

ESPEC CORP.
Apr. 2002 revision 2

ERC-100SII Screen Manual

1. ERS-100SII

About Password

Customer initial password: 0000

A password for demonstraion when communication disconnected : espec



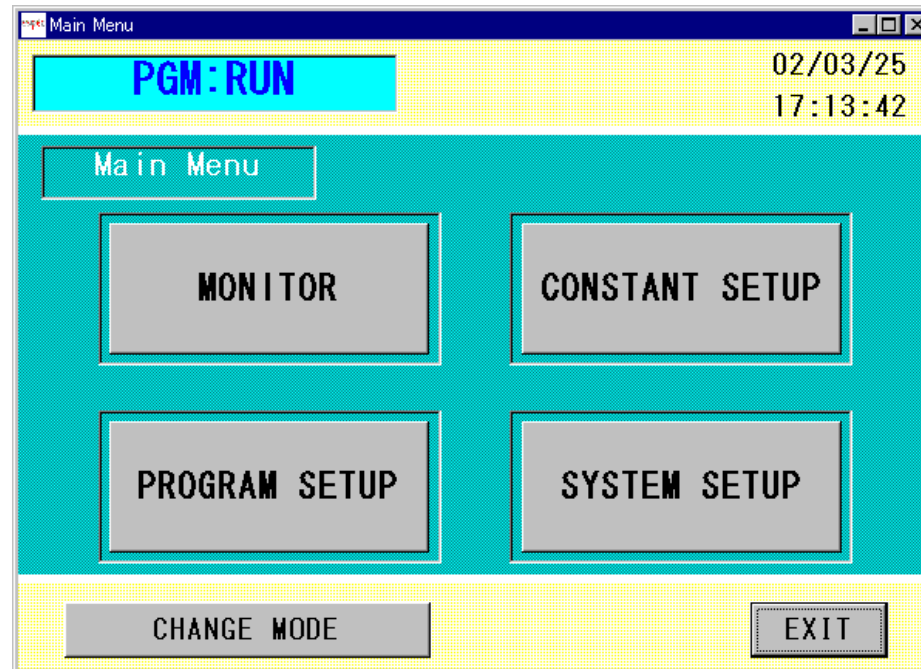
When you boot ERC-100SII for the first time after installation, please enter a pass word for demonstration.

Then set the communication parameter and chamber type on the Communication Set or Property screen of System Setup.

[NOTE] Customer initial password (0000) cannot be accepted this time.

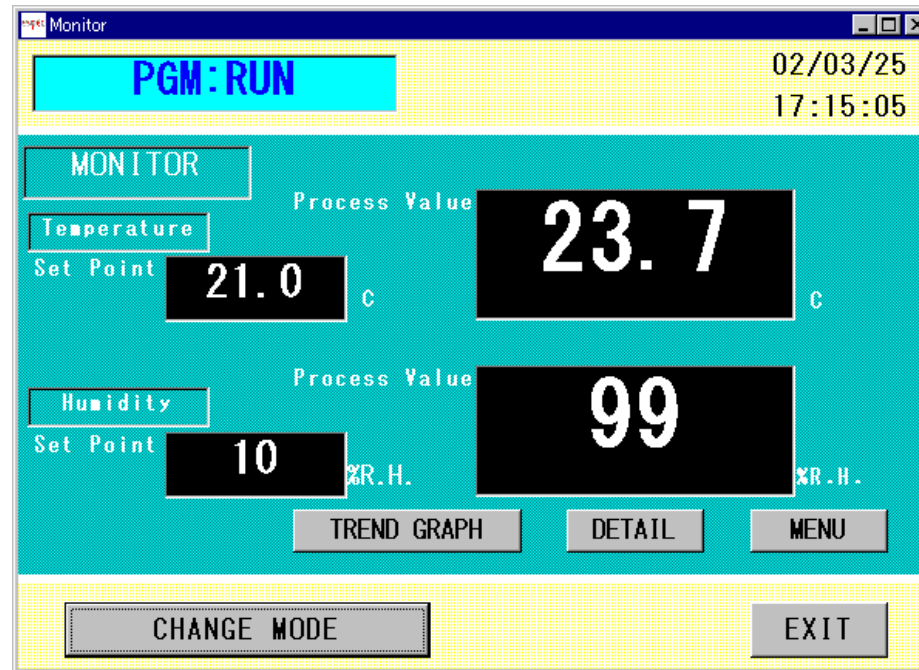
2. Main Menu

This is the main screen of ERC-100SII.



3. Monitor

This screen shows TEMP PV, TEMP SV, HUMI PV and HUMI SV.
It is impossible to set SV on this screen.



3.1 Trend Graph

REC TIME shows the time when the graph data is updated.

HUMI SV line does not appear in case of HUMI OFF and the purple line is drawn above the graph instead.

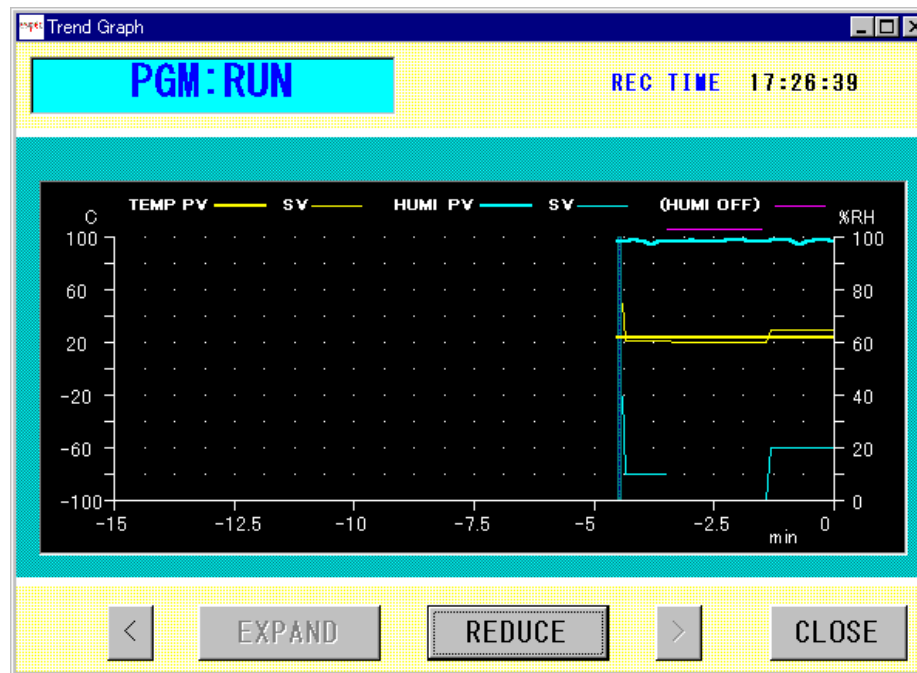
About the background color

Gray: When the P-instrumentation is sending Error Message

Red: When the communication is in trouble

Blue: When the P-instrumentation is Power OFF or STOP

Black: Others (during normal operation)



3.2 Program Index

This screen appears only during the program is operated.

The screenshot shows a 'Program Index' window with a yellow header bar. On the left, a cyan box contains the text 'PGM: RUN'. On the right, the date '02/03/25' and time '17:27:28' are displayed. The main area is divided into two panels: 'Program Index' (light blue background) and 'Current Status' (light green background). The 'Program Index' panel shows: Program Number 1, File PGM-01, Total Step 9, Program End POWER OFF, and Counter 1 From 1 to 9 by 99 times. The 'Current Status' panel shows: Current Step 3, Temperature Set Point 30.0 °C, Humidity Set Point 20 %R.H., and Remain Time 0:01 HH:MM. At the bottom, there are four buttons: 'CHANGE MODE', 'BACK', 'MENU', and 'EXIT'.

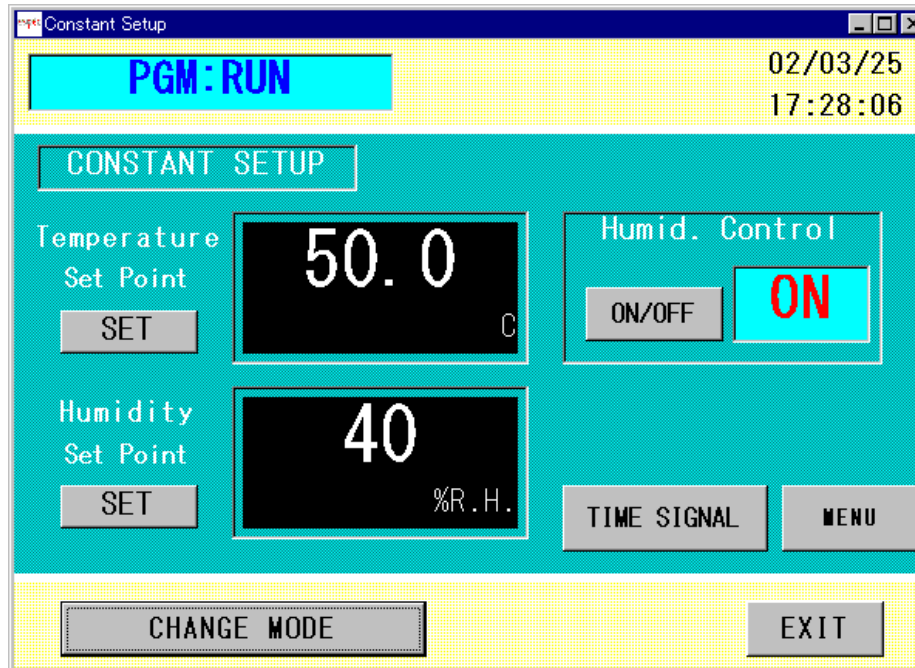
Program Index	
Program Number	1
File	PGM-01
Total Step	9
Program End	POWER OFF
Counter 1	From 1 to 9 by 99 times
Counter 2	From --- to --- by --- times

Current Status	
Current Step	3
Temperature Set Point	30.0 °C
Humidity Set Point	20 %R.H.
Remain Time	0:01 HH:MM

Buttons: CHANGE MODE, BACK, MENU, EXIT

4. Constant Setup

This screen is to set the TEMP SV and HUMI SV of the constant operation and also the humidity control setting.



The image shows a graphical user interface for a "Constant Setup" screen. At the top, a blue header bar contains the text "Constant Setup" on the left and window control icons on the right. Below the header, a yellow banner displays "PGM: RUN" in large blue letters on the left and the date "02/03/25" and time "17:28:06" on the right. The main area has a teal background. A white box at the top of this area is labeled "CONSTANT SETUP". Below this, there are two main sections. The left section is for "Temperature Set Point", showing a large digital display of "50.0" with a small "C" for Celsius. Below the display is a "SET" button. The right section is for "Humid. Control", showing a large digital display of "ON" in red. Below the display is an "ON/OFF" button. Below these two sections, there is a "Humidity Set Point" section with a large digital display of "40" and "%R.H." for relative humidity, with a "SET" button below it. To the right of the humidity set point are two buttons: "TIME SIGNAL" and "MENU". At the bottom of the screen, there are two large buttons: "CHANGE MODE" on the left and "EXIT" on the right.

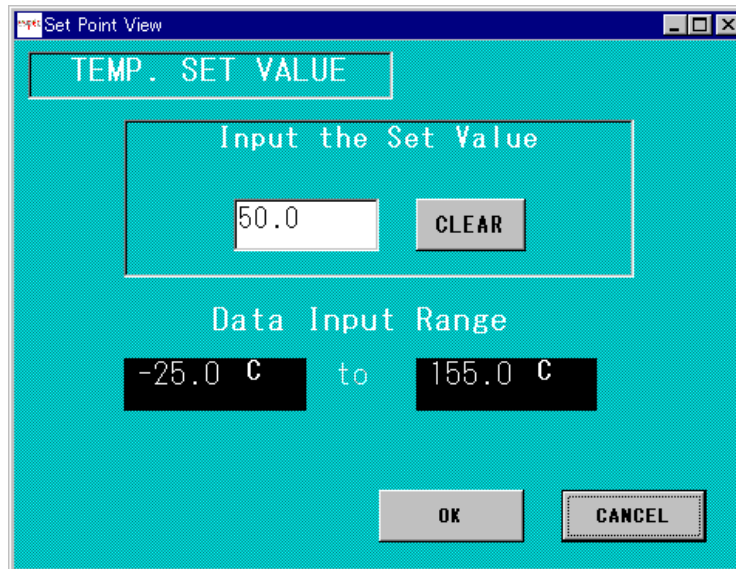
Section	Parameter	Value	Unit	Control
Temperature	Set Point	50.0	C	SET
	Humidity Control	ON		ON/OFF
Humidity	Set Point	40	%R.H.	SET

TIME SIGNAL MENU

CHANGE MODE EXIT

4.1 / 4.2 Set Point View

It is possible to set the TEMP SV and HUMI SV within the data input range in spite of the operation status of the chamber.
The following is the screen to set the TEMP SV.



The image shows a software window titled "Set Point View". Inside the window, there is a section titled "TEMP. SET VALUE". Below this title, there is a sub-section titled "Input the Set Value". This sub-section contains a text input field with the value "50.0" and a "CLEAR" button. Below the "Input the Set Value" section, there is a section titled "Data Input Range". This section displays the range "-25.0 C to 155.0 C". At the bottom of the window, there are two buttons: "OK" and "CANCEL".

4.3 Time Signal

This screen is to set time signal of constant operation.

In case that time signal (option) is set in the instrumentation, ERC-100SII can change its ON/OFF setting.

Time signal options in ERC-100SII and the instrumentation do not link.

That is, ERC-100SII cannot detect the setting state of time signal option in the instrumentation.

The screenshot shows a software window titled "Time Signal" with a cyan background. At the top center is a label "TIME SIGNAL". Below it are 12 rows of controls, each consisting of a label and a checkbox. The labels are "1 Time Signal-1" through "12 Time Signal-12". The checkboxes are labeled "ON/OFF". At the bottom of the window are two buttons: "SAVE" and "CANCEL".

Signal Label	ON/OFF
1 Time Signal-1	<input type="checkbox"/>
2 Time Signal-2	<input type="checkbox"/>
3 Time Signal-3	<input type="checkbox"/>
4 Time Signal-4	<input type="checkbox"/>
5 Time Signal-5	<input type="checkbox"/>
6 Time Signal-6	<input type="checkbox"/>
7 Time Signal-7	<input type="checkbox"/>
8 Time Signal-8	<input type="checkbox"/>
9 Time Signal-9	<input type="checkbox"/>
10 Time Signal-10	<input type="checkbox"/>
11 Time Signal-11	<input type="checkbox"/>
12 Time Signal-12	<input type="checkbox"/>

5. Program view

No.1 shows RAM program (editable by customers).

No. 2 to 30 cannot be used.

The screenshot shows a window titled "Program View" with a yellow background. At the top left, a blue box contains the text "PGM: RUN". At the top right, the date "02/03/25" and time "17:29:51" are displayed. Below this, a cyan box labeled "PROGRAM VIEW" contains a list of programs. The first program is "PGM-01" with a small icon to its left. Below it are 30 numbered slots, each with a small icon and a black box. The slots are arranged in three columns: 1-10, 11-20, and 21-30. Below the list, a cyan box contains the text "Select Program Number to EDIT" and three radio buttons labeled "EDIT", "VIEW", and "DELETE". To the right of this box is a grey button labeled "MENU". At the bottom of the window, there are two grey buttons: "CHANGE MODE" on the left and "EXIT" on the right.

Program Number	Program Name
1	PGM-01
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

Select Program Number to EDIT

☒ EDIT ☐ VIEW ☐ DELETE

MENU

CHANGE MODE EXIT

5.1 Program Editor

Gray mask is applied where it is unable to edit in order to prevent the mis-input.

Click the step number to cancel the gray mask. It can be canceled only the pre-step mask is also canceled.

Input the capital letters of "OFF" to turn off the humidity operation, not "0."

Time signal between No.3 and 12 can be displayed by clicking DETAIL even though they are not set in fact.

Make sure to set the same time signal option in ERC-100SII as in the instrumentation (Main Menu → System Setup → Property).

Choose SAVE only from the page that has temperature input, otherwise the error message appears and it is impossible to send the program.

The screenshot shows the 'Program Editor' window with a cyan background. On the left, there are three panels: 'File' with 'PGM-01', 'Program End' with radio buttons for 'POWER OFF', 'CONSTANT', 'HOLD', and 'Next Program', and 'Counter1' and 'Counter2' with input fields for ranges and times. The main area contains a table with 15 rows (steps 1-15) and 5 columns: Temp., Humid., TIME, and Time Sig. (1, 2). The table has a gray mask applied to steps 10-15. Navigation buttons '<' and '>' are on the right, and 'DETAIL', 'SAVE', and 'CLOSE' buttons are at the bottom.

	Temp.	Humid.	TIME	Time Sig.
	SP / Ramp Ctrl.	SP / Ramp Ctrl.	HH:MM / Soak Ctrl.	1 2
1	21.0	10	0:01	<input type="checkbox"/> <input type="checkbox"/>
2	20.0	OFF	0:02	<input checked="" type="checkbox"/> <input type="checkbox"/>
3	30.0	20	0:03	<input type="checkbox"/> <input checked="" type="checkbox"/>
4	40.0	30	0:04	<input type="checkbox"/> <input type="checkbox"/>
5	50.0	30	0:05	<input type="checkbox"/> <input type="checkbox"/>
6	60.0	OFF	0:06	<input checked="" type="checkbox"/> <input type="checkbox"/>
7	70.0	40	0:07	<input type="checkbox"/> <input checked="" type="checkbox"/>
8	80.0	OFF	0:08	<input type="checkbox"/> <input type="checkbox"/>
9	90.0	50	0:09	<input type="checkbox"/> <input type="checkbox"/>
10				<input type="checkbox"/> <input type="checkbox"/>
11				<input type="checkbox"/> <input type="checkbox"/>
12				<input type="checkbox"/> <input type="checkbox"/>
13				<input type="checkbox"/> <input type="checkbox"/>
14				<input type="checkbox"/> <input type="checkbox"/>
15				<input type="checkbox"/> <input type="checkbox"/>

5.1.1 Detail (Time Signal Set)

This screen is to set time signal of program operation, however, it is not set in fact.

The screenshot shows a software window titled "DETAIL(TIME SIGNAL SET)". Inside the window, there is a grid for setting time signals. The grid has 15 rows and 12 columns. The columns are labeled 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12. The rows are labeled 1 through 15. Each cell in the grid contains a small square icon. A "CLOSE" button is located at the bottom right of the window.

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

5.2 Program List

This screen looks like the Program Editor screen, but it is impossible to edit the program on this screen.

This screen can be printed out with PRINT OUT key.

The settings on this screen are able to be saved in any media which is connected with PC by choosing SAVE key.

	Temp.	Humid.	TIME	Time Sig.	
	SP / Ramp Ctrl.	SP / Ramp Ctrl.	HH:MM / Soak Ctrl.	1	2
1	21.0	10	0:01		
2	20.0	OFF	0:02		
3	30.0	20	0:03		
4	40.0	30	0:04		
5	50.0	30	0:05		
6	60.0	OFF	0:06		
7	70.0	40	0:07		
8	80.0	OFF	0:08		
9	90.0	50	0:09		
10					
11					
12					
13					
14					
15					

6. System Setup

It is possible to set conditions of ERC-100SII from this screen.



6.1 Limit Set

This screen is to set the high and low limit of TEMP SV and HUMI SV.

The image shows a software window titled "Limit Set" with a cyan background. It contains two main sections: "Temperature" and "Humidity". Each section has input fields for "High Limit" and "Low Limit", followed by a unit indicator and a "SET" button. The "Temperature" section shows values of 155.0 and -25.0 with a unit of 'c'. The "Humidity" section shows values of 100 and 0 with a unit of '%R.H.'. A "CLOSE" button is located at the bottom right of the window.

Parameter	High Limit	Low Limit	Unit
Temperature	155.0	-25.0	c
Humidity	100	0	%R.H.

6.1.1 / 6.1.2 / 6.1.3 / 6.1.4 Set Point View

It is possible to set the high and low limit of TEMP SV (HUMI SV) regardless of the operation status of the chamber.
The screen below is the setting screen of high limit temperature.

The input range of high/low limit temperature (humidity) depends on the latest set temperature (humidity), that is, input range of low limit temperature (humidity) is the min. temperature (humidity) to the latest set temperature (humidity) and that of high limit temperature (humidity) is the latest set temperature (humidity) to max. temperature (humidity). Therefore, input range changes as the latest set temperature (humidity) changes.
For example, when the set humidity is 0, input range of low limit humidity is 0%R.H. to 0%R.H.

The image shows a software window titled "Set Point View". Inside the window, at the top, is a label "TEMP. MAX." in a white box. Below this is a section titled "Input the Set Value" containing a text input field with the value "155.0" and a "CLEAR" button. Underneath is a section titled "Data Input Range" showing a range from "50.0 C" to "160.0 C". At the bottom of the window are two buttons: "OK" and "CANCEL".

6.2 Sampling Setup

This screen is to set the trend graph.

The present graph data will be cleared when the sampling cycle is changed or the CLEAR key is chosen.

The image shows a 'Sampling Setup' window with a title bar containing a small icon and the text 'Sampling Setup'. The window has a cyan background and contains several interactive elements:

- TREND GRAPH SET**: A header label at the top.
- Sampling Status**: A label next to a cyan button displaying 'Now Sampling'.
- Sampling Control**: A label next to two buttons: 'ON(Resume)' and 'OFF'.
- Sampled Data**: A label next to a 'CLEAR' button.
- Cycle**: A label for a list of four buttons: '5 sec', '30 sec', '1 min', and '5 min'.
- Max. Rec. Time**: A label for a list of four corresponding time values: 'Approx.4 hr', 'Approx.24 hr', 'Approx.2 days', and 'Approx.10 days'.
- Current Cycle**: A label next to a cyan button displaying '5 sec'.
- CLOSE**: A button at the bottom right of the window.

6.3 Logging

This screen shows the logging file settings, however It is impossible to change the settings on this screen.

Click MODIFY to change the settings.

If logging is executed, it will be interrupted when this screen is closed.

The error message will appear if you specify a wrong file name, for example, no drive is specified or the file name is empty.

This trouble does not cause any wrong effect to other functions of ERC-100SII nor the instrumentation.

The screenshot shows a window titled "Logging" with a cyan background. At the top, "Logging Status" is displayed in white text on a black background, followed by "OFF" in red text on a black background. Below this, there are three sections: "Logging File", "Logging Interval", and "Logging Data". The "Logging File" section contains a "File Name" field with the text "D:\Erc100sII\v100\ESPEC.LOG" and a "Mode" dropdown menu set to "Over Write". The "Logging Interval" section contains a numeric field with the value "30" and a unit "s". The "Logging Data" section contains four checkboxes, each with a red square icon: "Temp. Set Point", "Temp. Process Value", "Humid. Set Point", and "Humid. Process Value". At the bottom of the window, there are four buttons: "LOGGING START", "LOGGING STOP", "MODIFY", and "CLOSE".

6.3.1 Logging Set

This screen is to set conditions of the logging file.

Logging interval is basically periodical per setting time (30 to 3600 sec.) but sometimes it will become uneven or delay per setting time due to the multi-task processing of Windows, especially when other application that has a heavy load runs on the same PC.

Logging Set

Logging Interval

30 s (30 to 3600) CLEAR

Logging Data

☒ SP / PV ☐ Set Point ☐ Process Value

Logging File

D:\\$Erc100sII\v100\$ESPEC.LOG VIEW

Save Style

☒ Over Write ☐ Append

OK CANCEL

6.4 Alarm Monitor

This screen shows the latest information of alarm occurred to the chamber.
It indicates only the current total number of alarms and their specific number, not the details nor the history.



6.5 Command Test

It is possible to test the communication command of P-instrumentation here.
Although the screen shows "NA..." when the command is incorrect, this does not cause any trouble to the instrumentation nor ERC-100SII.

Command Test

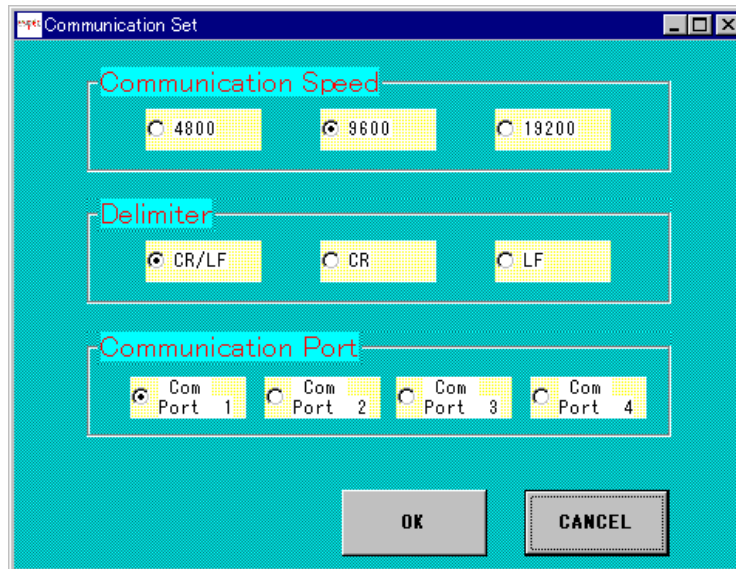
Send Data

Receive Data

You can make sure of the commands
using this mode on debug.

6.6 Communication Set

Settings on this screen besides communication port must be same as the instrumentation's.
Communication port setting is unique to ERC-100SII, that is, the instrumentation does not have this setting.



The image shows a software dialog box titled "Communication Set". It has a blue title bar with standard window controls. The main area has a light blue background and contains three sections, each with a label and three radio button options:

- Communication Speed:** Options are 4800, 9600 (selected), and 19200.
- Delimiter:** Options are CR/LF (selected), CR, and LF.
- Communication Port:** Options are Com Port 1 (selected), Com Port 2, Com Port 3, and Com Port 4.

At the bottom right, there are two buttons: "OK" and "CANCEL".

6.7 Time Signal Name

Time signal name here does not link with the instrumentation's.

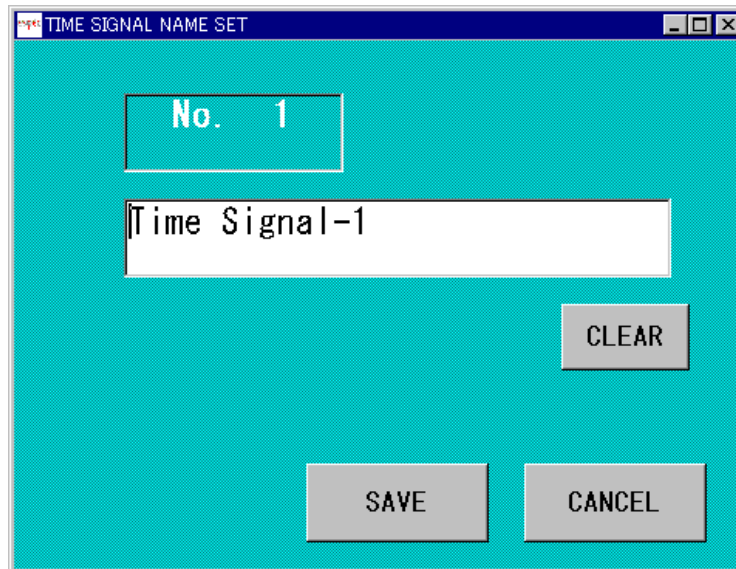
TIME SIGNAL NAME	
1	Time Signal-1
2	Time Signal-2
3	Time Signal-3
4	Time Signal-4
5	Time Signal-5
6	Time Signal-6
7	Time Signal-7
8	Time Signal-8
9	Time Signal-9
10	Time Signal-10
11	Time Signal-11
12	Time Signal-12

CLOSE

6.7.1 Time Signal Name Set

Max. 14 characters are acceptable.

In case of no character input, the name will be "Time Signal-n."(n=1-12)



The screenshot shows a Windows-style dialog box titled "TIME SIGNAL NAME SET". The dialog has a blue title bar with standard minimize, maximize, and close buttons. The main area has a light blue background. At the top, there is a label "No." followed by a text box containing the number "1". Below this is a larger text box containing the text "Time Signal-1". To the right of this text box is a "CLEAR" button. At the bottom of the dialog are two buttons: "SAVE" on the left and "CANCEL" on the right.

6.8 Input Password

It is required to input the preset password in order to display the Property screen.
Regardless of the entry password of ERC-100SII, any one of the two, a customer password (Initial setting: 0000),
a demonstration password "espec" is acceptable.



The image shows a Windows-style dialog box titled "Input Password". The dialog has a light gray background. At the top, the title bar is blue with the text "Input Password" and standard window control buttons (minimize, maximize, close). Below the title bar, the text "Input Password" is centered. In the center of the dialog, there is a white rectangular text input field. To the right of the input field is a button labeled "CLEAR". Below the input field and the "CLEAR" button, there are two buttons: "OK" on the left and "CANCEL" on the right.

6.8.1 Property

This screen is to set property of ERC-100SII itself.

It is also possible to check the version of ERC-100SII.

Font and size of characters are based on the OS being installed ERC-100SII.

Time signal option setting of ERC-100SII is completely independent from that of P-instrumentation.

Therefore, ERC-100SII cannot detect time signal options set in the instrumentation, and vice versa.

Property

ERC-100SII v1.00 Copyright(C) ESPEC Corp.

User Password

0000 CHANGE PASSWORD

Font

MS ゴシック 12 SIZE

Temp. range in graph

-100 c to 100 c

Language

☐ Japanese ☒ English

Chamber Type

☒ Temp. only ☐ Temp. / Humi.

TIME SIGNAL

☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6
☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12

Size of Window

Length 6500 Width 9000
X0 500 Y0 500

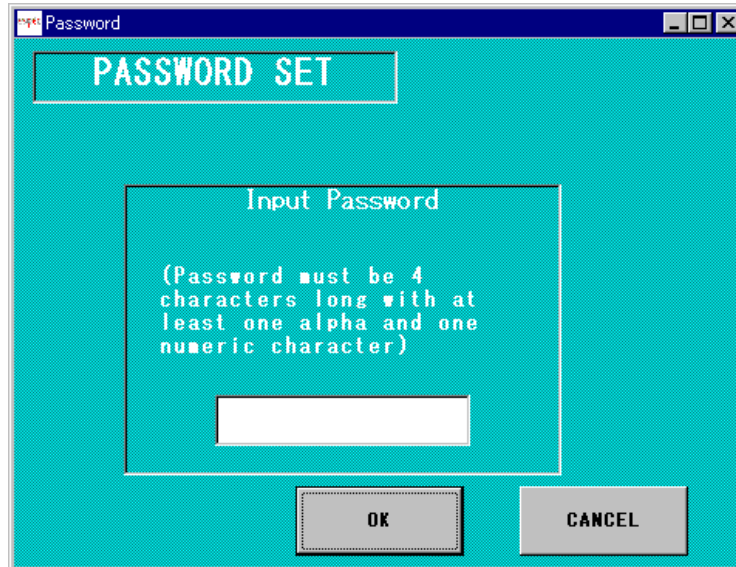
ERC-100SII END

☒ Chamber Power OFF ☐ Hot Chamber Power OFF

OK

6.8.1.1 Password

This screen is to change the customer password.
Input exactly 4 characters consist of alphabet and number.

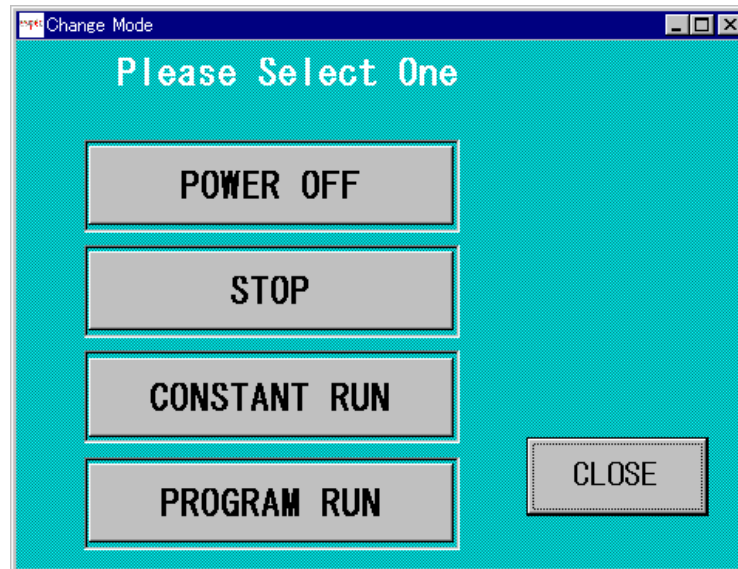


The image shows a screenshot of a software window titled "PASSWORD SET". The window has a blue title bar with standard Windows controls (minimize, maximize, close). The main area has a light blue background. At the top, there is a white rectangular box containing the text "PASSWORD SET". Below this, there is a larger white rectangular box. Inside this box, the text "Input Password" is centered. Below that, a message in a monospaced font reads: "(Password must be 4 characters long with at least one alpha and one numeric character)". Underneath the message is a white rectangular input field. At the bottom of the window, there are two gray buttons: "OK" on the left and "CANCEL" on the right.

7. Change Mode

the instrumentation.

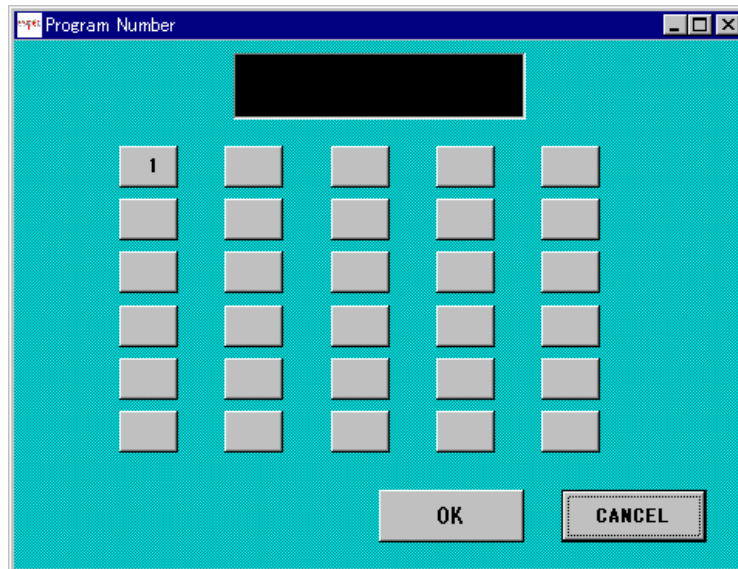
ERC-100SII can set or monitor the chamber status as long as the chamber breaker is ON even if the instrumentation is OFF.



8. Program Number

The screen shows the program number registered in P-instrumentation.

P-instrumentation starts the program operation when the program number is chosen on this screen.



9. Select File

This screen appears when logging file is set or the location of the program list is saved. Extensions such as "txt, log, pgm" are prepared but any extension is acceptable. Note that ERC-100SII tells no alarm message of overwriting. When the set directory does not exist, the error message will come up later on. When the set file name does not exist, the file will be made later on.

