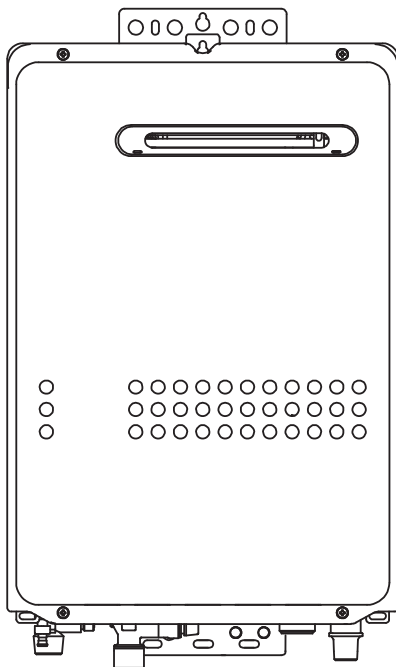




# Owners Guide



Ex. 26ECB5N

## Condensing Models

26ECB5N  
26ECB5L  
26ECB6N  
26ECB6L  
21ECB5N  
21ECB5L  
21ECB6N  
21ECB6L

## Non Condensing Models

21ENB5N	26ENA5N
21ENB5L	26ENA5L
21ENB6N	26ENA6N
21ENB6L	26ENA6L
17ENB5N	
17ENB5L	
17ENB6N	
17ENB6L	

Thank you for purchasing this Dux Gas Water Heater.

Before using, please:

Read this manual completely for operating instructions.

Confirm warranty and proof of purchase.

Keep this manual where it can be found whenever necessary.

Installation must conform with local codes, or in the absence of local codes, AS/NZS5601, AS/NZS3500.4, AS/NZS3000 wiring regulations and all Local Building, Water and Gas fitting regulations.

Dux reserves the right to discontinue, or change at any time, the designs and/or specifications of its products without notice.

\* Note :This appliance requires a minimum flow rate to operate of 2.5 litres/min., water fixtures with a flow rate of 7.5 litres/min. or higher are recommended.

For optimum performance we recommend installation of Dux optional temperature controllers.



# Important Safety Information



## WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

- Do not store or use petrol or other flammable vapours and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
  - Do not try to light the appliance.
  - Do not touch any electrical switches; Do not use electrical appliances, including the phone" inside the building.
  - Immediately call you gas supplier, from a safe distance from the gas leak.
- To be installed and serviced only by an authorised person
- This appliance is not suitable for use as a pool heater
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.
- DO NOT USE OR STORE FLAMMABLE MATERIALS IN OR NEAR THISAPPLIANCE.
- DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.
- DO NOT MODIFY THIS APPLIANCE.

To prevent damage to property and injury to the user, the icons shown below will be used to warn of varying levels of danger.

Every indication is critical to the safe operation of the water heater and must be understood and observed. Potential dangers from accidents during installation and use are divided into the following four categories. Closely observe these warnings; they are critical to your safety.

### Icons warning of risk level



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



## DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



## WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



## CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

## CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

### Other icons

	Electric Shock		High Temperature.		Be sure to do.		Earth		
	Prohibited		No flame.		Don't touch.		Don't disassemble the equipment.		Don't touch with a wet hand.

## ! DANGER



Prohibited

### Vapours from flammable liquids will explode and catch fire causing death or severe burns.

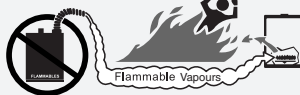
Do not use or store flammable products such as petrol, solvents or adhesives in the same room or area near the water heater.

#### Keep flammable products:

1. Far away from the water heater.
2. In approved containers.
3. Tightly closed.
4. Out of children's reach.

#### Vapours:

1. Cannot be seen.
2. Vapours are heavier than air.
3. Go a long way on the floor.
4. Can be carried from other rooms to the main burner by air currents.



Prohibited

### Hot Water Heater temperatures over 50 °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 licensed installer.



Prohibited

### Do Not Install Indoors.

This will cause carbon monoxide poisoning and a potential fire hazard.

## ! WARNING



No flame.

**A. This water heater does not have a pilot.**  
It is equipped with an ignition device that automatically lights the burner. Do not try to light the burner by hand.

**B. BEFORE OPERATING** smell all around the water heater area for evidence of leaking gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### WHAT TO DO IF YOU SMELL GAS.

- Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier. Follow the gas supplier's instructions.
- C. Use only your hand to turn the gas valve knob.** Never use tools. If the knob will not turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this water heater if any part has been under water.** Immediately call a qualified service technician to inspect the water heater and to replace any damaged parts.



Be sure to do.

### When a gas leak is noticed:

1. Stop use immediately
2. Close the gas valve
3. Contact your gas supplier immediately



Be sure to do.

### If you detect abnormal combustion or abnormal odours, or during an earthquake, tornado or fire:

1. Turn off the hot water supply
2. Turn off the power to the water heater
3. Turn off gas and water supply valve.
4. Call Dux on AU 1300 365 115.



High Temperature.

### Check the temperature of the running hot water before entering the shower.

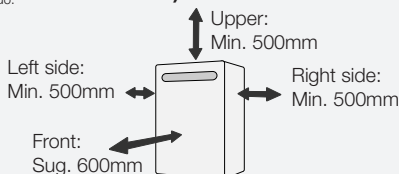


### Check the temperature before stepping into the bath tub.



Be sure to do.

### Leave the proper clearance between the water heater and nearby objects (trees, timber, boxes with flammable materials etc.).

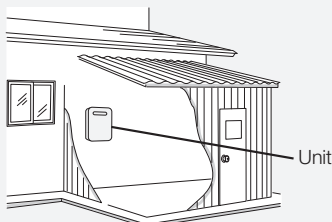


# Important Safety Information



Prohibited

**Do not place the unit in an indoor environment by means of adding walls and ceiling (Do not enclose using corrugated sheets, etc.)**



Carbon monoxide poisoning or fire may occur as a result.



Prohibited

**Carbon Monoxide Poisoning Hazard. Do not install this water heater in a mobile home, recreation vehicle or on a boat.**



Prohibited

**Do not place combustibles such as laundry, newspapers, oils etc. near the heater.**



Prohibited

**Do not use combustible chemicals such as oil, petrol, benzene etc. in the near the water heater or the exhaust vent.**



Prohibited

**Do not store or use petrol or other flammable vapours and liquids in the vicinity of this or any other appliance.**



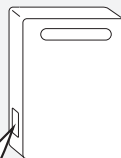
Prohibited

**Do not place or use a spray can near the water heater or the exhaust vent.**



Be sure to do.

**Check that the data label. (left side of casing)**



**Ex. For Natural Gas**

MODEL XXXXXXXX	
GAS TYPE	: NG
GAS CONSUMPTION	: xx MJ/hr
HEAT OUTPUT	: xx kW
ELECTRICAL RATING	: AC230-240V 50Hz
RATED POWER	: xx W
HOT WATER SUPPLY CAPACITY	: xx L/min RAISED xx°C
GAS PRESSURE TEST POINT	



Be sure to do.

**Installation and service must be performed by a qualified insraller, service agency or the gas supplier.**



Prohibited

**Do not use hair spray or spray detergent in the vicinity of the heater.**



Prohibited

**Do not allow small children to play unsupervised in the bathroom or with the water heater .**

**Do not allow small children to bathe unsupervised.**

**This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.**



Don't touch  
with a wet  
hand.



Electric  
Shock.

**Do not touch the power  
cord with wet hands.**



Be sure  
to do.

**Contact Dux before using with  
a solar heater.**



Don't  
disassemble  
the equipment.

**Contact a qualified service  
technician for any necessary  
repairs, service or maintenance.**

## CAUTION



Earth

**Be sure to electrically earth the  
unit.**



Prohibited

**Do not turn off the water heater  
while someone is bathing.**



Be sure  
to do.

**Keep power cord free of dust.**



Prohibited

**Do not cover the water heater, store  
trash or debris near it, or in any way  
block the flow of fresh air to the unit.**



Prohibited

**Do not use the water heater for  
other than hot water supply, shower  
and bath.**



Prohibited

**Do not install in locations where  
excessive dust or debris will be  
in the air.**



Prohibited

**Do not use a broken or modified power cord.  
Do not bind, bend or stretch power cords.  
Do not scratch, modify, or subject  
them to impact or force. If the supply  
cord is damaged, it must be replaced  
by the manufacturer, its service agent  
or similarly qualified persons in order to  
avoid a hazard.**



Prohibited

**Do not use condensate, discharged  
from the drain pipe, for drinking or for  
consumption by animals.**



Prohibited

**Do not exchange a remote controller  
cord without notice.**



Don't  
touch.

**Do not touch the exhaust vent  
during or immediately after  
operation of the water heater.**



Be sure  
to do.

**To prevent burns or scalding, turn  
off the power button and wait until  
the equipment cools before per-  
forming maintenance.**

# Important Safety Information

## CAUTION

**Do not drink water that has been inside the unit for an extended period of time. Do not drink the first use of hot water from the unit in the morning.**

**Clean the filter on the water inlet as frequently as required. The quality of your local water will affect the frequency required.**

**Keep the area around the unit clean.**

If boxes, weeds, cobwebs, cockroaches etc. are in the vicinity of the unit, damage or fire can result.

**Do not install the equipment where the exhaust will blow on walls or windows.**

**Treat hard, acidic or otherwise impure supply water with approved methods to ensure full warranty coverage.**

**Problems resulting from scale formation are not covered by the warranty.**

**Do not run water through the unit when unit is not on.**

When discharging hot water, make sure the unit is ON. If water is run through the unit with the unit OFF, water may condense inside the unit and cause incomplete combustion or damage to the internal electrical components.

**Do not disassemble the remote controller.**

**Do not use benzene, oil or fat detergents to clean the remote controller.**

This may cause deformation.

**Do not get the remote controller wet.**

ECB1D and ECB2D are water resistant, too much water can cause damage. ECM1D is not water resistant.

**Do not splash water on the remote controller. Do not expose the remote controller to steam.**

Do not locate the remote controller near stoves or ovens, this may cause damage or failure.

**Preventing damage from freezing (☞ p.22)**

Damage can occur from frozen water within the device and pipes even in warm environments. Be sure to read below for appropriate measures. Repairs for damage caused by freezing are not covered by the warranty.

**Power must be switched on at all times for antifrost protection to work.**

**If it is snowing, check the air inlet, exhaust gas vent and exhaust vent terminal for blockage.**

**Do not use parts other than those specified for this equipment.**

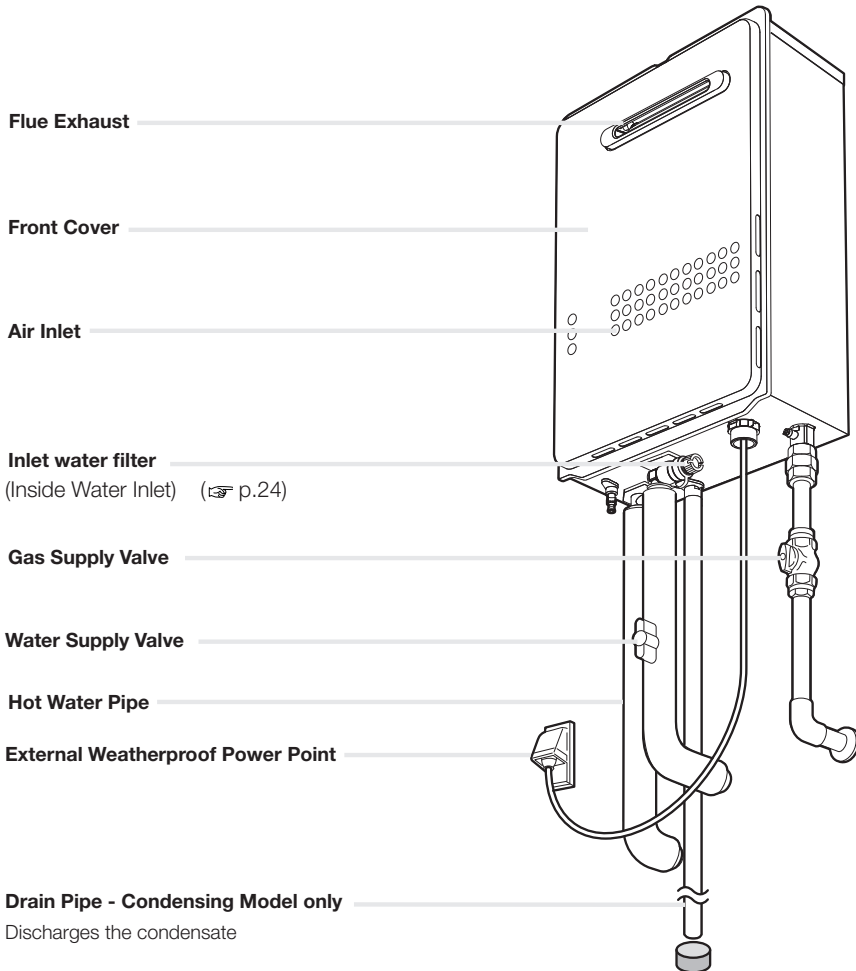
# Contents

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# General Parts

## Main Unit

### Outdoor Wall Mounted, Power flue Model



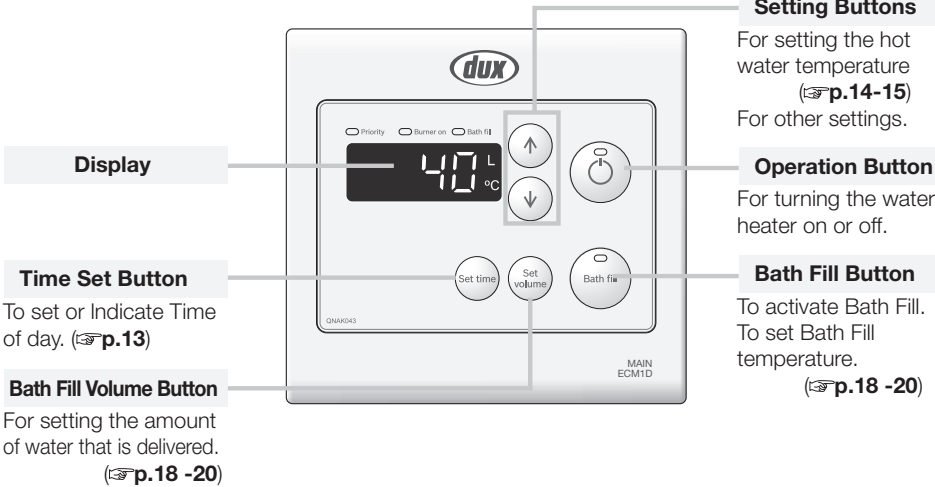
Ex. 26ECB5N

**\* The above illustration shows an example of installation.**  
The exact installation configuration may be slightly different.

# Names and Functions of Controllers

## Main Controller (ECM1D) <Optional>

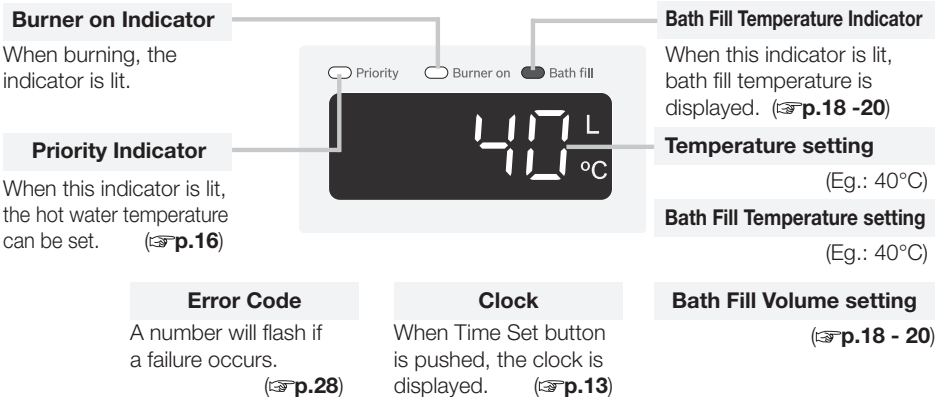
What is actually displayed depends on how the water heater is set.



\* Before use, remove the protective sheet from the remote controller surface.

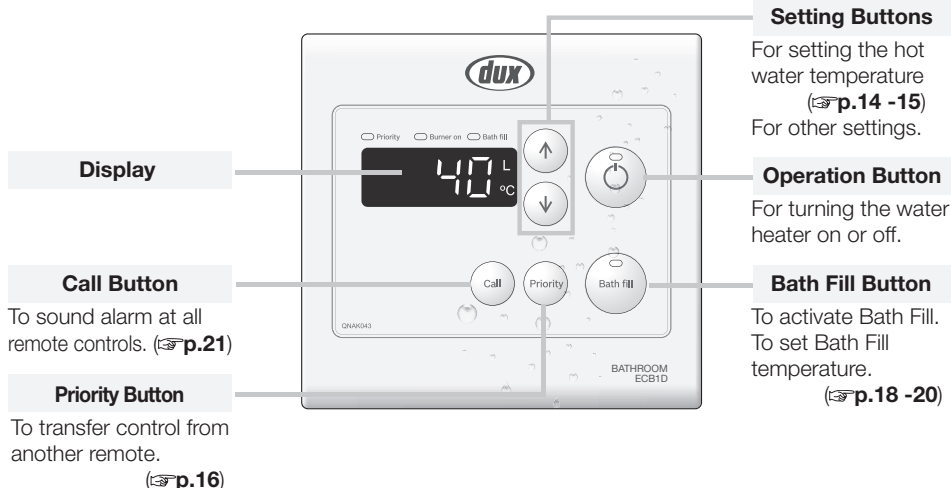
## Display

The illustration below shows the remote controller display.  
What is actually displayed depends on how the water heater is set.



## Bathroom Controller (ECB1D) <Optional>

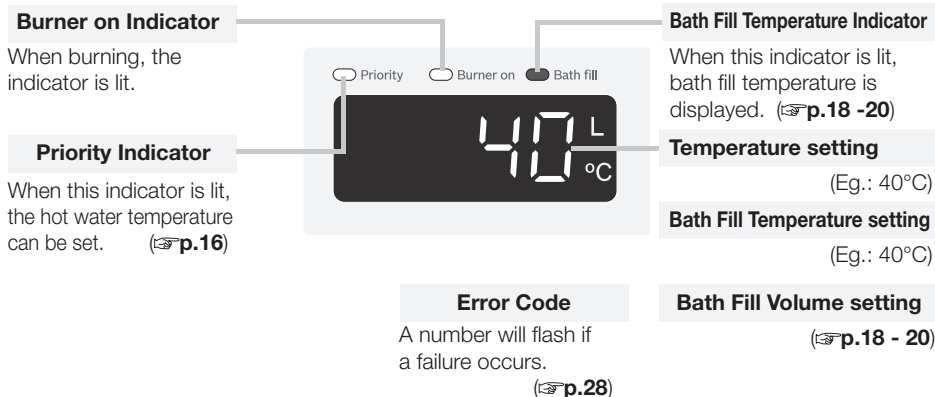
What is actually displayed depends on how the water heater is set.



\* Before use, remove the protective sheet from the remote controller surface.

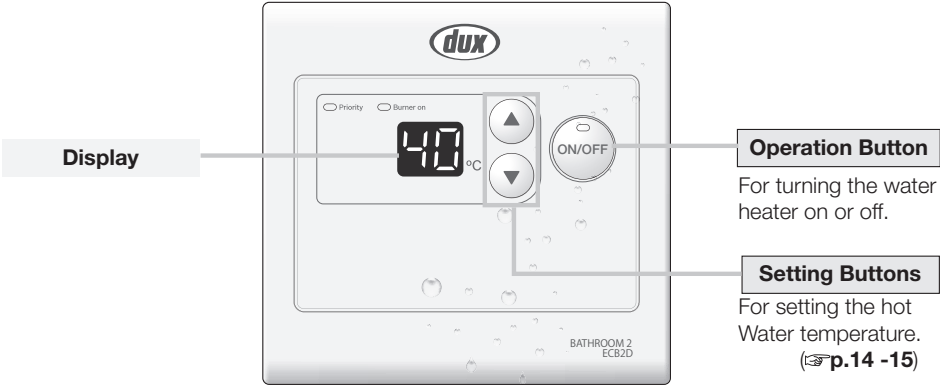
## Display

The illustration below shows the remote controller display.  
What is actually displayed depends on how the water heater is set.



# Bathroom 2 Controller (ECB2D) <Optional>

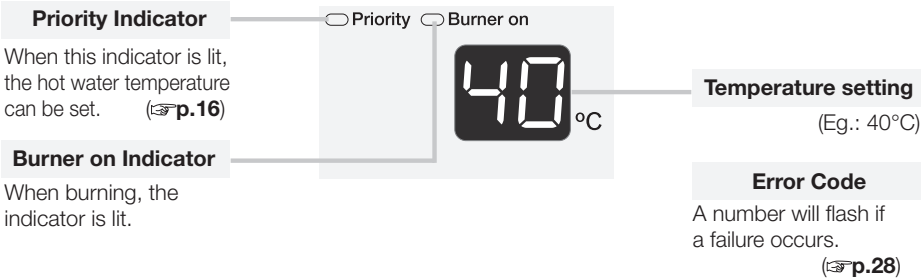
What is actually displayed depends on how the water heater is set.



\* Before use, remove the protective sheet from the remote controller surface.

## Display

The illustration below shows the remote controller display.  
What is actually displayed depends on how the water heater is set.



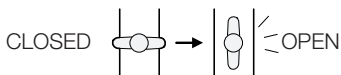
# Initial Operation

Before the first use of your water heater, make the following preparations.

Follow steps **1 through 4**

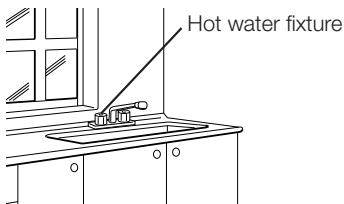
**1**

Open the water supply valve.



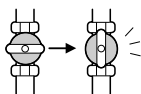
**2**

Open a hot water fixture to confirm that water is available, and then close the fixture again.



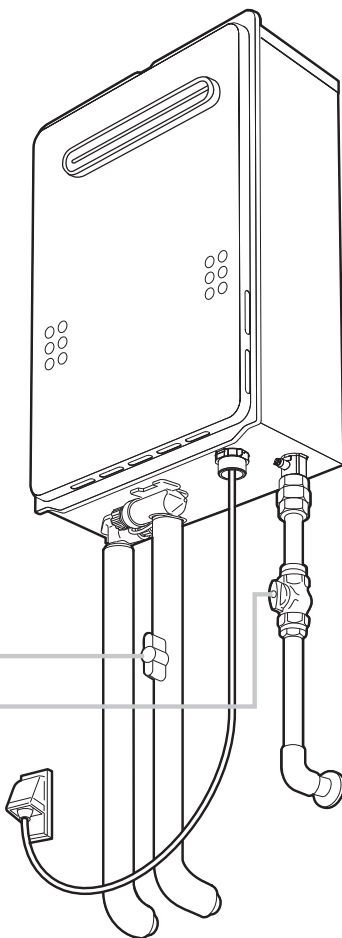
**3**

Open the gas supply valve.



**4**

Turn on the power.



Ex. 21ENB5N

# Clock Adjustment

(Main Controller)



Note: Only the main controller has a clock function.

Clock setting and the clock can be displayed regardless of "ON or OFF" of the operation button.  
(The illustration is in a state of "OFF".)

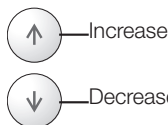
## 1 Press the Set Time Button (Until "0:00" is flashing)



Flashing



## 2 Adjust the clock



The time changes in 1-minute increments with each press on the button, and then in 10-minute increments if the button is kept pressed down.

Flashing



## 3 Press the Set Time Button



The flashing changes to constant illumination when the clock has been set.

Flashing



## Display the clock

Press the set time button.

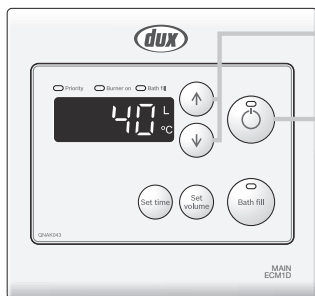
The clock display will then return to the original screen display.



- The clock display will disappear if hot water is used or the temperature of the hot water is changed during the clock display.
- If the Time set button is pushed when the hot water is being used or a high temperature (60°C or more) is set, the clock is displayed for 10 seconds and will return to the original screen display after that.
- In the event of a power cut or after disconnecting the power supply, the clock on the display screen will show 0:00 when the power is restored. In this case the clock will need to be reset.

# Setting and Using the Water Heater

(Main Controller)

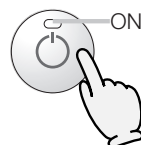


2

1

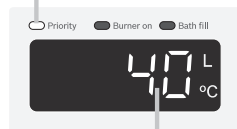
(Starting with the Operation Off)

## 1 Press the Operation Button



The temperature will be displayed on the Remote Controller.

ON



Previous set temperature  
(Eg.: 40°C)



## DANGER

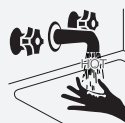


High Temperature

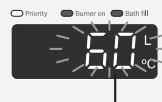
**To prevent scalding:**

**Hot Water Heater temperatures over 50°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 licensed installer.
- When setting the unit to 60°C or more (p.15), the temperature display will flash for 10 seconds.
- Take caution when using the unit again after setting to 50°C or higher. Always check the set temperature before use.



Remote Controller Display

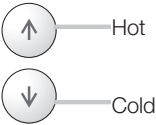


Flashing for 10 sec

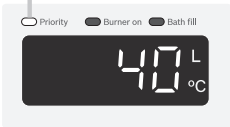




**2 Set temperature.**  
( Always check the temperature setting before use. )



Check the indicator lights.



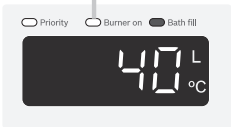
Water temperature



**3 Turn on hot water.**



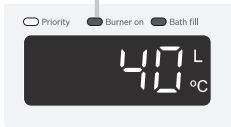
ON



**4 Turn off the hot water.**



OFF



( °C: The temperature settings below are examples. The temperature setting necessary depends on the usage, the length of piping or seasons. )

Bathroom and Bathroom 2 controller are these ranges.

[50 degree models: Main and Bathroom and Bathroom 2 controller are these ranges.]

37	38	39	40	41	42	43	44	45	46	47	48	50	55	60	75
			Shower, hot water supply, etc.				Hot water supply, etc.						High temperature		

\*Initial factory setting is 40°C

\* For most residential applications, the recommended setting temperature is 50°C or less.  
For applications that occasionally require a higher temperature setting, locate the remote controller in a convenient location.

# Controller Priority Function

## Priority

Hot water supplied from this appliance is delivered to the kitchen, bathroom, and shower, etc. at the same temperature.

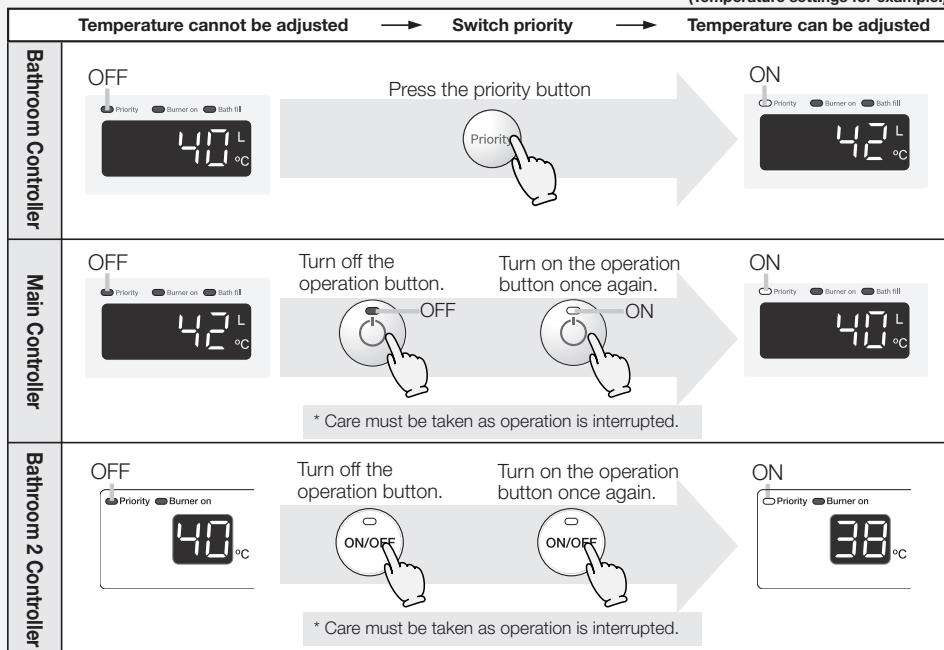
The water temperature can only be changed by one remote controller if a number of remote controllers are installed.

Only the controller with the priority light illuminated will be able to adjust the temperature of the water heater.

- The remote controller on which the operation button is turned "on" has priority.
- If the Bathroom or Bathroom controller2 has priority left ON, press OFF & ON any other controller to transfer priority to that controller. This function cannot be changed while the appliance is producing hot water (Except when hot water is operating).

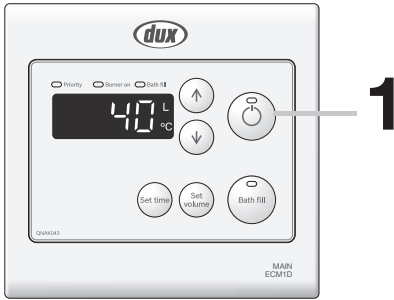
**When the temperature cannot be adjusted, follow the procedure below. <Priority button>**

(Temperature settings for example.)



# Muting the Remote Controller

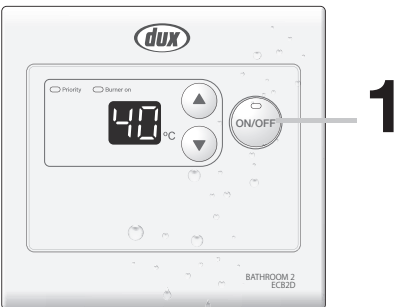
(Main Controller)



(Bathroom Controller)



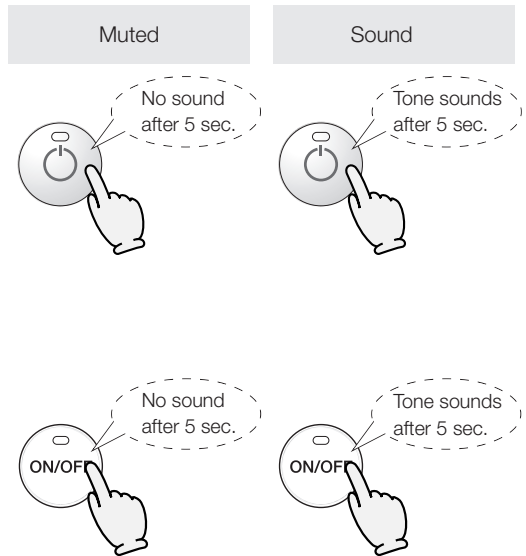
(Bathroom 2 Controller)



The remote controller will emit a sound when any button is pushed. This sound can be muted if it is desired.

\* Initial factory setting is with sound

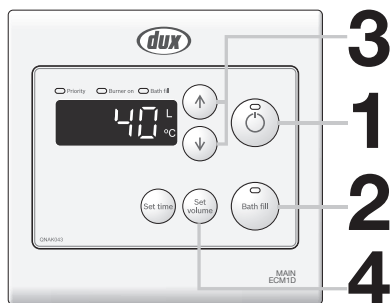
## 1 Hold the Operation Button for five seconds.



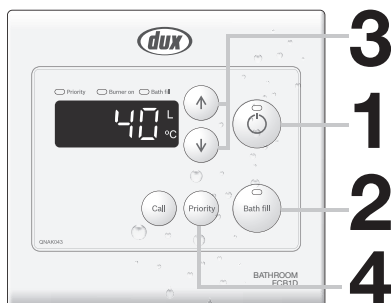
- The bath fill and the call function alarm are not muted.

# Bath Fill Function

(Main Controller)



(Bathroom Controller)

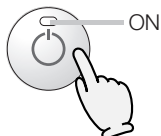


(Starting with the operation off)

## Preparation

Plug the bath drain.

## 1 Press the Operation Button

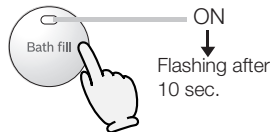


The temperature will be displayed on the remote control thermostat.



Previous set temperature  
(Eg.:40°C)

## 2 Press the Bath Fill Button



Flashing for 10 sec. → ON



Bath Fill temperature  
(Eg.:42°C)

Flashing for 10 sec. → ON

## Filling Up the Bath

In order to run a warm bath, push the bath fill button and open the hot water tap of the bath.

When the bath has reached the volume set on the controller, an alarm sounds and the hot water supply will stop automatically.

Once the bath fill is complete, please close the tap as the water heater cannot operate until this is done.

## Water Temperature

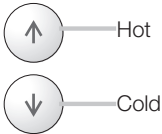
( °C: The temperatures settings below are only examples. The temperature setting necessary will depend on the usage, the length of piping or seasons. )

37	38	39	40	41	42	43	44	45	46	47	48
Warm			Warmer			Hot					

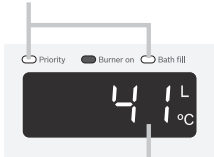
\* Initial factory setting: 40°C

To set the Bath Fill Volume:

### 3 Set temperature. (Always check temperature setting before use)



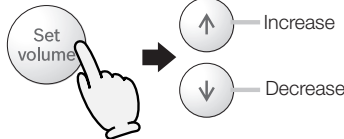
Check the indicator lights.



Bath Fill temperature

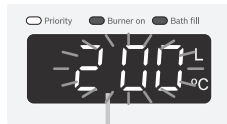
### 4 Adjust bath fill volume setting.

Press the Bath Fill button (the setting will flash on the display) and adjust with the setting buttons.



Choose the bath fill volume setting from the following options: 40 - 80 (In 20 litre intervals), 120 - 200 (In 40 litre intervals), or 250 - 650 (In 50 litre intervals).

\* Initial factory setting: 160 litre.



Bath fill volume setting will be flashing (Eg. 200 litre).

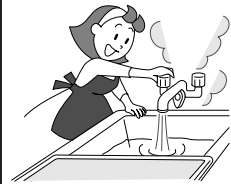
\* The level can only be adjusted while the indicator is flashing.

\* After 10 seconds, the remote will again display the temperature.

\* For Bathroom controller.

To alter the bath fill volume press the priority button after the bath fill button.

### 5 Turn on hot water.



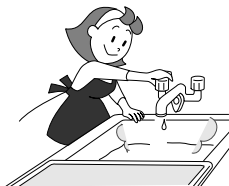
An alarm will sound for 10 seconds when the flow reaches the set level.



**And the hot water will stop automatically.**

## 6 Turn off the hot water when the alarm sounds.

The alarm will sound when the set level has been reached. Stop the water.



**\* When using hot water at another hot water outlet, also turn it off.**

**<When you turn off the hot water supply>**

- Bath fill temperature indicator turns off. (within approx. 30 seconds).

**<If you do not turn off the hot water supply>**

The equipment automatically runs the water to check if the hot water supply has been turned off.

**<When approx. 10 minutes passes without turning off the hot water supply the sound is played>**

The following screen appears, so turn off all the hot water supplies and then press the bath fill button.

**\* Do not open the hot water supply until the Bath fill temperature indicator goes off.**



The setting temperature becomes the bath fill temperature after the bath fill was used.

If the bath fill is being used to indicate when a bath is full:

- If any hot water is being used besides what is going into the bath, the alarm will sound before the bath is full.
- If there was water in the bath before the fill began, the bath may overflow.
- If there was water in the bath before the fill began, the temperature in the bath after it is full may be different from the temperature setting.

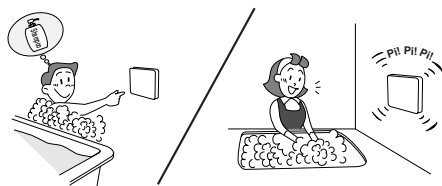
# Call Function

(Bathroom Controller)



The call button can be used to sound an alarm at the Main Controller.

(Conversation is not possible as it is not an intercom.)



## 1 Press the call button.



The alarm sounds for as long as the button is pressed.

- The call button can be used regardless of whether the operation button is turned "on" or "off".

# Frost Protection

## CAUTION

- \* Damage can occur from frozen water within the device and pipes even in warm environments. Be sure to read below for appropriate measures.
- \* Repairs for damage caused by freezing are not covered by the warranty.

## Freezing is prevented within the device automatically by the freeze-prevention heater

**Freezing cannot be prevented when the power plug is unplugged. Ensure that the appliance is plugged in and switched on at all times.**

(Freezing will be prevented regardless of whether the operation switch is ON or OFF.)

- \* The freeze prevention heaters will not prevent the plumbing external to the unit from freezing. Protect this plumbing with insulation, heat tape or electric heaters, solenoids, or pipe covers.

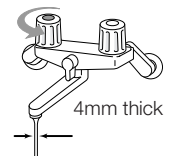
### Take the measures below for extremely cold temperatures\*.

(outside temperature including wind chill factor less than -15)

This method can protect not only to the heater, but also to the water supply, water piping and mixing valves.

1. Turn the unit off with the Operation Button on the Remote Controller.
2. Close the gas supply valve.
3. Open a hot water fixture, and keep a small amount of hot water running (400cc / minute or about 4mm thick).
- \* If there is a mixing valve, set it to the highest level.
4. The flow may become unstable from time to time. Check the flow 30 minutes later.
- \* In general, it is not advisable to run water through the unit when it is OFF (→ p. 6), but in this case freeze prevention is more important.

Hot Water Fixture



## If water will not flow because it is frozen

1. Close the gas and water valves.
2. Turn off the operation button.
3. Open the water supply valve from time to time to check whether water is running.
4. When the water is flowing again, check for water leaks from the equipment and piping before using.

If the heater or the piping is frozen, do not use the heater or it may get damaged.

# Regular Maintenance

## Performance

### CAUTION



Be sure to do.

To prevent burns or scalding, turn off the operation button and wait until the equipment cools before performing maintenance.

**Check**

For laundry, newspaper, timber, oil, spray cans and other combustible materials.

**Check**

For abnormal sounds during operation.

**Check**

For abnormalities in external appearance, discoloration or flaws.

**Check**

For water leaks from the equipment and piping.

**Check**

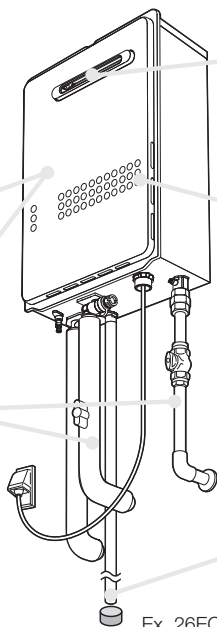
For dust and soot in the flue exhaust.

**Check**

For dust or debris in the air inlet.

**Check**

For blockage at the drain pipe discharge.  
Condensing model only



Ex. 26ECB5N

## Periodic Maintenance

### Equipment

Wipe the outside surface with a wet cloth, then dry the surface. Use a neutral detergent to clean any stains.

### Remote Controller

Wipe the surface with a wet cloth.

- Do not use benzene, oil or fatty detergents to clean the remote controller; deformation may occur.
- ECB1D, ECB2D are water resistant but not water proof. Keep it as dry as possible. ECM1D is not water resistant.

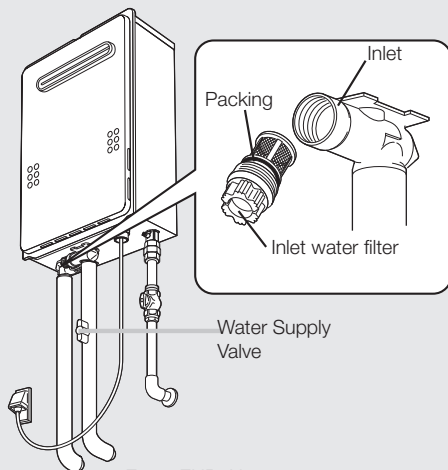
## Periodic Maintenance

### Inlet water filter

If the inlet water filter is covered with debris, the hot water may not run smoothly, or the unit may put out cold water. Check and clean the filter as explained below.

**\* To avoid burns, wait until the equipment cools down before draining the water.  
The appliance will remain hot after it is turned off.**

1. Close the water supply valve.
2. Open all hot water fixtures.
3. With a bucket ready, remove the inlet water filter (about 1 L. will drain out)
4. Take the inlet water filter. (See illustration to right).
5. Clean the inlet water filter with a brush under running water.
6. Replace and close inlet water filter.  
(Take care not to lose the packing.)
7. Close all hot water fixtures.
8. Open the water supply valve and check that water does not leak from the inlet water filter.



Ex. 21ENB5N

**\* This water heater should be serviced by an authorised person at regular intervals not exceeding 2 years.**



# Troubleshooting

## Initial Operation

Unit does not attempt to ignite when water is running.

- Check for reversed plumbing or crossed pipes.
- Check the inlet water filter. (→ p.24)

Unit attempts to ignite but fails

- Reset unit and try again. There may be air in the gas line.
- Have a professional check the gas supply pressure.

## Temperature

Hot water is not available when a fixture is opened.

- Are the gas and water supply valves fully open?
- Is the water supply cut off?
- Is the hot water fixture sufficiently open?
- Is the gas being cut off by the gas meter?  
(Can other gas devices such as stoves be used?)
- (For ULPG) Is there enough gas in the tank?  
(Can other gas devices such as stoves be used?)
- Is the inlet water filter clogged? (→ p.24)
- Is the operation button turned on?

No water is available when a fixture is opened.

- Is the water supply cut off?
- Is the heater frozen?
- Is the hot water fixture sufficiently open?

The hot water is not the correct temperature.

Water takes time to become hot when turning the hot water fixture

- Have you allowed enough time for the cold water in the pipes to drain out?

The water is too hot.

- Are the gas and water supply valves fully open?
- Is the water temperature setting appropriate?  
(→ p.14 and p.15)
- If the water supply temperature is high, it is possible for the temperature to be higher than the temperature set on the remote controller.
- If only a small amount of hot water is demanded, it is possible for the temperature to be higher than the temperature set on the remote controller.

The water is not hot enough.

- Are the gas and water supply valves fully open?
- Is the water temperature setting appropriate?  
(→ p.14 and p.15)

(Continued)

(Continued)

<p>The water is cold when only a single fixture is open.</p>	<ul style="list-style-type: none"> <li>• The unit will not heat the water if the flow rate is less than 2.5 litre per minute. Open the fixture more or open other fixtures so that a greater flow passes through the unit, and the unit should begin heating again.</li> </ul>
<p>Fluctuations in hot water temperatures.</p>	<ul style="list-style-type: none"> <li>• Set water temperature at 48°C to 50°C. This will allow you to use a higher flow of hot water thus meeting the minimum flow requirement of 2.5 L/min.</li> <li>• Clean the inlet water filter of any debris (➔ p.24)</li> </ul>

## Amount of Hot Water

<p>The amount of hot water at a certain fixture is not constant.</p>	<ul style="list-style-type: none"> <li>• When hot water is demanded at other fixtures, the amount available may be reduced. The maximum flow available from a 26 litre model is 26L/min., from a 21 litre model is 21 L/min., from a 17 litre model is 17 L/min. at a 25°C temperature rise.</li> <li>• Pressure fluctuations and other plumbing conditions can cause the temperature and pressure at a fixture to be unstable, but it should stabilize after a short time.</li> <li>• There are some types of hot water taps that discharges large volumes of hot water at first but stabilize after time.</li> <li>• To keep the temperature stable, the heater limits the amount of water that can flow through it to a small amount initially, but the amount increases over time.</li> </ul>
<p>The amount of hot water in the bath is less/more than the set amount.</p>	<ul style="list-style-type: none"> <li>• When hot water is used for other fixtures while filling the bath, the bath will not fill as much.</li> <li>• If there is water in the bath already, or when filling is stopped and restarted, the bath will fill more.</li> </ul>
<p>The bath fill alarm does not sound even when filled to the set amount.</p>	<ul style="list-style-type: none"> <li>• The bath fill alarm is set to sound when hot water is continuously discharged for the set volume of water. If mixing valves are used, or if cold water is mixed with hot water at the fixture, the bath will fill more than the setting of the bath fill function.</li> </ul>
<p>Amount of hot water available has decreased over time.</p>	<ul style="list-style-type: none"> <li>• Is the inlet water filter clogged? (➔ p.24)</li> </ul>

## Sounds

<p>The fan can be heard after operation is stopped. A motor can be heard when turning the unit on or off, when opening or closing a fixture, or after the unit has been running for a while.</p>	<ul style="list-style-type: none"> <li>• These noises indicate the proper operation of devices which are designed to let the unit reignite more quickly, and ensure the water temperature is stable.</li> </ul>
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## Remote Controller

The light on the operation button does not come on.	<ul style="list-style-type: none"> <li>• Has there been a power failure?</li> <li>• Is the power connected properly?</li> </ul>
Clock shows "0:00".	<ul style="list-style-type: none"> <li>• If the power is disconnected for any reason, when the power is reconnected, the clock on the display screen shows "0:00", indicating that it needs to be reset. (p.13).</li> </ul>
The water temperature changes after a power failure or when the power is disconnected.	<ul style="list-style-type: none"> <li>• The temperature setting and the bath fill setting may both need to be reset after a power outage.</li> </ul>
The plastic on the surface or buttons of the remote controller has torn, peeled, or air bubbles inside.	<ul style="list-style-type: none"> <li>• The surface of the remote controller is affixed with a protective sheet (to prevent surface scratching, etc.) at time of shipment. This sheet can be removed or left as it is. When leaving the protective sheet on, areas frequently touched may tear or peel. However, the remote controller will not malfunction from water entering such torn or peeled areas. To restore the appearance of the remote controller surface, simply remove the protective sheet.</li> </ul>

## Other

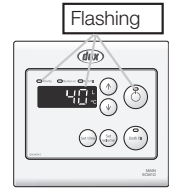
The heater stops burning during operation.	<ul style="list-style-type: none"> <li>• Are the gas and water supply valves fully open?</li> <li>• Is the water supply cut off?</li> <li>• Is the hot water fixture sufficiently open?</li> <li>• Is the gas being cut off by the gas meter? (Can other gas devices such as stoves be used?)</li> <li>• (For ULPG) Is there enough gas in the tank? (Can other gas devices such as stoves be used?)</li> </ul>
White smoke comes out of the flue exhaust on a cold day.	<ul style="list-style-type: none"> <li>• This is normal. The white smoke is actually steam.</li> </ul>
The hot water is turbid.	<ul style="list-style-type: none"> <li>• This is harmless. Small bubbles appear as the air in the water is heated and depressurized rapidly to atmospheric pressure.</li> </ul>
The water appears blue The bath tub/wash-basin has turned blue.	<ul style="list-style-type: none"> <li>• Coloration to a blue colour may be noticed from small traces of copper ion contained in the water and fat (furring). However, there are not problems concerning health. Coloration of the bath tub/wash-basin can be prevented by cleaning frequently.</li> </ul>
Frequent water discharge from drain pipe. (Condensing model only)	<ul style="list-style-type: none"> <li>• Condensation forms inside the unit during operation and is discharged from the drain pipe.</li> </ul>

## Check for an Error Code

If there is a problem with the unit, a numerical error code will flash on the remote controller.

If this occurs, take appropriate measures as listed below.

When an error code appears, the display and the operation light will flash together.



Main Controller

Error Code	Cause	Action
11	Ignition error	Check whether the gas valve is open. Press the operation button to turn the unit off, open a hot water fixture, and turn the unit back on. If the flashing number doesn't return the problem is solved.
29 (Condensing model only)	Clogging of neutralizer	Contact the installer or DUX Service Department for assistance.
90	Abnormal combustion, low gas supply pressure	Have a professional check the gas supply pressure. Contact Dux 1300 365 115
92 (Condensing model only)	The neutralizer needs to be replaced soon.	The equipment can be used for awhile, but the maximum hot water flow available from the unit will be reduced. Contact the installer or DUX Service Department for assistance.
93 (Condensing model only)	The neutralizer has reached the end of its service life and must be replaced.	The equipment cannot be used. Contact the installer or DUX Service Department for assistance.
99	Abnormal combustion	Contact the installer or Dux Service Department for assistance.

### Contact Dux if:

- Any other error code appears.
- An error code is indicated again after the above actions were followed.
- There are any other questions.



# Follow-up Service

## Requesting Service

First follow the instructions in the troubleshooting section (p.25 to p.28).  
If the error is not corrected, contact Dux Service Department at 1300 365 115.

We will need to know:

**The Models**

Condensing Models	Non Condensing Models
26ECB5N	21ENB5N
26ECB5L	21ENB5L
26ECB6N	21ENB6N
26ECB6L	21ENB6L
21ECB5N	17ENB5N
21ECB5L	17ENB5L
21ECB6N	17ENB6N
21ECB6L	17ENB6L

**Date of purchase** ..... (see the warranty)

**Details of problem** ... (flashing error codes, etc., in much detail as possible)

**Your name, address, and telephone number**

**Desired date of visit**

## Warranty

For repairs after the warranty period, there will be a charge on any service, and service will only be performed if the unit is deemed repairable.  
See warranty Document on page 34.

## Period of Time for Stocking Repair Parts

Dux will stock repair and maintenance parts for this unit within ten (10) years of the date of original manufacture.

## Reinstallation

If you want to reinstall the appliance at a different location, confirm that the gas and power supply indicated on the data plate are available at the new location. If you are not sure, consult the local utility company.

If you move to a region that uses a different type of gas, conversion and adjustment of the appliance will be necessary.

# Specifications

## Specifications

Model Name		26ECB5N	26ECB5L	26ECB6N	26ECB6L	21ECB5N	21ECB5L	21ECB6N	21ECB6L
Approval certification number		SAI-400194							
Type	Installation	Outdoor, Wall Mounted							
	Air Supply/Exhaust	Power Flue							
Operating Pressure		200 -1,000 kPa							
Minimum Flow Rate		2.5 L/min.							
Dimensions		520mm (Height) x 350mm (Width) x 170mm (Depth)							
Weight		18 kg				17 kg			
Water Holding Capacity		0.9 L				0.8 L			
Connection Sizes	Water Inlet	R 3/4 (20mm)							
	Hot Water Outlet	R 3/4 (20mm)							
	Gas Inlet	R 3/4 (20mm)							
Power Supply	Supply	230 - 240 VAC (50Hz)							
	Consumption	NG/ULPG : 49.0W/60.0W Freeze Prevention 130W				NG/ULPG : 43.0W/52.0W Freeze Prevention 130W			
Burner Injector Size		NG/ULPG : 1.4mm/2.4mm / 1.1mm/1.4mm				NG/ULPG : 1.3mm/2.2mm / 0.9mm/1.4mm			
Accessories		Anchoring Screws							

## Performance

Item		Maximum Performance	
Gas Consumption	NG	175 MJ/hr	145 MJ/hr
	ULPG	185 MJ/hr	149 MJ/hr
Maximum Hot Water Capacity		26 L/min	21 L/min
		25°C Rise	



## Specifications

Model		21ENB5N	21ENB5L	21ENB6N	21ENB6L	17ENB5N	17ENB5L	17ENB6N	17ENB6L
Approval certification number		SAI-400195							
Type	Installation	Outdoor, Wall Mounted							
	Air Supply/Exhaust	Power Flue							
Operating Pressure		200 -1,000 kPa							
Minimum Flow Rate		2.5 L/min							
Dimensions		520mm (Height) x 350mm (Width) x 170mm (Depth)							
Weight		15 kg				14 kg			
Water Holding Capacity		0.5 L				0.5 L			
Connection Sizes	Water Inlet	R 3/4 (20mm)							
	Hot Water Outlet	R 3/4 (20mm)							
	Gas Inlet	R 3/4 (20mm)							
Power Supply	Supply	230 - 240 VAC (50Hz)							
	Consumption	NG/ULPG : 36.0W/49.0W Freeze Prevention 129W				NG/ULPG : 31.0W/41.0W Freeze Prevention 129W			
Burner Injector Size		NG/ULPG : 1.2mm/2.0mm / 0.9mm/1.4mm				NG/ULPG : 1.2mm/1.8mm / 0.9mm/1.4mm			
Accessories		Anchoring Screws							

## Performance

Item		Maximum Performance	
Gas	NG	159 MJ/hr	125.5 MJ/hr
Consumption	ULPG	159 MJ/hr	127 MJ/hr
Maximum Hot Water Capacity	25°C Rise	21 L/min	17 L/min



## Specifications

Model Name		26ENA5N	26ENA5L	26ENA6N	26ENA6L
Approval certification number		SAI-400195			
Type	Installation	Outdoor, Wall Mounted			
	Air Supply/Exhaust	Power Flue			
Operating Pressure		200 -1,000 kPa			
Minimum Flow Rate		2.5 L/min.			
Dimensions		600mm (Height) x 350mm (Width) x 170mm (Depth)			
Weight		19 kg			
Water Holding Capacity		0.9 L			
Connection Sizes	Water Inlet	R 3/4 (20mm)			
	Hot Water Outlet	R 3/4 (20mm)			
	Gas Inlet	R 3/4 (20mm)			
Power Supply	Supply	230 - 240 VAC (50Hz)			
	Consumption	NG/ULPG : 62W/64W Freeze Prevention 129W			
Burner Injector Size		NG/ULPG : 2.3mm / 1.6mm			
Accessories		Anchoring Screws			

## Performance

Item		Maximum Performance
Gas	NG	200 MJ/hr
Consumption	ULPG	200 MJ/hr
Maximum Hot Water Capacity	25°C Rise	26 L/min

- Specifications may be changed without prior notice.
- The capacity may differ slightly, depending on the water pressure, water supply, piping conditions, and water temperature.



**WATER QUALITY**

All Dux water heating appliances are constructed from high quality materials and components and all are certified for compliance with relevant parts of Australian and New Zealand gas, electrical and water standards.

Whilst Dux water heaters are warranted against defects, the warranty is conditional upon correct installation and use, in accordance with detailed instructions provided with the heater. In the case of the water supplied to the heater, it is important that the water quality be of acceptable standard.

The water quality limits/parameters listed in water quality table are considered acceptable and generally, Australian and New Zealand suburban water supplies fall within these limits/parameters.

In areas of Australia and New Zealand where water may be supplied, either fully or partly, from bores, artesian wells or similar, one or more of the important limits may well be exceeded and the heater could, therefore, be at risk of failure.

Where uncertainty exists concerning water quality, intending appliance users should seek a water analysis from the water supplying authority and in cases where it is established that the water supply does not meet the quality requirements of the water quality table, the Dux warranty would not apply.

**WATER QUALITY TABLE**

Maximum levels

pH	Saturation Index(LSI) (langelier)	Total Hardness	Chlorides	Sodium	Iron
6.5-9	+0.4 to Minus 1.0 @65C	200mg/l	250mg/l	180mg/l	1mg/l

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**Dux Manufacturing Ltd (Dux)  
Manufacturer's Warranty  
(Applicable for purchases from 1 April 2016)**

**Dux continuous flow water heater Warranty:**

- 12 years heat exchanger warranty.
- 3 year parts and labour.

The benefits provided to you by the warranty and replacement guarantee (collectively "Warranty") are in addition to the guarantees and other rights and remedies available to you under the Australian Consumer Law ("ACL").

If the Unit fails to conform to this Warranty during the applicable period, Dux will replace any failed component or where necessary, in the absolute discretion of Dux, replace the Unit free of charge including reasonable labour costs incurred in normal business working hours.

This Warranty only applies to defects which have arisen solely from faulty materials or workmanship in the Unit and does not apply to other defects which may have arisen as a result of, without limitation, the following: accidental damage, abuse, misuse, maltreatment, abnormal stress or strain, harsh or adverse water conditions including excessive water pressure or temperature, neglect of any kind or otherwise as a result of any use of the Unit contrary to the product manual or other instructions provided by Dux. Alterations or repair of the Unit other than by an accredited and licensed service agent or technician are not covered. Attachment of accessories or use of non-genuine replacement parts other than those manufactured or approved by Dux are not covered by this Warranty.

This Warranty applies only to the Unit and does not cover any ancillary plumbing or electrical parts supplied by the installer such as pressure limiting valve, tempering valve, line strainer, stop cocks, non-return valve, electrical switches, pumps or fuses, or faulty installation.

The Unit must be installed by a licensed tradesperson in accordance with information set out in the manual supplied with the Unit and/or any relevant statutory requirements. If the Unit is located in a position that does not comply with the installation instructions or relevant statutory requirements, then this Warranty does not cover major dismantling or removal of cupboards, doors,

walls or special equipment and/ or excessive labour, at the determination of Dux, to make the Unit accessible for repair or replacement.

As required by legislation, including under the ACL, any claims for damage to furniture, carpets, walls, foundations or any other consequential loss either directly or indirectly due to defects of any kind in a Unit will only be met by Dux where the damage could be considered reasonably foreseeable and installed complying with the installation instructions and all relevant statutory requirements.

In addition to this Warranty, certain legislation (including the ACL) may give you rights which cannot be excluded, restricted or modified. This Warranty must be read subject to such legislation and nothing in this Warranty has the effect of excluding, restricting or modifying those rights.

If Dux fails to meet a guarantee under the ACL, your remedy for such failure may be limited to any one or more of the following:

- replacement of the Unit;
- repair of the Unit;
- refunding the cost of the Unit;
- payment of reasonable costs of having the Unit repaired;
- payment in respect of the reduced value of the Unit.

**Warranty claims can be placed by completing the following steps:**

Contact Dux on 1300 365 115 and select the Service option followed by the Hot Water option.

- Provide the serial number and model number of the HWS located on the white compliance sticker.
- Provide full name, address and contact number.
- Provide proof of installation of the unit, for warranty to commence from the Date of Installation of the unit. If proof of installation or purchase cannot be provided, then Date of Manufacture of the unit will be used to determine warranty commencement date.



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**Contact Details:**

Dux Manufacturing Limited  
Lackey Road, Moss Vale, NSW, 2577, Australia

1300 365 115 (Australia)  
0800 729 389 (New Zealand)  
Email: [duxaftersales@dux.com.au](mailto:duxaftersales@dux.com.au)

**Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.**



## Note