

# Air conditioner

# Installation manual

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## Refrigerant Detection Sensor Kit

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

# Installing a Refrigerant Detection Sensor Kit

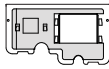


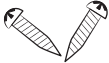




California Proposition 65 Warning (US)

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**NOTE**

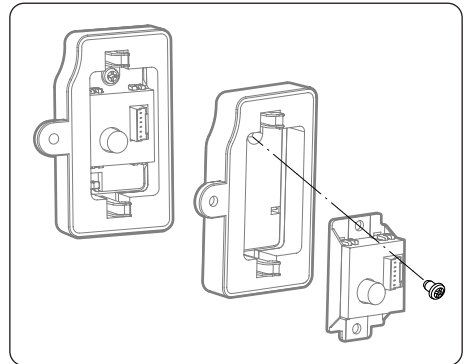
The refrigerant detection sensor included in this kit has a 10 year lifespan. When the sensor's lifespan has been reached and needs to be replaced, only replace with sensor models specified by Samsung. This kit is to be installed by qualified technicians.

## Accessories

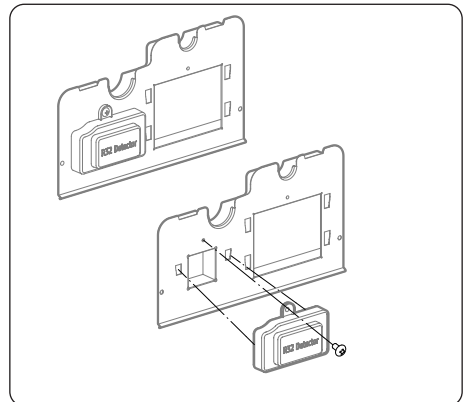
Assy Pipe-Cover (1)	Refrigerant Detection Sensor (1)	Assy Sensor-Cover (1)
		
Screw-Tapping (3)	Assy Connector Wire-DC Signal (1)	Installation Manual (1)
		
Wi-Fi Cover (1)	Cable-tie(1)	
		

## Assembling the Refrigerant Detection Sensor Kit

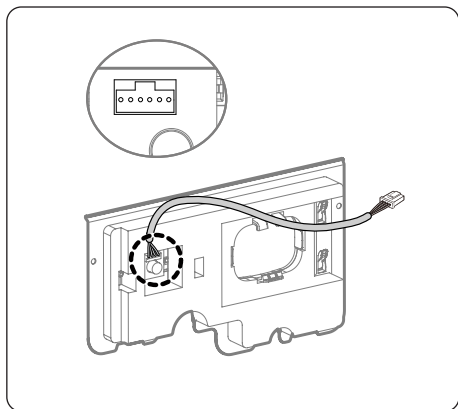
- 1 Insert the refrigerant detection sensor into the sensor cover and fasten with 1 of the self-tapping screws.



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

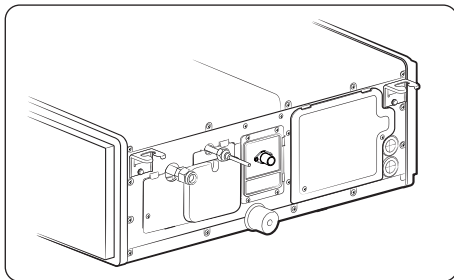


- 3** Connect the wiring harness to the Refrigerant Detection Sensor socket .

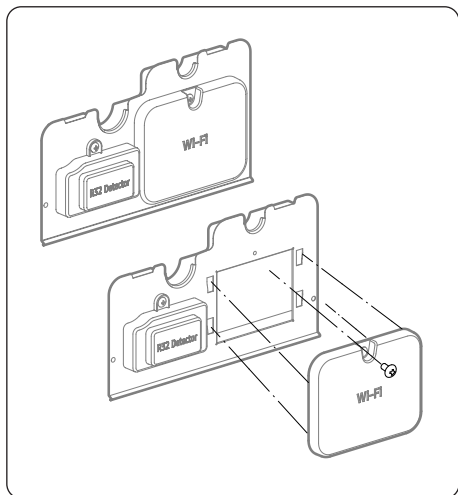


## Verifying product type

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

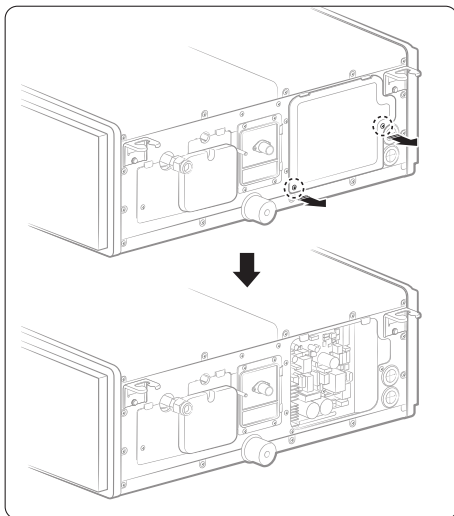


- 4** Attach the Wi-Fi Cover onto the piping cover with 1 of the self-tapping screws.



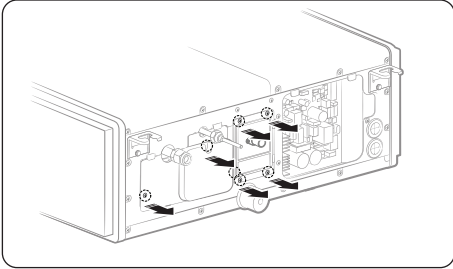
## Installation

- 1** Loosen two screws and remove the control box cover.

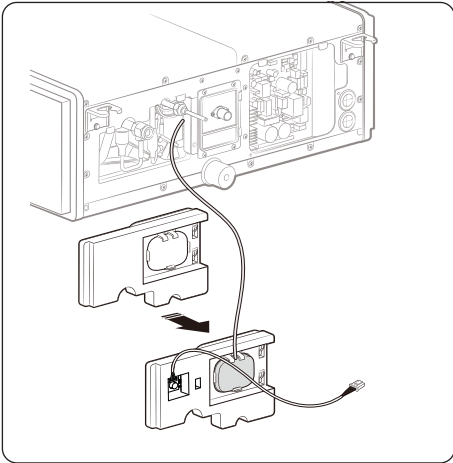


# Installing a Refrigerant Detection Sensor Kit

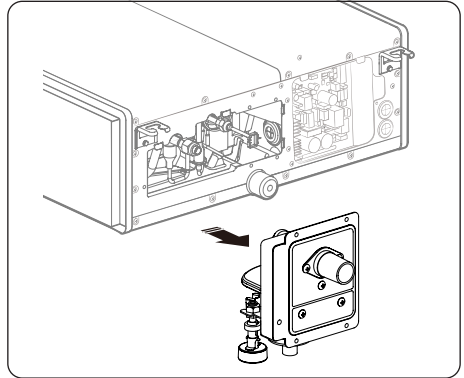
2 Loosen 7 screws and then remove the pipe cover, Wifi cover, drain pump and cover .



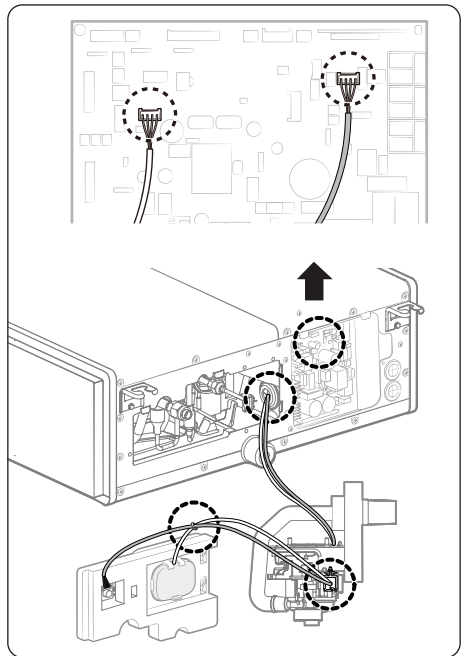
3 Remove the Wi-Fi module from the factory installed pipe cover and then install Wi-Fi module with pipe cover included with the refrigerant detection sensor.



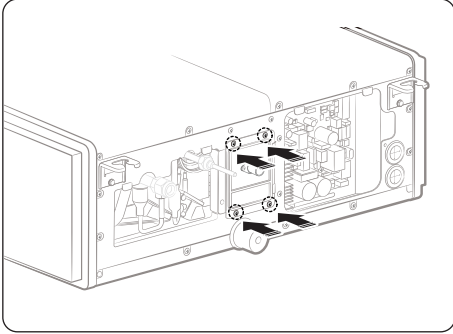
4 Remove the drain pump and cover.



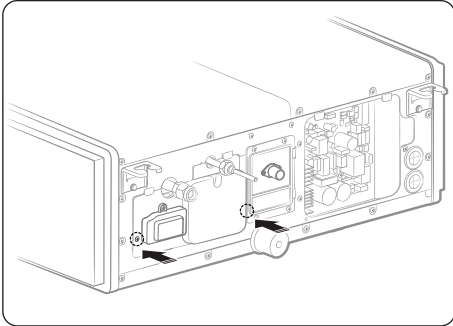
5 Fix refrigerant detection sensor wire and Wi-Fi wire by cable-Tie , and then connect refrigerant detection sensor wire with PBA through the wire-holder and Rubber-hole.



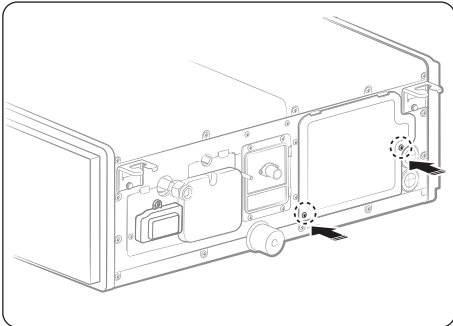
6 Reinstall the drain pump and drain cover.



7 Reinstall assy pipe cover .



8 Reinstall assy control cover .

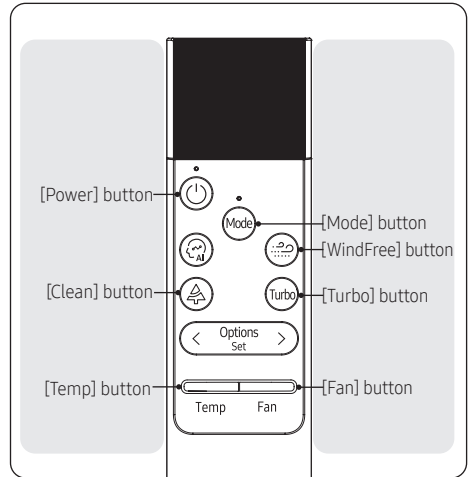


## Setting the installation options

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

O2 Series Installation Options	
Default	Refrigerant Detection Sensor
020010-120000-200000-300000	020010-120000-200020-300000

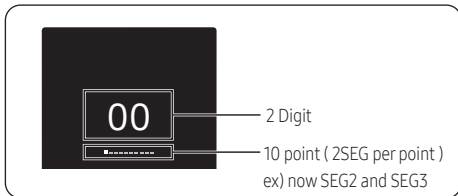
### Common steps for setting the options with wireless remote control



# Installing a Refrigerant Detection Sensor Kit

## NOTE

- The remote control display and buttons may vary depending on the model.
- Enter the mode for setting the options.
    - Reset remote control : [Temp] button Down + [Fan] button Down + [Mode] Press for 10 seconds.
    - You can see the "SW Initialization" message and enter the following in 5 seconds.
    - Press [WindFree] button and [Turbo] button for 5 seconds.
    - Make sure that you are entered into the mode for setting options:



- 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 :  $\overleftarrow{\text{Temp}}$  up or down, range : 0 ~ F

























Right value :  $\overleftarrow{\text{Fan}}$  up or down, range : 0 ~ F

Take the steps presented in the following table:

























Steps	Remote control display
<p><b>1</b> Set the SEG2 and SEG3 values:</p> <p><b>a</b> Set the SEG2 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG3 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ...  → </p>	 <p>SEG2</p>  <p>SEG3</p>
<p><b>2</b> Press the  button to move to the next page.</p>	
<p><b>3</b> Set the SEG4 and SEG5 values:</p> <p><b>a</b> Set the SEG4 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG5 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ...  → </p>	 <p>SEG4</p>  <p>SEG5</p>
<p><b>4</b> Press the  button to move to the next page.</p>	












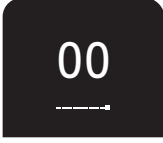










# Installing a Refrigerant Detection Sensor Kit

Steps	Remote control display
<p><b>5</b> Set the SEG6 and SEG8 values:</p> <p><b>a</b> Set the SEG6 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG8 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ... →  → </p>	 <p>SEG6</p>  <p>SEG8</p>
<p><b>6</b> Press the  button to move to the next page.</p>	
<p><b>7</b> Set the SEG9 and SEG10 values:</p> <p><b>a</b> Set the SEG9 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG10 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ... →  → </p>	 <p>SEG9</p>  <p>SEG10</p>
<p><b>8</b> Press the  button to move to the next page.</p>	

Steps	Remote control display
<p><b>9</b> Set the SEG11 and SEG12 values:</p> <p><b>a</b> Set the SEG11 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG12 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ... →  → </p>	 <p>SEG11</p>  <p>SEG12</p>
<p><b>10</b> Press the  button to move to the next page.</p>	
<p><b>11</b> Set the SEG14 and SEG15 values:</p> <p><b>a</b> Set the SEG14 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG15 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ... →  → </p>	 <p>SEG14</p>  <p>SEG15</p>
<p><b>12</b> Press the  button to move to the next page.</p>	

# Installing a Refrigerant Detection Sensor Kit

Steps	Remote control display
<p><b>13</b> Set the SEG16 and SEG17 values:</p> <p><b>a</b> Set the SEG16 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG17 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ... →  → </p>	 <p>SEG16</p>  <p>SEG17</p>
<p><b>14</b> Press the  button to move to the next page.</p>	
<p><b>15</b> Set the SEG18 and SEG20 values:</p> <p><b>a</b> Set the SEG18 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG20 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ... →  → </p>	 <p>SEG18</p>  <p>SEG20</p>
<p><b>16</b> Press the  button to move to the next page.</p>	

Steps	Remote control display
<p><b>17</b> Set the SEG21 and SEG22 values:</p> <p><b>a</b> Set the SEG21 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG22 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ...  → </p>	 <p>SEG21</p>  <p>SEG22</p>
<p><b>18</b> Press the  button to move to the next page.</p>	
<p><b>19</b> Set the SEG23 and SEG24 values:</p> <p><b>a</b> Set the SEG23 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p><b>b</b> Set the SEG24 value by pressing the  button repeatedly until the value you want to set appears on the remote control display.</p> <p>When you press the  or  button, values appear in the following order:   →  → ...  → </p>	 <p>SEG23</p>  <p>SEG24</p>

# Installing a Refrigerant Detection Sensor Kit

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



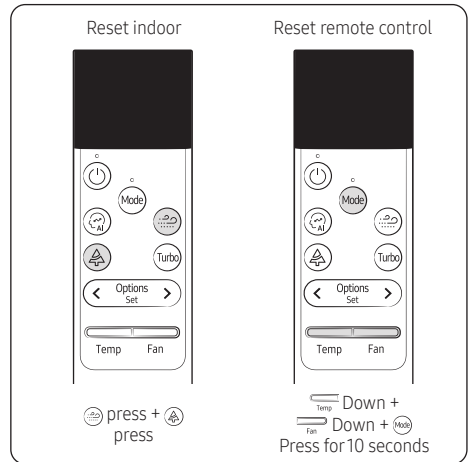
EX) AC\*\*\*DNHDCG

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 **Mode** 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 **Mode** button again.

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

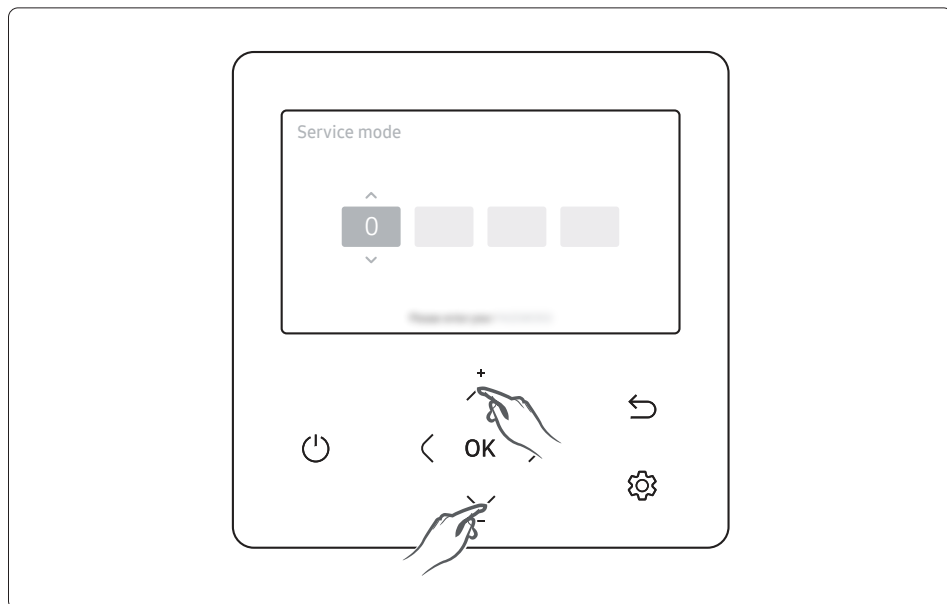
- a Reset the indoor or outdoor unit.
  - Indoor Unit : Press **Mode** button + **Temp** button for 5 seconds
  - Outdoor Unit: Press the K3 button
- b Reset remote control: **Temp** button Down + **Fan** button Down + **Mode** Press for 10 seconds  
 You can see the "SW Initialization" message.



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## Setting the installation option with the wired remote control

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

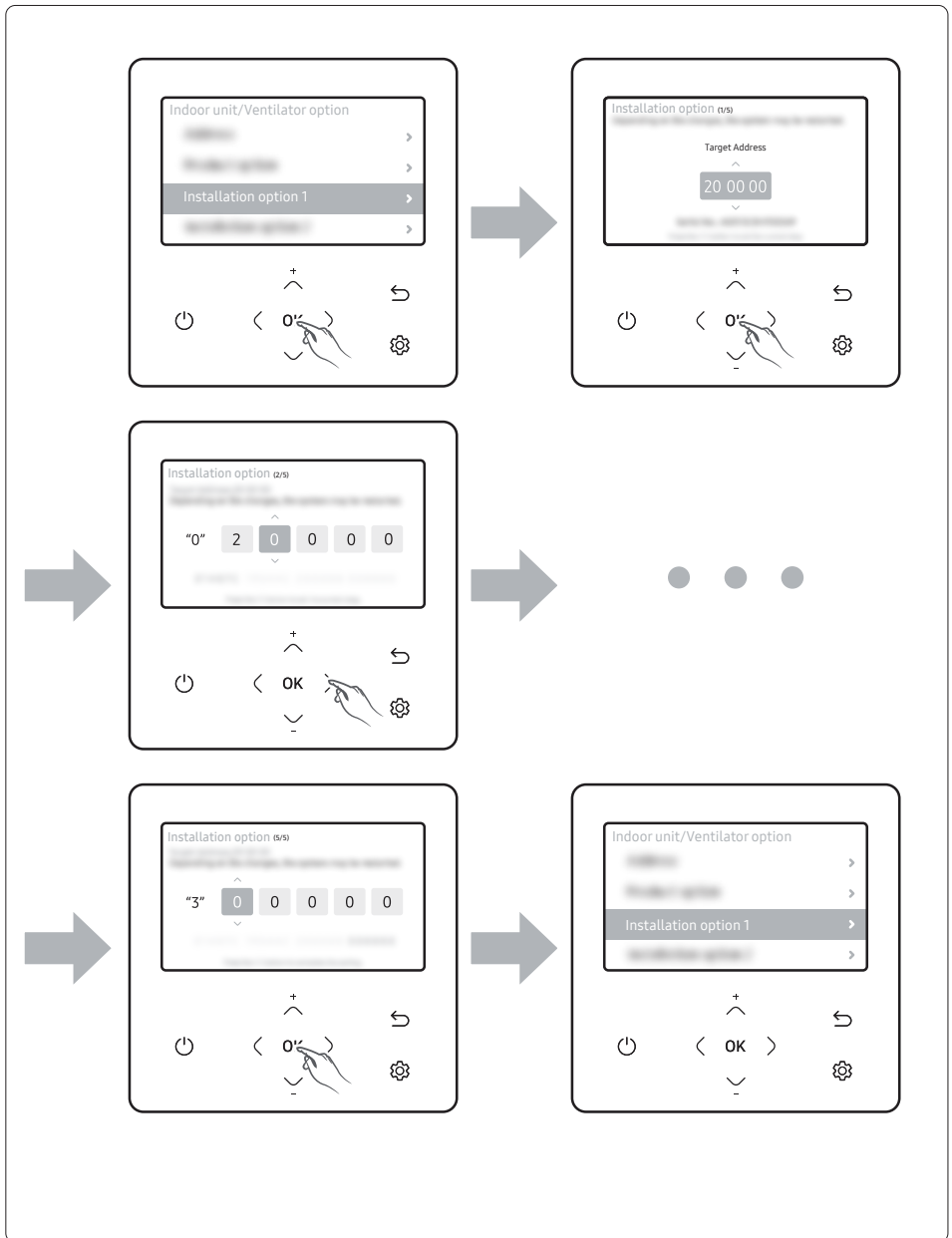


- 1 If you want to use the various additional functions for your Wired Remote control, press the ^ and v buttons at the same time for more than 3 seconds.
  - The password entry screen appears.
- 2 Enter the password, "0202," and then press the **OK** button.
  - The settings screen for installation/service mode appears.
- 3 See the list of additional functions for the Wired Remote control 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 ^ / v 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.

# Installing a Refrigerant Detection Sensor Kit



[Installation Option 1-1page]

Installation Option 1 (1/5)

Target Address

20 00 00

Press the OK button to set the current step.

[Installation Option 1-2page]

Installation Option 1 (2/5)

Target Address 20 00 00

"0" 2 0 0 1 0

Press the OK button to set the current step.

[Installation Option 1-3page]

Installation Option 1 (3/5)

Target Address 20 00 00

"1" 2 0 0 0 0

Press the OK button to set the current step.

[Installation Option 1-4page]

Installation Option 1 (4/5)

Target Address 20 00 00

"2" 0 0 0 2 0

Press the OK button to set the current step.

[Installation Option 1-5page]

Installation Option 1 (5/5)

Target Address 20 00 00

"3" 0 0 0 0 0

Press the OK button to set the current step.










## 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 remote control.
- Setting Installation option code is available when there is one-on-one connection between a wired remote control 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						
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	X	X				
R-32 detection sensor replacement alarm	E699						
R-32 detection sensor unavailable alarm	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 remote controller, an error code is displayed
- If an error occurs,  is displayed on the wired remote control. If you would like to see an error code, press the Test button.

Display	Explanation	Remark
<b>801</b>	Communication Error between indoor and outdoor unit	
<b>818</b>	Indoor fan PCB overheating error	
<b>821</b>	Error of Room sensor in the indoor unit (Open/Short)	
<b>822</b>	Error of Eva In sensor in the indoor unit (Open/Short)	
<b>823</b>	Error of Eva Out sensor in the indoor unit (Open/Short)	
<b>853</b>	2nd Detection of the float switch	
<b>854</b>	Error of Fan motor in the indoor unit	
<b>862</b>	EEPROM error	
<b>863</b>	EEPROM option setting error	
<b>202</b>	No communication for 2 minutes between indoor units (Communication error for more than 2 minutes)	
<b>422</b>	Clogging of outdoor service valve	
<b>557</b>	Option code miss matching among the indoors (only for DPM)	Check the indoor option code
<b>601</b>	Error of communication between the indoor unit and wired remote control after 3 minutes.	Wired remote control error
<b>604</b>	Error of communication between the indoor unit and wired remote control after completion of 10 times tracking.	
<b>606</b>	COM1/COM2 Cross-installed error	
<b>607</b>	Error of Main wired remote control and Sub wired remote control setting	
<b>665</b>	Emergency alarm system on (Emergency Stop)	
<b>816</b>	Error indicating a short-circuit, open-circuit or fault signal in the Refrigerant Detection Sensor	Refrigerant Detection Sensor error
<b>696</b>	Error indicating a primary refrigerant leak detected	
<b>697</b>	Error indicating a secondary refrigerant leak detected	
<b>698</b>	Error indicating a malfunction of the Refrigerant Detection Sensor	
<b>699</b>	R-32 detection sensor replacement alarm	
<b>800</b>	R-32 detection sensor unavailable alarm	
<b>897</b>	Error indicating another indoor unit that shares the outdoor unit detects the R-32 refrigerant.	

**SAMSUNG**