Refrigerant Detection Sensor Kit
Installation manual

M1HRDS01

- Thank you for purchasing this lennox Product.
- Before operating this unit, please read this manual carefully and retain it for future reference.

LENNOX Powered by SAMSUNG

Installing a Refrigerant Detection Sensor Kit

California Proposition 65 Warning (US)

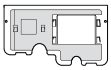
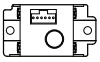
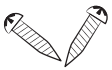
⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

NOTE

The refrigerant detection sensor included in this kit has a 10 year lifespan. When the sensor's lifespan has been reached and needs to be replaced, only replace with sensor models specified by Lennox.

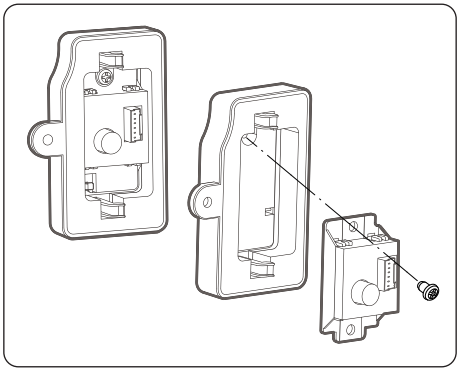
This kit is to be installed by qualified technicians.

Accessories

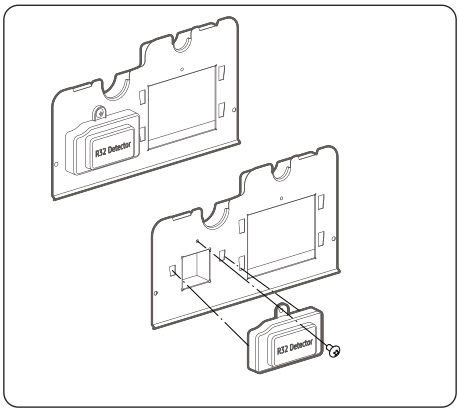
Assy Pipe-Cover (1)	Refrigerant Detection Sensor (1)	Assy Sensor-Cover (1)
		
Screw-Tapping (3)	Assy Connector Wire-DC Signal (1)	Installation Manual (1)
		
Wi-Fi Cover (1)	Cable-tie(1)	

Assembling the Refrigerant Detection Sensor Kit

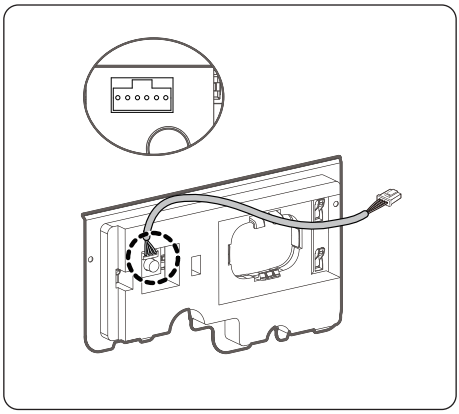
1 Insert the refrigerant detection sensor into the sensor cover and fasten with 1 of the self-tapping screws.



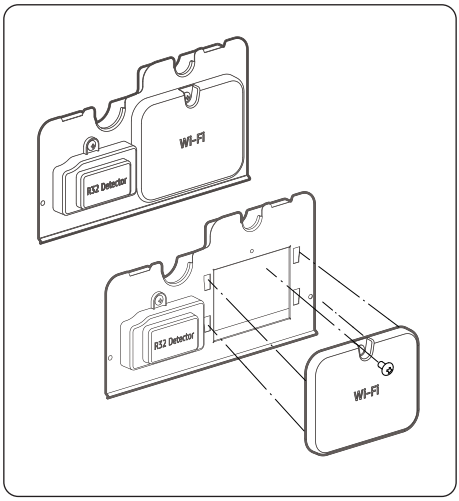
2 Attach the sensor and cover onto the piping cover with 1 of the self-tapping screws.



3 Connect the wiring harness to the Refrigerant Detection Sensor socket .

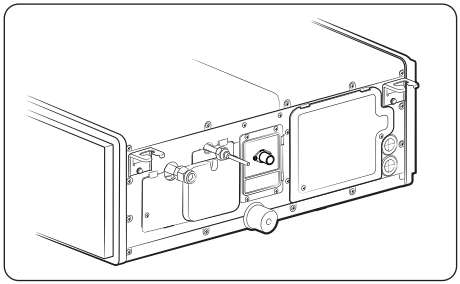


4 Attach the Wi-Fi Cover onto the piping cover with 1 of the self-tapping screws.



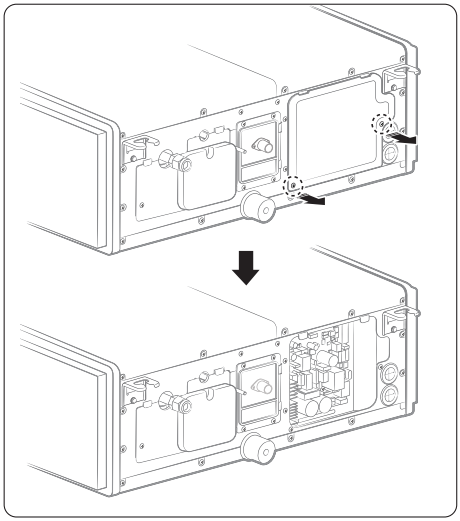
Verifying product type

Verify the product type by checking the location of pipe cover.



Installation

1 Loosen two screws and remove the control box cover.



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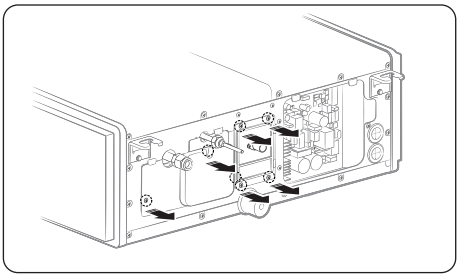
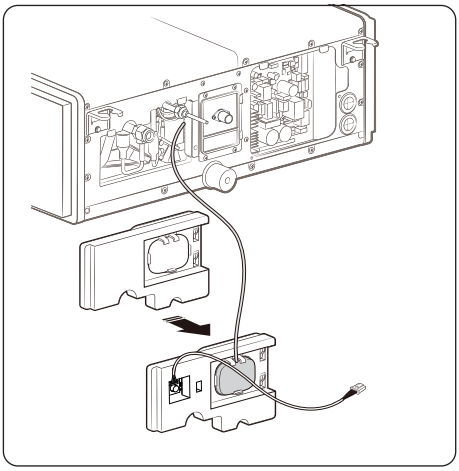
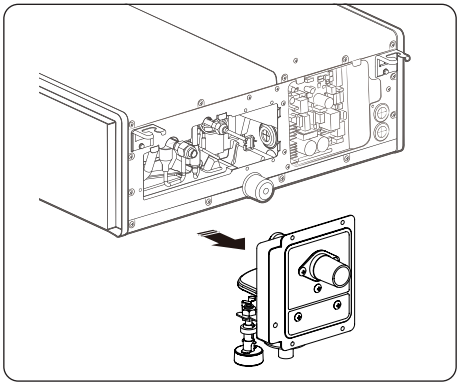
2 Loosen 7 screws and then remove the pipe cover, Wifi cover, drain pump and cover .



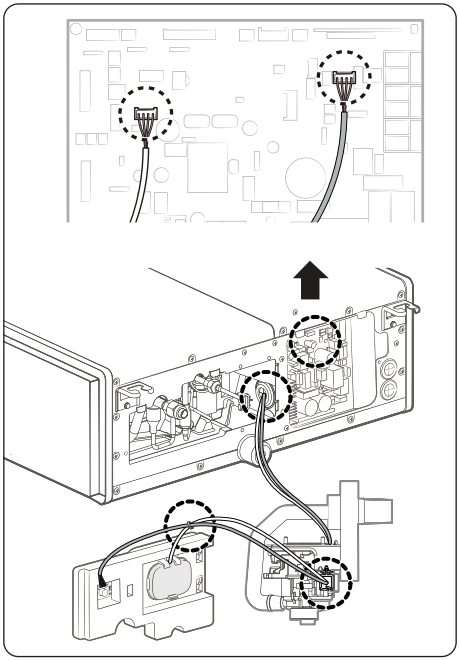
3 Remove the Wi-Fi module from the factory installed pipe cover and then install Wi-Fi module with pipe cover included with the refrigerant detection sensor.



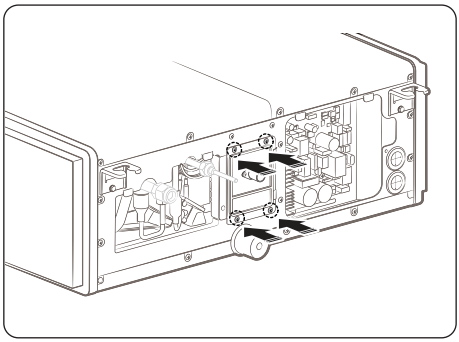
4 Remove the drain pump and cover.



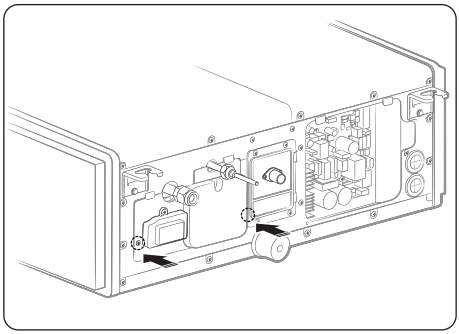
5 Fix refrigerant detection sensor wire and Wi-Fi wire by cable-Tie , and then connect refrigerant detection sensor wire with PBA through the wire-holder and Rubber-hole.



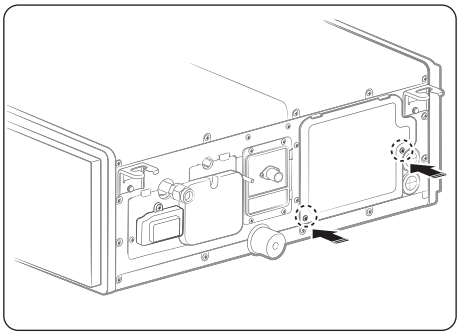
6 Reinstall the drain pump and drain cover.



7 Reinstall assy pipe cover .



8 Reinstall assy control cover .

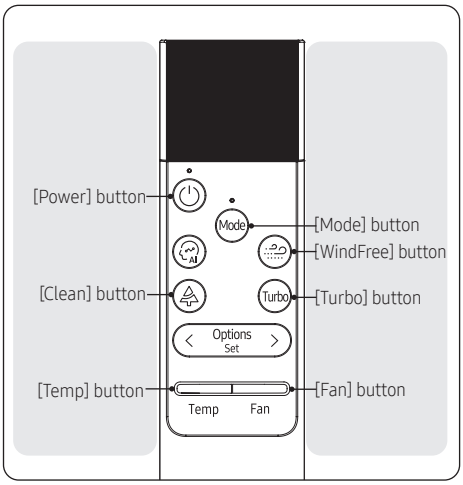


Setting the installation options

To enable the Refrigerant Detection Sensor functionality, set the installation option code.

02 Series Installation Options	
Default	Refrigerant Detection Sensor
020010-120000-200000-300000	020010-120000-200020-300000

Common steps for setting the options with wireless remote control



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NOTE

- The remote control display and buttons may vary depending on the model.

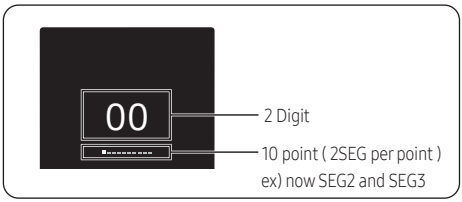
1 Enter the mode for setting the options.

a Reset remote control : [Temp] button Down + [Fan] button Down + [Mode] Press for 10 seconds.

b You can see the "SW Initialization" message and enter the following in 5 seconds.

c Press [WindFree] button and [Turbo] button for 5 seconds.

d Make sure that you are entered into the mode for setting options:



2 Set the option values.

⚠ CAUTION

- The total number of available options is 24 : SEG1 to SEG24.
- Because SEG1, SEG7, SEG13, and SEG19 are the page options used by the previous remote control models, the modes to set values for these options are skipped automatically.
- You can see 20 SEG (except SEG1, SEG7, SEG13, SEG19 SEG2 → ...→ SEG6 → SEG8 → .....→ SEG12 → SEG 14 → .... → SEG 18 → SEG20 → ... → SEG 24

SEG1	**SEG2**	**SEG3**	**SEG4**	**SEG5**	**SEG6**
0	X	X	X	X	X
SEG7	**SEG8**	**SEG9**	**SEG10**	**SEG11**	**SEG12**
1	X	X	X	X	X
SEG13	**SEG14**	**SEG15**	**SEG16**	**SEG17**	**SEG18**
2	X	X	X	X	X
SEG19	**SEG20**	**SEG21**	**SEG22**	**SEG23**	**SEG24**
3	X	X	X	X	X

- You can set the next SEG by pressing the mode button.
- You can change the digit value through the following operation.
  Left value : Temp up or down, range : 0 ~ F
  Right value : Fan up or down, range : 0 ~ F

Take the steps presented in the following table:

Steps	Remote control display
1 Set the SEG2 and SEG3 values: **a** Set the SEG2 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG3 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG2 SEG3
2 Press the Mode button to move to the next page.	
3 Set the SEG4 and SEG5 values: **a** Set the SEG4 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG5 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG4 SEG5
4 Press the Mode button to move to the next page.	

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Steps	Remote control display
5 Set the SEG6 and SEG8 values: **a** Set the SEG6 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG8 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG6 SEG8
6 Press the Mode button to move to the next page.	
7 Set the SEG9 and SEG10 values: **a** Set the SEG9 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG10 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG9 SEG10
8 Press the Mode button to move to the next page.	

Steps	Remote control display
9 Set the SEG11 and SEG12 values: **a** Set the SEG11 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG12 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG11 SEG12
10 Press the Mode button to move to the next page.	
11 Set the SEG14 and SEG15 values: **a** Set the SEG14 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG15 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG14 SEG15
12 Press the Mode button to move to the next page.	

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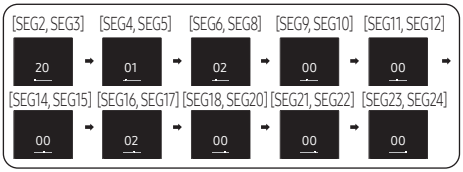
Steps	Remote control display
13 Set the SEG16 and SEG17 values: **a** Set the SEG16 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG17 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG16 SEG17
14 Press the Mode button to move to the next page.	
15 Set the SEG18 and SEG20 values: **a** Set the SEG18 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG20 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG18 SEG20
16 Press the Mode button to move to the next page.	

Steps	Remote control display
17 Set the SEG21 and SEG22 values: **a** Set the SEG21 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG22 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG21 SEG22
18 Press the Mode button to move to the next page.	
19 Set the SEG23 and SEG24 values: **a** Set the SEG23 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG24 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG23 SEG24

Installing a Refrigerant Detection Sensor Kit

3 Check whether the option values you have set are correct by pressing the Mode button repeatedly.



EX) MDDD***S6-1P

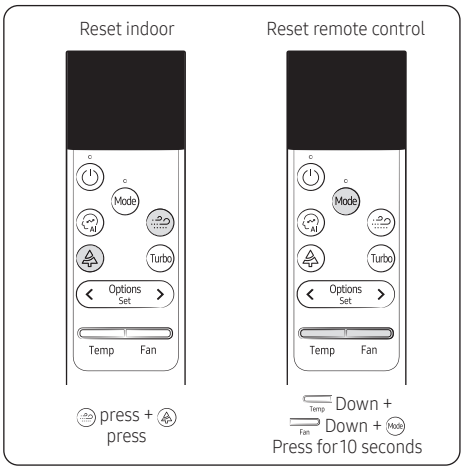
020010-120000-200020-300000

4 Save the option values into the indoor unit:
Point the remote control to the remote control sensor on the indoor unit and then press the ⏻ button on the remote control twice.
Make sure that this command is received by the indoor unit. When it is successfully received, you can hear a short sound from the indoor unit. If the command is not received, press the ⏻ button again.

5 Check whether the air conditioner operates following the option values you have set:

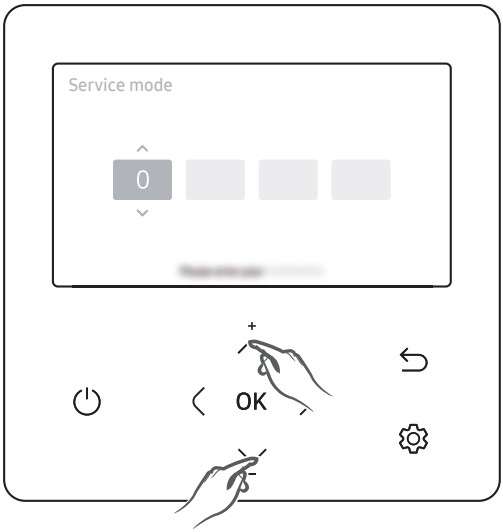
a Reset the indoor or outdoor unit.
- Indoor Unit : Press 💧 button + 🌲 button for 5 seconds
- Outdoor Unit: Press the K3 button

b Reset remote control: Temp button Down + Fan button Down + Mode Press for 10 seconds
You can see the "SW Initialization" message.



Setting the installation option with wired controller

To set the indoor unit installation option use wired controller and follow the directions below.



1 If you want to use the various additional functions for your Wired controller, press the ∧ and ∨ buttons at the same time for more than 3 seconds.
   - The password entry screen appears.
2 Enter the password, "0202," and then press the OK button.
   - The settings screen for installation/service mode appears.
3 See the list of additional functions for wired controller on the next page, and then select the Installation Option 1 menu.
   - Once you have entered the settings screen, the current setting appears.
   - Refer to the chart for data setting.
   - Using the ∧ / ∨ buttons, change the settings and press the 〉button to move to the next setting.
   - Press the OK button to save the new setting.
   - Press the ⮌ button to move to the Home screen.

NOTE

- While setting the data, you can press the ⮌ button to move to the Home screen after checking the saving status at a pop-up screen.

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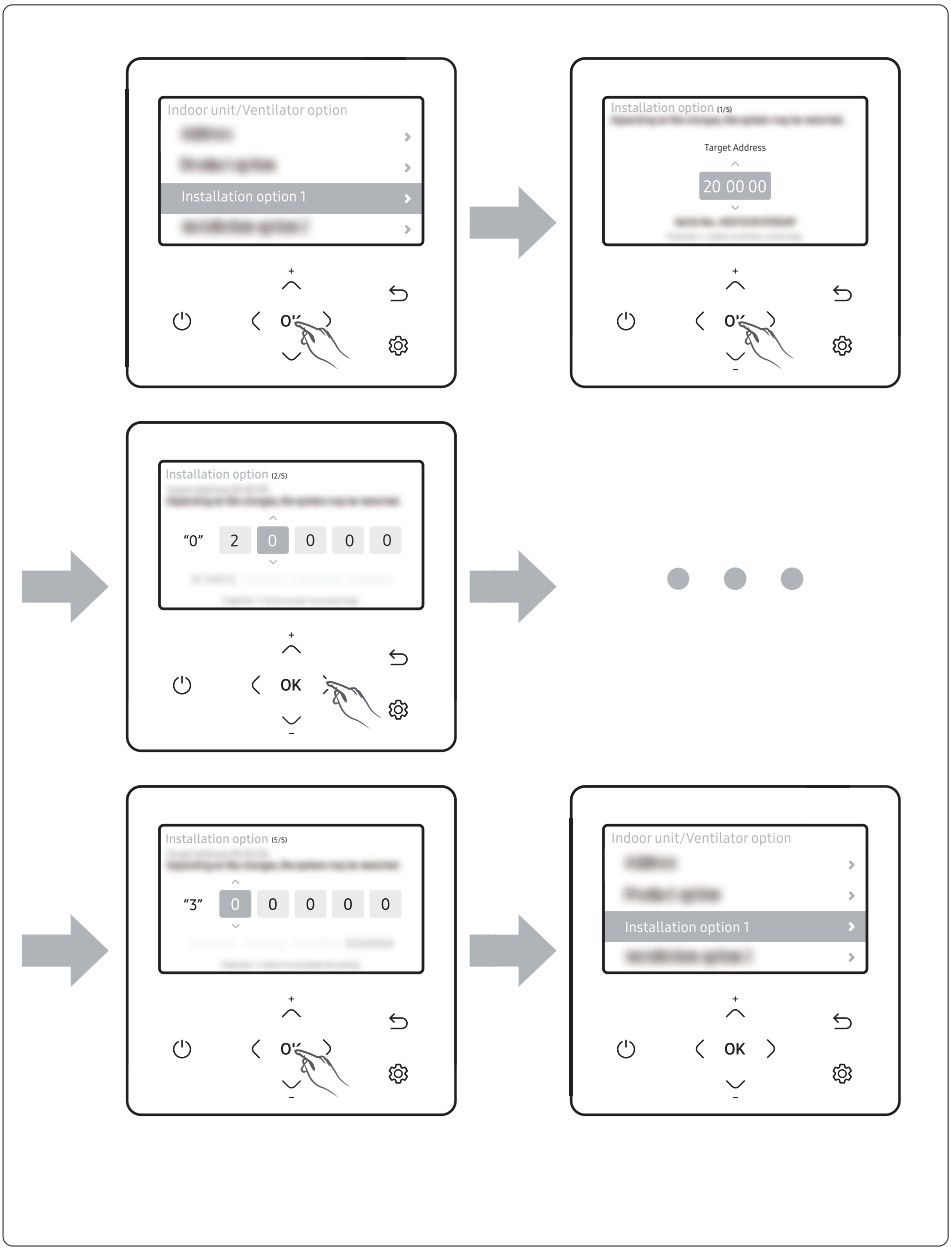
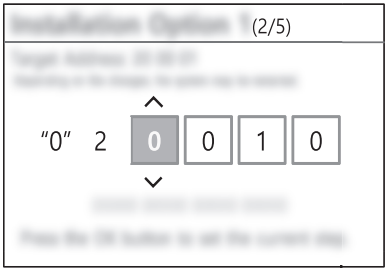
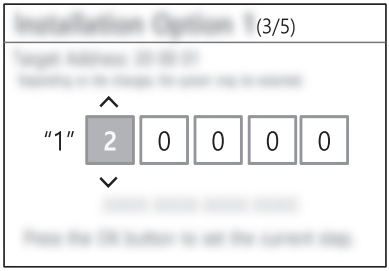


[Installation Option 1-1page]

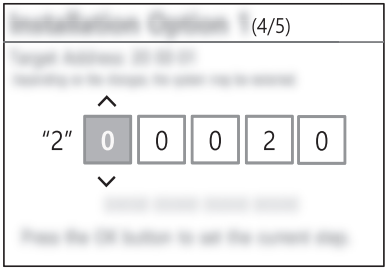
[Installation Option 1-2page]



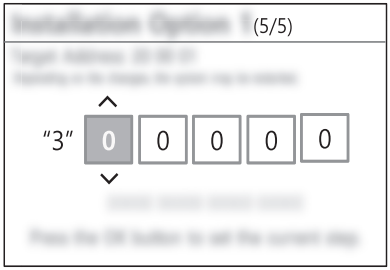
[Installation Option 1-3page]



[Installation Option 1-4page]



[Installation Option 1-5page]



NOTE

- Press ⮌ button anytime during setup to exit without setting.
- Option code will not be applied if you don't press OK button.
- The setting Installation option code is available only with a Main wired controller.
- Setting Installation option code is available when there is one-on-one connection between a wired controller and an indoor unit.

Troubleshooting

- If an error occurs, check Refrigerant Detection Sensor wire connection or change Refrigerant Detection Sensor.
- In case of Receiver Kit, When an error occurs, LED is flickering.

Abnormal conditions	Error code	Indicators					Remarks
		Blue	Red				
Error indicating a short-circuit, open-circuit or fault signal in the Refrigerant Detection Sensor.	E116	X	X	◑	◑	◑	
Error indicating the Refrigerant Detection Sensor's lifespan cannot be predicted	E695						
Error indicating a primary refrigerant leak detection	E696						
Error indicating a secondary refrigerant leak detected	E697						
Error indicating a malfunction of the Refrigerant Detection Sensor	E698						
Error indicating a refrigerant leak sensor replacement is required	E699						
Error indicating the refrigerant leak sensor's lifespan expired	E700						
Error indicating another indoor unit that shares the outdoor unit detects the R-32 refrigerant.	E797						

● On ◑ Flickering X Off

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

- In case of Wired controller, an error code is displayed
- If an error occurs, TEST is displayed on wired controller. If you would like to see an error code, press the Test button.

Display	Explanation	Remark
101	Communication Error between indoor and outdoor unit	
118	Indoor fan PCB overheating error	
121	Error of Room sensor in the indoor unit (Open/Short)	
122	Error of Eva In sensor in the indoor unit (Open/Short)	
123	Error of Eva Out sensor in the indoor unit (Open/Short)	
153	2nd Detection of the float switch	
154	Error of Fan motor in the indoor unit	
162	EEPROM error	
163	EEPROM option setting error	
202	No communication for 2 minutes between indoor units (Communication error for more than 2 minutes)	
422	Clogging of outdoor service valve	
557	Option code miss matching among the indoors (only for DPM)	Check the indoor option code
601	Error of communication between the indoor unit and wired controller after 3 minutes.	Wired controller error
604	Error of communication between the indoor unit and wired controller after completion of 10 times tracking.	
606	COM1/COM2 Cross-installed error	
607	Error of Main wired controller and Sub wired controller setting	
665	Emergency alarm system on (Emergency Stop)	
116	Error indicating a short-circuit, open-circuit or fault signal in the Refrigerant Detection Sensor	Refrigerant Detection Sensor error
695	Error indicating the Refrigerant Detection Sensor's lifespan cannot be predicted	
696	Error indicating a primary refrigerant leak detected	
697	Error indicating a secondary refrigerant leak detected	
698	Error indicating a malfunction of the Refrigerant Detection Sensor	
699	Error indicating a Refrigerant Detection Sensor replacement is required	
700	Error indicating the Refrigerant Detection Sensor's lifespan expired	
797	Error indicating another indoor unit that shares the outdoor unit detects the R-32 refrigerant.	