

# Happy Link LAN System INSTRUCTION MANUAL



EF100501-1

HAPPY Industrial Corporation

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# Regarding this software

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## Normal Operation

Please connect personal computer to the embroidery machine to meet the following requirements.

### **Applicable PC**

IBM PC/AT Compatible

### **Useable OS**

Windows 98 (including second edition)

Windows 2000 Professional

Windows Me

Windows XP Home Edition

Windows Vista

Windows 7

#### **NOTE:**

Only these versions of the Operating System are supported.

### **CPU**

Pentium2 or more with processor speed greater than 400MHz

### **Memory**

More than 32MB (recommend more than 64MB)

### **Hard disk**

Over 10MB of space available

### **Screen Resolution**

800x600(over 256 colors)

### **A Mouse is necessary**

### **Floppy Disk and CD-ROM drive are required**

### **Serial(RS232C) or USB port**

# Network connection

## Wire connection

Recommends for wire connection

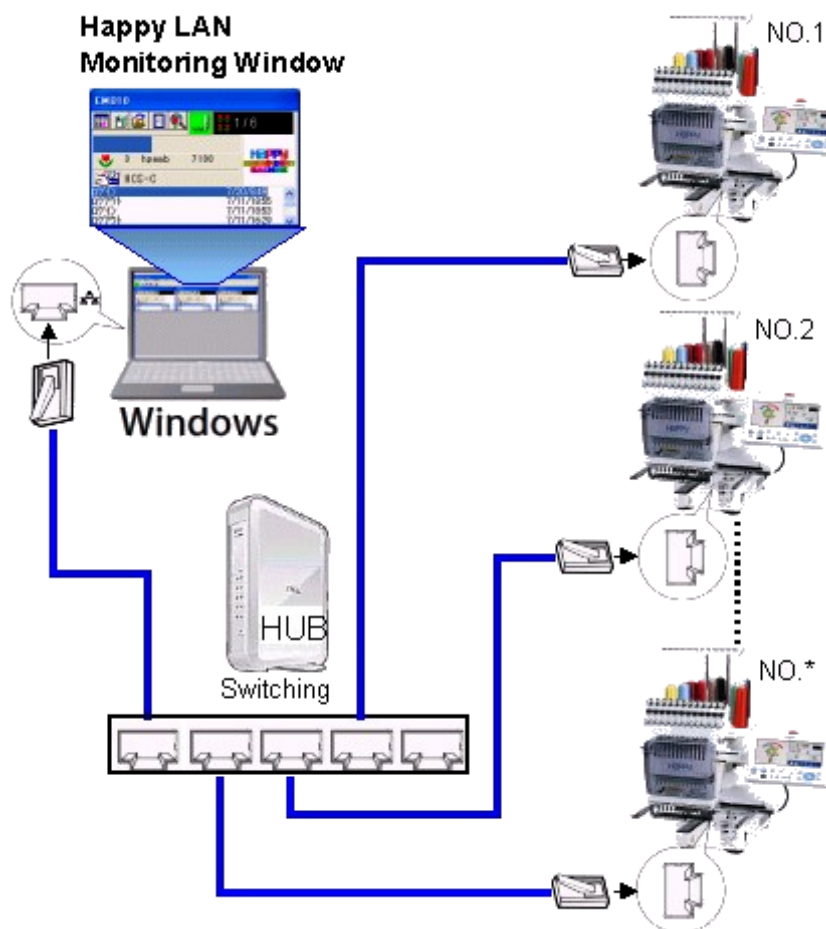
Switching HUB-----10BASE-T switching HUB (connector: RJ-45)

Cable-----10BASE-T straight cable (connector: RJ-45)

PC(Personal computer)-----10BASE-T with LAN port (connector: RJ-45)

Embroidery machine----- Model HCS (Later version than Ver.3.04) , HCD and HCR

Connection image



Note:

1. Please turn off the power of the embroidery machine when you connect equipment.
2. Use Switching HUB (Repeater HUB is not available).
3. If you have not LAN port in PC, Increase LAN boards on your market.
4. If asked of exceptional approval of Firewall setting in SP2 of Windows XP, please set HAPPY

## Wireless connection

### Recommends for wireless connection

PC(Personal computer)----- 10BASE-T with LAN port (connector: RJ-45)

Embroidery machine----- Model HCS (Later version than Ver.3.04), HCD and HCR

Wireless LAN device----- Example Model: GW-AP54SP-P (PLANEX COMMUNICATIONS INC.)

The connection of wireless LAN was confirmed with this model.

GW-AP54SP-P (PLANEX COMMUNICATIONS INC. <http://www.planex.com.tw/>)

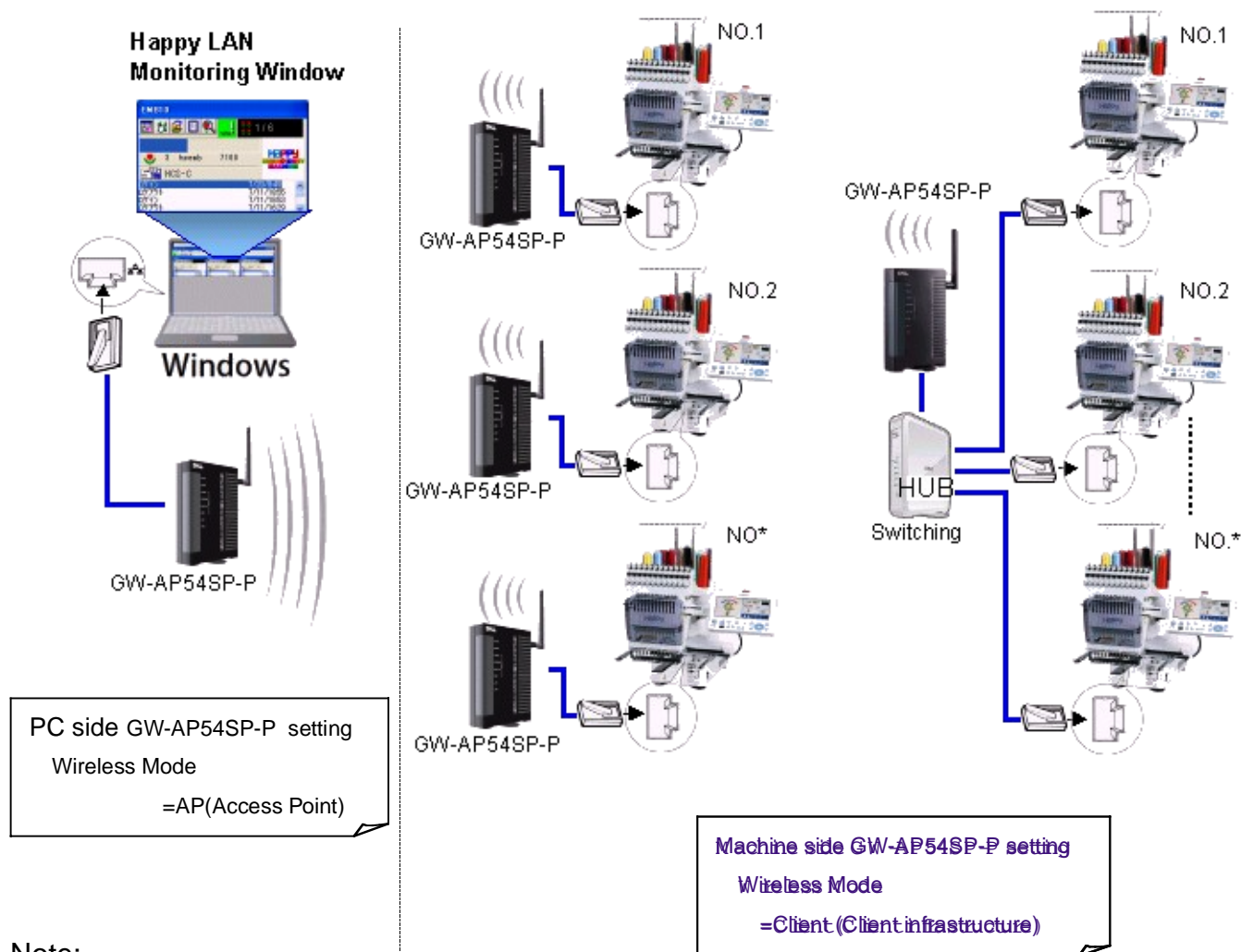
WLB5254AP (STD Information Technology. <http://www.globalzio.com/>)

More detail, please ask to the manufacturer if you want to have this product in your country.

Note: Otherwise, please select the wireless LAN device by following points.

- 1) Please select same maker the device for PC and Machine side
- 2) Please select the device to LAN convert type from wire connection to wireless.
- 3) Select or setting to "Access point" for PC side, "Client infrastructure" for Machine side

### Connecting image



### Note:

1. Please turn off the power of the embroidery machine when you connect equipment.
2. Use Switching HUB (Repeater HUB is not available).
3. If you have not LAN port in PC, Increase LAN boards on your market.
4. If asked of exceptional approval of Firewall setting in SP2 of Windows XP, please set HAPPY

# How to set up

**Note:** In order to use this software, you need to have a basic knowledge of Windows.

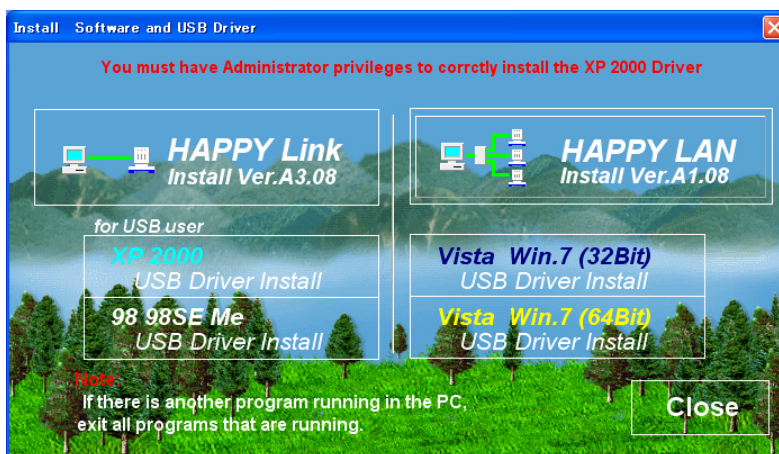
## How to install in PC

**Note:**

Install in the Administrator if you use Windows XP or Windows2000.

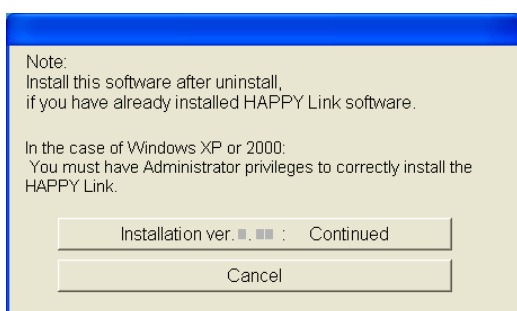
Install this software after uninstall, if you have already installed Happy LAN software.

1. Insert the CD in the CD-ROM drive. [Install menu] is automatically displayed. (This process takes a few moments.) Click on "HAPPY LAN install".

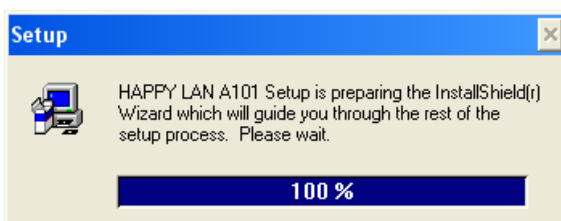


2. You are to remove an old version.

Click on Continue when an old version isn't being installed, and the installation of "HAPPY LAN" is started. Until a CD starts, it may take several seconds.

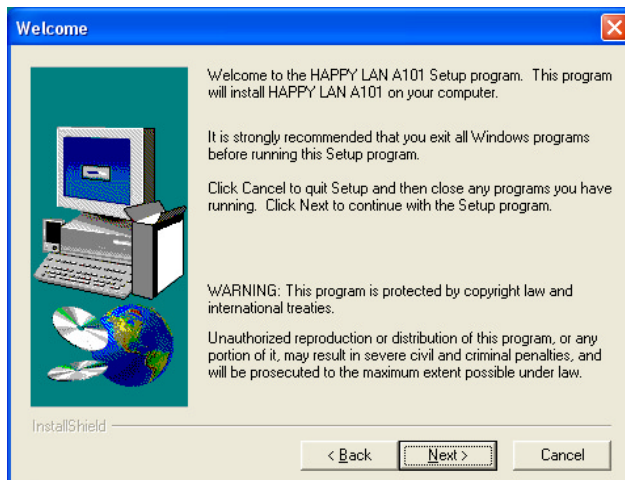


3. [Setup] normally, is automatically displayed, and the HAPPY Link setup prepares the Install Shield wizard that controls the setup. (This process takes a few moments)



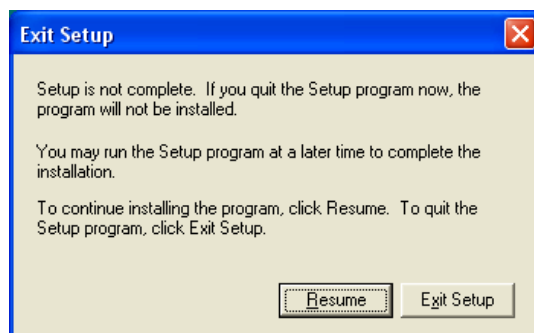
4. [Welcome] scene is displayed. Please click on [Next].

5. Please click on [Next].



**Note:**

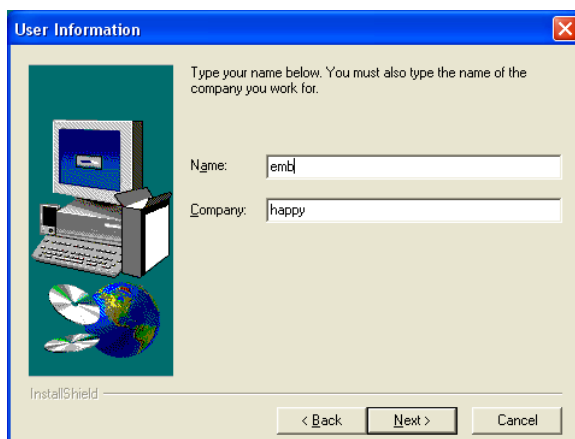
5-1. If there is another program running in the PC, please click on [Cancel] to exit [Set up].  
Please select [Exit Setup].



5-2. Then, exit all programs that are running.

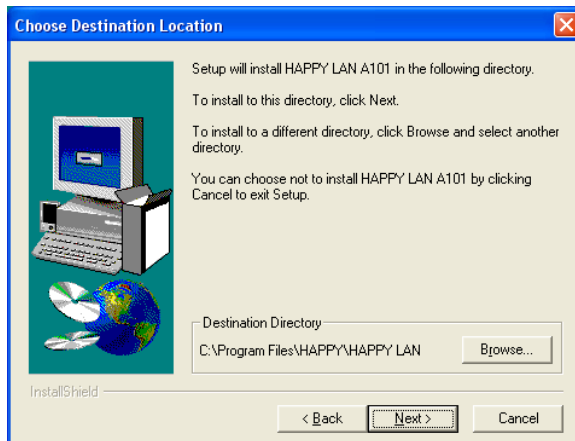
5-3. Take out the CD-ROM, and start from the beginning set up again.

6. Please input information on user. Please click on [Next] after inputting.



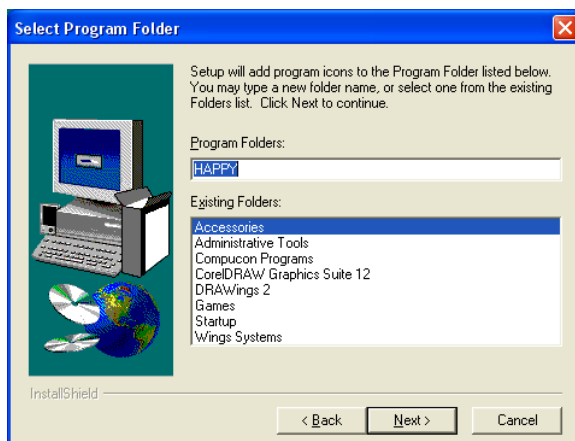


7. Please click on [Next]. (Designating a directory to install Happy Link.)

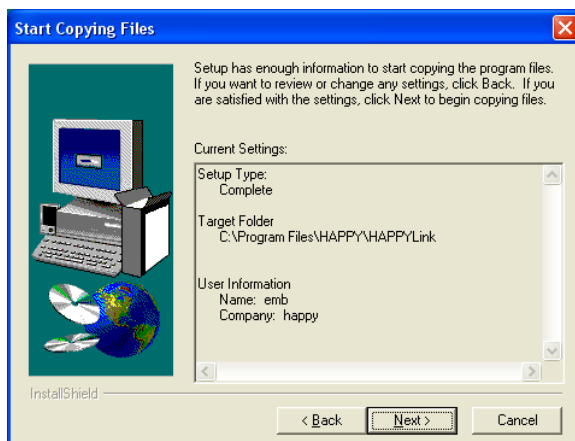


(If you wish to alter the location of the installation, please click on [Browse].)

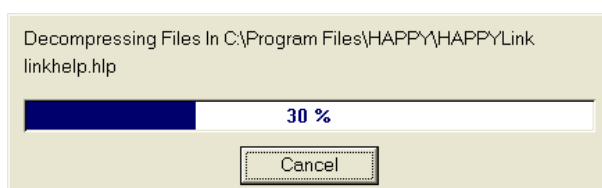
8. Please click on [Next]. (Designating folder to use.)



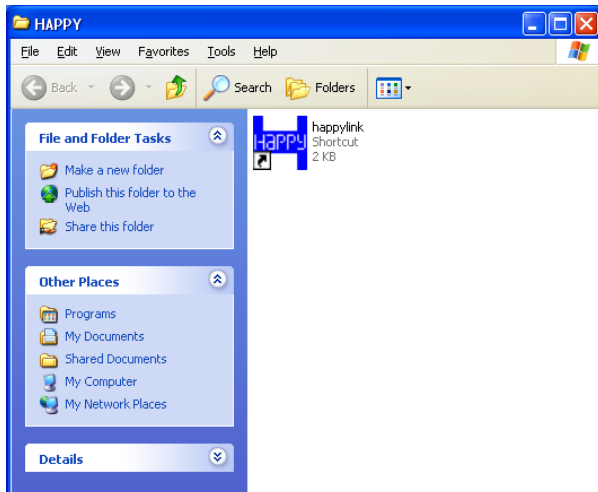
9. Please click on [Next]. The machine will start to copy files.



10. Decompression is being done.



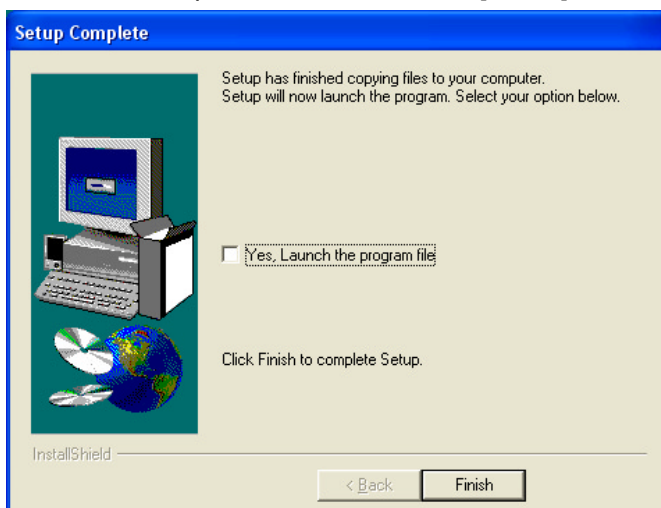
11. A Folder with [HAPPY LAN] will be opened. Please click on the "X" at the right upper of the window to close it.



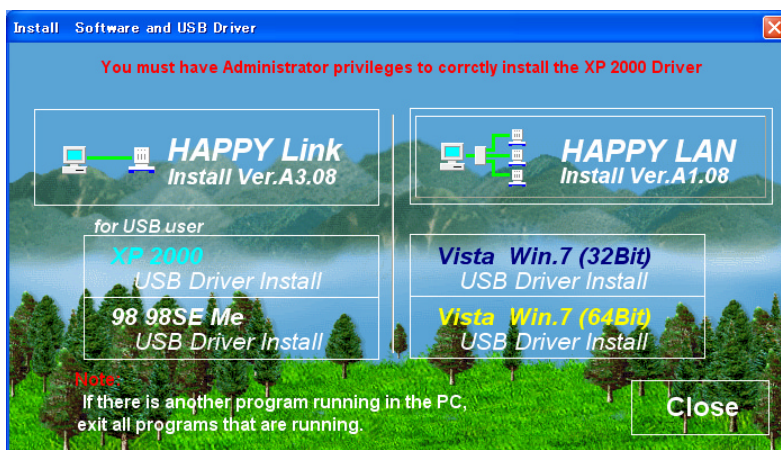
**Note**

It is OK to reverse the turn to close, though a turn of 10th and 11th clause may reverse by PC.

12. Setup has been completed. Please click on [Finish].



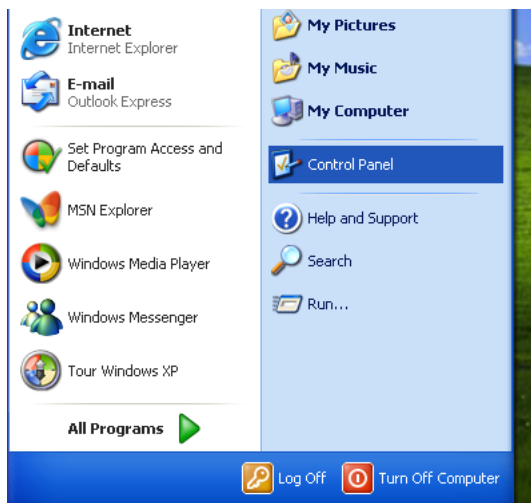
13. [Install menu] is displayed again.  
Please click on [Close].



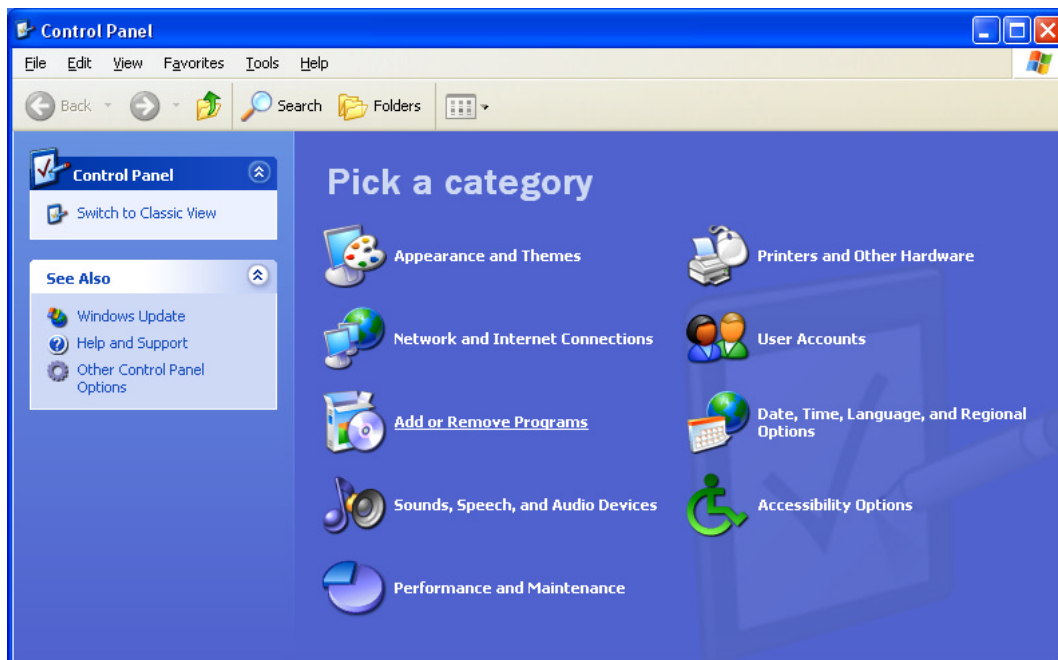
14. After you have finished the installation, please take out the CD-ROM.

# How to uninstall

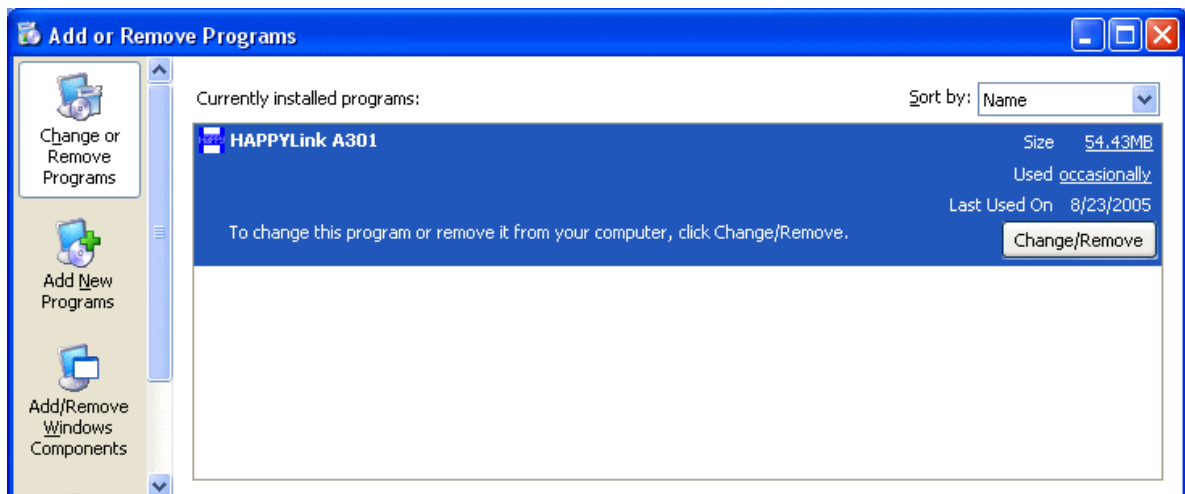
1. Please click on in order: [Start]-[Settings]-[Control panel].



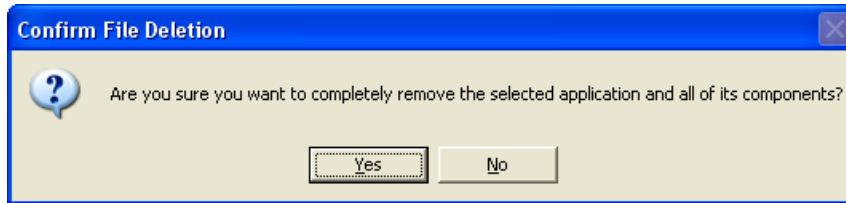
2. Please click on [Add/Remove program Icon] in the control panel.



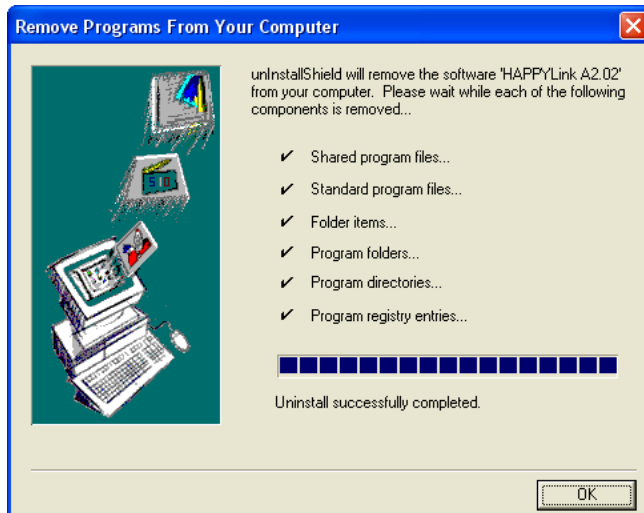
3. Please select HappyLAN from program list now installed, then click on [add / Remove].



4. A message to confirm your desire to uninstall the software is shown. Click on [Yes].



5. Click on [OK] to finish uninstalling.



**Note:**

If you are asked to delete common files, please select [All no].

# Setup

---

Following 3 items are to be set up in advance.

1. Setting of embroidery machine

Set MAC address and IP address of the embroidery machine.

Confirm if each default value of Port number, Server IP address and Subnet mask is not changed.

2. Setting of PC

Input IP address and Subnet mask. Validate LMHOSTS. Invalidate NetBIOS.

3. Setting of HAPPY LAN

Register the embroidery machine (IP address of the embroidery machine, name of the embroidery machine and IP address of PC).

Confirm if each default value of Port number and Server IP address is not changed.

Menu structure and preset values of the embroidery machine before shipment are following.

Main menu -----

-----[Other]---[Setting of date]

-----[Network]Port number-----7891

-----IP address of the embroidery machine--192 168 1 10

-----MAC address-----48,50,59,53,48,43

-----Server IP address-----192 168 1 1

-----Subnet mask-----255 255 255 0

## Setup of the embroidery machine

Set IP address and MAC address.

Confirm if other default values remain the same.

Turn off the power of the embroidery machine after settings of IP address and MAC address are finished.

Make sure IP address and MAC address of each embroidery machine do not overlap each other. If such overlapping occurs, communication will be unavailable.

As the above is for standard setting, please refer to following example of setting for other cases.

NOTE: The values from 0 to F are available for inputting of MAC address (0123456789ABCDEF).

Example) 50 comes after 4F.

1st machine

Port number	7891
IP address	192 168 1 <u>10</u>
MAC address	48 50 59 53 48 <u>43</u>
Server address	192 168 1 1
Subnet mask	255 255 255 0

2nd machine

Port number	7891
IP address	192 168 1 <u>11</u>
MAC address	48 50 59 53 48 <u>44</u>

Server address 192 168 1 1  
Subnet mask 255 255 255 0

3rd machine

Port number 7891  
IP address 192 168 1 12  
MAC address 48 50 59 53 48 45  
Server address 192 168 1 1  
Subnet mask 255 255 255 0

4th machine

Port number 7891  
IP address 192 168 1 13  
MAC address 48 50 59 53 48 46  
Server address 192 168 1 1  
Subnet mask 255 255 255 0

5th machine

Port number 7891  
IP address 192 168 1 14  
MAC address 48 50 59 53 48 47  
Server address 192 168 1 1  
Subnet mask 255 255 255 0

.  
.  
.

8th machine

Port number 7891  
IP address 192 168 1 17  
MAC address 48 50 59 53 48 4A  
Server address 192 168 1 1  
Subnet mask 255 255 255 0

9th machine

Port number 7891  
IP address 192 168 1 18  
MAC address 48 50 59 53 48 4B  
Server address 192 168 1 1  
Subnet mask 255 255 255 0

.  
.  
.

13th machine

Port number 7891  
IP address 192 168 1 22  
MAC address 48 50 59 53 48 4F  
Server address 192 168 1 1  
Subnet mask 255 255 255 0

14th machine

Port number        7891  
IP address        192 168 1 23  
MAC address        48 50 59 53 48 50  
Server address     192 168 1 1  
Subnet mask        255 255 255 0

15th machine

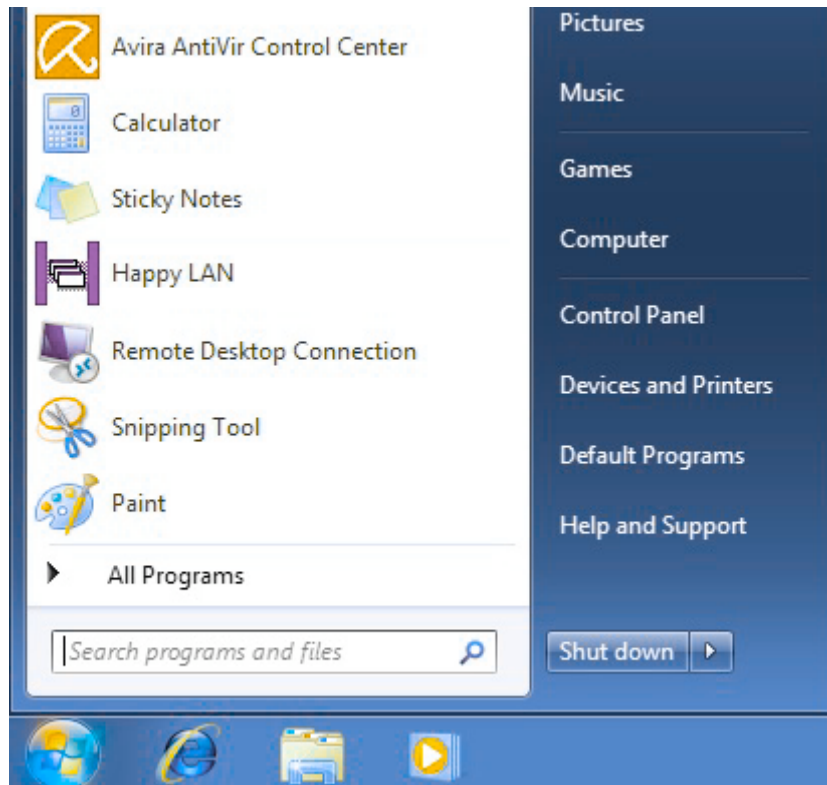
Port number        7891  
IP address        192 168 1 24  
MAC address        48 50 59 53 48 51  
Server address     192 168 1 1  
Subnet mask        255 255 255 0

# Setup of PC (Personal Computer)

Set protocol TIC/IP for communication.

## For Windows Vista, Windows 7 users

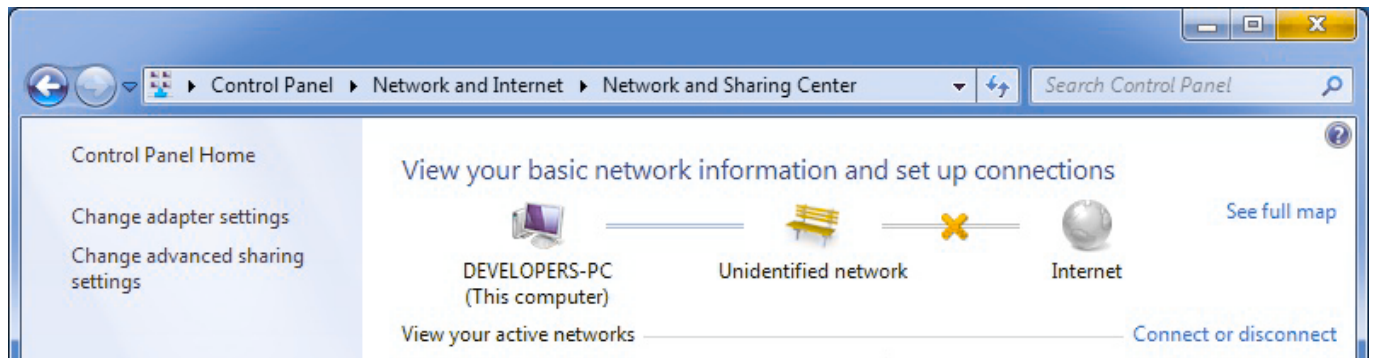
Enter Network Access in control panel.



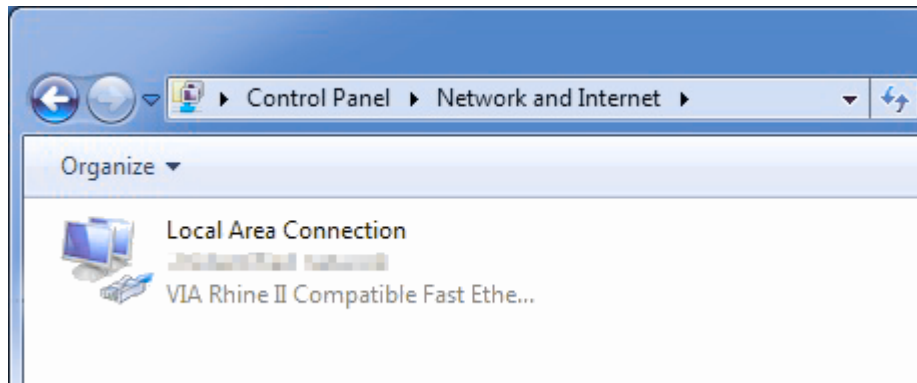
Click "View network status and tasks".



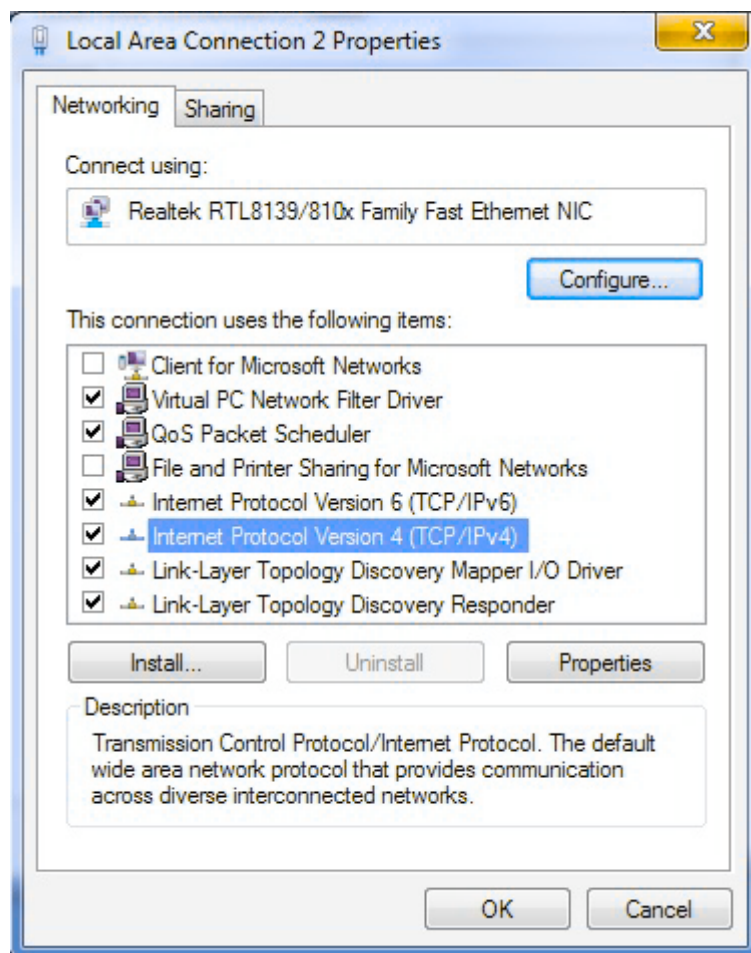




Click "Manage network connections"(Vista), "Change adapter settings"(Win.7).



Click "Local Area Connection Properties", and open the Properties for Local Area Connection. Clear the check boxes for "Client for Microsoft Networks" and "File and Printer Sharing for Microsoft Networks".

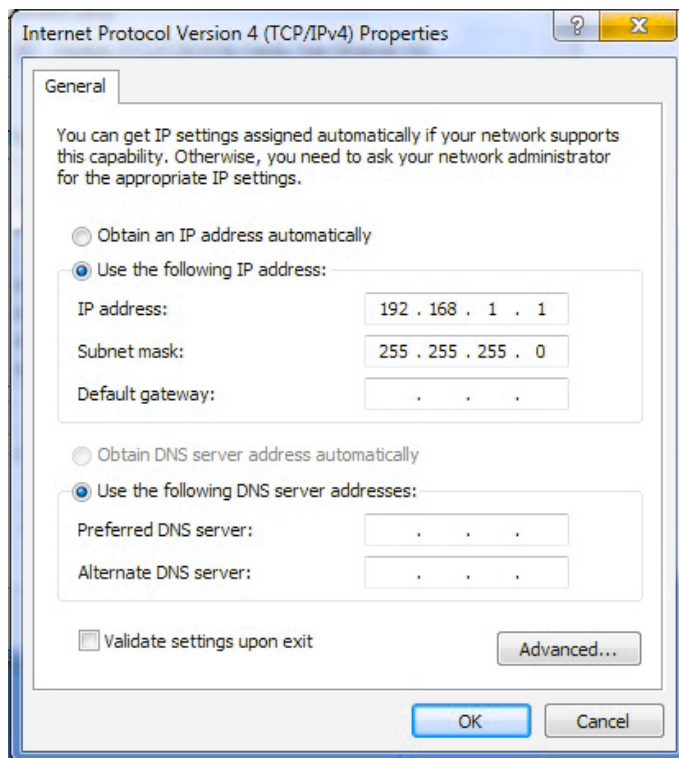


## Setup of IP address

Open the Properties of TCP/IP and proceed with setting as following.

IP address        192 168 1 1

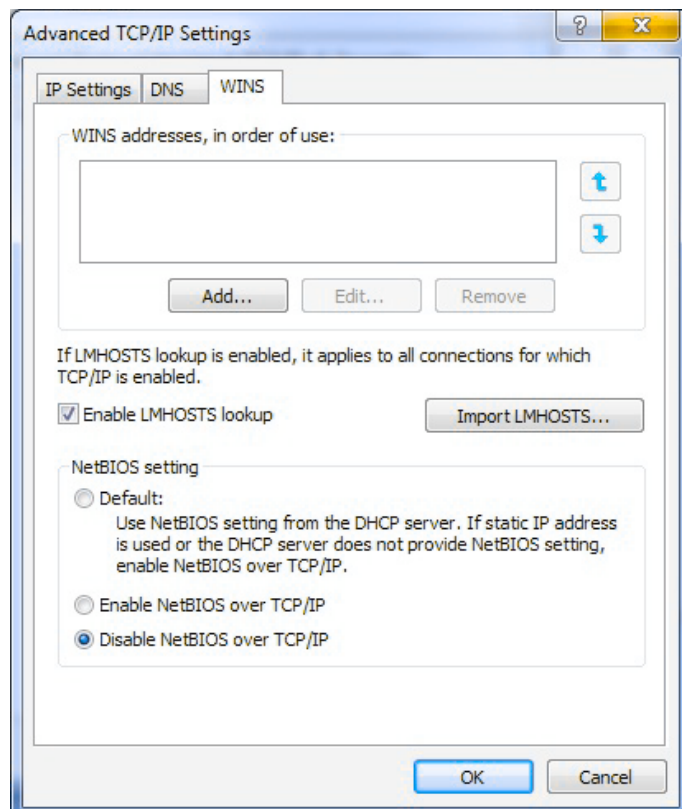
Subnet mask      255 255 255 0



Then, click “Advanced TCP/IP Settings” and open the tab of “WINS”. Follow the procedures as below for setting.

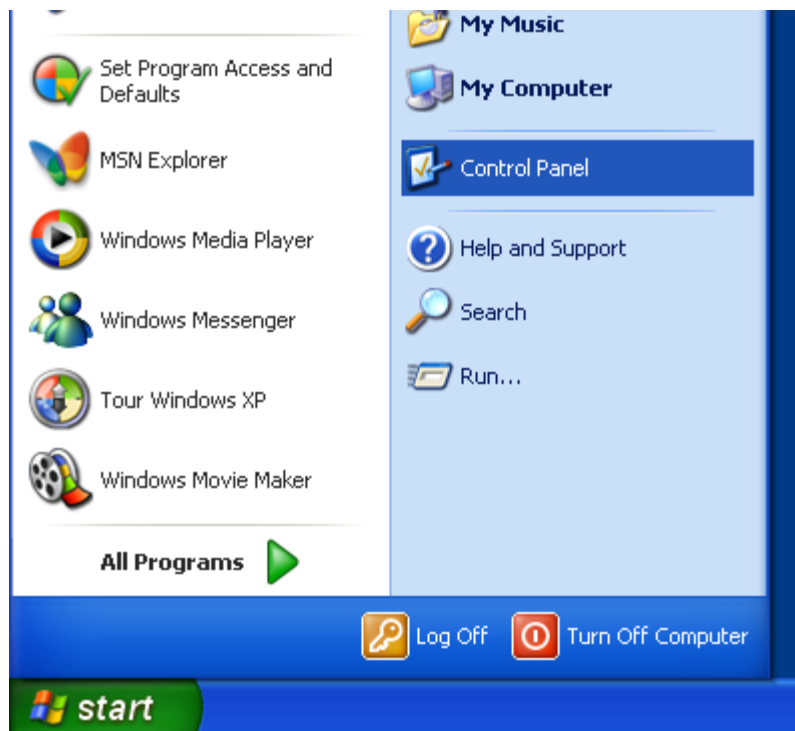
Check the box of “Enable LMHOSTS lookup”.

Check the box of “Disable NetBIOS overTCP/IP”.

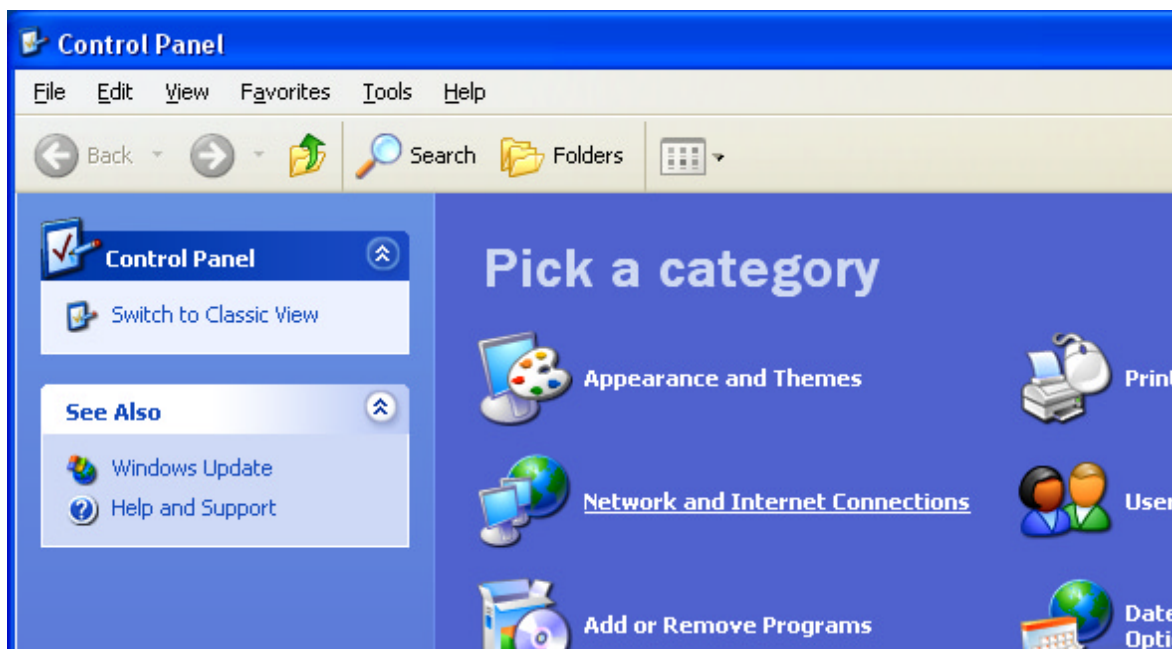


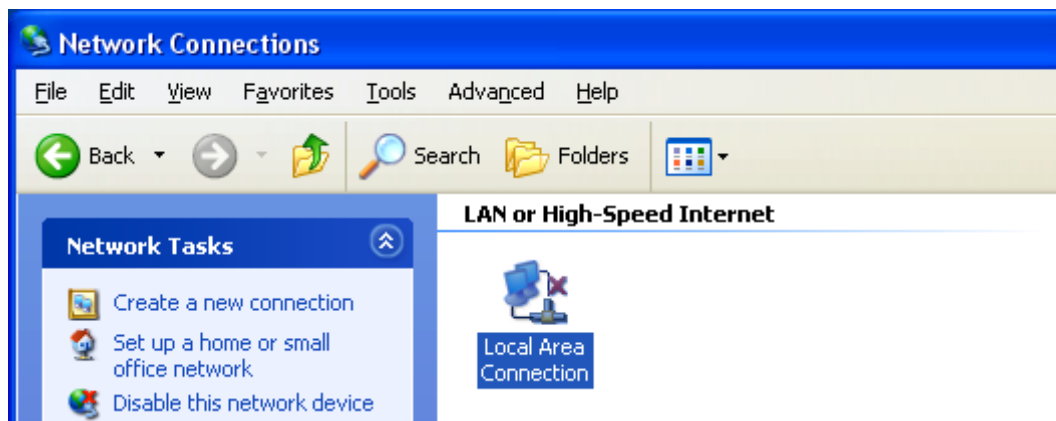
## For Windows XP users

Enter Network Access in control panel, and open Properties of Local Area communication.

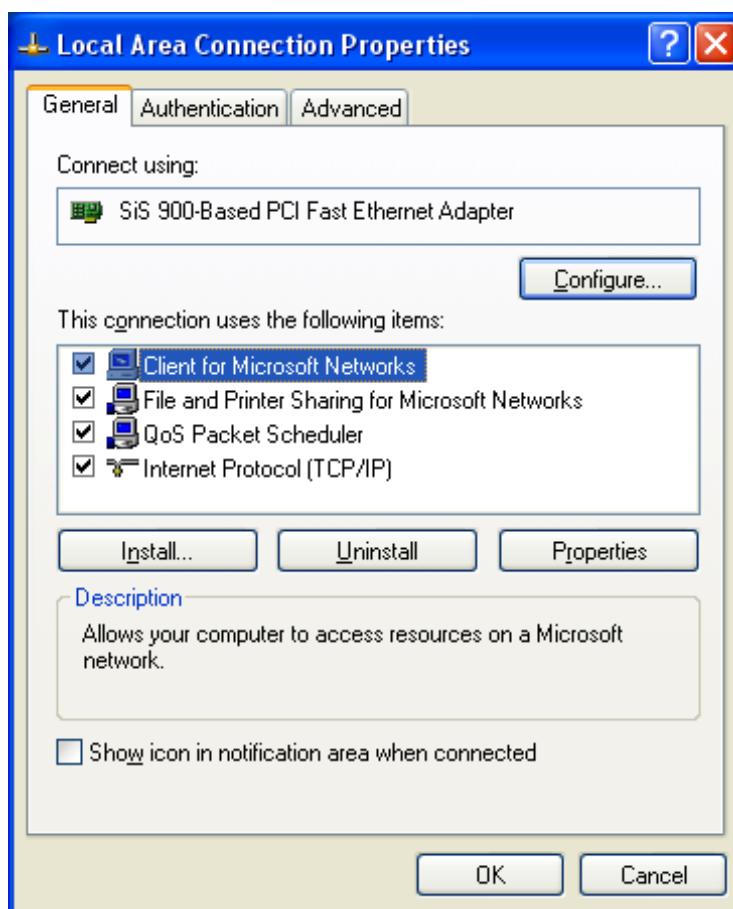


Click "Network and Internet connection".





Click "Local Area Connection Properties", and open the Properties for Local Area Connection. Clear the check boxes for Client for Microsoft Networks and File and Printer Sharing for Microsoft Networks .



## Setup of IP address

Open the Properties of TCP/IP and proceed with setting as following.

IP address        192 168 1 1

Subnet mask     255 255 255 0

The screenshot shows the 'Internet Protocol (TCP/IP) Properties' dialog box with the 'General' tab selected. The dialog box has a blue title bar with a question mark icon and a close button. Inside, there is a text box explaining that IP settings can be assigned automatically or manually. Two radio buttons are present: 'Obtain an IP address automatically' (unselected) and 'Use the following IP address:' (selected). Below the selected radio button, there are three input fields: 'IP address:' with the value '192 . 168 . 1 . 1', 'Subnet mask:' with the value '255 . 255 . 255 . 0', and 'Default gateway:' which is empty. Below these, there are two more radio buttons: 'Obtain DNS server address automatically' (unselected) and 'Use the following DNS server addresses:' (selected). Below the selected radio button, there are two input fields: 'Preferred DNS server:' and 'Alternate DNS server:', both of which are empty. At the bottom right of the dialog box, there is an 'Advanced...' button. At the very bottom, there are 'OK' and 'Cancel' buttons.

Internet Protocol (TCP/IP) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address:

IP address: 192 . 168 . 1 . 1

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses:

Preferred DNS server: . . .

Alternate DNS server: . . .

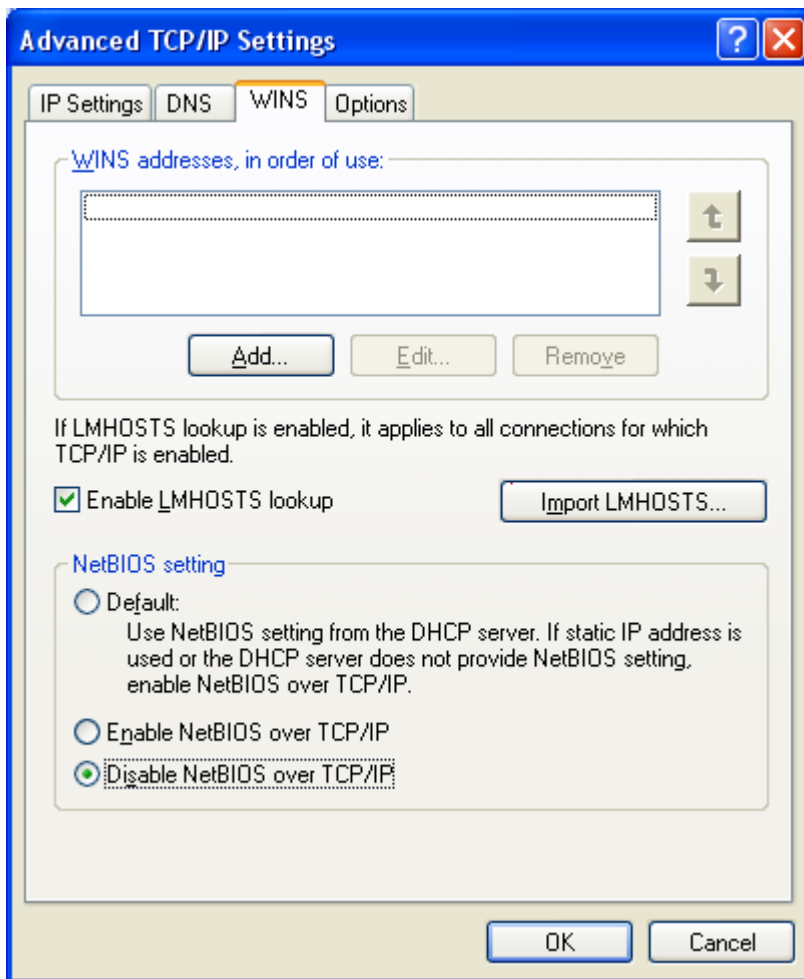
Advanced...

OK Cancel

Then, click **Advanced TCP/IP Settings** and open the tab of **WINS** . Follow the procedures as below for setting.

Check the box of **Enable LMHOSTS lookup** .

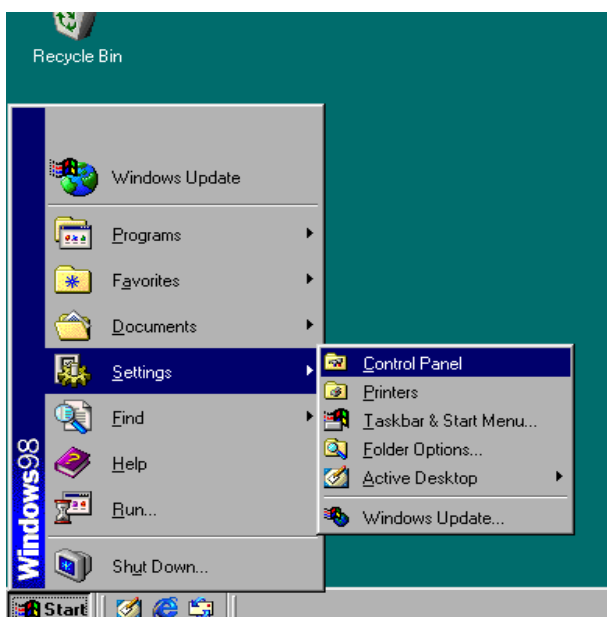
Check the box of **Disable NetBIOS over TCP/IP** .



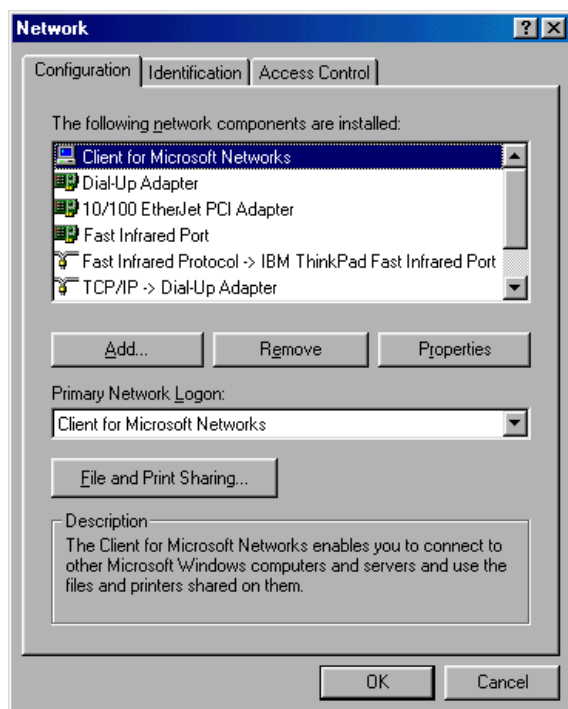
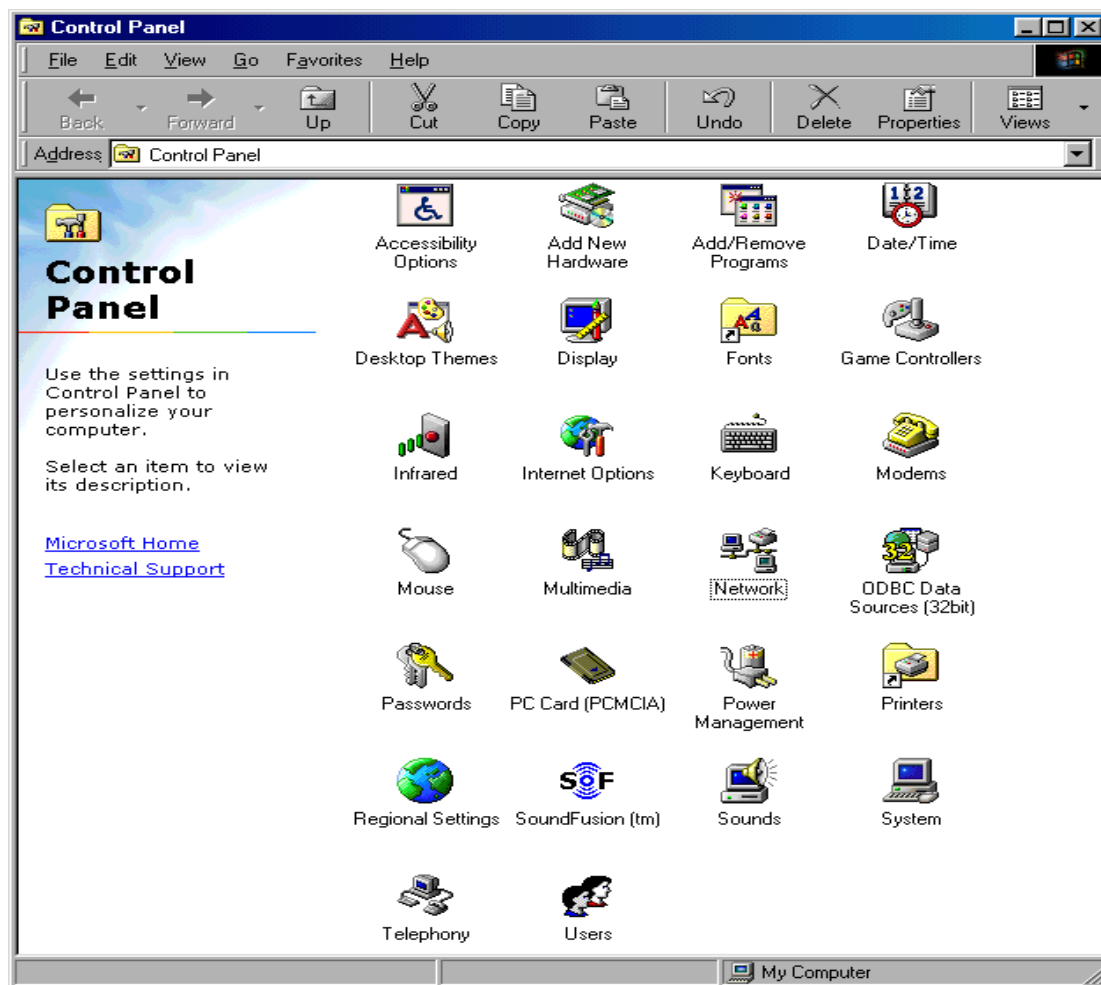
## For Windows98,98SE,Me users

Delete existing **Client for Microsoft Networks** except for **HAPPY LAN**, and set IP address.

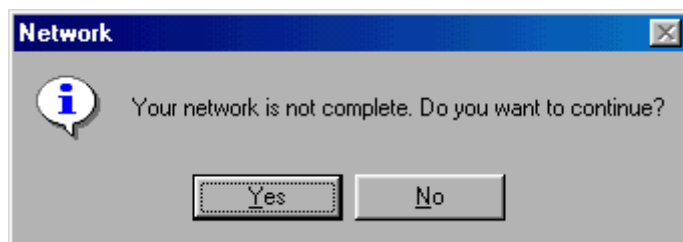
Open the control panel.



Open the Network.



Delete Client for Microsoft Networks and File and Printer Sharing for Microsoft Networks .  
Click Yes when " Your network is not complete. Do you want to continue?" is indicated.

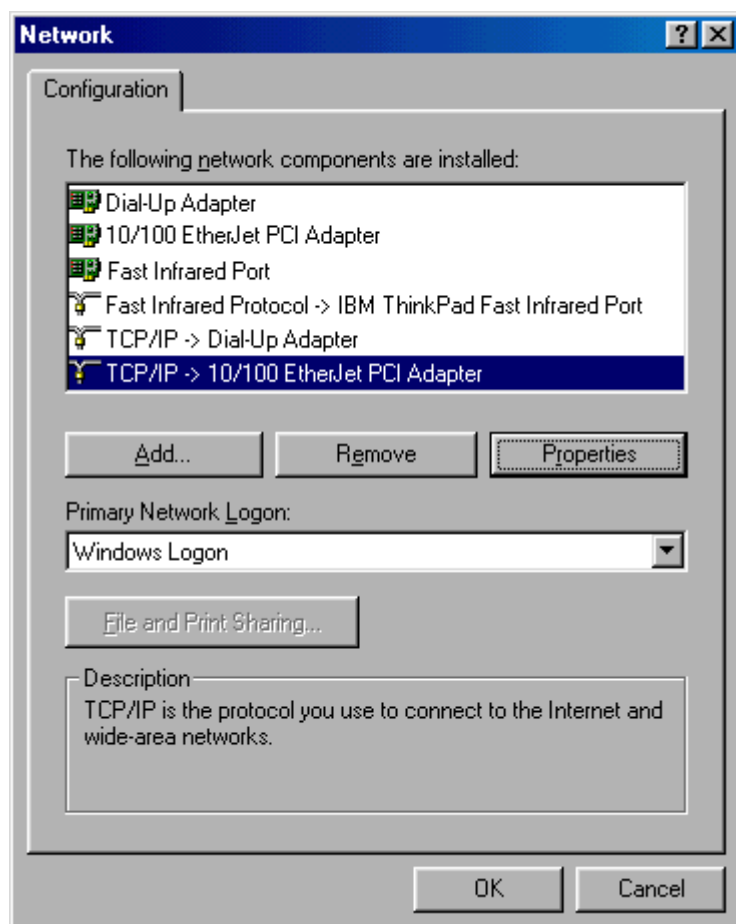


## Setup of IP address

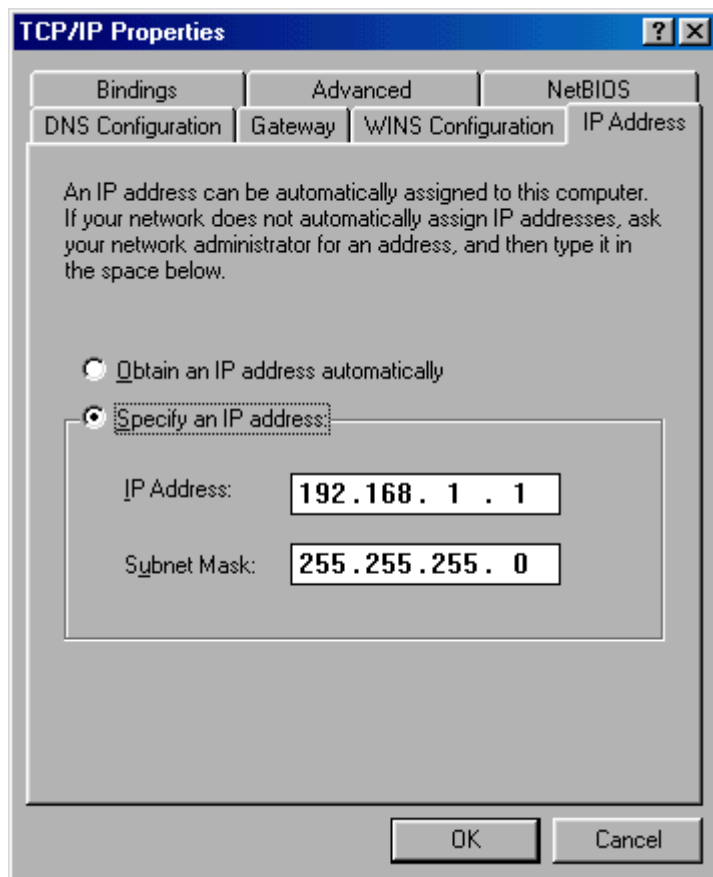
Open the TCP/IP Properties , and set IP address.

IP address            192 168 1 1

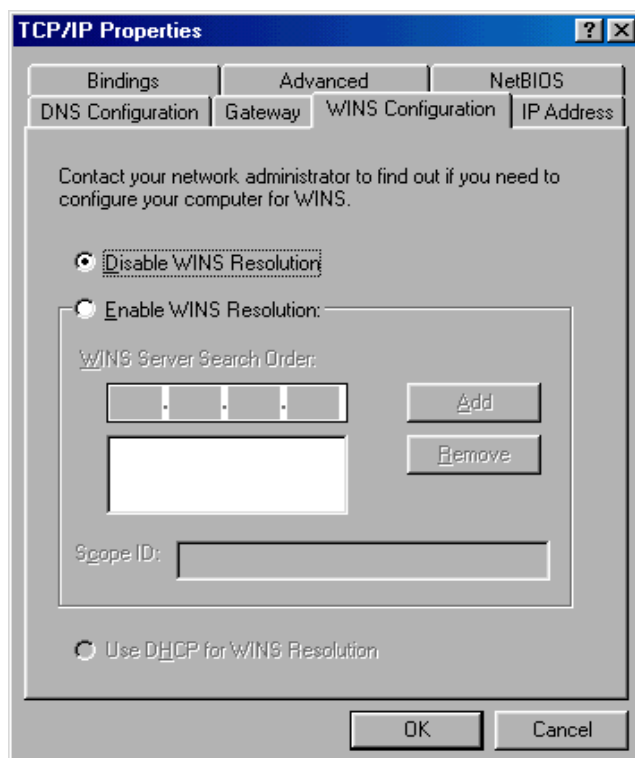
Subnet mask        255 255 255 0



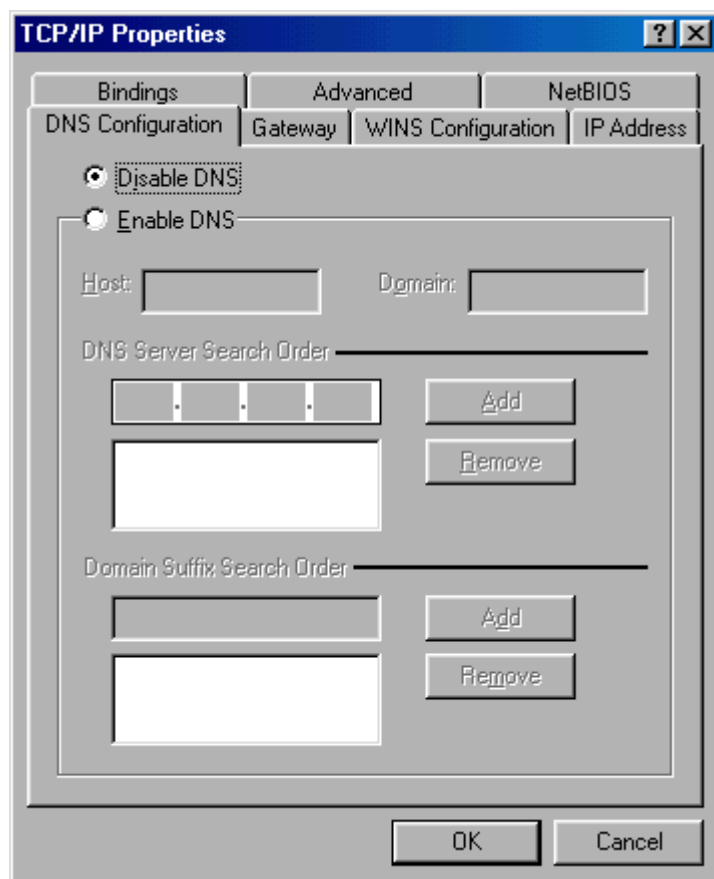




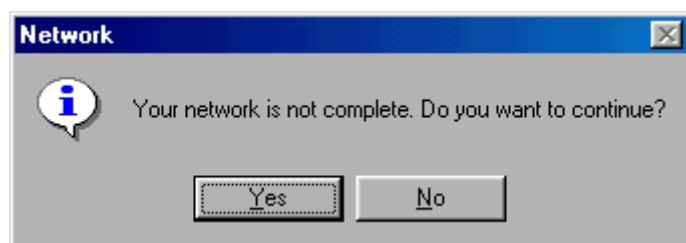
Choose "Disable WINS Resolution".



Choose "Disable DNS".



Choose Yes when "Your network is not complete. Do you want to continue?" is indicated.

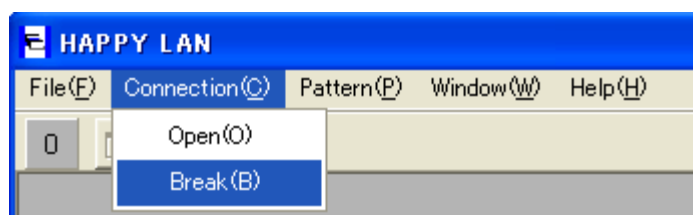


## Setup of HAPPY LAN

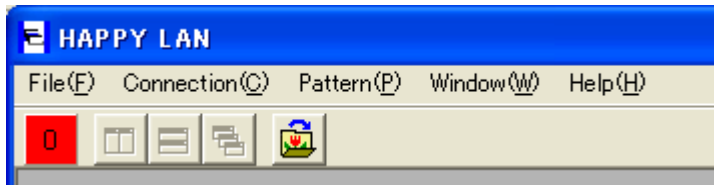
Register IP address of PC, the name and IP address of embroidery machine.

Activate "HAPPY LAN".

Click "Break" in "Connection" of menu bar.



When the Break is clicked, the red indicator starts blinking.

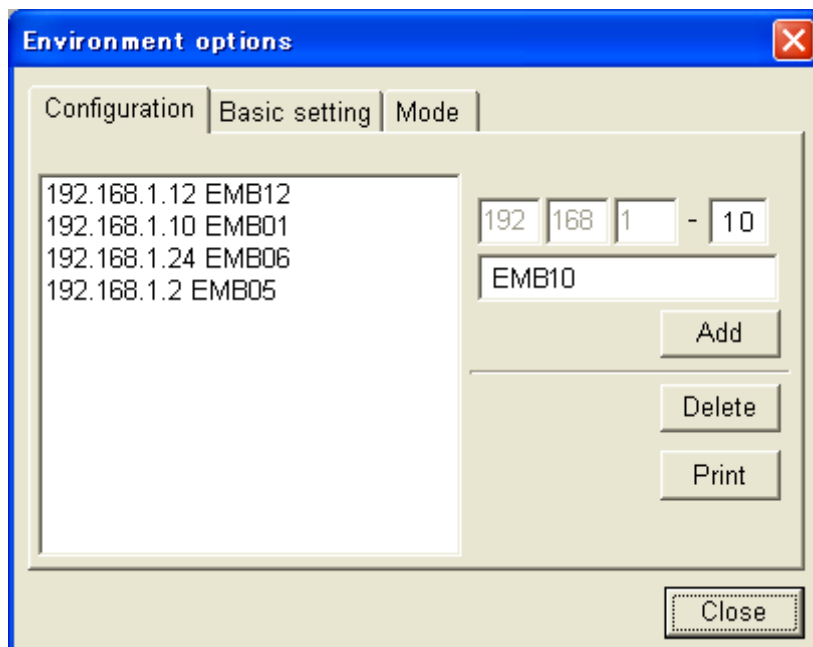


### Registration of the embroidery machine

Click "Environment options" in "Files" menu, and enter setup to open the tab of Configuration .  
Input the name(s) of the embroidery machine(s) and the last digit of IP address.

NOTE: When IP address of the embroidery machine is changed after the registration, re-registration of the machine in accordance with the new IP address is required.

Example) When the name of the embroidery machine is EMB10 and its IP address is 192 168 1 10, enter EMB10 and click Add , Then, it will be added to a list.

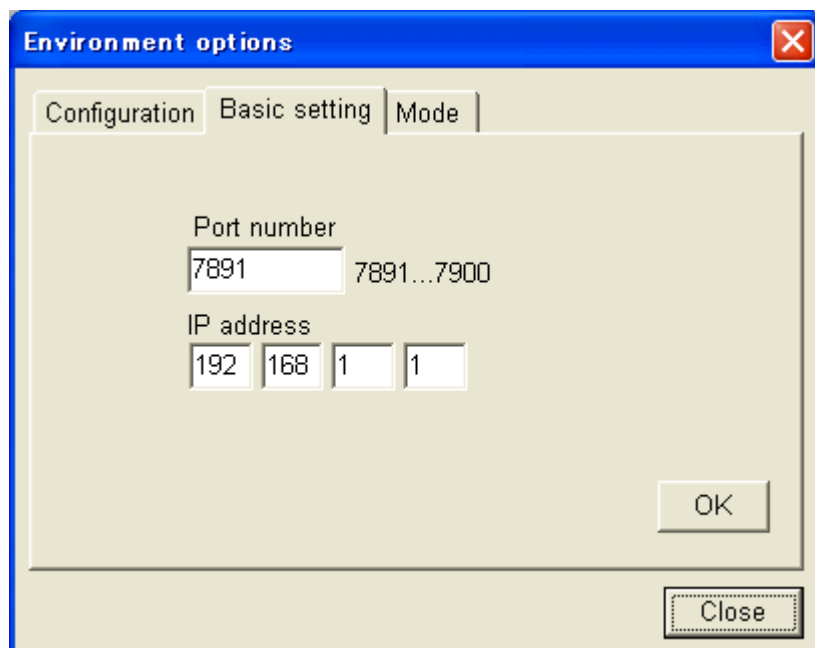


How to delete the embroidery machine registered

Choose the embroidery machine already registered in the list and click Delete .

## Registration of IP address of PC

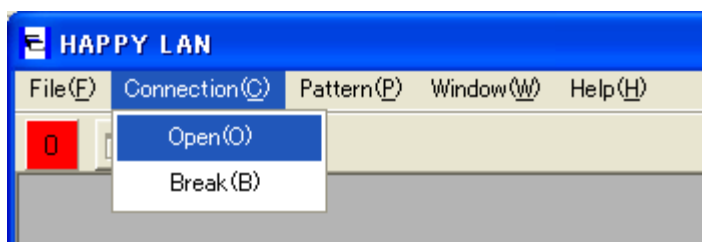
Open the tab of Basic setting .



Make sure the IP address is the same with the one registered in 2-2. Setup of PC (Personal Computer) . If not, enter the IP address of PC and click OK . Port number 7891 shall remain the same.

Click Close after the setting is finished.

Click Connection to choose Open in menu bar. It will become waiting state for the connection of the embroidery machine.



## Examples of setting

Example 1) IP address of PC is set as 192 168 2 1.

Setting of PC Network				
IP address	192 168 2 1			
Subnet mask	255 255 255 0			
Setting of HAPPY LAN environment				
Port number	7891			
IP address (server address)	192 168 2 1			
Embroidery machine				
Port number	7891			
	1st machine	2nd machine	3rd machine	20th
IP address	192 168 2 10	192 168 2 11	192 168 2 12	....29
MAC address	48 50 59 53 48 43	48 50 59 53 48 44	48 50 59 53 48 45	....56
Server address	192 168 2 1			
Subnet mask	255 255 255 0			

Example 2) IP address of PC is set as 192 168 3 1.

Setting of PC Network				
IP address	192 168 3 1			
Subnet mask	255 255 255 0			
Setting of HAPPY LAN environment				
Port number	7891			
IP address (server address)	192 168 3 1			
Embroidery machine				
Port number	7891			
	1st machine	2nd machine	3rd machine	20th
IP address	192 168 3 10	192 168 3 11	192 168 3 12	....29
MAC address	48 50 59 53 48 43	48 50 59 53 48 44	48 50 59 53 48 45	....56
Server address	192 168 3 1			
Subnet mask	255 255 255 0			

Example 3) IP address of PC is set as 192 168 4 1.

Setting of PC Network				
IP address	192 168 4 1			
Subnet mask	255 255 255 0			
Setting of HAPPY LAN environment				
Port number	7891			
IP address (server address)	192 168 4 1			
Embroidery machine				
Port number	7891			
	1st machine	2nd machine	3rd machine	20th
IP address	192 168 4 10	192 168 4 11	192 168 4 12	....29
MAC address	48 50 59 53 48 43	48 50 59 53 48 44	48 50 59 53 48 45	....56
Server address	192 168 4 1			
Subnet mask	255 255 255 0			

Example 4) IP address of PC is set as 192 168 2 1, and Subnet mask is set as 255 255 255 224.

Setting of PC Network				
IP address	192 168 2 1			
Subnet mask	255 255 255 224			
Setting of HAPPY LAN environment				
Port number	7891			
IP address (server address)	192 168 2 1			
Embroidery machine				
Port number	7891			
	1st machine	2nd machine	3rd machine	20th
IP address	192 168 2 10	192 168 2 11	192 168 2 12	....29
MAC address	48 50 59 53 48 43	48 50 59 53 48 44	48 50 59 53 48 45	....56
Server address	192 168 2 1			
Subnet mask	255 255 255 224			

Example 5) IP address of PC is set as 192 168 2 1, and Subnet mask is set as 255 255 255 192.

Setting of PC Network				
IP address	192 168 2 1			
Subnet mask	255 255 255 192			
Setting of HAPPY LAN environment				
Port number	7891			
IP address (server address)	192 168 2 1			
Embroidery machine				
Port number	7891			
	1st machine	2nd machine	3rd machine	20th
IP address	192 168 2 10	192 168 2 11	192 168 2 12	....29
MAC address	48 50 59 53 48 43	48 50 59 53 48 44	48 50 59 53 48 45	....56
Server address	192 168 2 1			
Subnet mask	255 255 255 192			

# Start

---

Make sure that the power supply of the embroidery machine is off.

Make sure that both between PC —HUB and HUB - the embroidery machine are connected by the cables.

Make sure that the power supply of HUB is on.

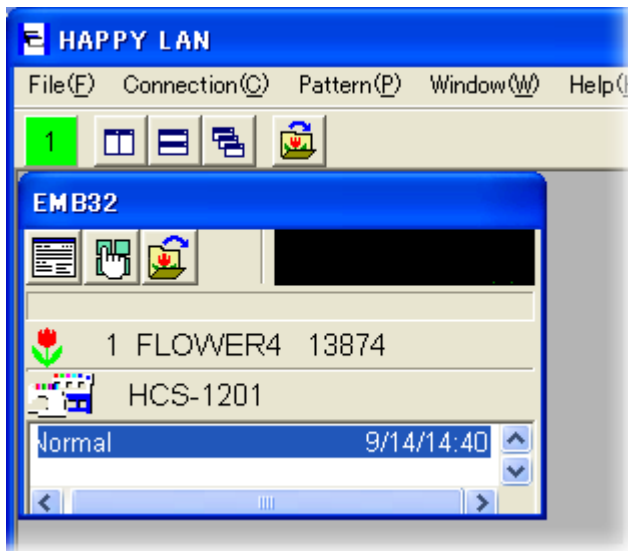
Activate Local Area Network System (HAPPY Link LAN).

Follow the procedures below to start the communication with the embroidery machine.

Turn on the power of the embroidery machine.

Frame moves when the Ent. button of the embroidery machine is pressed.

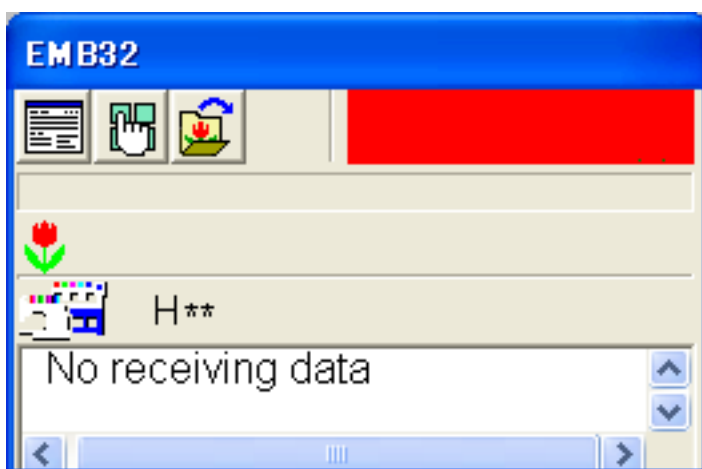
After the frame movement, the communication with HAPPY LAN starts and one monitoring window appears.



The name registered in advance is shown at the top of the monitoring window.

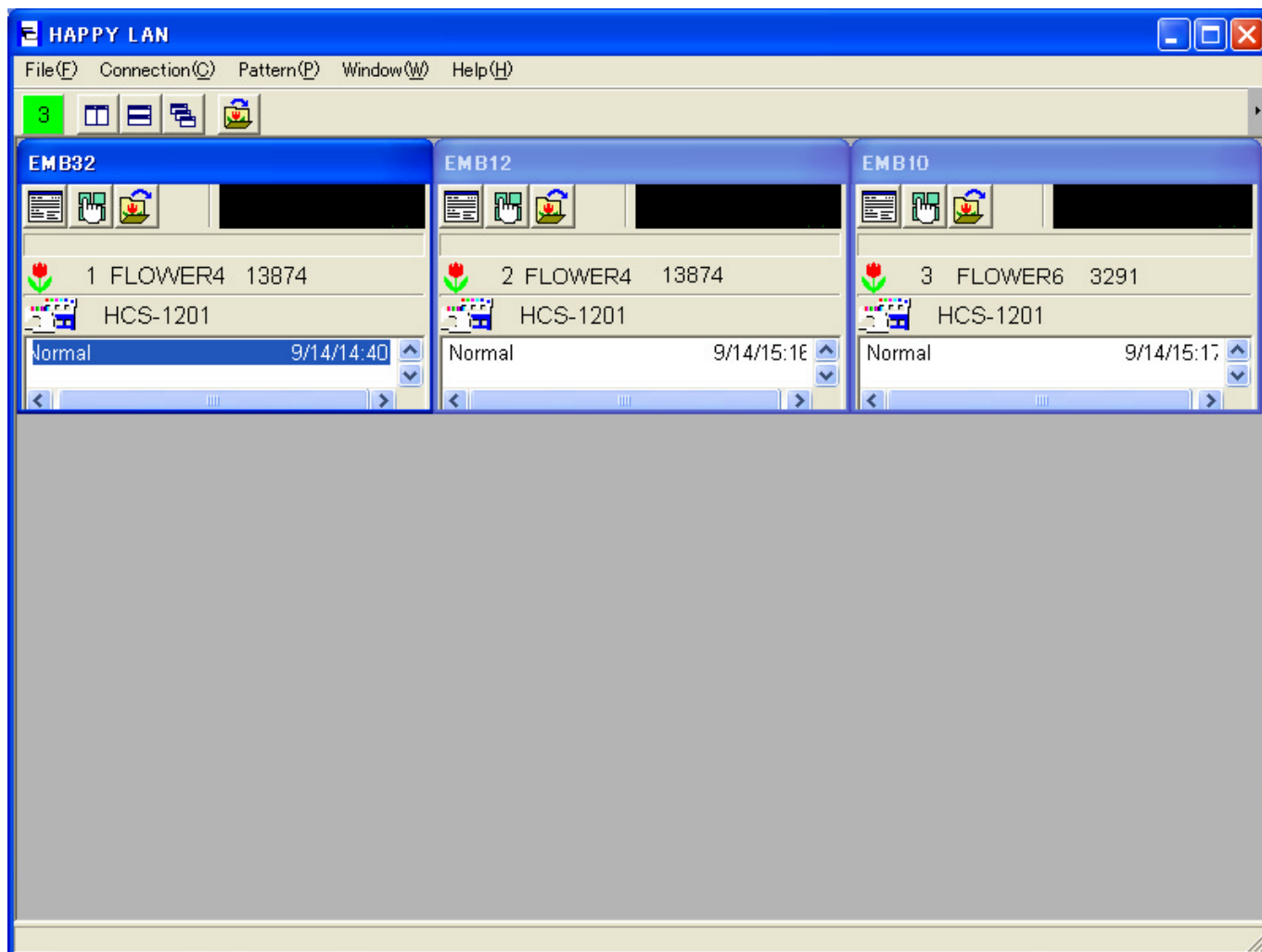
Have all the other embroidery machines recognized in the same manner as above.

NOTE: If the red indicator of the monitoring window is blinking, the embroidery machines is not recognized properly. Follow the procedures below for recovery.

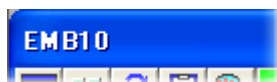
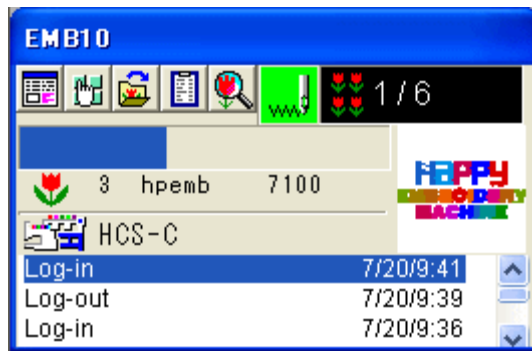


1. Click the indication blinking to close the monitoring window.
2. Then, turn off the power of the embroidery machines unrecognized.
3. Have the embroidery machine recognized again.





# Explanation of Monitoring Window



<Name of embroidery machine> The name registered at Environment options is shown.



<Production information> Information on production, thread cutting and other is shown.



<Setting of embroidery machine> Setting of pattern data of the embroidery machine can be changed by operational mode.



<Pattern selection> Reading the pattern data stored in PC, changing the setting of the pattern data and transmission of the pattern data are available.



<Indicator> Showing the status of the embroidery machine and the number of repeat sewing.



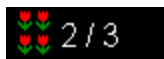
Shown during embroidering.



Shown when needle change is suspended.



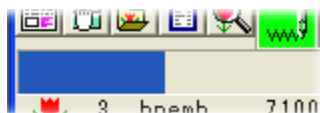
Shown during embroidering is stopped.



Setting counter of repeat sewing.



Red light blinks when communication failed.



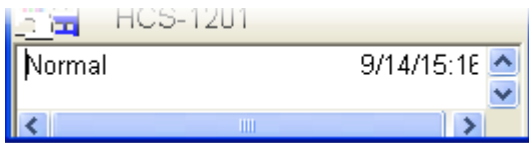
Progress of embroidering is shown by a bar.



Name of pattern (current number of pattern, pattern name and number of stitches)



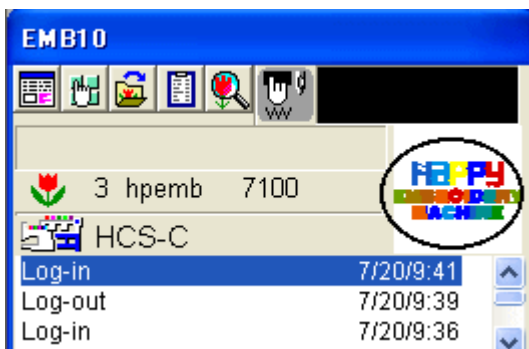
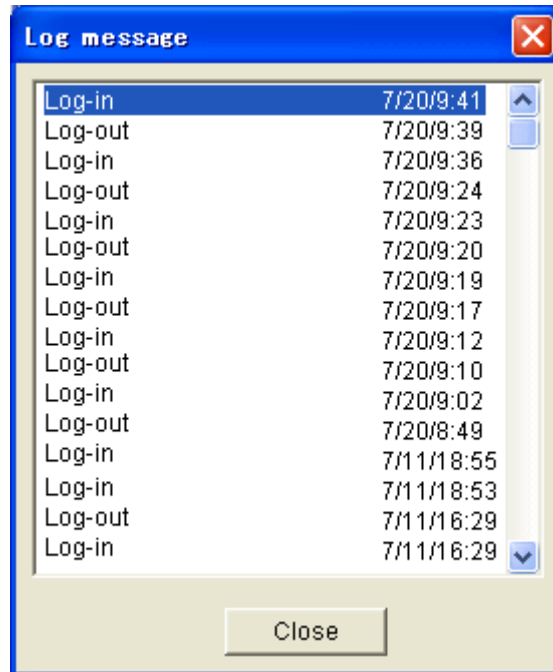
Model type of the embroidery machine.



Log-message of communication status.



Enlargement of Log-message



Display of the area of pattern to be embroidered.

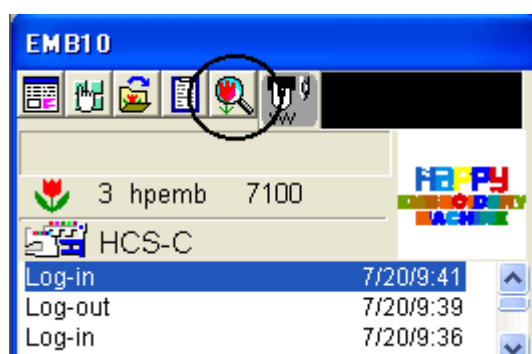
Reduced display of the pattern to be embroidered is shown.

NOTE: Only the patterns transmitted from PC by HAPPY LAN can be shown. The patterns read by the embroidery machine from cards and floppy disks, and the patterns transmitted by other communication software. In that case, \*\*\*\*\* is shown.





<Enlargement of pattern display> Window for enlargement display of the pattern to be embroidered is shown by clicking.



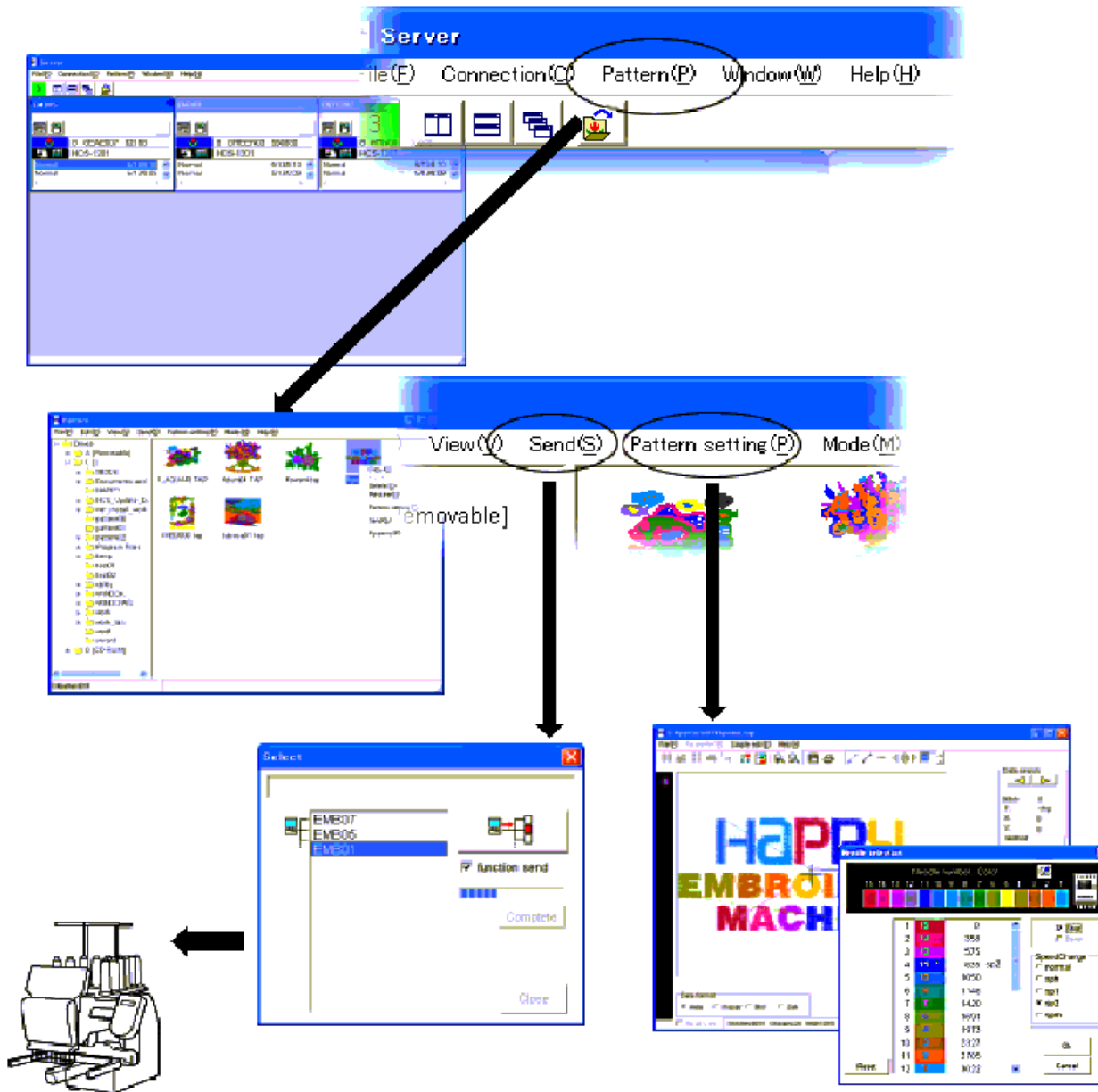
# Main functions

Example for transmission of pattern data

Open the pattern control window (open by monitoring window or the open-button in main window).

Select the pattern from the pattern control window, and transmit the pattern by clicking Send to the embroidery machine appointed.

Settings of needles and other are available by clicking Pattern setting after selecting the pattern.

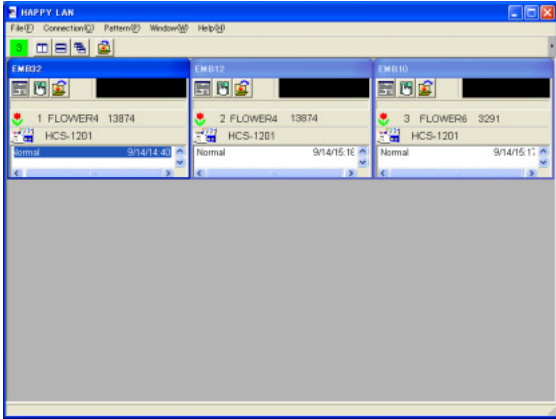


# Explanation of each window

## Main window

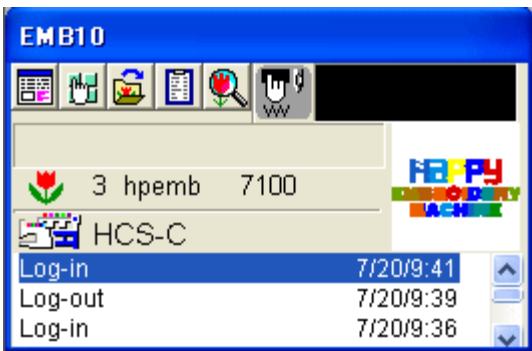
Display as below shows the embroidery machines waiting status for connection.

When the embroidery machines are connected, same numbers of the monitoring windows as the embroidery machines are displayed.



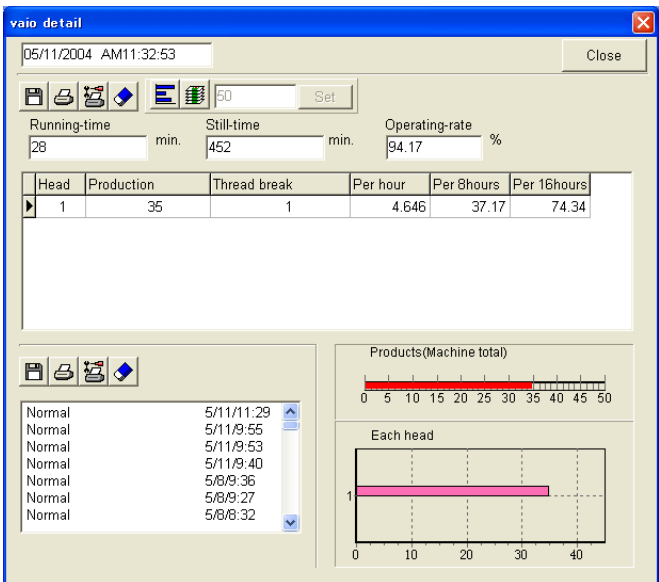
## Monitoring window

Display as below shows the window of the embroidery machine connected.



## Details button

Open the window for checking production information.

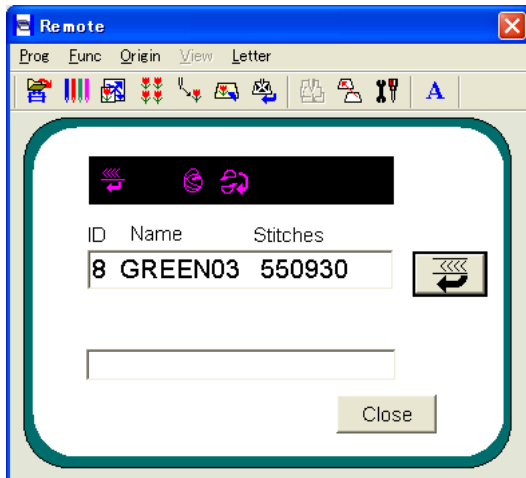




## Operational mode button

Open the window for changing the setting of the embroidery machine(s).

Operational mode window



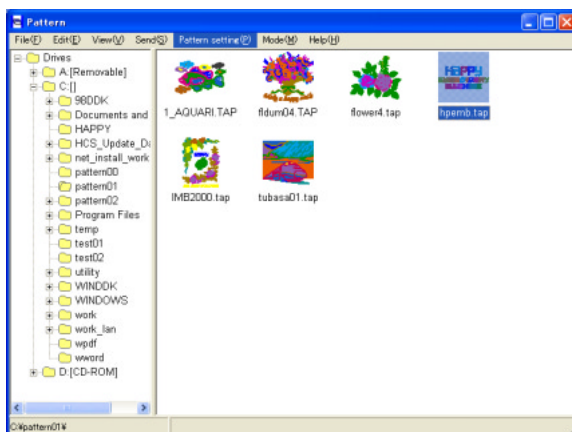
Setup items

- |                                       |                                   |
|---------------------------------------|-----------------------------------|
| Pattern management                    | Needle selection                  |
| Adjust                                | Repeat                            |
| Frame out                             | Offset                            |
| Auto origin                           | Direct (frame position setting) * |
| Create (setting of machine functions) | Letter *                          |

\*MARKS: The Setup item is limited according to each model.

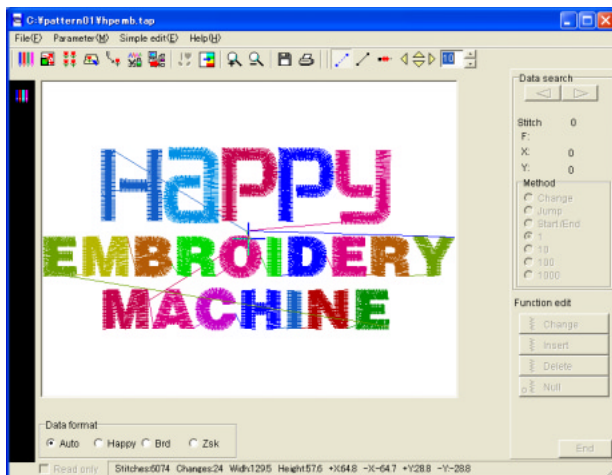
## EachFunction

It allows you to control the pattern in PC and to transmit the pattern to the embroidery machine. Open Pattern in the main window.



## Setting of pattern data

It allows you to set the needle selection for the pattern in PC and other. Open Pattern setting menu of pattern control window.





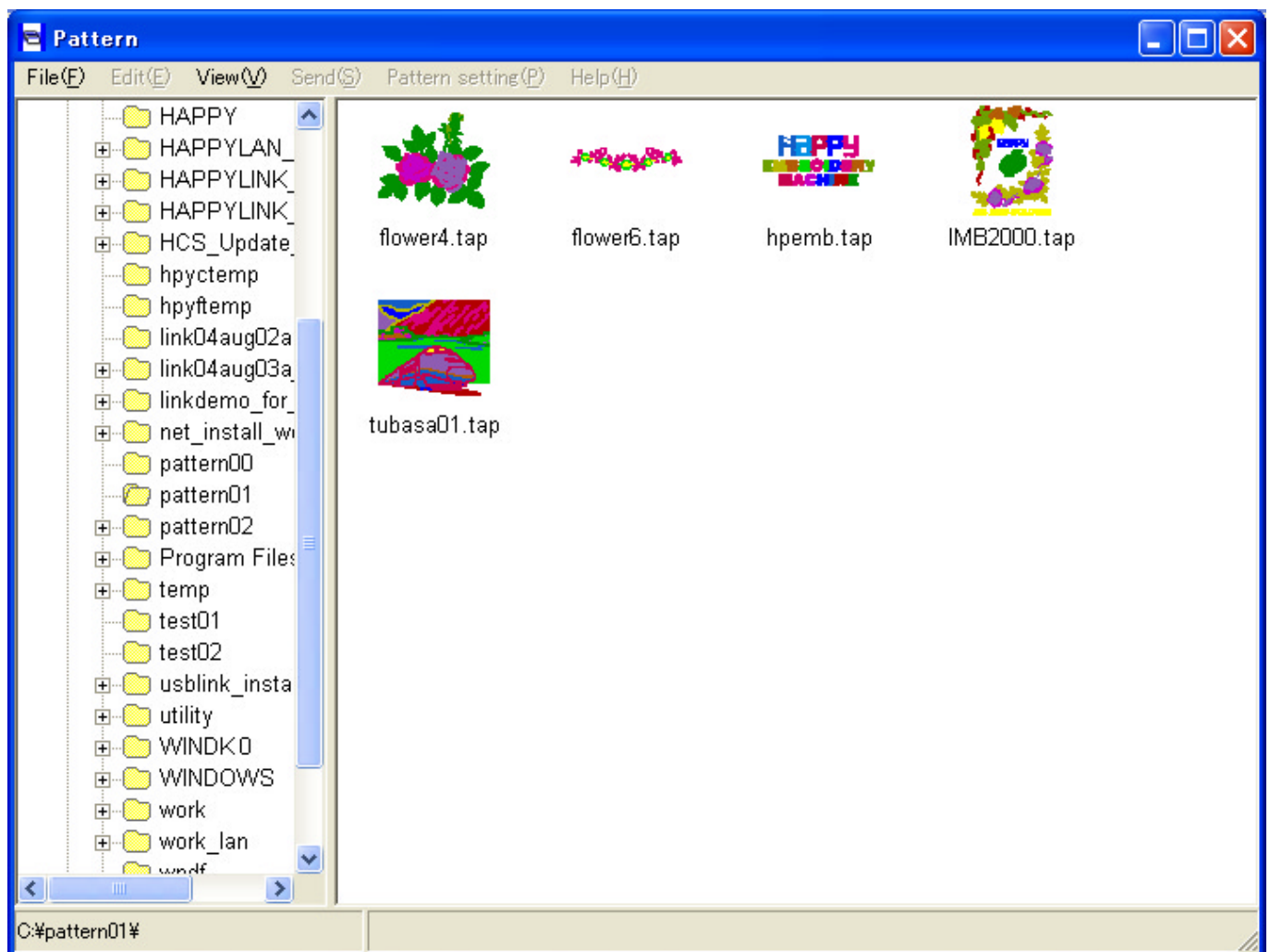
# Explanation of each function

## Pattern selection


Select the pattern to transmit it to the embroidery machine.

Functions: Transmission of the pattern, Pattern setting, Copying, Deletion, renaming and Display of design information.

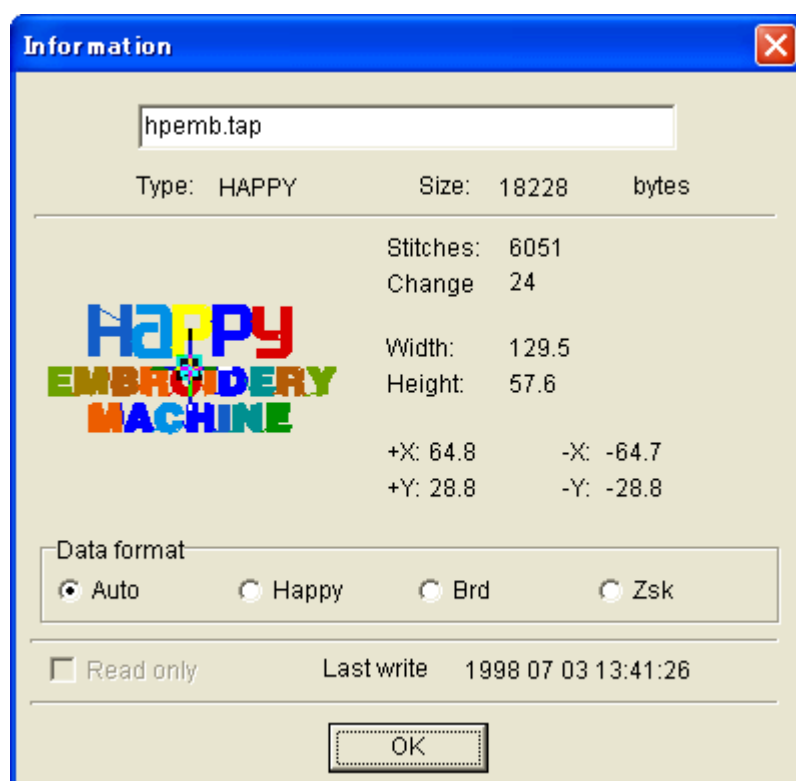
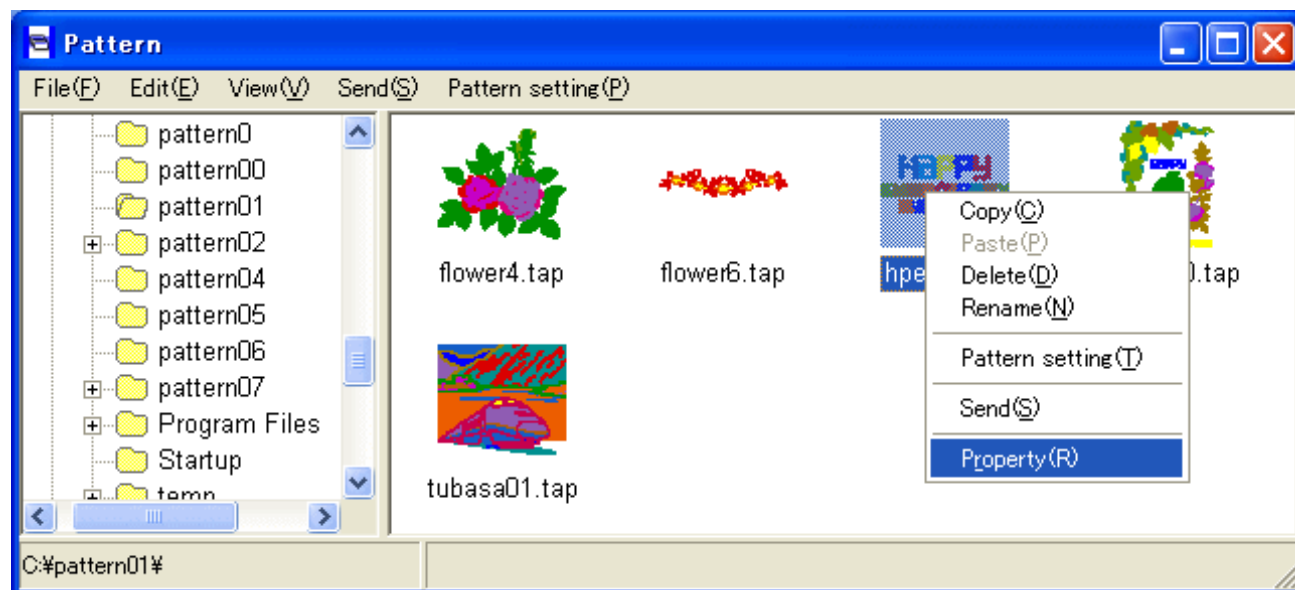
Click **Pattern** of the main menu, or Click  of main menu or monitoring screen.



## Details of the pattern

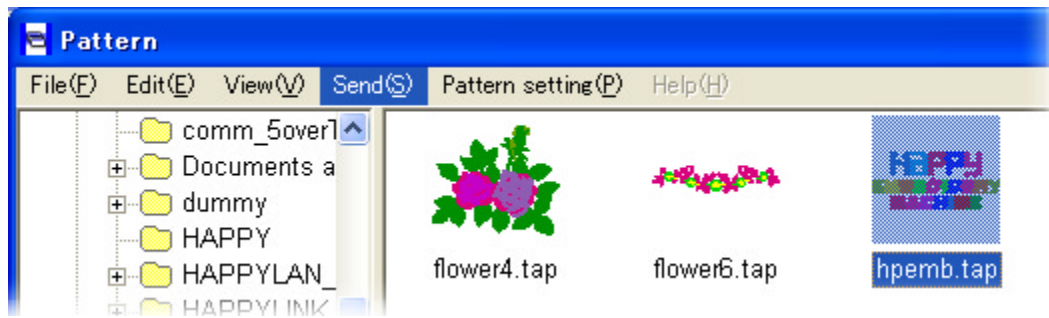
Open Pattern by clicking .

Choose the pattern in Pattern screen and right-click. Click Property.

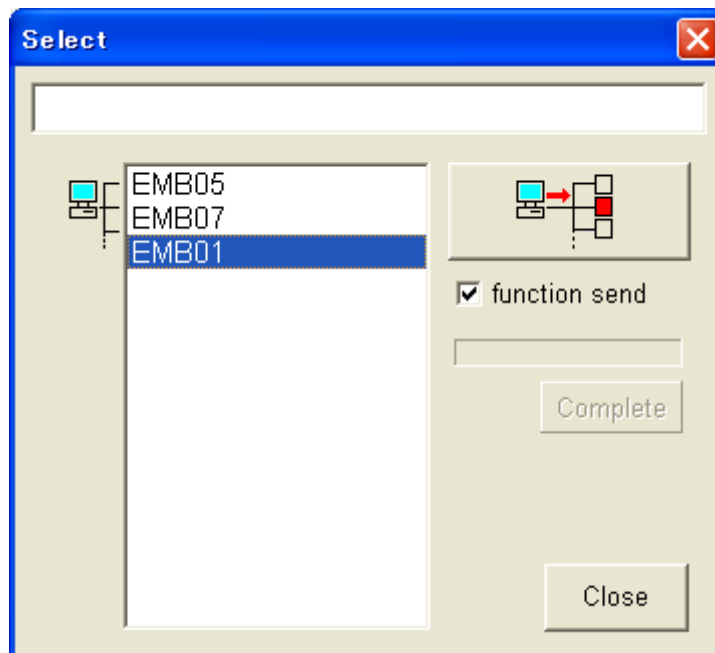


# Transmission of pattern

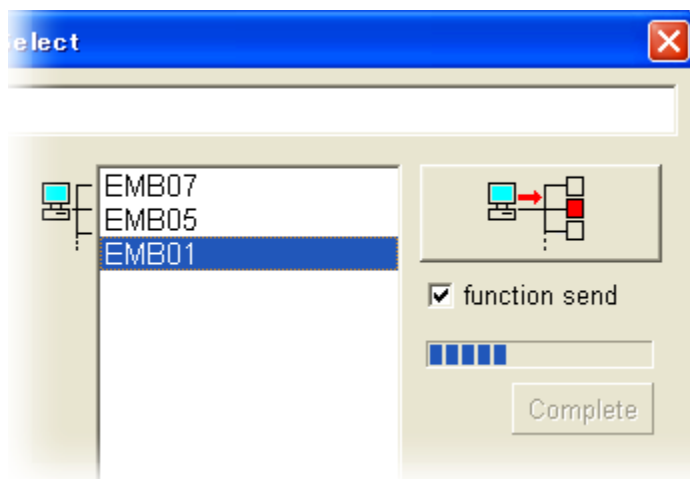
Select the pattern and open Transmitting box by clicking Send .



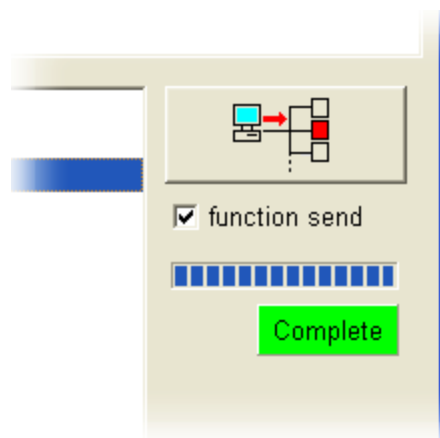
Select destination and click sending button.



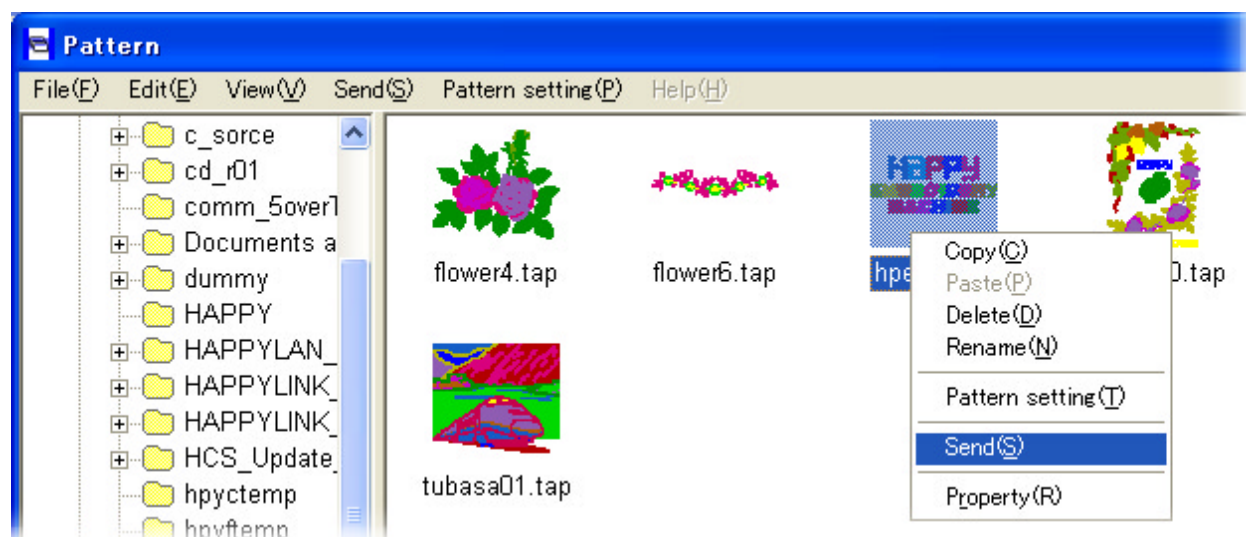
Progress bar is indicated during the transmission.



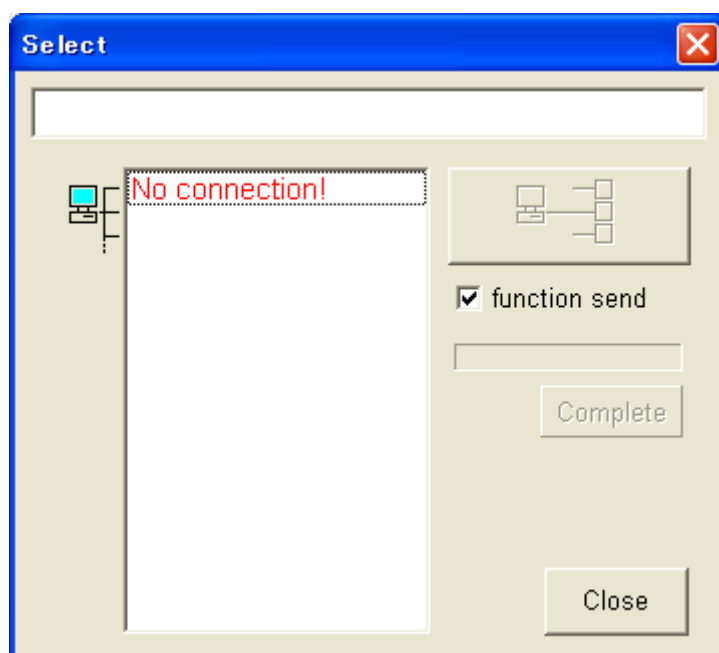
Complete is indicated when transmission is finished.



"Transmission" can be selected by right-clicking as well.



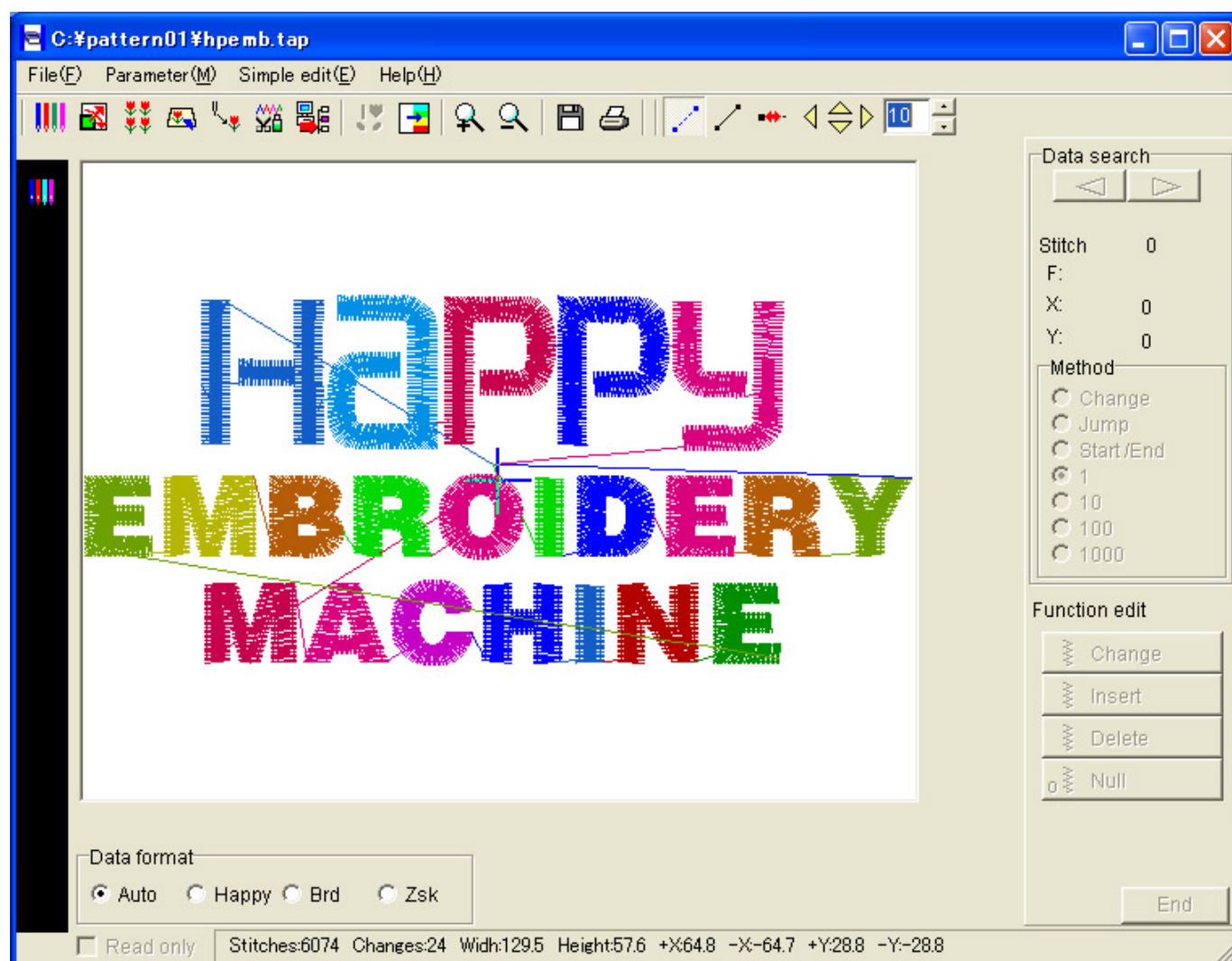
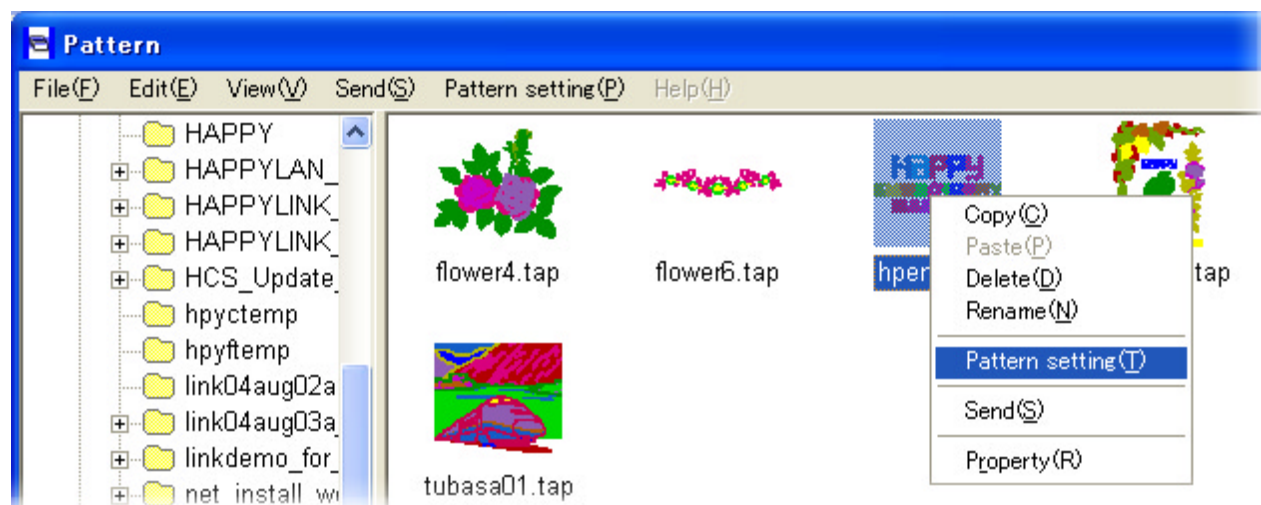
"No connection" is indicated when the embroidery machine isn't connected.



## Pattern setting

Functions: Needle select, Scale, Repeat, Offset, Frame out, Simple editing and Transmission.

Click **Pattern setting** in the menu after choosing the pattern. Or, right-click after choosing the pattern, and click **pattern setting** in Pop-up menu. Or, open **Pattern setting** in the menu.



## <Items for setting>



### Needle select

For setting the order of the needles before starts embroidering. The needle will be change to the other needle preset at every color change of embroidering.



### Scale (Design adjust)

For scaling, rotation, inversion and other functions of the pattern for embroidering.



### Repeat

For repeat embroider of the same pattern on a piece of cloth.



### Offset

For ordering the frame to move from one position appointed to the start position of the pattern where the embroidering starts.



### Frame out

For ordering the frame to automatically move to the position requested when the embroidering of the color (needle) appointed in advance is done. This is effective when some procedures are required during embroidering.



### Simple editing

Addition of the needle stitches, deletion, transfer, addition and alteration of functions and other for the pattern data.



### Transmission

To have the pattern data transmitted by opening the box.

## <Other items>



### Information on the pattern data



### View of jump (showing every jump in the design)



### Change of viewpoint of the design



### Change of background



### Zoom in, Zoom out



### Stitch Point (showing stitch point by dots)



### View by each color change



### Save design data



### Print design

## 1. Needle select


You can designate the order of needles to be used for sewing.

You can insert a stop command in the color change process.

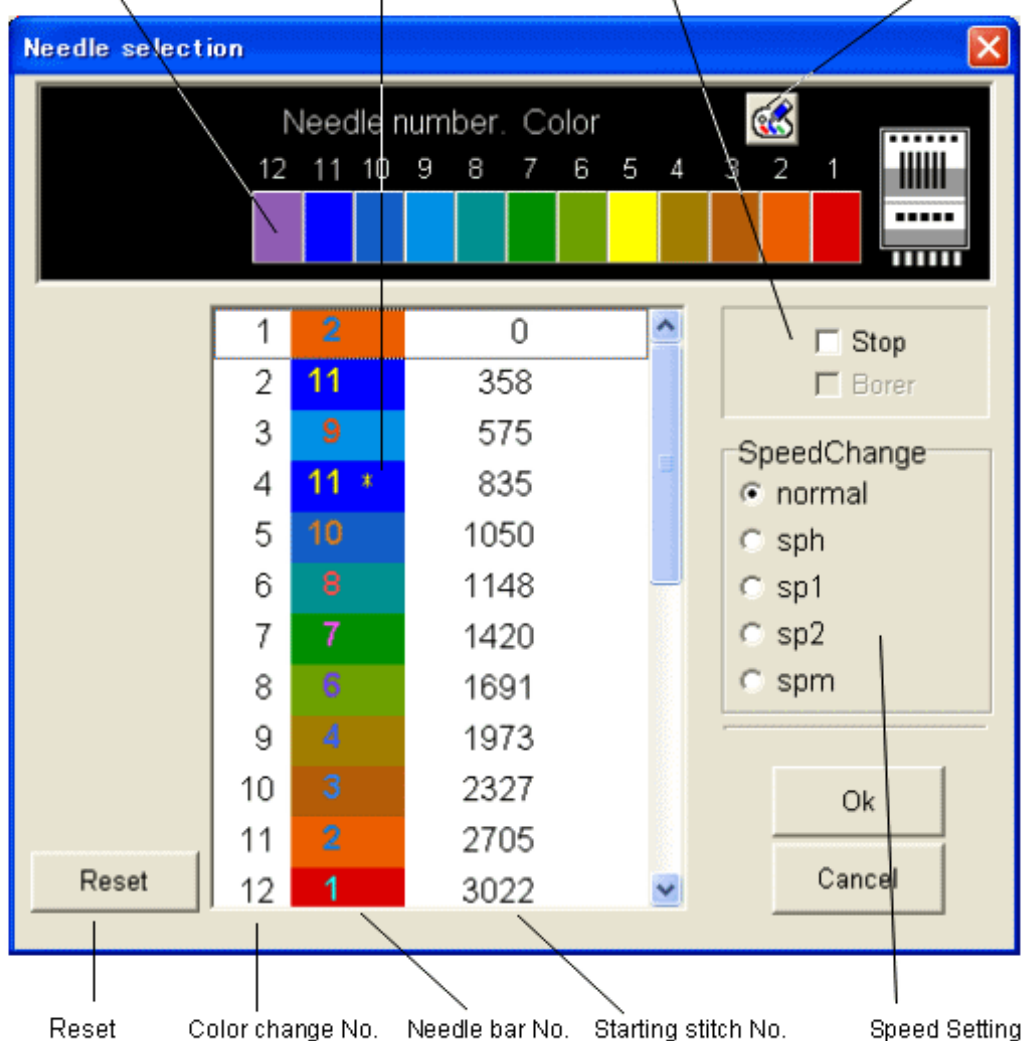
You can set the speed in the color change process.

Note:

If you change the number of the needle bar after having set a color change stop, the color change stop will go off. You will then need to reset it.

Click on Needle Select button  to display the dialogue of needle select. (If any pattern data is not read, the dialogue is not displayed.)

Needle No. and Thread color    Needle Change Stop Mark    Needle Change Stop Set    Thread Color Change



### How to select:

1. Select color change number and click it.
2. Select the color you like from Needle No. and Thread color and click it.  
Please repeat this process for every color change number.  
Please check Stop and/or Borer if you wish to use these functions.  
(Only embroidery machines that have Borers can use this function)
3. Click on the OK button to finish the setting and the setting is stored in the machine.

**Stop Mark:**

If you check the stop box after you selected the needle, a [\*] mark appears on the right side of needle number and color change stop is set. Sewing proceeds, but the embroidery machine will stop when this color has completed sewing. Push the start button on the embroidery machine to restart.

**Borer:**

If you check this mark, you will have a [B] symbol on right side of the needle number.

If you use this function, you need to install a borer device to the machine. Please refer to [Options].

**Alteration of speed**

You can set the speed of the embroidery machine at every change. The set machine speed is displayed.

**Normal:** Normal speed

**sph:** Release of speed limit

**sp1:** Setting speed limit at 700rpm (different by machine model)

**sp2:** Setting speed limit at 600rpm (different by machine model)

**spm:** Setting speed limit at 300rpm (different by machine model)

**Reset**

Reset all of your needle numbers to 0 for color changes.

Other functions (stop etc.) will all go off.

**OK**

Input contents are saved in the [Setting file].

**Cancel**


The screen will be closed without saving the input contents in the [Setting file].

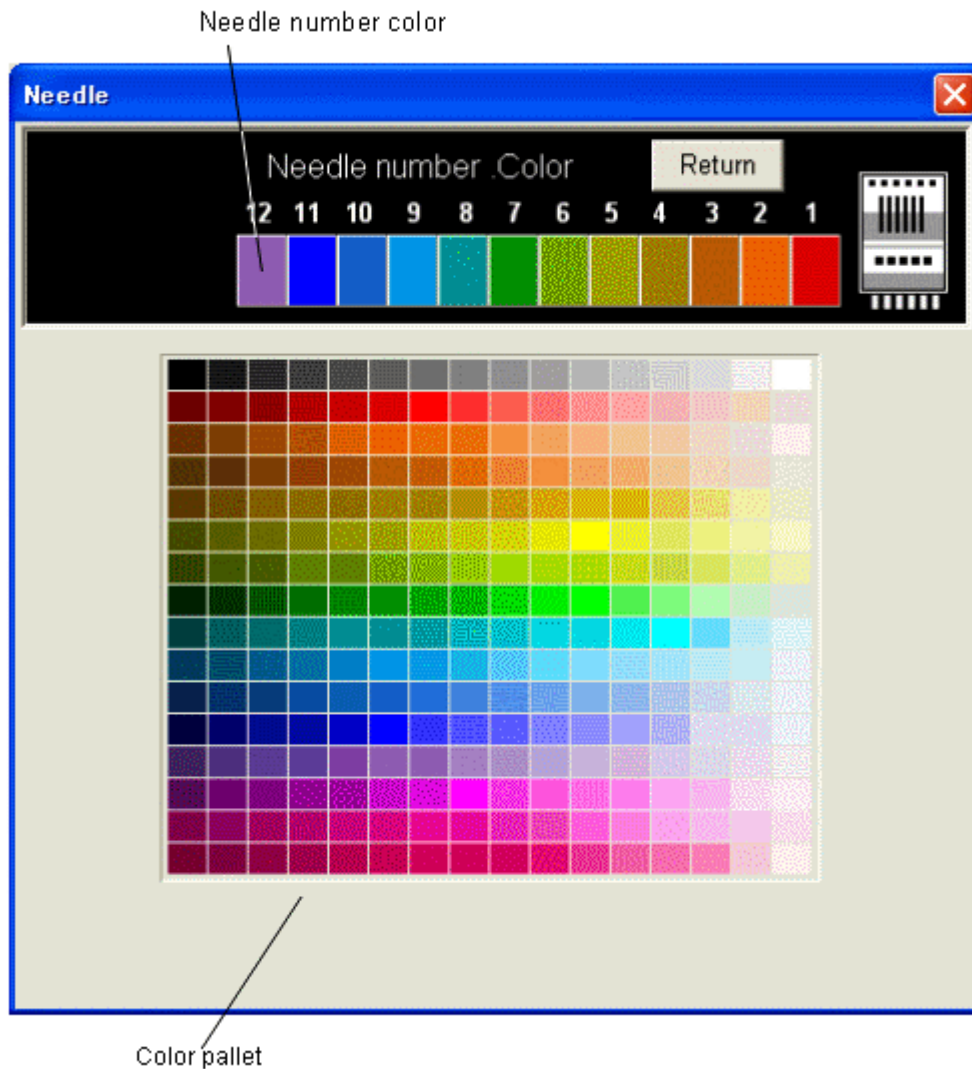
**Change Thread color**

You use this button for the Thread color change menu. You can change the display color that will represent each thread color.



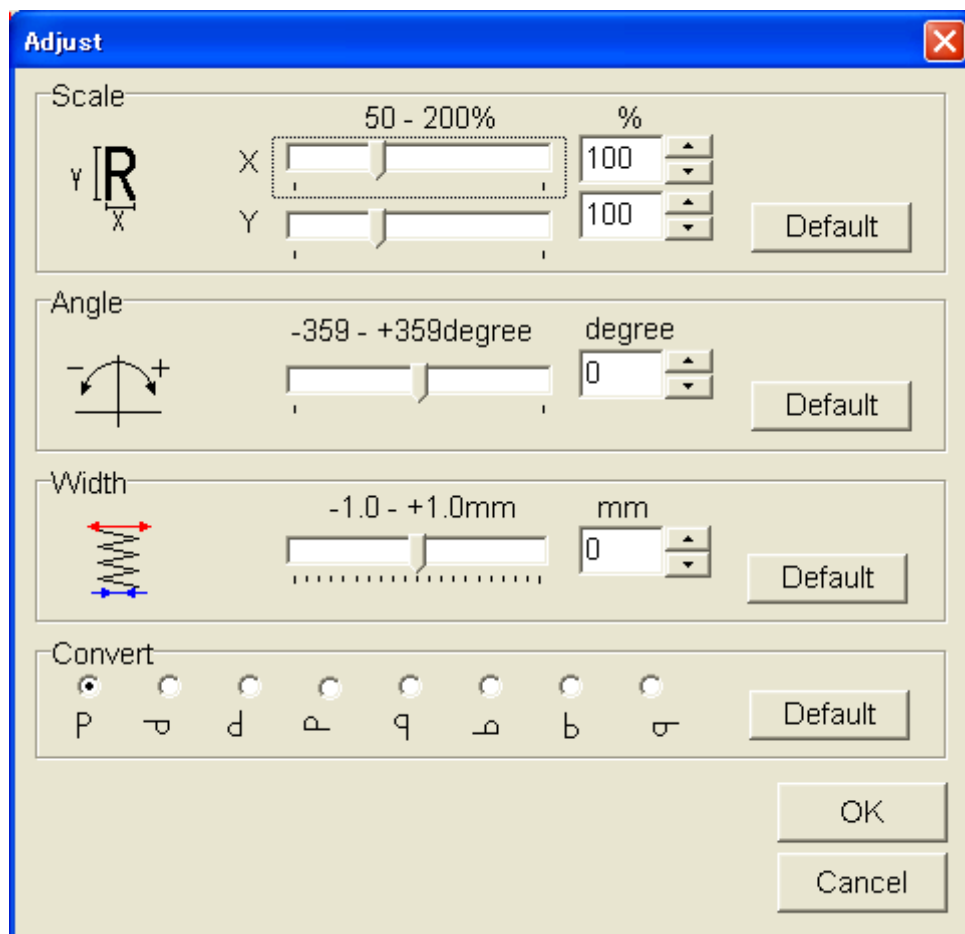
## How to change Thread color

1. Click on the "Change Thread Color" Button  to open a Thread color change menu.
2. Select and click on the needle you wish to change the color of.
3. Select the color of your choice from the color pallet, this will change the needle color.
4. Click on Return to apply your setting.



## 2. Design Adjust

You can set the scale, alter or other functions to the selected pattern.(Pattern data itself does not change. Only embroidery will follow these settings.)



1. Drag the Scrollbar.
2. Input data into the number box.
3. Click on Up/Down button by the mouse.

If you use Convert, just click on a check bottom.

You will get the standard settings back by clicking on [Default].

Click on [OK] after having input. This menu will be closed.

Note: When you sew with the width adjustment setting, an error may occur at the end point.

In this case, please return the stitch width setting to 0.0.

### [Function and adjustment]

#### Scale

The machine scales in X and Y directions for every 1% proportionately.

1. Scale adjusts X side (Scale X) 50~200 %, Original size: 100 %
2. Scale adjusts Y side (Scale Y) 50~200 %, Original size: 100 %

#### Angle

With the start point of the pattern as a pivot point, the machine changes the angle in 1degree increments.

Angle: -359~359 degree, Original size: 0 degree

**Width**

The machine adjusts stitch width in a design within range of -1.0~1.0mm in increments of 0.1 mm.

Width -1.0~1.0mm

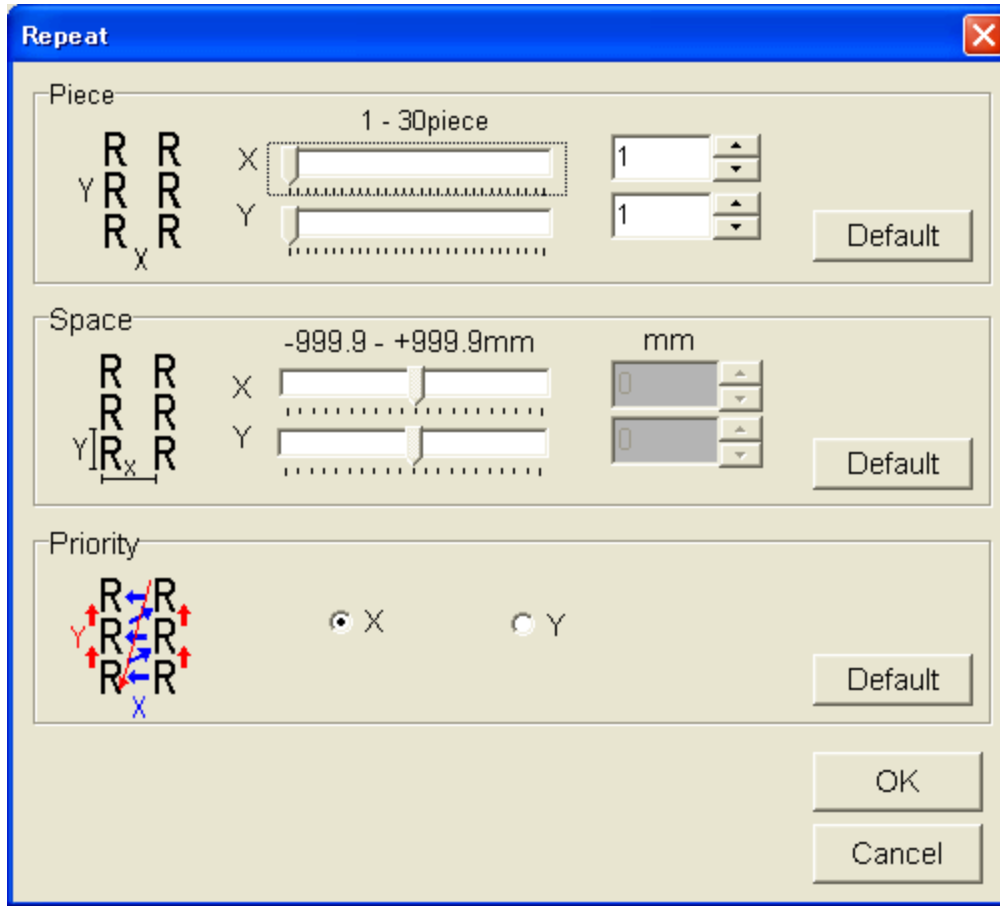
**Convert**

Using the start point of the pattern as a pivot point, the machine changes the angle in 90-degree increments and it mirrors the design.

8 Pattern can be set based on P of standard.

### 3. Repeat

The machine automatically embroiders a specified number of pieces in X and Y directions.



You can change the above items in the following ways:

1. Drag the Scrollbar.
2. Input data from your keyboard into the number box.
3. Click on Up/Down button with your mouse.

In the [Priority], please click on the button for the direction you prefer.

You will get the standard settings back by clicking on [Default].

Click on [OK] after having input. This menu will be closed.

Function and adjustment]

#### Piece

Set the number of pieces in the X and Y direction. Total pieces will be pieces: X times pieces: Y.

1. Pieces: X 1~30 pieces
2. Pieces: Y 1~30 pieces

#### Space

This sets X and Y distance between the start point of each pattern, when repeat is used. When a positive value is input, the machine makes repeat toward the right or upward. If a negative value is used it will move to the left or downward.

1. Space: X -999.9~999.9mm
2. Space: Y -999.9~999.9mm

**Priority**

When using more than 2 pieces in the X or Y direction, a priority must be set to determine which piece to start first.

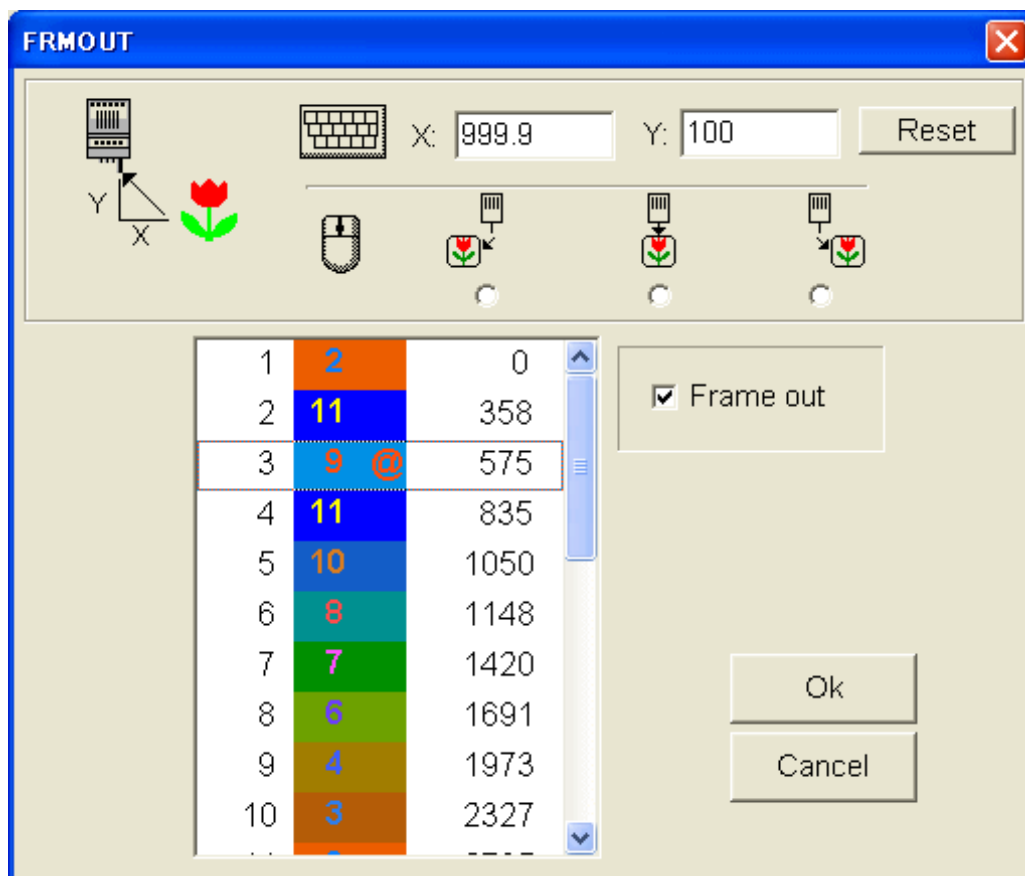
X direction: horizontal direction is the first priority, and vertical direction will be the second.

Y direction: vertical direction is the first priority, and horizontal direction will be the second.

#### 4. **Frame out**

By adding a **Frame out** command to the pattern color number, the machine can move the frame and stop it on the position that you set up after sewing all of a color. When you restart it, the frame will move to the normal stitching position and continue to work. This function is convenient for trimming of threads in the middle of sewing or placing an applique .

When you click on the frame out button, the menu opens.

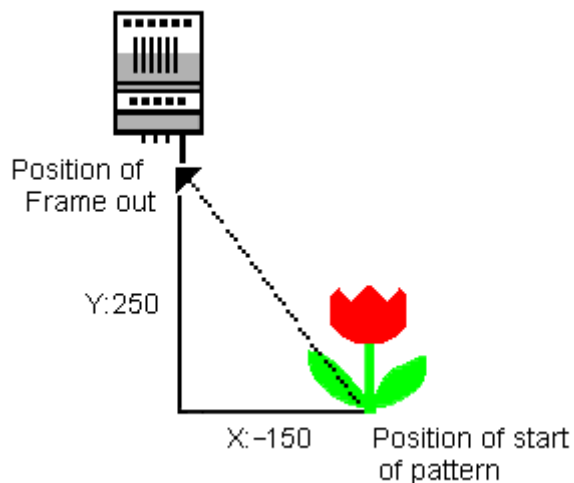


Input the amount of the frame out by numbers, and select the color change that you want to move at the end of. Click on [Frame out]. The @ sign will appear on the right of the needle number.

With the start point of the pattern as a base point, please set the distance to move for the frame out.

## How to set frame out

### Example1



1. X: -150 Y: 250 Input these numbers.
2. Please click on the color change number you desire to add the frame out to.
3. Please click on [Frame out]. When this is set, an @ sign is put next to the needle bar number.
4. When you click on [OK] after input, the screen will close and the frame out is set.

Example 2. Easy setting cautions [of an input]:

**Note:** It is necessary to perform the clauses 2-4 of Example 1 after setting.



A check of a check button sets up the regular value.

The form displays a keyboard icon on the left. To its right are two input fields. The first field is labeled 'X:' and contains the value '-100'. The second field is labeled 'Y:' and contains the value '100'.



A frame comes to the front left-hand side at the time of a frame-out. X: 100 and Y: 100 are set.



A frame comes to the front side at the time of a frame-out. X:0 and Y: 100 are set.



A frame comes to the front right-hand side at the time of a frame-out. X: -100 and Y: 100 are set.

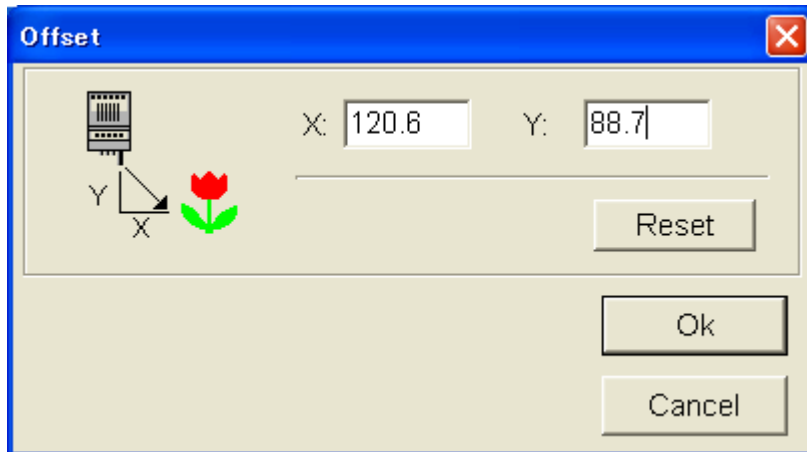
## 5. Offset

If you set up an offset position, the frame moves from the offset position to its initial position and starts working.

Using the off set setting, you can start stitching from wherever you want.

Use the off set setting with the origin function, and the frame will move back to the off set position automatically after it completes stitching.

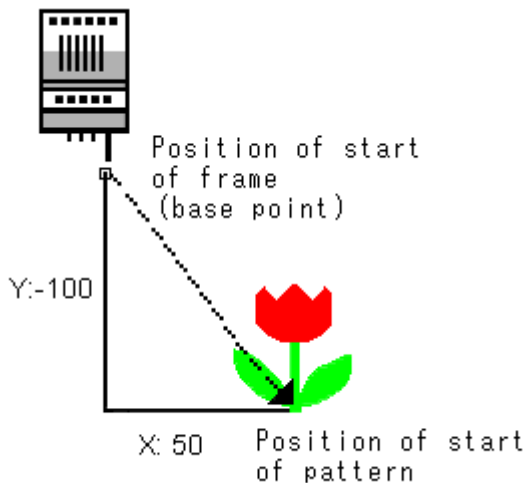
When you click on the [Offset] button, the input screen will open.



With the start point of the drive frame as a base point, please set the move distance to the start point of the pattern.

### How to set offset

Example)



1. X: 50 Y: -100 Input these numbers.
2. When you click on [OK] after input, the screen will close.



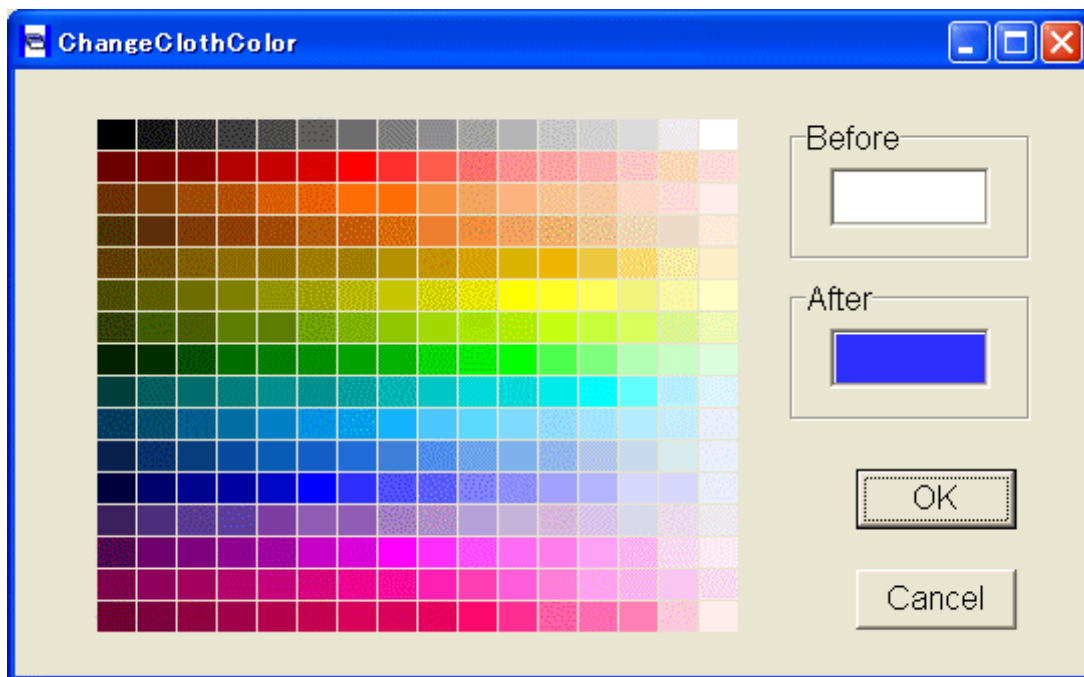
## 6. **View the selected block by color**

Click on Simple Editing to use this function. Refer to "[View the selected block by color](#)" of Simple Editing .

## 7. Changing the background color

You can change the background color (cloth color).


When you click on the [Change of background color] button, the window of change of background color appears.

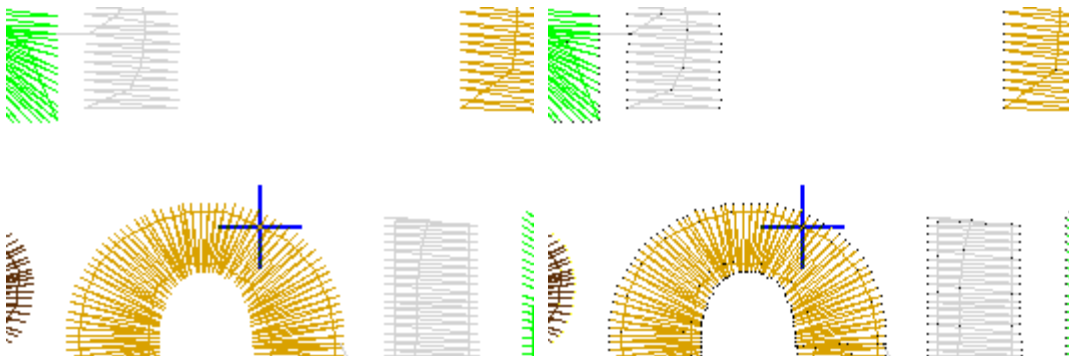



The color you set will remain unchanged until you change the background color.

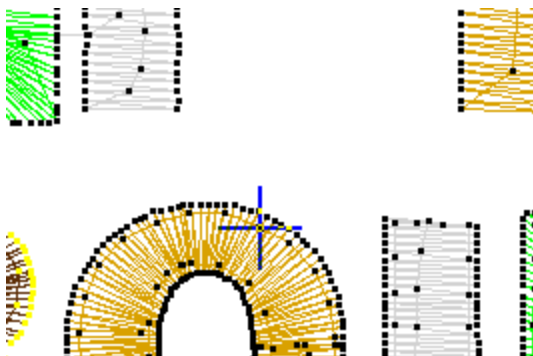
The current background color is shown in the window marked [Before]. When you click on the color pallet, a new color appears in the window marked [After]. When you click on [OK], the background color changes.

## 8. View of the needle drop point

Click on  at Pattern setting to show the needle drop point on the pattern displayed.



Click on  to enlarge the size of the needle drop point.



## 9. Simple editing

The program offers some basic editing functions such as display of the pattern selected, current stitch position by marker, current stitch number and the data. You can save this simple edited data.

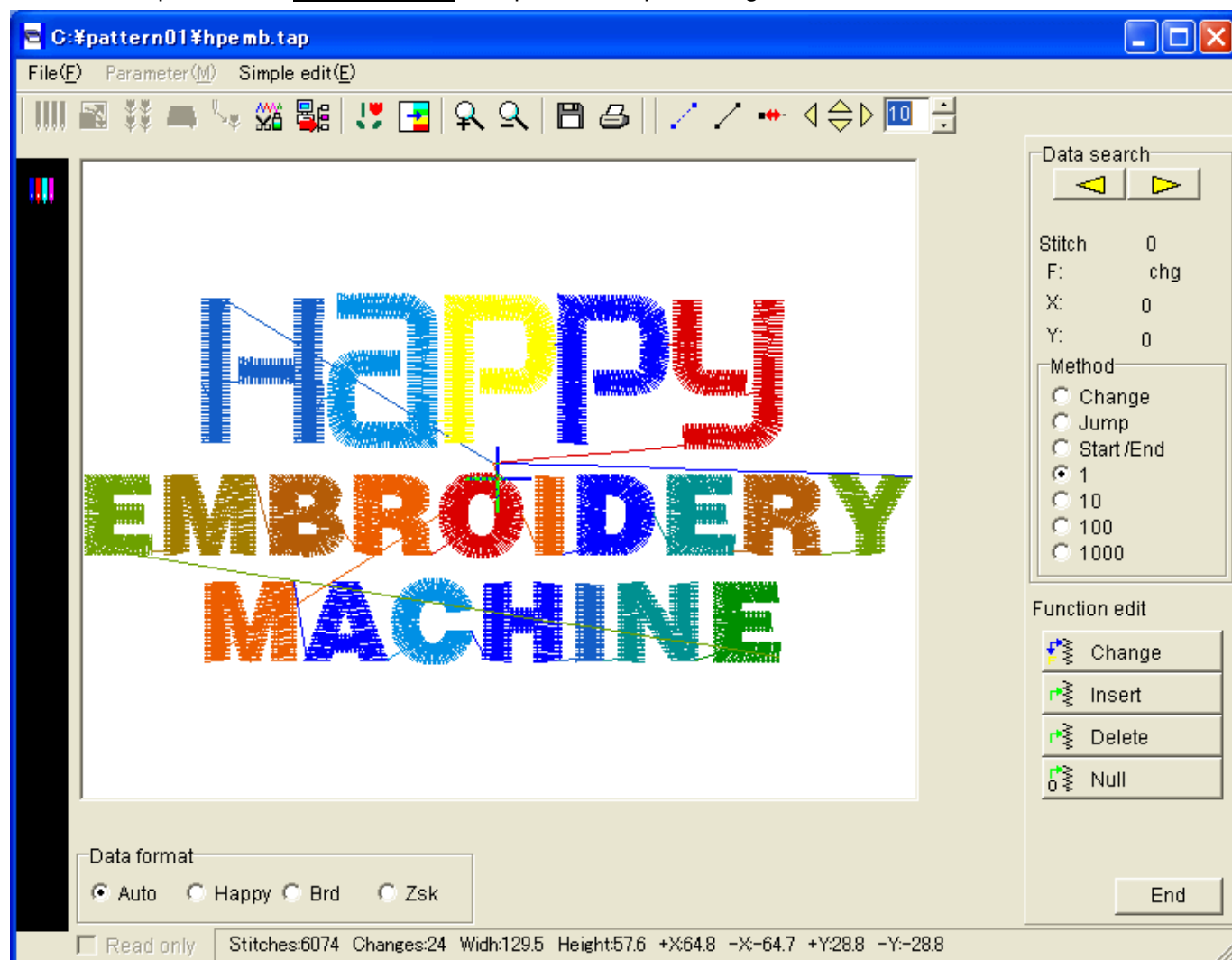
### Note:

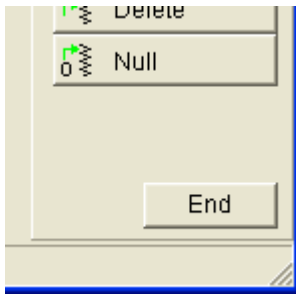
Please back up the data before the simple editing so as not to lose its original data.

You can save it with the same file name on the original data after the simple editing.

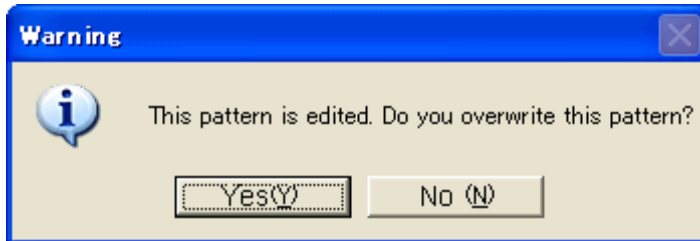


Click on "Simple edit" of "Pattern setting" to open the simple editing.





Click on this Close button and it will return to the Data sending mode .  
When you click on [Close] if you edited the file, the following message is displayed.



When you click on [Yes], the contents of the design are replaced with the edited information.  
When you click on [No], the edits are cancelled.

Simple edit has the functions below.

#### Data Search

Move to the stitch you want to edit and display the stitches (the number of stitches) and data displayed.

#### Search Method

Select the method to search stitch data.

#### Function

Allows you to add, erase, or move of the stitch of the selected pattern data and add and change the function. The design data itself will be changed here.

**Note:** Please backup the original data before the simple edit.

#### **Change stitch setting:**

You can change the current stitch to a color change, jump, end, or a normal stitch.

#### **Insert stitch:**

You can insert a color change, jump, end, or a normal stitch in front of the present stitch position.

#### **Delete:**

You can delete the present stitch.

#### **Null stitch (zero data):**

You can insert a Zero stitch.

### Cancellation of edited contents (Edit revert)

You can cancel the contents of Simple edit. The design data and the settings of [Needle selection] return to the condition before you began.

### Viewpoint

Move the design on screen using the arrow keys.



### Information of pattern

It is displayed at the bellow of main window.



### **View the selected block by color**

Only the color block of the current stitches in [simple editing] is displayed.

Select "Color change" in "Data search". The pattern displays only the color block at the position of the current when you search by  [Forward search] or  [Back search], if this button is pushed.

(Example) the pattern of the figure 1 is shown by color blocks and is shown in the figure 2, and figure 3 as bellow:

Figure 1: Normal pattern display

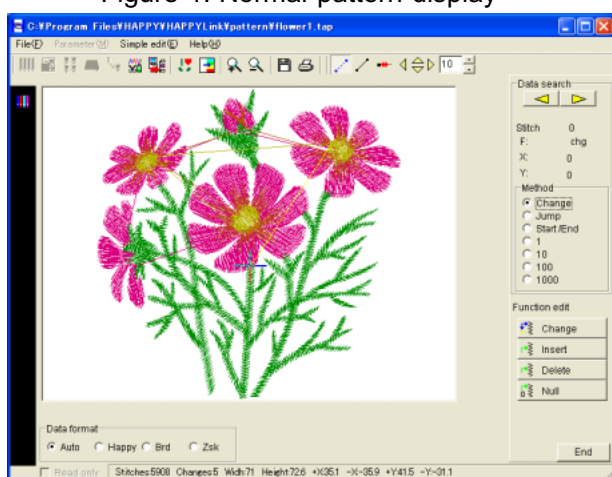


Figure 2: Display by color block (1)

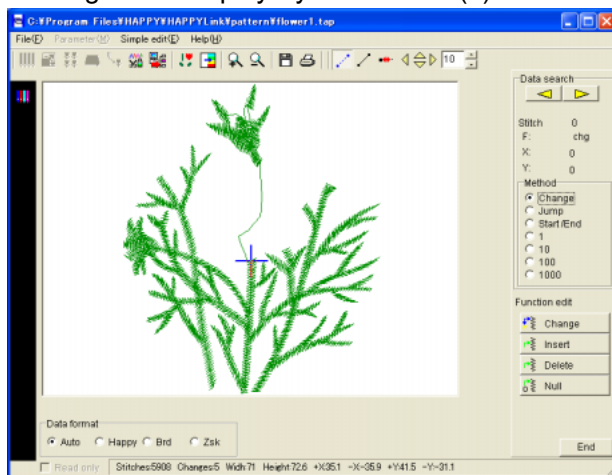
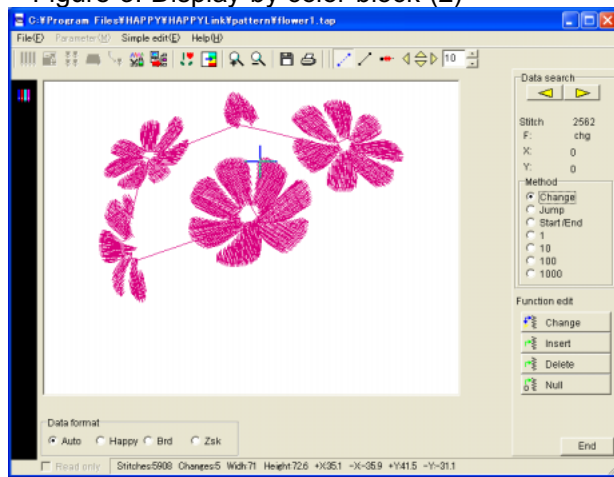
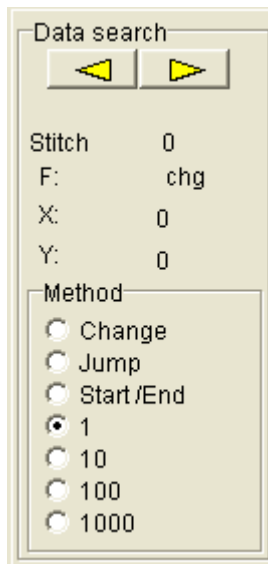


Figure 3: Display by color block (2)



## Data Search



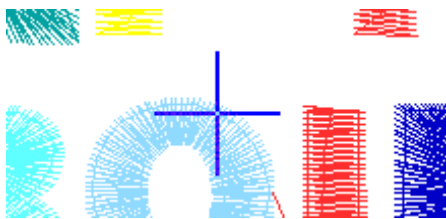
A dialog box titled "Data search" with a yellow left arrow and a yellow right arrow at the top. Below the arrows, the following fields are displayed:

Stitch	0
F:	chg
X:	0
Y:	0

Below these fields is a section titled "Method" containing a list of radio buttons:

- ☐ Change
- ☐ Jump
- ☐ Start /End
- ☒ 1
- ☐ 10
- ☐ 100
- ☐ 1000

This will move to the stitch you want to edit and have the stitches (the number of stitches) data in editing displayed. It also indicates the position of the stitches with a marker (shaped cursor).



### Stitch

Showing stitch number as selected

### F

Showing function of selected stitch

### X

Showing X movement data

### Y

Showing Y movement data

### [] **Forward search** Key

Scroll forward through stitch points.

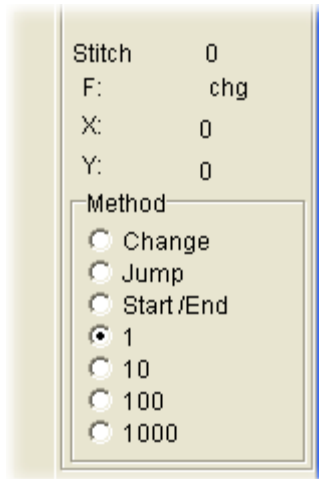
### [] **Backward search** Key

Scroll back through stitch points.

The method of searching can be selected from [Search Method].



## Search Method





Stitch 0  
F: chg  
X: 0  
Y: 0

Method

☐ Change  
☐ Jump  
☐ Start/End  
☒ 1  
☐ 10  
☐ 100  
☐ 1000



Please select how to select stitch (number of stitches) data from the following.

### Change (Color change search)

This will search color change point. Click on  forward to move to the next color change point. Click on  back to return to the previous color change point.



If the pattern has a color change function and Needle is selected, you can change the needle in embroidery.

### [Jump] search

This will search jump point. Click on  forward to move to the next jump point. Click on  back to return to the previous jump point.



Jump function will skip stitching without sewing.

### [End Point] search

This will search end point. Click on  forward to move to the end point. Click on  back to return to start point.

End point means the embroidery finishing point.



### [Move 1]

This will move 1stitch each. Click on  forward to move to 1 stitch next. Click on  back to return to 1 stitch previous.



### [Move 10]

This will move 1stitch each. Click on  forward to move to 10 stitches next. Click on  back to return to 10 stitches previous.

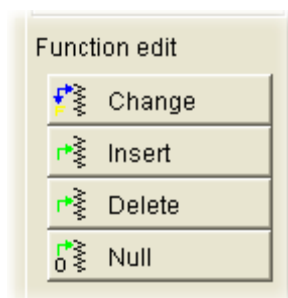
### [Move 100]

This will move 1stitch each. Click on  forward to move to 100 stitches next. Click on  back to return to 100 stitches previous.

### [Move 1000]

This will move 1stitch each. Click on  forward to move to 1000 stitches next. Click on  back to return to 1000 stitches previous.

## Function



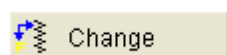
This allows you to edit the pattern data, to add, erase and move a stitch, add or change function.

### Note:

Please remember that in case you change the setting, the shape might change.

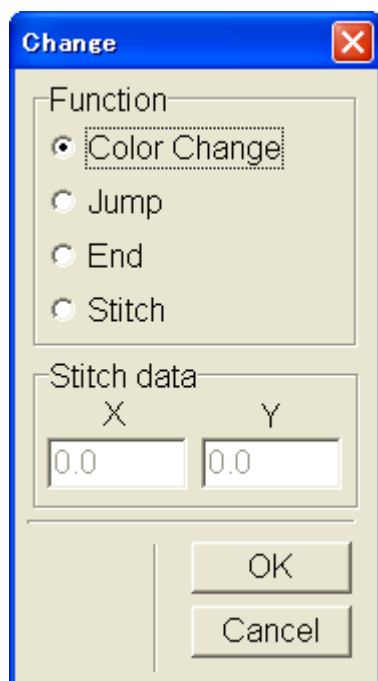
If you name this setting with the same name as the original file, it will replace the original file. Please backup the original data before editing.

During the editing, you can reset the editing. Please refer to "Cancellation of edited contents (Edit revert)".



**[Change] key**

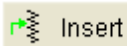
You can change stitch data and functions for selected stitches. Click on this icon to open stitch change menu.



When selecting a Jump function or Stitch, You need to input Jump or stitch length to X data , Y data of Stitch data

When selecting (Color change) or (End) function, you cannot input anything Stitch data .

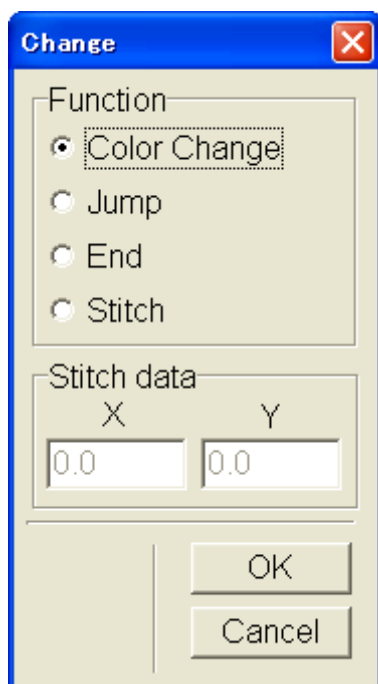
Click on [OK] to display the pattern data changed.



Insert

### [Insert] Key

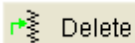
This will insert a stitch before the selected stitch point. Click on [Insert] Key to open stitch edit menu.



When selecting a Jump function or Stitch, You need to input Jump or stitch length to X data , Y data of Stitch data

When selecting (Color change) or (End) function, you cannot input anything Stitch data .

Click on [OK] to display the pattern data changed.

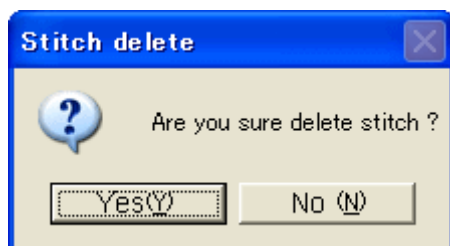


Delete

### [Delete] Key

Click on this icon to erase the selected stitch, and then a confirmation menu will open.

Click on this icon to erase the selected stitch, and then a confirmation menu will open.



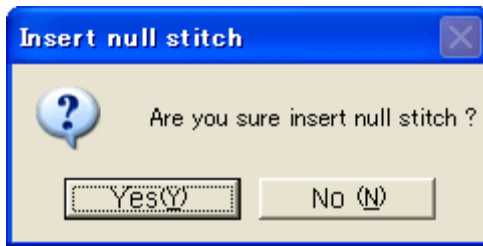
Click on [OK] to display the pattern data changed.



Null


### [Insert null stitch] Key

Click on this icon to insert a null stitch (No X, or Y movement data) before the selected stitch and the confirmation menu will open.



Click on [Yes] to carry out.

## 10. Save design data

 Save design data as HAPPY format.

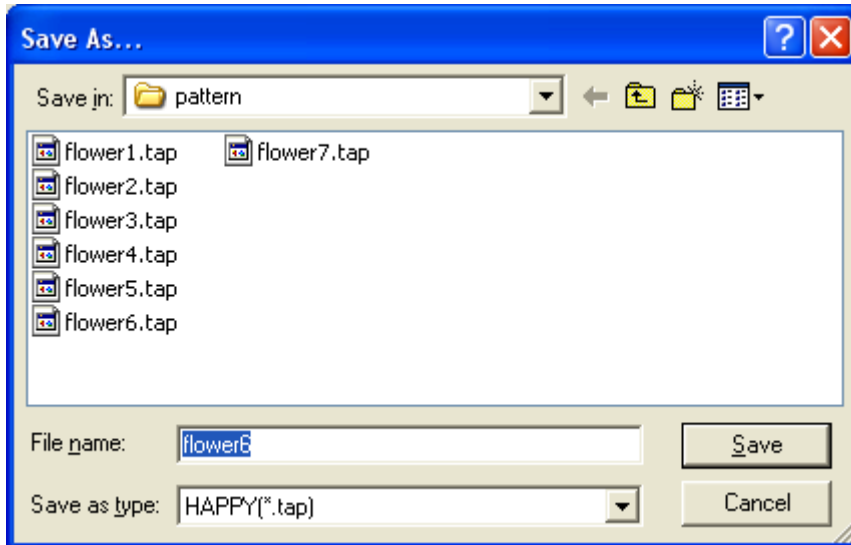
### Note:

If [Read/Write setting] of the Pattern data selecting dialogue is checked, the setting can be saved at the same time. Ex. Needle bar selection.

The pattern data of TAJIMA (DST) format is changed to that of HAPPY format and saved.

If you name this setting with the same name as the original file, it will replace the original file. **Please backup the original data before editing.**

Click on [Save design data] button to open the dialogue of file name input.

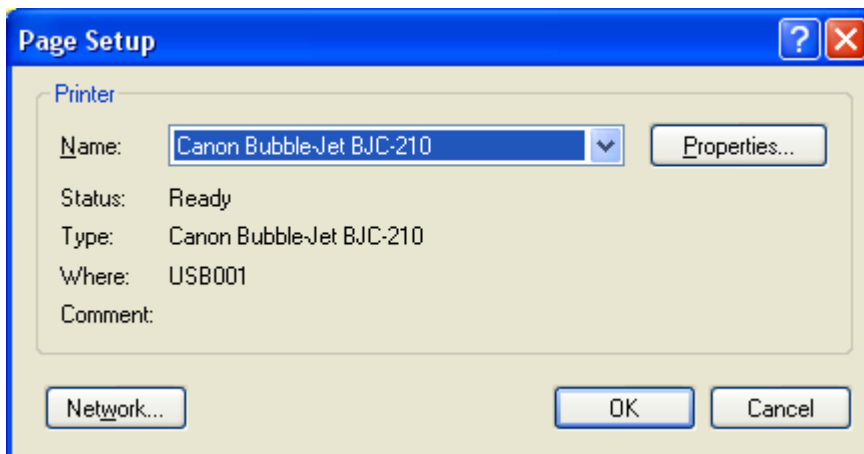


Decide the folder to save, input the file name and click on [Save] to save the pattern data.

(Pattern setting)

## 11. Print Design

You can print the currently displaying pattern by [Pattern Setting] Click on this button to open the print menu.

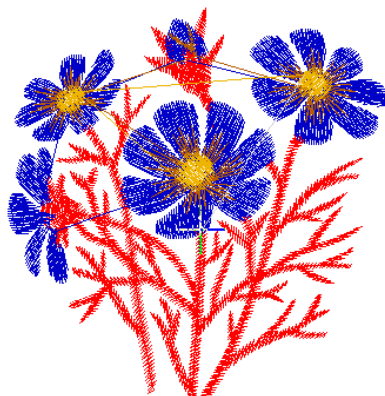


### Print contents:

1. Pattern Name
2. Number of Stitches
3. Number of Color change
4. Width
5. Height
6. Displayed color and stitch number of each color change
7. Pattern

Example of print is showed as bellow:

Name	:	flower01.tap	0
Stitches	:	5908	2562
Changes	:	5	5442
Width	:	71.0	6730
Height	:	72.6	5903

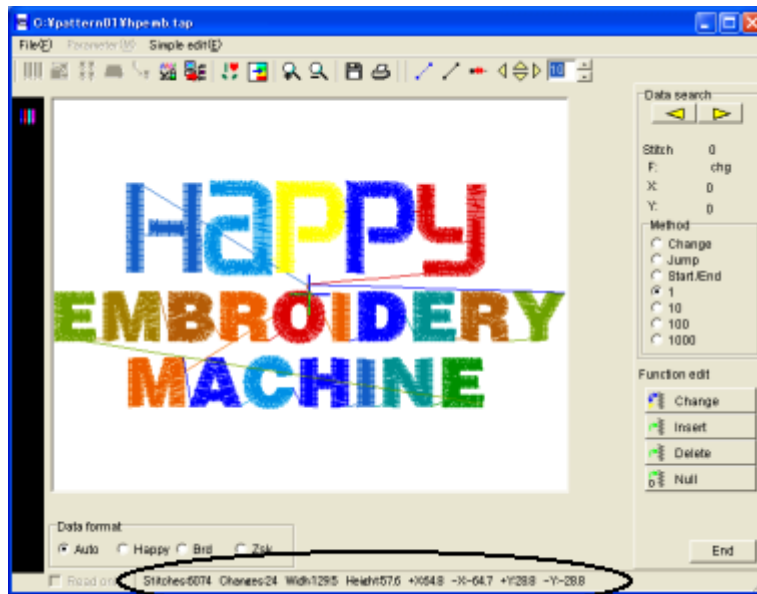


### Note:

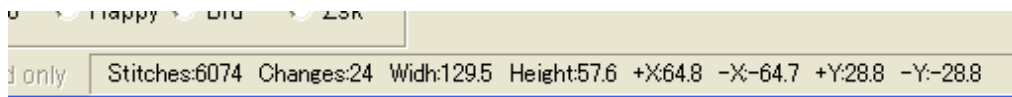
Click on [Print Setting] at [File] in menu bar to enable you to do setting in detail.

The display of Print Menu and Driver property is different by the type of printer driver used in your PC.

## 12. Pattern Information



This is displayed at the bottom of the dialogue.



**Stitches** Number of stitches

**Changes** Number of color changes

**Width** Width of pattern (x)

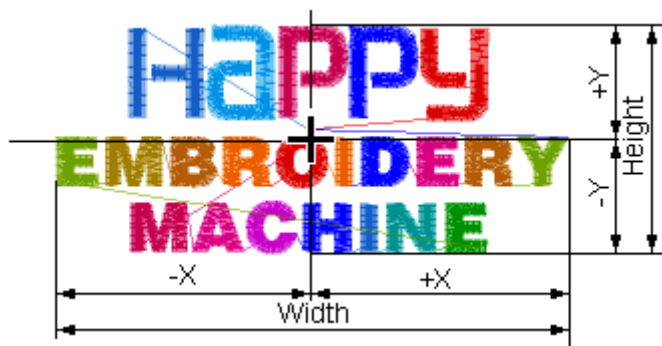
**Height** Height of pattern (y)

**+X** Maximum distance to X+ direction from the start point as a original point

**-X** Maximum distance to X- direction from the start point as a original point

**+Y** Maximum distance to Y+ direction from the start point as a original point

**-Y** Maximum distance to X- direction from the start point as a original point

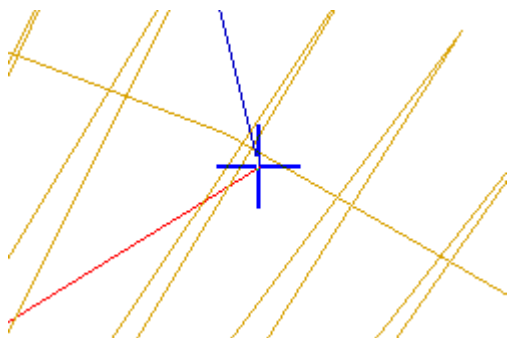


### 13. Zoom in, out

When you click on this button, the pattern in the display will be enlarged or reduced. A marker will indicate the center.

(This function only affects the view, not your design.)

Zoom in



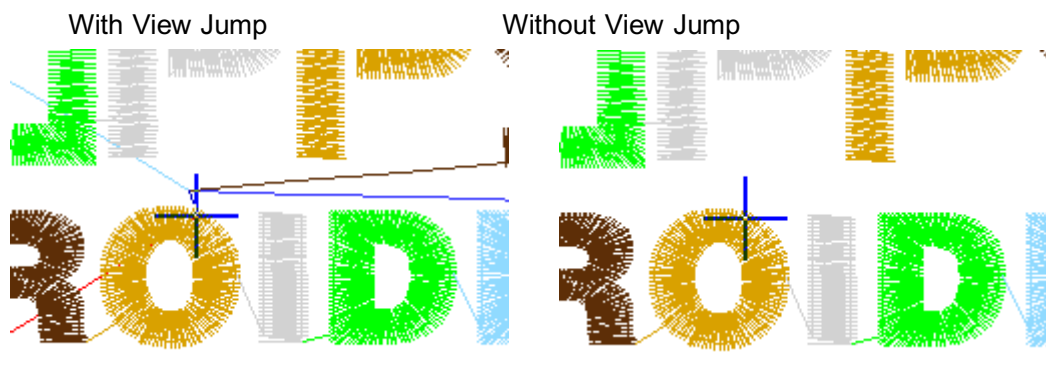
Zoom out



### 14. View Jump

View every jump in the design.

When you wish to remove the jumps from the display, please click on it again.





## 15. Viewpoint



Changes view of the design.

You can move the viewpoint by using the direction key.



**[To right] Key**

Click on this key to change viewpoint to right side.



**[To left] Key**

Click on this key to change viewpoint to left side.



**[To upper] Key**

Click on this key to change viewpoint to upper side.



**[To lower] key**

Click on this key to change viewpoint to lower side.



**Moving amount**

You can change the step of the direction key.

You can change it by using the up and down keys, or put in the number from your keyboard.

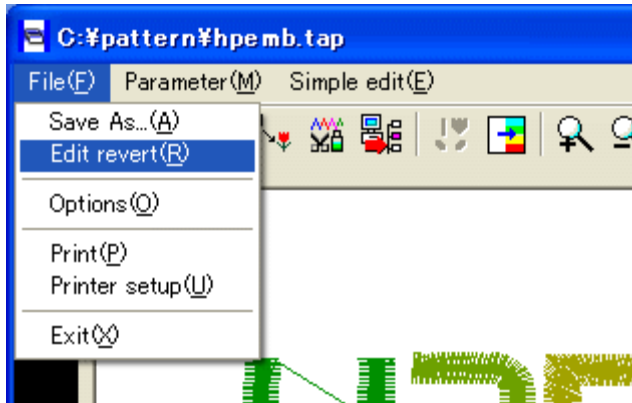
If you increase the number a lot, you might not be able to see the pattern because the pattern has shifted out of the window.

## 16.Cancel of edited contents (Edit revert)

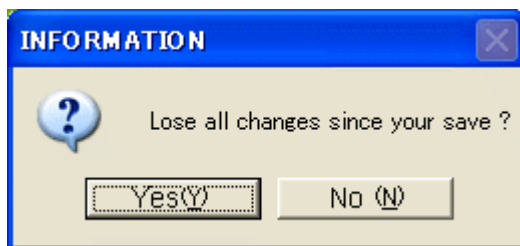
You can cancel the [Simple Edit]. The design data and the setting of [Needle selection] return to the condition just before you changed them.

### Note:

If you saved the file you edited during the [Edit revert], you cannot use [Edit revert]. And, if you edit something, you can use this function again. In this case, the pattern data and the setting of [Needle selection] return to the condition of the last save.



When you click on [File] —[Edit Revert] in the menu, the message [Lose all changes since your save?] is displayed.



When you click on [Yes], the edited contents are cancelled and the contents will return to those before editing.

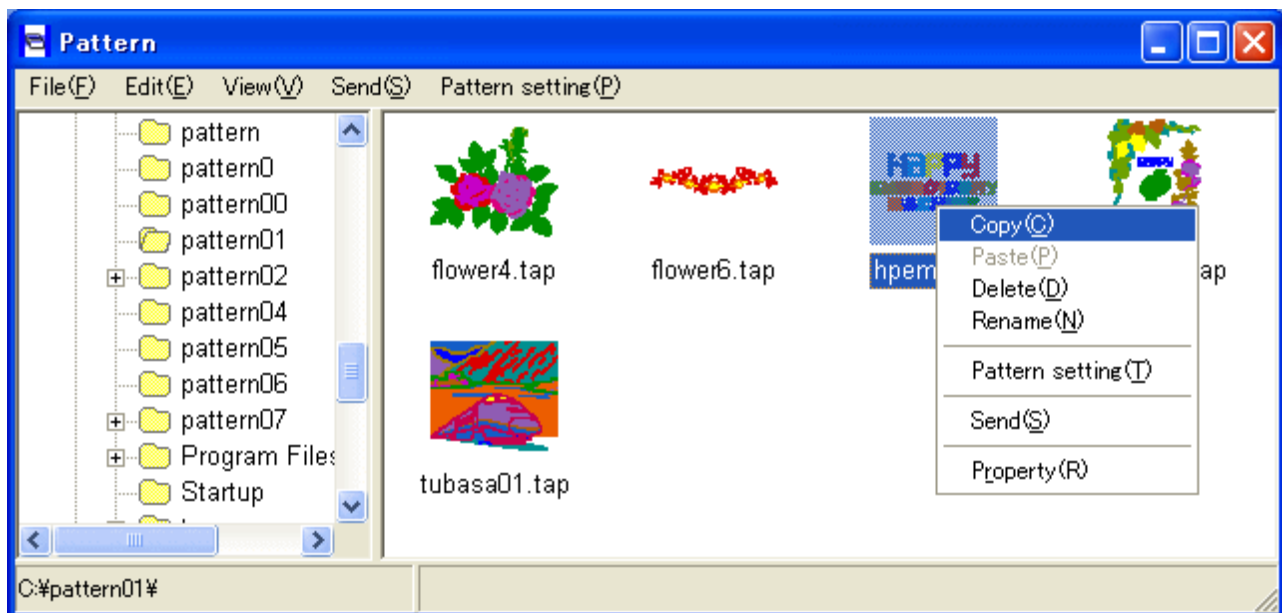


The indicator that indicated contents being edited goes off.

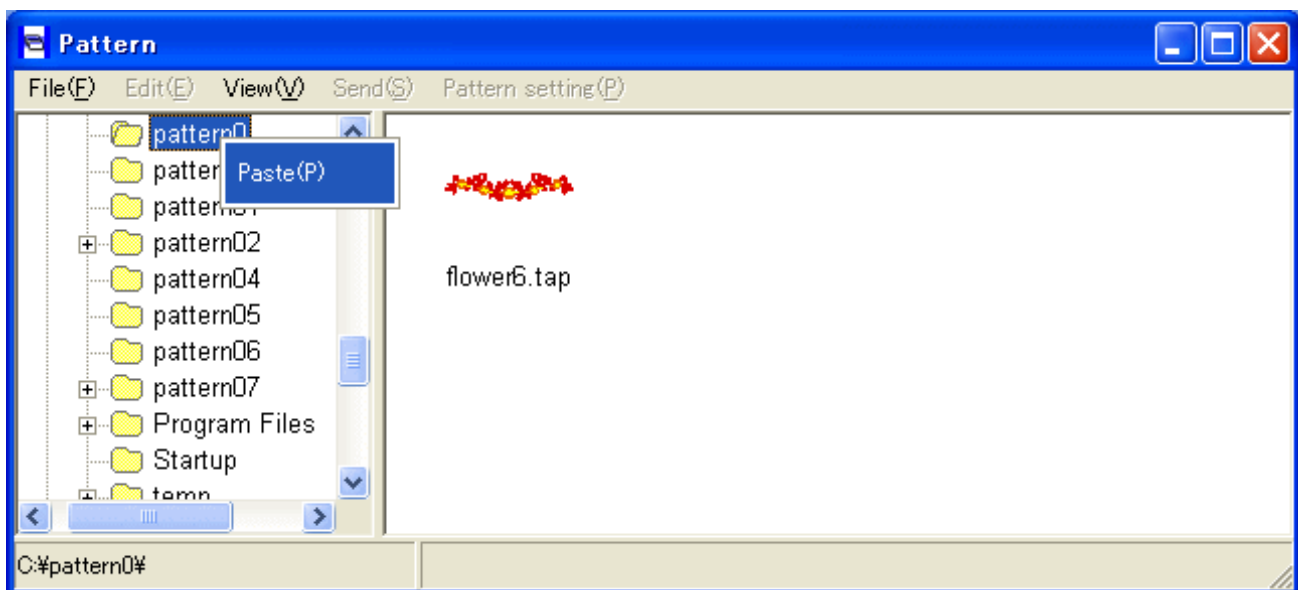
## Pattern copy, delete and Change pattern name

### Pattern Copy

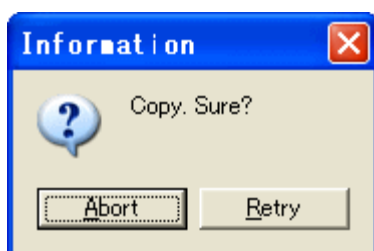
At Pattern Select Window, select a pattern and right click and click on [Copy] in sub menu.



When you select the folder to which the pattern data is to be copied and right click on, [Paste] will display. When you click on this, the confirmation menu will open.

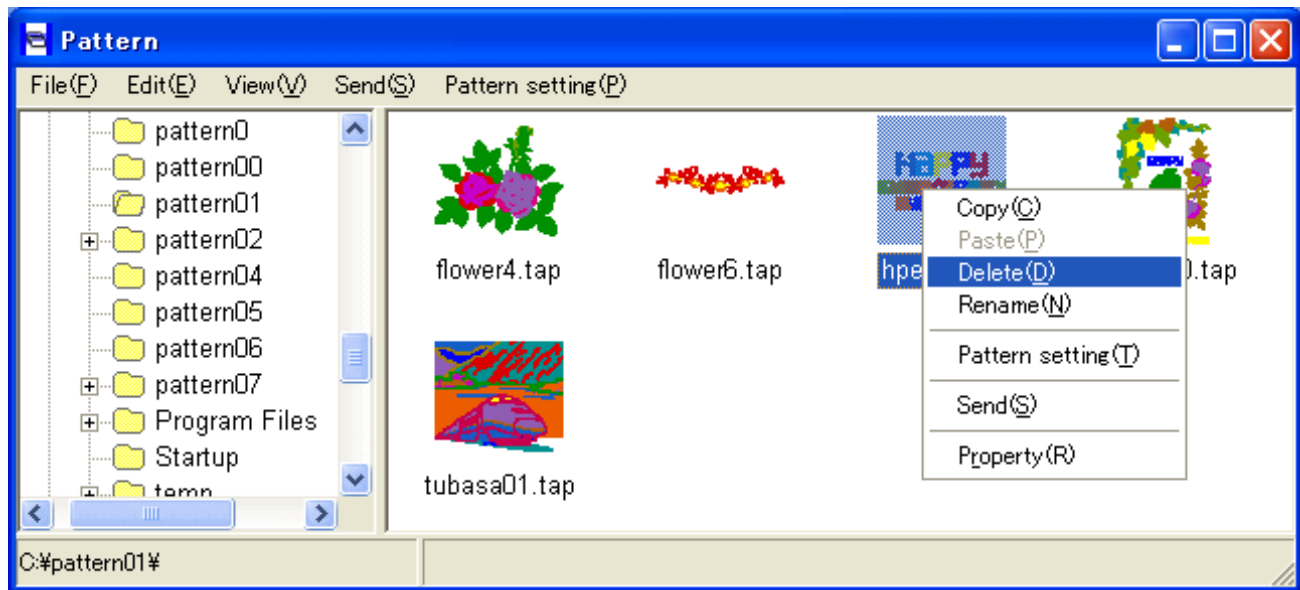


Click on [Yes] to copy.

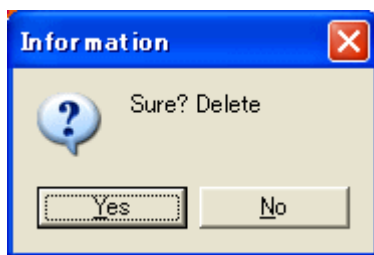


## Pattern Delete

Select a pattern and right click at Pattern select window.  
Click on [Delete] of submenu.



Confirmation message will open.



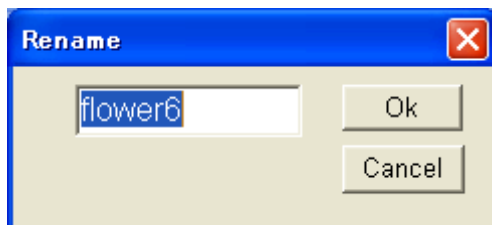
Click on "Yes" to delete the pattern.

## Change Pattern Name

Select a pattern and right click at Screen of Pattern Selection.  
Click on [Change name] of submenu.

Input form is open.

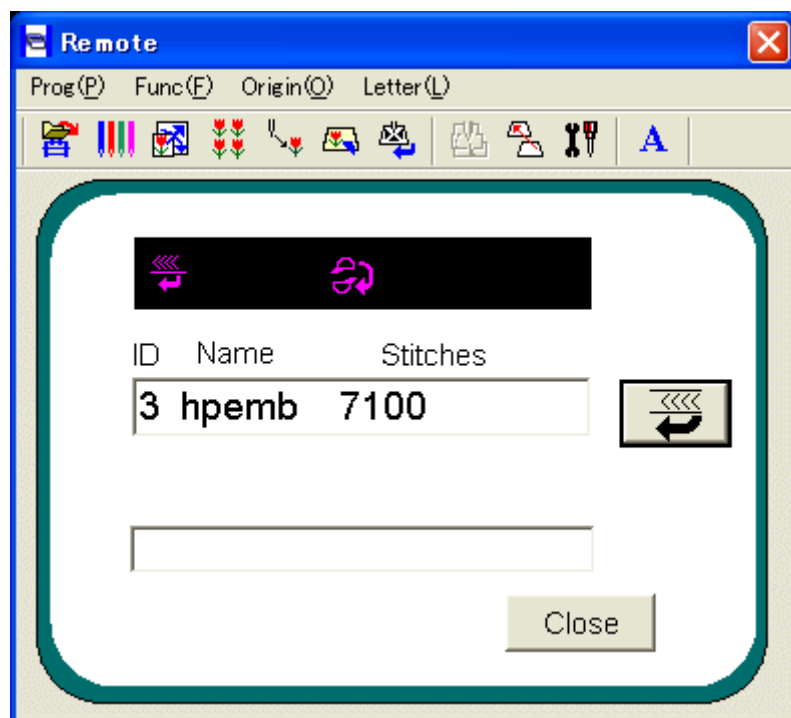
Input a pattern name and click on [OK]. Number of characters to be input is limited to 8.





## Change of machine setting (Operation mode)

An Operation mode window opens when it clicks on  of the watch window.



### Items of Machine setting

Change of setting that connected with machine are following listed items and functions.

- Pattern selection
- Needle selection
- Adjust
- Repeat
- Offset
- Frame out
- Auto origin setting
- Locate\*
- Direct
- Create
- Letter

(\*This function may not be used depending on Model.)



#### Pattern selection

For selecting, deleting or renaming a pattern that is saved in the embroidery machine's memory.



### Needle selection

For setting the order in which the needles will be sewn.



### Adjust

For editing the scaling, rotation, stitch width adjustment, and coordinate changes in the design.



### Repeat

For repeat sewing of the same pattern.



### Offset

Allows you to set the machine to have a starting position in which the frame may be located offset from the actual position that stitching will begin. This can allow for easy loading of the frame into the machine.



### Frame out

This allows you to have the frame move out from under the needles after a certain color / needle has finished sewing. This will allow for trimming or the application of an applique .



### Auto origin setting

When the design is completely finished the frame returns to its original starting position automatically instead of remaining at the last stitch of the design.



Locate (This button is gray color and you cannot use this function, when the embroidery machine does not have this ability.)

If the power source of the embroidery machine is shut off, and you changed the drive frame position; or the machine stopped due to a power outage while sewing, this function enables you to move the drive frame back to the previous position after turning the power back on.



### Direct

Move directly to a stitch or color change point or repeat number in the design.



### Create

For the basic setup of an embroidery machine.



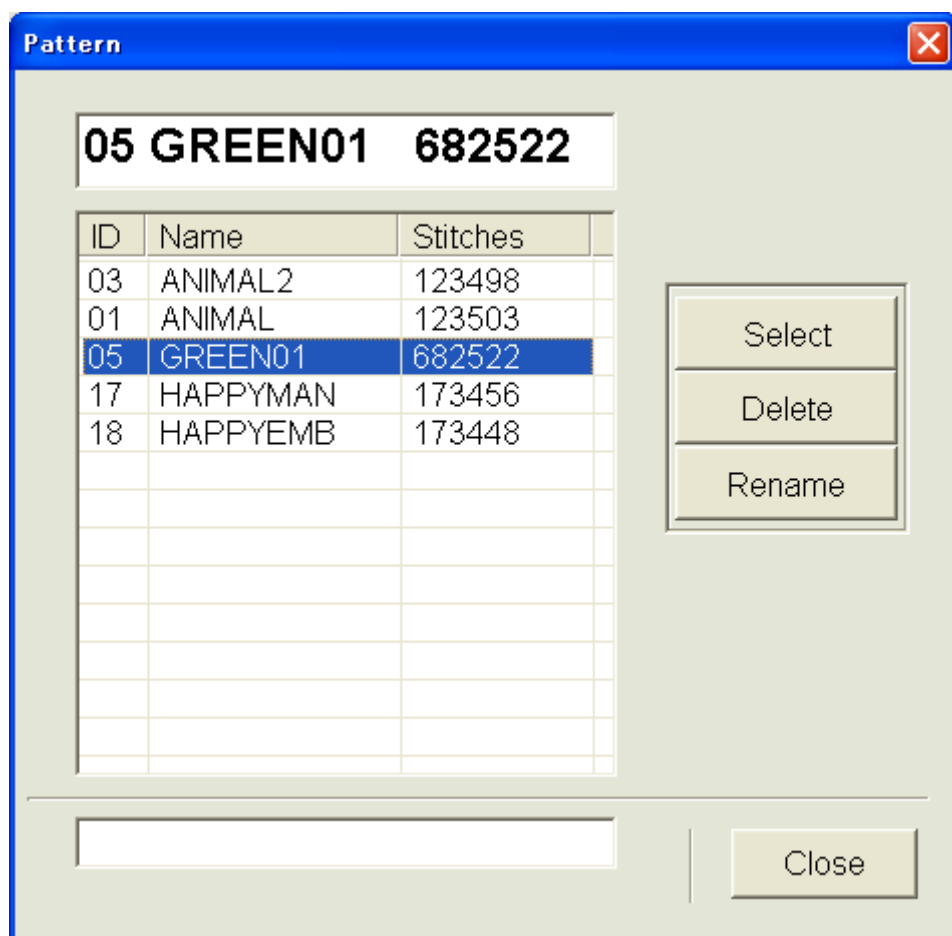
### Letter

Selecting letters from internal fonts in the embroidery machine and stitching them.

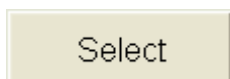


## Pattern selection (Pattern)

When you click on the Pattern control button, the pattern control dialogue is displayed. The current pattern selected in the embroidery machine is displayed in Bold in the top of the window.

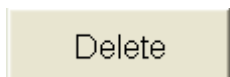


Function:



### Selection of pattern

Select a pattern ID. Click on the ID number, and click on Select.



### Deletion of pattern

Deleting the pattern from the machines memory. Click on the ID number, and click on Delete.

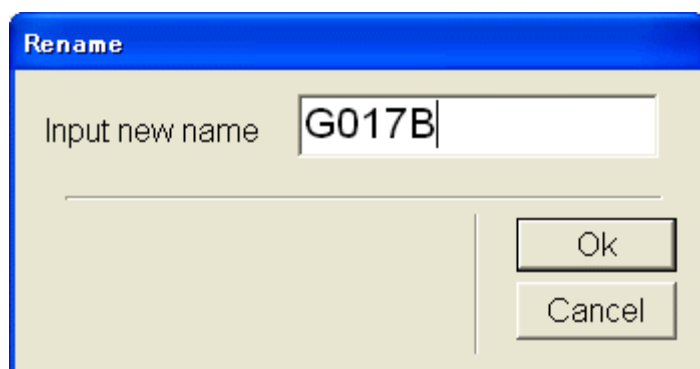
**Note:** The message of Sure? is displayed. Click on [Yes] to delete.

Rename

### **Renaming a pattern**

Entry form of new pattern name will be displayed. Type a new name not to exceed eight letters.

Click on **OK** after the entry.



A screenshot of a 'Rename' dialog box. The dialog has a blue title bar with the word 'Rename' in white. The main area has a light beige background. On the left, the text 'Input new name' is followed by a text input field containing 'G017B'. Below the input field is a horizontal line. To the right of the input field are two buttons: 'Ok' and 'Cancel'.



## Needle (Needle selection)

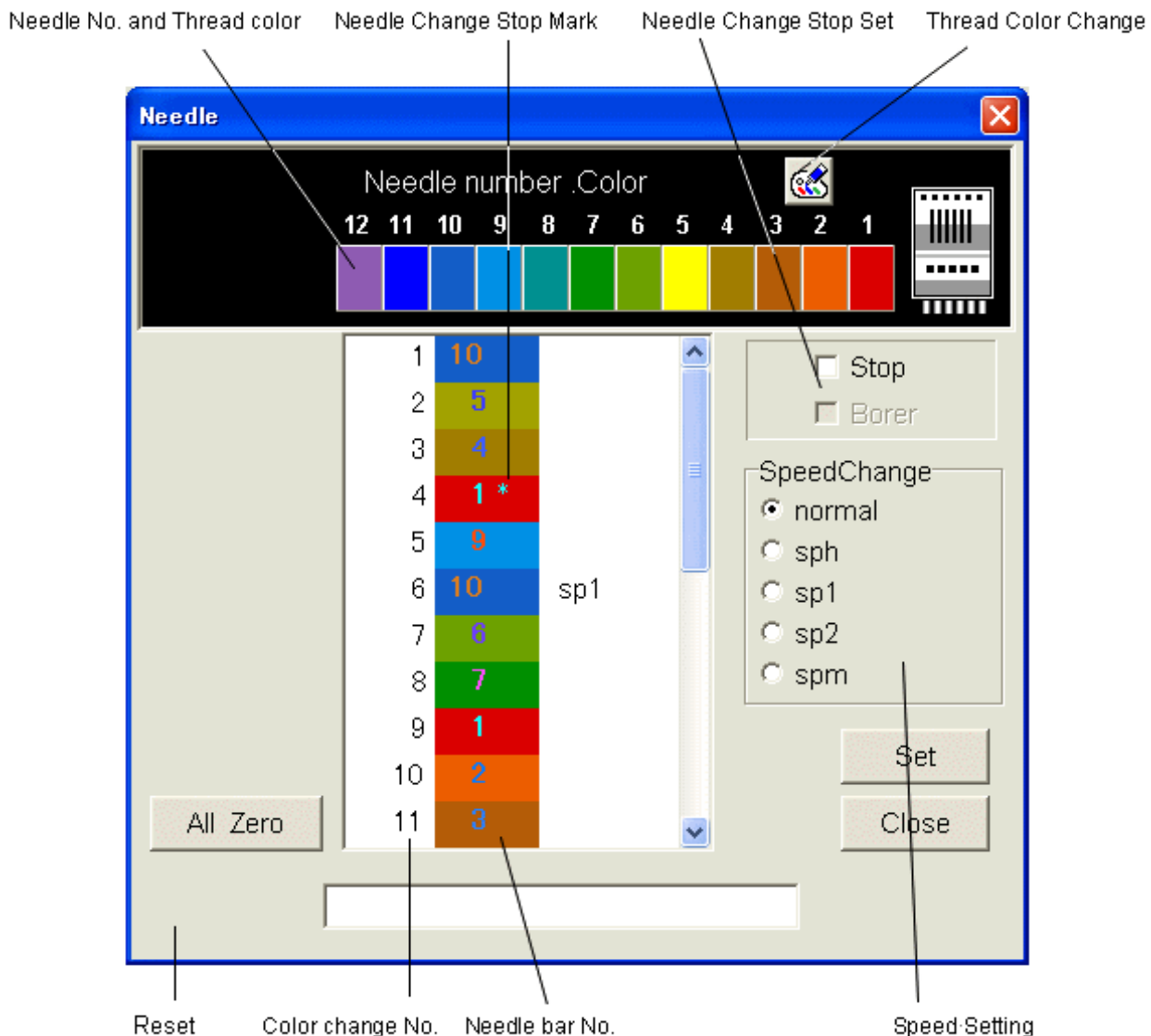
Designate the order of needles to be used for embroidering.

Set the needle for every color change of the pattern.

Set the stop command at color change. Machine will stop at color change.

If you change the number of the needle bar after having set a color change stop, the color change stop will go off. You will then need to reset it.

You can set the sewing speed at the color change.



### How to select:

1. Select color change number.
2. Select the color you desire from the number of the needle bars above. Please repeat this process for every color change number.  
Please check **Stop** and/or **Borer** if you wish to use these functions. (Only embroidery machines that have Borers can use this function.)
3. Click on the **Set** button.

## Stop

If you check the stop box after you selected the needle, an asterisk [\*] will be displayed on the right side of the needle bar and a color change stop will be set.

The sewing continues to the end of the color and then stops.

Push the start button on the embroidery machine to restart.

## Borer

If you check this mark, you will have a [B] symbol on the right side of the needle number. (If you use this function, you will need to install your boring device on the machine.) Please refer to [Options].

## Alteration of speed

You can set a sewing speed at each color change. When you check it, the speed you set is shown.

**Normal** Normal speed

**sph** Cancellation of speed limit

**sp1** Setting of speed limit at about 700rpm (different by machine model)

**sp2** Setting of speed limit at about 600rpm (different by machine model)

**spm** Setting of speed limit at about 300rpm (different by machine model)

## Reset

Resets all of the needle numbers to 0 for color changes.

Other settings (stop etc.) will go off also.

## Set

Puts the needle setup you selected into effect for the machine.


## Close

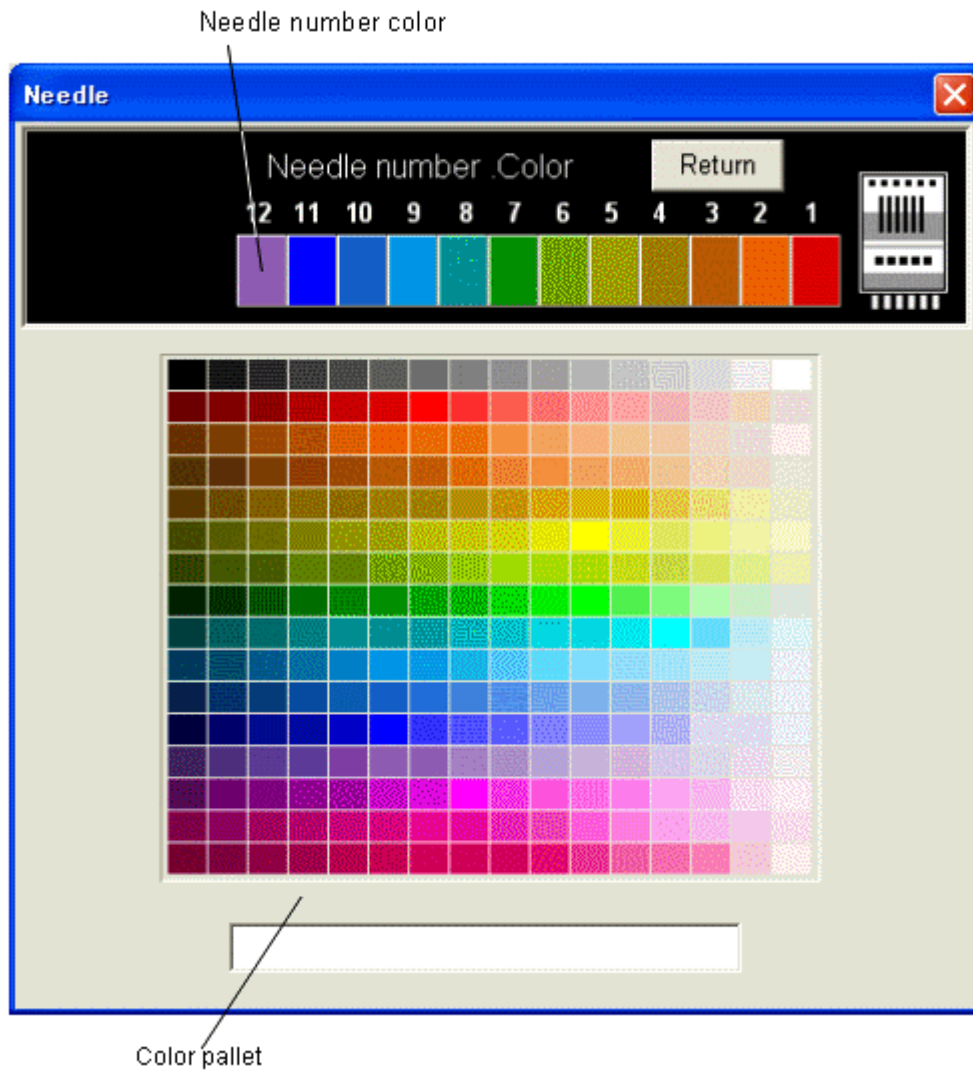
Close needle selection window your Settings are not applied.

## Change Thread color

You use this button for the Thread color change menu. You can change the display color that will represent each thread color.

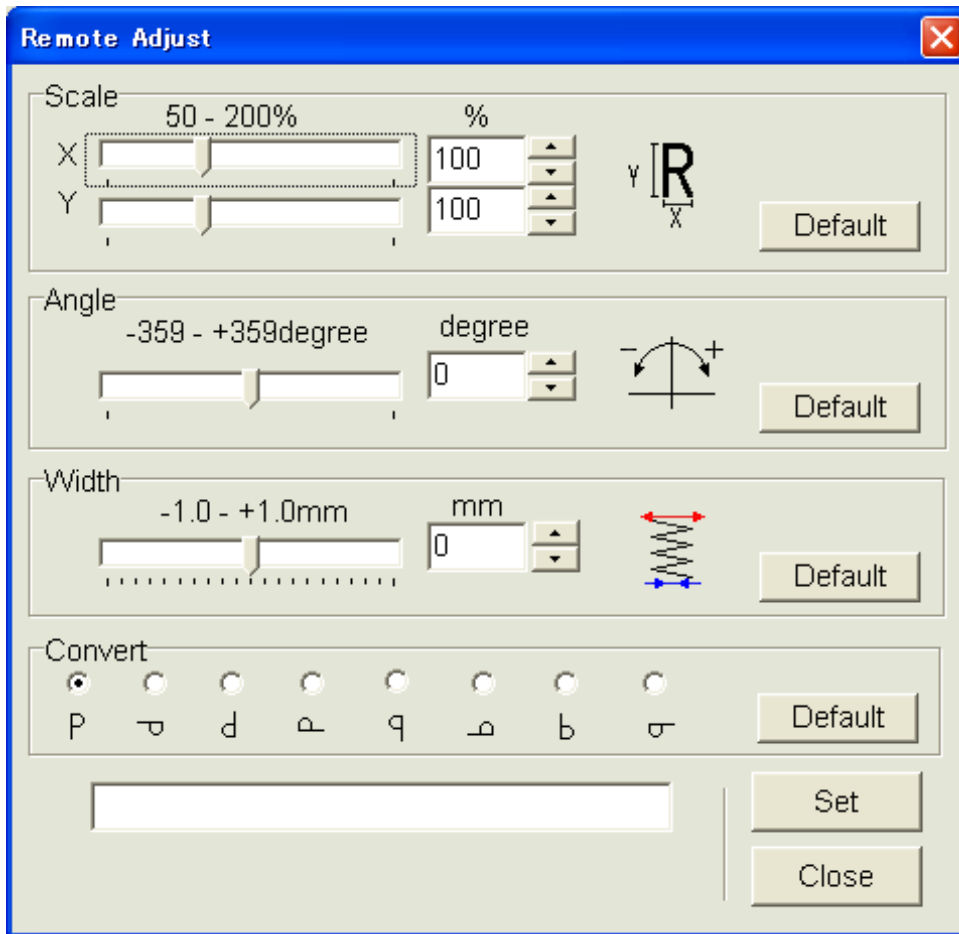
## How to change Thread color

1. Click on the  Change Thread color button to open a Thread color change menu.
2. Select and click on the needle you wish to change the color of.
3. Select from the color pallet, this will change the needle color.
4. Click on **Return** to apply your setting.



## Adjust

Used to set (Scale), (Angle), (Width), and (Convert). Click on the Adjust button, the adjustment menu will open.



The 'Remote Adjust' dialog box is divided into four main sections: Scale, Angle, Width, and Convert. Each section has a range indicator, a unit, a numerical input field, a direction icon, and a 'Default' button. The Scale section shows '50 - 200%' for X and Y axes with a '100' value and a 'Default' button. The Angle section shows '-359 - +359degree' with a '0' value and a 'Default' button. The Width section shows '-1.0 - +1.0mm' with a '0' value and a 'Default' button. The Convert section has eight radio buttons labeled P, R, d, A, q, P, b, and S, with a 'Default' button. At the bottom, there is a large empty text box, a 'Set' button, and a 'Close' button.

You can change the above items in the following ways:

1. Drag the Scrollbar.
2. Input data from your keyboard to the number box.
3. Click on Up/Down button by your mouse.

If you use Convert just click on a direction to rotate and/or mirror the design.

After you have finished inputting and click on [set], these functions will be set in the embroidery machine.

**NOTE:** When you sew after having set the stitch width, it is possible that an error could occur at the final point. If this occurs, please return the stitch width setting to 0.0 .

### [Function and adjustment]

#### Scale

The machine scales in X and Y directions for every 1% proportionately.

Scale adjust X side (Scale X) 50~200 %, Original size: 100 %

Scale adjust Y side (Scale Y) 50~200 %, Original size: 100 %

#### Angle

With the start point of the pattern as a pivot point, the design changes angle in 1-degree increments.

Angle: -359~359 degree, Original size: 0 degree

**Width**

The machine adjusts satin stitch width in a design within range of —4.0~1.0mm in increments of 0.1 mm.

Width -1.0~1.0mm

**Convert**

Using the start point of the pattern as a pivot point, the design changes angles in 90-degree increments and it mirrors the design too.

8 patterns can be set with reference to "P".



## Repeat

You can repeat the same design in the X and Y direction automatically. If you click on the repeat button, the Repeat menu will open.

**Remote Repeat**

Piece 1 - 30piece

X

Y

Y R R R R X R R R R Default

Space -999.9 - +999.9mm mm

X

Y

Y R R R R X R R R R Default

Priority

☒ X ☐ Y

Y R R R R X R R R R Default

You set the number of pieces for the X and Y direction, and the space between each design, and the Priority on the start direction.

You can change the above items in the following ways:

1. Drag the Scrollbar.
2. Input data from your keyboard into the number box.
3. Click on the Up/Down button by your mouse.

After you have finished click on [Set] to load this function into the embroidery machine.

### [Function and adjustment]

#### Piece

Set the number of pieces in the X and Y direction.

Pieces: X 1~30 pieces

Pieces: Y 1~30 pieces

#### Space

This sets X and Y distances between the start points of each pattern, when repeat are used. When a positive value is input, the machine sets each repeat toward the right or upward. If a negative value is used it will move to the left or downward.

Space: X -999.9~999.9mm

Space: Y -999.9~999.9mm

## **Priority**

When sewing more than 2 pieces in the X or Y direction, a priority must be set to determine which piece to start first.

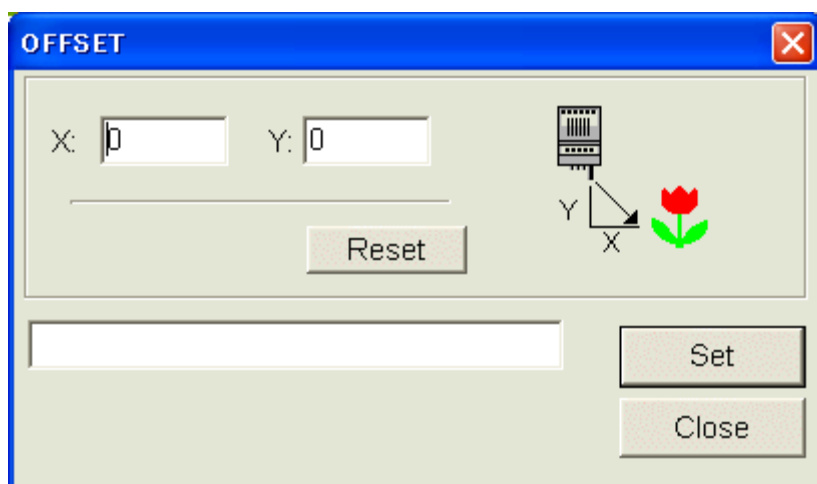
Priority: X - Left/Right, Y - Top/Bottom

X direction: horizontal direction is the first priority, and vertical direction will be the second.

Y direction: vertical direction is the first priority, and horizontal direction will be the second.

## Offset

The embroidery machine will start sewing after the drive frame is moved from a position where the offset is designated to the start point of the pattern. When you click on the offset button, the Offset Menu will open.

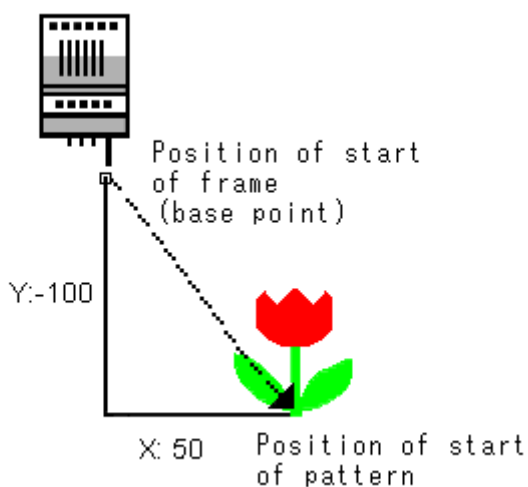


Please input numbers from keyboard.

Please set move distance to start point of pattern with start point of the drive frame as base point.

### How to set offset

Example)

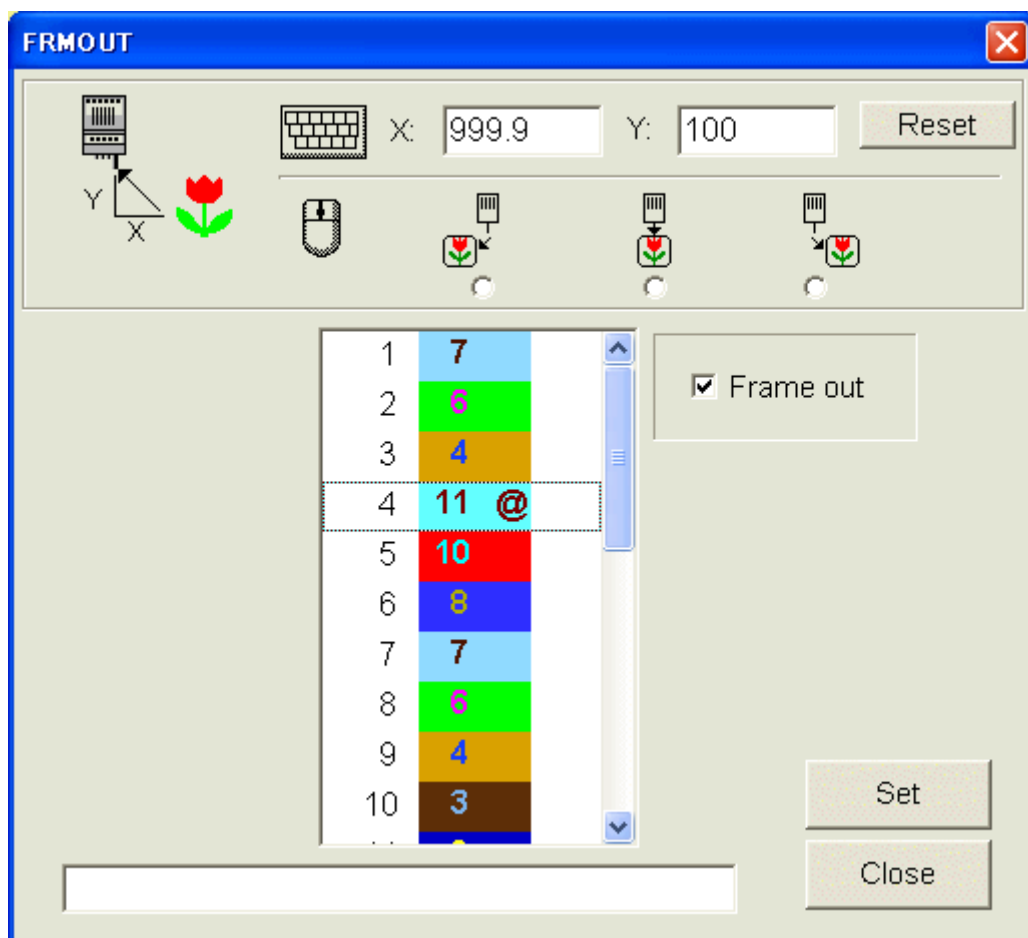


1. Please input X: 50, Y: -100.
2. After you have finished entering the numbers and click on [Set], this function will be set in the embroidery machine.



## Frame out

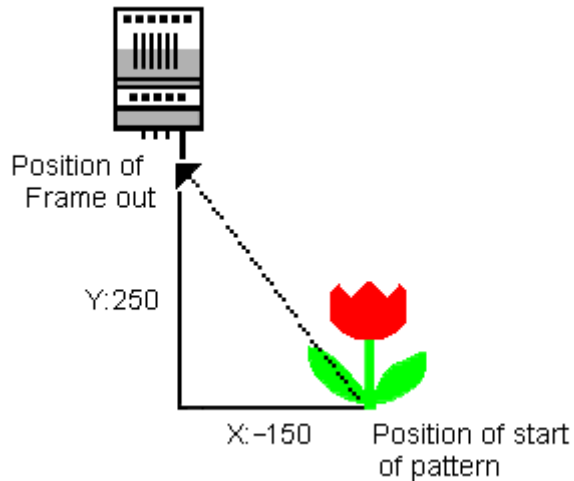
After you have sewn a designated color in the pattern, the drive frame will automatically move to a frame out position to stop. When you restart it, the frame will move to the normal position and continue to work.



Input the frame out distance from the keyboard. Next you select a color change number and click on [Frame out]. The @ symbol will appear on the right side of the needle number. With the start Point of the pattern as the base point, please set the move distance to the frame out position.

## How to set frame out

### Example1

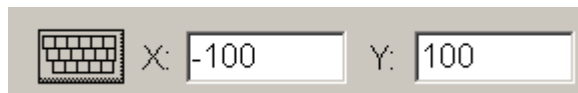


1. Please input X: -150, Y: 250.
2. Click on the color change number you want set to make the frame out.
3. Click on [Frame out]. When this function is set, an @ mark will be added to the needle bar number.
4. When you click on [Set], this function will be set in the embroidery machine.

### Example 2. easy setting cautions [ of an input ]: -- it is necessary to perform the clauses 2-4 of Example 1 after a setup



A check of a check button sets up the regular value.



.X:100 out of which a frame comes to this side left-hand side, and Y:100 are set up at the time of a frame-out.



.X:0 out of which a frame comes to the front, and Y:100 are set up at the time of a frame-out.



.X:-100 out of which a frame comes to this side right-hand side, and Y:100 are set up at the time of a frame-out.

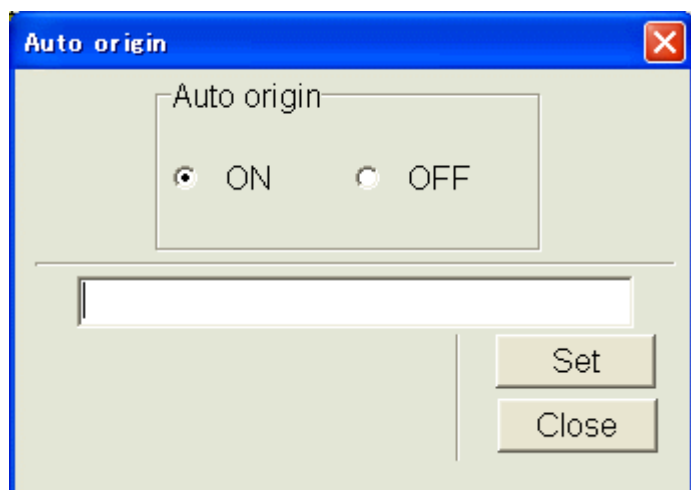
## Auto origin setting

ON: If you select ON, the frame returns to its original position automatically after the sewing is finished.

OFF If you select OFF, the frame will not return to its original position after the sewing is finished.

Function will be set with click on SET .

**Note:** When offset is set, this will return to offset position.



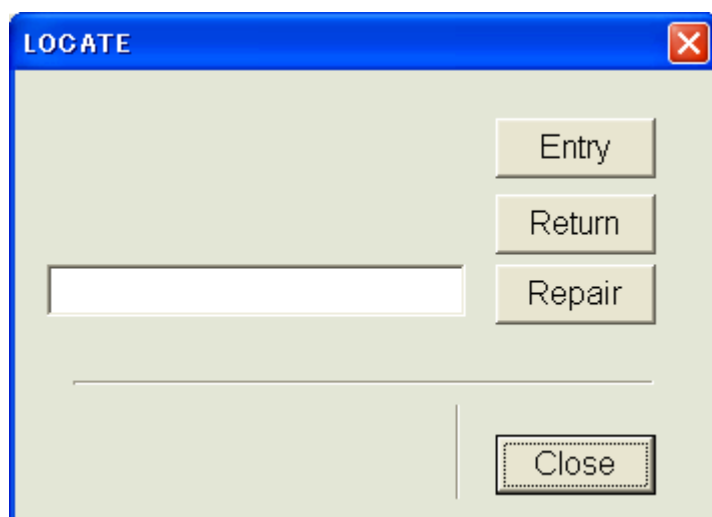
## **Locate**

**Note:** This function may not be used depending on Model.

(This button is gray color and you cannot use this function, when the embroidery machine does not have this ability. HCS machine does not have this ability.)

If the power source of the embroidery machine is shut off, and you changed the drive frame position; or the machine stopped due to a power outage while sewing, this function enables you to move the drive frame back to the previous position after turning the power back on.

When you click on drive frame position button, the Locate menu set scene is shown.



Please input the frame position by pattern and store it with the design in memory.

**Caution:** DO NOT USE THIS FEATURE WITH CAP DRIVERS ON THE MACHINE.

### **[Entry]:**

This is function to register original point of the present pattern.

#### 1. Preparation of the embroidery machine:

Please determine position of original point before making registration.

- a) Please move the drive frame back to original point with the original button.
- b) Push Shift and 0 the machine to set the origin point.

#### 2. Click on [Entry] icon. (Message: As CAUTION! (Move frame) appears, Click on [OK].)

#### 3. Be sure the frame path is clear. Then push the [Start] button on the machine. (The drive frame will move to this side to the right and return to previous position to finish registration.)

**[Return to Origin]:** Now if you have a power failure. You can return to the origin point with Return to ORIGIN

#### 1. Preparation of the embroidery machine:

Before turning the machine on, be sure the main shaft position is on C - Point. In addition, please

turn power of the embroidery machine on and press thread cut button to cut threads.

#### 2. First, click on [Return to Origin] button. (Message: CAUTION! (Move frame) appears, Click on [OK].)

#### 3. Be sure the frame path is clear, and then push [Start] button on the machine. (After the drive frame moved to this side to the right, Frame will move automatically and return to origin point.)

**[Repair]:**

Now if you have a power failure, you will be able to return to the previous stitch sewn.

1. Preparation of the embroidery machine:

Before turning the machine on, be sure the main shaft is on C-point . And, please turn power of the embroidery machine on and press thread cut button to cut thread.

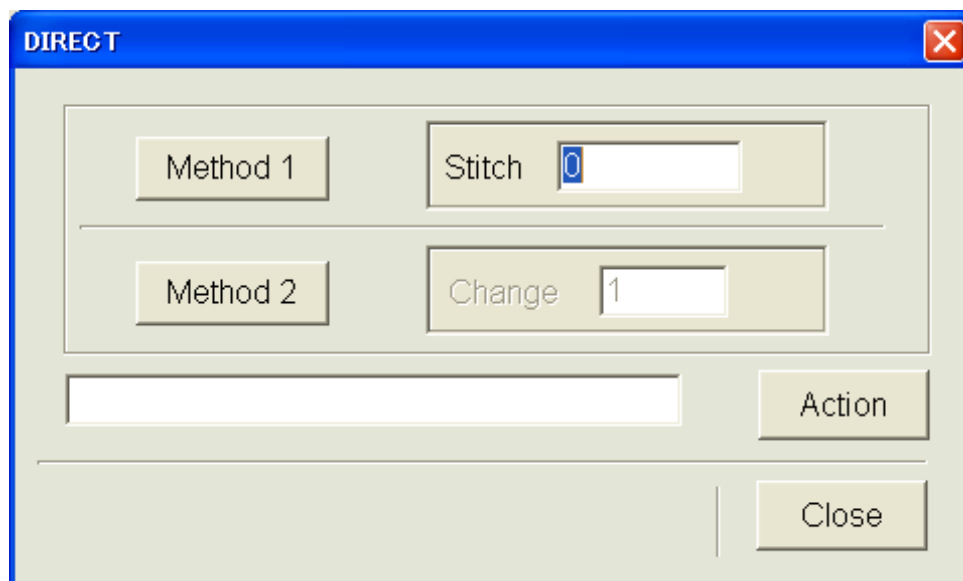
2. Click on the [Repair] icon. (Message: CAUTION! (Move frame) appears, Click on [OK].)

3. Be Be sure the frame path is clear, and then push [Start] button on the machine.

(After the drive frame moved to this side to the right, the frame will automatically move to the last stitch sewn.)

## Direct

This function moves the frame to the position, which is a stitch number or a color change number.



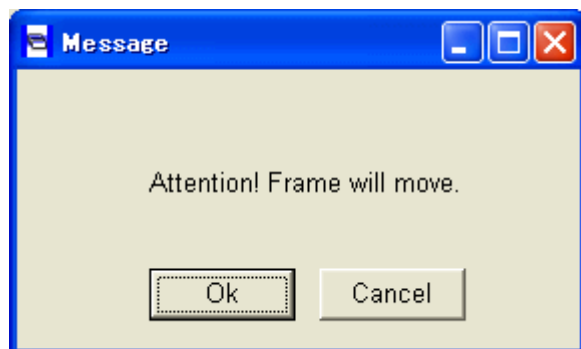
Select with button of either Method 1 or Method 2.

Method 1, By pointing out the number of stitch, the machine will move the frame to that position.

Method 2, By pointing out the color change, the machine will move the frame to that position.

Input the number from your keyboard in either way. After that, Click on the Action .

The message of Attention. Frame will move. is displayed. Be careful, as the frame will move after clicking on [OK].



### **Note:**

There is no setting by the repetition number.

## Create

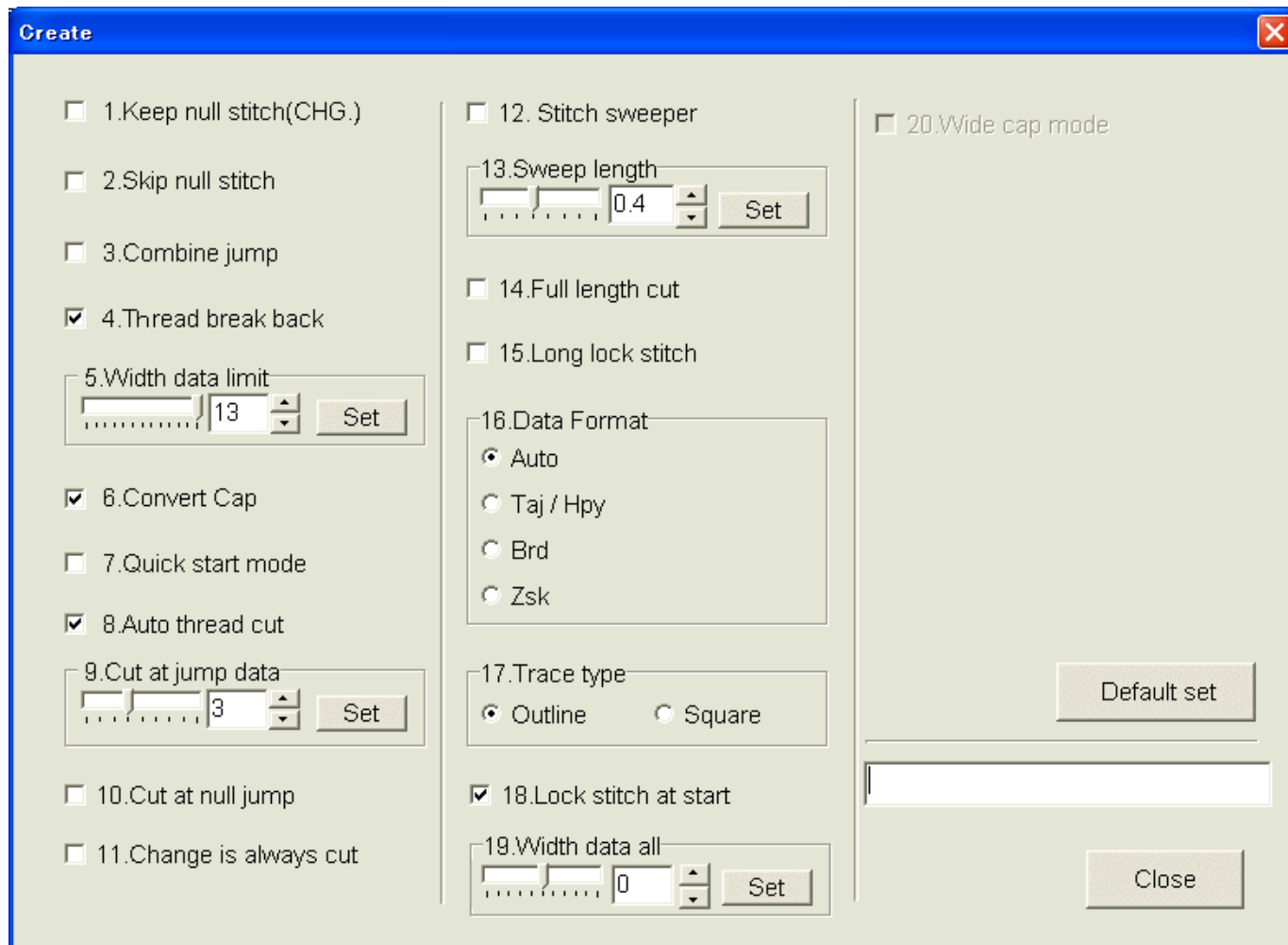
This sets the basic settings of the machine.

You can change these settings by clicking on each. If you need to input data, you can input from your PC or by adjusting the slide bar or Up/Down button in the menu.

Note some items require set to be clicked on to activate them. Click on Close to go back to the previous menu.

You can click on [Default set] to change all items to their default values.

**Note:** This function may not be used depending on Model. Set with machine side that are not displayed at this window.



### 1. Keep null Stitch (CHG.)

When the machine reads the data, it reads all jump stitch data including the jump stitches that are sewn before a color change.

Null stitches are stitches that have no movement.

### 2. Skip null stitch

When the machine reads the data, it reads only jump stitches that are sewn before the color change or that have movement. When reading in pattern data, the machine reads all data except for jump stitches other than jump stitches before a color change.

### 3. Combine jump

When the machine reads the data, if there are a series of jumps, it will combine the series of jumps into one movement after adjusting the data to be less than 12.7 mm.

#### **4. Thread break back**

When the thread breaks, the frame moves back a few stitches and then the machine stops.

#### **5. Width data limit**

This controls the maximum stitch length to 13mm at the default. If a stitch exceeds 13mm, it will then turn into a jump stitch to reach full stitch length. This number should be lowered if you are using caps or heavy garments.

#### **6. Convert Cap**

When the cap drive is installed in the embroidery machine, the machine will turn the design upside down.  
(Only for embroidery machines with this function)

#### **7. Quick start mode**

After thread cut, or

After three stitches the machine speed increases.

If not three stitches then after five stitches, the machine speed increases.

#### **8. Auto thread cut**

Automatically cuts when a trim code is detected.

#### **9. Cut at jump data**

When a series of continuous jumps exists in the design data; for example, three jumps, the machine will trim the thread before the jumps.

#### **10. Cut at null jump**

If there is one stitch of null (empty) jump in the design data and more than one stitch of jump thereafter, the machine will trim the thread before the null jump.

#### **11. Change is always cut**

This will force machine to cut at any color change, even if there is not a trim code inserted at the end of the color. Then the machine will trim even if the color change is set to the same needle.

#### **12. Stitch sweeper**

When the machine reads the data, it removes extremely short stitches that can cause thread breaks.

#### **13. Sweep length**

The width of the stitch sweep. Stitches shorter than the specified length or width will be removed.

#### **14. Full length cut**

The machine trims upper thread to a longer length.

#### **15. Long lock stitch**

Sets the lock stitch length longer.

#### **16. Data format**

Determines the data format when the machine reads the data disk or design.

The default setting is Auto, but you can select others if the design could not be read correctly, and read



the data again.

- Auto** : Automatic judge (Normal setting)
- Taj / Happy** : Tajima, Happy Trinary data type
- Brd** : Barudan Binary data type
- Zsk** : Zsk Binary data type

## 17. Trace type

Select design trace type.

**Outline** which will show the rough outline or maximum size of the design or

**Square** this moves the frame in a square around the maximum design area.

## 18. Lock stitch. At start

Machine inserts a lock stitch before and after a thread trim automatically.

## 19. Adjust width all pattern

Puts width data limit setting into effect for all designs.

It adjusts the width of the satin stitches for all patterns that are saved in the embroidery machines memory. It becomes the first priority. (Rather than stitch width of [adjust].)

## 20. Trace

(Design trace)

By outlining the pattern or its maximum size, and moving a frame, you can check the actual size and its position. Select **Make trace data** to trace.

(Only for an embroidery machine with this function.)

## 21. Make trace data

Build design trace data.

This function will make the trace data when the machine reads the pattern into memory. Select **Make trace data** to be able to use the trace feature.

(Only for an embroidery machine with this function.)

## 22. Wide cap mode

You can use Wide cap frame on the HCS-1201 machine only using HAPPYLink software version A2.\*\*.

(If your HAPPYLink software version A1.\*\*, you can use semi wide cap frame only.)

You make select mode "Wide cap" or "Semi wide cap" on machine side. HAPPYLink may show your selection. (Machine responds best machine condition for Wide cap design when you select "Wide cap" mode. And in case of changing mode, please re-turn on HAPPYLink after re-turning on HCS machine.)

Check off: Normal for Semi wide cap frame

Check on: Wide cap mode (Sew field 290 X 70 mm)

## 23. All head mending

This feature is designed for multi-head machines, if it is set to **NO** only the head with the thread break will mend. If it is set to **yes** all heads will mend at a thread break.

(Only for an embroidery machine with this function.)

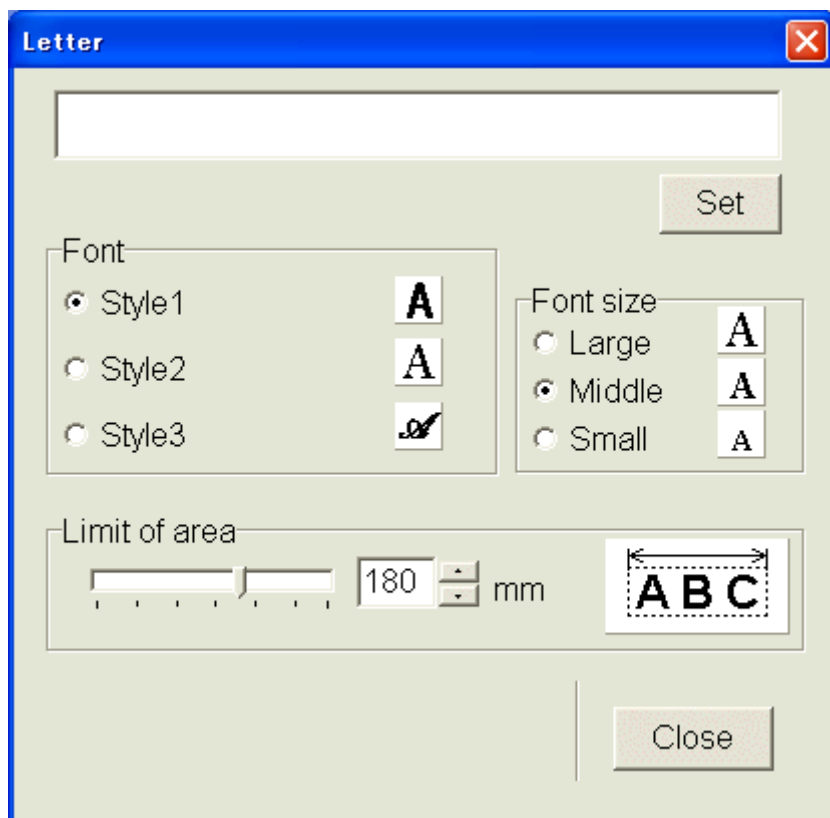
## 24. Slow mend out

For multi-head machines, when mending finishes and all heads start to sew again, the machine speed decreases to help the first few stitches be sewn. (Only for an embroidery machine with this function.)

## Letter

The embroidery machine has characters stored in it.

**Note:** This function may not be used depending on Model.



You need to determine the proportions of the font and the size of the characters as well as the length of a line.

Please input characters from the keyboard. You can put in up to 15 characters maximum.

Regarding which characters you can input please refer to the instruction manual for your embroidery machine.

When you click on [Set], it will be set in the embroidery machine. The characters are saved as the pattern in the machine. In Addition, the name of the pattern is the first eight characters typed.

When the length of a line is larger than that designated by the area selection, an error message (Area Over) will appear. In such a case, reduce the number of characters; lengthen the line or both to clear the error. (Refer to the instruction manual of the machine, too.).

Explanation of items to be selected

**Selection of font (Font)** Selection is to be made from Style1, Style2 and Style3.

### **Selection of size (Size)**

**Large** 15mm

**Middle** 10mm


**Small** 4mm

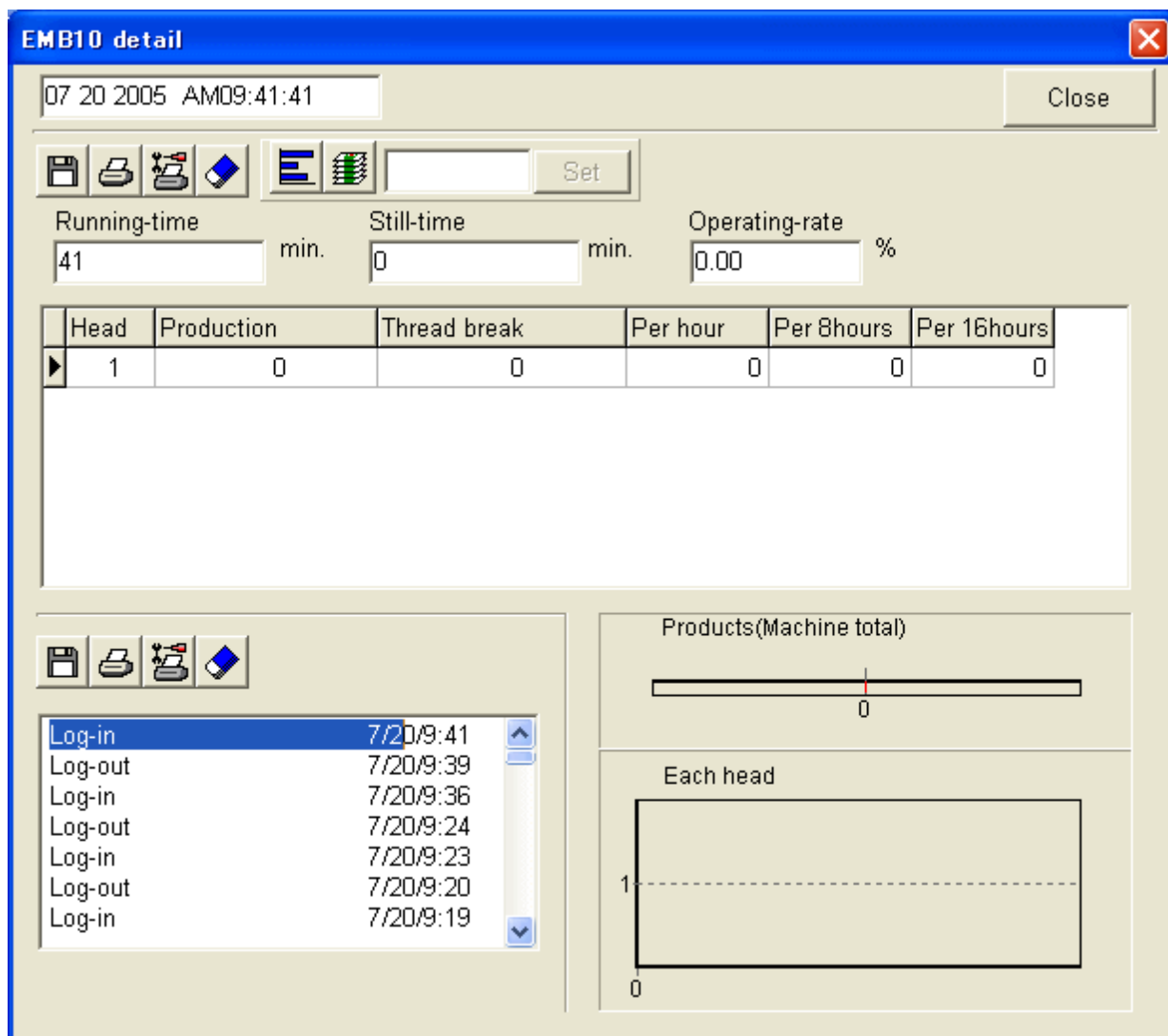
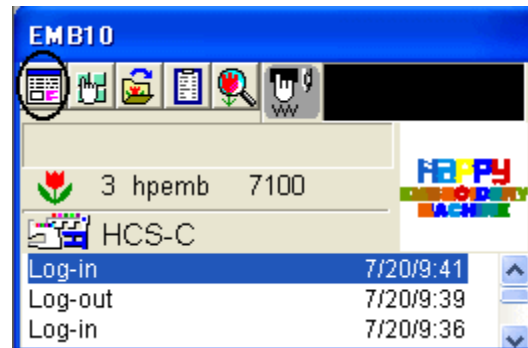
**Selection of area (Area)** This is to determine the line length (0 - 290mm) of the characters.

**Note:** When the area is set to 0, the space between the characters will become 0.8mm.

## View the production data

You can view, print out, and output the file of the production data that is collected if your machine has these features.

When you select  in the menu, the production data dialogue is displayed.



## Function of production data dialogue

**Head** Head number of an embroidery machine. It shows each head number of the embroidery machine.

**Production** Production capacity.

**Thread break** Thread break frequency.

**Per hour** Production capacity in an hour.

**Per 8 hours** Production capacity in an eight hour shift.

**Per 16 hours** Production capacity in an sixteen hour time frame

**Still-time:**

Interval.

The time when the operation of the embroidery machine is stopped.

**Running time:**

Operation hours.

The time until operation stops after the start button of the embroidery machine is pushed and operation is begun.

**Operating rate:**

The rate of operation.

Running time = Operating rate / total time

Total time is the time until the embroidery machine is turned off after it is turned on.

Total time = Running time + Still-time



Reset all data.



Save the data in a CSV file.



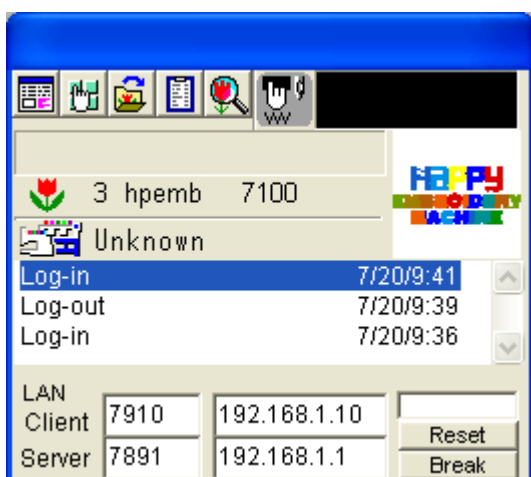
Print out the data.



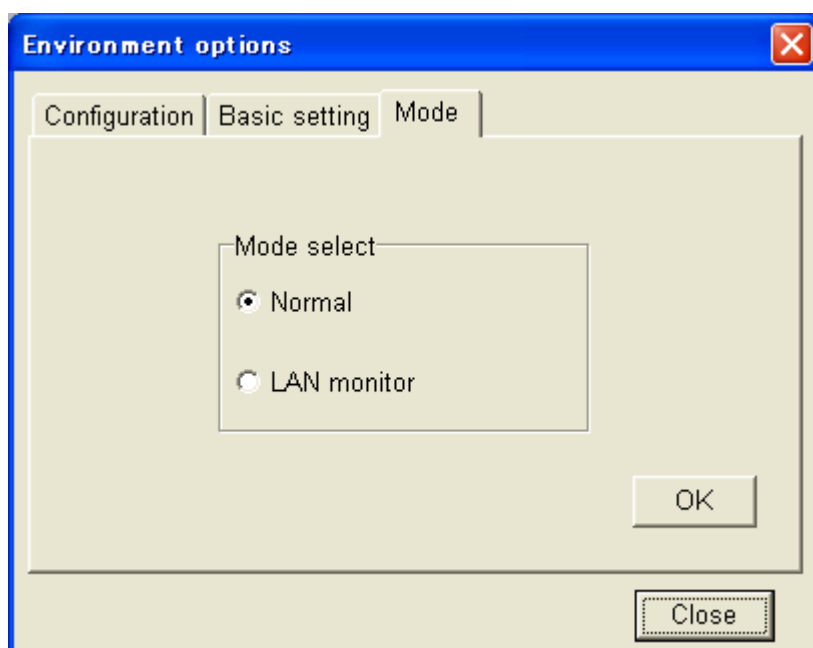
Setting up of printer.

# LAN monitoring

Enable to display port number and IP address at the bottom of Operation mode window.



Mode can be changed at "Configuration" window.



Machine port number, Machine IP address, PC port number, PC port number

"reset" button will be used for unexpected error to reset the embroidery progressing bar.

"Shut down" button will be used for unexpected error to shut down the machine connection individually.

# Trouble shooting

## **Q1 Does not indicate Monitoring Window**

- A1. Cable is not connected
- A2. Setting error of address and/or port number
- A3. PC and Embroidery machine is connected with straight cable directly without Hub.  
Connect with Hub or use of crossing cable

### **\*\*\*Ping command\*\*\***

A utility to determine whether a networking hardware is connected. It works by sending a packet to the specified address and waiting for a reply.

For example if you enter "ping-t 192.168.1.10" at command prompt,  
you will have "Reply from 192.168.1.10: bytes=32 time=2ms TTL=255"

Reconfirm the A1,A2 and A3, in case of "Request timed out" is shown.

Ping will be ended by pressing Ctrl + c key.

## **Q2. Does not indicate Embroidery design at Monitoring Window**

- A1. Normally, showing embroidery design only transfer design from PC to machine by network.  
In case input embroidery design from memory card and USB port, does not show design.
- A2. If you changed machine IP-address, machine recognition other machine and does not indicate embroidery design.

## **Q3.Log list goes red at Monitoring Window**

- A1. Some sort of error is occurring at embroidery machine. Move the mouse pointer on the red part and  
Click of a mouse button to cancel it and display will be turned to Normal.

## **Q4.Want to send design but unable to find the name from the list of the machine.**

- A1. IP Address and name of the Embroidery machine is not registered.  
Please refer to instruction Page11[setting] and register.

## **Q5. There is a design that is not shown on display at Pattern selection function.**

- A1. Unsupported format  
This software correspond to Happy TAP, DST DSB and DSZ format.

## **Q6. There is a design that is not shown correctly on display at Pattern selection function.**

- A1. Change display style at [Pattern selection]- [View]-[data format]. Default setting is [AUTO].

## **Q7. Get errors when trying to reboot the machine after stop by emergency stop button or power switch.**

- A1. Cancel the error and reboot both HAPPYLAN and embroidery machine.
- A2. In case of the Network use, Turn off the machine with POWER OFF of NET menu.

# GLOSSARY

## TCP/IP

This is standard protocol of Network. HAPPY LAN communicates with TCP/IP

## IP Address

Address for originating host or destination host used for TCP/IP communication and is expressed as 32bit numerical value.

## Subnet mask

A mask used to determine what subnet an IP address belongs to and is expressed as 32bit numerical value. As this setting needs calculation, please refer to the example in the instruction book.

## Port number

Configure the Port number at TCP/IP to use HAPPY LAN. Communication between machine and PC will be done through the configured Port.

## Host name

Host name is conjugated with IP address and you can give recognizable name in each packet which will be name of each Embroidery machine that are connected with Network.

## Hub

Hub is a device that mediates the PC and each embroidery machine.

There are 2 types of Hub in the market. Passive Hub and Switching Hub.

A passive hub serves simply as a conduit for the data, enabling it to go from one device (or segment) to another.

A switching hub reads the destination address of each packet and then forwards the packet to the correct port. We recommend to use a switching Hub which can avoid communication failure at the time of network congestion.

## MAC address

Short for Media Access Control address, a hardware address that uniquely identifies each node of a network.

## Ping

A utility to determine whether a networking hardware is connected. It works by sending a packet to the specified address and waiting for a reply. For example if you enter `ping-t 192.1.12` at command prompt, you will have reply like `Reply from 192.168.1.12: bytes=32 time=2ms TTL=255`. If there is no reply it means communication is not available.

Ping will be ended by pressing Ctrl key and c key.

## Firewall

Security system that is set between networks. Security system restrict the external access.

## Peer-to-peer

One-on-one communication between PC and machine. Direct connection using crossover cable .



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