

# PC-900 MONITORING SOFTWARE

## SWM-PC001E

### INSTRUCTION MANUAL

#### CONTENTS

About this manual .....	2
Notice when using SWM-PC001E .....	2
On CD-ROM .....	2
1. Preparation before starting the SWM-PC001E .....	3
1.1 Operating environment .....	3
1.2 Installing the SWM-PC001E .....	6
1.3 Uninstalling the SWM-PC001E .....	12
2. Starting and terminating the SWM-PC001E .....	14
2.1 Wiring between a personal computer and PC-900 .....	14
2.2 Starting the SWM-PC001E .....	15
2.3 Displays and operation of the SWM-PC001E .....	17
2.3.1 Screens .....	17
(1) Multiple channels (32-channel screen) .....	17
(2) Multiple channels (8-channel screen) .....	18
(3) Single channel screen .....	19
(4) Chart screen .....	20
(5) Chart plot condition setting screen .....	21
2.3.2 Menu bar operation .....	22
(1) Printer selection .....	22
(2) Printing .....	22
(3) Terminating the monitoring software .....	22
(4) Channel (unit) name registration .....	23
(5) Setting operation .....	24
(6) Setting screen menu bar operation .....	27
(7) Data logging .....	33
(8) Alarm history screen .....	35
(9) Password registration .....	36
(10) Communication condition setting .....	37
(11) Help screen .....	38
(12) Version information .....	39

## About this manual

This manual explains how to install SWM-PC001E, PC-900 monitoring software.

In this manual, Windows XP is used for purposes of explanation, however, other operating systems (Windows 95/98/Me/NT4.0/2000) are applicable as well.

## Notice when using SWM-PC001E

### Shinko software: Terms of use

#### 1. License

(1) This software can only be used upon accepting Terms of Use.

Please read carefully these Terms of Use before using this software.

(2) You may not reverse engineer, decompile or disassemble the software.

#### 2. Copyright

The copyright for this software belongs to Shinko Technos Co., Ltd.

#### 3. Limitation of usage

You may not rent, lease or lend this software.

#### 4. Copying of the software

It is against the law to copy the software on any medium.

#### 5. Disclaimers

(1) Shinko Technos Co., Ltd makes no warranty regarding the use of this software.

Users are liable for any problems occurring from the use of this software.

(2) Shinko Technos Co., Ltd is not liable for any damages, whether direct, indirect, special, incidental, or consequential (including loss of business profits, business interruption, or any other pecuniary loss), as a result of using this software, even when Shinko Technos Co., Ltd has been informed of the possibility of the damage.

## On CD-ROM

- In the CD-ROM, the following files are included.

The information on installation methods for the SWM-PC001E is contained in the following file.

**Install\_E.txt**

The information on license and copyright for the SWM-PC001E is contained in the following file.

**Readme\_E.txt**

The following is the file for installing SWM- PC001E.

**setup.exe [in Win95 folder]**

- Windows 95/98/Me/NT4.0/2000/XP are registered trademarks of Microsoft Corporation.

# 1. Preparation before starting the SWM-PC001E

## 1.1 Operating environment

PC-900 monitoring software "SWM-PC001E" will run under the following system requirements.

- **Personal computer (PC)**

Personal computer running Windows

- RS-232C interface equipment (COM1 to COM8)
- Hard disk, 50 Megabytes or more of space available
- CD-ROM drive equipment

- **Operating system**

Windows XP Home Edition (English)  
Windows XP Professional (English)  
Windows 2000 Professional (English)  
Windows Me (English)  
Windows NT4.0 (English)  
Windows 98 (English)  
Windows 95 (English)

- **Display**

Resolution, 800 x 600 dots or more

Use "Normal fonts".

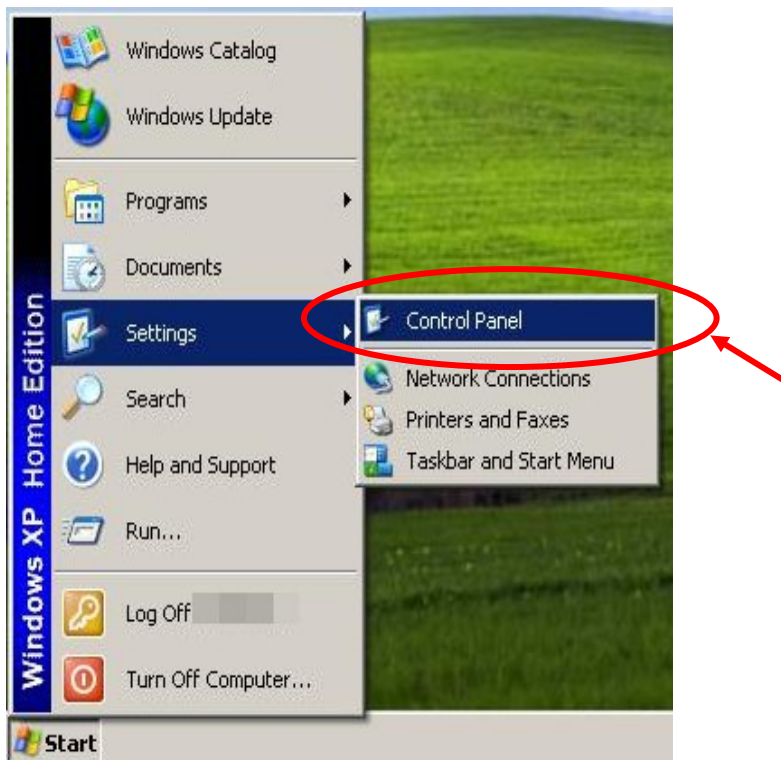
To set up the font, refer to pages 3 to 5.

- **How to set up the font size**

To change the font from large to normal, follow the procedures below.

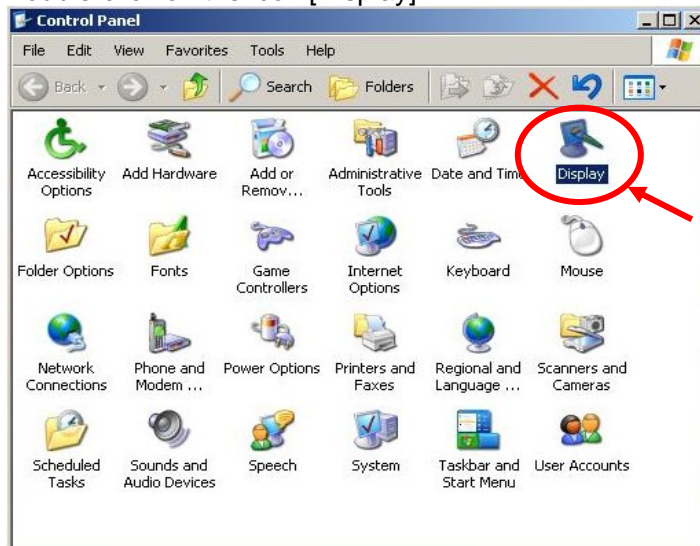
(1) Close all applications which are running.

Select [Settings] – [Control panel], and click.



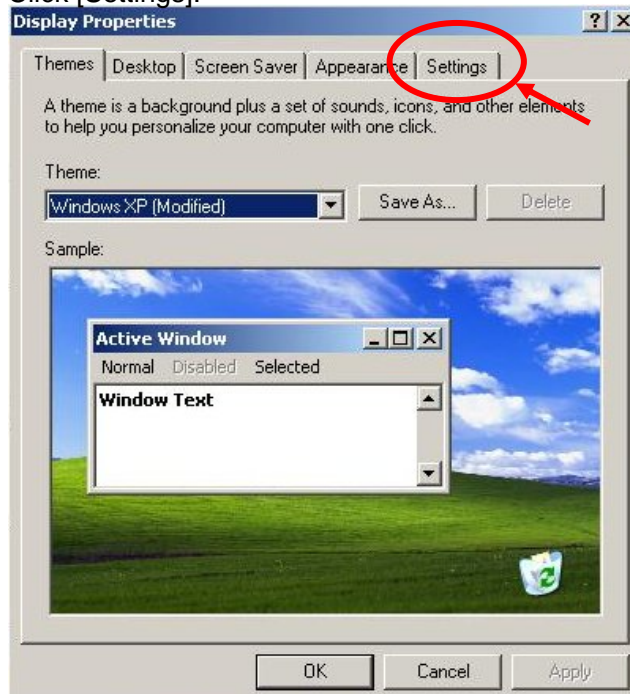
(Fig. 1.1-1)

(2) Double-click on the icon [Display].



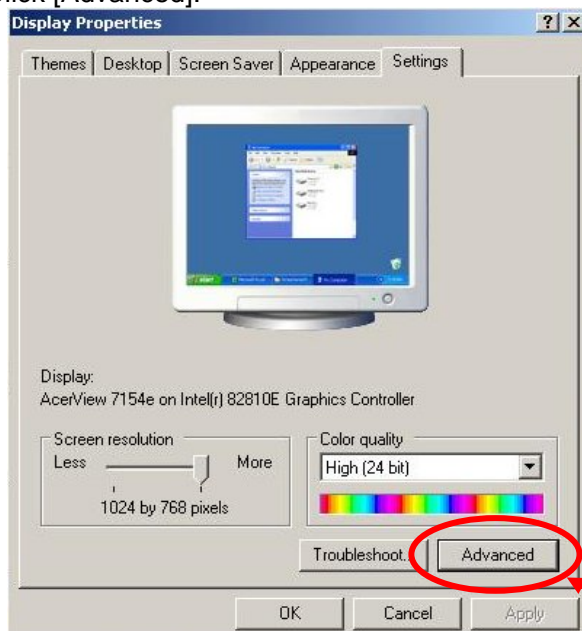
(Fig.1.1-2)

(3) Click [Settings].



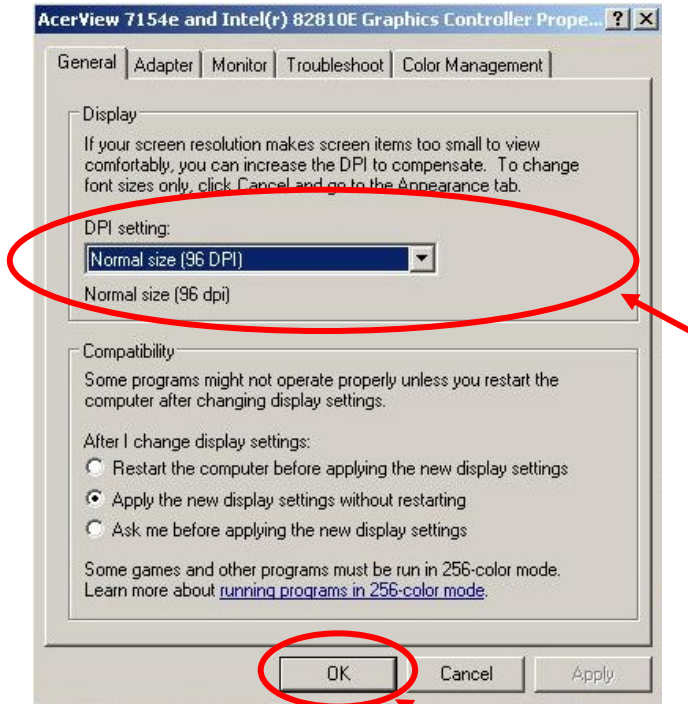
(Fig.1.1-3)

(4) Click [Advanced].



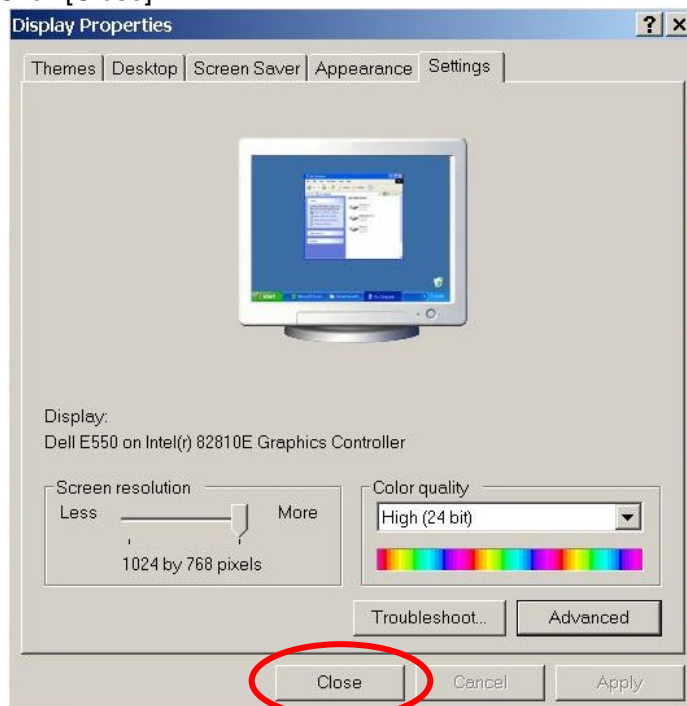
(Fig. 1.1-4)

(5) Select “Normal size” in the DPI setting, and click [OK].



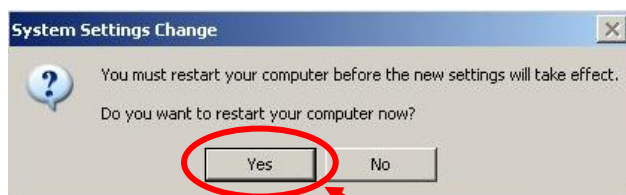
(Fig. 1.1-5)

(6) Click [Close].



(Fig. 1.1-6)

(7) Click [YES].



(Fig. 1.1-7)

(8) After restarting the system, the font will be set to “Normal size”.

## 1.2 Installing the SWM-PC001E

**Before installing, close all applications which are running.**  
**Set the font to “Normal size”.** (See p.3 to 5)

The personal computer used here has the following drive configuration.

Setup method described in the manual is based on the assumption that the data is downloaded and decompressed onto D drive.

Designate a drive in accordance with your operating environment.

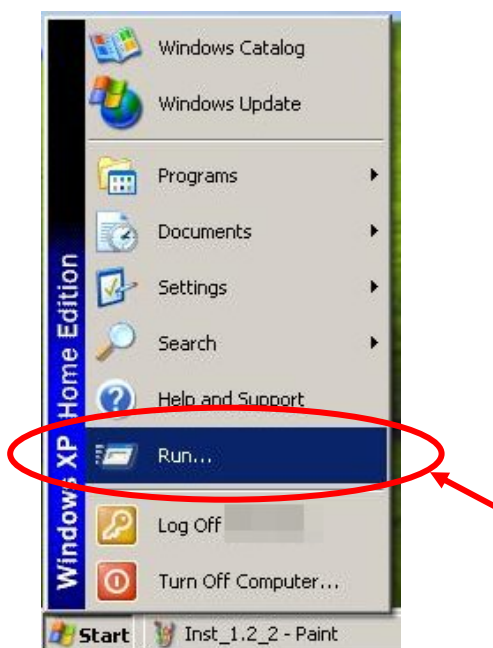
A drive: Floppy disk

C drive: Hard disk

D drive: Hard disk

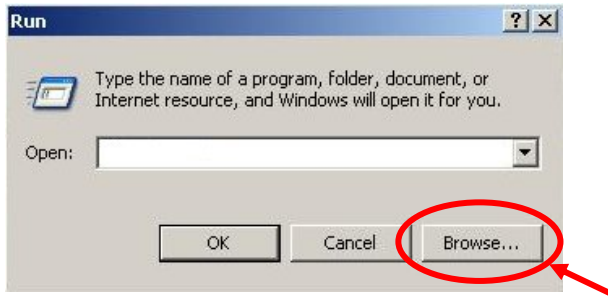
E drive: CD-ROM

(1) Select [Run...] from the Start menu and click it.



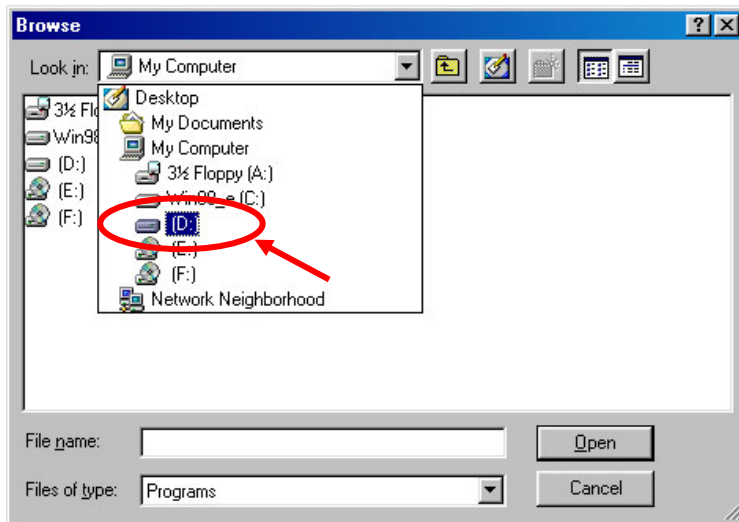
(Fig. 1.2-1)

(2) Click [Browse...].



(Fig. 1.2-2)

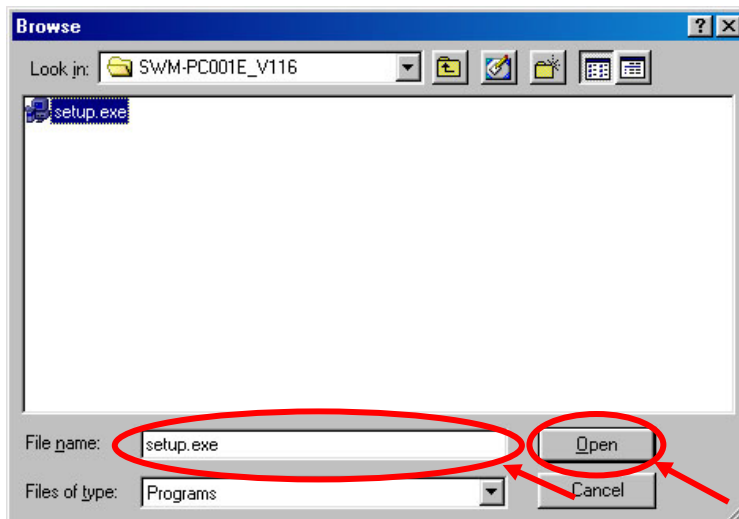
(3) Select "(D:)".



(Fig. 1.2-3)

(4) Select "SWM-PC001E\_Vxxx" from [Look in].

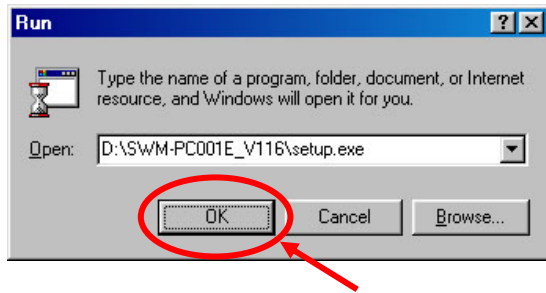
The setup file (setup) will appear, then select it and click [Open].



(Fig. 1.2-4)

(5) Click [OK].

SWM-PC001E Setup Wizard appears.



(Fig. 1.2-5)

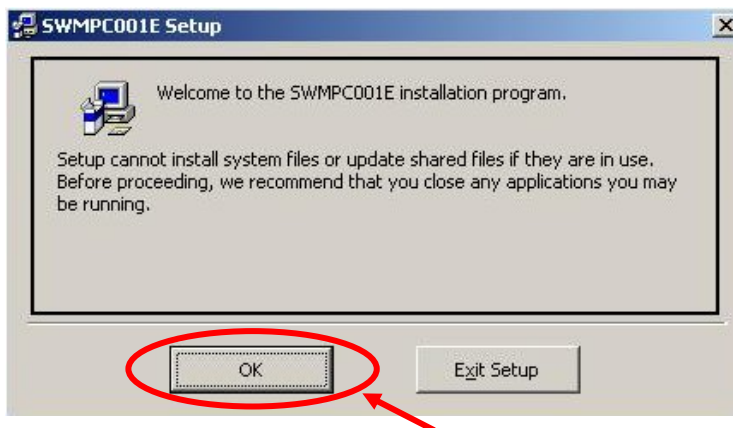
(6) While setup file is copied, the following display appears.



(Fig. 1.2-6)

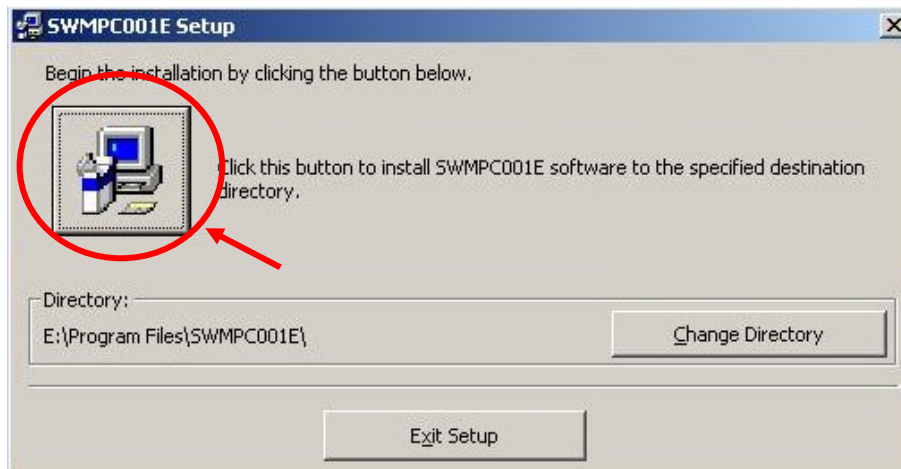
(7) Click [OK] .

To cancel installation, click [Exit Setup].



(Fig. 1.2-7)

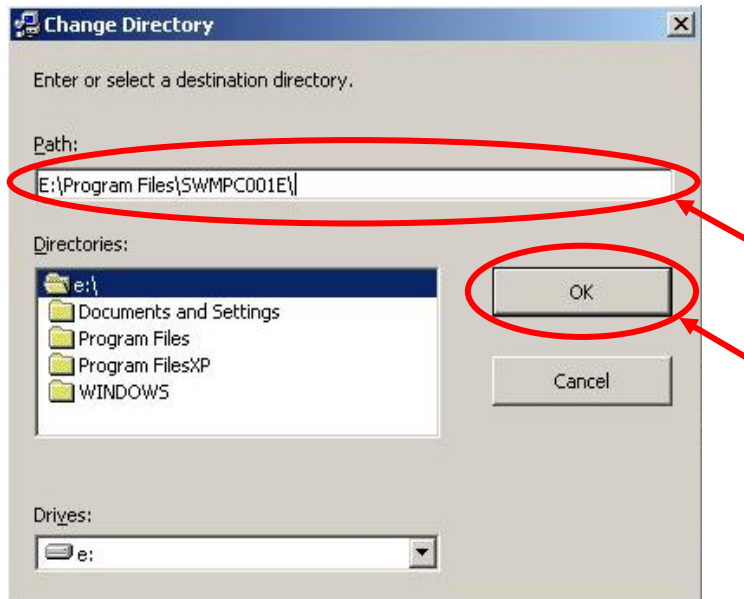
- (8) Confirm the name of the drive and folder (directory) for installation.  
“E: \Program Files\SWMPC001E\” has been already designated for installation.  
If this designation is OK, click the icon.  
To change the installation destination, click [Change Directory].  
To cancel installation, click [Exit Setup].



(Fig. 1.2-8)

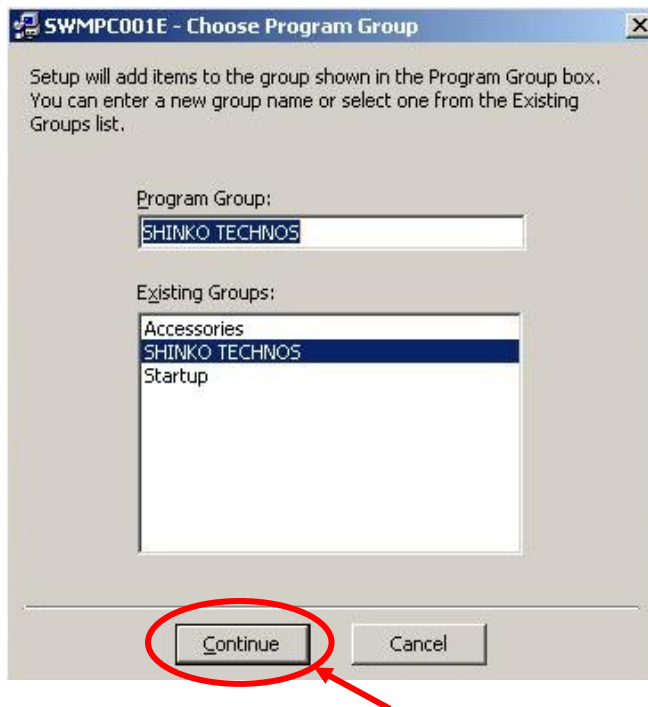
#### Screen to change the installing destination

Designate a name for the drive and folder (directory) and click [OK].  
To revert to the previous display without selecting, click [Cancel].



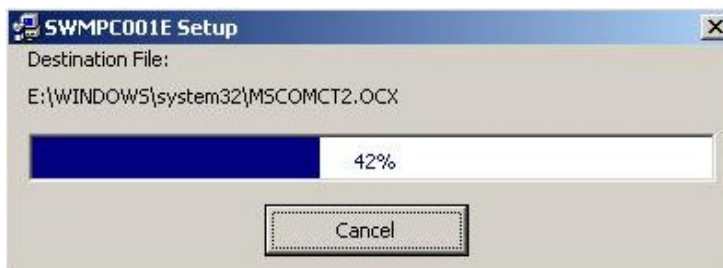
(Fig. 1.2-9)

- (9) Select a program group for the monitoring software.  
SHINKO TECHNOS group has been selected as default.  
If this group is OK, click [Continue].  
To change the group name, input a new group name or select one from the existing group list.  
To cancel installation, click [Cancel].



(Fig. 1.2-10)

- (10) The file copying status will be indicated with a bar graph.  
To cancel installation, click [Cancel].



(Fig. 1.2-11)

- (11) If the installation is complete, the following display will appear.  
Click [OK].

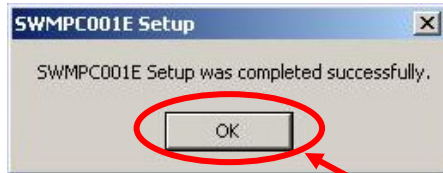
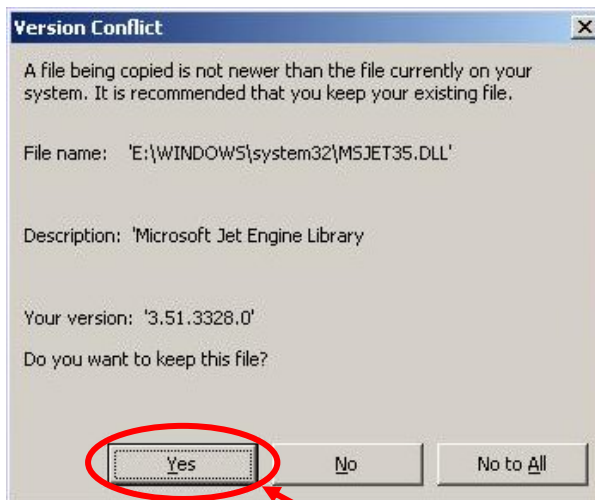


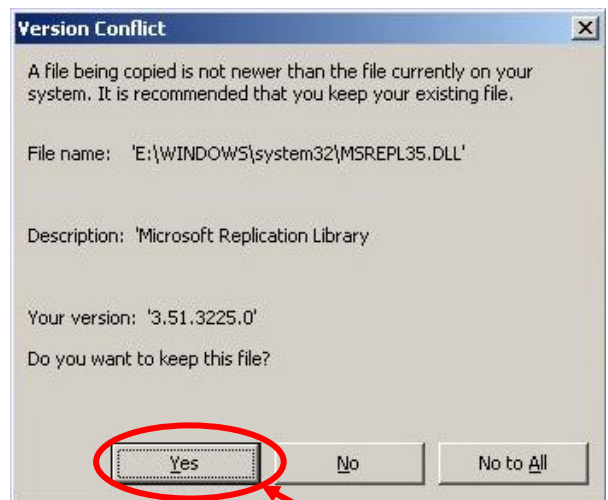
Fig.1.2-12

### Error message during installation

During installation, the following display will sometimes appear depending on the operating system. This is because the file being copied is older than the file in the system or they are of the same date. To keep the current file, click [Yes]. Installation will continue.



(Fig. 1.2-13)

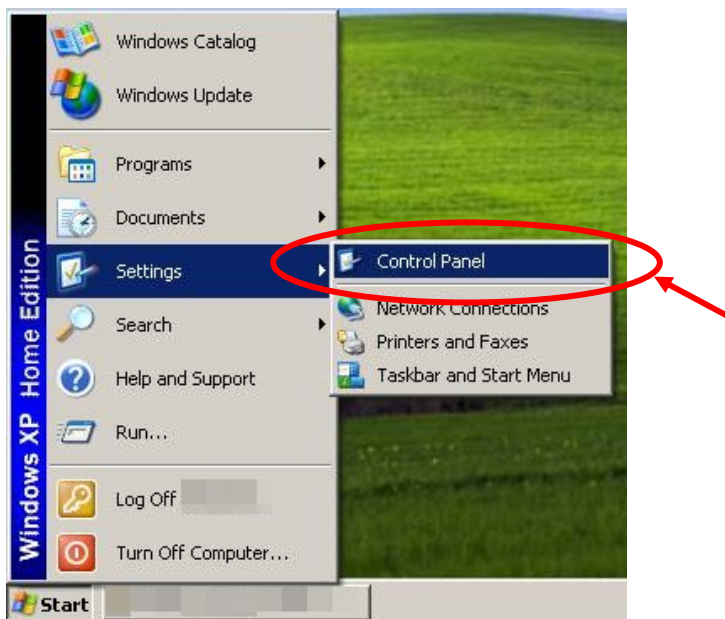


(Fig. 1.2-14)

### 1.3 Uninstalling the SWM-PC001E

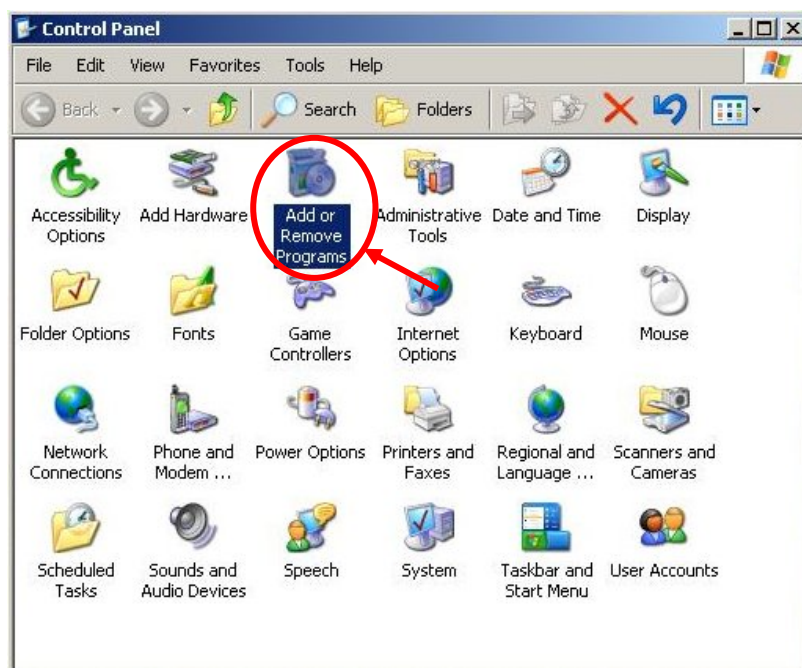
The procedures to uninstall the related files of the “SWM-PC001E” from the hard disk are described as follows.

- (1) Select [Settings] on the Start menu – [Control panel], and click.



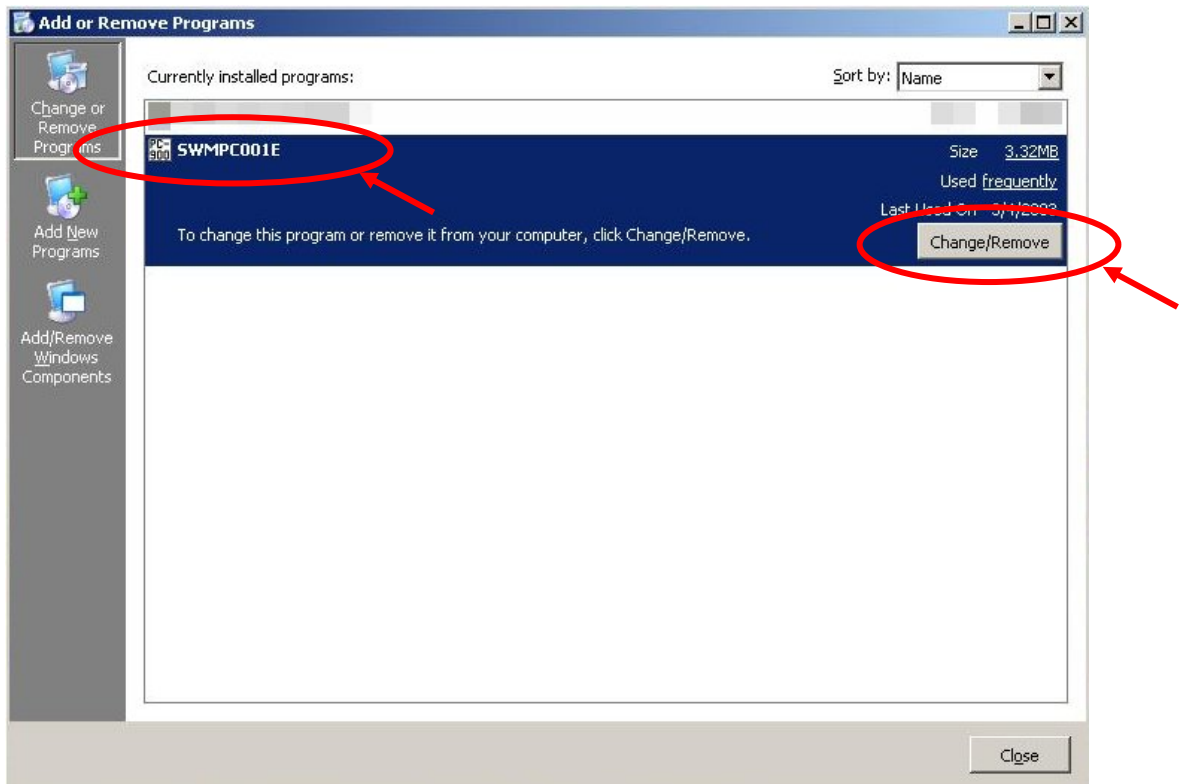
(Fig. 1.3-1)

- (2) Double-click on the icon [Add or Remove Programs].



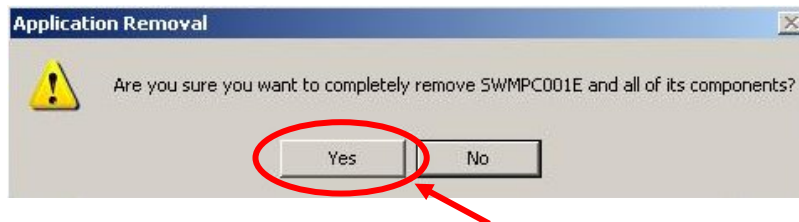
(Fig. 1.3-2)

(3) Click or select [SWM-PC001E\_Vxxx] on the application list, and click [Change/Remove].



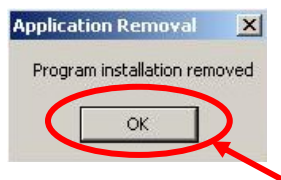
(Fig. 1.3-3)

(4) The dialog box to confirm the removal will appear.  
Click [Yes].



(Fig. 1.3-4)

(5) If the uninstallation is completed normally, the following display will appear.  
Click [OK].

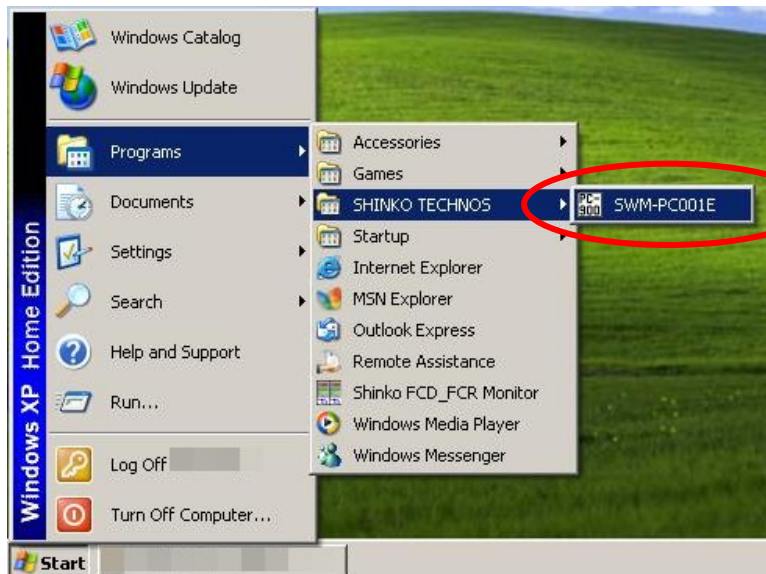


(Fig. 1.3-5)



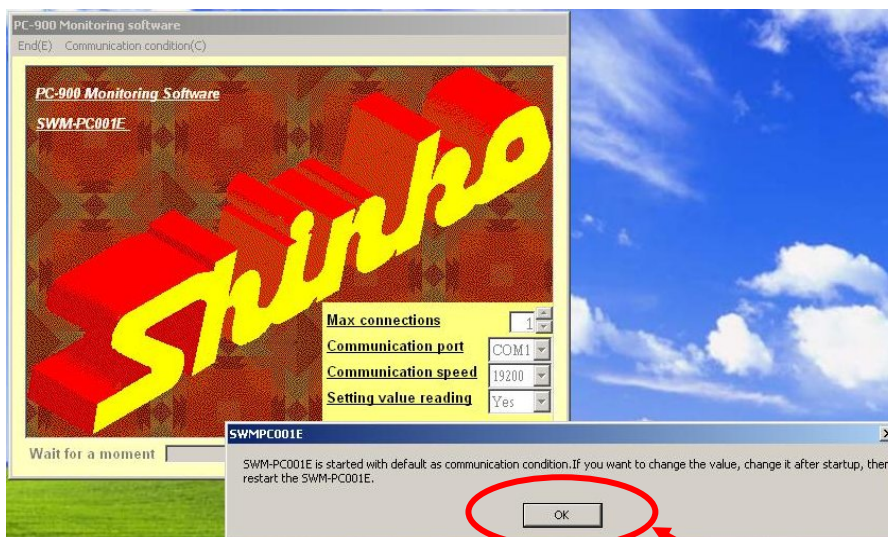
## 2.2 Starting the SWM-PC001E

- (1) Confirm that the communication cable has been connected to the communication port of the PC.  
Select [Programs] on the Start menu – [SHINKO TECHNOS] – [SWM-PC001E\_Vxxx], and click.



(Fig. 2.2-1)

- (2) Click [OK].



(Fig. 2.2-2)

- (3) Select the input range, Alarm 1 (A1) and Alarm 2 (A2) type, Options Applied/Not applied and PC-930/PC-950 of each PC-900 connected, then click [OK].  
 If the specification setting is not correct, errors will frequently occur and setting ranges will differ.  
 Once the specification is set, it will not appear next time the software started.  
 To set specifications after the software starts, refer to "Specifications setting" (p.32).

(Fig. 2.2-3)

- (4) The monitoring software will start after reading the PC-900 data.  
 When "Setting value reading" [Yes] is selected, data reading time of one PC-900 unit with each communication speed is shown below.  
 If "Setting value reading" [No] is selected, the monitoring software will start within several seconds regardless of the communication speed.

Communication speed	19200bps: Approx. 1 minute
	9600bps : Approx. 1 minute 30 seconds
	4800bps : Approx. 2 minutes 30 seconds
	2400bps : Approx. 4 minutes

(Fig. 2.2-4)

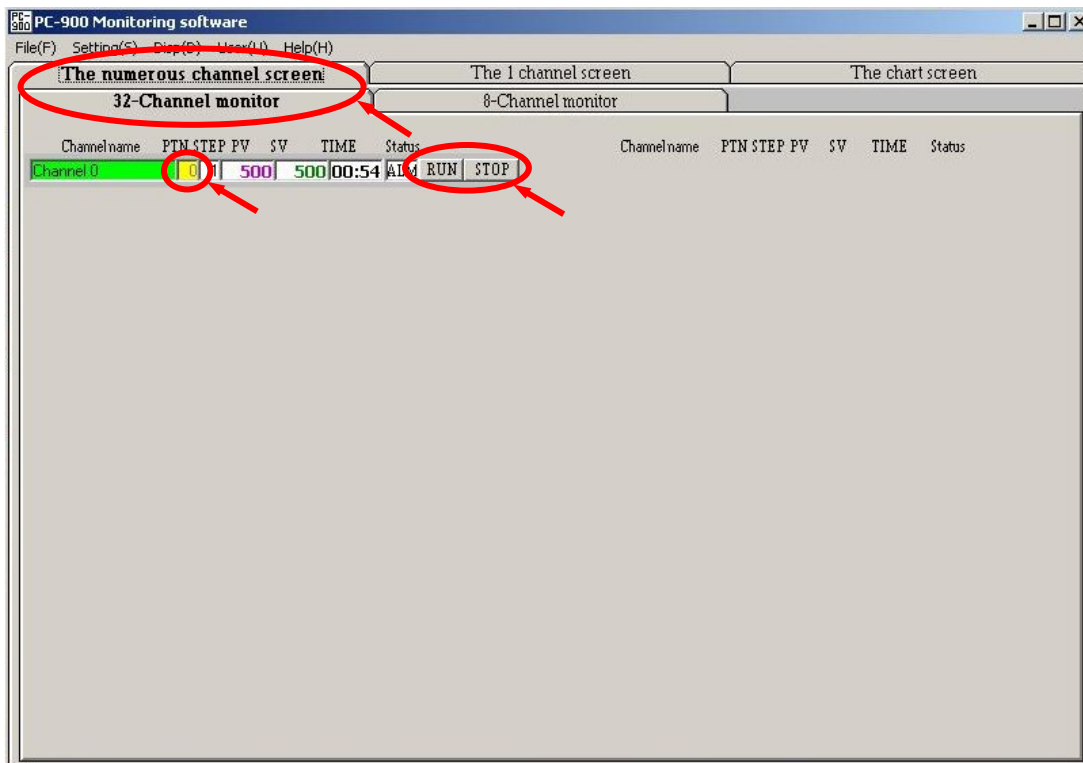
## 2.3 Screens and operation of the SWM-PC001E

### 2.3.1 Screens

The screen can be changed by clicking the tab.

#### (1) Multiple channels (32-channel screen)

A maximum of 32 units can be monitored. Only the connected units are indicated.



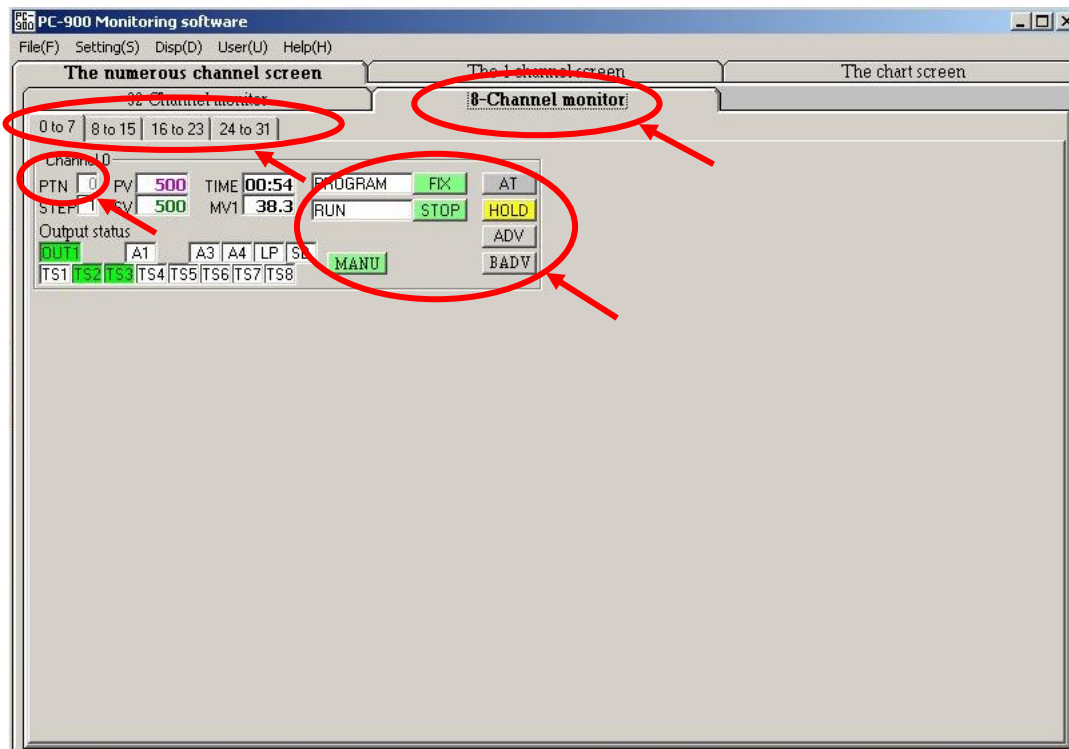
(Fig. 2.3.1-1)

#### Operation explanation

- [PTN] box : By double-clicking this in Standby mode, the onscreen numerical keyboard is indicated.  
Enter a program pattern number to be run and click [OK].
- [RUN] button : By clicking this in Standby mode, "Program control run" mode can be selected.
- [STOP] button: By clicking this in the "Program control run" mode, the mode reverts to Standby mode.

## (2) Multiple channels (8-channel screen)

A maximum of 8 units can be monitored. Only the connected units are indicated.



(Fig. 2.3.1-2)

### Operation explanation

[0 to 7], [8 to 15], [16 to 23], [24 to 31] tab: By clicking these tabs, the screen changes in blocks of 8 units.

[PTN] box : By double-clicking this in Standby mode, the onscreen numerical keyboard is indicated.

Enter a program pattern number to be run and click [OK].

[FIX/PROG] button : By clicking this in Standby mode or "Program control run" mode, "Fixed value control run" mode is selected.

By clicking this in the "Fixed value control run" mode, the mode reverts to Standby mode.

[RUN/STOP] button: By clicking this in Standby mode, "Program control run" mode is selected.

By clicking this in the "Program control run" mode, the mode reverts to Standby mode.

[AT] button : By clicking this in the "Program control run" mode or "Fixed value control run" mode, AT (auto-tuning) Perform/Cancel can be switched.

[HOLD] button : By clicking this in the "Program control run" mode, Hold function is initiated, and step time progress pauses. Hold function will be released by clicking this button while Hold function is working.

[ADV] button : By clicking this in the "Program control run" mode, the running step stops and proceeds to the next step.

[BADV] button : By clicking this in the "Program control run" mode, the running step stops and returns to the previous step.

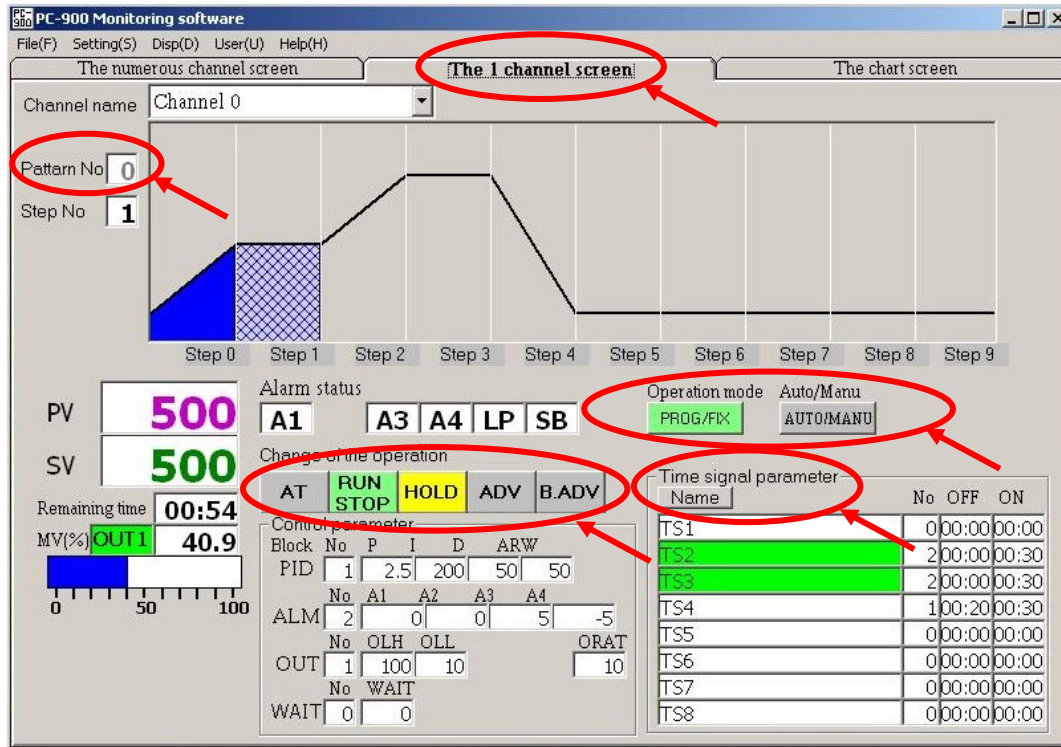
[MANU] button : By clicking this in the "Program control run" mode or "Fixed value control run" mode, Manual control mode is selected.

During Manual control mode, output manipulated variable (MV) can be changed.

By clicking this in the Manual control mode, the mode reverts to the "Program control run" mode or "Fixed value control run" mode.

### (3) Single channel screen

One unit selected in the channel name selection can be monitored.



(Fig. 2.3.1-3)

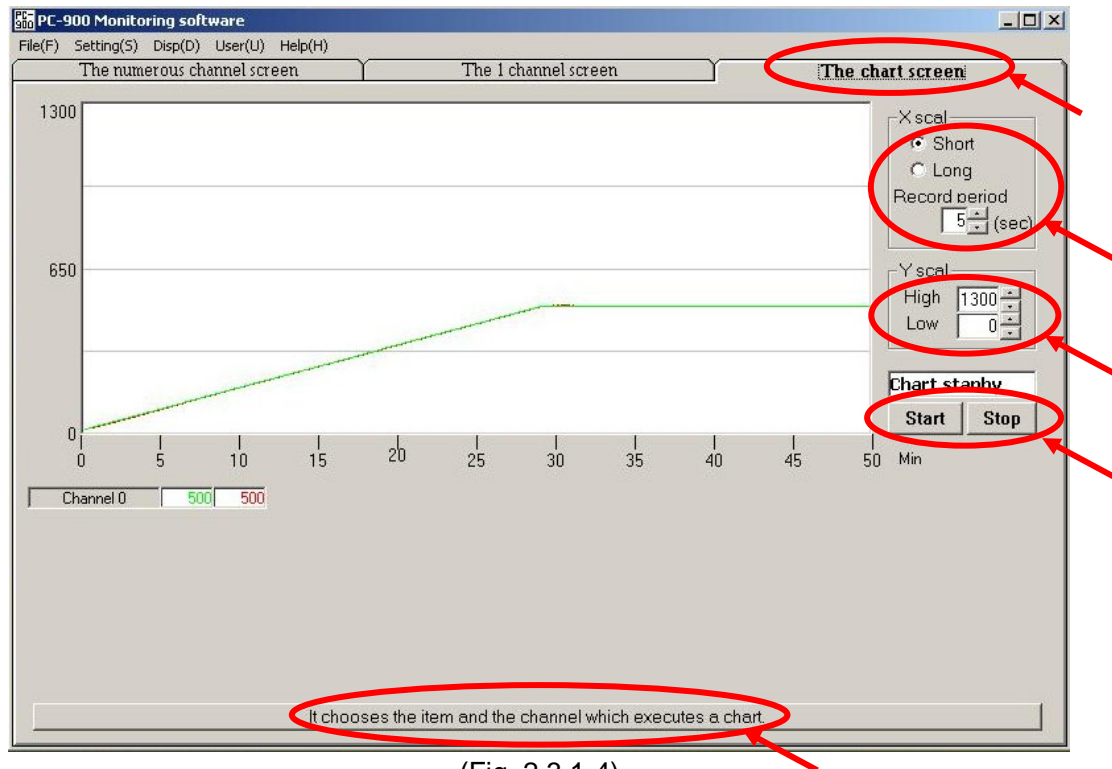
#### Operation explanation

- [Pattern No.] box : Double-clicking this in Standby mode, the onscreen numerical keyboard is indicated.  
Enter a program pattern number to be run and click [OK].
- [AT] button : By clicking this in the "Program control run" mode or "Fixed value control run" mode, AT (auto-tuning) Perform/Cancel can be switched.
- [RUN/STOP] button : By clicking this in Standby mode, "Program control run" mode can be selected.  
By clicking this in the "Program control run" mode, the mode reverts to Standby mode.
- [HOLD] button : By clicking this in the "Program control run" mode, Hold function is initiated, and step time progress pauses.  
Hold function will be released by clicking this button while Hold function is working.
- [ADV] button : By clicking this in the "Program control run" mode, the running step stops and proceeds to the next step.
- [BADV] button : By clicking this in the "Program control run" mode, the running step stops and returns to the previous step.
- [PROG/FIX] button : By clicking this in Standby mode or "Program control run" mode, "Fixed value control run" mode is selected.  
By clicking this in the "Fixed value control run" mode, the mode reverts to Standby mode.
- [AUTO/MANU] button : By clicking this in the "Program control run" mode or Fixed value control run mode, Manual control mode is selected.  
During Manual control mode, output manipulated variable (MV) can be changed.  
By clicking this in the Manual control mode, the mode reverts to the "Program control run" mode or "Fixed value control run" mode.
- [Name] button : If this is clicked, and if the password registered in Password registration (p.35) is entered and [OK] is clicked, the time signal can be freely named.

#### (4) Chart screen

The chart of the connected unit is indicated.

If the monitoring software is closed during chart indication, the chart automatically appears next time the monitoring software starts.



(Fig. 2.3.1-4)

#### Operation explanation

[X scal] setting item : Set the number of samples and record cycle (1 to 60 seconds).  
(e.g.) If record cycle is 5 seconds and the number of samples is 600,  
X axis maximum scale becomes 3000 seconds (5 x 600).  
Therefore, X axis indication shows 0 to 50 minutes.

[Y scal] ] setting item : Input chart indication high and low limit values.

[Start] button : Clicking this initiates chart indication.

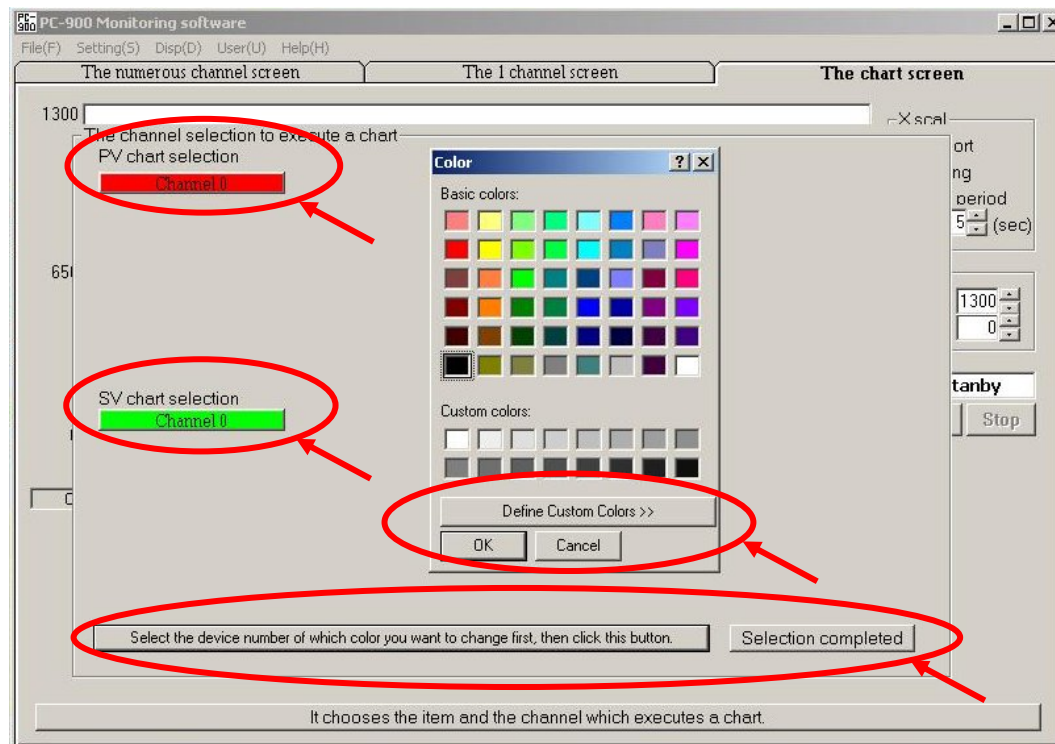
[Stop] button : Clicking this stops chart indication.

[It chooses the item and the channel which executes a chart] button:

By clicking this, chart plot condition setting screen is selected.

## (5) Chart plot condition setting screen

Select a channel and item to plot a chart.



(Fig.2.3.1-5)

### Operation explanation

- [Channel number] button : Select a channel (unit) number to indicate PV or SV with the chart.
- [Select the device number of which recording color you want to change first, then click this button] : Clicking this indicates the color setting screen.
- [Selection completed] button : By clicking this, chart plot condition setting ends and reverts to the Chart screen.

### Color setting screen

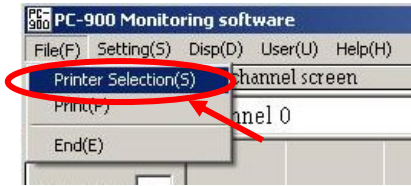
- [Define Custom colors] button: By clicking this, users' own color can be set and added.
- [OK] button : Clicking this sets the color, then closes the screen.
- [Cancel] button : Clicking this closes the screen without setting the color.

## 2.3.2 Menu bar operation

### (1) Printer selection

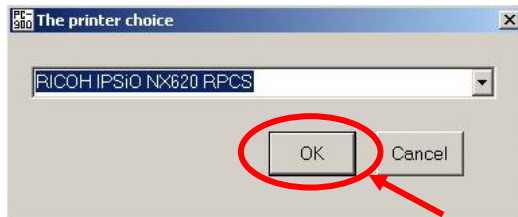
Selects a printer as shown below.

- ① Select [File (F)] on the menu bar – [Printer Selection (S)], and click.



(Fig. 2.3.2-1)

- ② The Printer selection screen appears.  
Select a printer and Click [OK].

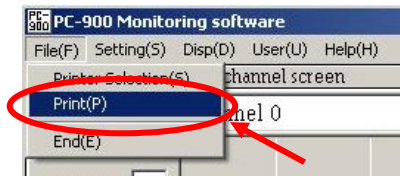


(Fig. 2.3.2-2)

### (2) Printing

Prints screens of the Monitoring software as shown below.

- ① Select [File (F)] on the menu bar – [Print (P)], and click.  
The Monitoring software screen will be printed.



(Fig. 2.3.2-3)

### (3) Terminating the Monitoring software

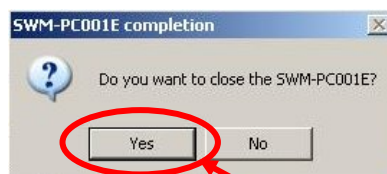
Terminates the Monitoring software as follows.

- ① Select [File (F)] on the menu bar – [End (E)], and click.



(Fig. 2.3.2-4)

- ② SWM-PC001E completion screen appears.  
Click [Yes].



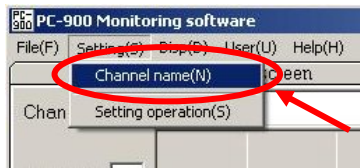
(Fig. 2.3.2-5)

#### (4) Channel (unit) name registration

Registers a channel (unit) name to be indicated on the screen as follows.

The registered channel (unit) name is indicated on the screen and selection list.

- ① Select [Setting (S)] on the menu bar – [Channel name (N)], and click.



(Fig. 2.3.2-6)

- ② The password input screen appears.

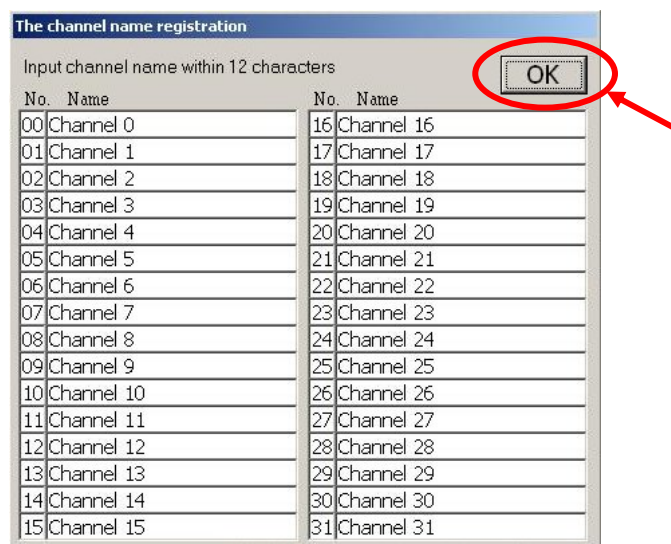
Enter the password registered at Password registration and click [OK]. (See p.36)



(Fig. 2.3.2-7)

- ③ The channel name registration screen appears.

Enter a channel name and click [OK].

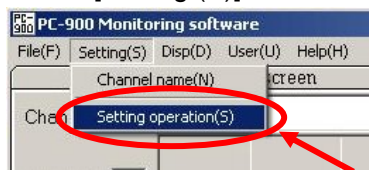


(Fig. 2.3.2-8)

## (5) Setting operation

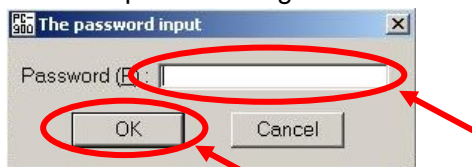
Conducts various settings as shown below.

- ① Select [Setting (S)] on the menu bar – [Setting operation (S)] and click.



(Fig. 2.3.2-9)

- ② The password input screen appears.  
Enter the password registered at the Password registration and click [OK]. (See p.36)



(Fig. 2.3.2-10)

- ③ The monitoring screen and setting screen are indicated.  
If "Setting value reading" [Yes] is selected when the Monitoring software starts, the read values are indicated, and if "Setting value reading" [No] is selected, the default values are indicated.

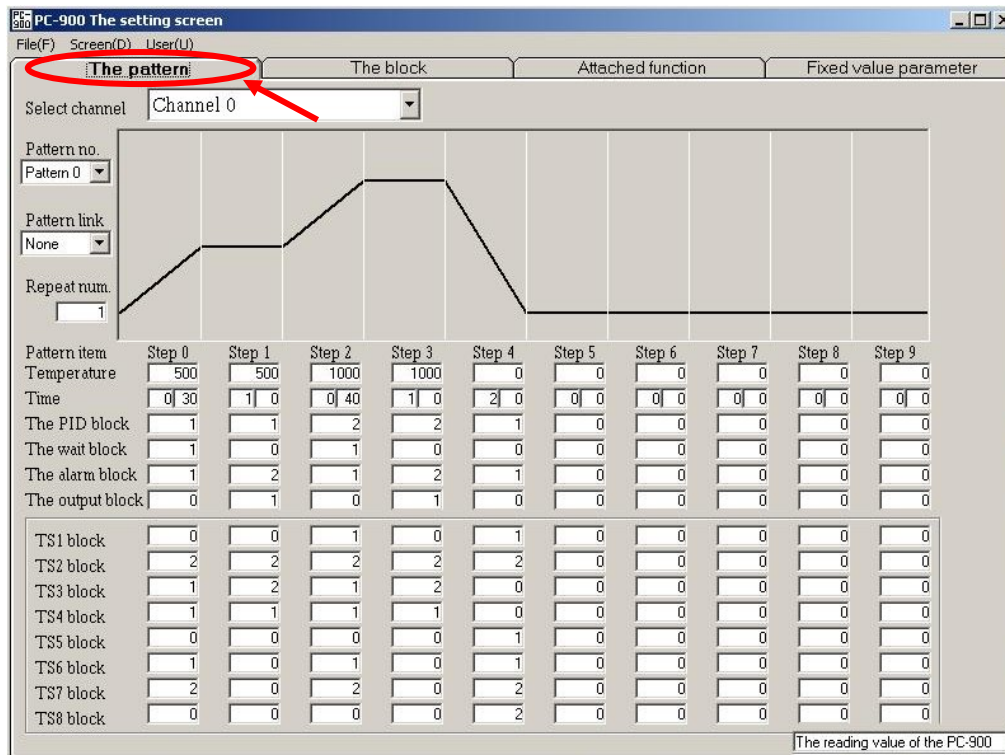
## Screen switching

Click the tab to switch screens.

### ● Pattern setting screen

Set all step data, pattern link Yes/No and the number of repetitions for 1 pattern.

The set program is indicated with a graph.



(Fig. 2.3.2-11)

## Operation explanation

Select a channel (unit) name, pattern number and pattern link respectively.

To set values, double-click on the items to be set, then the onscreen numerical keyboard appears. Input each set value and click [OK].

The set values will be transmitted to the PC-900.

## ● Block setting screen

Set values for PID, Alarm, Output, Wait and Time signal on the screen below.

PC-900 The setting screen

File(F) Screen(D) User(U)

The pattern **The block** Attached function Fixed value parameter

**PID block setting**

	Block 0	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9
OUT1 Proportional band [%]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Integral time [sec]	200	200	200	200	200	200	200	200	200	200
Derivative time [sec]	50	50	50	50	50	50	50	50	50	50
Anti-reset windup [%]	50	50	50	50	50	50	50	50	50	50

**Alarm block setting**

	Block 0	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9
Alarm3 (A3) action point	0	0	0	0	0	0	0	0	0	0
Alarm4 (A4) action point	0	0	0	0	0	0	0	0	0	0

**Output block setting**

	Block 0	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9
OUT1 High limit [%]	100	100	100	100	100	100	100	100	100	100
OUT1 Low limit [%]	0	0	0	0	0	0	0	0	0	0
OUT1 Changing rate limit [%]	0	0	0	0	0	0	0	0	0	0

**Wait block setting**

	Block 0	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9
Wait value	0	0	0	0	0	0	0	0	0	0

**Time signal block setting**

	Block 0	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9
Time signal OFF time	0	0	0	0	0	0	0	0	0	0
Time signal ON time	0	0	0	0	0	0	0	0	0	0
Time signal OFF time	0	0	0	0	0	0	0	0	0	0
Time signal ON time	0	0	0	0	0	0	0	0	0	0

The reading value of the PC-900

(Fig. 2.3.2-12)

## Operation explanation

To set values, double-click on the items to be set, then the onscreen numerical keyboard appears. Input each set value and click [OK].

The set values will be transmitted to the PC-900.

## ● Attached function setting screen

Set the Alarm, Output, Transmission output, Input parameters and other functions.

PC-900 The setting screen

File(F) Screen(D) User(U)

The pattern The block **Attached function** Fixed value parameter

**Alarm parameter setting**

Alarm3 (A3) action  
High limit alarm

Alarm4 (A4) action  
Low limit alarm

A3 hysteresis 1.0 A3 delayed time 0  
A4 hysteresis 1.0 A4 delayed time 0  
Loop break alarm time 0 Loop break alarm span 0

**Output parameter setting**

OUT1 Proportional cycle 15  
OUT1 ON/OFF hysteresis 1.0

**Transmission output parameter**

Transmission output selection  
Process variable transmission

Transmission output high 1370  
Transmission output low limit -200

**Input parameter setting**

Sensor correction setting 0.0  
PV filter time constant setting 0.0

**Other function setting**

Setting value lock selection  
No setting value lock

Start step temperature setting value 0  
Program control startina svstem  
PV start

Status after power failure restored  
Continues performing program

Step time unit selection Hours:Minutes

Step time indicating method selection  
Remaining time

Step temperature indicating method selection  
Setting value correspond to the step time progress

Pattern end output time setting 0 sec  
Step temperature value when program  
end holding function No hold action

TS1 Output/Status (RUN) selection  
Tmsignal output

TS2 Output/Status (HOLD) selection  
Tmsignal output

TS3 Output/Status (WAIT) selection  
Tmsignal output

TS4 Output/Status (FAST) selection  
Tmsignal output

TS5 Output/Status (STOP) selection  
Tmsignal output

**Main setting setting value limit**

Main setting value high limit 1370  
Main setting value low limit -200

auto tuning action selection  
Normal mode

The reading value of the PC-900

(Fig. 2.3.2-13)

## Operation explanation

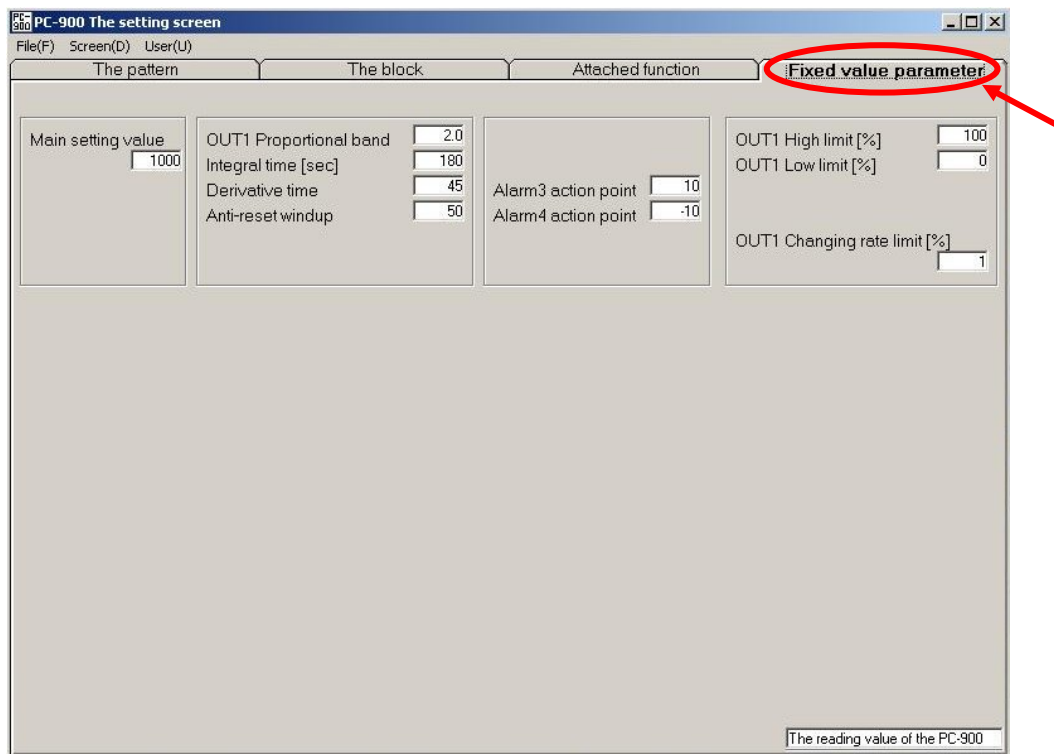
Select Alarm 3 (A3) and Alarm 4 (A4) type and other functions from the list.

To set values, double-click on the items to be set, then the onscreen numerical keyboard appears. Input each set value and click [OK].

The set values will be transmitted to the PC-900.

- **Fixed value control parameter setting screen**

Sets the main setting value (SV), PID, Alarm action point (Alarm value) and Output parameters for the fixed value control on this screen.



(Fig. 2.3.2-14)

**Operation explanation**

To set values, double-click on the items to be set, then the onscreen numerical keyboard appears.

Input each set value and click [OK].

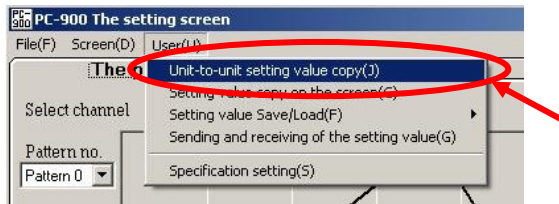
The set values will be transmitted to the PC-900.

## (6) Setting screen menu bar operation

### ● Set value copy between PC-900 units

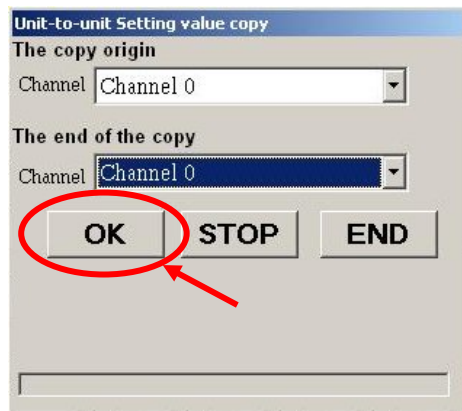
The set value copy between PC-900 units is performed as follows.

- ① Select [User (U)] on the menu bar – [Unit to unit setting value copy (J)], and click.



(Fig. 2.3.2-15)

- ② The Unit to unit setting value copy screen appears.  
Select the copy origin and the copy destination, then click [OK].  
Copy between units starts.  
It takes several minutes since all set values are copied.



(Fig. 2.3.2-16)

### Operation explanation

- [OK] button : Copying between units starts.
- [STOP] button : Copying between units stops.
- [END] button : Copying between units is cancelled.

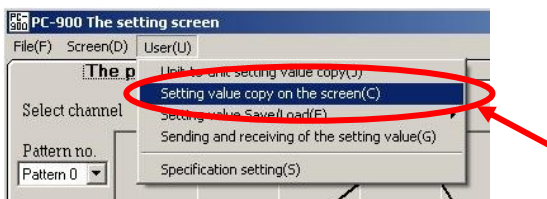
### ● Set value copy on the screen

Set values can be copied on the screen.

**When sending set values to the PC-900, execute Setting value Sending/Receiving.**

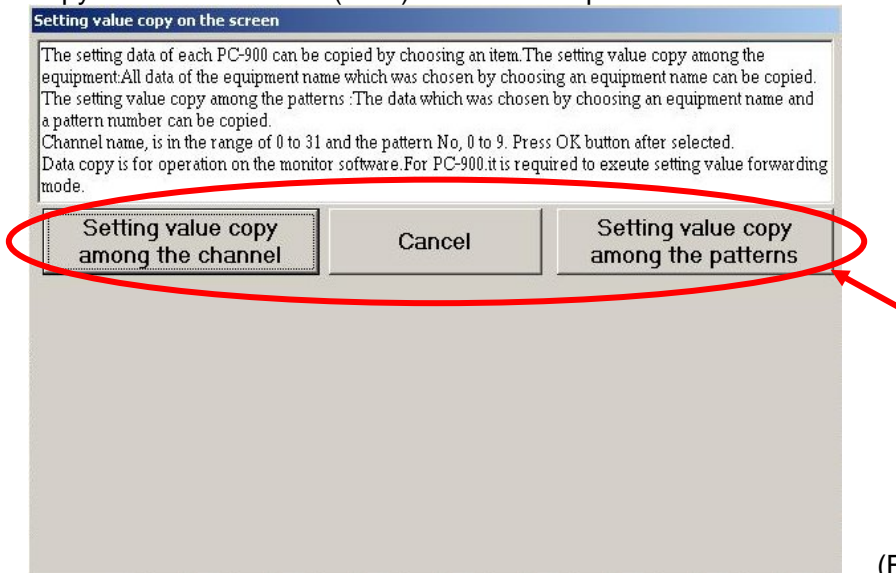
(See page 31)

- ① Select [User (U)] on the menu bar – [Setting value copy on the screen (C)], and click.



(Fig. 2.3.2-17)

- ② [Setting value copy on the screen] screen appears.  
Copy between channels (units) and between patterns can be carried out.

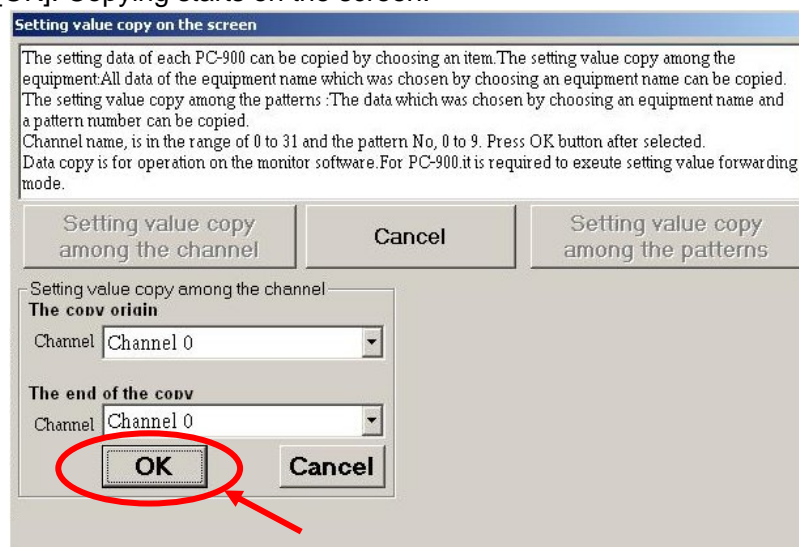


(Fig. 2.3.2-18)

### Operation explanation

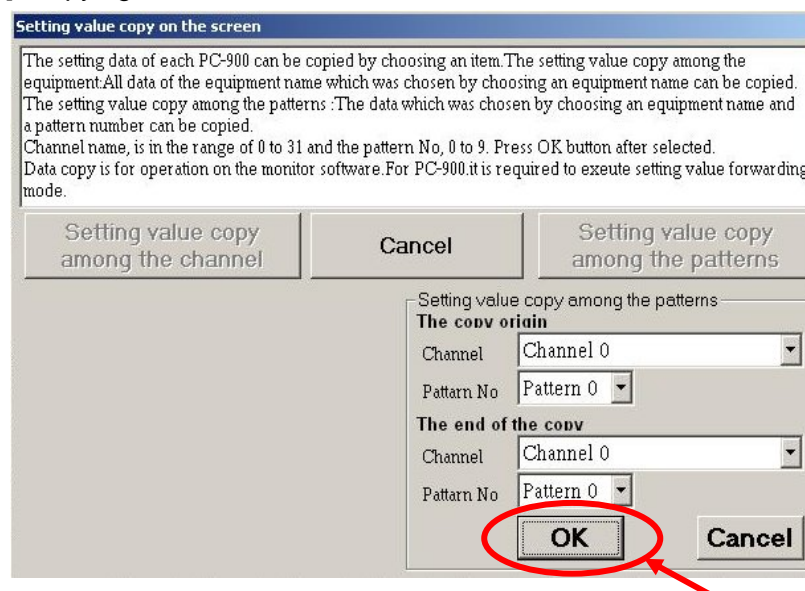
[Cancel] button: Clicking this cancels setting value copy on the screen.

[Setting value copy among the channel] button: Clicking this opens Setting value copy between channels screen. Select the copy origin and copy destination, then click [OK]. Copying starts on the screen.



(Fig. 2.3.2-19)

[Setting value copy among the patterns] button: Clicking this opens Setting value copy between patterns screen. Select the copy origin and copy destination, then click [OK]. Copying starts on the screen.



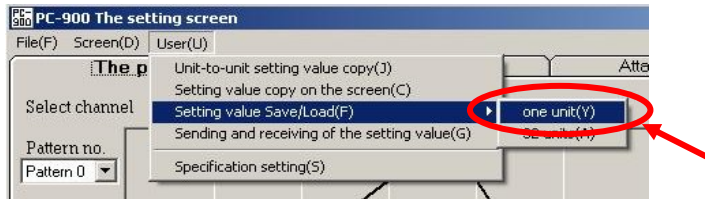
(Fig. 2.3.2-20)

### Setting value Load/Save (per unit)

The set values on the display can be saved in a file or loaded from files per unit.

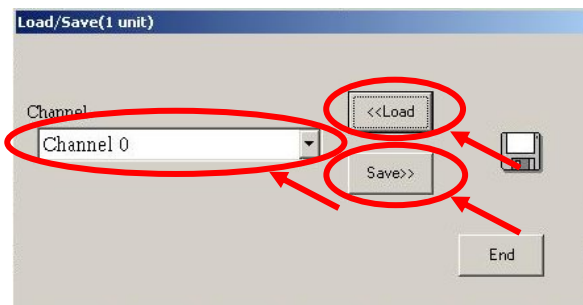
**When transmitting the set values to the PC-900, execute Setting value Sending/Receiving.** (See p.31)

- ① Select [User(U)] on the menu bar – [Setting value Load/Save(F)] – [1 unit (Y)], and click.



(Fig. 2.3.2-21)

- ② Load/Save (1 unit) screen appears.



(Fig. 2.3.2-22)

### Operation explanation

Channel box : Select a channel name to save or load the data.

[<<Load] button : Opens File selection screen.

Select a file name and click [Open].

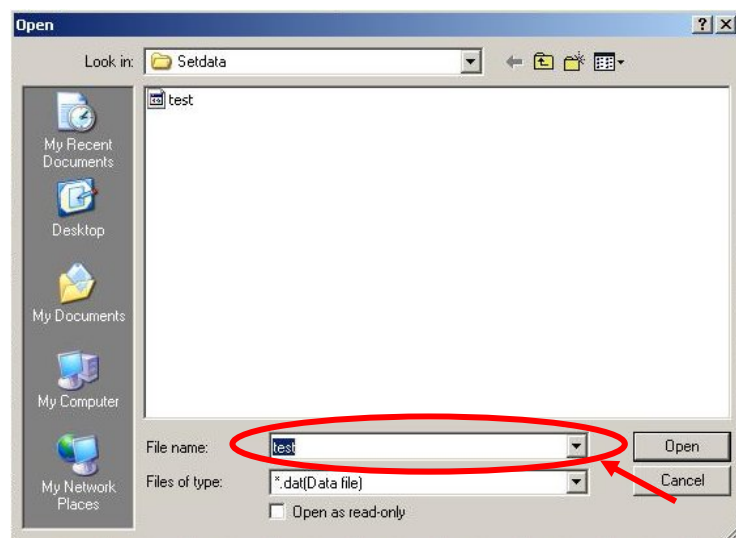
The data saved in the selected file is loaded to the selected channel data.

[Save>>] button : Opens File selection screen.

Select a file name and click [Open].

The selected channel data is saved in the selected file on the screen.

[End] button : Terminates Setting value Load/Save.



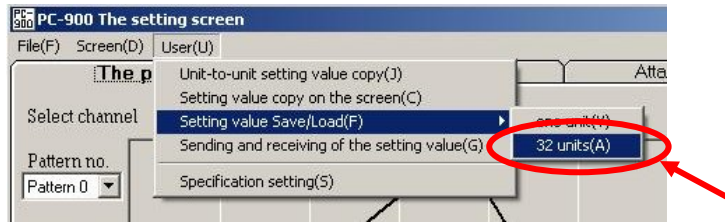
(Fig. 2.3.2-23)

### Setting value Load/Save (every 32 units)

The set values can be saved in a file or loaded from files in blocks of 32 units.

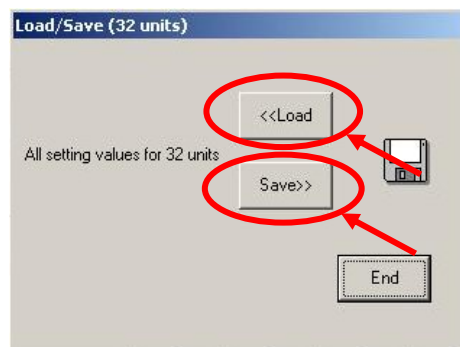
**When transmitting the set values to the PC-900, execute Setting value Sending/Receiving.** (See p.31)

- ① Select [User(U)] on the menu bar – [Setting value Load/Save(F)] – [32 units (A)], and click.



(Fig. 2.3.2-24)

- ② Load/Save (32 units) screen appears.



(Fig. 2.3.2-25)

### Operation explanation

[<<Load] button : Opens File selection screen.

Select a file name and click [Open].

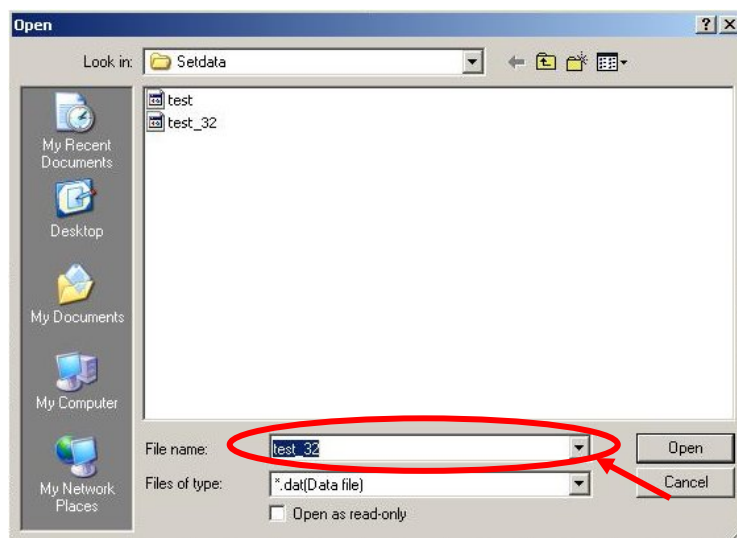
The data for 32 units saved in the selected file is loaded to the data on the screen.

[Save>>] button : Opens File selection screen.

Select a file name and click [Open].

The data for 32 units is saved in the selected file on the screen.

[End] button : Terminates Setting value Load/Save.

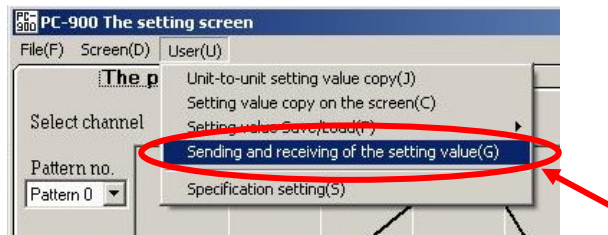


(Fig. 2.3.2-26)

## Setting value Sending/Receiving

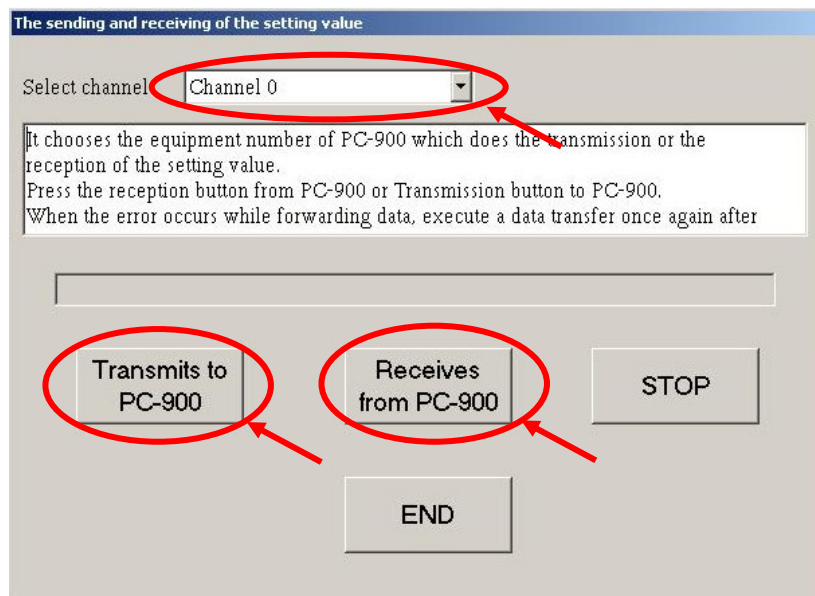
All set values on the screen can be sent to the PC-900 and received from the PC-900.

- ① Select [User (U)] on the menu bar – [Sending and Receiving of the Setting value (G)], and click.



(Fig. 2.3.2-27)

- ② Setting value Sending/Receiving screen appears.



(Fig. 2.3.2-28)

## Operation explanation

Select Channel: Selects a channel (unit) name to send or receive the set values.

[Transmits to PC-900] button: By clicking this button, the set value on the screen is sent to the selected channel (PC-900).

[Receives from PC-900] button: By clicking this button, the set value of the selected channel (PC-900) can be received and read on the screen.

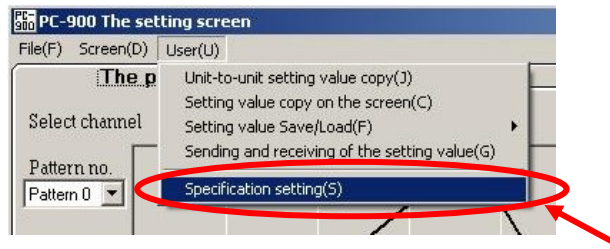
[STOP] button : Stops Setting value Sending/Receiving.

[END] button : Terminates Setting value Sending/Receiving.

## Specifications setting

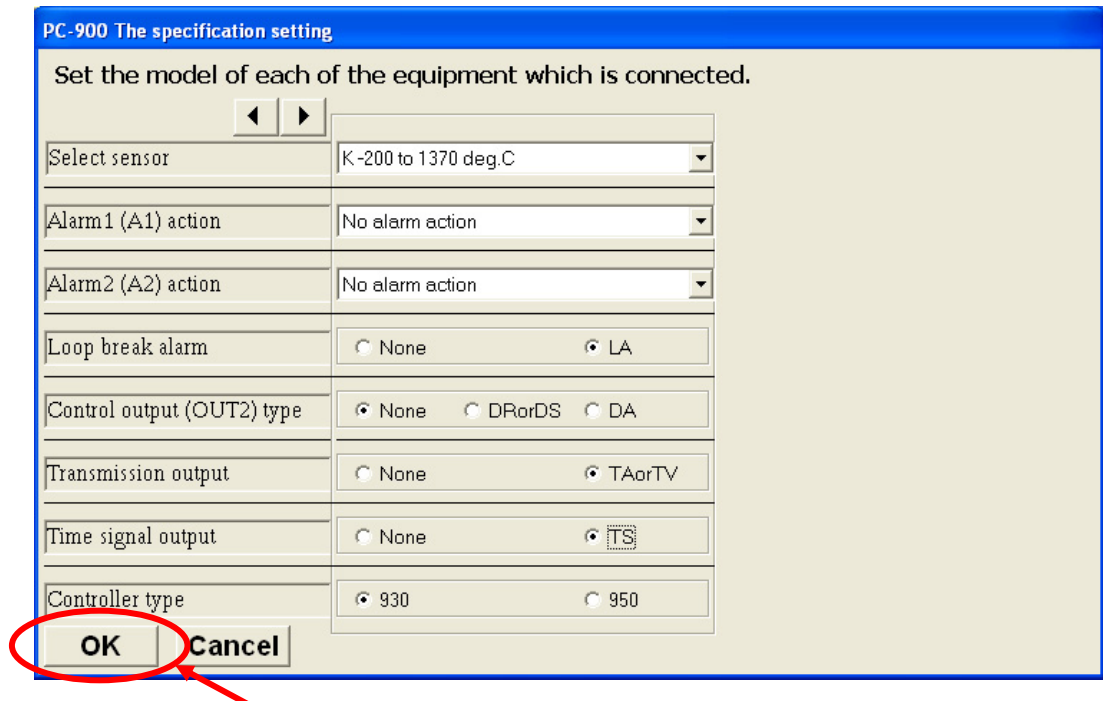
Set specifications according to the PC-900 connected.

- ① Select [User (U)] on the menu bar – [Specification setting (S)], and click.



(Fig.2.3.2-29)

- ② Setting value Sending/Receiving screen appears.  
Select an input range, Alarm 1 (A1) and Alarm 2 (A2) type, option Applied/Not applied, PC-930/PC-950 of the PC-900 connected, and click [OK].  
If the specification setting is not correct, errors will frequently occur and setting range will differ.



(Fig. 2.3.2-30)

## (7) Data logging

Logs PV for 32 units and saves in a file.

The saved data can be edited on the spreadsheet applications like Microsoft Excel.

### File name selection

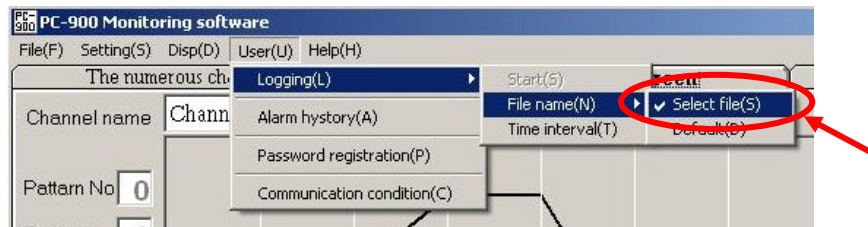
It is impossible to start data logging if the file name is not selected.

There are 2 ways to select a file name.

- File selection: A file name can be freely designated.
- Default: A file name is automatically determined from the date and time.  
yymmdd\_hhmm.csv      yy : Lower 2 digits of the year (2003: 03)  
                                 mm : Month (January: 01)  
                                 dd : Day (the 1st : 01)  
                                 hh : Hour (8 a.m.: 08, 8 p.m.: 20)  
                                 mm : Minute (1 minute: 01)

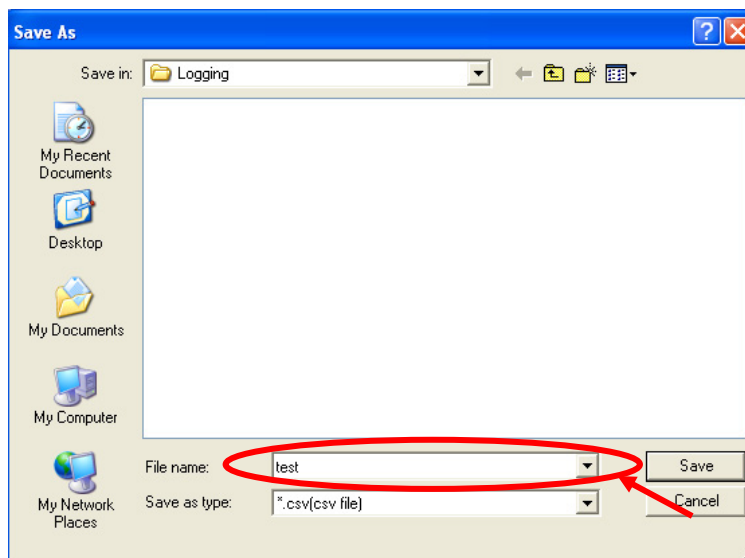
If monitoring software is closed during data logging, the data logging automatically starts next time monitoring software starts.

- ① Select [User (U)] – [Logging (L)] – [File name (N)] – [Select file (S)], and click.



(Fig. 2.3.2-31)

- ② The file selection screen appears.  
Enter a file name and click [Save].

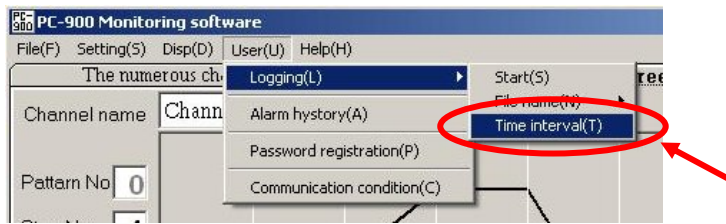


(Fig. 2.3.2-32)

### Data logging cycle setting

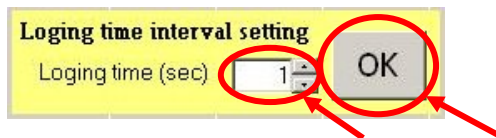
Sets a data logging cycle (time interval) as follows.

- ① Select [User (U)] on the menu bar – [Logging (L)] – [Time interval (T)], and click.



(Fig. 2.3.2-33)

- ② Logging time interval setting screen appears.  
Set a logging cycle. Setting range: 1 to 1800 seconds.

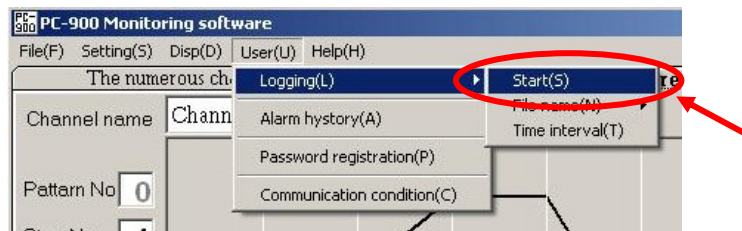


(Fig. 2.3.2-34)

### Data logging start

Data logging starts as follows.

- ① Select [User (U)] – [Logging (L)] - [Start (S)] and click.



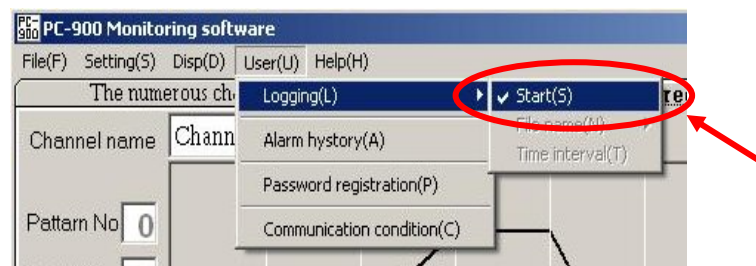
(Fig. 2.3.2-35)

- ② Data logging is initiated.

### Data logging termination

Data logging is terminated as follows.

- ① During data logging, select [User (U)] - [Logging (L)] - [Start (S)], and click.



(Fig. 2.3.2-36)

- ② Data logging is terminated.

## (8) Alarm history screen

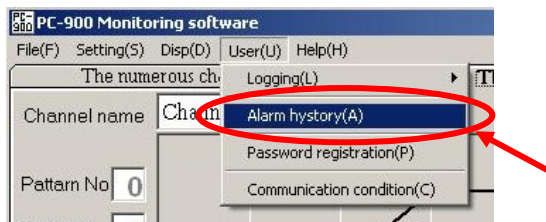
During monitoring, the following PC-900 items are indicated:

Alarm 1 (A1), Alarm 2 (A2), Alarm 3 (A3), Alarm 4 (A4), Upscale, Downscale, Loop break alarm, Channel (unit) name and Time when time signal occurred and was restored.

The file name is automatically set by the date and time when the monitoring software is started.

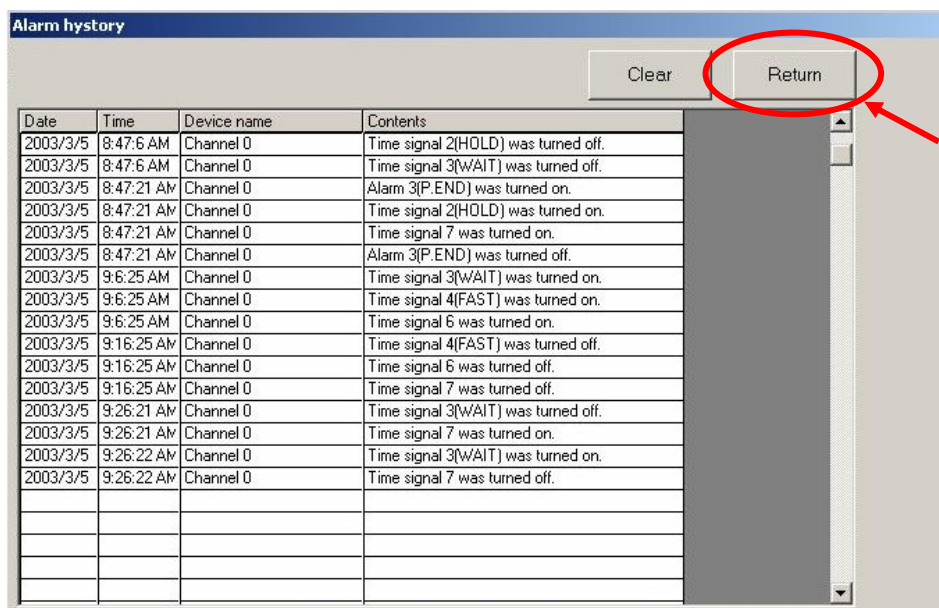
His\_yyyy\_mm\_dd\_hh\_mm.txt      yyyy: Year  
    mm : Month (January: 1)  
    dd : Day (the 1st : 1)  
    hh : Hour (8 a.m.: 8, 8 p.m.: 20)  
    mm : Minute (1 minute: 1)

- ① Select [User (U)] - [Alarm history (A)], and click.



(Fig. 2.3.2-37)

- ② Alarm history screen appears.



(Fig. 2.3.2-38)

### Operation explanation

[Clear] button : Clicking this clears the history data on the screen.

[Return] button : Clicking this closes alarm history screen.

## (9) Password registration

To use this software, the password must be registered so that nobody other than the operator can change set values.

The following are limited by the password.

- When registering a channel (unit) name
- When registering a time signal name
- When proceeding to the setting screen

No default value has been set.

Click [OK], then each screen will be selected.

- ① Select [User (U)] on the menu bar – [Password registration (P)], and click.



(Fig. 2.3.2-39)

- ② Password registration screen appears.  
Enter the current password, and click [OK].  
Default value has not been set, so click [OK].



(Fig. 2.3.2-40)

- ③ New password input box is indicated.  
Enter a new password and click [OK].



(Fig. 2.3.2-41)

Once the password is altered, no screen can be selected if the altered password is not entered.

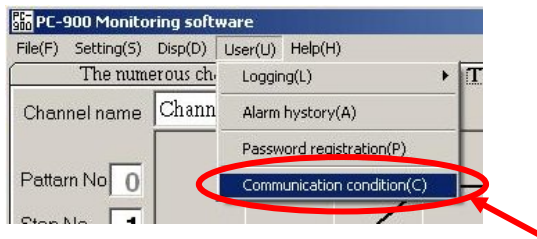
**Be careful not to forget it.**

If the password is forgotten, inquire at our agency or to us.

## (10) Communication condition setting

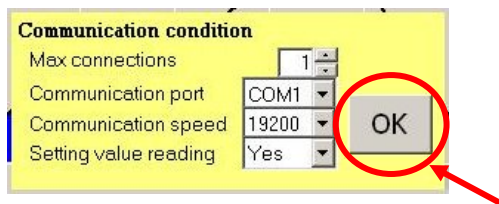
Set the number of connected units, communication port, communication speed, "Setting value reading" Yes/No when the monitoring software starts as shown below.

- ① Select [User (U)] on the menu bar – [Communication condition (C)], and click.



(Fig. 2.3.2-42)

- ② Communication condition setting screen appears.  
Set the communication conditions and click [OK].



(Fig. 2.3.2-43)

### Operation explanation

Max connections	: Sets the number of PC-900 units connected.
Communication port	: Select a communication port number.
Communication speed	: Select a speed according to that of the PC-900.
Setting value reading	: If Setting value reading "Yes" is selected, data reading time of one PC-900 unit with each communication speed is shown below.
Communication speed	19200bps : Approx. 1 minute
	9600bps : Approx. 1 minute 30 seconds
	4800bps : Approx. 2 minutes 30 seconds
	2400bps : Approx. 4 minutes

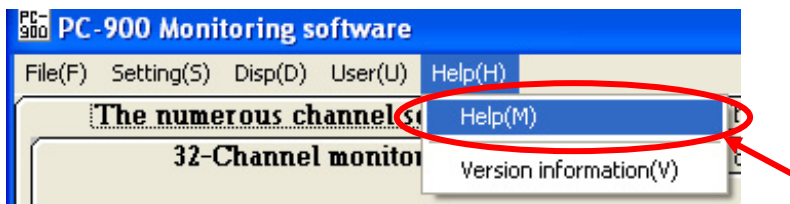
If the "Setting value reading" [No] is selected, the monitoring software will start within several seconds regardless of the communication speed.

- ③ If communication conditions are changed, restart the monitoring software.  
Otherwise the settings will not take effect.  
Terminating the software: p.22  
Starting the software: Pages 15, 16

## (11) Help screen

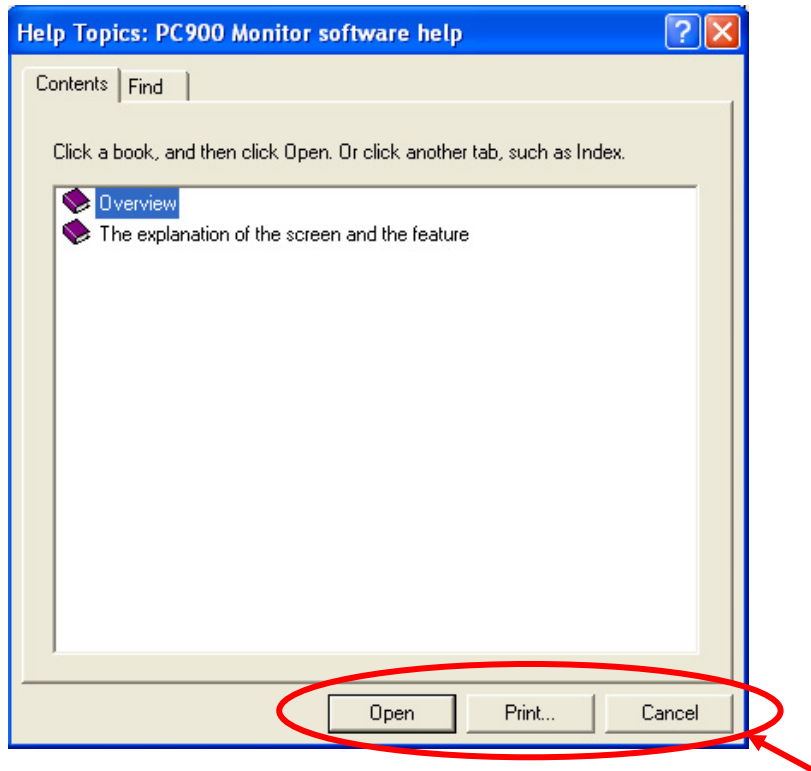
Each screen and operation method are explained.

- ① Select [Help(H)] on the menu bar – [Help(M)], and click.



(Fig. 2.3.2-44)

- ② Help display appears.



(Fig. 2.3.2-45)

### Operation explanation

[Open] button : Clicking this opens the selected Help contents.

If the closed book icon is selected, the book will be opened.

If the opened book icon is selected, the book will be closed.

[Print...] button : Clicking this prints the selected Help contents.

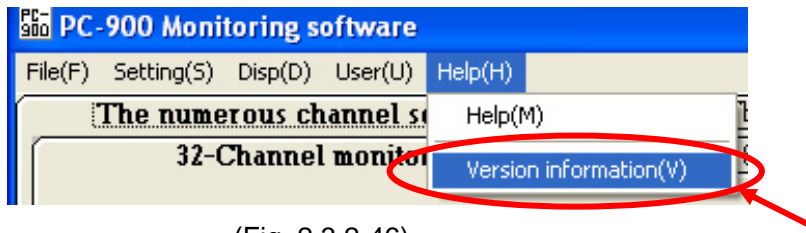
If the book icon is selected, all contents in the book will be printed.

[Cancel] button: Clicking this closes the Help display.

## (12) Version information screen

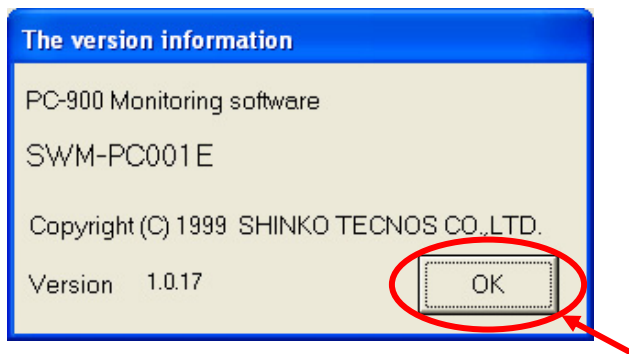
Version information on the monitoring software is described.

- ① Select [Help(H)] on the menu bar – [Version information(V)], and click.



(Fig. 2.3.2-46)

- ② Version information display appears.



(Fig. 2.3.2-47)

### Operation explanation

[OK] button: Clicking this closes Version information display.

\*\*\*\*\* Inquiry \*\*\*\*\*

For any inquiries about this software, please contact the shop where you purchased the software or our agency.

Please let us know the details of malfunction, if any, and the operating conditions.

**SHINKO TECHNOS CO.,LTD.**  
**OVERSEAS DIVISION**

Reg. Office: 2-5-1, Senbahigashi, Minoo, Osaka, Japan

URL : <http://www.shinko-technos.co.jp>

E-mail : [overseas@shinko-technos.co.jp](mailto:overseas@shinko-technos.co.jp)

Tel : 81-72-727-6100

Fax: 81-72-727-7006