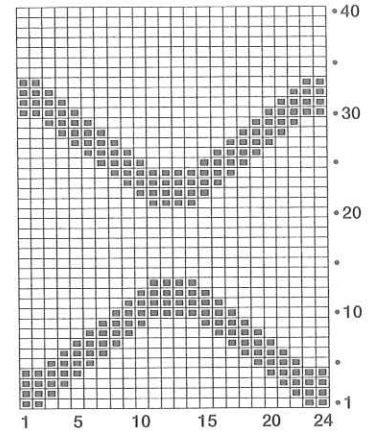
□ ...Cam Lever set at 'P'

No.83

26 rows 60 stitches

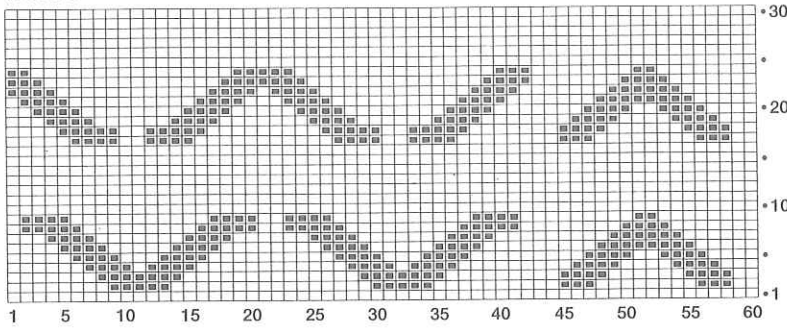


No.84 40 rows 24 stitches



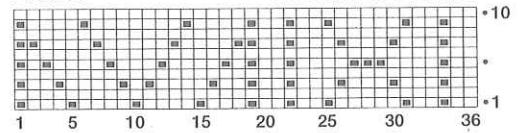
No.85

30 rows 60 stitches



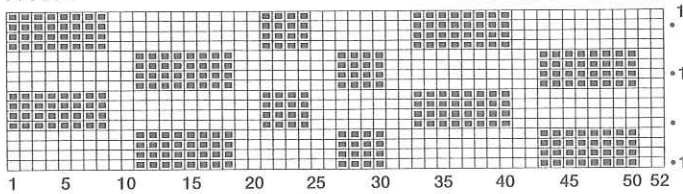
No.87

10 rows 36 stitches

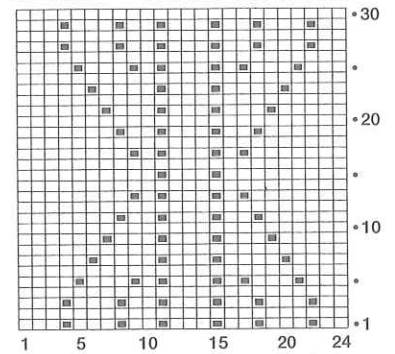


No.86

16 rows 52 stitches

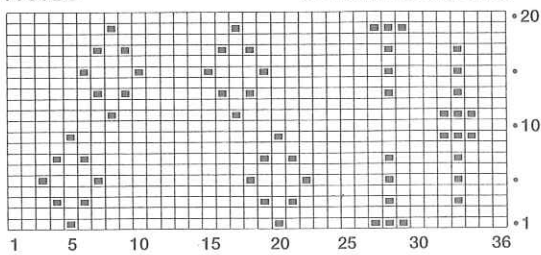


No.88 30 rows 24 stitches



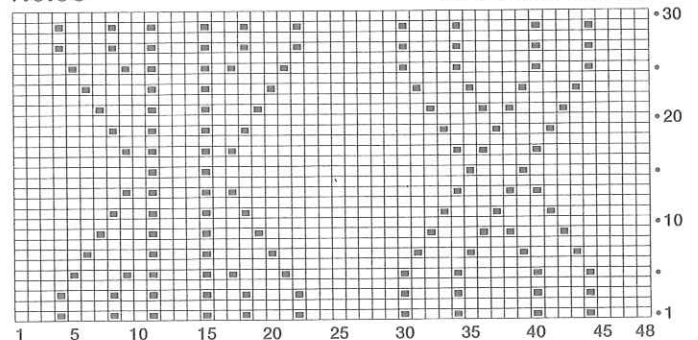
No.89

20 rows 36 stitches

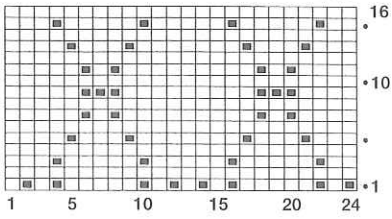


No.90

30 rows 48 stitches

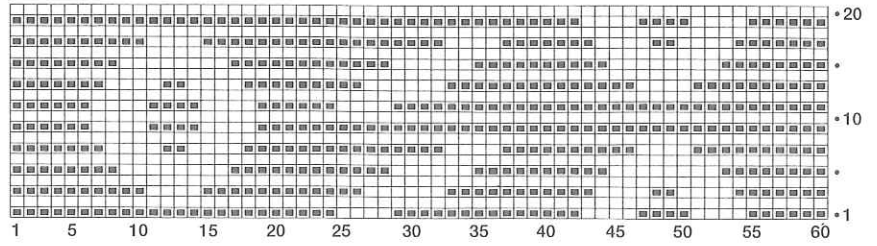


No.91 16 rows 24 stitches

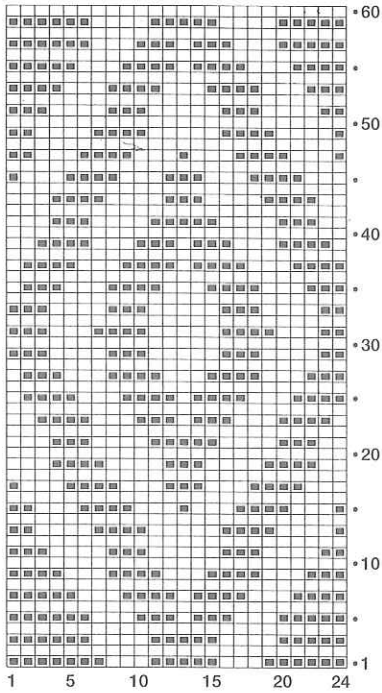


No.92

20 rows 60 stitches

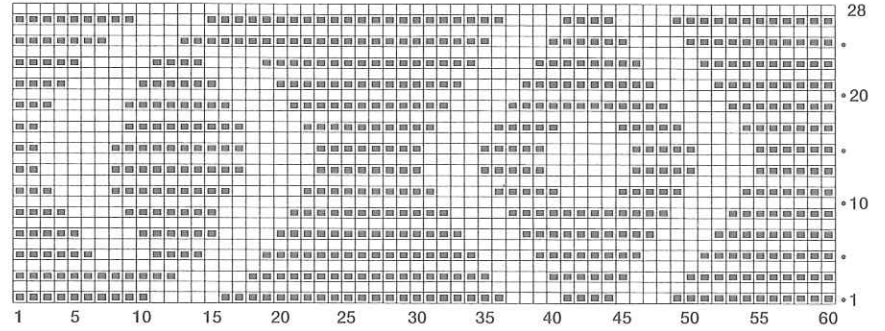


No.93 60 rows 24 stitches

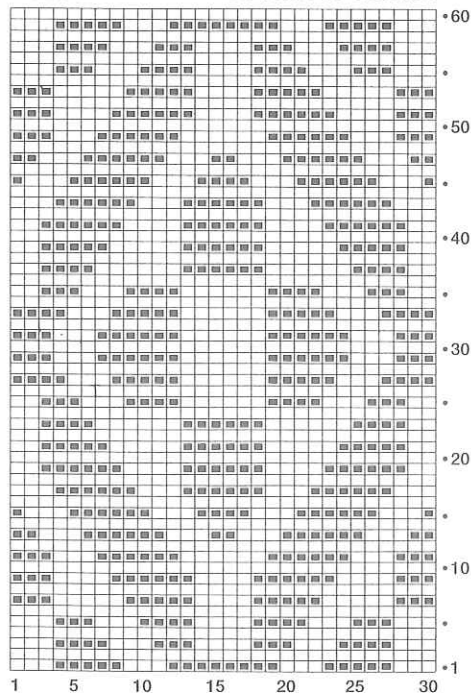


No.94

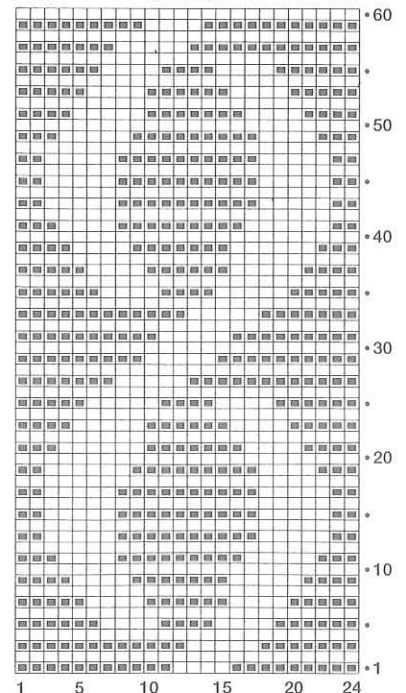
28 rows 60 stitches



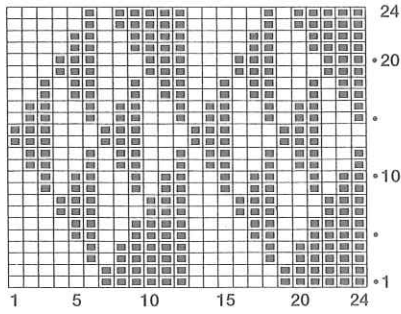
No.95 60 rows 30 stitches



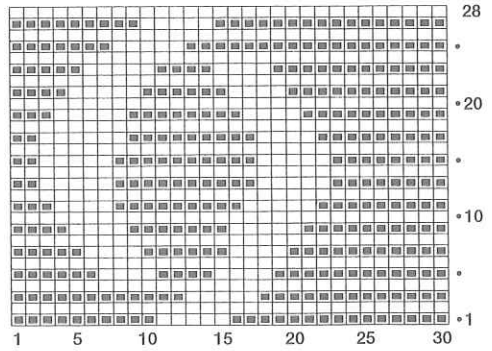
No.96 60 rows 24 stitches



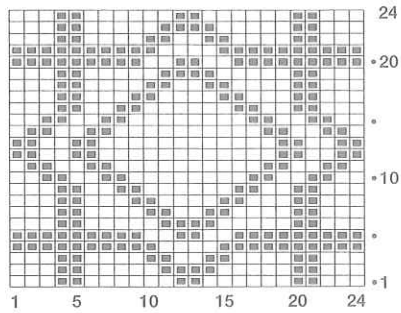
No.97 24 rows 24 stitches



No.98 28 rows 30 stitches

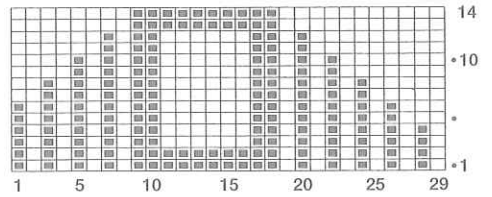


No.9 24 rows 24 stitches

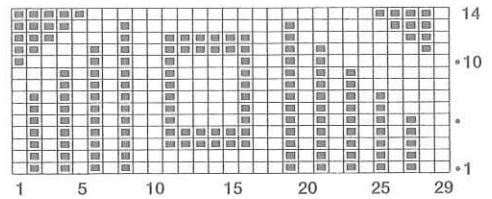


No.100 Jacquard in colours (3 colours)
42 rows 29 stitches

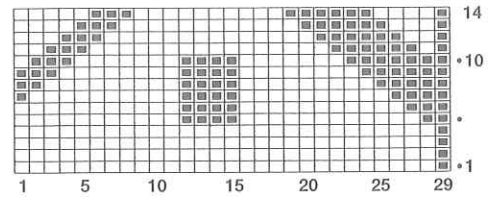
Colour No. 1



Colour No. 2



Colour No. 3



Troubleshooting on PC10

| Symptom | Cause | Measure |
|---|--|--|
| Nothing is displayed after the power is turned on. (No buzzer sounds. The light doesn't come on.) | Power is not supplied to the PC10. | Check whether the AC adapter has been connected to the PC10, the power cord has been connected to the AC adapter, and the power cord has been connected to the socket. Be sure to use the AC adapter supplied with the PC10. |
| The PC10 doesn't operate by pressing any key. (No sound, no display) | | Press the C key. If the PC10 doesn't operate yet, turn off the power and then, turn on the power again. |
| Characters (pattern) on the LCD are unclear or can hardly be seen. There is unevenness on the display. | LCD may have poor viewability depending on the brightness of the display and viewing angle. Also, there is some unevenness on any LCD. | Adjust the brightness of the display using the □ and ■ keys. The viewing angle can be adjusted by using the stand mounted on the PC10. (Refer to pages 4 and 6.) |
| Brightness cannot be adjusted using the □ and ■ keys. | While the pattern drawing functions are being used, brightness cannot be adjusted. | Press the C key to finish the pattern drawing function. Then, brightness adjustment using the □ and ■ keys becomes enabled. |
| The pattern cannot be knitted by operating the Carriage. | The PC10 is not ready for knitting. The Point Cams and Needle-1 Cam have not been set. | Press the KNIT and = keys to make the PC10 ready for knitting. Or, set the Point Cams and Needle-1 Cam and move the Carriage to and fro twice. |
| If the patterns in one C card (Memory Card) were copied to the other C card at once, the old patterns resident in the other C card were erased. | If the patterns in a C card are copied to another card at once, the patterns originally resident in the card are erased and replaced with the copied patterns. | If you want to keep the patterns originally resident in the card, copy patterns one by one. (Refer to page 17.) |
| After setting a normal C card (Memory Card) where patterns are stored, "CARD ERR" or "NO CARD" is displayed. | The C card has not set properly. | Pull out the C card and insert it again. |
| It takes a long time to store a pattern or load a pattern. | | It takes about 5 seconds to store a pattern of 200 stitches by 1000 rows. If the C card is used in other electronic devices such as PC and digital camera, too, it may take longer. |

● Messages displayed

| Message (Display) | Content | Measure |
|-------------------|---|--|
| OK | This indicates PC10 is ready for operation. You can start operation by pressing DRAW , KNIT , LOAD or SAVE . | |
| ***** | This indicates PC10 is now under processing. | Note: While this is displayed, do not pull out or insert the C card (Memory Card). |
| COMPLETED | This indicates the operation of storing or copying of a pattern in a C card (Memory Card), formatting of a C card, etc. is completed. Soon after this is displayed, "OK" appears. | |
| TOO BIG | This is displayed when the specified size of a pattern to be drawn exceeds the size of a pattern that can be knitted with the PC10. | |
| Yarn 3? | This is displayed before entering the figure for specifying the colour when setting colour data for drawing of a multi-coloured pattern. This is a question "For what colour is the yarn No. 3 used?" | |
| CHECK PAT. | This may be displayed when the power is turned on and the KNIT and = keys are pressed after the PC10 was left unused for some time. This indicates there may be no pattern in the PC10. | Press the = key to check whether the pattern exists. If the pattern is displayed normally, you can continue to knit. If the pattern is not displayed normally, press the C key and load (or draw) the pattern again. |
| SET CARD | This means, "Set a C card (Memory Card) to PC10. | |
| NO CARD | This means that the C card (Memory Card) has not been set properly. | Re-set the C card properly. |
| NO DATA | 1. In case a pattern number that is not stored in the C card is specified for loading 2. In case you start knitting without drawing or loading a pattern when there is no pattern in the PC10 | 1. Load a pattern by specifying the stored pattern number. 2. If you draw a pattern or load a pattern, you can start knitting. |
| 15 PATS | This means there are 15 patterns stored on the C card (Memory Card). | |
| BAD CARD | This indicates the C card (Memory Card) that has been set cannot be used for saving patterns. If an optionally available card where ready-made patterns are resident is set, this message appears. | Replace the card with a new C card where patterns can be stored. |
| CARD FULL | This is displayed when the total size of patterns to be stored exceeds the space of the C card (Memory Card) or the number of patterns to be stored is more than 16384. | Erase the patterns resident in the C card or use another card with a larger space. |
| 15 PAT. | This means that the pattern was stored as NO. 15 pattern on the C card (Memory Card). | |

| Message (Display) | Content | Measure |
|--|--|---|
| FORMAT? | When you press the "SAVE", "F1" and "=" keys to format (initialize) a C card (Memory Card), this message is displayed to ask again if you wish to format (initialize) a card. | Press the [=] key to start formatting or press the [C] key to stop formatting. |
| ERASE? | When you press the "SAVE", "F2" and "=" keys to erase the last pattern stored on the C card (Memory Card), this message is displayed to ask again if you wish to erase the last pattern. | Press the [=] key to erase. Press the [C] key to stop erasing. |
| MASTER CRD | This appears when you try to copy all patterns from one C card to another C card. This means "Insert the C card where the original patterns are resident." | |
| RECV. CRD | This message is displayed when copying all patterns. This means "Set the C Card to copy TO after taking out the Master C Card." | |
| PROTECTED | This is displayed when the Memory Card to which patterns cannot be copied is used. | All patterns cannot be copied to this Memory Card. |
| 15 TRANS | This indicates how many patterns were copied from the original C card (Memory Card) to the target C card at the last operation. | |
| W: column | When combining two patterns vertically, this message is displayed if the number of stitches of the bottom pattern is different from that of the top pattern. | To continue combining, press the [=] key. To stop combining, press the [C] key. |
| W: row | When combining two patterns horizontally, this message is displayed if the number of rows of one pattern is different from that of the other pattern. | To continue combining, press the [=] key. To stop combining, press the [C] key. |
| W: color | If you try to combine a pattern in multi-colours and a pattern in a single colour, this message is displayed. | It is impossible to combine a pattern in multi-colours and a pattern in a single colour. Press the [C] key to stop the operation. |
| CARD ERR | There is something wrong with this C Card (Memory Card). | |
| NO FORMAT | This means the C card (Memory Card) has not been formatted for the PC10. | Format the C card according to the formatting procedure. |
| FAT ERROR | The recording format of the C card (Memory Card) is different from the format that can be used with the PC10. | The Memory Card having a special recording format for PC, digital camera, etc. cannot be used with the PC10. |
| Fmt. Err. File. Err. Move. Err. FOLD. ERR. CRD. ERR. | These messages are displayed if any error occurs when you try to read from or write onto the C card (Memory Card). The figure displayed on the right end indicates the content of the error. | There may be a trouble in the PC10 or the C card. Contact your local sales office or our service center. |



PC 10

SILVER REED