

# intelligent Touch Controller INSTALLATION MANUAL

This manual must be read prior to installation. During installation, please refer to the indoor unit installation manual.

## DCS601C71

### WARNING

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Please read these "SAFETY CONSIDERATIONS" carefully before installing this unit and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained. Also, inform customers that they should store this installation manual along with the operation manual for future reference. This unit comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

**WARNING** Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION** Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTE** Indication situation that may result in equipment or property-damage-only accidents.

### WARNING

Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself. Improper installation may result in electric shocks or fire.

Perform installation work in accordance with this installation manual. Improper installation may result in electric shocks or fire.

Be sure to use only the specified accessories and parts for installation work. Failure to use the specified parts may result in electric shocks, fire or the unit falling.

Carry out the specified installation work after taking into account earthquakes. Improper installation work may result in the equipment falling and causing accidents.

Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual. An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

Make sure that all wiring is secured, the specified wires are used, and no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.

When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened. Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

Before touching electrical parts, turn off the unit.

Ground this unit. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire. Incomplete grounding may result in electric shocks.

Do not reconstruct or change the settings of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.

Install an leak circuit breaker, as required. If an leak circuit breaker is not installed, electric shock may result.

DO NOT install this unit in the following locations.

(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen, plastic parts may deteriorate and fall off or result in water leakage.

(b) where corrosive gas, such as sulfurous acid gas, is produced, Corroding copper pipes or soldered parts may result in refrigerant leakage.

(c) near machinery emitting electromagnetic waves.

Electromagnetic waves may disturb the operation of the control system and result in malfunction of the equipment.

(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions may result in fire.

### CAUTION

Be very careful about product transportation.

Safely dispose of the packing materials.

Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

### NOTE

Install this unit, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise. (Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

This unit is a class A product.

In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## 1 System components

The components of the kit are as follows. Before installing, be sure to check whether they are supplied.

Intelligent Touch Controller proper	1 set	Installation manual	1 COPY
Touch pen	1 piece	Hardware manual	1 COPY
Mounting screw (M4×50)	4 piece	Software ID	1 COPY
Flat washer	4 piece		

Where embedded in wall, a steel electrical box

## 2 Installing

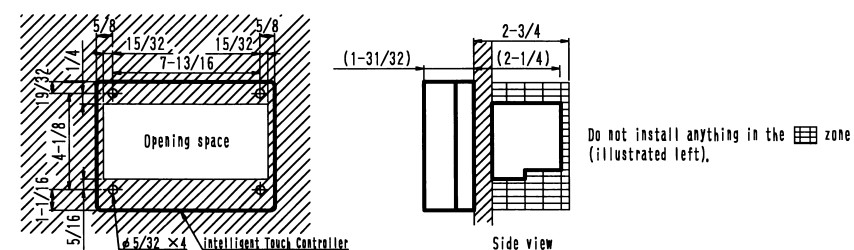
Don't fail to turn OFF the indoor unit power switch before installing intelligent Touch Controller. Failure to observe this instruction could result in electric shock.

### Location

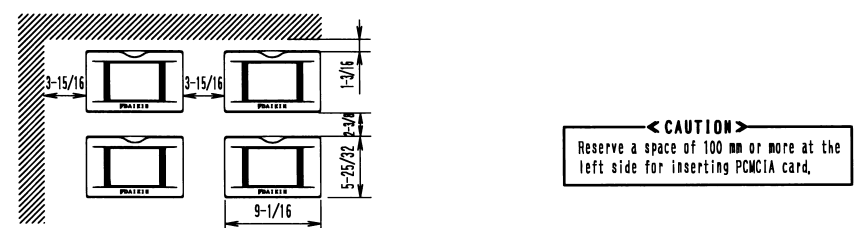
Either **Installation on control panel front door** or **Embedding in wall** is selectively available for installation of the intelligent Touch Controller. Install the intelligent Touch Controller at an indoor location where it is free from affect by electromagnetic wave and adhesion of water content, dust, etc., whether installed on the front door or embedded in wall.

### Required installation space

Open space necessary for the front door of control panel and for the walls:

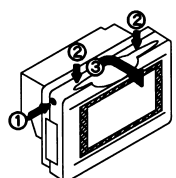


Device to device pitch and minimum spacing from wall surface, where installed in series



### How to install

- Open the upper case. Separate portion ① using a screwdriver (4). (Be careful not to lose the separated portion.) Open portion ② in direction ③ while pressing it lightly.



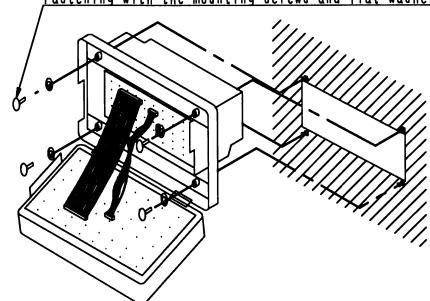
### CAUTION

- Control PC board is contained in both of the upper case and lower case. When opening, be careful not to damage them by a screwdriver.  
- PC board is not so resistible to static electricity. Therefore, remove completely static electricity which is accumulating by the human body, before beginning opening the case. (The static can be removed by bringing the body in touch with control panel, etc. which is already grounded.)

- Mount the intelligent Touch Controller, using the screws

2-1. Where installed on the control panel front door

Fastening with the mounting screws and flat washer.



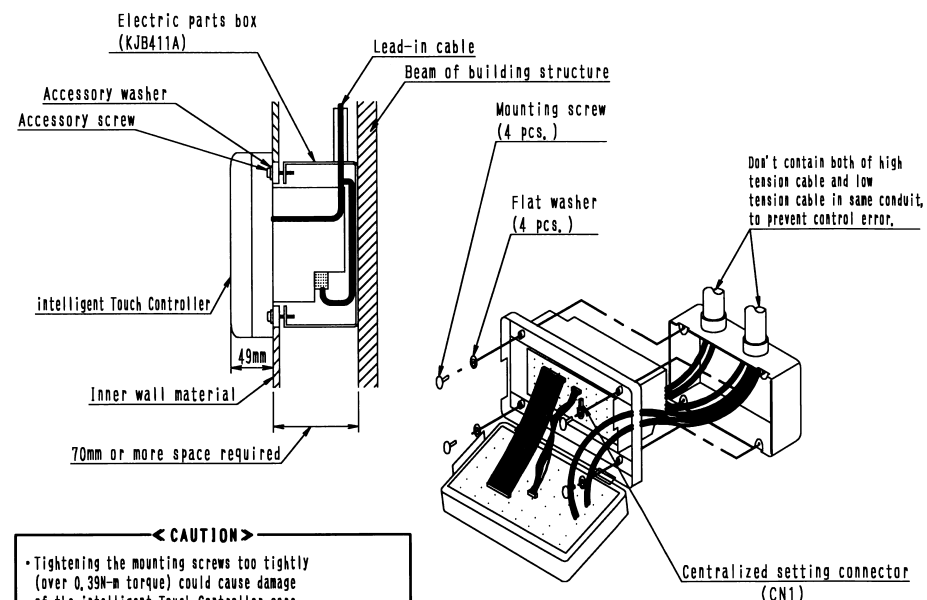
For detail of the opening of the control panel front door, refer to **Required installation space** prescribed in the foregoing paragraph.

### CAUTION

- Tightening the mounting screws too tightly could cause damage of the intelligent Touch Controller case.  
- A spacing of 70mm or more must be available at the back of i-Touch Controller because terminal block, etc. are provided on the back panel.

2-2. Where embedded in a wall

Mount the intelligent Touch Controller in the embedded Electric parts box as illustrated right below, using the accessory mounting screws (M4 × 50).



### CAUTION

- Tightening the mounting screws too tightly (over 0.39N-m torque) could cause damage of the intelligent Touch Controller case.  
- Unless 70mm or more space is made available, the intelligent Touch Controller bottom and the embedding Electric parts box bottom will come in contact with one another making it impossible to install the intelligent Touch Controller.  
- In this case, the 4-piece embedding electric box cover is not used. Dismount the box cover before using the intelligent Touch Controller.

### Initial setting

Centralized setting connector (CN1) (The controller is complete with this connector when shipped from the shop.)

- See the above sketch for the position detail.
- Where one intelligent Touch Controller only is used independently, don't dismount the centralized setting connector. (Use it as shipped from the shop.)
- Where two intelligent Touch Controllers are used in series and used in combination with other centralized devices, make initial setting per the Table below.

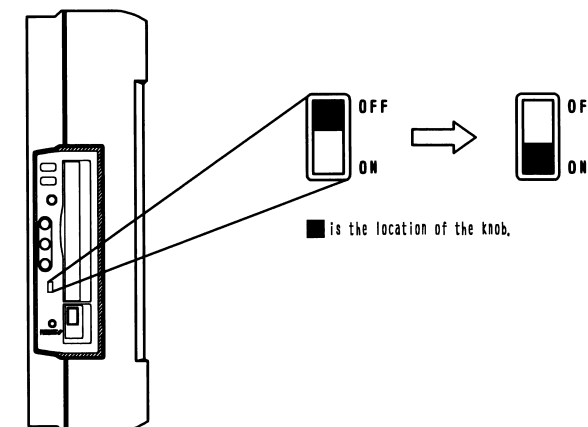
### CAUTION

- Disconnect this connector, however, where used in combination with BACnet Gateway, DMS-1F, etc.  
- This is unavailable for combined use with the schedule timer.

Pattern	Connection pattern of centralized devices			Setting the centralized setting connector (CN1)		
	Intelligent Touch Controller	Central remote controller	ON/OFF controller	Intelligent Touch Controller	Central remote controller	ON/OFF controller
①	1 to 2 sets			*1		
②	1 set	1 set		WITH	WITHOUT	
③			1 to 8 sets	*1		Set "WITHOUT" for all
④	1 to 2 sets			*1		Set "WITHOUT" for all others.

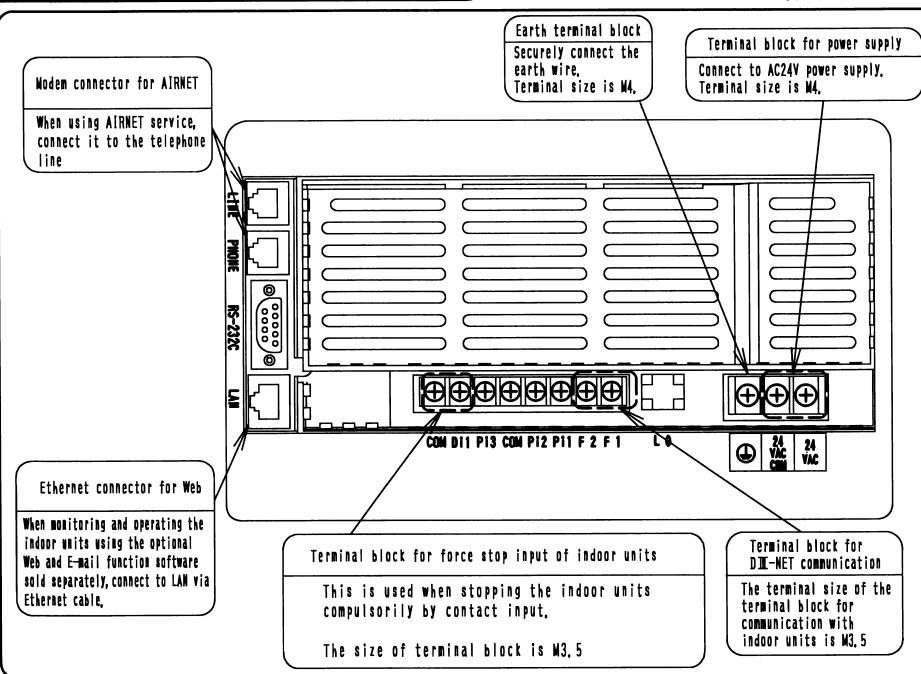
After complete setting up of all the above setting items, shut the intelligent Touch Controller panel door in the reverse sequence of the above.

- Setting "BACK-UP BATTERY VALIDATE" switch (shifted to OFF when being shipped from the shop. — Back-up battery set to INVALIDATE) For the switch to back up the clock, etc. in case of any power failure, actuate it from OFF side (knob is located above) to ON side (knob is located below) as shown in the sketch below.



TO BACK

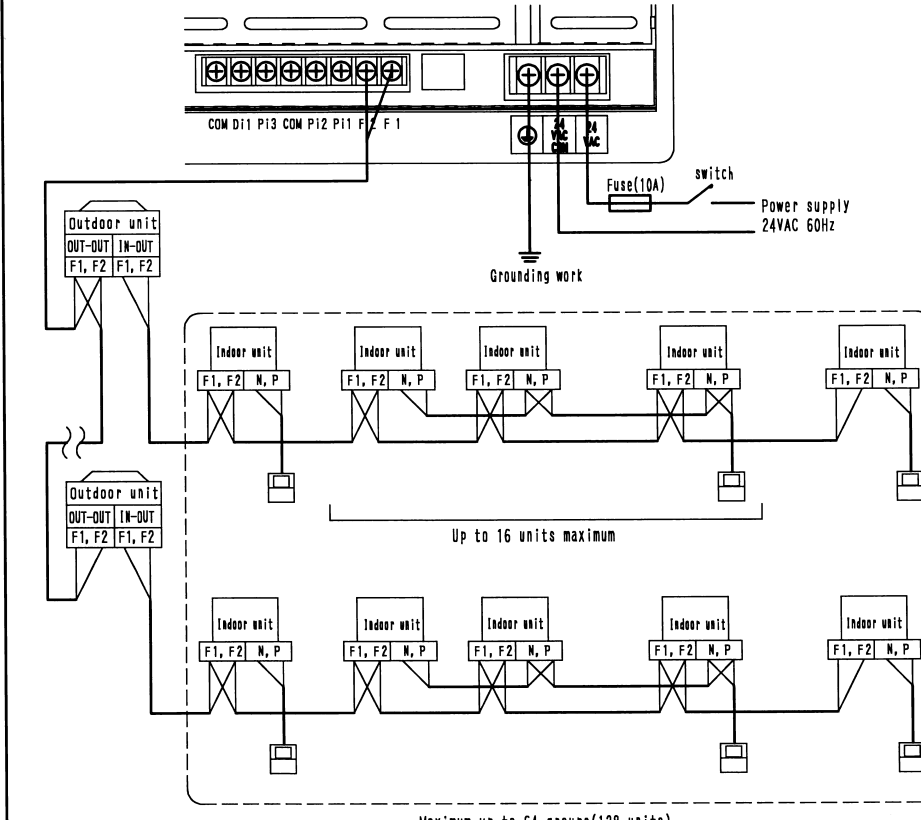
**3 Names of the rear terminals and their function** (Before start electrical wiring, check the terminal block and connector at the back of controller.)



**4 Electric Wiring Connection** (Do not fail to use a round crimp terminal with reinforcing sleeve for safety wiring connection to the Intelligent Touch Controller.)

When wiring, cut off the power supply (using a local switch) and do not apply power until all work has been finished.

**Wiring for power supply and Connecting wiring for DXX-NET communication of indoor units**  
In order to perform centralized control of indoor units using this controller, connect the power wiring to terminals 24VAC and 24VAC COM, earth wire to earth terminal and connecting wiring for DXX-NET communication of air-conditioner (indoor unit and outdoor unit) to terminals F1 and F2 respectively as shown in the sketch below.

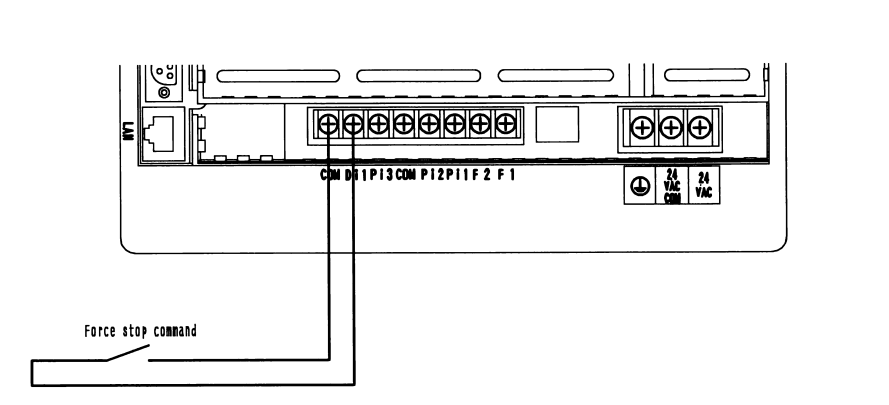


Power cable wiring	1, 25mm <sup>2</sup>
Fuse	10A
Connecting wiring for DXX-NET communication of indoor and outdoor units	0, 75 - 1, 25 mm <sup>2</sup> vinyl cord or cable with sheath (2 wire) — up to 1000 m maximum (wiring length — up to 2000 m maximum) (When shield cable is used, the wiring length is available up to 1500m.) For the type of electric wire, refer to the design guide.

- CAUTION**
- Don't fail to perform installation of Grounding work. Don't connect the grounding wire to any of gas pipe, city water pipe, lightning rod, and telephone grounding wire.
  - Don't turn ON the power supply (front switch) until all the works are complete.
  - The connecting wiring for communication of indoor and outdoor units is a connecting wiring for the control. Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
  - Don't connect the power cable to F1, F2 terminal blocks. Wrong connection to these terminal blocks could result in damage and burning of the centralized control devices and of the electric parts of the indoor and outdoor units. This is very hazardous. Check each wired cable once more before turning ON the power switch.

**Wiring for force stop input**

In order to stop the air-conditioner through force stop input, connect the wiring for force stop input to the terminals D11 and COM as shown in the sketch below.



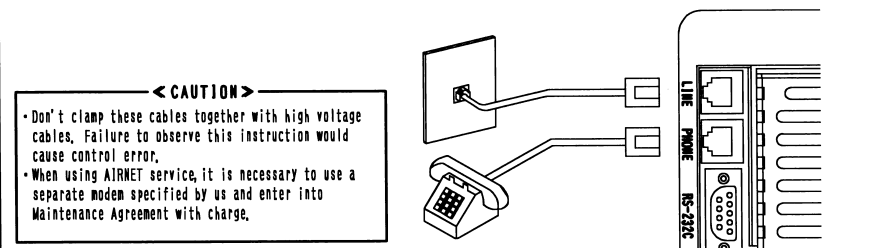
- Wiring for force stop input**
- 0, 75 - 1, 25 mm<sup>2</sup> vinyl cord or cable with sheath (2 wire) — up to 150m maximum
  - When FORCE-STOP INPUT is kept ON, the indoor units connected thereto are unable to be operated because they are force-stopped.
  - Use a contact which can guarantee minimum application load DC16V and 10mA.
  - Use an instantaneous contact of 200msec or more in current feed time, where required.

**CAUTION**

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- Terminals COM are inter-connected. Connecting to either one is allowed, but the number of cables connectable to one terminal is limited to 2 pieces.
- Don't connect the power cable to D1, COM terminal blocks. Wrong connection to these terminal blocks could result in damage and burning of the centralized control devices and of the electric parts of the indoor and outdoor units. This is very hazardous. Check each wired cable once more before turning ON the power switch.

**Connection to public telephone line**

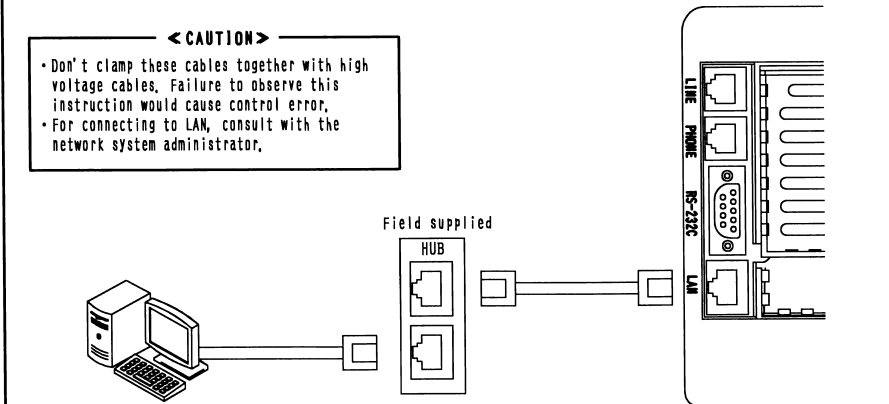
Connect to the telephone line in order to monitor the air-conditioner via AIRNET service. Connect to modular cable from the public telephone line to the upper connector with a stamping of LINE, and connect the modular cable of the telephone to the lower connector with a stamping of PHONE, as shown in the sketch below.



- CAUTION**
- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
  - When using AIRNET service, it is necessary to use a separate modem specified by us and enter into Maintenance Agreement with charge.

**Connection to LAN**

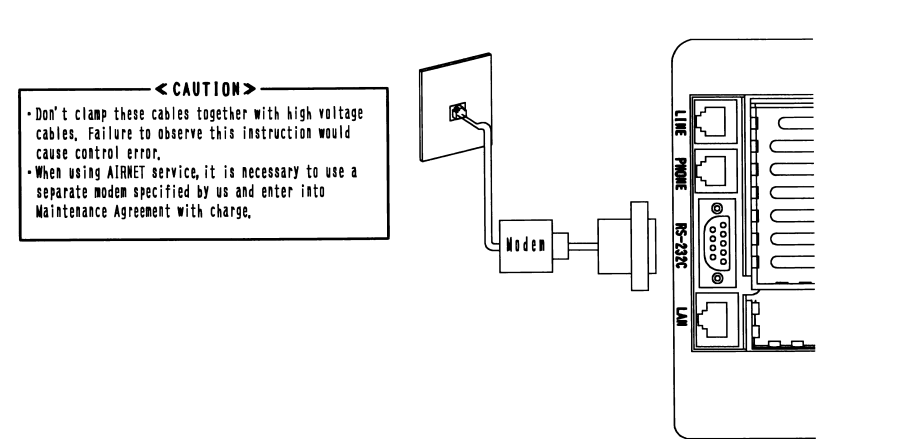
In order to monitor/control the air-conditioner using optional Web and E-mail function software sold separately, use a UTP cable to connect to LAN. Connect the UTP cable to the Ethernet connector with a stamping of LAN.



- CAUTION**
- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
  - For connecting to LAN, consult with the network system administrator.

**Modem connection**

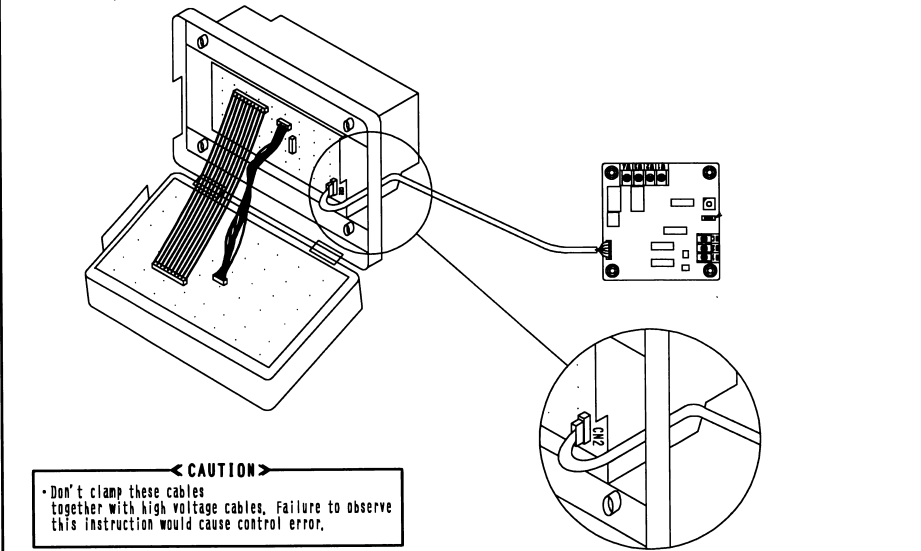
Connect to the telephone line in order to monitor the air-conditioner via AIRNET service. Connect to modular cable from the public telephone line to the upper connector with a stamping of LINE, and connect the modular cable of the telephone to the lower connector with a stamping of PHONE, as shown in the sketch below.



- CAUTION**
- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
  - When using AIRNET service, it is necessary to use a separate modem specified by us and enter into Maintenance Agreement with charge.

**Connection for Unification Adaptor**

In order to perform total start and stop/situation monitoring from central supervisory board, etc., connect a Unification Adaptor sold separately. As shown in the sketch below, open the controller and connect the cable from the Unification Adaptor to CN2 connector located on the printed board on the lower case. If you route the cable in the cable guide groove on the lower case, you can make a smart connection without any slack of the cable.



- CAUTION**
- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.

**5 Setting group No. for centralized control**

Turn ON the power to the Intelligent Touch Controller Following the below procedure, set the group numbers for the indoor units connected to the DXX-NET. This group number is set for each indoor unit system. (When not using the remote controller, the remote controller is to be connected just for making settings but must be disconnected when finished.)

**Preparations**

- Check no troubles exist with installation and wiring before turning ON the power.
- Turn ON the power to the indoor unit and intelligent Touch Controller. Setting is not possible with the power OFF.

Nothing is wrong with the equipment if "88" is displayed when power is turned ON. This may happen and the unit may not respond to operation, but the situation should last only a moment.

- Hold down for 4 seconds or more to enter the field set mode.
- Press and set the mode NO. to "00".
- Press and set the group No. Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 4-15. Set the group No. when "GROUP" on the liquid crystal display is flashing. Press the button to initiate flashing of "GROUP" on the liquid crystal display.
- Press to set the group No.
- Press . This will return the system to the normal mode.

For details on making settings from the simplified remote controller, refer to the instruction manual of the unit.  
For details on making settings of the group No. of the Ventaire or adapters (Wiring adapter for other air conditioners, etc.), refer to the instruction manual of the said unit.