

Central Control Interface Module Installation manual

VCTRL05P-1

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

Safety precautions

California Proposition 65 Warning (US)

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

This installation manual explains how to install a central control interface module that is connected to a Lennox chiller fan coil control kit. Please read this manual thoroughly before installing the product. (Please refer to appropriate installation for any optional product installation.)

WARNING

Hazards or unsafe practices that may result in severe personal injury or death.

CAUTION

Hazards or unsafe practices that may result in minor personal injury or property damage.

-  Follow directions.
-  Do NOT attempt.
-  Make sure the machine is grounded to prevent electric shock.
-  Unplug the power plug from the wall socket.
-  Do NOT disassemble.

For installation

WARNING

-  **Consult qualified installer or service center for installation.**
 - If not, there is risk of product malfunction, water leakage, electric shock or fire.

Make sure to use the supplied cables.

- If not, there is risk of fire or damage to the product.

Make sure that all wiring work is done by qualified person complying regional standards and instructions in this manual.

- If the installation is done by unqualified person, there is risk of product malfunction, electric shock or fire caused by incorrect installation.

Check if the installation was done properly according to the installation manual.

- There is risk of electric shock or fire if the product is installed incorrectly.

CAUTION

-  **Make sure there is no tension to the cable during installation.**
 - Cable may get cut and cause fire.

When installing the product in hospitals or other places, make sure that the product does not interrupt with other products.

- Abnormal operation may occur.

-  **Do not install the product in a place where flammable gas leaks or if there is possible chance of leakage.**
 - There is risk of fire or explosion.

Do not install the product in a place where it will be exposed to oil or vapor etc.

- If the product is used in a place where it is exposed to oil, vapor or sulphur dioxide, parts of the product may get damaged or product may function abnormally.

Do not install the product in a place where special spray or acid/alkali solution is used.

- There is risk of electric shock or abnormal operation.

For operation

WARNING

-  **Do not attempt to repair, disassemble, or modify the product yourself.**
 - There is potential risk of product damage, electric shock or fire. When repair is needed, consult qualified installer or service center.

Contact the service center when you need to dispose the product.

-  **Do not attempt to move or re-install the product that is already installed.**
 - If not, there is risk of electric shock or fire.

CAUTION

-  **Do not allow water to enter the product.**
 - If not, there is risk of electric shock or fire.
-  **Do not connect the power cable to the communication cable terminal.**
 - There is risk of fire.

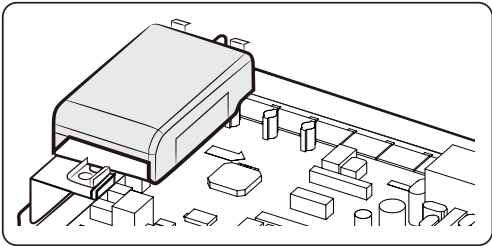
Central Control Interface Module installation

Accessories

Item	Central Control Interface Module	DC power cable (12 V)	Communication cable	Case	Cable tie	Screw (M4)	Installation Manual
Shape							

Diagram of connection between a central control interface module and chiller fan coil control kit

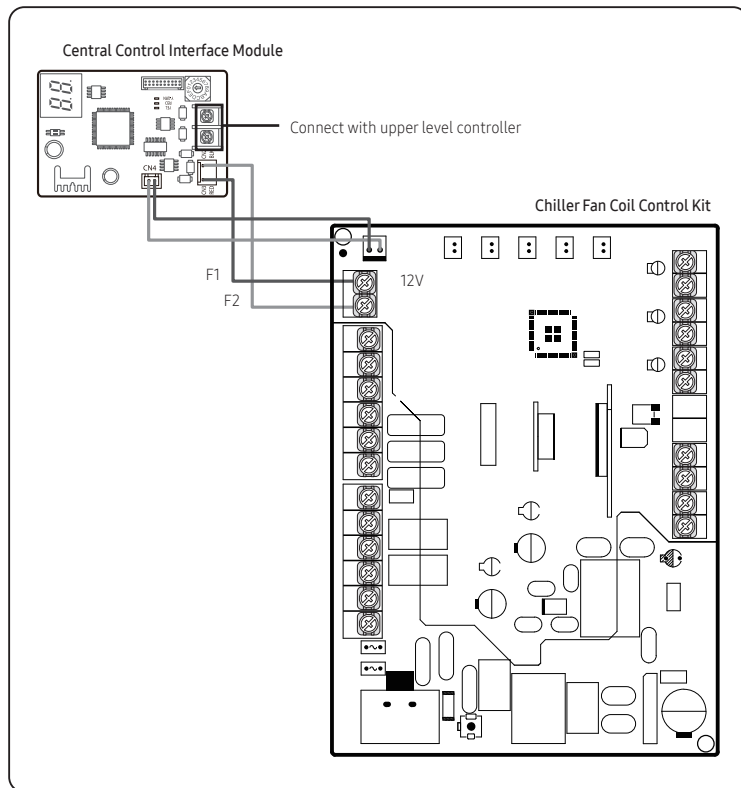
- 1 Fix the central control interface module case at fixing point of chiller fan coil control kit by 1 screw.



- 2 Attach central control interface module to the case and connect power and communication cable.
- If you use upper level controller (such as DMS, etc.) with the central control interface module installed, use of centralized control (02 series installation option - SEG5) must be set as "Enable".

Connecting chiller fan coil control kit

- Connect DC power cable connector (Blue) to CN12 of chiller fan coil control kit MAIN PBA.
- Communication cable (Red) is ring type. Connect the cable to F1, F2 terminal of chiller fan coil control kit MAIN PBA.



⚠ CAUTION

- You should separate power cable and communication cable of chiller fan coil control kit. (Abnormal operation of the product may occur due to the electric problem.)
- Central control interface module (VCTRL05P-1) supports connection between NASA communication upper level controller → NASA communication chiller fan coil control kit.
It does not support Non-NASA communication upper level controller → NASA communication chiller fan coil control kit.
- You should be aware that power may not be supplied to chiller fan coil control kit and interface module if power polarity of V1 and V2 is connected opposite.
- Terminal block of upper level controller connection on central control interface module has to be tightened by M3 size screw, and the torque is 0.37 ~ 0.55 lbf-ft (0.5 ~ 0.75 N-m).

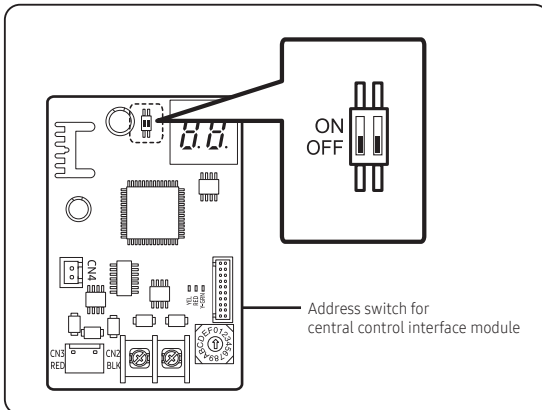
Central Control Interface Module installation

- 3 Set the address of central control interface module.
- The address of each central control interface module should be set differently.

CAUTION

- The cable length between the upper controller and the farthest central control interface module should be within 3280.8 ft (1000 m).
- You should switch off the power supply before installation.
- The wiring should be installed in accordance with electric wiring regulations and should be placed inside the wall so that users cannot touch them.

Setting option switch and address switch



- 1 Switch for setting address: Address switch, set the address within 0 ~ F (0 ~ 15)
(Address between each central control interface module should be set differently.)
- 2 Option switch

About setting the main address manually and installation condition

	SW4	
	1	2
ON	Manual address	No function
OFF	Automatic address	

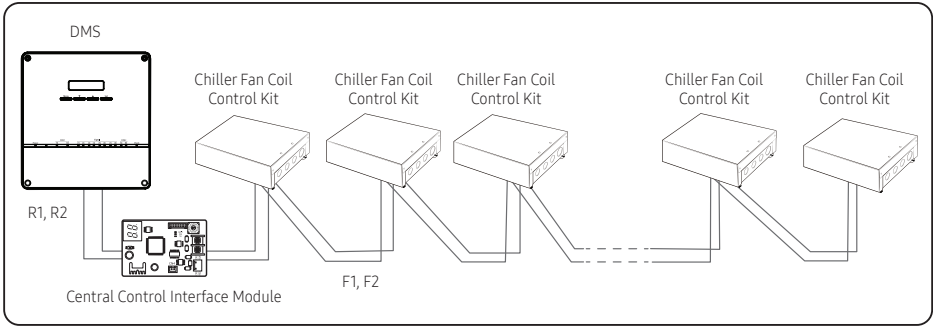


- Automatic address: Address of the interface module is assigned randomly.
- Manual address: Address of the interface module is assigned by address switch of the central control interface module.

NOTE

- The default setting of option switch is OFF for both SW4 and SW5.

When installing 16 chiller fan coil control kits



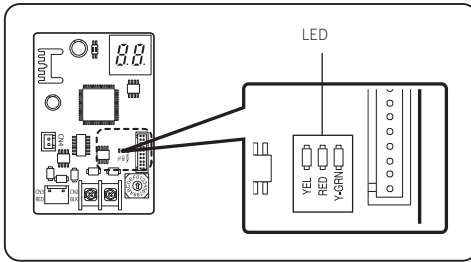
NOTE

- Central control interface module can be applied from DMS or later version.
- Refer to chiller fan coil control kit installation manual for wiring work of chiller fan coil control kit.

Checking operation

LED Display

- 1 When resetting the power supply, the central control interface module will not respond to the upper level communication for up to 10 minutes.
When the communication with lower level (e.g.: between central control interface module and chiller fan coil control kit) is detected as valid communication, Y-GRN LED will blink.
(Please wait until the communication between and central control interface module and the chiller fan coil control kit becomes normal.)



- 2 When the communication with upper level (e.g.: between DMS and central control interface module) is detected as valid communication, RED LED will blink.

NOTE

- YEL LED is not in use.

7-SEGMENT indication

- 1 When initializing power supply, program code will be indicated.
 - Example of program code: 17 89 A3 16
- 2 Then tracking of chiller fan coil control kit will be on progress, and **00** will be indicated.
- 3 After tracking is done, communicating address of chiller fan coil control kit will be indicated in order when the communication is normal.
- 4 When there is no communication between chiller fan coil control kit and central control interface module for more than 3 minutes, **EF** ↔ **E1** will be indicated alternatively.
 - Check the communication cable connection between chiller fan coil control kit and central control interface module, and reset the power of central control interface module.
- 5 When the central control interface module tracking is not completed, **EF** ↔ **E3** will be indicated alternatively.
 - Chiller fan coil control kit and central control interface module may not be installed correctly. Check the installation, and reset the power of central control interface module.
- 6 When there is an error on EEPROM of the central control interface module, **EF** ↔ **E4** will be indicated alternatively.
 - EEPROM is memory part that saves settings of the interface module.
 - If the error is occurred, reset the power of central control interface module. If the error occurs continuously, the replacement of central control interface module is necessary.
- 7 When same address was set to multiple central control interface module, **EF** ↔ **E5** will be indicated alternatively.
 - If SW4-1 is ON, set each address differently within 0 ~ F by address switch, and reset the power of central control interface module.
 - If SW4-1 is OFF, reset the power of central control interface module to reset the automatic address.
- 8 When more than 16 chiller fan coil control kits are installed, **EF** ↔ **E6** will be indicated alternatively.
 - Install the chiller fan coil control kit less than 16, and reset the power of central control interface module.
- 9 When indoor units and chiller fan coil control kits are installed together, **EF** ↔ **E7** will be indicated alternatively.
 - Indoor units and chiller fan coil control kits cannot be installed together. Remove the indoor units, and reset the power of central control interface module.

Notes on interface module installation

- 1 Indoor units and chiller fan coil control kits should not be installed to the same communication line (F1, F2).
- 2 Power of the central control interface module should be reset after changing the installation condition of the chiller fan coil control kit.
 - When changing the number of installed units or address of the chiller fan coil control kit.

