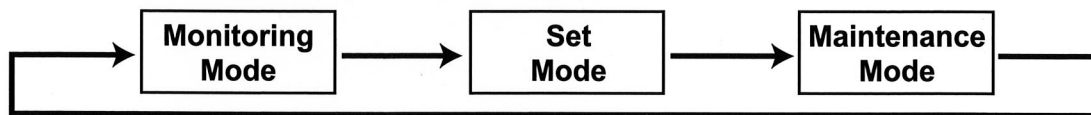




Setting Procedures

- **Indicator Switch [SW3-1]** Push Switch for Set Mode.



- **Items [SW3-2]** Mode can be selected by pushing "Items" Switch.
- **UP[SW3-3]** Change the setting by pushing "UP" Switch.
Each step is saved by switching to next step. (Autosave)

Before changing setting, verify that SW1 (Dipswitch), #1, #2 on switch panel undercover, is set appropriately according to the M-Alkalinity list right.

SW1,#1	SW1,#2	M-Alkalinity
OFF	OFF	UNDER 60mg/L
OFF	ON	OVER 60mg/L AND UNDER 120mg/L
ON	OFF	OVER 120mg/L AND UNDER 300mg/L
ON	ON	OVER 300mg/L AND UNDER 500mg/L

Set Items

- **Date (S Date)** Make sure to set the present date. (month/date/year)
- **Time (S Time)** Make sure to set the present time.
- **Monitor Interval (S Intvl)**
To set the interval for each monitoring. (Recommended setting example: A "S Intvl 060" indicator means monitoring is at 60 min. intervals.)
- **Start & Stop for Monitoring (S Start, S Stop)**
To set the monitoring period. (To set time) In order to set continuous monitoring for 24 hours, set [24:--] or set the same time for both "S Start" & "S Stop".
- **Monitors only when remote auto bypass signal is OFF. (S Rte Sgl Off)**
(Remote signal example: water softener regenerating signal from softener unit)
Note: Set (S Rte Sgl Off) when the remote signal is not connected.
- **Monitors at remote auto bypass signal is ON. (S Rte Sgl On)**
Monitors for hardness when the remote signal is ON only. (Remote signal example: water feeding signal from softener unit)
- **Remote signal delay time (S DelayTime)**
In the case where the water sample is taken off after a feed water motor valve, the main unit can be set with a remote signal delay time to take the sample after the feed water motor valve has completely opened.
Failures to properly set the remote signal delay time may result in "Wash Flow F" alarm.
- **Alarm Set Point (S AlarmSet)**
To set the hardness concentration at which to initiate the alarm for hardness leakage incidents. (Factory setting is 2 mg/L.)
- **Retry Cycle (S Alarm Inc No.)**
Amount of Cycles before the main unit determines hardness leakage as verifiable can be set by user from 1 to 3 times. In other words; How many times the unit takes a "hard" reading before responding. (Factory setting is 2.)
- **Response (Alarm) Cycle (S Alarm Det No.)**
Amount of failed Retry Cycles before the main unit sets of alarm can be determined by user from 1 to 3 times. In other words; How many responses before setting off the hardness leakage alarm. (Factory setting is 2.)
- **Contact of remote alarm (S Rte Alarm)**
Set the contact of the remote alarm. (Factory setting is "NC".)
Setting = "NO" : When it is judged to be an alarm, the remote alarm output turns on.
Setting = "NC" : When it is judged to be an alarm, the remote alarm output turns off.
- **Cartridge replacement date (S C Rpl 10/23/06)**
The reagent cartridge replacement date ---- When replacing the reagent cartridge, do not disconnect power from the main unit to keep the date of replacement in memory. When necessary to change the date, it can be changed by pressing the "UP" switch.
- **Remote signal ID (S Rte ID)**
Remote signal ID is not available. Please input "00".
- **Communication ID (S Comm ID)**
Communication ID is not available. Please input "00".
In addition, please set "OFF" of SW1(Dipswitch),#5.



Digital Display Description

Monitoring Mode

Display	Description
1 CMU Ver.DE121040	ROM version
2 All Clear	Memory data clear
3 Hardness Monitor	Hardness monitor
4 Self Check	Self check
5 Self Check Retry	Self check retry
6 Monitor ON	Monitoring ionic concentration (Hardness)
7 Monitor ON Retry	Monitor ON retry
8 Std-by:	Waiting for monitoring stage
9 Result:	No result
10 Result:0mg/L	Result:1mg/L or less
11 Result:1mg/L	Result:between 1mg/L and 2mg/L
12 Result:2mg/L	Result:between 2mg/L and 3mg/L
13 Result:3mg/L	Result:between 3mg/L and 5mg/L
14 Result:>5mg/L	Result:5mg/L or more
15 Cartridge OFF	Cartridge disconnected
16 Cartridge OFF F	Cartridge disconnected fault
17 SW ON Cfm	Switch ON confirmed after cartridge replacement
18 Pump Start Cfm	During verification of the pump in its home position
19 High Temperature	Water temperature more than 50°C
20 Can't Monitor	The main unit can't monitor hardness
21 SelfCheck F :A000	A000: Control board fault
22 Thmsta F :C131	C131: Thermistor fault
23 Photo Rpt F :C365	C365: Photoreceptor fault
24 Pump F :C444	C444: Reagent injection pump fault
25 Data F :C500	C500: Data fault
26 Wash Flow F:F086	F086: Insufficient water flow for wash
27 Comm F :F090	F090: Communication fault
28 New Cartridge	F137: Need cartridge replacement
29 Hardness Leakage	Hardness is over the alarm level
30 Wash F :F265	F265: Insufficient pre wash
31 Injection F :F281	F281: Incomplete reagent injection
32 Data Check :F500	F500: Back up data cleared

Set Mode

Display	Description
1 S Date 10/23/06	S Date (m/d/y)
2 S Time 15:28	S Time 15:28
3 S Intvl 060min	S Monitor interval 60 min
4 S Start 08:30	S Start time 08:30
5 S Stop 20:30	S Finish time 20:30
6 S Rte Sgl OFF	S Monitor by remote signal off
7 S Rte Sgl ON	S Monitor by remote signal on
8 S DelayTime 010s	S Remote signal delay time
9 S AlarmSet 2mg/L	S Alarm set at 2mg/L
10 S Alarm Inc No:2	S 2 consecutive incidents set alarm off
11 S Rte Alarm :NO	S Set the contact of the remote alarm :NO
12 S C Rpl 10/23/06	S Set the contact of the remote alarm :NC
13 S Rte ID :00	S Cartridge replacement date(m/d/y)
14 S Comm ID :00	S Remote signal ID

S:Indicate Set Mode

Maintenance Mode

Display	Description
1 M ROMVerDE121040	M ROM version
2 M Hardness Mon	M Hardness monitor
3 M IN-OUT Mode *	M Input-output mode
4 M OUT1 1111 1111	M Output1 1111 1111
5 M OUT2 1111 1111	M Output2 1111 1111
6 M IN1 1111 1111	M Input1 1111 1111
7 M IN2 1111 1111	M Input2 1111 1111
8 M IN3 1111 1111	M Input3 1111 1111
9 M Thmsta :25°C	M Water temperature :25°C
10 M AD(R):FFF FFF	M AD(Red) :FFF FFF
11 M T(R) :99.9%	M Transmissivity(Red) :99.9%
12 M DA(R) :FF	M DA(Red) :FF
13 M AD(G) :FFF FFF	M AD(Green) :FFF FFF
14 M T(G) :99.9%	M Transmissivity(Green) :99.9%
15 M DA(G) :FF	M DA(Green) :FF
16 M Wash Pd 9.99S	M Pre wash time 9.99 second
17 M MAlkal<60mg/L	M Set M-alkalinity at 60mg/L or less
M MAlkal<120mg/L	M Set M-alkalinity at 120mg/L to 120mg/L
M MAlkal<300mg/L	M Set M-alkalinity at 120mg/L to 300mg/L
M MAlkal<500mg/L	M Set M-alkalinity at 300mg/L to 500mg/L
18 M WL:L	M Select from LED wavelength table:L
M WL:S	M Select from LED wavelength table:S
19 M Alarm Content *	M Alarm description
20 M Error1:11111111	M Error table1:11111111
21 M Error2:11111111	M Error table2:11111111
22 M Cartridge Dia *	M Cartridge data
23 M C Exc 10/23/06	M Cartridge replacement date(m/d/y)
24 M C Hrs 999999	M Cartridge used hours since replacement:999999
25 M C Fqc 9999	M Reagent injection frequency since cartridge replacement:9999
26 M Leakage Log1 *	M Hardness leakage record1
27 M Date 10/23/06	M Date of Hardness leakage (m/d/y)
28 M Time 15:28	M Time of Hardness leakage 15:28
29 M Hardness:2mg/L	M Hardness leakage 2mg/L
30 M AD(R):FFF FFF	M AD(Red) :FFF FFF
31 M T(R) :99.9%	M Transmissivity(Red) :99.9%
32 M DA(R) :FF	M DA(Red) :FF
33 M AD(G) :FFF FFF	M AD(Green) :FFF FFF
34 M T(G) :99.9%	M Transmissivity(Green) :99.9%
35 M DA(G) :FF	M DA(Green) :FF
36 M Rset 10/23/06	M Date of reset (m/d/y)
37 M RsetTime 15:28	M Time of reset 15:28
38 M System F Log1 *	M System error record 1
39 M Bik Out Log1 *	M Black out record 1

M:Indicate Maintenance Mode

Maintenance Mode display can be changed by pressing the "Items" switch. In the event a "*" appears, mode/display can be changed by pressing the "Up" switch.