



YDS-NETSYS-0907

ENGLISH

# OWNER'S MANUAL

THIRD GENERATION NETWORK SYSTEM

Please read this installation manual carefully before installing your air conditioner.  
Please keep this manual in a safe place for future reference.  
This manual may be subject to change without notice for purpose of improvement.

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## I. Overview of system

The system consists of front-end interface, back-end communication components and database. The front-end interface is an interactive interface enabling system operation and data query by the user. The back-end communication components automatically update the system continually to ensure information refreshing of indoor and outdoor units of air conditioners in the system and punctually delivery of user's control and query signals. Database mainly stores the information of indoor and outdoor units of air conditioners and furthermore allots the electricity quantity for each indoor unit through internal mechanisms.

## II. Operation of system

### A. Communication browse window

The communication data browse window is shown as follows:

Index	DateTime	Head	Comman	Dest	Sourc	Data	Check	End Code	Length	Result
16653	2006-11-20 10:56:15	AA	C1	1601	8080	000000000000003E	EA	55	16	OK
16652	2006-11-20 10:56:15	AA	C0	8080	1601	E0148802135A5A5...	56	55	32	OK-Up
16651	2006-11-20 10:56:15	AA	C0	1601	8080	010000000000003F	E9	55	16	OK
16650	2006-11-20 10:56:15	AA	C1	8080	1501	18FF191900000000...	E0	55	32	OK-Up
16649	2006-11-20 10:56:14	AA	C1	1501	8080	000000000000003E	EB	55	16	OK
16648	2006-11-20 10:56:14	AA	C0	8080	1501	E0148802135A5A5...	81	55	32	OK-Up
16647	2006-11-20 10:56:14	AA	C0	1501	8080	110000000000003F	DA	55	16	OK
16646	2006-11-20 10:56:14	AA	C1	8080	0C01	96FF323200000000...	39	55	32	OK-Up
16645	2006-11-20 10:56:14	AA	C1	0C01	8080	000000000000003E	F4	55	16	OK
16644	2006-11-20 10:56:13	AA	C0	8080	0C01	E0148802135A5A5...	60	55	32	OK-Up
16643	2006-11-20 10:56:13	AA	C0	0C01	8080	190000000000003F	DB	55	16	OK
16642	2006-11-20 10:56:13	AA	C1	8080	0B01	18FF191900000000...	EA	55	32	OK-Up
16641	2006-11-20 10:56:13	AA	C1	0B01	8080	000000000000003E	F5	55	16	OK
16640	2006-11-20 10:56:13	AA	C0	8080	0B01	E0148802135A5A5...	31	55	32	OK-Up
16639	2006-11-20 10:56:13	AA	C0	0B01	8080	010000000000003F	F4	55	16	OK
16638	2006-11-20 10:56:13	AA	C1	8080	0201	96FF323200000000...	43	55	32	OK-Up
16637	2006-11-20 10:56:12	AA	C1	0201	8080	000000000000003E	FE	55	16	OK
16636	2006-11-20 10:56:12	AA	C0	8080	0201	E0148802135A5A5...	68	55	32	OK-Up
16635	2006-11-20 10:56:12	AA	C0	0201	8080	100000000000003F	EE	55	16	OK
16634	2006-11-20 10:56:12	AA	C1	8080	0101	18FF191900000000...	F4	55	32	OK-Up
16633	2006-11-20 10:56:12	AA	C1	0101	8080	000000000000003E	FF	55	16	OK
16632	2006-11-20 10:56:11	AA	C0	8080	0101	E0148802135A5A5...	95	55	32	OK-Up
16631	2006-11-20 10:56:11	AA	C0	0101	8080	010000000000003F	FE	55	16	OK
16630	2006-11-20 10:56:11	AA	C1	8080	0900	FFFFFFFF00000000...	3A	55	32	OK-Up
16629	2006-11-20 10:56:11	AA	C1	0900	8080	000000000000003E	F8	55	16	OK

<Fig. 2-1>

The window is used to view the communication status during system debugging and can mainly display the contents of frames the system receives and sends

1) . The three buttons "Close", "Open Comm", "Clear" respectively

have the following functions

Close can close the window

Open Comm can open the communication port the system selects

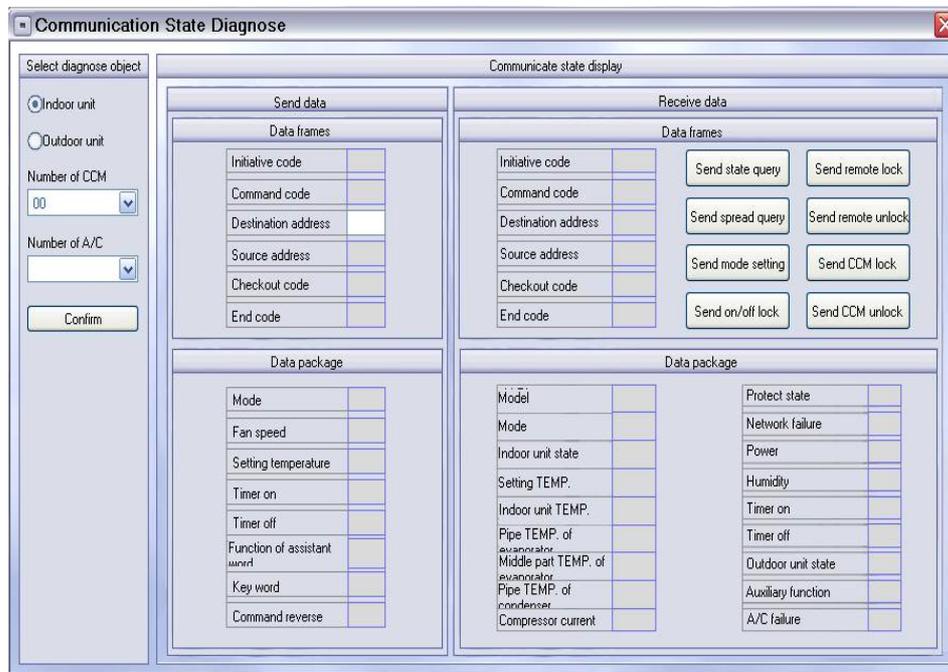
Clear can clear the contents of the window

2) . "Start" and "Stop" radio buttons

Start can restart communication

Stop is used to stop communication

### B. Communication status diagnosis window



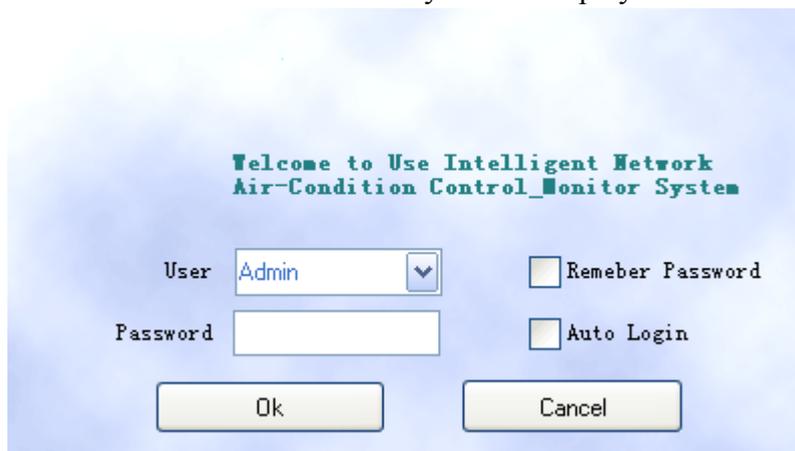
<Fig. 2-2>

Operation:

1. Select querying indoor or outdoor unit from the radio buttons on the upper left window
2. Then select the air conditioner No. for diagnosis. It consists of centralized controller No. and air conditioner No.. Or you can directly fill in the blank area at the data sending column with air conditioner No. followed by centralized controller No. The number shall be converted into hexadecimal number.
3. For sending command type button, when data return, the receiving data package will display data, or otherwise the contents are null.

### C. User logon

Double click the shortcut icon of new system to display the following window:



<Fig. 2-3>

1. User can be created in the database of system and selected through the drop down box of account in this window

- 1 ). If you select remembering password, you can logon to the system only by press OK each time.

- 2 ) . If you select auto logon, you can enter the system by pressing the user name and password each time.

2. User authorities

The users may be divided into super administrator, administrator and user.

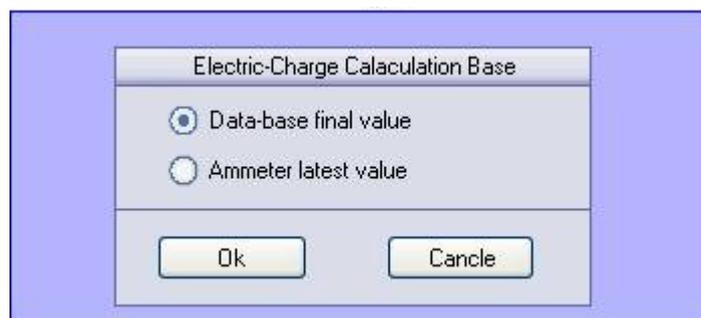
**Super administrator** has the authority to operate all the pages, including all the authorities such as communication diagnosis, communication status browse, system construction, query and control of air conditioners and centralized controllers, query of outdoor units and group schedule management.

**Administrator** has all the authorities of super administrator except communication diagnosis and communication status browse, and mainly has the function of site construction of system and system management.

**User** mainly has the function of main window, uniform setting window, indoor centralized controller window, air conditioner window, group operation, schedule management, report query, etc.

### D. Electricity billing base reading window

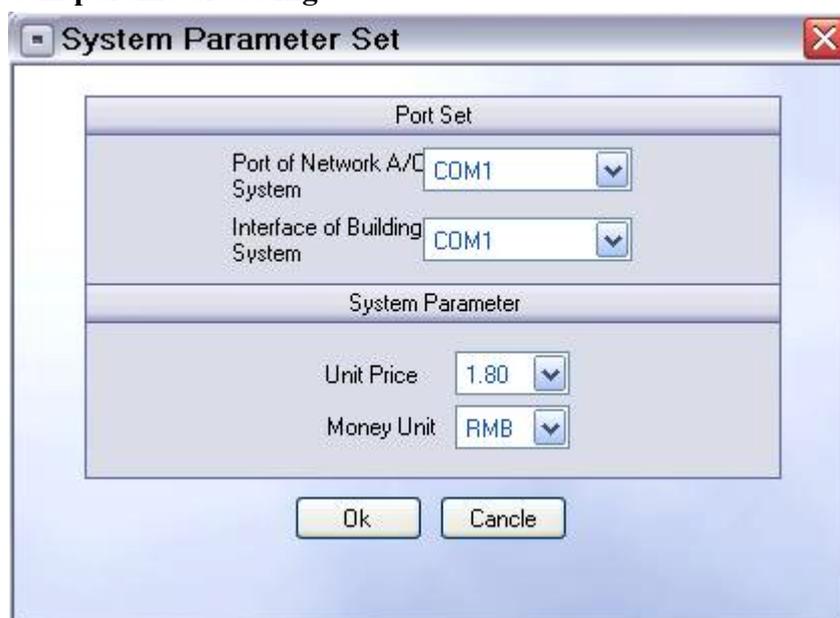
After the user name and password are entered, you can enter the billing base reading selection window, shown as follows:



<Fig. 2 - 4>

1. The system default electricity billing base is the last reading of the database.
2. If the latest meter reading is selected as the calculation base, the system checks the watt-hour meter in the first cycle during system operation without any calculation. Normally, the last reading of the database shall be used as the calculation base of electricity billing, except watt-hour meter replacement.

#### E. System parameter setting



<Fig. 2-5>

1. The port of network air conditioning system may be selected according to the actual condition of computer in use.
2. Building system interface is the port interfacing with LON gateway and shall be selected as per the actual condition.
3. Electricity rate is an important parameter and will be used in the report and actual calculation process.
4. Currency unit is the unit of money involved in our report.

### III. System construction

The system construction has the following steps:

1. Input of indoor and outdoor centralized controllers
2. Input of outdoor unit. A set is a collection of outdoor units under the outdoor centralized controller and any outdoor unit shall be under a set. All the outdoor units under a set are under the same centralized controller and so an outdoor set is different from the group of indoor units.
3. Input of indoor unit. After input of indoor centralized controller, outdoor centralized controller, set and indoor unit, the whole system is created. The operations afterward are specific to such components, including system scanning.

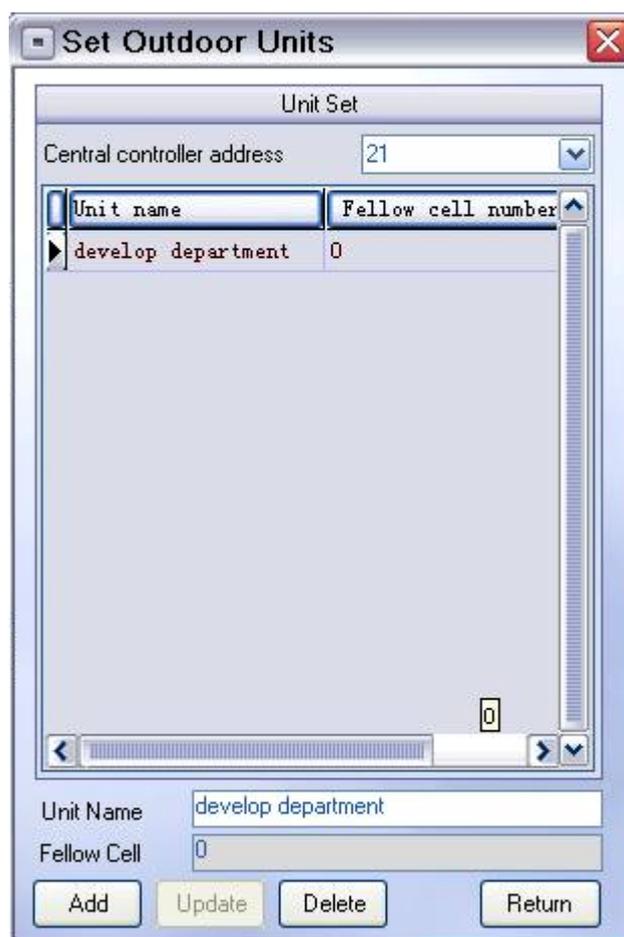
#### A. Input of outdoor centralized controller



<Fig. 3-1>

1. Select Outdoor, press “New” and the left list will display a blank line. Select the row and then input the name for centralized controller to be created under the centralized controller name. Select the icon used in the system. Finally, press “Update” to create the centralized controller in the system.
2. After creation, you can select and modify it from the list and then press “Update” button for updating.
3. It can be deleted from the list.

## B. Input of unit

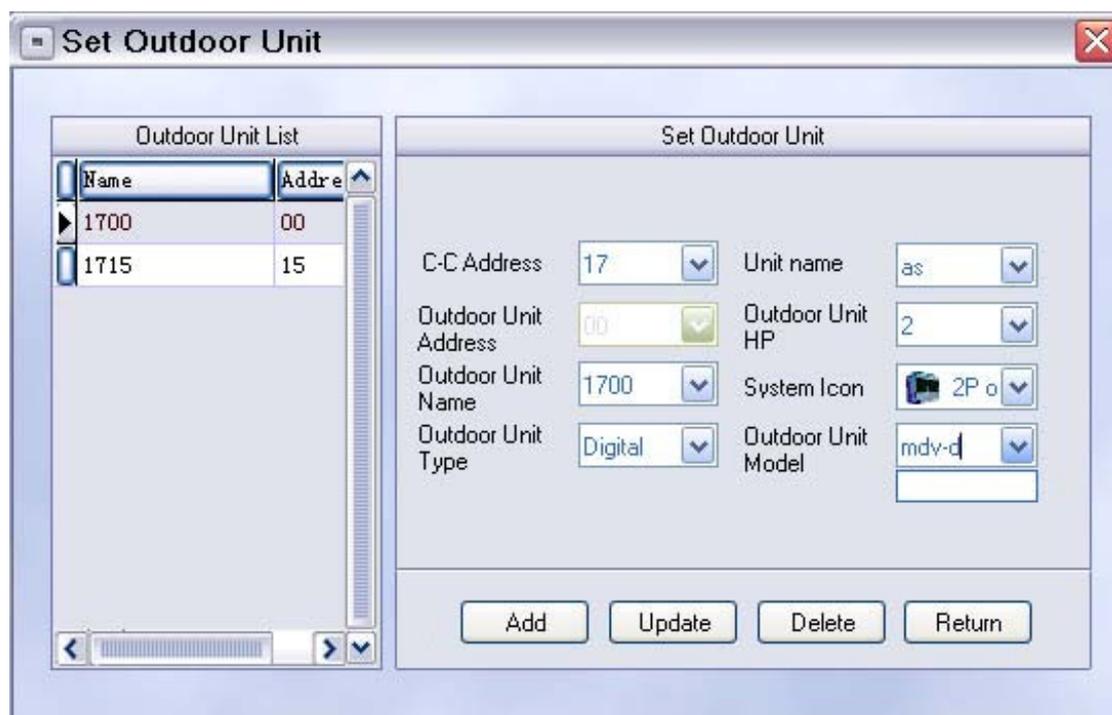


<Fig. 3-2>

After the outdoor centralized controller is created, a set can be created under the outdoor centralized controller.

1. Select outdoor centralized controller, and then all the sets under the centralized controller will be displayed in the list.
2. Press “New” and the list will display a blank item. Select it and input the name of set and after that press “Update” button.
3. The set can be deleted if it consists of no outdoor unit. Select the set to be deleted and then press “Delete” to delete the set.

### C. Input of outdoor unit



<Fig. 3-3>

1. To create an outdoor unit, you can select an address from the outdoor centralized controller address drop down box. Then all the outdoor units under the centralized controller are in the list.
2. Press “New” and then the list will display a blank line. Click the blank to input the address, name and model of the outdoor unit and its icon in the system. In the meanwhile select the set. Then press “Update” complete input of outdoor unit.
3. After selecting the address of centralized controller, click the outdoor unit to be modified in the left list. Then you may modify the outdoor unit parameters from the options on the right.
4. If an outdoor unit does not exist, select the outdoor unit and then press “Delete” to delete the outdoor unit.

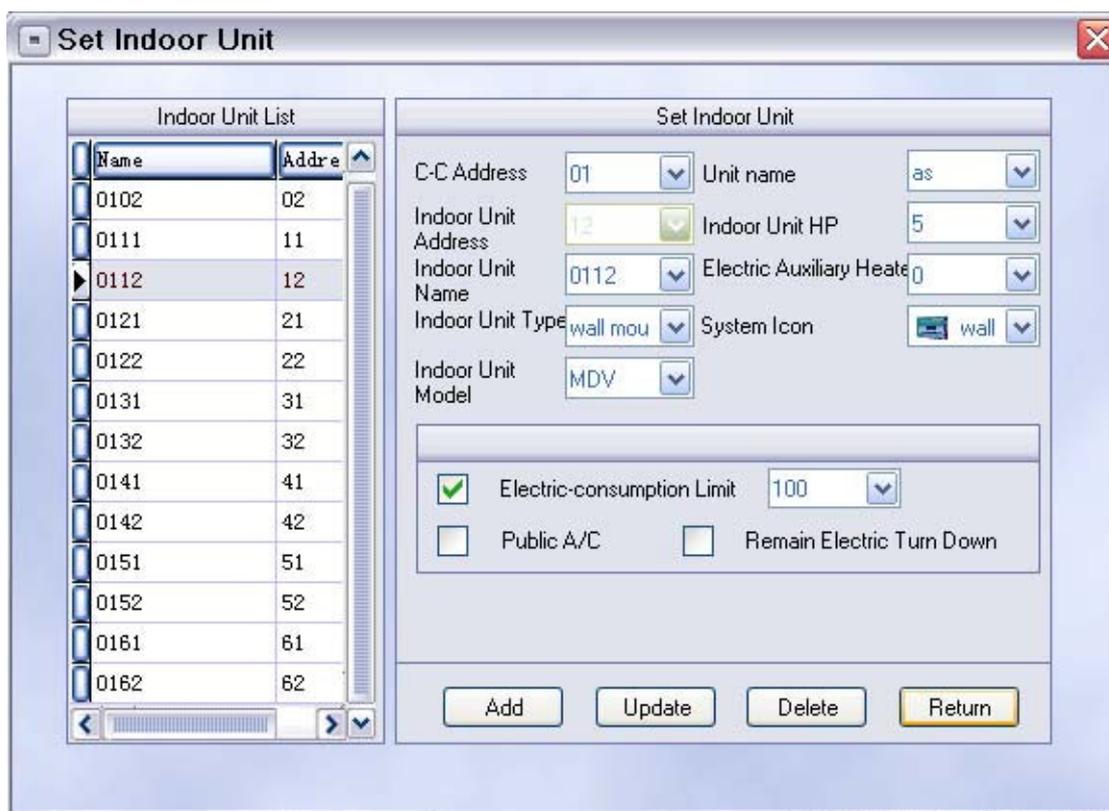
## D. Input of indoor centralized controller



<Fig. 3-4>

1. Select the centralized controller option from the menu to enter the centralized controller setting window. Then select indoor option and the left list will display the created indoor centralized controllers.
2. Press “New” and the list will display a blank. Click the blank and input the name of centralized controller to be created. Select the address of centralized controller and its icon to be used in the system. Then press “Update” and the centralized controller is ready.
3. The centralized controller to be modified may be selected from the left. Then modify the name of centralized controller and its icon in the system from the right options. After modification, press “Update” to update the changes into the database.
4. If an indoor centralized controller has no air conditioner and will not be used, the centralized controller can be deleted. During deletion, select the centralized controller to be deleted from the left list and then press “Delete” button. When the centralized controller still has air conditioners, a prompt box will be displayed that the centralized controller cannot be deleted. A centralized controller can be deleted if it has no air conditioner under control.

## E. Input of indoor air conditioner



<Fig. 3-5>

1. If you want to view the indoor units of a centralized controller, you may select the address of centralized controller through the centralized controller address option. So the left air conditioner list will display all the air conditioners under the centralized controller.
2. If an air conditioner needs to be created under the centralized controller, press “New” to display a blank at the bottom of the left list. Click the blank and then input at the right options the name of indoor unit, centralized controller address, air conditioner address, the set connected in the system, capacity of indoor unit, capacity of auxiliary electric heater for the indoor unit, type of indoor unit, indoor unit model and its icon displayed in the system.
  - 1) . When the electricity bill with cost limit is calculated in the system, the electricity limit option may be selected. Then fill in the specific electricity quantity. If electricity balance of a month can be carried over to the next month, the electricity balance carrying over option shall be selected.
  - 2) . Air conditioners in public area indicate that they serve the common area, and their electricity costs shall be shared if they are ticked as common air conditioners.
  - 3) . After all the options are filled in, directly press “Update” to create the air conditioner.

3. If the basic parameters of an air conditioner shall be changed, select the address of centralized controller of the indoor unit and select the air conditioner from the left list. Then all the information about the air conditioner will be displayed on the right. Modify the parameters and after that directly press “Update” and the modification is complete.
4. When an air conditioner does not actually exist, delete it as per the following steps. Select the centralized controller for the air conditioner to be deleted; select the air conditioner to be deleted from the left list and then press “Delete” directly to delete the air conditioner from the system.

#### F. Input of group

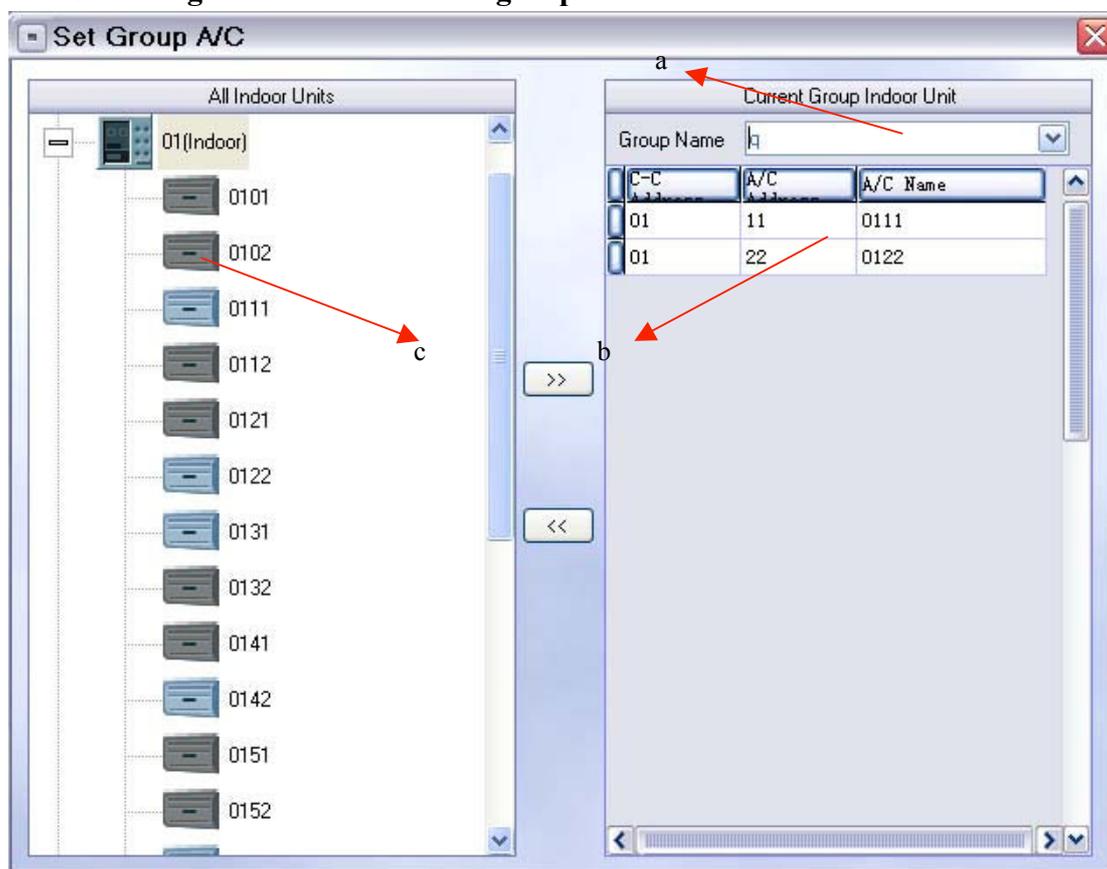


<Fig. 3-6>

1. Create. When entering the group parameter setting window, all the groups of the system will be in the list. To create a new group, press “New” and the list will display a blank. Click the blank and input the name of the new group in the group name box. Then press “Update Group” button and the new group is created.
2. Change of group name. To change the group name, enter the group parameter setting window directly and click the group to be changed. Then input a new name in the group name box and press “Update Group” button. Then the group name is changed.

3. Delete a group. When there is no air conditioner in a group, you can delete the group by selecting it from the list and press “Delete Group” to delete the group.

### G. Setting air conditioners of a group



<Fig. 3-7>

1. Select the group to be maintained in a and all the indoor units of the group will be displayed in list b.
2. Select the indoor unit to be added into the group from tree c and then press “13

## V. System operations

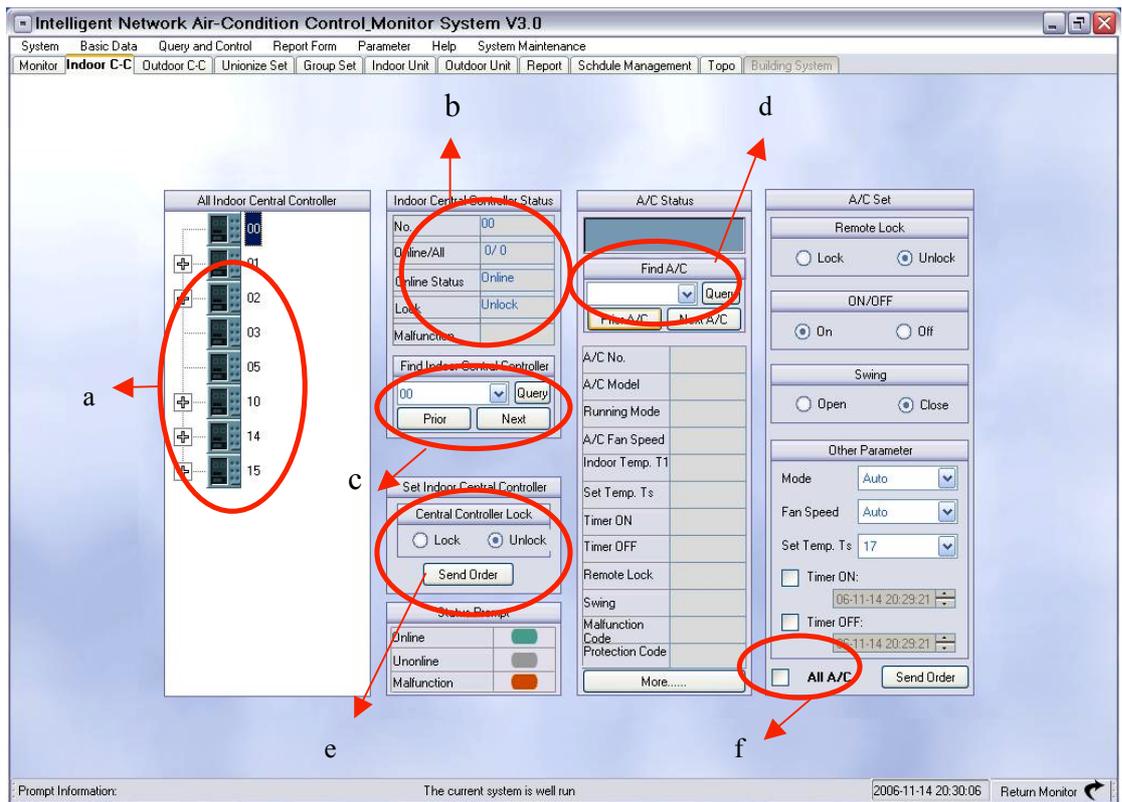
### A. Main window



<Fig. 4-1>

1. An icon represents an operation window in the system.
2. The LOGO can be easily changed into other LOGOs. Double click the LOGO icon in the window and the window of the selected icon will be displayed. Then you can change the LOGO.
3. You can enter the specific function operation window from any icon in the window.

## B. Indoor centralized controller window

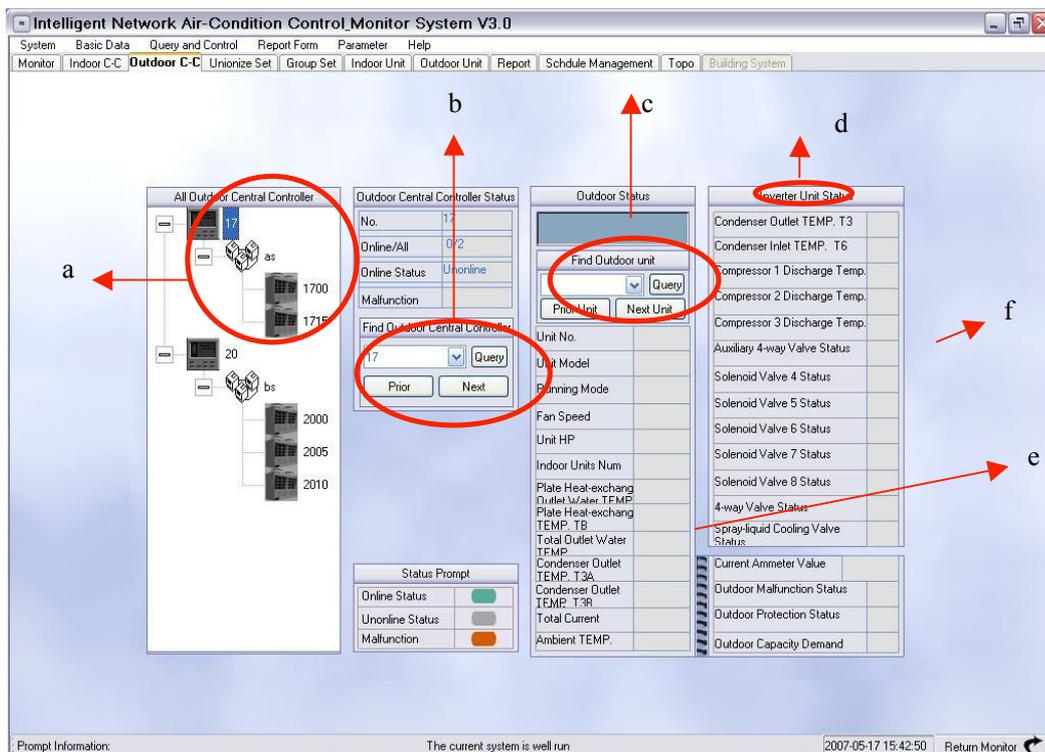


<Fig. 4-2>

1. In this window, the system automatically builds a tree structure as per the relations between indoor units and centralized controllers, as shown in a. Direct click the icon of centralized controller and the connected indoor units will be displayed. Light green indicates on line and normal operation, but grey indicates off line and reddish brown indicates on line and faults.
2. The centralized controller status display can be referred to b, displaying the centralized controller No. and the number of on-line air conditioners under the centralized controller.
3. c is the centralized controller selection box. The selection box at d on the right is linked with centralized controller selection box and lists all the air conditioner names under the centralized controller selected in the centralized controller selection box.
4. The indoor unit selection box d is linked with c.
5. The centralized controller setting box e can lock and unlock the centralized controller. The centralized controller will be locked upon a locking command being successfully sent. Then the locked icon of centralized controller will be displayed and the air conditioners under it cannot be operated from the centralized controller level. The locked icon of centralized controller will disappear after the unlocking command is successfully sent to the locked controller and then the air conditioners can be operated through the centralized controller.

6. The air conditioner setting boxes can be divided into remote control settings, On/Off settings, swing setting, mode setting, fan speed setting, temperature setting and timing setting.
  - 1) . If “All air conditioners” under f is not ticked, the air conditioner setting box is to set up the air conditioner selected from the air conditioner selection box d.
  - 2) . If “All air conditioners” under f is ticked, the settings are valid for all the air conditioners under the centralized controller selected in c.
  - 3) . The centralized controller settings include two options: remote controller locking and unlocking. The default is unlocking. When locking is selected, the selected air conditioner will not receive remote controller setting signals after successful locking, but the upper level settings are still valid. When the remote controller of air conditioner is locked, the remote controller can be unlocked and then the indoor unit can receive remote controller signals.
  - 4) . On/Off setting is used to set up the air conditioner switching On/Off. When timing on or off is selected, On/Off setting is shielded and cannot be operated.
  - 5) . Mode setting is used to set up the operation mode of air conditioner, including Cooling, Heating, Auto, Dehumidifying and Fan. The fan speed options include high, low and auto. The temperature setting can vary between 17 ~ 30°C.
  - 6) . Timing On/Off option, if not ticked and selected, the timing on/off time is not available. When either option is selected, all the setting information cannot be sent to the indoor unit immediately through “Send”. Instead, such information will be saved in the database as per the selected timing on /off status. If timing on is selected only, all the setting information except air conditioner On/Off will be saved, including set timing on time. When the set timing on time is up, the setting information, including switching on will be sent to the indoor unit. If timing off is selected, only the timing off is saved and switching off command will be sent upon the timing off time.

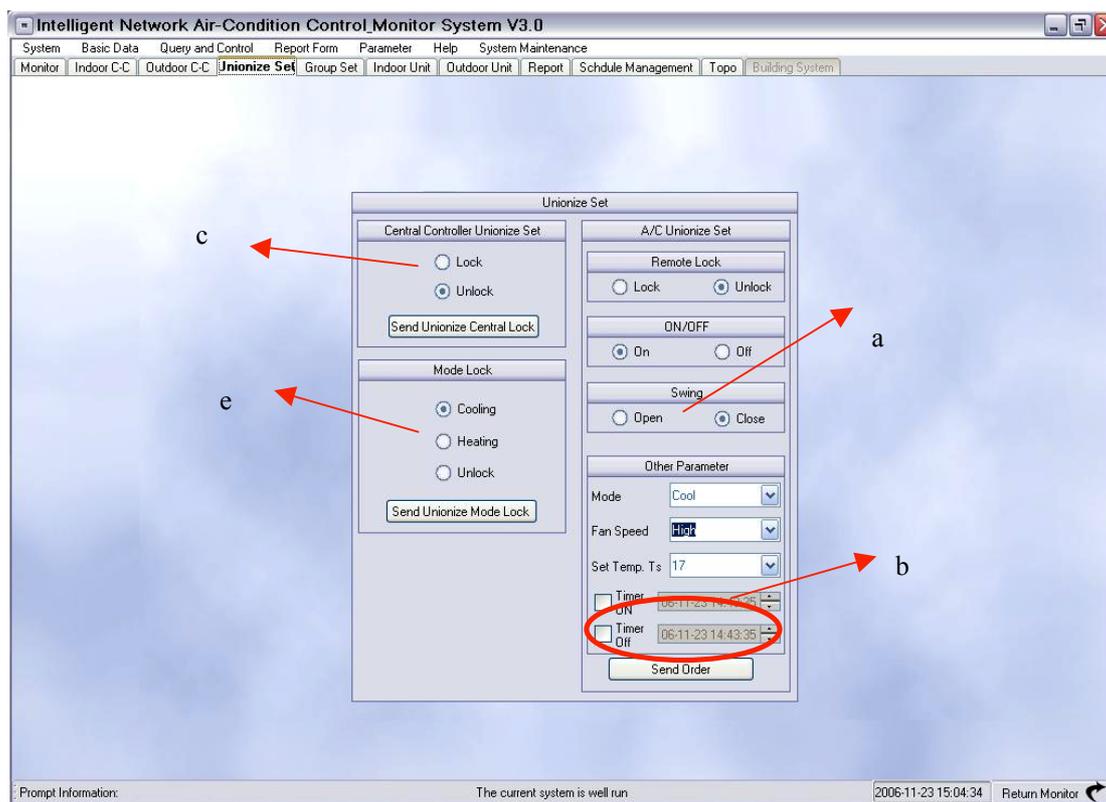
### C. Outdoor centralized controller query window



<Fig. 4-3>

1. a is made of the tree consisting of outdoor centralized controllers, sets and outdoor units. The set refers to the outdoor units under the same refrigeration system.
2. b is the centralized controller selection box. After the centralized controller is selected, the outdoor units in c will change with the centralized controller. Press “Query” to display the information of centralized controller. Press “Previous” to query for the information of the previous outdoor centralized controller and “Next” for the information of the next outdoor centralized controller.
3. c refers to the outdoor unit selection box and selection of an outdoor unit under the selected outdoor centralized controller.
4. d refers to the type of outdoor units. f displays the specific information about a specific model, including digital, frequency variable and water type outdoor units. If no specific information about the outdoor unit is available, the default is frequency variable.
5. e displays the common information of all the outdoor units.
6. The outdoor centralized controller and outdoor units can only be queried and cannot be controlled.

## D. Uniform setting page

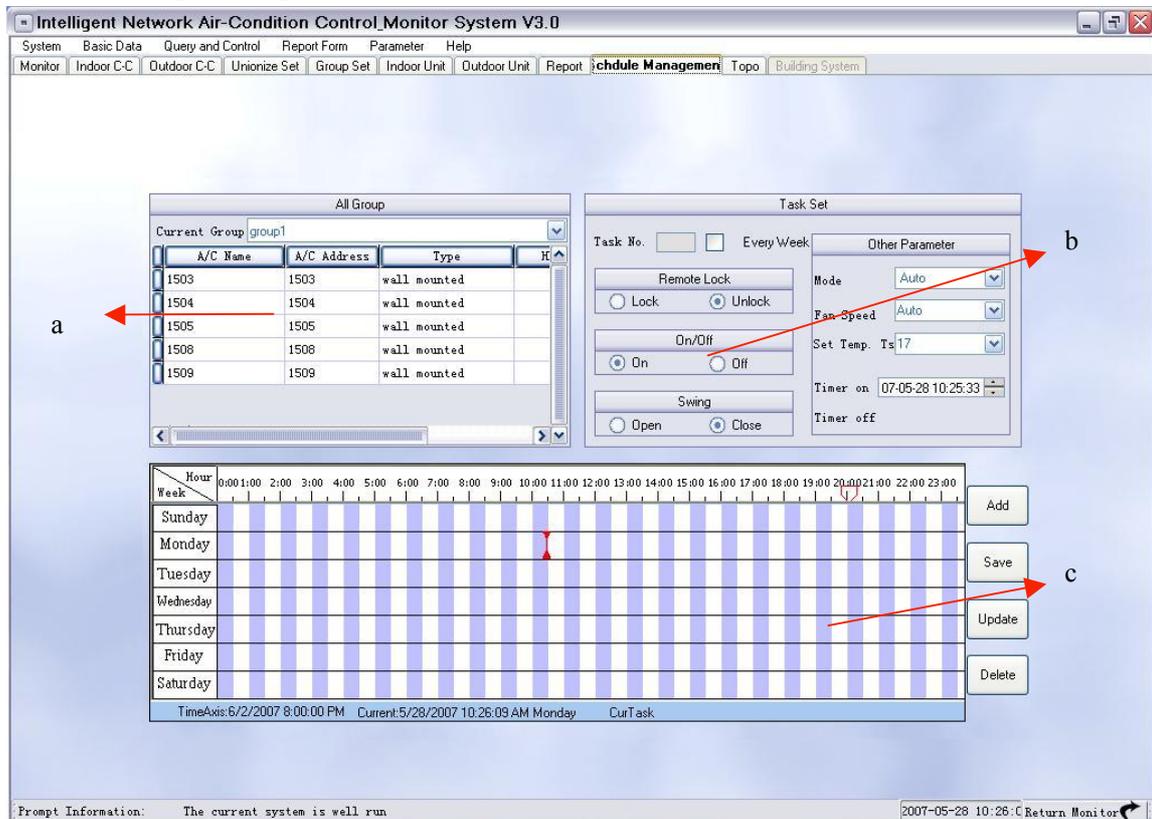


<Fig. 4-4>

1. Uniform setting is specific to all the indoor units within the system and includes mode setting, locking, unlocking and mode locking and unlocking for indoor units.
2. a is the air conditioner setting column, where the remote controller locking setting is to send the locking commands to all the indoor units so that they cannot receive remote controller signals. The default is unlocking. On/Off option refers to sending commands to switch on or off the air conditioner. In case of Off, the swing, mode, fan speed or temperature setting is disabled. Such settings are enabled if On is selected. Swing function includes swing On /Off with Off as the default. Mode option includes cooling, heating, fan, dehumidifying and auto. The fan speed of indoor unit fan may be high, medium, low and auto. The temperature can be set within 17 ~ 30°C. After “Send Command” is pressed, the system sends commands to each indoor unit for setting.
3. b is the timing On/Off setting option. When either option is selected, On/Off option will be shielded. If timing On is selected, press “Send Command” to save all the settings and switching on information into the database. If timing Off is selected, press “Send Command” to save the switching off information into the database. All the timing information of each indoor unit can be displayed at the query system

- when the timing time is not up. When timing time is up, all the setting information will be sent to the indoor units and the timing information will then be removed if you query any air conditioner in the system.
4. c is the locking option of centralized controller, including locking and unlocking. In case of locking, all the controller key operations will be disabled after all the indoor centralized controllers receive a locking command. Select centralized controller unlocking, and then press “Send uniform centralized controller locking command” to unlock all the indoor centralized controllers after successfully sending the commands.
  5. e is the mode locking selection box. When only one mode is allowed for the whole system, select cooling or heating from the option, and then press “Uniform mode locking command”. After it is successfully sent, the operation mode of indoor unit cannot be changed through a remote controller or centralized controller. But the indoor unit can be unlocked or other operation mode may be used from the upper level. When the mode locking is applied to all the indoor units, select unlocking and press “Uniform mode locking command” to unlock the indoor units and the mode of all the indoor units can be changed after the command is successfully sent.

### E. Group settings



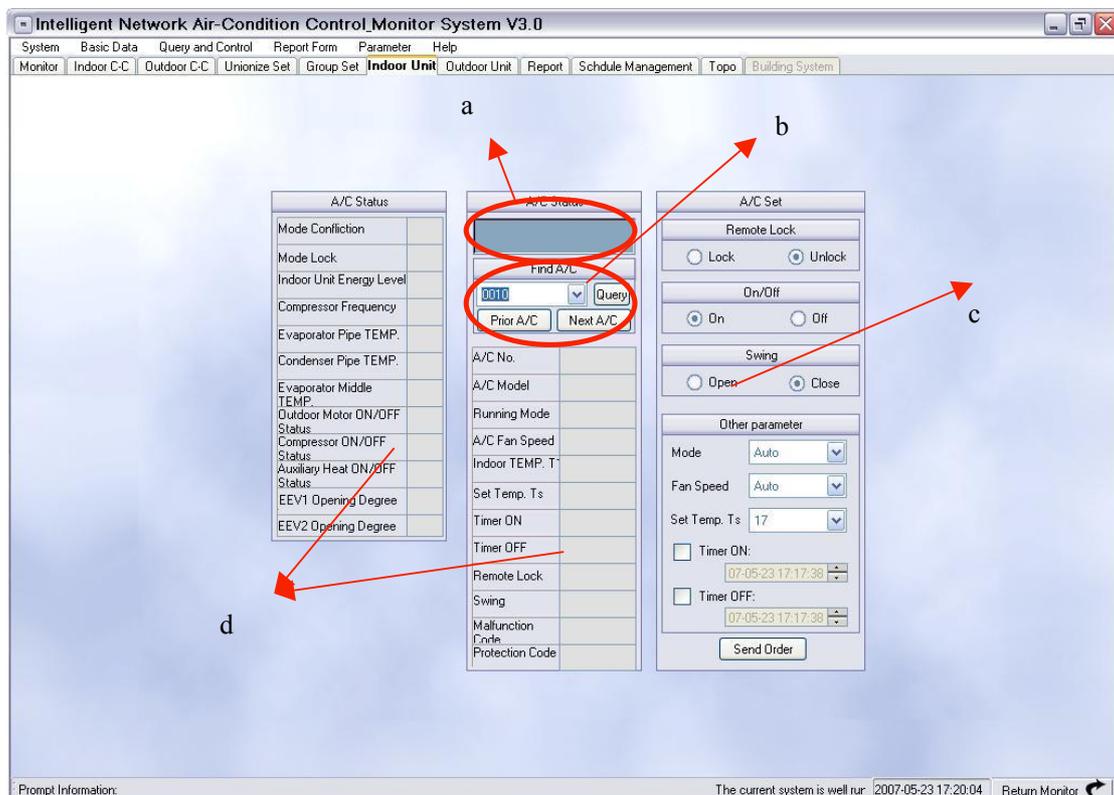
<Fig. 4-5>

1. a consists of the group name drop down box and selected

indoor unit of group. After a group is selected, all the indoor units under the group will be in the list.

2. b is the group setting box and includes remote controller setting, On/Off setting and operation mode setting, fan speed of indoor unit and temperature setting. As for the previous indoor unit settings, direct press “Send Command” after proper settings to send such settings to all the indoor units of the group.
3. After a group is selected in a, the schedule management information related to the group will be displayed in the schedule management box c. The schedule management information consists of a number of tasks, which are all switching on tasks - starting from switching on and ending at switching off. The schedule management box consists of many arrow lines. When we need to know the setting of a specific task, select the arrow line of the task (it will turn red after selection). Double click to enter the schedule management page. So we can view the specific setting of the task.

### F. Indoor unit window

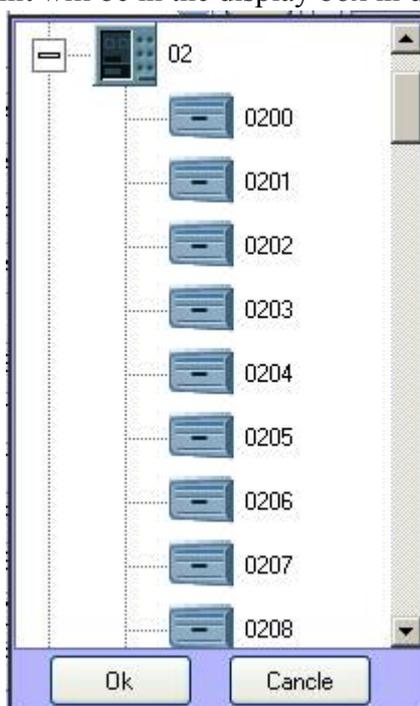


<Fig. 4-6>

1. a is used to display the status of selected indoor unit. After Query is pressed, the icons in box a display the status of the current indoor unit. In the display box, there is icon of

indoor unit operation mode, icon of timing setting, icon of indoor fan speed and locking icon. For the mode icons, “❄️” indicates Cooling, “❄️” indicates heating, “🕒” indicates timing setting, “🌀” indicates high speed of indoor fan, “🌀” indicates low speed of indoor fan, “🔒” indicates remote controller locking or mode locking setting.

2. b is the indoor unit selection box. Click the dropdown box “▼”, and the tree consisting of indoor units and centralized controllers will be prompted, as shown in <Fig. 4-7>. After the indoor unit is selected from the tree, press “OK” and then the name of indoor unit will be prompted in the dropdown box. Then press Query and the relevant information of the indoor unit will be in the display box in d.



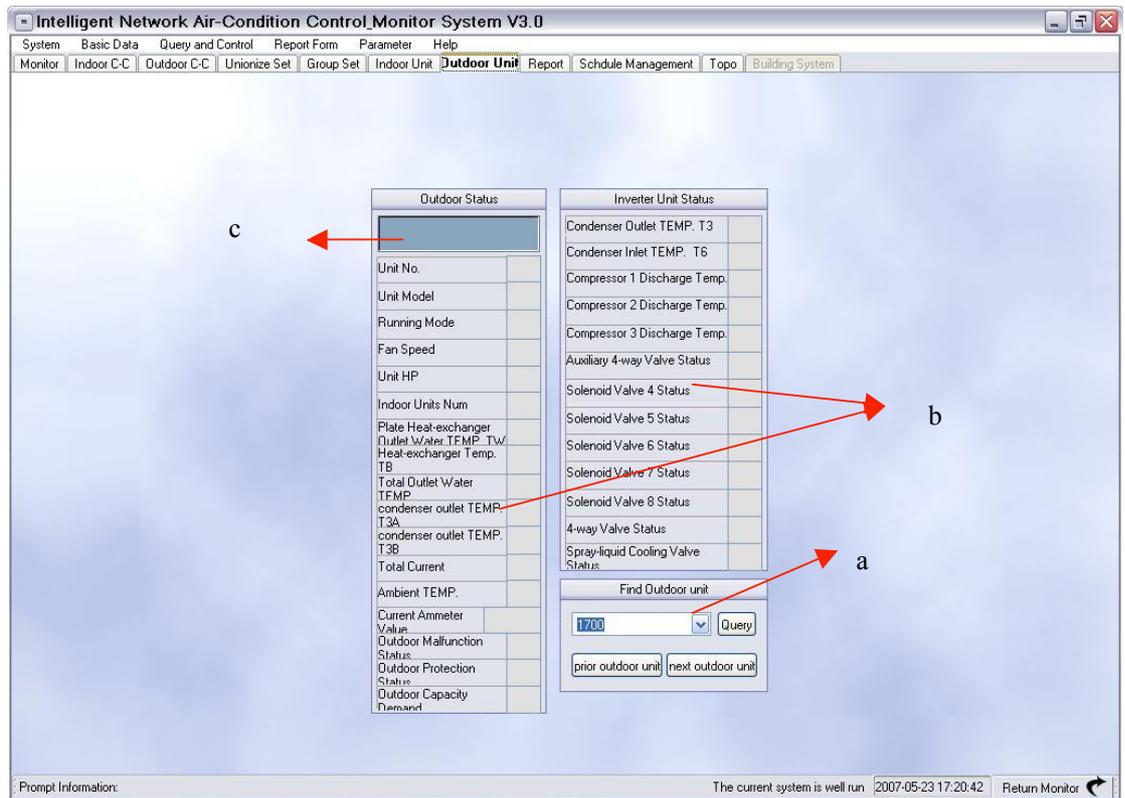
<Fig. 4-7>

3. c is used to set indoor units. It is almost the same as the indoor unit setting in indoor centralized controller window. But there is no air conditioner selection box here. So it can only set up the air conditioner selected in b.

4. d is used to display the indoor unit operation status. If no operation information is available for an indoor unit, a blank is used. Timing information may be expressed as “2006-06-20 14”, or “0: 0: 00” in case of none. After a timing

task is fulfilled, the air conditioner returns to non-timing status. In case of mode conflict, the word “conflict” will be displayed behind the mode and at the mode conflict column. The information displayed at the status information display column and the information of database is simultaneously updated.

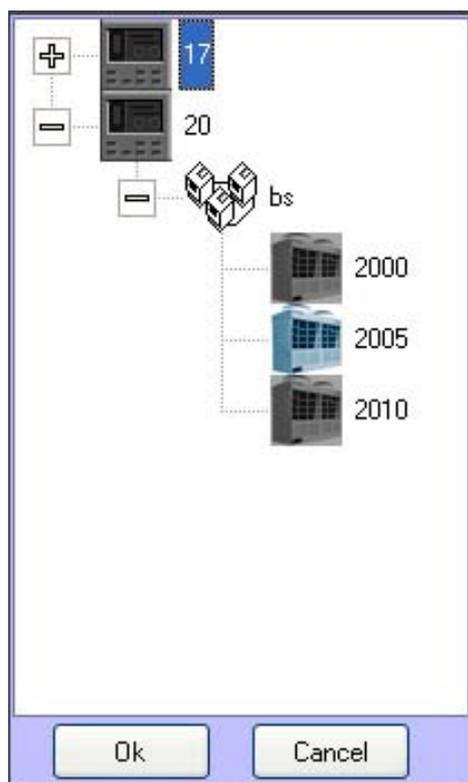
### G. Outdoor unit window



<Fig. 4-8>

1. Only query function is available for outdoor units and so it has only one outdoor unit selection column, outdoor unit status display column and outdoor unit status marking. The displays at outdoor unit status display column are updated simultaneously with database updating. The latest current status will be reflected only if Query button is used.
2. a is the selection column of outdoor unit. Press outdoor unit drop down box “

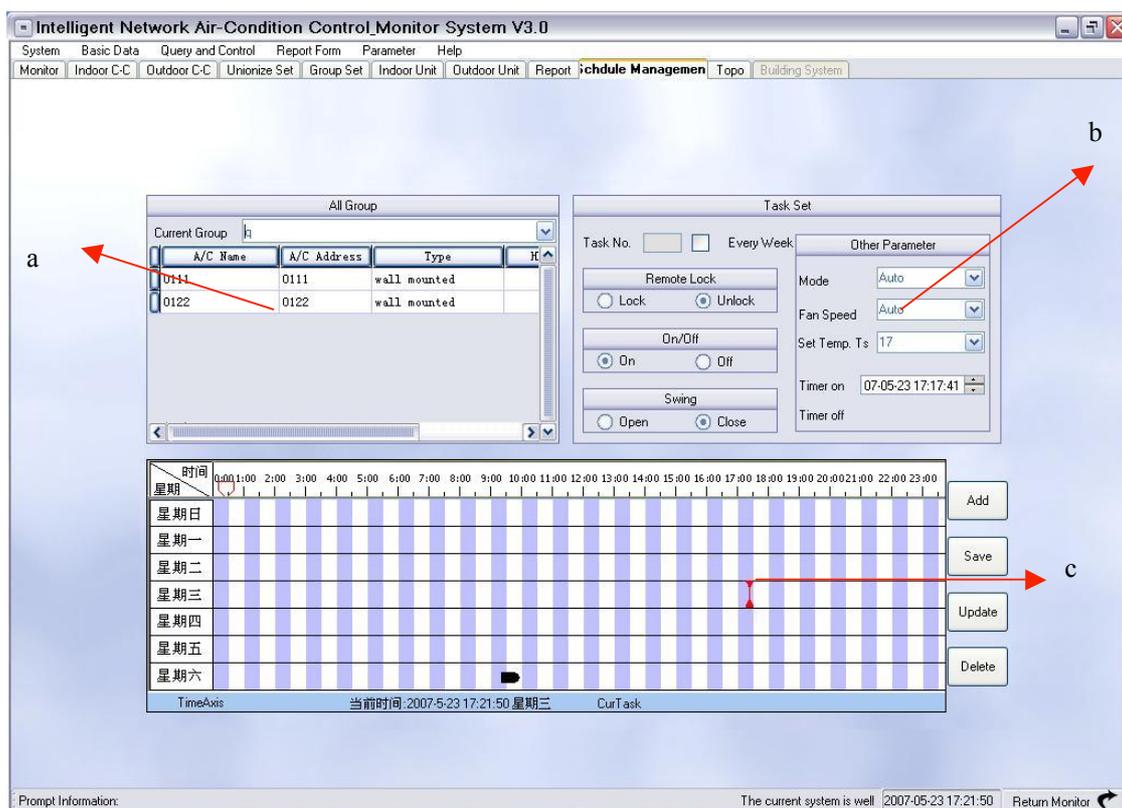
22



<Fig. 4-9>

3. b is the outdoor unit status display column to display the latest status of selected outdoor unit in the specific items in the column. A blank is used if no status information is available for an outdoor unit. It is updated simultaneously with the database updating.
4. c is the status marking column of outdoor unit to mark the operation mode of outdoor unit and outdoor fan status. In the operation mode, “❄️” indicates Cooling mode, and “❄️” indicates Heating mode. For the outdoor fan, “🌀” indicates High and “🌀” indicates Low.

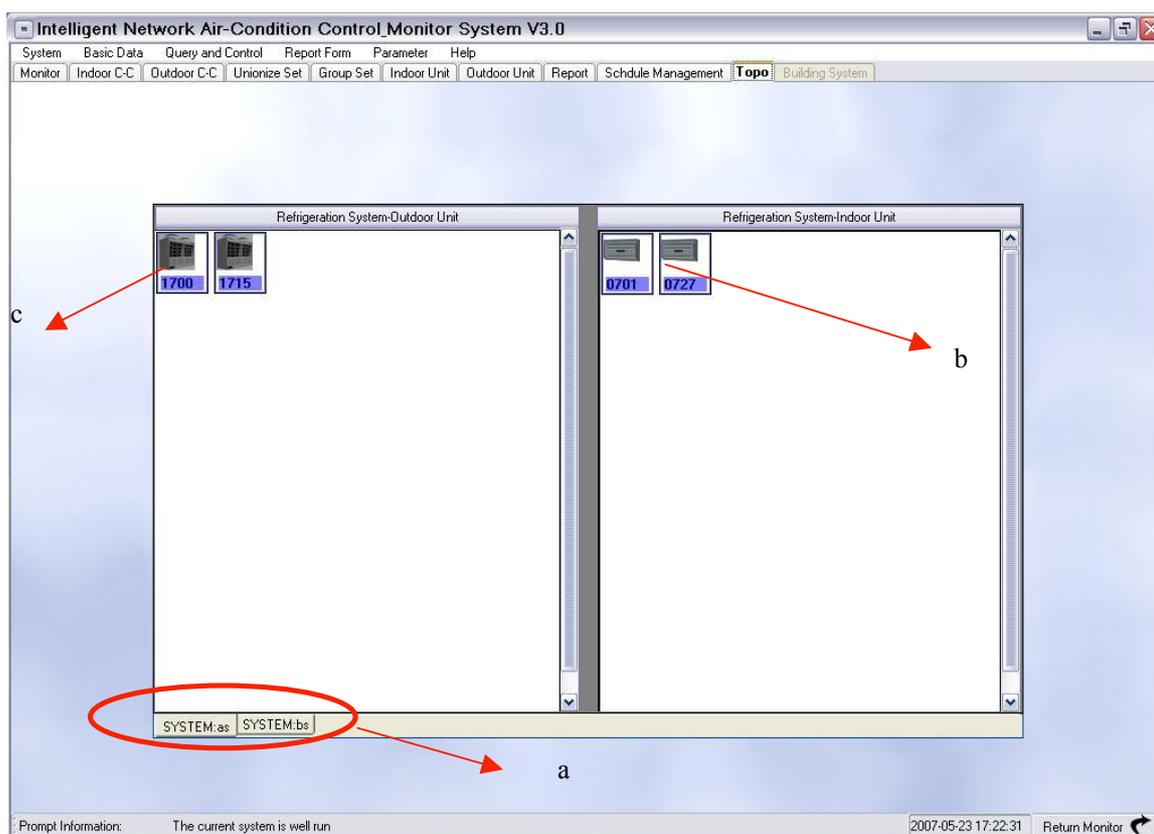
## H. Schedule management page



<Fig. 4-10>

1. The group selection column a, can select a specific group and display the information related to the group. When a group is selected from the group selection box a, c will display all the set tasks for the group. b is the task setting column.
2. All the tasks of the group are switching on tasks, namely starting from switching on and ending at switching off.
3. After a group is selected, you may delete, modify and create tasks.
4. To add a new command, firstly press “New” and then select the items in setting column b one by one. The task setting is basically the same as the setting of indoor unit, but On/Off option cannot be operated. The system default is that all the tasks are switching on tasks. After all the settings are selected, the task can be set as a weekly task. If it is set as a weekly task on every Tuesday, task will be executed every Tuesday. If it is not set as a weekly task, the task will be executed when it is time and will be deleted after execution. After the above operations, press “Save” and a new task is created. You can view the task from c.
5. To modify a task, you may select the task from c and then the setting of the task is displayed in b. Then the setting can be modified in b and after that press “Save” and the task modification is OK.
6. To delete a task, you only need to select the task in c and then press “Delete” to delete the task.

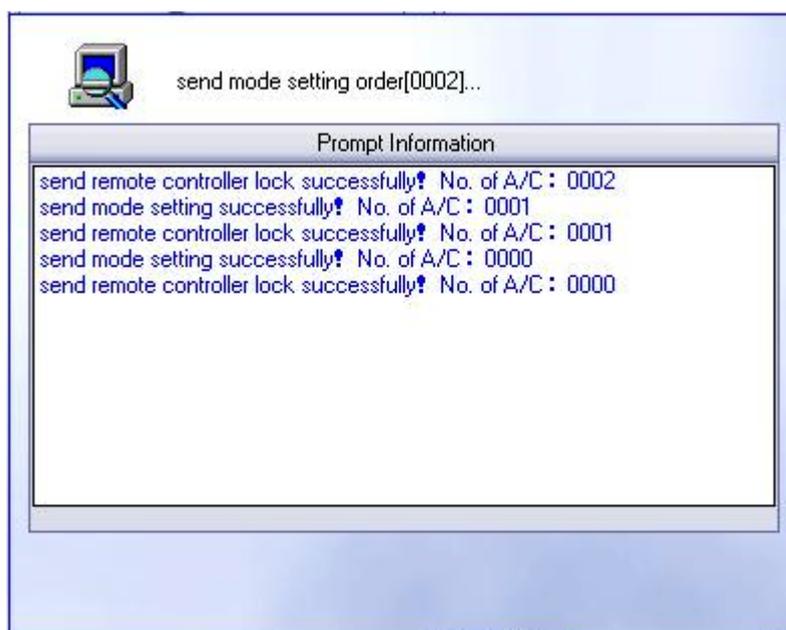
## I. Refrigeration system topology



<Fig. 4-11>

1. Refrigeration system TOP diagram is used to connect the outdoor units with indoor units within the same refrigeration system. So you can view the distribution status of system visually.
2. a lists all the refrigeration systems within the system and the refrigeration systems have the name of outdoor sets.
3. Click any refrigeration system in a and b and c will display all the indoor units and outdoor units of the refrigeration system. The indoor unit is represented with the icon of indoor unit in the system. Likewise, the outdoor units are represented with their icons in the system.
4. In b, when we move the cursor to any icon, the complete name of the indoor unit will be displayed through a small mark. When we press any icon, we will enter the indoor unit page and meanwhile the latest status of the indoor unit will be displayed.
5. The outdoor unit operations in c are the same as the indoor unit operations in b. The difference is that to press outdoor unit icon will skip to the outdoor unit window and the latest information of outdoor unit will be displayed.

## J. System command sending prompt box



<Fig. 4-12>

- 1 The system sends commands in two forms – to send commands manually, and the system sets timing and group task commands. If the commands are manually sent successfully, the sending box will be automatically closed after sending. Unsuccessfully sending commands shall be manually closed. The auto commands triggered by the system will be closed automatically upon completion of sending.
2. The type of command sent and successful or unsuccessful sending will be listed in the sending box.

## V. Electricity allotment and report

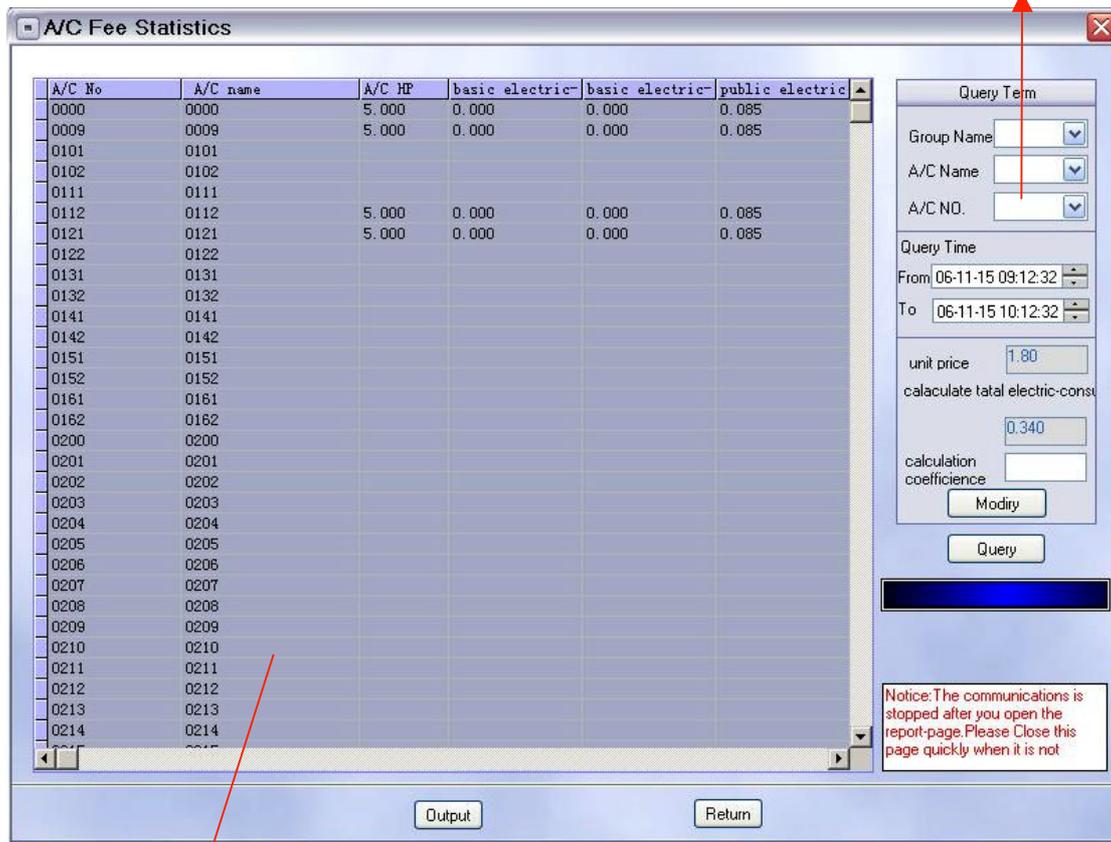
### i. Electricity allotment principle

1. The system allotment adopts proration and the electricity for proration is mainly the electricity consumption of outdoor units and of indoor unit fan and auxiliary electric heater.
2. The indoor units of the same refrigeration system share the electricity consumption of the outdoor sets of the refrigeration system. The indoor units outside the system do not share the electricity of the outdoor sets of the refrigeration system.
3. The electric bill of an indoor unit in certain time period can be divided into two parts: basic electricity and shared electricity.
  - 1) . The basic electricity includes the electricity consumption of the indoor unit due to operations in Cooling, heating or fan mode.

- 2) . The shared electricity includes electricity consumed by outdoor units when all the indoor units are in standby status, as well as the electricity consumed by outdoor set(an administrator may log onto the system to select to incorporate this portion of electricity or not) when the whole refrigeration system runs normally but the billing system has some faults.
4. After the system inquires the condition of all the indoor units and outdoor units, it will distribute the electricity according to the inquired information. Meanwhile, it will count indoor electricity consumed according to the condition of indoor fan and electrical auxiliary heater.
  5. For the indoor unit which setting to public A/C, the electricity counted each time will be considered as public electricity and then distribute to each indoor unit according to the indoor capacity.
  6. For the A/C which setting electricity limited, when the electricity consumed reached limited value, as long as the system detect the running condition of this A/C is ON, it will send a OFF command to this one and lock the remote controller at the same time. If the A/C have been selected “Remain Electric Turn Down”, when the electricity limited of a month haven’t been used up, the remainder and the quantity of next month will add up to be the total quantity of next month.
- Note: The final explain authority belongs to our company. If this system has been adopted as fee distribute principle, the final user need to approbate this system fee-distribute principle.

**ii. Report**

**A. Air conditioner billing statistics sheet**



b

<Fig. 5-1>

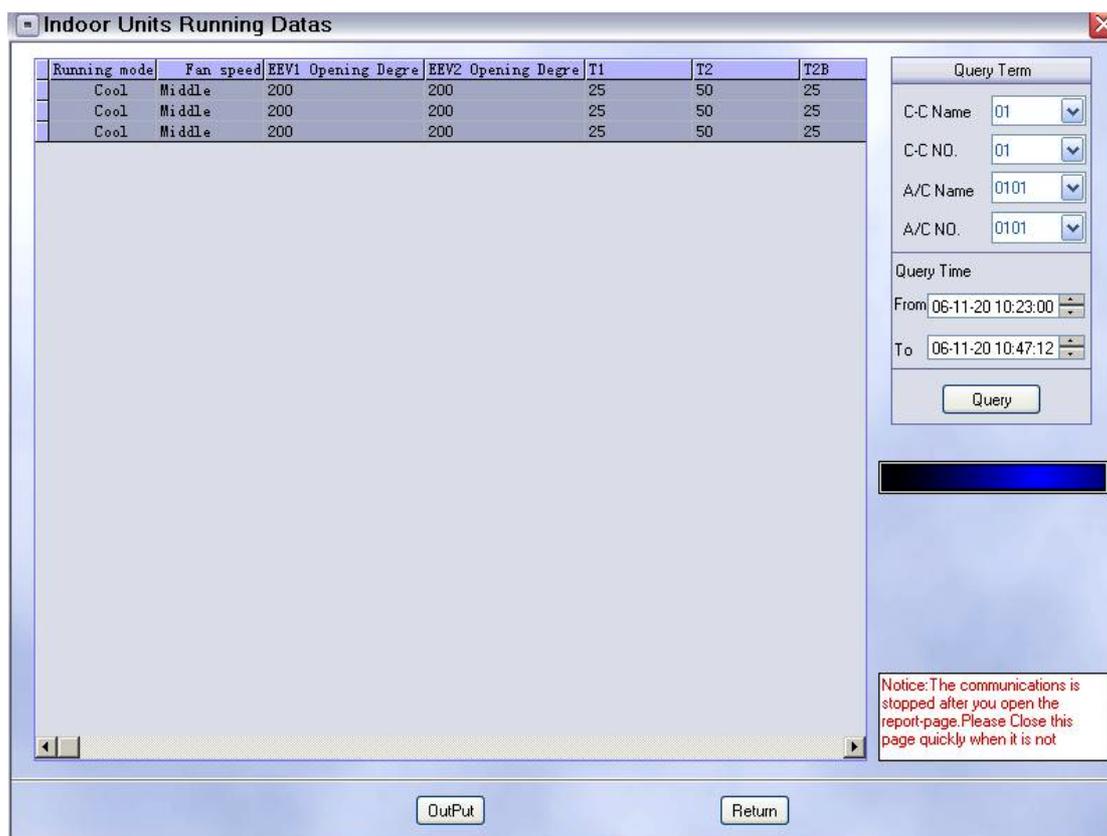
1. The billing statistics is based on groups and the billing data of all or individual air conditioners of the group can be printed out.
2. The electricity fees for any time period can be queried for and printed.
3. The electricity bill consists of two parts: basic electricity fee and shared electricity fee. The fee of each indoor unit for the time period is displayed in the total electricity fee item in the report.

## B. Detailed electricity bill

<Fig. 5-2>

1. The detailed bill is the list for a certain time period as per the On/Off information of indoor units. It is similar to a telephone bill. The detailed bill of the group of air conditioners or an individual air conditioner can be output.
2. The bill for any time period can be output.
3. All the output bills only include basic electricity fees without shared electricity fees.

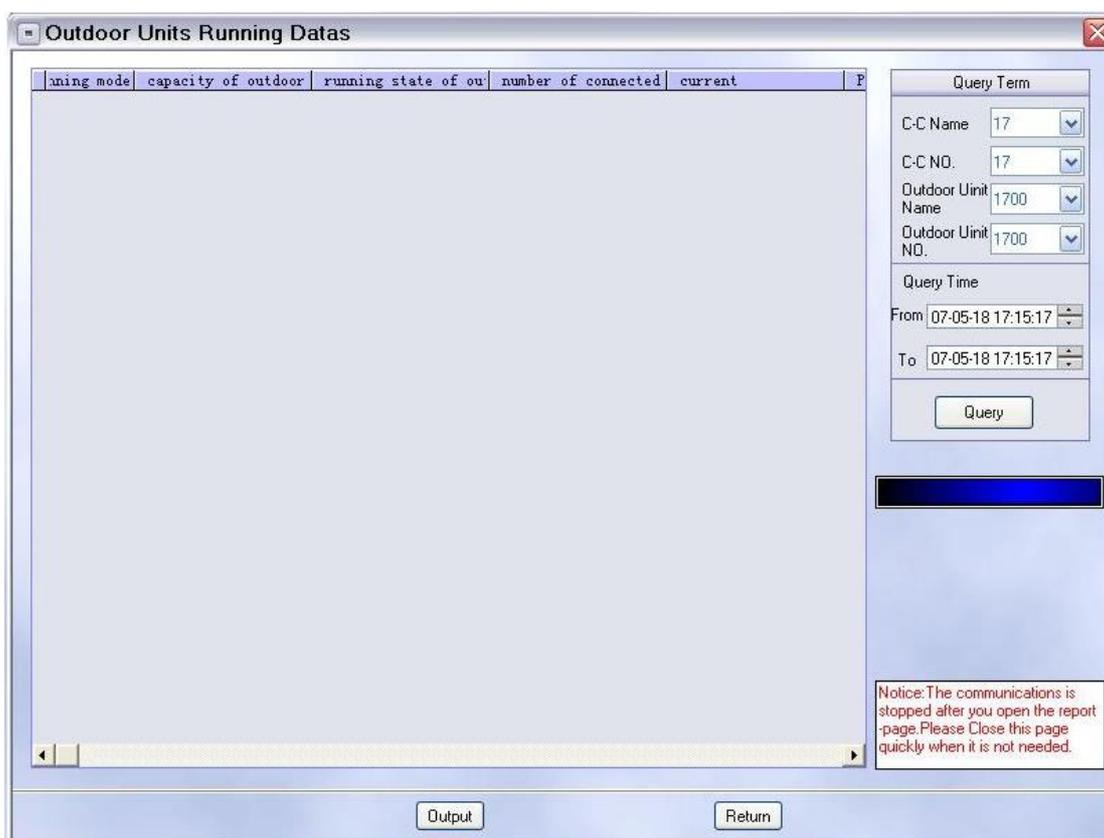
### C. Operation data of indoor units



<Fig. 5-3>

1. The indoor unit operation data report is the list of operation data of indoor units under query for a certain time period.
2. Only the data of one indoor unit can be outputted and the maximum time period is 7 days.
3. The report is used to analyze data during maintenance and it can facilitate identification of causes for faults.

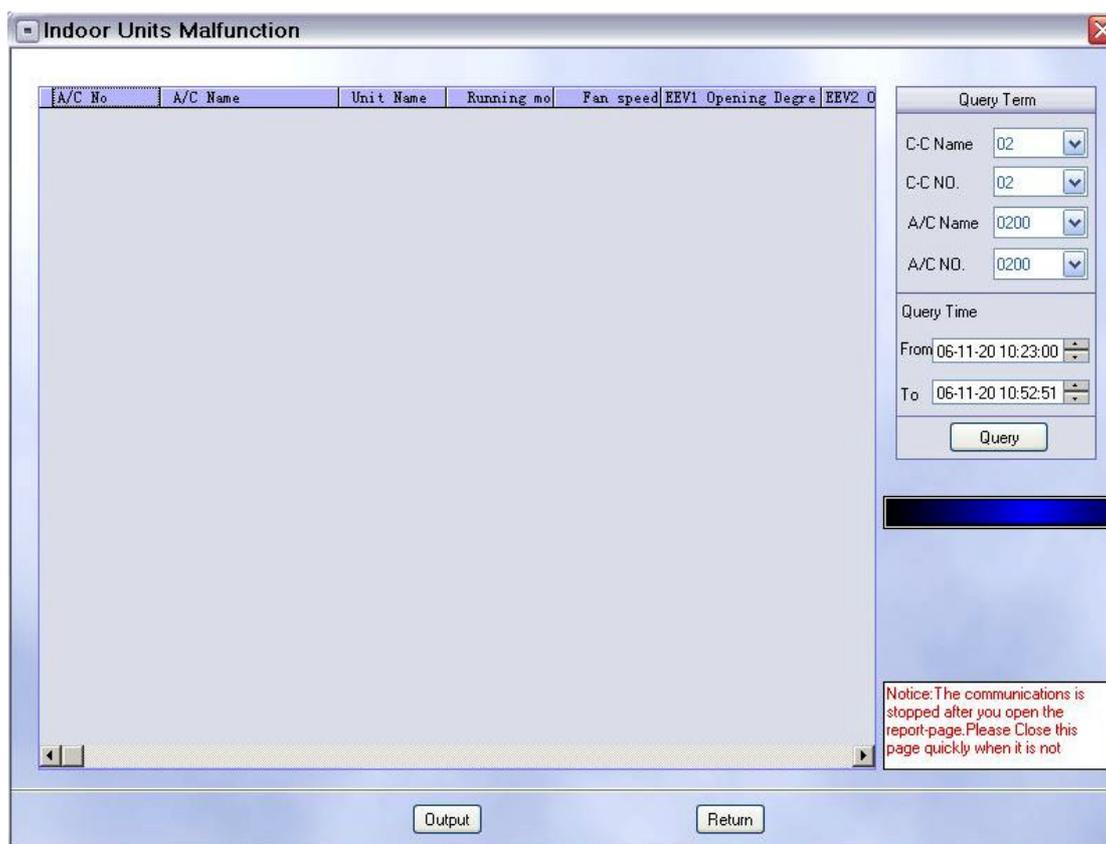
### D. Operation data of outdoor units



<Fig. 5-4>

1. As the operation data of indoor units, the outdoor unit operation data report is the list of operation data of outdoor units under query for a certain time period.
2. Only the data of one outdoor unit can be outputted and the time period is 7 days.
3. The report is used to analyze data during maintenance and it can facilitate identification of causes for faults.

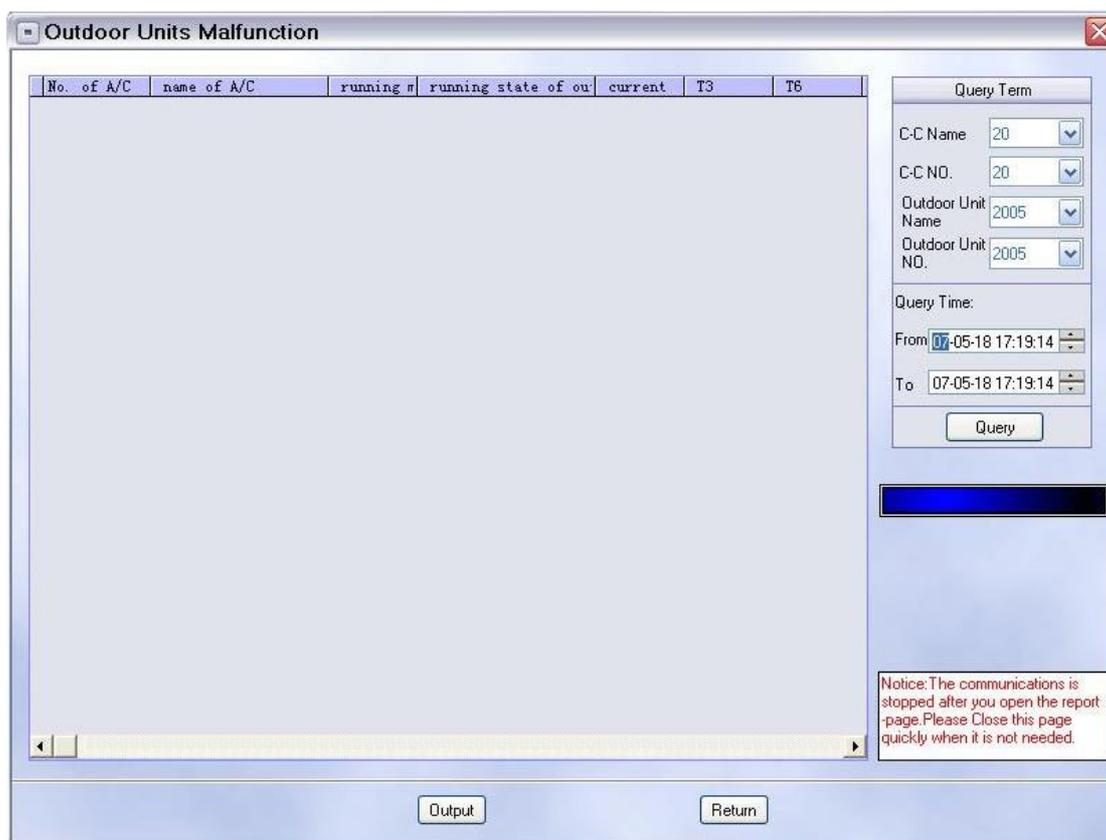
### E. Querying indoor unit faults and protection



<Fig. 5-5>

1. As the indoor unit operation data report, it is used to query for the report of all indoor unit faults and protection information for a certain time period.
2. The maximum query time period of report is 7 days.
3. It is mainly used to query for the faults and protection of indoor units of system during a time period.

## F. Querying outdoor unit faults and protection



No. of A/C	name of A/C	running #	running state of ou	current	T3	T6
------------	-------------	-----------	---------------------	---------	----	----

Query Term

C-C Name: 20

C-C NO.: 20

Outdoor Unit Name: 2005

Outdoor Unit NO.: 2005

Query Time:

From: 07-05-18 17:19:14

To: 07-05-18 17:19:14

Query

Output Return

Notice: The communications is stopped after you open the report page. Please Close this page quickly when it is not needed.

<Fig. 5-6>

1. As the outdoor unit operation data report, it is used to query for the report of all outdoor unit faults and protection information for a certain time period.
2. The maximum query time period of report is 7 days.
3. It is mainly used to query for the faults and protection of outdoor units of system during a time period.

### G. Report printing and output in EXCEL worksheets and WORD tables

	A/C HP	basic electric consumption (degree)	basic electric charge (USD)	public electric consumption (degree)	public electric charge (USD)	total electric consumption (degree)	total electric charge (USD)
000	5.000	9.006	16.211	0.011	0.019	9.017	16.230
001	3.000	3.548	6.387	0.005	0.010	3.554	6.397
002	2.000	3.536	6.364	0.004	0.008	3.540	6.372
003	5.000	4.964	8.935	0.005	0.009	4.969	8.944
400	2.000	4.419	7.953	0.101	0.181	4.519	8.135
401	5.000	5.972	10.750	0.241	0.434	6.213	11.184
402	5.000	5.644	10.160	0.244	0.438	5.888	10.598
403	2.000	2.418	4.353	0.096	0.174	2.515	4.527
404	2.000	6.010	10.818	0.103	0.186	6.113	11.003
405	2.000	4.202	7.564	0.006	0.010	4.208	7.575
406	2.000	5.993	10.787	0.103	0.186	6.096	10.972
407	2.000	5.688	10.239	0.103	0.186	5.791	10.424
416	5.000	14.992	26.985	0.258	0.464	15.250	27.449
417	5.000	14.992	26.985	0.258	0.464	15.250	27.449
420	5.000	14.992	26.985	0.258	0.464	15.250	27.449
421	5.000	14.992	26.985	0.258	0.464	15.250	27.449
422	2.000	5.997	10.794	0.103	0.186	6.100	10.980
423	2.000	5.997	10.794	0.103	0.186	6.100	10.980
424	5.000	14.992	26.985	0.258	0.464	15.250	27.449
428	5.000	14.992	26.985	0.258	0.464	15.250	27.449
532	2.000	5.856	10.540	0.103	0.186	5.959	10.726
534	2.000	5.963	10.734	0.103	0.186	6.067	10.920
537	2.000	5.944	10.699	0.103	0.186	6.047	10.894

<Fig. 5-7>

1. If the report needs to be printed, direct press “” button to output the report to the default printer.
2. If the report shall be saved as an EXCEL worksheet, you need to operate as follows: click select all button “”, press copy button “”, and then click EXCEL output button to output the report to an EXCEL worksheet. Finally you only need to save it.
3. If the report shall be saved as a WORD table, repeat the process for EXCEL worksheet but press WORD output button “” at the final step.

## DE - COMMISSIONING DISMANTLING & DISPOSAL

This product contains refrigerant under pressure, rotating parts, and electrical connections which may be a danger and cause injury!

All work must only be carried out by competent persons using suitable protective clothing and safety precautions.



Read the Manual



Risk of electric shock



Unit is remotely controlled  
and may start without warning

1. Isolate all sources of electrical supply to the unit including any control system supplies switched by the unit. Ensure that all points of electrical and gas isolation are secured in the OFF position. The supply cables and gas pipework may then be disconnected and removed. For points of connection refer to unit installation instructions.
2. Remove all refrigerant from each system of the unit into a suitable container using a refrigerant reclaim or recovery unit. This refrigerant may then be re-used, if appropriate, or returned to the manufacturer for disposal. **Under No circumstances should refrigerant be vented to atmosphere.** Where appropriate, drain the refrigerant oil from each system into a suitable container and dispose of according to local laws and regulations governing disposal of oily wastes.
3. Packaged unit can generally be removed in one piece after disconnection as above. Any fixing down bolts should be removed and then unit lifted from position using the points provided and equipment of adequate lifting capacity. Reference MUST be made to the unit installation instructions for unit weight and correct methods of lifting. Note that any residual or spilt refrigerant oil should be mopped up and disposed of as described above.
4. After removal from position the unit parts may be disposed of according to local laws and regulations.



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