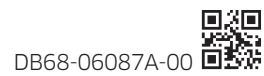


SAMSUNG



DB68-06087A-00

DVM CHILLER

Installation manual

FCU Interface Module MIM-F10N

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



SAMSUNG

Safety precautions






This installation manual explains how to install a FCU interface module that is connected to a Samsung FCU 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.

FCU interface module installation

Accessories







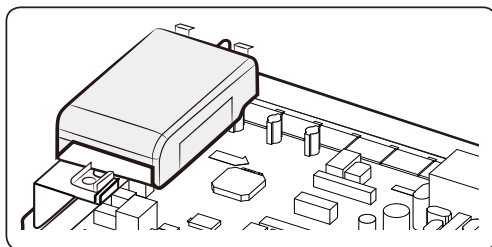
| Item | FCU interface module | DC power cable (12 V) | Communication cable | Case | Cable tie | Screw (M4) |
|-------|---|---|---|---|---|---|
| Shape |  |  |  |  |  |  |

Diagram of connection between a FCU interface module and FCU KIT

1 Fix the FCU interface module case at fixing point of FCU KIT by 1 screw.

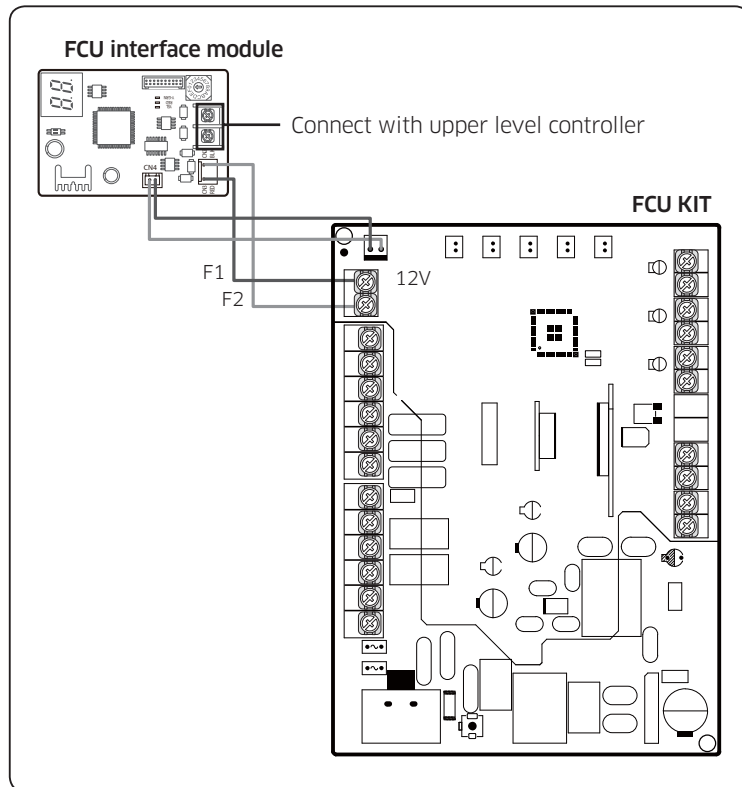


2 Attach FCU interface module to the case and connect power and communication cable.

- If you use upper level controller (such as DMS, OnOff controller, etc.) with the FCU interface module installed, use of centralized control (02 series installation option - SEG5) must be set as "Enable".

Connecting FCU KIT

- Connect DC power cable connector (Blue) to CN12 of FCU KIT MAIN PBA.
- Communication cable (Red) is ring type. Connect the cable to F1, F2 terminal of FCU KIT MAIN PBA.



⚠ CAUTION

- You should separate power cable and communication cable of FCU KIT. (Abnormal operation of the product may occur due to the electric problem.)
- FCU interface module (AIM-F10N) supports connection between NASA communication upper level controller → NASA communication FCU KIT.
It does not support Non-NASA communication upper level controller → NASA communication FCU KIT

FCU interface module installation

- You should be aware that power may not be supplied to FCU KIT and interface module if power polarity of V1 and V2 is connected opposite.
- Terminal block of upper level controller connection on FCU interface module has to be tightened by M3 size screw, and the torque is 0.5 ~ 0.75 N·m.

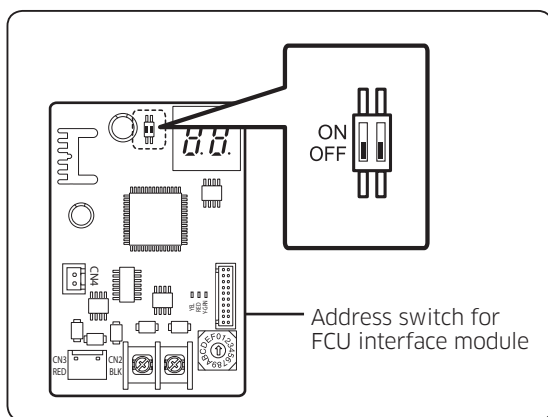
3 Set the address of FCU interface module.

- The address of each FCU interface module should be set differently.

⚠ CAUTION

- The cable length between the upper controller and the farthest FCU interface module should be within 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

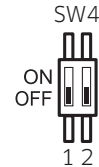


- 1 Switch for setting address: Address switch, set the address within 0 ~ F (0 ~ 15)
(Address between each FCU interface module should be set differently.)

- 2 Option switch

About setting the main address manually and installation condition

| | SW4 | |
|-----|-------------------|-------------|
| | 1 | 2 |
| ON | Manual address | No function |
| OFF | Automatic address | |

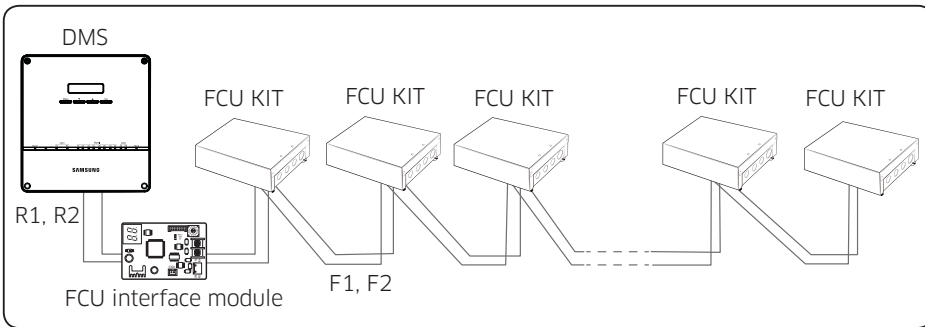


- Automatic address: Address of the interface module is assigned randomly.
- Manual address: Address of the interface module is assigned by address switch of the FCU interface module.

NOTE

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

When installing 16 FCU KITs



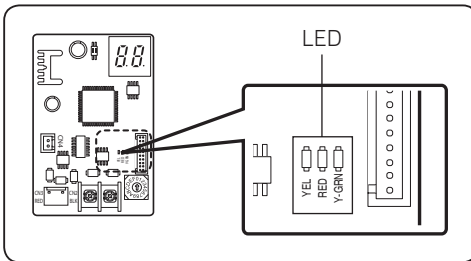
NOTE

- FCU interface module can be applied from DMS2.5 or later version.
- Refer to FCU KIT installation manual for wiring work of FCU KIT.

Checking operation

LED Display

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



- 2 When the communication with upper level (e.g.: between DMS and FCU 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.
• Exmaple of program code: 17 89 A3 16
- 2 Then tracking of FCU KIT will be on progress, and **88** will be indicated.
- 3 After tracking is done, communicating address of FCU KIT will be indicated in order when the communication is normal.
- 4 When there is no communication between FCU KIT and FCU interface module for more than 3 minutes, **EE** ↔ **ET** will be indicated alternatively.
 - Check the communication cable connection between FCU KIT and FCU interface module, and reset the power of FCU interface module.

5 When the FCU interface module tracking is not completed, $E8 \leftrightarrow E3$ will be indicated alternatively.

- FCU KIT and FCU interface module may not be installed correctly. Check the installation, and reset the power of FCU interface module.

6 When there is an error on EEPROM of the FCU interface module, $E8 \leftrightarrow E4$ will be indicated alternatively.

- EEPROM is memory part that saves settings of the interface module.
- If the error is occurred, reset the power of FCU interface module. If the error occurs continuously, the replacement of FCU interface module is necessary.

7 When same address was set to multiple FCU interface modules, $E8 \leftrightarrow E5$ will be indicated alternatively.

- If SW4-1 is ON, set each address differently within 0 ~ F by address switch, and reset the power of FCU interface module.
- If SW4-1 is OFF, reset the power of FCU interface module to reset the automatic address.

8 When more than 16 FCU KITs are installed, $E8 \leftrightarrow E6$ will be indicated alternatively.

- Install the FCU KIT less than 16, and reset the power of FCU interface module.

9 When indoor units and FCU KITs are installed together, $E8 \leftrightarrow E7$ will be indicated alternatively.

- Indoor units and FCU KITs cannot be installed together. Remove the indoor units, and reset the power of FCU interface module.

Notes on interface module installation

1 Indoor units and FCU KITs should not be installed to the same communication line (F1, F2).

2 Interface module for an air conditioner is different, make sure AIM-N01 model is connected to an air conditioner.

3 Power of the FCU interface module should be reset after changing the installation condition of the FCU KIT.

- When changing the number of installed units or address of the FCU KIT

Memo
