FULL DC INVERTER SYSTEMS

OWNER´S & INSTALATION MANUAL
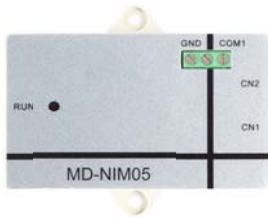
NIM05

COMMERCIAL AIR CONDITIONERS SDV4

SDV IV

sinclair

Hotel card key interface module: NIM05

NIM05 is mainly designed for the hotel card-insert system. It offers a smart way to save energy and manage the air conditioners.

- ✧ A smart way to save energy and money.
- ✧ Cooperates with the hotel card-insert system.
- ✧ Extra power supply is unnecessary.
- ✧ Connected but insulate to the card-insert system
- ✧ Cooperate with the wired controller to automate control.
- ✧ Easy to install.

The main difference between NIM05/E and NIM05/E-1 is that NIM05/E-1 is able to record the running state after power off and recover the unit to the previous running state. While NIM05/E runs the unit to the default starting state after power off.
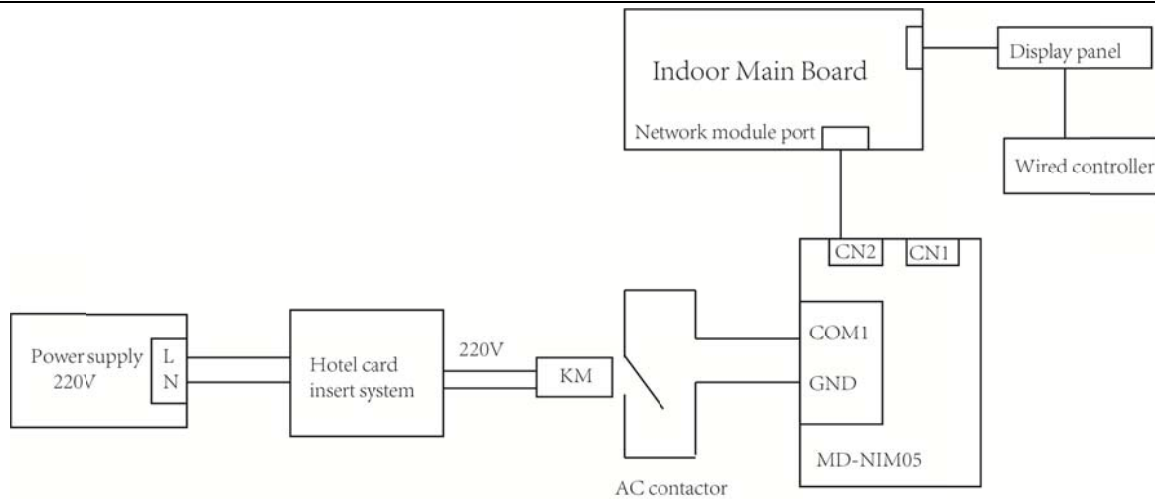
6.2.1 Wiring

When the card is inserted, to turn on the air conditioner, the terminal COM and GND should be connected or short. So the card-insert system should send the signal to the terminal COM and GND. When connecting the COM port and GND, it will send a turn ON signal to the indoor unit; when the COM port and GND are broken, it will send a turn OFF signal to the indoor unit.

NIM05 can be connected to the network module port of the indoor unit the hotel card system can provide the DC 5V.The wiring diagram should be as follows.

Wiring diagram:

- ◆ MD-NIM05 can be cooperated with the wired controller or remote controller to automate control.
- ◆ Can use remote controller and wired controller to control A/C.
- ◆ Includes a build-in auto-restart function and NIM05 control will not affect auto-restart function of the indoor unit.
- ◆ Only need to connect to the network module port of the indoor unit and wiring is simple.
- ◆ When connecting the COM port and GND, it will send a turn ON signal to the indoor unit; when the COM port and GND are broken, it will send a turn OFF signal to the indoor unit.
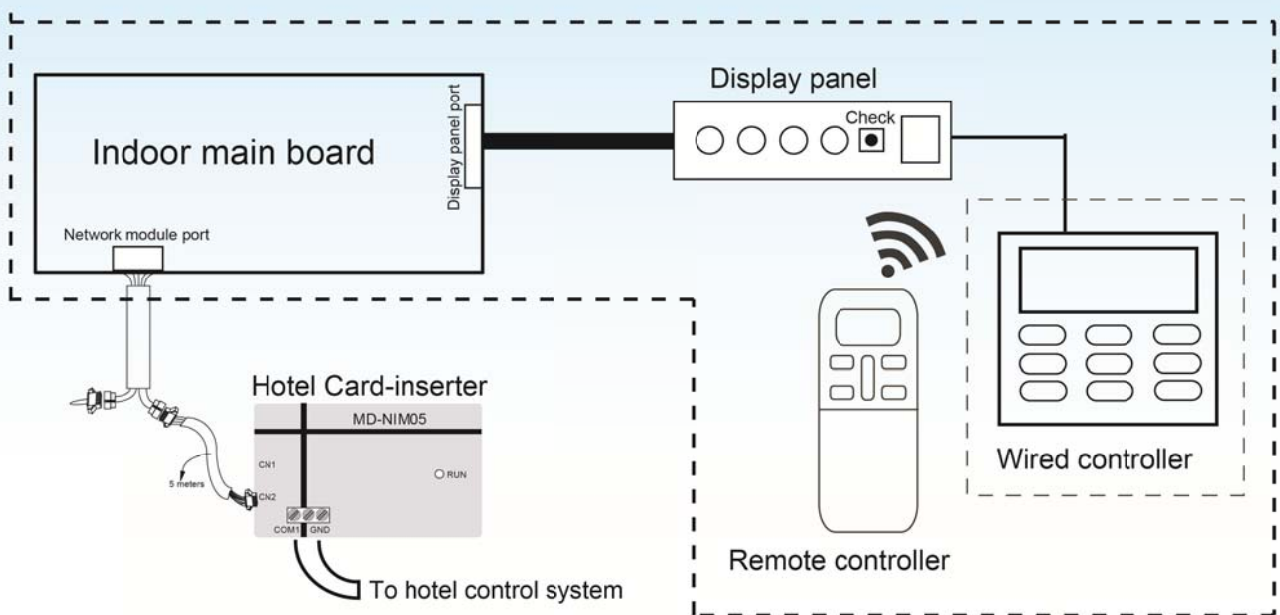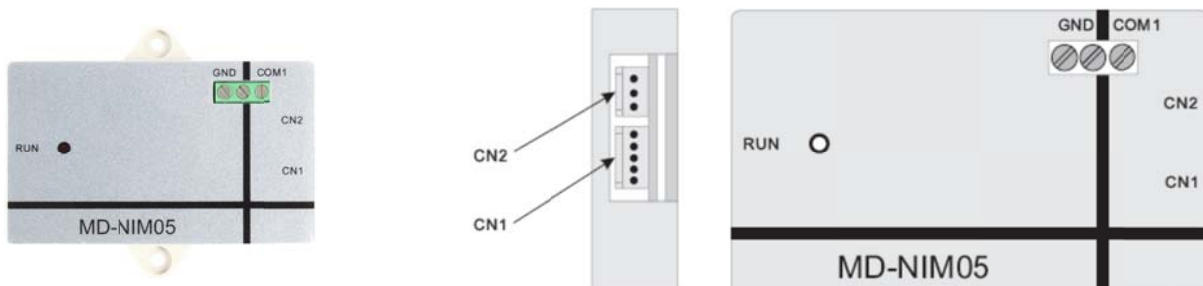
Indoor Main Board

Network module port

Display panel

Wired controller

CN2　CN1

COM1

GND

MD-NIM05

Power supply 220V　L　N

Hotel card insert system

220V

KM

AC contactor

Hotel card key interface module

Indoor main board

Display panel port

Network module port

Display panel

Check

Hotel Card-inserter

MD-NIM05

CN1

CN2

RUN

COM1　GND

5 meters

To hotel control system
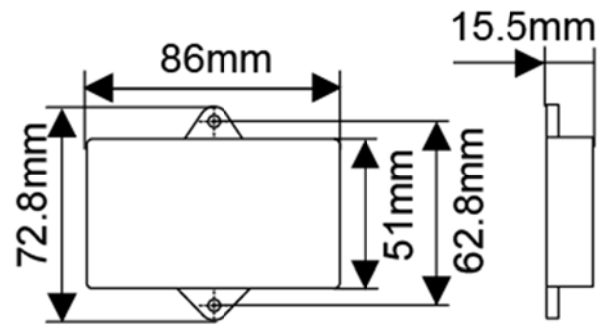
Remote controller

Wired controller

Notes:

1) An AC contactor or a delay is necessary to transform the signal.

2) Wiring assy. 2 connects the CN2 of hotel card-insert assy. to network module port of indoor main control board.

3) CN1 port reserved.

GND　COM1

RUN

CN2

CN1

MD-NIM05

CN2

CN1

GND　COM1

RUN

CN2

CN1

MD-NIM05

Notes: COM1 and GND terminals should be short to work and not be connected to the power. The electricity voltage over 5V will probably damage the device or get the device burnt and cause fire.
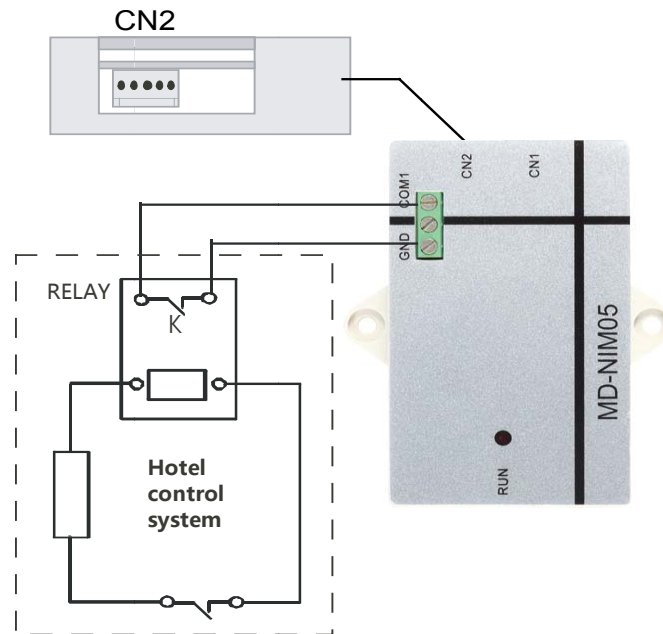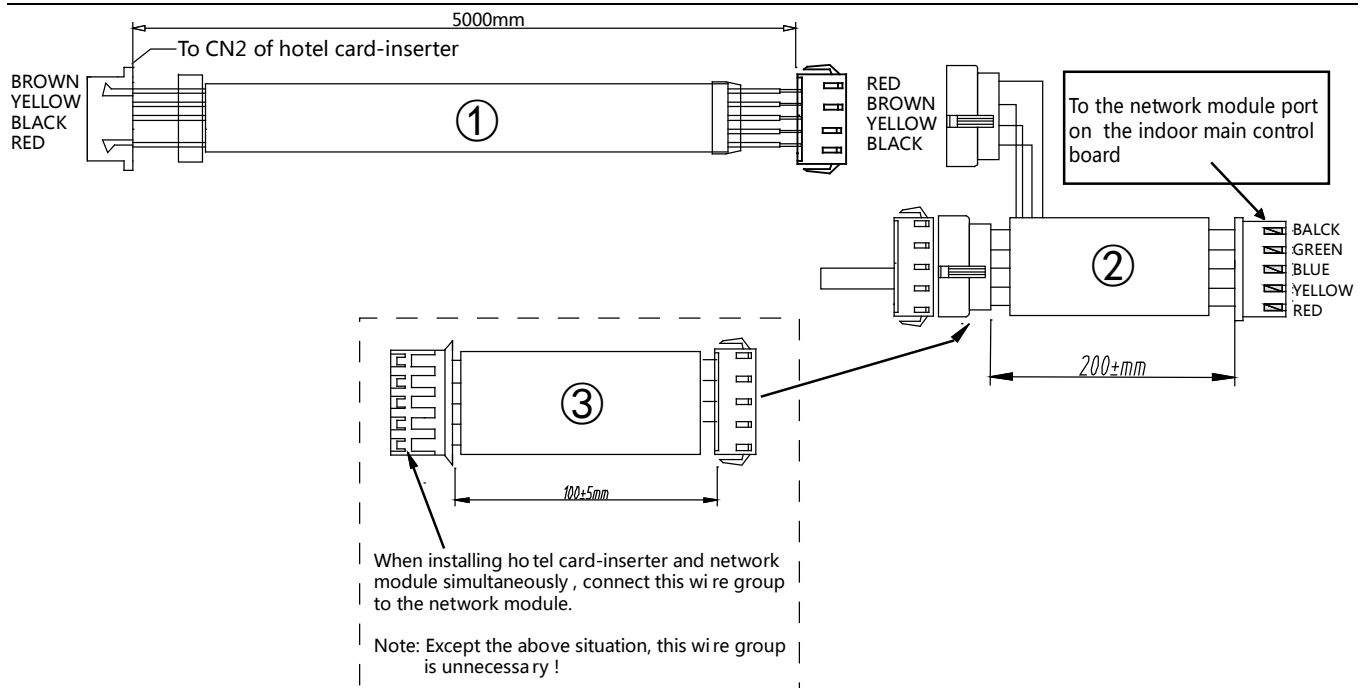
Installation

※ Dimensions

Wiring method and figure:

CN2 port needs to connect with network module port of the indoor unit.

5000mm

To CN2 of hotel card-inserter

BROWN
YELLOW
BLACK
RED

①

RED
BROWN
YELLOW
BLACK

To the network module port on the indoor main control board

②

BALCK
GREEN
BLUE
YELLOW
RED

200±mm

③

100±5mm

When installing hotel card-inserter and network module simultaneously , connect this wire group to the network module.

Note: Except the above situation, this wire group is unnecessary !

Notes:

The COM1 and GND input port of hotel card-inserter is a switch signal, which must be connected to the hotel control system through a RELAY component for controlling the ON or OFF state between COM1 and GND. When the COM1 and GND input port connect with the relay, it is unnecessary to consider the wire sequence, but the wiring length must be short as possible.

The ①②③ connecting wires are standard wires.

The ③ connecting wire is only used for the situation which you need use the hotel card-inserter and the network module at the same time

Operation description

1) Connect 5-place terminal at fixed rated wired controller via 5 terminals: A, B, C, D, and E.

2) Connect LCD at main control panel of indoor unit via terminals REV, C, D, and E.

3) Upon wiring according to the wiring diagram in, please power on the A/C and the indication lamp of the hotel card-inserter will be light up. When the card has been inserted between in COM1 and GND (means the relay is closed and the COM1 and GND are short connect), air conditioner is turned on and can be controlled normally.

4) When no card has been inserted between in COM1 and GND (i.e. it is broken), the ON/OFF button of remote controller or wired controller cannot start air conditioner, but two beeps of air conditioner closed down signals be giving out.

5) When power on every time, user need to use the remote controller or wired controller to turn on air conditioner and setting operation mode.

User must use the remote controller or wired controller to turn on air conditioner and set operation modes when the first start-up main unit. After then, operation modes of this performance would be memorized, although took off card and insert it on again, as long as power does not be cut off from main unit.

I.e. if the A/C does not power down, when the card is pulled out, it will turn off the A/C; when insert the card again, the system will perform as per the last setting.

6) System can receive signal delivering from remote controller or wired controller, and transits the signal to indoor unit; it can also memorizes the latest ON/OFF information sending by remote controller or wired controller (Timing, Eco and swing information can be transited but memorized.)

7) Upon powered to card-inserter, transited signal defaults as unit shutdown. Once take off the card, system will send signal of unit shut down twice; till to the next time card is inserted, system will not start unit until 3 seconds later, because of memory information delivery.

NOTE CONCERNING PROTECTION OF ENVIRONMENT

This product must not be disposed of via normal household waste after its service life, but must be taken to a collection station for the recycling of electrical and electronic devices. The symbol on the product, the operating instructions or the packaging indicate such disposal procedures. The materials are recyclable in accordance with their respective symbols. By means of re-use, material recycling or any other form of recycling old appliances you are making an important contribution to the protection of our environment. Please ask your local council where your nearest disposal station is located.

In case of quality problem or other please contact your local supplier or authorized service center.
Emergency number: 112

PRODUCER

SINCLAIR CORPORATION Ltd.
1-4 Argyll St.
London W1F 7LD
Great Britain

www.sinclair-world.com

This product was manufactured in China (Made in China).

REPRESENTATIVE

SINCLAIR EUROPE spol. s r.o.
Purkynova 45
612 00 Brno
Czech Republic

TECHNICAL SUPPORT

NEPA spol. s r.o.
Purkynova 45
612 00 Brno
Czech Republic

Tel.: +420 800 100 285
Fax: +420 541 590 124

www.sinclair-solutions.com
info@sinclair-solutions.com

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