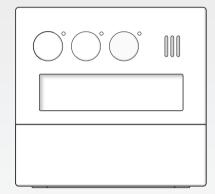


## Remote controller

# **USER'S MANUAL < Operation Guide>**

## Model

## RC-9018M



# Note to Owner:

This User's Manual provides additional details on the operation of this remote controller not covered in the water heater Owner's Guide. Keep this and all manuals provided with the water heater for future reference.

# **Contents**

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Thank you for purchasing this Remote controller.

- \* Please read this User's Manual carefully to ensure appropriate use.
- \* These operating instructions describe the functions of this remote controller.

  Keep these instructions where they can be found whenever necessary, preferably in the same location as the Owner's Guide provided with the water heater.

**NORITZ America Corporation** 

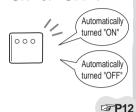
SHB8126 Rev. 11/11



# **RC-9018M Operation Overview**

# **Basic operation**

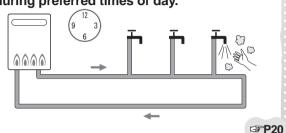
It is possible to automatically turn the water heater "ON" or "OFF".



It is possible to lock remote controller operation.



[For recirculation systems (System [ Rcrc ])] It is possible to circulate hot water only during preferred times of day.



[When using only one water heater:]
It is possible to set the remote controller to alert the user when the

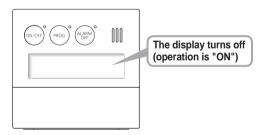
bathtub has reached a preset fill volume to prevent overfilling.



## Power Saving Mode

## The initial setting is set to "Powersave dsply: No-1"

If you set "Powersave dsply" to "Yes" (\$\sip P15\$), unnecessary power consumption by the remote controller is prevented. If approximately ten minutes pass without using hot water or without pressing a button, the display of the remote controller turns off.



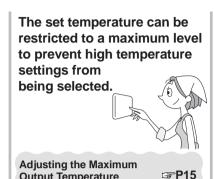
- \* If you use hot water or press a button, "Powersave dsply" is released.

  If you press the PROG button only once, "Powersave dsply" is released and the automatic program function will operate.
- \* If the setting temperature is set to 125°F/55°C or more, "Powersave dsply" will not function to prevent accidental scalding.
- \* If "Recirc" is operating, "Powersave dsply" will not function.

This setting is adjustable P15

## **User Preferences**

The remote controller can be customized based on the preference of the user in the following ways:



**Output Temperature** 

The clock display can be shown even though the power ON/OFF button is set to "OFF".

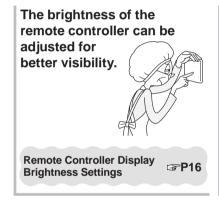


The remote controller display can be turned off to save power.



**Power Saving Modes** 

☞P15



The remote controller can be muted so that it does not emit a tone when a button is pressed.



Muting the ☞P16 **Remote Controller** 

The remote controller can be muted so that it does not emit a tone when an error occurs.



**Error Tone Settings** 

☞P16

# >> Additional Settings

Draining the water heater (freeze prevention).

P17 "Draining the Water Heater"

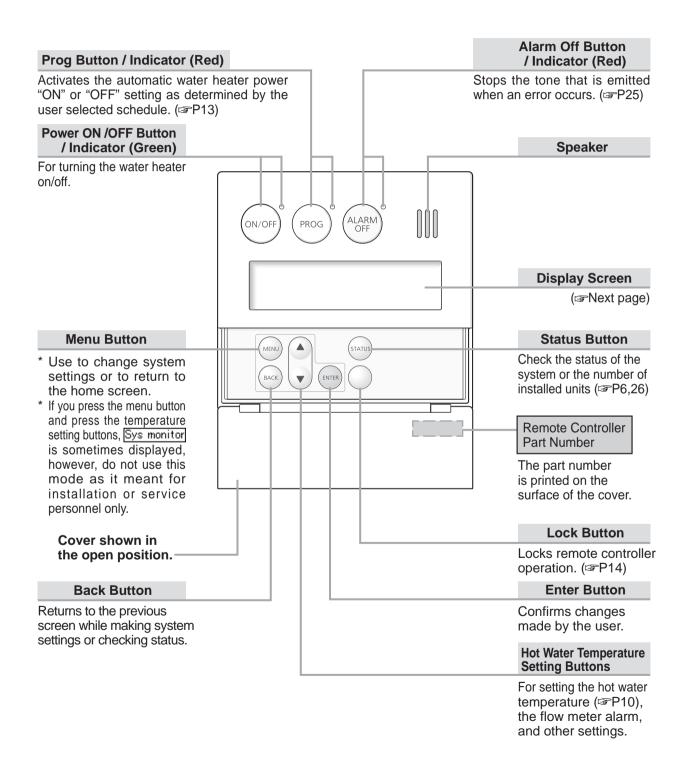
Restoring default remote controller settings.

P17 "Restoring Default Settings"

# **General Parts**

# Remote Controller (RC-9018M)

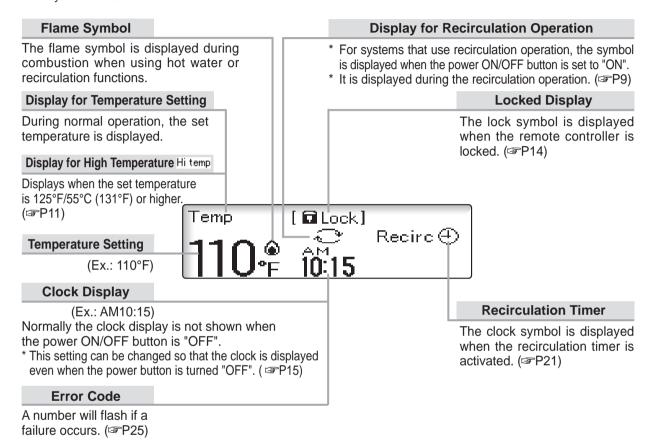
The remote controller will emit a tone when a button is pressed.



# Screen Display

- \* The screen display shown below is for illustration purposes only.

  The actual display will vary depending on how the water heater is being used.
- \* After a button is pressed, the display will gradually become darker to prevent unnecessary power consumption by the remote controller.

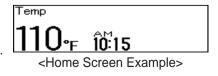


Note: As shipped from the factory, the remote controller is set to display in °F and gallons. To adjust the display to °C and liters, refer to the Installation Manual.

## What is the home screen?

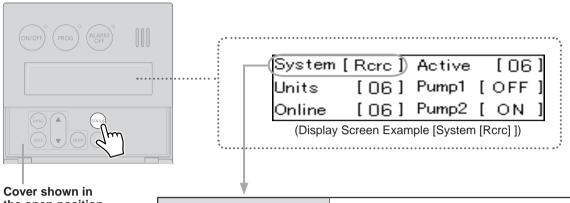
The home screen is displayed when the ON/OFF button is "ON".

Normally, the hot water temperature and the clock, etc. are displayed.



# **System Check**

# If you press the (STATUS) button, you can check the status of the system

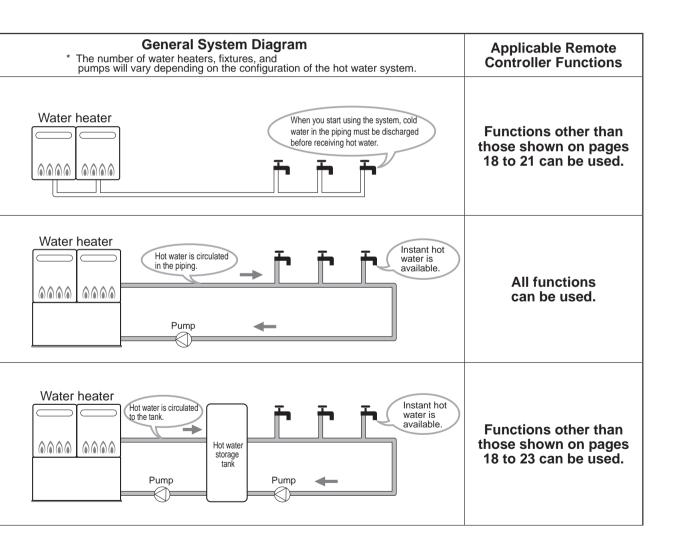


the open position.

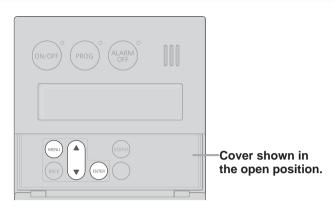
System Displayed on the Remote Controller	System Description	
System [Std]	Water heater only operation.	
System [Rorc]	* Water heater and recirculation operation.  * During recirculation operation, hot water is always circulated in the piping to provide instant hot water when a fixture is opened.  [If you set the ON/OFF button to "ON",  is displayed. (If "synchro ON/OFF" is set to "ON". (\$\simp\$P18))]	
System [Tank]	* Water heater combined with a storage tank operation.  * If a recirculation system is also installed, hot water is always circulated in the piping to provide instant hot water when a fixture is opened.  [If you set the ON/OFF button to "ON",  is displayed.]	

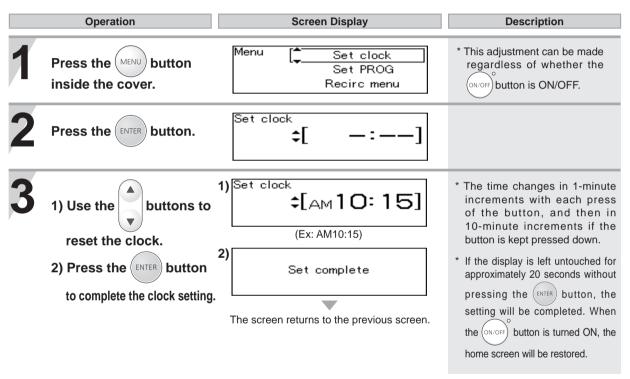


## Depending on the configuration of your system, not all functions may be used.



# For All Systems Clock Adjustment

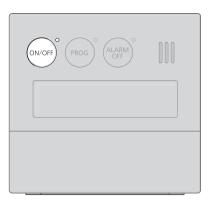




<sup>\*</sup> In the event of a power outage or after disconnecting power to the water heater, when power is restored, the clock on the display screen will show " - : - - " and the clock will need to be reset.

<sup>\*</sup> Normally, when the oworf button is turned OFF, the clock display disappears, but it is possible to display the clock when the oworf button is turned OFF by changing a setting. (\$\sigma\$P15)

# For All Systems Using the Water Heater





\* If System [Tank] is displayed, hot water will be discharged at the temperature of the storage tank.

## Screen Display Operation Description For systems with recirculation operation, \* The (ON/OFF) indicator is lit. button is "ON". is displayed here. \* The previously set hot water supply temperature is shown. Temp [For systems with recirculation operation] \* If you set the (ON/OFF) button to "ON", (Ex.: 110°F) recirculation operation is automatically started. Check \* The setting temperature displayed may vary from the actual temperature at the fixture depending on conditions such as season or length of piping. Turn on hot water. Lit during combustion Temp



Turn off the hot water

Turn off hot water.



## To prevent scalding:

Unlit

Temo

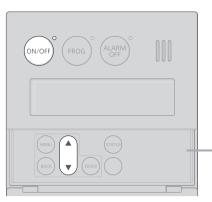
Hot Water Heater temperatures over 125°F (52°C) can cause severe burns instantly or death from scalding.

\* During operation, the symbol &

may be continuously lit.

- Children, disabled and elderly are at the highest risk of being scalded.
   Feel water temperature before bathing or showering.
   Temperature limiting valves are available, ask a professional person.
- When setting the unit to 125°F / 55°C (131°F) or higher, "Hi temp" will flash for 10 seconds and emit a tone as a high temperature warning.
- Take caution when using the unit again after setting to 125°F (52°C) or higher. Always check the set temperature before use.
- Do not allow anyone to change the water temperature while hot water is running.

# For All Systems Setting Hot Water Temperature





If System [ Tank ] is displayed, hot water will be discharged at the temperature of the storage tank.

Cover shown in the open position.

	Operation	Screen Display	Description
1	ON/OFF button is "ON".	Temp 110° <sub>F</sub> 10:15 (Ex.: 110°F)	* The ON/OFF indicator is lit.  * The previously set hot water supply temperature is shown.
2	Set the temperature using the buttons inside the cover.	Temp 105 <sub>°F</sub> 10:15 (Ex.: 105°F)	



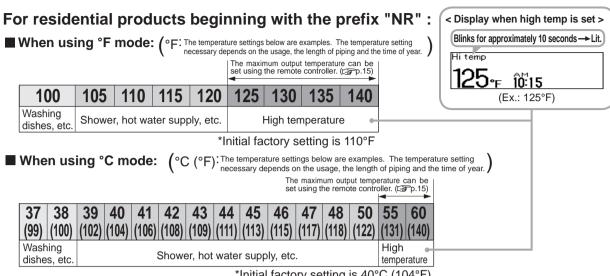


## To prevent scalding:

Hot Water Heater temperatures over 125°F (52°C) can cause severe burns instantly or death from scalding.

- Children, disabled and elderly are at the highest risk of being scalded. Feel water temperature before bathing or showering. Temperature limiting valves are available, ask a professional person.
- When setting the unit to 125°F / 55°C (131°F) or higher, "Hi temp" will flash for 10 seconds and emit a tone as a high temperature warning.
- Take caution when using the unit again after setting to 125°F (52°C) or higher. Always check the set temperature before use.
- Do not allow anyone to change the water temperature while hot water is running.





\*Initial factory setting is 40°C (104°F)

If fixtures incorporate mixing valves, set the temperature higher than usual.

# For commercial products beginning with the prefix "NC":

\* These settings are only available on commercial products.

■ When using °F mode: (°F: The temperature settings below are examples. The temperature setting necessary depends on the usage, the length of piping and the time of year.

100	105	110	0 /	115	120	0 125	130	13	5	140	145	1	50	160	17	0 '	185
Washing dishes, etc. Shower, hot water supply, etc.					c.	High temperature						•					
*Initial factory setting is 110°F  When using °C mode: (°C (°F):The temperature settings below are examples. The temperature setting necessary depends on the usage, the length of piping and the time of year.)																	
When us	ing °(	C mo	de:	(°C	(°F)	:The temper	rature setti	ngs belo	ow are	example e length	s. The t	empera	ature se	etting )	)		
37 38 (99) (100)		40	41	42	43	The temper necessary 44 45 (111) (113)	46	47	48	50	55	60	65	70	75	<b>80</b> (176)	<b>85</b> (185)

\*Initial factory setting is 40°C (104°F)

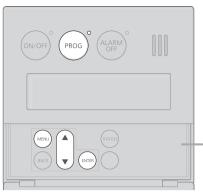
If fixtures incorporate mixing valves, set the temperature higher than usual.

- \* For applications that occasionally require a higher temperature setting, locate the remote controller in a convenient location.
- Consult local codes for minimum operating temperatures.



- Hot water temperatures shown are approximate and may differ from the actual temperature at the fixture depending on external factors such as the season and length of piping in the system.
- · When low temperatures are set (for washing dishes, etc.), if the incoming water temperature is already guite high, it may be difficult to ensure the outgoing water temperature is as per the setting.
- Please check the temperature displayed before using any hot water. Be especially careful using hot water after the set temperature has been changed.
- When the hot water temperature is adjusted using thermostat controlled water mixing valves. set the temperature on the remote controller approximately 20°F (10°C) higher than the required temperature to ensure the appropriate fixture temperature.

# For All Systems | Automatic Water Heater "ON" or "OFF"



Cover shown in the open position.

- If you set the time to turn "ON" or "OFF" the button, the (ON/OFF) button is automatically turned "ON" or "OFF" at the set time every day by just turning the (PROG) button "ON".
  - It is also possible to set only "ON" or "OFF" operation.
  - \* For recirculation systems, circulation is started or stopped according to the (ON/OFF button condition. "ON" or "OFF".

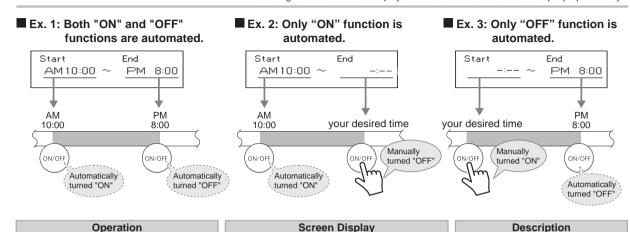
Set the time to turn "ON" or "OFF" the (ON/OFF) button automatically Operation Screen Display Description This example describes setting the "ON time" and "OFF time" to 10:00 am and 8:00 pm, respectively. **Preparation** 1. Check that the current time is properly set. (Setting the time P.8) 2. Check the button is set to "OFF" 1) Menu \* You can set the time regardless if Set clock 1) Press the (MENU) button Set PROG the (ON/OFF) button is "ON" or "OFF". Recirc menu inside the cover, \* The previously set "Start time" Select "Set PROG" Start End and "End time" are displayed. -:--| ~ using the buttons. 2) Press the (ENTER) button. \* The time changes in 10-minute Start End 1) Set the ON time to increments with each press of the \$AM10:00 ~ "AM10:00" using button, and then in 1-hour increments if the button is kept pressed down. \* If the previous setting is OK, press the the buttons. 2) Start End (ENTER) button without setting "Start time". AM10:00 ~ **\$**[ -:--2) Press the (ENTER) \* If you do not want to set the "Start time", **button** select "-: --" (located between AM 11:50 to complete the setting. and PM 0:00 settings).

- 1) Set the OFF time to "PM8:00" using
  - the buttons.
  - 2) Press the (ENTER) button to complete the setting.
- 1) Start End AM 10:00 ~ \$ PM 8:00 2) 🕋 Set
- AΜ PMReset 10:00~ 8:00 Confirm?
- \* The time changes in 10-minute increments with each press of the button, and then in 1-hour increments if the button is kept pressed down.
- \* If the previous setting is OK, press the (ENTER) button without setting "End time".
- \* If you do not want to set the "End time", select "-: --" (located between AM 11:50 and PM 0:00 settings).

# **Operation**

**Hint for operation** Follwing this procedure allows for automated control of water heater operation without user interaction.

\* The setting time shown on the display of the remote controller is for example purposes only.



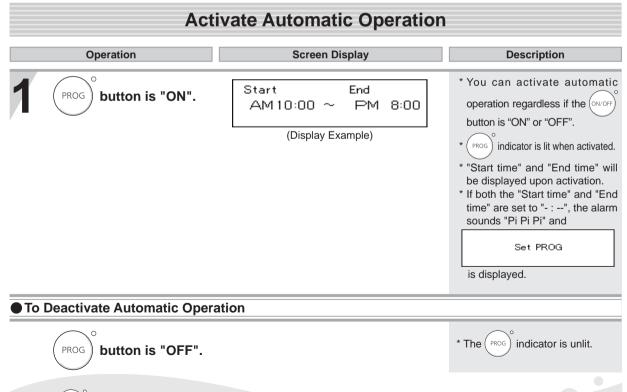
4

Check "Set" is selected, and then press (ENTER) button

to confirm all settings.

Set complete

- \* If you do not press ENTER button, the time setting is not completed.
- \* If you want to change "ON/OFF time", select "Reset" and then press the (ENTER) button, return to step 2.



- \* If the (PROG) button is not set to "OFF", the water heater will automatically turn "ON" or "OFF" at the set times.
- \* If there is a power failure or power is disconnected to the water heater, automatic operation will be deactivated.

# For All Systems Locking the Remote Controller





By locking the remote controller, the settings cannot be accidentally changed if a button is pressed by mistake.

Cover shown in the open position.

## Operation

### Screen Display

### Description



Press and hold

button

for approximately 2 seconds to lock the remote controller.



- \* The operation can be locked regardless if the (ON/OFF) button is "ON" or "OFF".
- \* The operations of ( PROG buttons are locked.
- \* Approximately 3 seconds after locking the remote controller, the display will return to the previous screen.

## If you press these buttons



Locked PROG ] 🖬 [MENU] 🖬 Temp ] 🙃

\* Approximately 3 seconds after the "locked" screen appears, the display will return to the previous screen.

while the remote controller is locked, the "Locked" screen will appear.

## To Unlock the Remote Controller

Press and hold button for approximately 2 seconds to unlock the remote controller.

Unlock complete PROG [ MENU ] Temp

\* Approximately 3 seconds after unlocking the remote controller, the display will return to the previous screen.

# For All Systems Customizable Settings < Misc settings > -1



## **Adjusting the Maximum Output** Temperature.

The maximum output temperature can be limited to prevent discharging hot water at too high of a temperature.

- button is "OFF".
- Press the (MENU) button inside the cover. Select Misc settings using the buttons.

Press the (ENTER) button.

The "Misc settings" screen appears.

- Select Max set temp using the buttons, and then press the (ENTER) button.
- Change the setting using the buttons.

Max set temp 140 °F] (Ex: 140°F)

The maximum temperature setting differs by product, refer to P11.

Setting completed \_\_\_\_\_

## **Display Screen Power Saving Mode** [powersave dsply]

To conserve power consumption by the display, it can be turned off completely or set to only display the clock when the power ON/OFF button is turned "OFF".

Press the (MENU) button inside the cover, Select Misc settings using the buttons.

Press the (ENTER) button.

The "Misc settings" screen appears.

- Select Powersave dsply using the buttons, and then press the (ENTER) button.
- Change the setting using the buttons.

Powersave dsply (Clock hidden) \$[ No-1 (Ex: No-1)

- Yes: the display will turn off and the clock will not be displayed when the power ON/OFF button is turned "OFF".
- No-1: the display will not turn off and the clock will not be displayed when the power ON/OFF button is turned "OFF".
- No-2: the display will not turn off and the clock is displayed when the power ON/OFF button is turned "OFF".

(Default setting=No-1)

Setting completed \_\_\_\_\_

To change other settings, select the option and press the (ENTER) button.

To return to the home screen, press the (MENU) button or let it sit for approximately 20 seconds.

# For All Systems

# **Customizable Settings < Misc settings> -2**

Adjusting the brightness of the display screen when the remote controller is turned on.

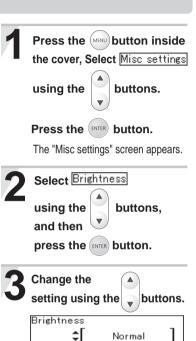
The display screen can be brightened or darkened or the backlight can be turned off completely.

## Muting the remote controller.

The remote controller can be muted so that it does not emit a tone when a button is pressed.

## <System dependent option> Error Tone Settings.

The remote controller can be muted so that it does not emit a tone when an error occurs.

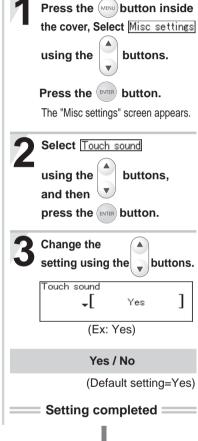


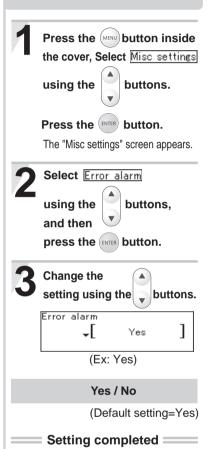
(Ex: Normal)

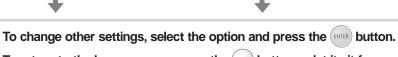
Setting completed \_\_\_\_\_

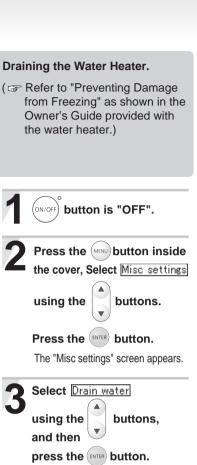
(Default setting=Normal)

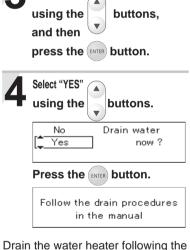
Dark / Dim / Normal / Bright











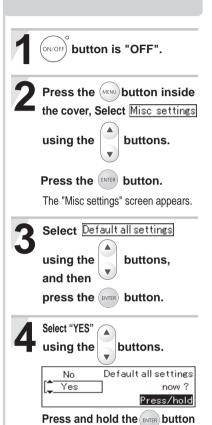
Drain the water heater following the procedures described in the Owner's Guide provided with the water heater.

# To stop draining water from the water heater

If you press the when "Drain water" and "Operating" are alternately displayed following steps 2 to 3, the drain function will stop.

## **Restoring Default Settings.**

Select settings can be restored to the factory default conditions.
See items marked with a ★ in the "Default Settings" section (☞ P27).





for approximately 5 seconds.

Reset complete

To change other settings, select the option and press the button.

To return to the home screen, press the button or let it sit for approximately 20 seconds.



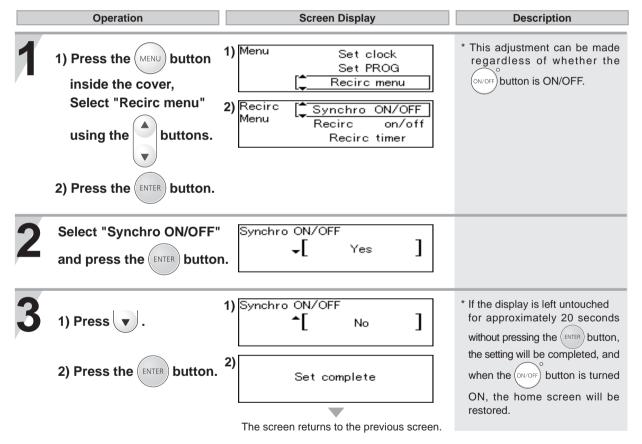
# Disabling Automatic Recirculation Operation





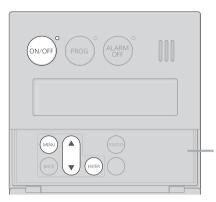
- \* To check system status. (SP6)
- \* When "synchro ON/OFF" is set to "No", recirculation can be activated manually.
- \* To change "synchro ON/OFF" from "No" to "Yes", follow the same procedure as described below.

Cover shown in the open position.



# For System [Rcrc]

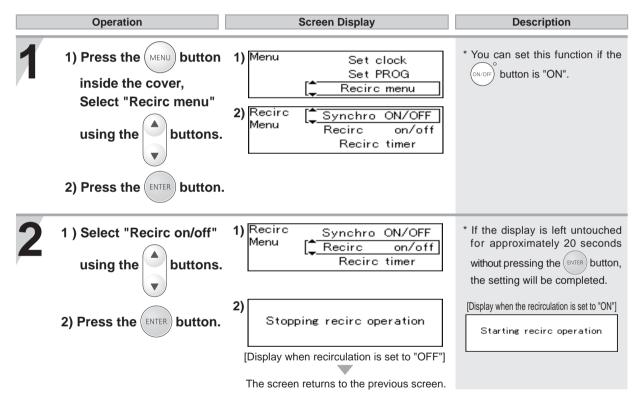
# Manually Stopping Recirculation Operation





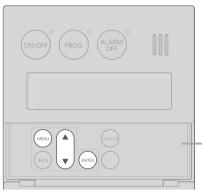
Recirculation operation can be manually stopped or started using this procedure.

Cover shown in the open position.



<sup>\*</sup> Even if recirculation is set to "OFF", recirculation operation is restarted by either turning the over button "ON", when the water heater is turned ON automatically (\$\sigma\$P12) or when the recirculation timer (\$\sigma\$P20) is active.

# For System [Rord] Setting the Recirculation System



Cover shown in the open position.

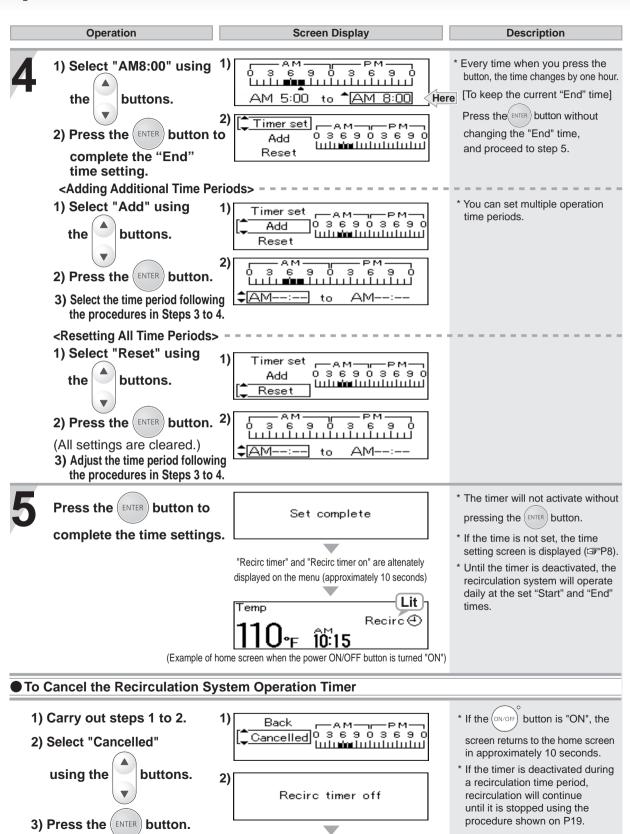


- With the recirculation operation timer set, hot water will be automatically circulated in the hot water pipes. Even with this function activated, it may take several minutes for hot water to be completely circulated through the plumbing system. Set the timer to activate the recirculation system prior to the first use of hot water to ensure hot water is instantly available.
- \* Multiple recirculation time periods can be set.
- \* Until the timer is deactivated (P21), the recirculation system will operate daily at the set times.
- \* When the recirculation system is turned "OFF" by the timer, the water heater will still remain "ON" and can be used normally.

Additional Time Periods" or "Resetting All Time Periods" (P21).

Operation Screen Display Description This example describes setting the recirculation system to operate between 5:00 am - 8:00 am. Check that the current time is properly set. **Preparation** (Setting the time P.8) 1) Press the (MENU) button inside the 1) Menu \* You can set the timer regardless Set clock Set PROG if the (ON/OFF) button is "ON" or "OFF". cover, Select "Recirc menu" using Recirc menu 2) Recirc Synchro ON/OFF buttons. Menu Recirc on/off Recirc timer 2) Press the (ENTER) button. 1) Recirc 1) Select "Recirc timer" \* The previous setting is displayed. Synchro ON/OFF Menu. Recirc on/off using the buttons. Recirc timer (Example of a display) 2) 2)Press the ENTER button. \* Every time when you press the 1) Select "AM5:00" using button, the time changes by one hour. [To keep the current "Start" time] AM-6:00 Press the (ENTER) button without buttons. changing the "Start" time, and proceed to step 4. 2) Press the (ENTER) button AM 5:00 to ^IAM-6:00 [To add additional time periods to the current to complete the "Start" setting, or to cancel the previous setting] time setting. 1) Press the (ENTER) button without setting "Start" time. 2) Press the (ENTER) button without setting "End" time. 3) Follow the procedures "Adding

# **Operation Timer**



The screen returns to the Recirc Menu.

# Single Water Heater Only Flow Meter Alarm



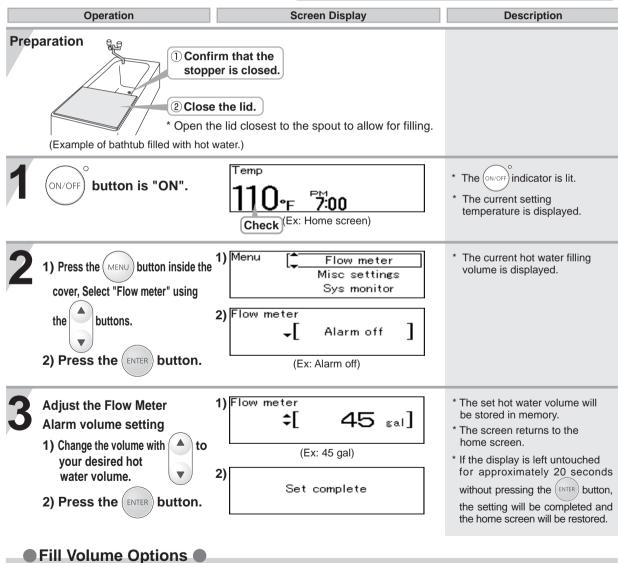


- If the flow meter alarm is being used to indicate when a tub is full:
- If any hot water is being used besides what is going into the tub, the alarm will sound before the tub is full.
- If there was water in the tub before the fill began, or if the water is not shut off manually when the alarm sounds, the tub may overflow.
- If there was water in the tub before the fill began, the temperature in the tub after it is full may be different from the temperature setting.

(gal)

Alarm off

Alarm off



10

40

15

60

20

80

25

100

30

120 140

35

40

160

45

180

50

200

55

220

60

240

70

260

80

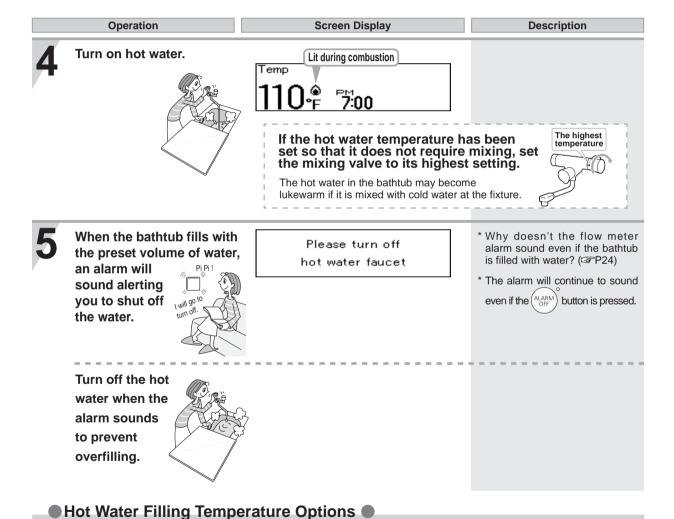
300

90

100

(Default setting = Alarm off)

340 380



( • F : The temperatures settings below are only examples. The temperature setting

Warmer

°C (°F): The temperatures settings below are only examples. The temperature setting necessary will depend on the usage, the length of piping and the time of year.

38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |

(99) | (100) | (102) | (104) | (106) | (108) | (109) | (111) | (113) | (115) | (117) | (118)

\* Initial factory setting: 110°F or 40°C (104°F)

Warmer

100

Warm

necessary will depend on the usage, the length of piping and the time of year.

110

Hot

\* Although the temperature can be set to 125°F / 50°C or

higher as it can cause severe burns instantly or death

\* The hot water filling temperature is same as the setting temperature.
\* The setting temperature displayed may vary from the actual

temperature at the fixture depending on conditions such as

higher, do not set the temperature to 125°F / 50°C or

from scalding.

season or length of piping.

# **Troubleshooting**

★ This section only covers issues with the remote controller.

To diagnose issues with the water heater, consult the Owner's Guide supplied with the water heater.

	Problem	Possible Cause	Action
	The power ON/OFF indicator	There has been a power failure.	Wait for power to be restored.
	does not light up	The power plug is disconnected.	Check the power plug.
77	The clock display shows	If the time is not displayed on the clock, either a power failure has occured or power was disconnected resulting in the display showing "-:".	Set the clock again.
Remote	The flow meter alarm does not sound or it sounds before the bathtub has been filled to the set amount.	The flow meter alarm is set to sound when hot water is continuously discharged for the set volume of water. If hot water is used for other fixtures while filling the bath tub, the alarm will sound before the tub is full.	An error has not occured.
Cont		If mixing valves are used, or if cold water is mixed with hot water at the fixture, the tub will fill more than the setting of the flow meter alarm.	An error has not occured.
Controller	The setting cannot be changed when a button is pressed.	The remote controller is locked.  While the remote controller is locked these buttons  PROG  Cannot be used.	Unlock the remote controller.
	[For recirculation systems] Flame symbol <>> lights up or goes out	During recirculation operation, the water heater will turn on and off to keep the hot water pipes up to temperature.	An error has not occured.



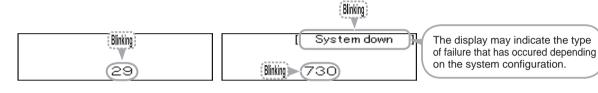
# **Checking for Error Conditions**

When a failure occurs, information relating to the error blinks on the display.

The error alarm may also continuously sound.

For additional details on the cause of the error displayed, refer to the "Troubleshooting" section in the Owner's Guide provided with the water heater.

## Error Code Display Screen



## ■ To Stop the Error Alarm

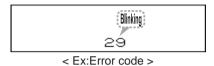
Press the OFF button (the indicator will turn off).

# Follow-up Service

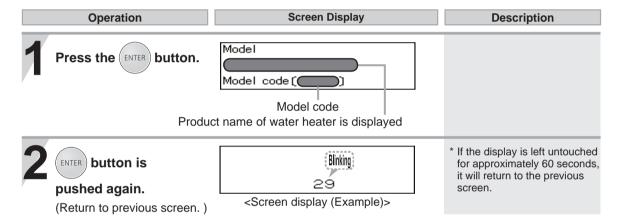
## **Requesting Service**

- \* Service and warranty periods are based on the type of product and the application type. Refer to the Limited Warranty provided with the water heater for complete details.
- \* Refer to the "Troubleshooting" section in this manual as well as the Owner's Guide supplied with the water heater. If the problem is not corrected, contact Noritz America Technical Support at 866-766-7489.

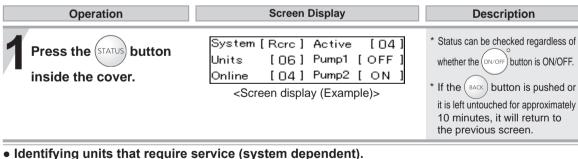
## If an error code is displayed, the model name and code can be checked



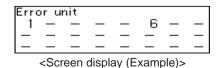
\* If more than one water heater is installed. this procedure cannot be used.



Press the (STATUS button to check the status of the system



Press the (STATUS) button twice inside the cover.



\* If you press the (BACK) button, the screen of step 1 is displayed. If you press the (STATUS) button, the screen returns to the previous screen.

# **Default Settings**

Items	Default setting
Clock display (unset)	-:
Hot water temperature	110°F / 40°C
Hot water volume	alarm off

Customizable Settings (€ P15 - 17)	Default setting	
Maximum Output Temperature	120°F / 50°C (Residential products begin with the prefix "NR")	*
	185°F / 85°C (Commercial products begin with the prefix "NC")	
"Powersave dsply" and clock display	No-1	*
Brightness of the display screen when the remote controller is turned on.	Normal	*
Operation sound of remote controller	Yes	*
Notification when a failure is generated	Yes	*

★ Indicates an item that can be restored to default.

See P17 "Restoring Default Settings".