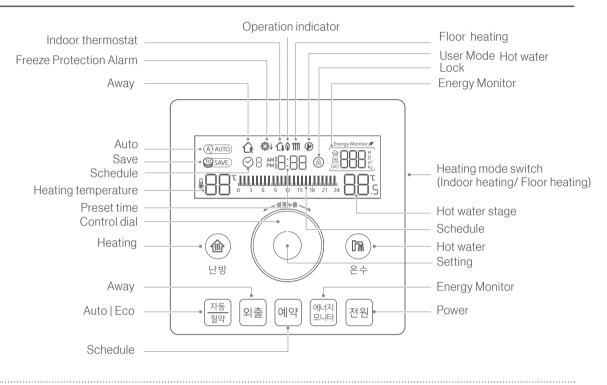
### How to use the gas boiler

### **Indoor Thermostat**



#### Heating Mode

[Indoor heating mode] or [floor heating mode] can be selected regarding the environment. Upon purchase, the default is the indoor heating mode (  $\bigtriangleup$  ).



#### Indoor heating mode

Indoor temperature sensor detects room temperature and controls the temperature.

### Flo

Floor heating mode Floor temperature sensor detects water temperature from a boiler an

water temperature from a boiler and controls the floor temperature.

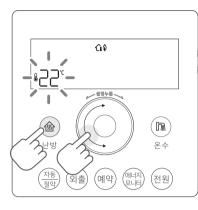
1. When power is on, press the [heating mode switch] button.

• (  $\bigcirc$  ) Indoor heating mode  $\leftarrow \rightarrow$  (  $\bigcirc$  ) Floor heating mode can be switched.



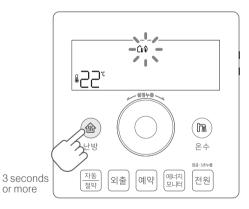


#### Heating



- 1. When power is on, press the [heating] button to turn on the heating system.
  - The heating temperature blinks on the LCD.
  - If the heating button is pressed when the system is on, it will be turned off.
- 2. Turn the control dial to set your desired temperature.
  - If the current temperature is lower than the set temperature, the combustion indicator
    () on the LCD turns on.

#### **Quick Heat**

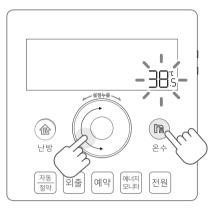


1. When power is on, press the [heating] button to turn on the heating system.

### 2. Press and hold the [Heat] button for at least 3 seconds.

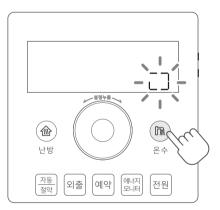
- Heating is set to the highest temperature, and Start() flashes on the indoor temperature control LCD display.
- If the set temperature changes during heating or you press and hold the [Heat] button for at least 3 seconds, Quick Heat is turned off.

#### Hot water



- 1. When power is on, press the [hot water] button to turn on the hot water system.
  - The hot water temperature blinks on the LCD.
  - Press the [Hot Water] button while in operation to stop hot water.
- 2. Turn the control dial to set your desired temperature.
  - With heating and hot water both on, press the [Hot Water] button to set your desired temperature when the hot water temperature blinks.
  - You can only change from between  $30^{\circ}$ C to  $55^{\circ}$ C while hot water is in use. To change to  $60^{\circ}$ C, press the Higher button while the hot water tap is off.

#### **Preheat Water**

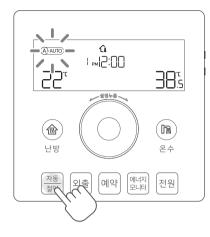


1. When power is on, press the [hot water] button to turn on the hot water system.

## 2. Press and hold the [Hot Water] button for at least 3 seconds.

- The circulation indicator flashes on the hot water temperature display, and preheating begins.
- Turn on the hot water tap while operating or press and hold the [Hot Water] button for at least 3 seconds to turn off hot water preheating.

#### Auto | Eco Mode



#### Away mode



#### Schedule mode



- 1. Press the [Auto | Eco] button while the power is on to select a mode.
  - The auto indicator ( (Anno) ) blinks on the LCD.

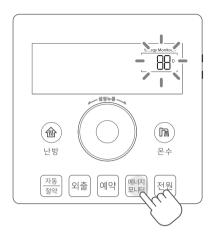


- You cannot set the heating temperature or hot water temperature in auto mode.
- Each time the [Auto | Eco] button is pressed, the mode changes.
- When the away button is pressed during the save mode, the save mode turns into the away mode.
- When the save button is pressed during the mode, the save mode will be turned off.
- 1. When power is on, press the [away] button to turn on the away mode.
  - $\cdot$  (  $\hat{\mathbf{A}}$  ) will be displayed.
  - The minimum temperature heating system will be turned on every 4 hours to keep the pleasant room temperature.
  - If the away or heating button is pressed when the mode is on, the away mode will be turned off.

- 1. When power is on, press the [schedule] button to preset time.
  - $\cdot$  ( $\bigcirc$ ) will be displayed.
  - Press the [schedule] button to change the reservation number.



• Press the [schedule] button while operating to disable reservation mode.



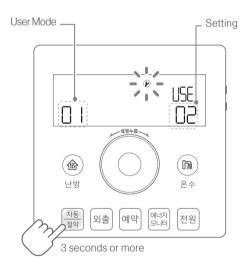
#### 1. Press the [Energy Monitor] button while power is off to select your desired item.

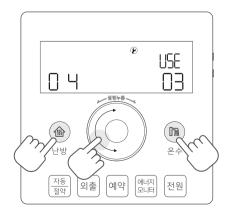
- The energy monitor indicator ( B<sup>•</sup>) on the LCD is on.
- Each time the [Energy Monitor] button is pressed, all energy information changes.

→ Boiler Use Date → Heat Use Time → Hot Water Use Time Disable Energy Monitor ← Gas Usage

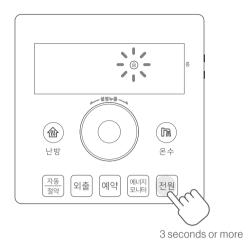
• Press and hold the [Energy Monitor] button for at least 3 seconds. ( [][]) blinks on the LCD and information is reset.

# Control LED brightness / Turn button and notification sounds on or off / Control volume





- 1. Press and hold the [Auto|Eco] and [Out] buttons for at least 3 seconds while the power is off.
  - The service mode indicator ( P ) on the LCD is on.
- 2. Turn the control dial to select your desired user mode.
  - 🛛 |: LED brightness
  - []2 : Button sound control
  - [] ] : Notification sound control (including error notifications and freeze warnings)
  - []4: Voice information volume control (change separately regardless of button and notification sound volume)
- 3. Press the [Hot Water] button after selecting a feature to set it as you wish.
  - 🛛 |: Stage 1
- <mark>]] -</mark> : Stage 5
- []**2** : Stage 2
- []n : On • []F : Off
- []]: Stage 3
- 🛛 4 : Stage 4
- 4. After setup, press the [Heat] button to stop user mode.

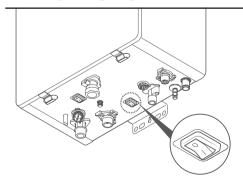


- 1. When power is on, press and hold the [power] button for more than 3 seconds to lock.
  - The icon ( ) will be displayed.
  - When the power or heating button is pressed for more than 3 seconds, the lock will be unlocked.

#### Freeze Protection Alarm

It will be displayed when a heating pump is turned on for freeze protection.

### **Emergency Operation**

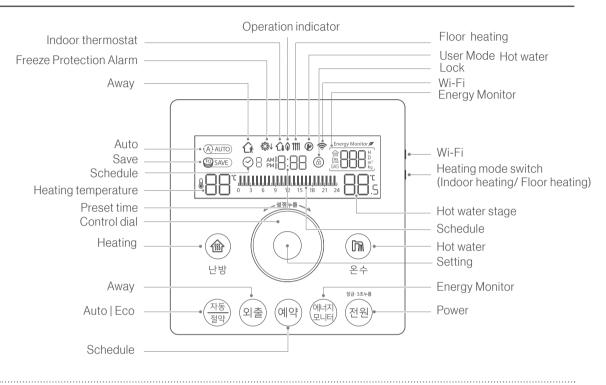


## 1. Press the [Emergency Operation] switch on the bottom of the boiler.

• Emergency operation of the boiler is possible if the indoor temperature controller is malfunctioning or not connected.

### How to use the gas boiler

### **Indoor Thermostat**



#### Heating Mode

[Indoor heating mode] or [floor heating mode] can be selected regarding the environment. Upon purchase, the default is the indoor heating mode (  $\frown$  ).



#### Indoor heating mode

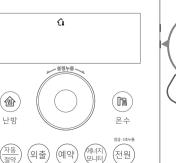
Indoor temperature sensor detects room temperature and controls the temperature.

#### Floor heating mode

Floor temperature sensor detects water temperature from a boiler and controls the floor temperature.

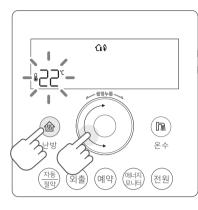
1. When power is on, press the [heating mode switch] button.

• (  $( \mathbf{\hat{h}} )$  ) Indoor heating mode  $\leftarrow \rightarrow ( \mathbf{\hat{h}} )$ Floor heating mode can be switched.



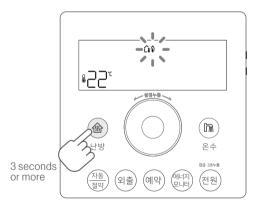


#### Heating



- 1. When power is on, press the [heating] button to turn on the heating system.
  - The heating temperature blinks on the LCD.
  - If the heating button is pressed when the system is on, it will be turned off.
- 2. Turn the control dial to set your desired temperature.
  - If the current temperature is lower than the set temperature, the combustion indicator
    () on the LCD turns on.

#### **Quick Heat**

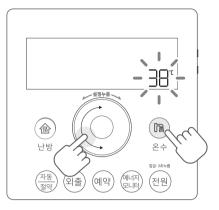


1. When power is on, press the [heating] button to turn on the heating system.

### 2. Press and hold the [Heat] button for at least 3 seconds.

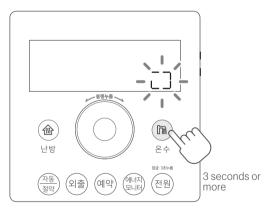
- Heating is set to the highest temperature, and Start() flashes on the indoor temperature control LCD display.
- If the set temperature changes during heating or you press and hold the [Heat] button for at least 3 seconds, Quick Heat is turned off.

#### Hot water



- 1. When power is on, press the [hot water] button to turn on the hot water system.
  - The hot water temperature blinks on the LCD.
  - Press the [Hot Water] button while in operation to stop hot water.
- 2. Turn the control dial to set your desired temperature.
  - With heating and hot water both on, press the [Hot Water] button to set your desired temperature when the hot water temperature blinks.
  - You can only change from between 30°C to 55°C while hot water is in use. To change to 60°C, press the Higher button while the hot water tap is off.

#### **Preheat Water**



1. When power is on, press the [hot water] button to turn on the hot water system.

## 2. Press and hold the [Hot Water] button for at least 3 seconds.

- The circulation indicator flashes on the hot water temperature display, and preheating begins.
- Turn on the hot water tap while operating or press and hold the [Hot Water] button for at least 3 seconds to turn off hot water preheating.

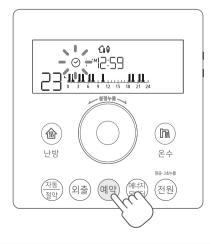
#### Auto | Eco Mode



#### Away mode



#### Schedule mode



- 1. Press the [Auto | Eco] button while the power is on to select a mode.
  - The auto indicator ( (A) AUTO ) blinks on the

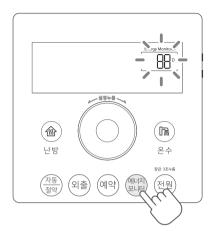


- You cannot set the heating temperature or hot water temperature in auto mode.
- Each time the [Auto | Eco] button is pressed, the mode changes.
- When the away button is pressed during the save mode, the save mode turns into the away mode.
- When the save button is pressed during the mode, the save mode will be turned off.
- 1. When power is on, press the [away] button to turn on the away mode.
  - $\cdot$  (  $\uparrow$  ) will be displayed.
  - The minimum temperature heating system will be turned on every 4 hours to keep the pleasant room temperature.
  - If the away or heating button is pressed when the mode is on, the away mode will be turned off.

- 1. When power is on, press the [schedule] button to preset time.
  - $\cdot$  ( $\bigcirc$ ) will be displayed.
  - Press the [schedule] button to change the reservation number.



• Press the [schedule] button while operating to disable reservation mode.



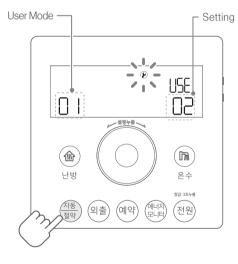
1. Press the [Energy Monitor] button while power is off to select your desired item.

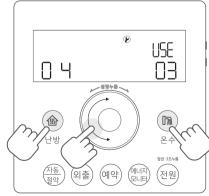
- The energy monitor indicator ( B. ) on the LCD is on.
- Each time the [Energy Monitor] button is pressed, all energy information changes.



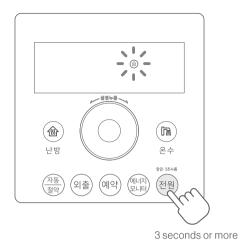
• Press and hold the [Energy Monitor] button for at least 3 seconds. ( [][]]) blinks on the LCD and information is reset.

# Control LED brightness / Turn button and notification sounds on or off / Control volume





- 1. Press and hold the [Auto|Eco] and [Out] buttons for at least 3 seconds while the power is off.
  - The service mode indicator ( P ) on the LCD is on.
- 2. Turn the control dial to select your desired user mode.
  - 🛛 |: LED brightness
  - []2 : Button sound control
  - [] ] : Notification sound control (including error notifications and freeze warnings)
  - []4: Voice information volume control (change separately regardless of button and notification sound volume)
- 3. Press the [Hot Water] button after selecting a feature to set it as you wish.
  - 🚺 |: Stage 1
- 🛛 🕇 : Stage 5
- []2 : Stage 2
- 📴 : On
- []]: Stage 3 []F: Off
- 🛛 4 : Stage 4
- 4. After setup, press the [Heat] button to stop user mode.

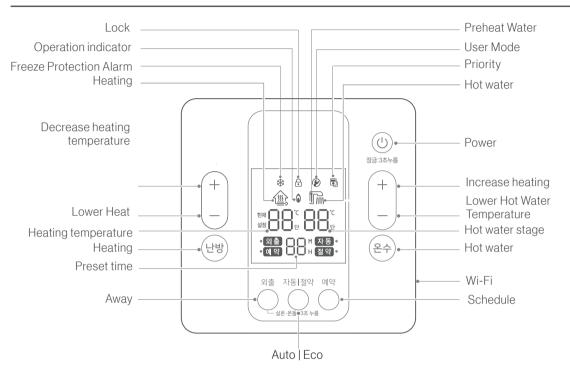


- 1. When power is on, press and hold the [power] button for more than 3 seconds to lock.
  - The icon ( ) will be displayed.
  - When the power or heating button is pressed for more than 3 seconds, the lock will be unlocked.

Freeze Protection Alarm It will be displayed when a heating pump is turned on for freeze protection.

### How to use the gas boiler

### **Indoor Thermostat**



#### Heating Mode

[Indoor heating mode] or [floor heating mode] can be selected regarding the environment. Upon purchase, the default is the indoor heating mode (  $\therefore$  ).



#### Indoor heating mode

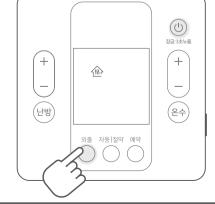
Indoor temperature sensor detects room temperature and controls the temperature.



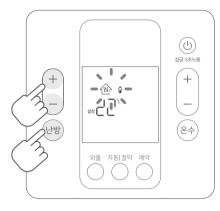
#### Floor heating mode

Floor temperature sensor detects water temperature from a boiler and controls the floor temperature.

- 1. When power is on, press and hold the [Away] button for at least 3 seconds.
  - (m) Indoor heating mode  $\leftarrow \rightarrow$  (m) Floor heating mode can be switched.



#### Heating

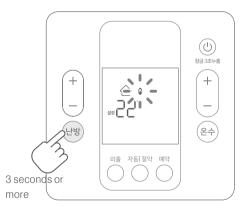


- 1. When power is on, press the [heating] button to turn on the heating system.
  - When the boiler is working, the combustion indicator() is on and the heating indicator() blinks.
  - If the heating button is pressed when the system is on, it will be turned off.

## 2. Set the desired temperature with the [up] and [down] buttons.

• If the current temperature is higher than the target temperature, the heating system will not be turned on.

#### **Quick Heat**

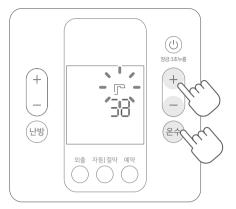


1. When power is on, press the [heating] button to turn on the heating system.

## 2. Press and hold the [Heat] button for at least 3 seconds.

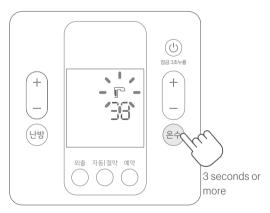
- Heating is set to the highest temperature, and Start() flashes on the indoor temperature control LCD display.
- If the set temperature changes during heating or you press and hold the [Heat] button for at least 3 seconds, Quick Heat is turned off.

#### hot water



- 1. When power is on, press the [hot water] button to turn on the hot water system.
  - $\bullet$  On the LCD, the heating indicator (  $\ensuremath{\int}^{\infty}$  ) is on.
  - Press the [Hot Water] button while in operation to stop heating.
- 2. Use the [Higher] or [Lower] button to set your desired temperature.
  - You can only change from between 30°C to 55°C while hot water is in use. To change to 60°C, press the Higher button while the hot water tap is off.

#### **Preheat Water**

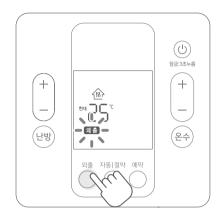


1. When power is on, press the [hot water] button to turn on the hot water system.

## 2. Press and hold the [Hot Water] button for at least 3 seconds.

- $\cdot$  On the LCD, the heating indicator (  ${\ensuremath{ \car l}}^{\ensuremath{ \car l}}$  ) is on.
- Turn on the hot water tap while operating or press and hold the [Hot Water] button for at least 3 seconds to turn off hot water preheating.

#### Away mode



#### Auto | Eco Mode



#### Schedule mode



- 1. When power is on, press the [away] button to turn on the away mode.
  - (외출) will be displayed.
  - The minimum temperature heating system will be turned on every 4 hours to keep the pleasant room temperature.
  - If the away or heating button is pressed when the mode is on, the away mode will be turned off. )

- 1. Press the [Auto | Eco] button while the power is on to select a mode.
  - (자동) will be displayed.
  - Each time the [Auto | Eco] button is pressed, the mode changes.

 $\rightarrow$  Auto  $\rightarrow$  Eco  $\rightarrow$  Turn off mode  $\longrightarrow$ 

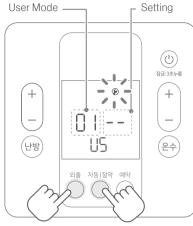
- You cannot set the heating temperature or hot water temperature in auto mode.
- Press the [Auto | Eco] or [Heating and Hot Water] button while operating to turn off auto mode.

## 1.When power is on, press the [schedule] button to preset time.

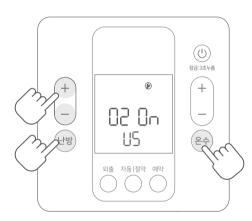
- ( 예약 ) will be displayed.
- Each time the ( 예약) button is pressed, reservation time changes at 1-hour or 4-hour intervals.

• Press the [Reservation] button while operating to disable reservation mode.

### Turn button and notification sounds on or off

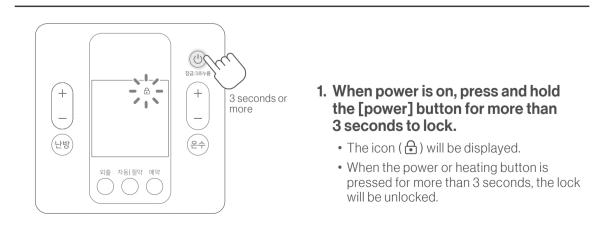


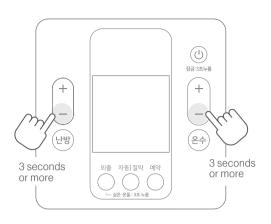
3 seconds or more



- 1. Press and hold the [Auto | Eco] and [Out] buttons for at least 3 seconds while power is off.
  - The service mode indicator ( ② ) blinks on the LCD.
- 2. Press the heating temperature [Up] or [Down] buttons to select the button for the desired feature.
  - 🛛 |: No feature
  - 🛛 🔁 : Button sound control
  - []]: Notification sound control (including errors and freeze warnings)
  - 🛛 4 : No feature
- 3. After selecting a feature (02 or 03), press the [Hot Water] button to enter your desired settings.
  - 🛛 🗖 : On
  - [][F : Off
- 4. After setup, press the [Heat] button to stop user mode.

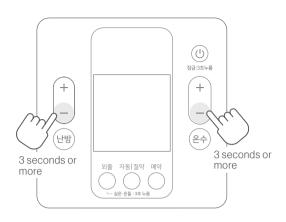
### Lock Function





- 1. Press and hold the [Lower Heat] and [Lower Hot Water Temperature] buttons for at least 3 seconds while power is off.
  - A buzzer will sound and mute will be set.
  - Press and hold the [Lower Heat] and [Lower Hot Water Temperature] buttons for at least 3 seconds simultaneously again. A buzzer will sound and mute will be disabled.

Freeze Protection Alarm It will be displayed when a heating pump is turned on for freeze protection.



- 1. Press and hold the [Lower Heat] and [Lower Hot Water Temperature] buttons for at least 3 seconds while power is off.
  - A buzzer will sound and mute will be set.
  - Press and hold the [Lower Heat] and [Lower Hot Water Temperature] buttons for at least 3 seconds simultaneously again. A buzzer will sound and mute will be disabled.



#### **Freeze Protection Alarm**

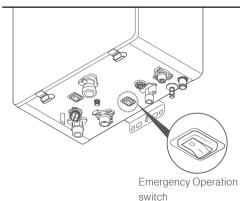
It will be displayed when a heating pump is turned on for freeze protection.

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#### **Priority Display**

If two indoor temperature controllers are connected, the most recently set up controller will be displayed on the display.

### **Emergency Operation**



## 1. Press the [Emergency Operation] switch on the bottom of the boiler.

• Emergency operation of the boiler is possible if the indoor temperature controller is malfunctioning or not connected.