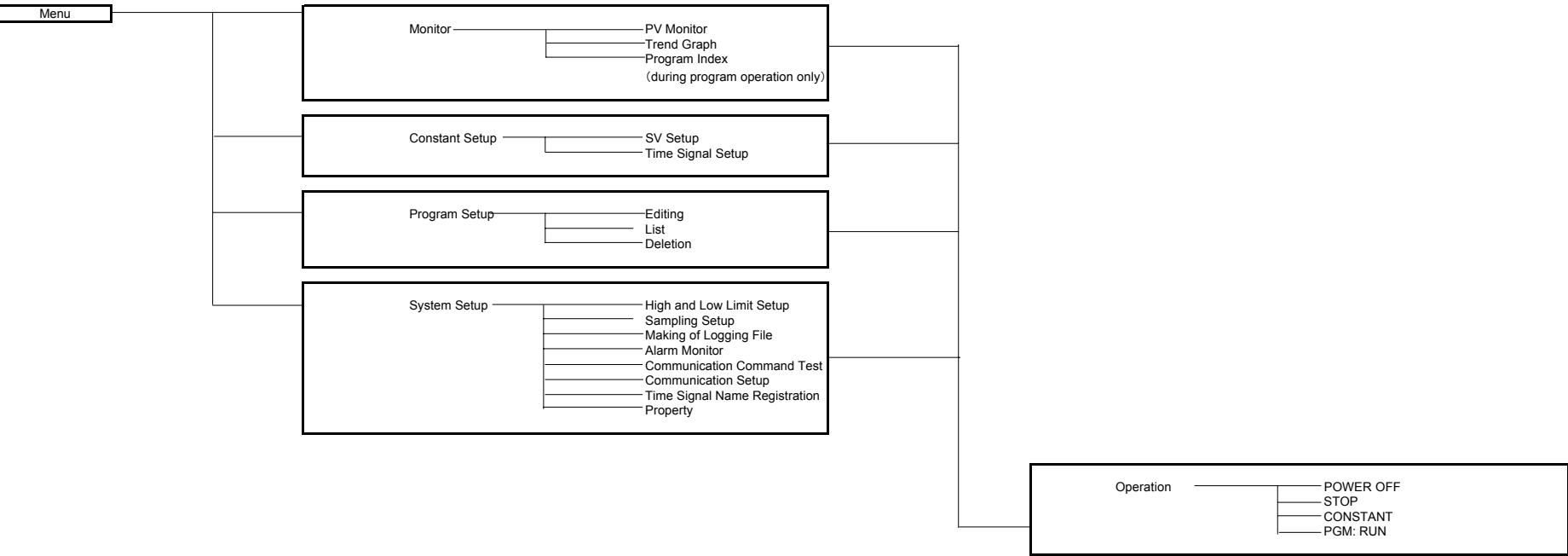


ERC-100SII Function Chart

1. Formation of Setup and Monitoring Functions
2. Chamber Monitoring Functions
3. Chamber Setup Functions
4. ERC Settings and Others

1. Formation of Setting and Monitoring Functions



2. Chamber Monitoring Functions

Functions	Monitoring and Operation of ERC-100SII					Spec.	Remarks
Monitoring Value	TEMP SV TEMP PV HUMI SV HUMI PV High limit TEMP SV Low limit TEMP SV High limit HUMI SV Low limit HUMI SV					Displayed to the first decimal place Displayed to the first decimal place No display of decimal place No display of decimal place Displayed to the first decimal place Displayed to the first decimal place No display of decimal place No display of decimal place HUMI SV shows OFF when humidity operation or power is OFF. HUMI PV is monitored even when HUMI SV shows OFF.	No display when temp. type chamber is connected. No display when temp. type chamber is connected. No display when temp. type chamber is connected. No display when temp. type chamber is connected.
Operation Status Display	POWER OFF STOP CONSTANT PGM: RUN					When the instrumentation is in the status of POWER OFF (as long as the breaker is ON) When the instrumentation is in the status of STOP When the instrumentation is in the status of CONSTANT When the instrumentation is in the status of PGM:RUN, PGM:STOP	
Alarm Detection	ALARM!! warning Pop-up of alarm message					"ALARM!!" warning flashes in red on the major screens in case of alarm. Total alarms and their numbers are informed.	
Graph Display	Line		TEMP SV TEMP PV HUMI SV HUMI PV			Fine yellow Bold yellow Fine light blue Bold light blue Whether the line, including the following three, will be smooth and clear depends on the load of PC and the resolution of PC screen. No drawing of this line when HUMI SV is OFF, and the purple line is drawn above the graph instead.	No display when temp. type chamber is connected. No display when temp. type chamber is connected.
	Background		NA Communication error POWER OFF/STOP Others			Gray Red Blue Black	
	Temp. range		Default setting Input range Min. input unit			0 to 100℃ From which temperature of 0, -50, -100 to which temperature of 50, 100, 150, 200, 250, 300.	Changeable on the Property screen
	Humidity range					0 to 100℃ Unchangeable	
	Patterns of expansion/reduce and scroll					Sampling interval Max. record time Expansion/reduce mode Recording time per page Total pages	Sampling interval may be uneven depending on the load to the PC.
		5 sec.	Approx. 4hrs.	1 2 3 4	Approx. 120 min. Approx. 60 min. Approx. 30 min. Approx. 15 min.	2 4 8 16	
		30 sec.	Approx. 24hrs.	1 2 3 4	Approx. 12 hrs. Approx. 6 hrs. Approx. 3 hrs. Approx. 1.5 hrs.	2 4 8 16	
		1 min.	Approx. 2 days	1 2 3 4	Approx. 24 hrs. Approx. 12 hrs. Approx. 6 hrs. Approx. 3 hrs.	2 4 8 16	
		5 min.	Approx. 10 days	1 2 3 4	Approx. 120 hrs. Approx. 60 hrs. Approx. 30 hrs. Approx. 15 hrs.	2 4 8 16	
Sampling status		NOW SAMPLING/STOP					
Sampling interval		5 sec./30 sec./1 min./5min.					
Others		Graph data sampling time of the latest updating (REC TIME)					Time depends on the internal clock of PC.

Constant Setup	Time signal	ON/OFF setting of one time signal of the instrumentation ERC-100SII cannot detect timesignal option setting of the instrumentation.	
	Humidity control	ON/OFF	No display when temp. type chamber is connected.
Program Index	Program No.	The running program NO. and the type of program, RAM program(only one pattern)	Displayed only during the program operation
	File name	Name of the running program(PGM-01 fixing)	Displayed only during the program operation
	Total steps	The total steps of the running program	Displayed only during the program operation
	Mode after the program operation	Mode after the operation of the running program (OFF/CONSTANT/HOLD)	Displayed only during the program operation
	Counter 1	Counter 1 setting of the running program No counter setting when the setting box is filled with "0."	Displayed only during the program operation
	Counter2	Not yet corresponded. Display [- - -]	Displayed only during the program operation
	Step No.	The running step No.	Displayed only during the program operation
	TEMP SV	TEMP SV for the running program Displayed to the first decimal place	Displayed only during the program operation
	HUMI SV	HUMI SV for the running program No display of decimal place	Displayed only during the program operation
	Step remaining time	Remaining time of the step Unit: 1 min.	Displayed only during the program operation
	Step remaining time	Remaining time of the step Unit: 1 min.	Displayed only during the program operation
Registered Program List	Registered program name list	"PGM-01" fixing	
	The number of registered program	1 RAM program (Editable)	
Details of Registered Program	File name	"PGM-01" fixing	
	Mode after the program operation	OFF/CONSTANT/HOLD	
	Counter 1	Counter setting is off when the setting box is filled with "0."	
	Counter 2	Not yet corresponded. Display [- - -]	
	TEMP SV	TEMP SV for the program operation Displayed to the first decimal place	
	Temperature ramp control	ON/OFF setting of each step's temperature ramp control Apply a check mark to turn ON the ramp control.	
	HUMI SV	HUMI SV for the program operation No display of decimal place Input "OFF" to turn OFF the humidity control, not "0."	
	Humidity ramp control	ON/OFF setting of each step's humidity ramp control Apply a check mark to turn ON the ramp control.	
	Time	[Hour] : [Minutes]	1:00 - 999:00 or 0:00 - 99:59
	Exposure control	ON/OFF setting of each step's exposure control	
	Time signal	ON/OFF setting of each step's time signal Time signals 1 and 2 are always displayed and 3 to 12 will come up by clicking DETAIL. Apply a check mark to turn ON the time signal.	Time signal 2-12 are not corresponded yet. (they are masked.)
	Max step	9	
Display of Date and Time		Date: yy/mm/dd Time: hh:mm:ss Each depends on the internal clock of PC.	

3. Chamber Setup Functions

Functions	Setup	Details	Spec.	Remarks
Switching of Operation Status	POWER OFF		P-instrumentation can be turned OFF but not the chamber breaker.	
	STOP		No function for the suspension of the program operation	
	CONSTANT	Change of TEMP SV	Settable to the first decimal place within the max. and min. temperature	
		Change of HUMI SV	The decimal point unnecessary. The value must be within the max. and min. humidity.	Only when temp. & humid. type chamber is connected.
		Humidity operation ON/OFF		Only when temp. & humid. type chamber is connected.
		Time signal ON/OFF	Can be set only 1 from 12 as long as time signal is set.	
	PROGRAM	Program selection	Any recorded program is selectable. Operation always starts from the first step.	Can register only one pattern,
High and Low Limit	TEMP SV	Max. value	Settable to the first decimal place within the input range	
	TEMP SV	Min. value	Settable to the first decimal place within the input range	
	HUMI SV	Max. value	The decimal place unsettingtable. The value should be within the input range.	Only when temp. & humid. type chamber is connected.
	HUMI SV	Min. value	The decimal place unsettingtable. The value should be within the input range.	Only when temp. & humid. type chamber is connected.
Program Editing	Editable settings	File name	"PGM-01" fixing	Unchangeable
		Mode after the program operation	OFF/CONSTANT/HOLD Any recorded program is selectable as the Next Program.	Unchangeable during the program operation
		Counter 1 and 2	Counter setting is off when all setting boxes are filled with "0." (Only counter 1 can be set.)	Unchangeable during the program operation
		TEMP SV	Indispensable to set to the first decimal place. If this rule is ignored, the value is automatically corrected.	Unchangeable during the program operation
		Temperature ramp control	Apply or take off the check mark to ON/OFF.	Unchangeable during the program operation
		HUMI SV	The decimal point unnecessary. Automatically deleted, if set. Input "OFF" to turn off the humidity control, not "0."	Unchangeable during the program operation
		Humidity ramp control	Apply or take off the check mark to ON/OFF.	Unchangeable during the program operation
		Step time	[Hour : Minute] Max. time: 999 hours	Unchangeable during the program operation
		Time signal	Can be set only 1 from 12. Apply or take off the check mark to ON/OFF.	Unchangeable during the program operation
		Max. step	Can input up to 9 step.	Unchangeable during the program operation
Program Deletion			RAM program is possible to delete.	

※1 User's Manual (Reference) Temp. & Humid. Chamber Platinous K Series

4. ERC Settings and Others

Settings	Details	Spec.	Remarks
Entry Password	Customer initial password	0000	Changeable on the Property screen
	Manufacturer password when communication disconnected	espec	
Saving of Program List	Location	Saving media connected with PC (ex. HDD)	
	File name	Any kind (Error occurs when specifying the non-existent drive or directory. New file is made when specifying the non-existent file.)	
	Contents	Date Time File name with pass ※2	
	Format	CSV	
Printing of Program List	Contents	※2	
Making of Logging File	Location	Saving media connected with PC (ex. HDD)	Sampling interval may be uneven due to the heavy load toward PC.
	File name	Any kind (Error occurs when specifying the non-existent drive or directory. New file is made when specifying the non-existent file.)	
	Contents	File name with pass Logging start time and date Sampling interval (sec.) Data No. Saved time of each data TEMP SV/TEMP PV/HUMI SV/HUMI PV or TEMP SV/TEMP PV or HUMI SV/HUMI PV Logging end time and date *1	
	Logging file capacity	Saving possible until the saving media is full.	
	Logging interval	Settable in 1-second-unit within 30 to 3600 sec. However, there will be some delay when PC has heavy load.	
	Logging file mode	New file or overwriting	
Communication Command Test		Possible to test both monitor command and set command. Refer to ※3 about command.	
Communication Setting	Communication speed	4800/9600/19200 bps	Setting must be same as P-instrumentation's.
	Delimiter	CR/LF, CR, LF	Setting must be same as P-instrumentation's.
	Communication port	Com Port 1 to Com Port 4	Select Com Port 1 when PC has only one serial port.
Time Signal Name	Editable name	No.1 to No.12	Time signal name does not link with P-instrumentation's.
	Settable characters	Characters possible to input directly or through FEP	
	Max. number of characters	14	

*1

Operation status of each step:

Error: NA, POWER OFF: FALSE (POWER_OFF), STOP: FALSE (STANDBY), Communication Error: COM_ERR, Running (Humidity ON): TRUE, Running (Humidity OFF): TRUE (HUMI_OFF)

Settings	Details	Spec.	Remarks
Property	Requirement at starting-up	Password input Input of any one of three passwords for entry (User password/espec)	
	Change of customer password	4 alphabets and numbers	
	Change of temp. range in trend graph	Within high and low limit temperature The decimal point unnecessary.	
	Language	Japanese/English	
	Chamber type	TEMP. & HUMID./TEMP. The same chamber type must be set in ERC-100SII and P-instrumentation.	
	Font type	Depends on OS Recommendation: MS Gothic for Japanese, Arial for English	
	Font size	Depends on OS Recommendation: 12 points	
	Time signal	Twelve This does not link with P-instrumentation's option setting.	
	Window size	Default setting: TOP:500, LEFT:500, Length:6500, Width:9000	TOP and LEFT indicate the point from the upper left of the screen.
Time and Date		Date: yy/mm/dd, Time: hh:mm:ss Depends on the internal clock of PC	
First Starting up after installation	Chamber type	TEMP. & HUMID./TEMP.	
	Language	Japanese/English	
Trend Graph	Sampling interval	5 sec. Max. record time: Approx. 4 hours	
		30 sec. Max. record time: Approx. 24 hours	
		1 min. Max. record time: Approx. 2 days	
		5 min. Max. record time: Approx. 10 days	
	Sampling status	ON/OFF Default setting: ON	
	Clear	Clearance of graph data	

※2

Program name

Total steps

TEMP SV of each step

Temperature ramp control ON/OFF of each step

HUMI SV of each step

Humidity ramp control ON/OFF of each step

Time of each step

Exposure ramp control ON/OFF of each step

Time signal ON/OFF of each step

Operation status of each step Error: NA, POWER OFF: FALSE(POWER_OFF), STOP: FALSE(STANDBY), Communication Error: COM_ERR, Running (Humidity ON): TRUE, Running (Humidity OFF): TRUE(HUMI_OFF)

Setting of counter 1 and 2

Mode after the program operation

※3

Please refer to each chamber's user's manual.