



navien Condensing Water Heater

User's Information Manual

Model

NPE-24AWE

NPE-24SWE

NPE-32AWE

NPE-32SWE

- These appliances are for use with natural gas or LPG. (An LPG conversion kit is included with the water heater.)
 - Type: B23-B33-B53-C13-C33-C43-C53-C63-C83
- Keep this manual near this water heater for future reference whenever maintenance or service is required.

WARNING

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

- **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 any appliances.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call the National Gas Emergency Helpline on (Freephone) 0800 111999 or your gas supplier from a neighbour's phone. Follow the instructions received.
- **Installation and service must be performed by a Gas Safe registered installer, service agency or the gas supplier.**



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1. Safety Information

The following safety symbols are used in this manual. Read and follow all safety instructions in this manual precisely to avoid unsafe operating conditions, fire, explosion, property damage or personal injury. Keep this manual for future reference.

DANGER

Indicates an imminently hazardous situation which, if not avoided, could result in severe injury or death.

WARNING

Indicates a potential hazardous situation which, if not avoided, may result in injury or death.

CAUTION

Indicates a potentially hazardous situation that, if not avoided, could result in property damage.

WARNING

If you do not follow these instructions exactly, a fire or explosion may result causing property damage or personal injury.



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

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gases are heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliances.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call the National Gas Emergency Helpline on (Freephone) 0800 111999 or your gas supplier from a neighbour's phone. Follow the instructions received.

C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

WARNING

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge provided they have been given supervision or instruction concerning to the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

DANGER



To prevent burns:

- Use the lowest operating temperature setting necessary to provide comfortably-hot water.
- If your household has children or elderly or disabled residents, consider using a lower temperature setting.
- Read all the instructions in this manual carefully before changing the temperature setting.
- Feel the water before using it on children, the elderly or the disabled.
- If it is necessary to set the water heater above 52°C, have a temperature-limiting valve or mixing valve installed on the water heater.

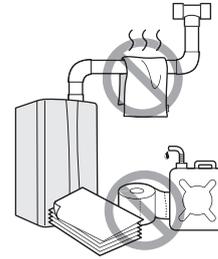
DANGER

This water heater is set to 50°C at the factory for your safety and comfort. Increasing the temperature increases the risk of accidental scalding. Water temperatures at or above 52°C can cause instant scalding or severe burns. Before you decide to change the temperature setting, read the following charts carefully.

Water Temperature	Time in which a young child can suffer a full thickness (3rd degree) burn*
70°C	Less than 1 second
60°C	1 second
55°C	10 second
49°C	10 minutes
37°C	very low scald risk

Before setting the temperature at or above 52°C, consider installing a thermostatically-controlled mixing valve or temperature-limiting valve. Contact a licensed plumber or your local plumbing authority for more information.

WARNING



- **Shut off the gas supply if the water heater is damaged.**

Have your installer or plumber show you the location of the gas shut off valve and demonstrate how to close the valve. If the water heater is damaged as a result of overheating, fire, flood or any other reason, close the manual shut off valve and do not operate the water heater again until it has been inspected by a qualified technician.

- **Do not store or use petrol or other flammable liquids near this water heater.**

Doing so may result in fire or explosion.

- **Do not place combustibles, such as newspapers or laundry, near the water heater or flue system.**

Doing so may result in a fire.

- **Do not place or use hair sprays, spray paints or any other compressed gases near the water heater or flue system, including the flue termination.**

Doing so may result in fire or explosion.

- **Do not operate the water heater with the front cover opened.**

Doing so may result in fire or carbon monoxide (CO) poisoning, which may result in property damage or personal injury.

- **Do not operate this water heater without proper flue system.**

Doing so may result in fire or carbon monoxide (CO) poisoning, which may result in property damage or personal injury. Inspect the flue termination and air intake supply annually to ensure proper operation of the water heater. Turn off and discontinue use of the water heater if any of the flue pipes, flue elbows or intake pipes are damaged in any way, separated at a joint or show evidence of corrosion, rusting or melting.

- **Do not touch the power cord or internal components of the water heater with wet hands.**

Doing so may result in electric shock.

- **Do not make any electrical connections before turning off the electrical power supply at service entrance panel.**

Doing so may result in severe personal injury.

CAUTION

- **Do not attempt to repair or replace any part of the water heater, unless it is specifically recommended in this manual.**

For all other service, contact an authorised technician or licensed professional. Improper adjustments, alterations, service, or maintenance may lead to property damage, personal injury and will void your warranty.

- **Do not operate the water heater if you feel something is wrong with it.**

Doing so may result in product damage or personal injury.

- **Do not allow children to operate or access the water heater.**

Doing so may result in product damage or personal injury.

- **Do not attempt to change the water temperature while the water heater is being used.**

Doing so may result in personal injury.

- **Do not turn on the water heater unless the water and gas supplies are fully opened.**

Doing so may damage the water heater.

- **Do not turn on the water if the cold water supply shut-off valve is closed.**

Doing so may damage the water heater.

- **Do not use this water heater for anything other than its intended purpose, as described in this manual.**

- **Do not remove the front cover unless the power to the water heater is turned off or disconnected.**

Failure to do so may result in electric shock.

- **When servicing the controls, label all wires prior to disconnecting them.**

Failure to do so may result in wiring errors, which can lead to improper or dangerous operation.

- **Do not use unapproved replacement or accessory parts.**

Doing so may result in improper or dangerous operation and will void the manufacturer's guarantee.

- **Do not place anything in or around the flue terminals, such as a clothes line, that could obstruct the air flow in or out of the water heater.**

- **This water heater has been approved for use in the UK and Ireland only.**

Using the water heater in any other country will void the manufacturer's guarantee.

- **Should overheating occur or the gas supply fail to shut off, turn off the manual gas valve to the appliance.**

- **Do not use this appliance if any part has been under water.**

Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

EC Conformity Declaration



Navien, hereby declares that the water heater models:

NPE-24AWE, NPE-24SWE, NPE-32AWE, NPE-32SWE

to which this declaration refers, conform to and comply with the essential requirements of the following applicable European Standards and Directives.

Gas appliances: Directive 2009/142/EC Standards EN 437 and EN 26

Water Heater Efficiency: Directive 92/42/EEC
Regulation (EU) No. 814/2013
Regulation (EU) No. 812/2013

Low voltage: Directive 2006/95/EEC

Electro-magnetic Compatibility: Directive 2004/108/EEC

Noise: Standard EN 15036-1, EN-ISO 3743-1

Navien, manufactures its products using a Quality Assurance system in compliance with Standard EN-ISO 9001:2000.

2. About the Water Heater

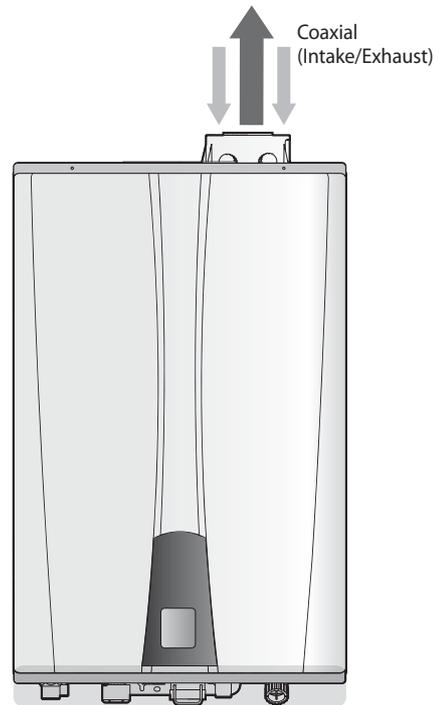
2.1 Description of the Water Heater

The NPE-series water heater is available in four models: NPE-24AWE, NPE-24SWE, NPE-32AWE, and NPE-32SWE

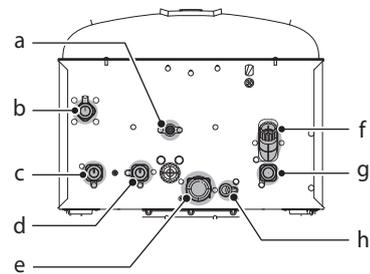
The main features are as follows:

- Potable domestic hot water, combination space heating, and commercial applications
- Maximum temperature: 85°C
- Dual stainless steel Heat Exchangers with stainless steel piping
- Built-in pump and 1.5 litre Buffer Tank for internal or external recirculation ("A" model only)

2.2 Parts of the Water Heater



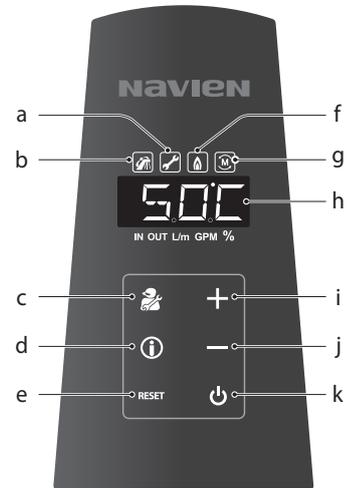
Bottom View



#	Description	Remark
a	Pump Drain Port	"A" model only
b	Gas Inlet	
c	Hot Water Outlet Connection	
d	Recirculation Inlet	"A" model only
e	Condensate Water Clean-out	
f	Inlet Water Filter	
g	Cold Water Inlet Connection	
h	Condensate Drain Connection	

2.3 The Front Panel

The front panel allows you to adjust the water temperature and view the operating status or error codes. Remove the protective sheet from the front panel before using it.



A code will appear on the display



Recirculation Mode



For installers only



Shows basic information



Resets the water heater (When an error occurs)



When the gas burner is on



Cascade operation



Increases the temperature



Decreases the temperature

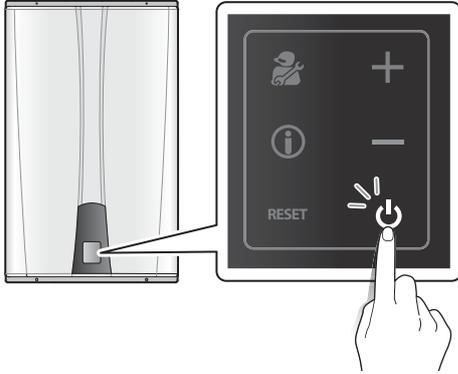


Turns the water heater on or off

3. Operating the Water Heater

3.1 Turning the Water Heater On or Off

To turn the water heater on or off, press the Power button.



When the power is on, the temperature will appear on the front panel display.



3.2 Adjusting the Water Temperature

WARNING

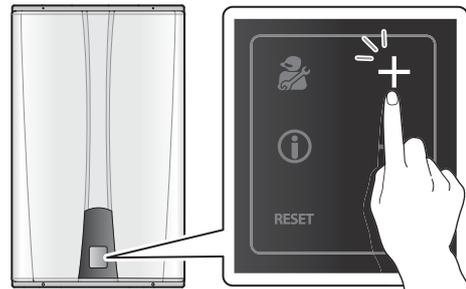
Before adjusting the water temperature, read "To prevent burns:" on page 4 carefully. Water above 50°C can cause instant scalding or severe burns.

The water heater is set to 48.5°C by default. To adjust the water temperature:

1. Make sure that all hot water faucets are closed, and ensure that the internal circulator and any external circulating pumps are off.

Note If a hot water faucet is open, you can adjust the temperature only from 37°C-43°C.

2. Press the + (Up) or - (Down) buttons until the desired temperature appears on the display. You can adjust the temperature while the display is flashing. Once the display stops flashing, the temperature setting is stored.



Note The water heater will retain your settings during a power outage.

You can adjust the temperature by the below 5-degree increments, depending on the temperature range:

Temperature range	Adjusting the water temperature
36°C-50°C (Celsius mode)	0.5°C increments
50°C-60°C (Celsius mode)	Press for 2 seconds to adjust in 2°C increments

The water heater will not provide hot water instantly at the hot water faucet unless a recirculation line has been installed from the furthest fixture back to the water heater. For "A" models, the unit must be set to "external recirculation" mode.

3.2.1 Using Commercial Mode

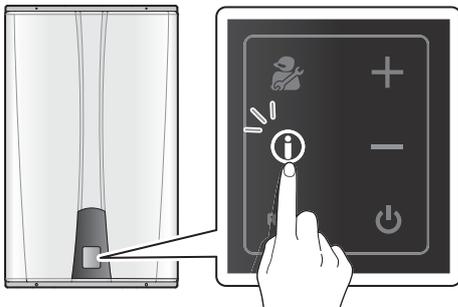
To use water above 60°C (up to 85°C), you can use Commercial Mode.

- To enter Commercial Mode: Press the up (+) and down (-) button simultaneously for 10 seconds. "HIGH" appears on the display.
- To exit Commercial Mode: Press the up (+) and down (-) button simultaneously for 10 seconds. "LoW" appears on the display.

Note To adjust the temperature, press the up (+) button for 5 seconds to adjust in 5°C increments.

3.3 Viewing Basic Information

To view information about the water heater, press the Information button.



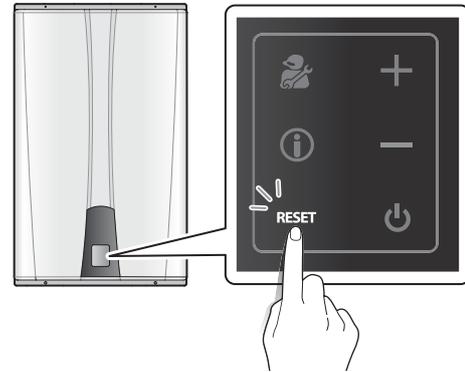
Press the + or – buttons to switch between the information types.

Display	Description
	Flow rate in litres per minute (LPM).
	Hot water outlet temperature (OUT).
	Cold water inlet temperature (IN).

To exit information mode, press the Reset button.

3.4 Resetting the Water Heater

If an error message appears, you can try resetting the water heater to resolve the problem. To reset the water heater, press the Reset button.



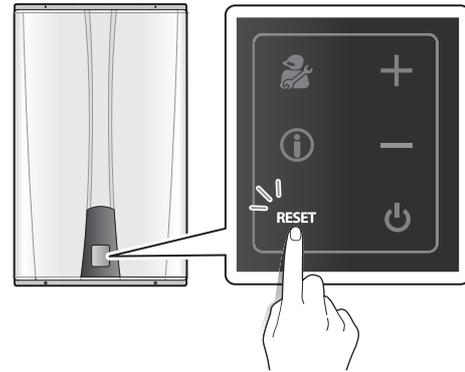
If resetting the water heater does not solve the problem, refer to the Troubleshooting section of this manual or contact a Technical Assistance Service.

4. Troubleshooting

4.1 Solving Basic Problems

If you experience a problem with the water heater, refer to the following chart for possible remedies. Error codes that appear on the front panel display are explained in the following section.

For minor problems, resetting the water heater may resolve the issue. To reset the water heater, press the Reset button on the front panel.



If resetting the water heater and attempting the remedies suggested below do not resolve the problem, contact Navien Technical Assistance Service (TAS) or a Gas Safe Registered Engineer.

Problem	Possible Cause(s)	What to do
No water comes out when the hot water tap is opened.	<ul style="list-style-type: none"> Is the cold water inlet filter clean? Is an error code displayed on the front panel? Is the water heater frozen? 	<ul style="list-style-type: none"> Ensure that the shut-off valves on the hot and cold pipes are open. If an error code is displayed, refer to "4.2 Understanding Error Codes" on page 13.
The water from the hot water faucet is cold or turns cold and stays cold.	<ul style="list-style-type: none"> Is the cold water inlet filter clean? Is the hot water faucet open wide enough draw at least 1.9 litres of water per minute (LPM) through the water heater? Is an error code displayed on the front panel? If there is an external recirculation system installed, is there a check valve on the recirculation return line? 	<ul style="list-style-type: none"> Clean the cold water inlet filter. Open the hot water faucet completely. If an error code is displayed, refer to "4.2 Understanding Error Codes" on page 13.
It takes too long for hot water to reach the fixtures.	Are you using the external recirculation mode?	Have a contractor install a recirculation return line from the furthest faucet back to the water heater.
The water is not hot enough.	Is the set temperature too low?	<ul style="list-style-type: none"> Check the water heater's temperature setting. Refer to "3.2 Adjusting the Water Temperature" on page 10. Check for cross plumbing between the cold and hot water lines.
The water is too hot.	Is the set temperature set too high?	Check the water heater's temperature setting. See "3.2 Adjusting the Water Temperature" on page 10.

4.2 Understanding Error Codes

When an error code appears on the front panel, refer to the following chart for a definition and possible remedy for the situation.

Auto reset	Reason	Self-diagnostic / Action
E003	Ignition failure	Manual reset
E004	False flame detection	Auto reset
E012	Flame loss	Manual reset
E016	Heat exchanger overheat	Manual reset
E030	Abnormal exhaust temperature	Manual reset Auto reset
E046	Abnormal operation: heat exchanger overheating sensor	Auto reset
E047	Abnormal operation: exhaust thermostat	Auto reset
E060	Abnormal operation: dual venturi limit switch	Auto reset
E109	Abnormal operation: fan	Manual reset
E110	Exhaust blockage (Condensate blockage)	Manual reset
E127	Abnormal operation: APS	Manual reset Auto reset
E407	Abnormal operation: hot water outlet1 thermistor	Auto reset
E421	Abnormal operation: cold water inlet1 thermistor	Auto reset
E432	Abnormal operation: cold water inlet2 thermistor	Auto reset
E434	Abnormal operation: water adjustment valve	Manual reset
E438	Abnormal operation: circulation pump	Manual Auto reset
E439	Abnormal operation: flow sensor	Manual reset
E441	Abnormal operation: hot water outlet2 thermistor	Auto reset
E445	Abnormal operation: mixing valve	Manual reset
E515	Abnormal operation: relay feedback (PCB)	Manual reset
E517	Abnormal operation: dip switch setting (PCB)	Manual reset
E593	Abnormal operation: front panel key	Auto reset
E615	Abnormal operation: input and memory (MCU)	Manual reset
E736	Abnormal operation: cascade communication	Auto reset
E760	Flushing alarm	Alarm
E782	Abnormal operation: main panel communication	Auto reset
E787	Abnormal operation: reset device	Manual reset Power reset

If the error code is not cleared by resetting the water heater functioning (see "3.4 Resetting the Water Heater") or if it occurs repeatedly, call the nearest official Technical Assistance Service (TAS), indicating the number of the error code appearing on the front panel.

Guarantee

Guarantee Conditions

Navien's commercial guarantee covers the correct functioning of the products manufactured by Navien, in accordance with the following conditions and time periods:

1. This commercial guarantee is valid for the following periods, as from the start-up date:
 - 2 years for electric and hydraulic elements, pumps, valves, etc.
 - 5 years for heat exchangers.
 - 5 years for domestic hot water tanks.
 - During the 2-year period following the start-up date, Navien will carry out any repairs of original flaws or defects totally free of charge.
 - After these 2 years have elapsed and until the end of the guarantee period, labour costs and call-out charges will be payable by the user.
2. The annual overhaul is not included in the terms of this guarantee.
3. The start-up and annual overhaul are to be carried out by personnel authorised by Navien.
4. The commercial guarantee will be null and void in the following cases:
 - If the annual overhaul by personnel authorised by Navien has not been carried out.
 - If the water heater has not been installed in accordance with the applicable laws and regulations for this type of appliance.
 - If the water heater has not been started up immediately after its installation, by personnel authorised by Navien.

Failures due to misuses or incorrect installation, use of non-suitable power or fuel, supply with water with physical or chemical properties causing incrustation or corrosion, incorrect handling of the appliance and, in general, for any reason beyond Navien's control, are excluded from this guarantee.

This guarantee does not affect the consumer's rights as stipulated by law.

Note: Start-up is included in the price of the water heater. The call-out charge is not included.

Suitable Use

The NPE-AWE/NPE-SWE model water heaters are designed with all the necessary safety systems. Unsuitable use of the appliance for a purpose it was not designed for entails risk of damage to the water heater or property, and even of injury to the user and other persons.

The NPE-AWE/NPE-SWE model water heaters are designed to generate heat for domestic hot water and to be connected to central heating systems. Any use other than the above will be considered unsuitable use of the water heater. In such cases the manufacturer/supplier shall not be liable for any damage caused, and the user will be liable for the damage. Correct use of the water heater includes reading the user and installation instructions and all applicable documents, and complying with the maintenance and inspection conditions.

Everyday Care

Clean the outside of the water heater with a damp cloth with a little detergent. Do not use abrasive products to clean the water heater.

Waste Recycling and Disposal

Observe the applicable national regulations and standards concerning waste disposal.

The water heater

Neither the wall-mounted water heater or its accessories are to be disposed of with the domestic waste. Ensure the appliance and its accessories, where applicable, are suitably disposed of.

Packaging

The transport packaging will be disposed of by the specialist technician who made the installation.

ErP Information

Product Fiche (EU regulation No 812/2013)

KD Navien	Unit	NPE-24AWE	NPE-24SWE	NPE-32AWE	NPE-32SWE
Declared load profile		XL	XL	XXL	XXL
Water heating energy efficiency class		A	A	A	A
Water heating energy efficiency	%	103	106	105	107
Annual electricity consumption	kWh	41	57	24	24
Annual fuel consumption	GJ	14	14	18	18
Default temperature setting	°C	48.5	48.5	48.5	48.5
Sound power level	dB	56	56	58	58
Specific precaution	Read the user's information and installation manual before the application is assembled, installed or maintained.				

Memo

Memo

Memo

User's Information Manual

Getting Service

If your water heater requires service, you have several options for getting service:

- Contact an official Technical Assistance Service (TAS) at 0844 332 2323 or go to the website (www.navien.co.uk).
For warranty service, always contact an official Technical Assistance Service (TAS) first.
- Contact the technician or professional who installed your water heater.
- Contact a Gas Safe Registered engineer.

When you contact an official Technical Assistance Service (TAS), please have the following information at hand:

- Model number
- Serial number
- Date purchased
- Installation location and type
- Error code, if any appears on the front panel display.

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