

Refrigerant Detection Sensor Kit Installation manual

M1LRDS01

- Thank you for purchasing this lennox Product.
- 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.

NOTE

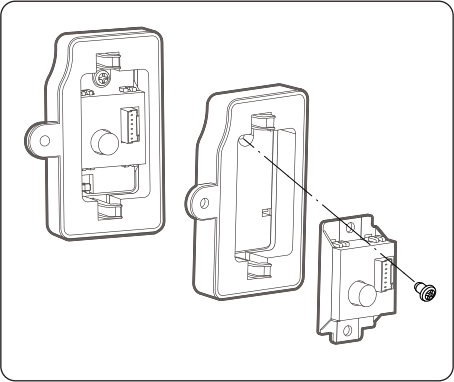
The refrigerant detection sensor included in this kit has a 10 year lifespan. When the sensor's lifespan has been reached and needs to be replaced, only replace with sensor models specified by Lennox. This kit is to be installed by qualified technicians.

Accessories

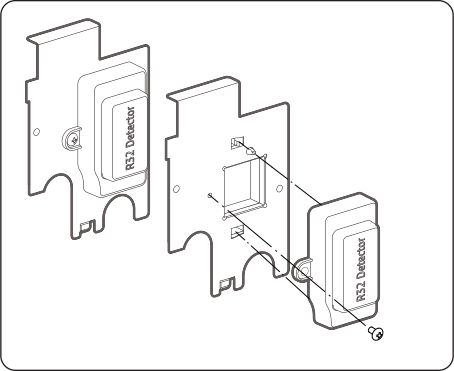
Assy Pipe-Cover (1)	Refrigerant Detection Sensor (1)	Assy Sensor-Cover (1)
Screw-Tapping (2)	Assy Connector Wire-DC Signal (1)	Installation Manual (1)

Assembling the Refrigerant Detection Sensor Kit

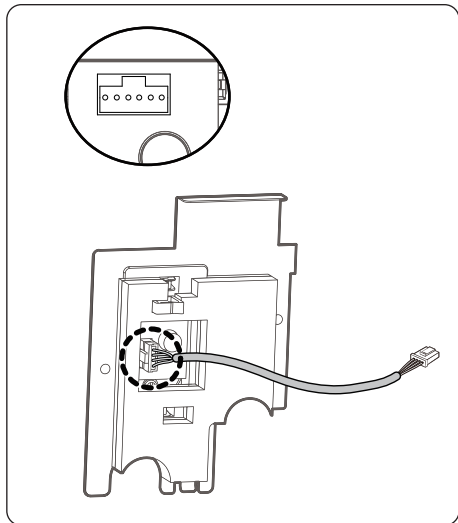
- 1 Insert the refrigerant detection sensor into the sensor cover and fasten with 1 of the self-tapping screws.



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

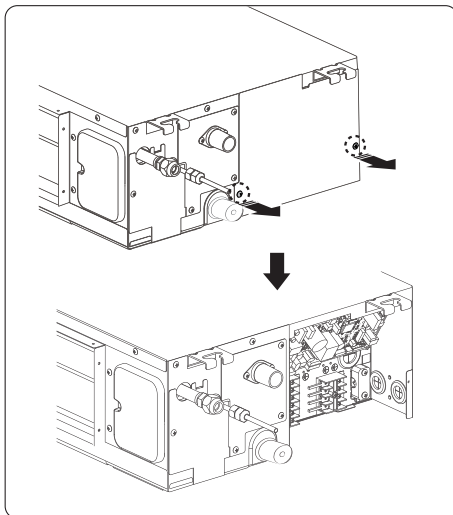


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- 3 Connect the wiring harness to the Refrigerant Detection Sensor socket and hang the wire on the wire-holder.



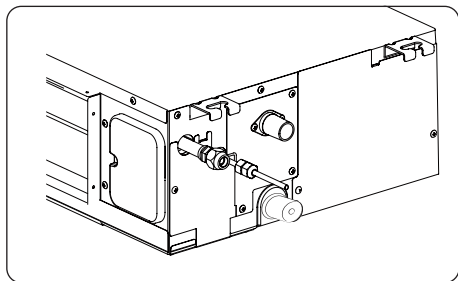
Installation

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



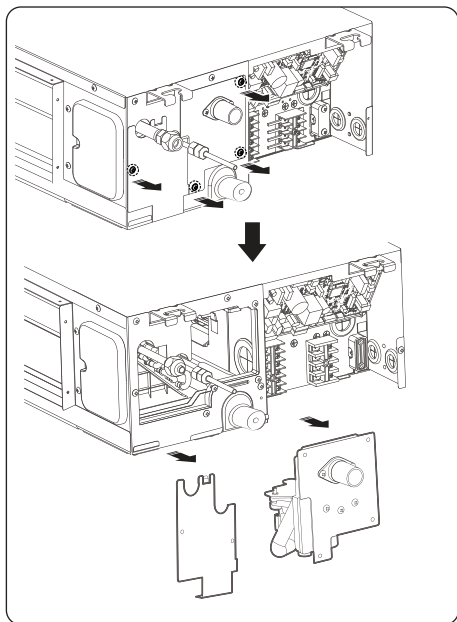
Verifying product type

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

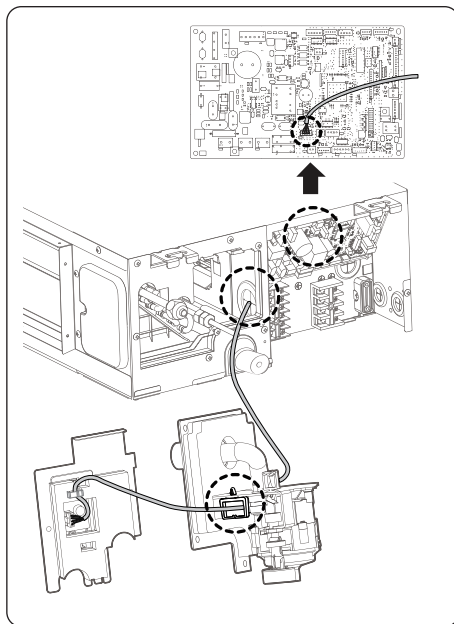


Installing a Refrigerant Detection Sensor Kit

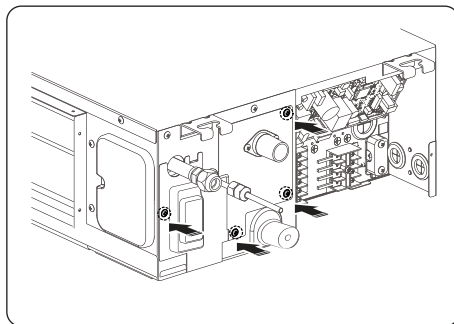
- 2 Loosen 4 screws and remove the pipe cover, then remove the drain pump and cover .



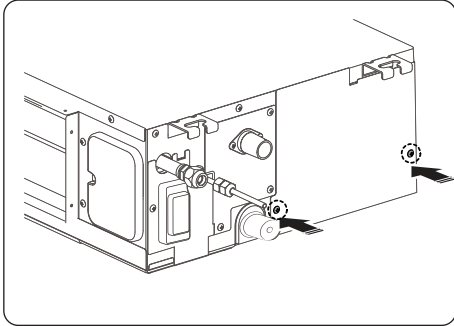
- 3 Connect the Refrigerant Detection Sensor wire with PBA through the wire-holder and Rubber-hole.



- 4 Reinstall the pipe cover, then reinstall the drain pump and drain cover.



5 Reinstall the control box cover.

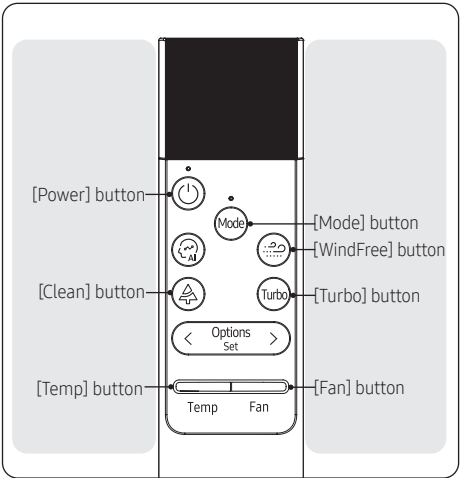


Setting the installation options

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

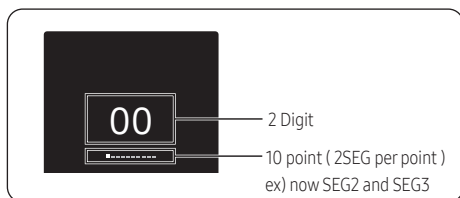
Common steps for setting the options with wireless remote control



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 :  up or down, range : 0 ~ F

























Right value :  up or down, range : 0 ~ F

Take the steps presented in the following table:

























Steps	Remote control display
<p>1 Set the SEG2 and SEG3 values:</p> <p>a 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 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>	<div> SEG2</div> <div> SEG3</div>
<p>2 Press the  button to move to the next page.</p>	<div></div>
<p>3 Set the SEG4 and SEG5 values:</p> <p>a 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 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>	<div> SEG4</div> <div> SEG5</div>
<p>4 Press the  button to move to the next page.</p>	<div></div>























Installing a Refrigerant Detection Sensor Kit

Steps	Remote control display
<p>5 Set the SEG6 and SEG8 values:</p> <p>a 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 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: 0 → 1 → ... → E → F</p>	<div> SEG6</div> <div> SEG8</div>
<p>6 Press the  button to move to the next page.</p>	<div></div>
<p>7 Set the SEG9 and SEG10 values:</p> <p>a 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 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: 0 → 1 → ... → E → F</p>	<div> SEG9</div> <div> SEG10</div>
<p>8 Press the  button to move to the next page.</p>	<div></div>

Steps	Remote control display
<p>9 Set the SEG11 and SEG12 values:</p> <p>a 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 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>10 Press the  button to move to the next page.</p>	
<p>11 Set the SEG14 and SEG15 values:</p> <p>a 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 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>12 Press the  button to move to the next page.</p>	

Installing a Refrigerant Detection Sensor Kit

Steps	Remote control display
<p>13 Set the SEG16 and SEG17 values:</p> <p>a 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 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>	<div> SEG16</div> <div> SEG17</div>
<p>14 Press the  button to move to the next page.</p>	<div></div>
<p>15 Set the SEG18 and SEG20 values:</p> <p>a 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 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>	<div> SEG18</div> <div> SEG20</div>
<p>16 Press the  button to move to the next page.</p>	<div></div>

Steps	Remote control display
<p>17 Set the SEG21 and SEG22 values:</p> <p>a 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 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>	 SEG21  SEG22
<p>18 Press the  button to move to the next page.</p>	
<p>19 Set the SEG23 and SEG24 values:</p> <p>a 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 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>	 SEG23  SEG24



Installing a Refrigerant Detection Sensor Kit

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








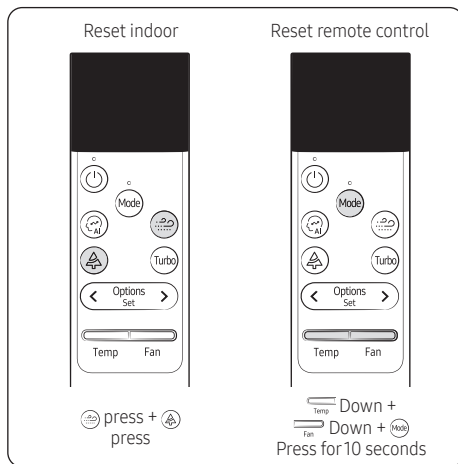
EX) MMDD***S6-1P

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.

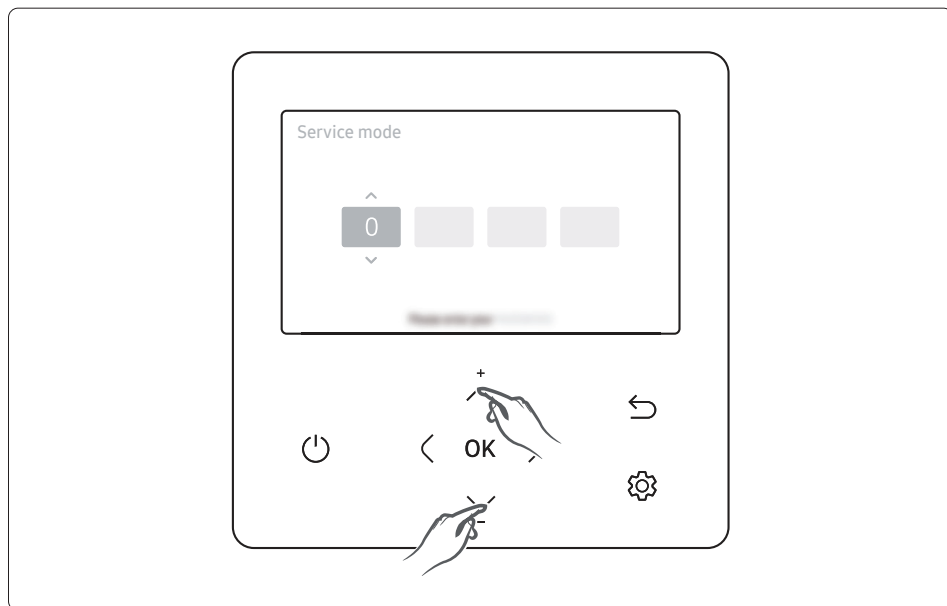
- 5 Check whether the air conditioner operates following the option values you have set:

- 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:  button Down +  button Down +  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.

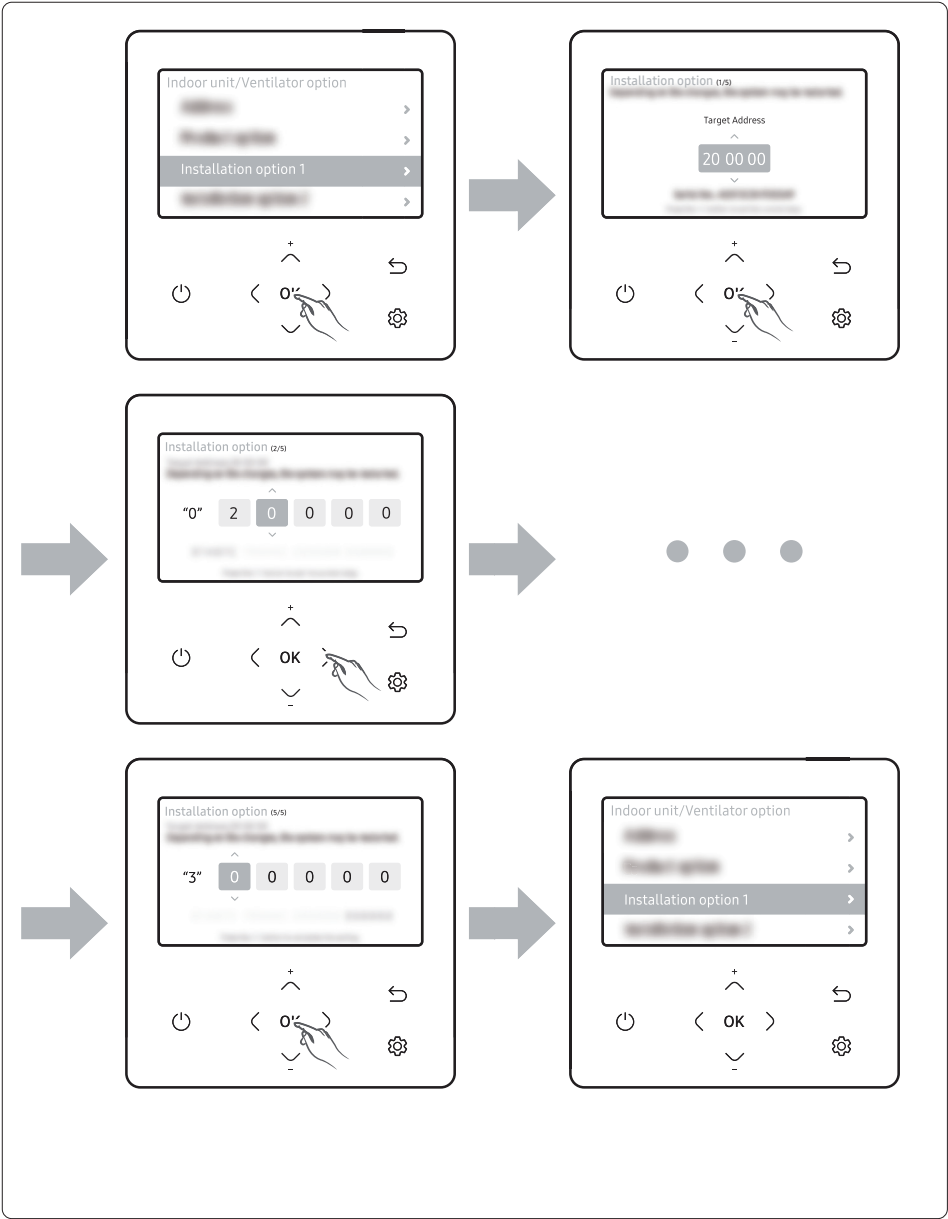


- 1 If you want to use the various additional functions for your Wired controller, press the \wedge and \vee buttons at the same time for more than 3 seconds.
 - The password entry screen appears.
- 2 Enter the password, "0202," and then press the **OK** button.
 - The settings screen for installation/service 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 \wedge / \vee buttons, change the settings and press the \rightarrow button to move to the next setting.
 - Press the **OK** button to save the new setting.
 - Press the \hookrightarrow button to move to the Home screen.

NOTE

- While setting the data, you can press the \hookrightarrow 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 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 **ESC** 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,  is displayed on wired controller. If you would like to see an error code, press the Test button.

Display	Explanation	Remark
401	Communication Error between indoor and outdoor unit	
418	Indoor fan PCB overheating error	
421	Error of Room sensor in the indoor unit (Open/Short)	
422	Error of Eva In sensor in the indoor unit (Open/Short)	
423	Error of Eva Out sensor in the indoor unit (Open/Short)	
453	2nd Detection of the float switch	
454	Error of Fan motor in the indoor unit	
462	EEPROM error	
463	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)	
816	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	
800	Error indicating the Refrigerant Detection Sensor's lifespan expired	
897	Error indicating another indoor unit that shares the outdoor unit detects the R-32 refrigerant.	

