OWNER'S MANUAL

KAYNET Software and Soft Dog.

Thank you very much for purchasing our product,
Before using it, please read this manual carefully and keep it for future reference.

CONTENTS PAGE

NOTE

- This manual gives detailed description of the precautions that should be brought to your attention during operation.
- In order to ensure correct service of this paper, please read this manual carefully before using the unit.
- For convenience of future reference, keep this manual after reading it.
- As the product updates, this document will be changed without prior notice.

1. KAYNET INTRODUCTION

1.1 KAYNET system introduction

KAYNET system is the short name of Intelligent Manager. It consists of three parts: KAYNET software, KAYNET M-interface web gateway and V4+ outdoor unit refrigerant system. The KAYNET system can connect 4 KAYNET M-interface gateways at most, totally could join up 64 refrigerant systems. The KAYNET software can communicate with network and KAYNET M-interface gateway, to control and manage the refrigerant system. The KAYNET system framework as the Fig.1-1 display.

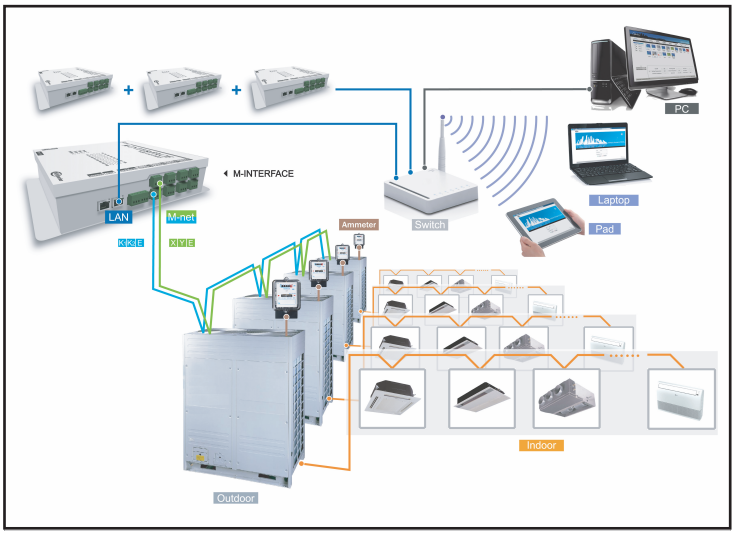


Fig.1-1

KAYNET software installed in the computer, and the KAYNET M-interface gateway connects to the computer through LAN port. Laptop and Pad can visit WEB page of KAYNET M-interface through wireless network.

1.2 Models which could be inserted

1) Projects which do not need electric quantity division: can freely insert V4+ units.
2) Projects which need electric quantity division: connect the V4+ series outdoor units and indoor units, and wiring the M-net terminal communication wire from the outdoor side.
3) Details consult relevant technical personnel.

1.3 KAYNET network introduction

KAYNET software includes server software, cline-side software and database software. Install the server software and the database software in the same computer, this computer and the KAYNET M-interface should be in the same subnet segment(for details, please refer to 3.1). The cline-side can connect to the server through the local or remote network.

1.3.1 Local network connection

The cline-side can connect to the server through the local network, the local network connection as the following display:

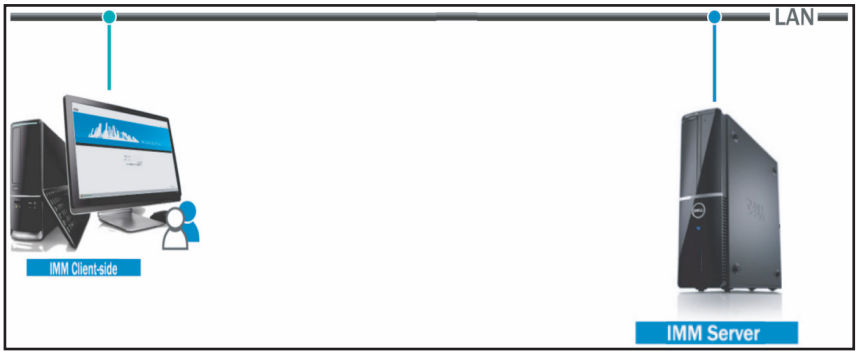


Fig.1-2

1.3.2 Remote network connection

The client-side and server also can use the remote network (VPN) connection. VPN has router establishing and computer establishing methods, and the remote network connection needs some IT knowledge and needs the IT professionals to assist.

1） Router establishing

VPN tunnels establish between routers, and then can visit WEB interface through VPN tunnels. VPN Server can be established by oneself and also can be rented. Its topology structure as follow display:

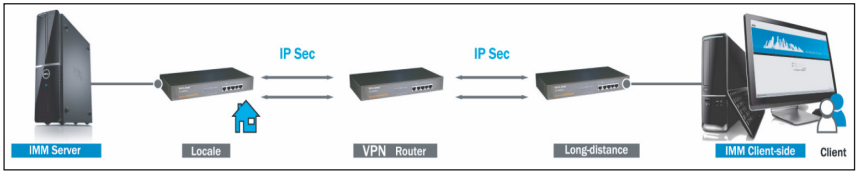


Fig.1-3

2）computer establishing

Use VPN client-side software and VPN Server to establish VPN tunnel, then user can visit the server through VPN tunnel. VPN client-side software and VPN Server can be achieved by commercial ways. Its topology structure as follow display:

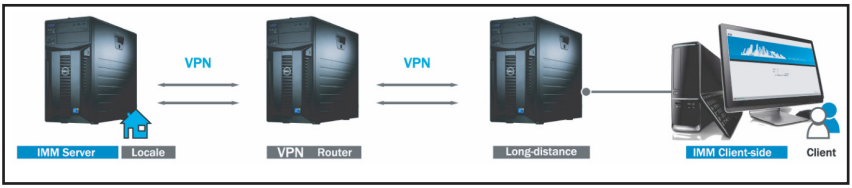


Fig.1-4

1.4 KAYNET software functions

User can operate the KAYNET client-side software to monitoring the air-conditioning system. The functions offered by KAYNET software as the following display:

Fig.1-5

Main functions as follow:

1) Device monitoring
   Offer control and management of indoor/outdoor unit for the KAYNET M-interface gateway.
2) Device guide
   User can see the location of the air-conditioning device.
3) Schedule management
   Offers schedule control function of indoor unit.
4) Energy saving management
   Offers energy saving control function of indoor unit.
5) Statistics of energy consumption
   Offers electric quantity division function of air-conditioning system.
6) Device management
   Offers the group division function of air-conditioning device.
7) Data statistics
   Provides the status changing records of indoor unit, outdoor unit and KAYNET M-interface gateway.
8) Log
   Offers all the records of the client-side operations which operated by the user.

2. SOFTWARE INSTALLATION

2.1 Installation preparation

Before the KAYNET software installation, it needs to make sure the air-conditioning system operated normally, KAYNET M-interface gate way worked normally, the communication between KAYNET M-interface gateway and air-conditioning system was normal, and it needs to meet the following hardware and system requirements.

Table.2-1

	Specification	Recommendation	Remark
PC	CPU: i3 or above Internal storage: 2G or above Hard disk: 120G or above Keyboard/Mouse with middle wheel Network:108ASE-T Screen resolution should over 1024*768 Screen size should over 17 inch	Recommended that IBM or DELL products	Must be desktop (Notebook computer or other types of computers is not allowed), and ensure the computer works normally before installing the software.
System	Microsoft Windows XP Professional Service Pack 3/Windows7 Flagship edition 32-bit systems.	———	
Document form	NTFS	———	

2.2 Software installation

About the details please consult relevant technical personnel. This system needs to be regularly checked by the professional to ensure it runs correctly.

3. SETTING

3.1 IP address setting

Default IP of KAYNET M-interface gateway is 192.168.100.40, subnet cover code is 255.255.255.0. The KAYNET M-interface gate and KAYNET server must be stayed in the same sub network, two ways of realization: amend the KAYNET M-interface gate IP and configure the static state IP for server.

3.1.1 Configure static IP

Generally configure single IP, if the IP address of computer cannot be amended, then configure several IP. Methods as follow (Take windows 7 system for example):

1) Configure single IP

Open the property dialogue box to configure the IP address and subnet cover code, for example: IP: 192.168.100.44, subnet cover code: 255.255.255.0.

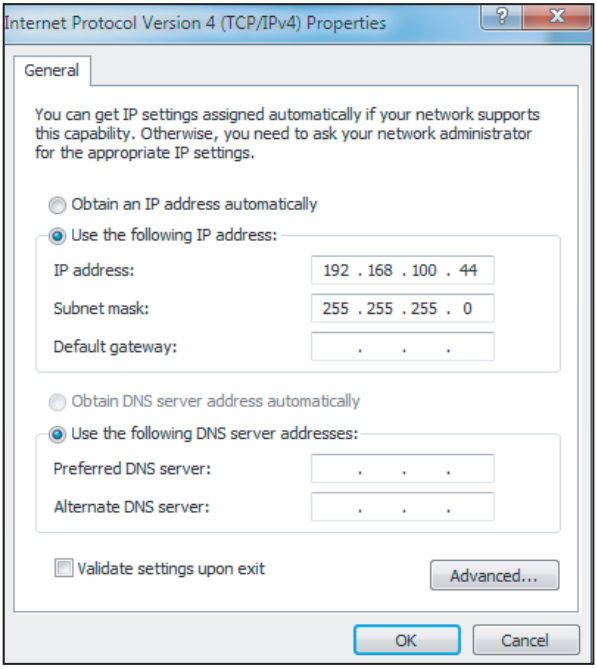


Fig.3-1

After configuration, click the “OK” button.

2) Configure several IP

Before configure several IP, it need to configure a statistic IP address. Open the property dialogue box, select the “Advanced”, and display the TCP/IP setting dialogue box as follow:

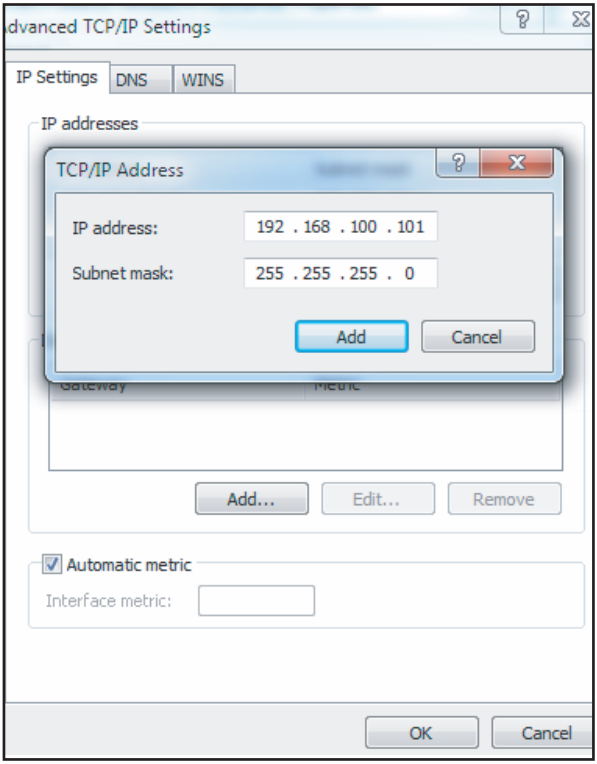


Fig.3-2

Click the “Add” button in IP address bar, add a IP address in the same net area with “192.168.100.40”, e.g.:IP: 192.168.100.101, subnet cover code: 255.255.255.0, and then click the “Add” button.

3.1.2 Amend gateway IP

Before amending the IP address of KAYNET M-interface gateway, it needs a computer to visit the WEB page of KAYNET M-interface, then enter the IP address amending page through the computer. The page display as follow:

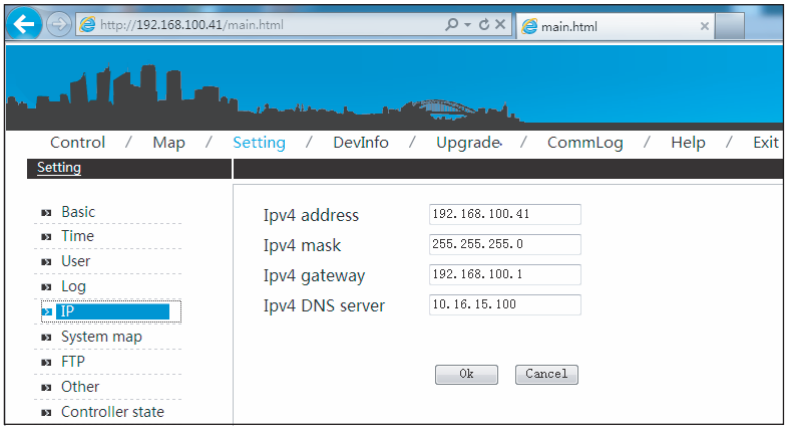


Fig.3-3

After typing, click “OK” to save. Do not conflict with other IP in the network, detailed IP address assignment needs to consult the network administrator.

3.2 Software operation setting

Before software operation, set the server software, client-side software and database software. About the details setting please consult relevant technical personnel. After setting, insert the dongle (dongle is only used for this system, please keep the dongle properly), and start the server software and then start the client-side software.

4. OPERATION INSTRUCTION

4.1 User login

Operate the KAYNET client-side software, popup the login interface as the follow display:

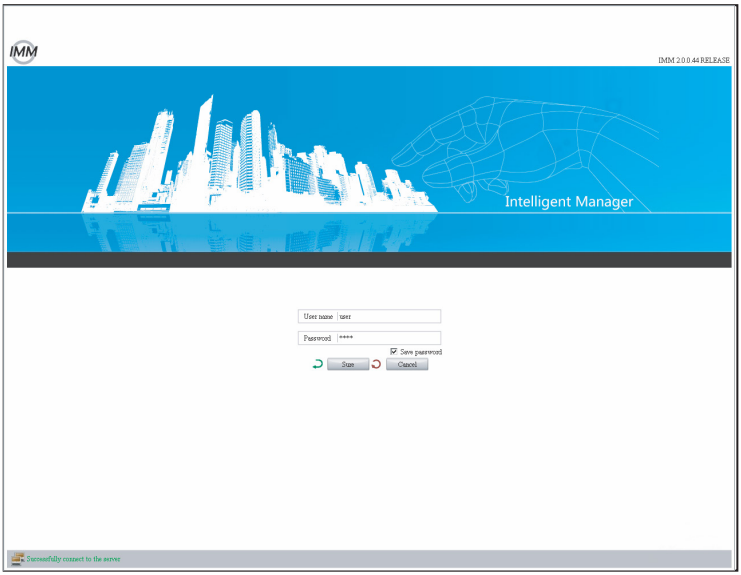


Fig.4-1

After “Connect to the server successfully” was displayed at the lower left of the login interface, then can carry out the login operations.

Steps of carrying out the login operations as follow:

1）Type in user’s password, the default is user;

2）Choose whether save the password;

3）Click [OK] to carry out login;

4）Click [Cancel] to exit this page;
When clicked the “OK” button, after login successfully, then enter into the system home page. If login failed, please refer to Appendix 5.1.

4.2 User log out

Click the icon  on upper-right corner, exit the system, and the interface display as follow:

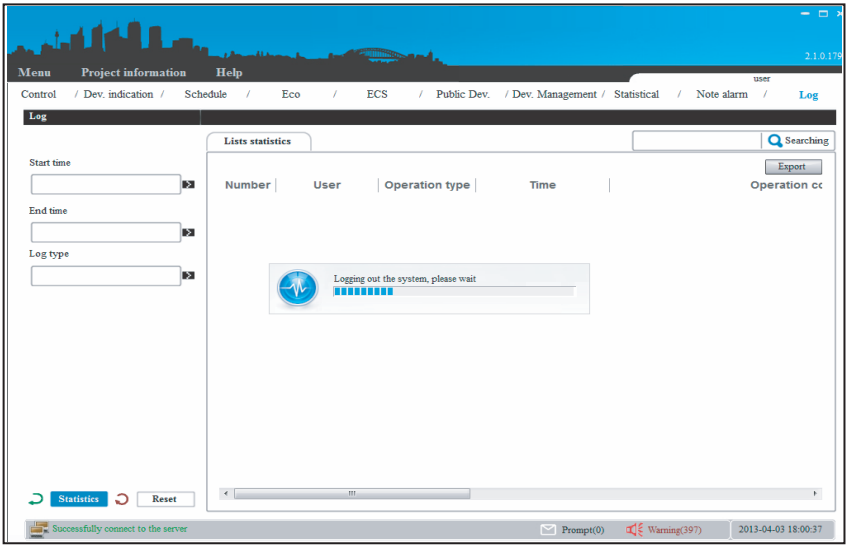


Fig.4-2

4.3 System initialization

After the user login successfully, then will show out the system initialization dialogue frame, and carry out the initialization of the whole system, update the system information. The itialization dialogue frame display as follow:

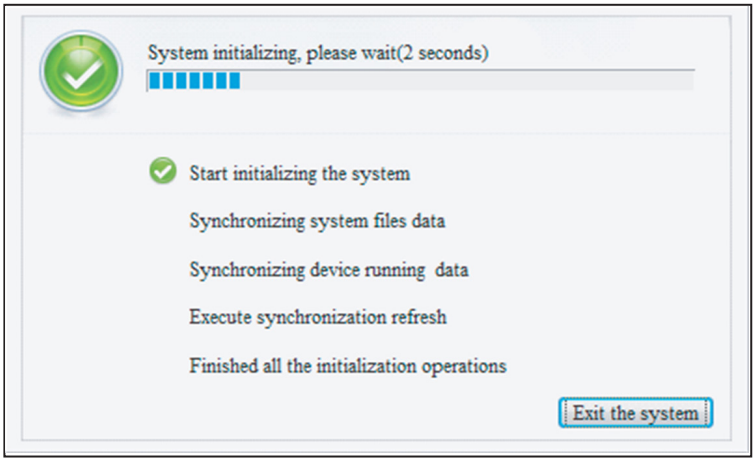


Fig.4-3

Click the “Exit the system” button, then will stop the initialization work and exist the system.

4.4 Main interface introduction

The system home page display as the follow:

Fig.4-4

Menu: system functions menu.

Functions: functions in menu, include device monitoring, schedule management, energy saving management, statistics of energy consumption, public device, data statistics and log etc. functions. Display: display detailed information of each function.

Information tip: display the prompt message and alarm information.

The upper-right corner of the interface will display the software version and user’s login name.

4.5 Devices monitoring

This part is displayed as 3 classes of air-conditioning indoor unit, outdoor unit and KAYNET M-interface gateway. Each class will be displayed as primary group and secondary group.
E.g.: under the indoor unit it will display the primary group: Buildings; and under the primary group it will display secondary group: first floor, second floor, third floor etc. Detailed group setting please refers to 4.10.

4.5.1 KAYNET M-interface gateway monitoring

Choose the KAYNET M-interface gateway selection; the interface will display all the KAYNET M-interface gateway devices in the KAYNET system.

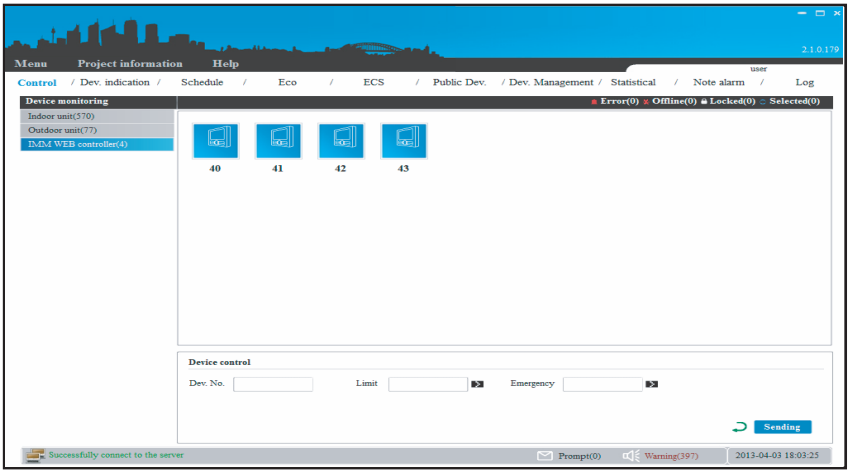


Fig.4-5

There are 3 display statuses of KAYNET M-interface gateway: lost connection, locked and selected. When selected or right mouse click a KAYNET M-interface gateway device, the bottom of interface would display its IP address and it whether has limit mode, and the user can control the KAYNET M-interface gateway device through the method of setting the limit mode parameters, emergency stop parameters and then click the “send” button. User can amend the device name: double-click the device name, then amend it, and press enter key to save. E.g.: select the KAYNET M-interface gateway devices named 40 and 41 (selecting method refers to 4.5.4), and choose the “limit mode” parameters, and then click the “send” button, the page display as follow:

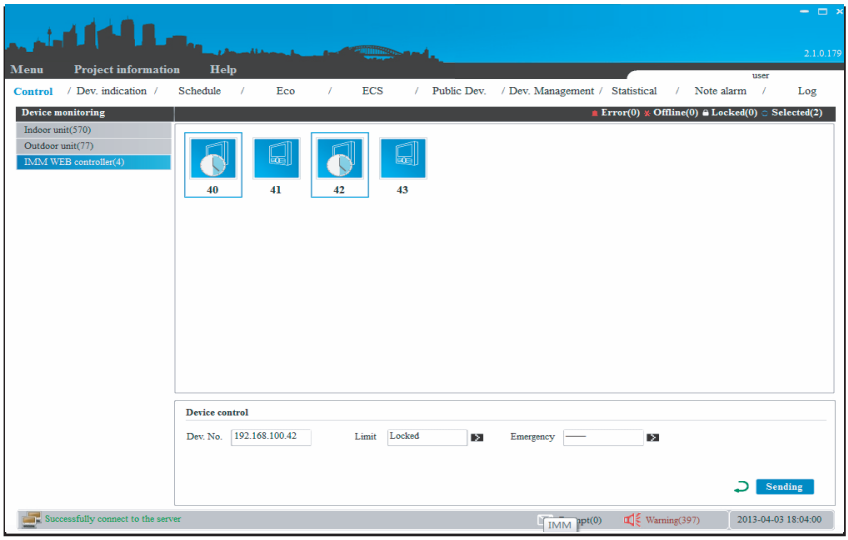


Fig.4-6

After successfully set “Limit mode”, the device icon will add an icon with locker.

Parameters specifications: Table.4-1

Parameters	Specifications
Limit mode	Locked: can not operate in the WEB page of KAYNET M-interface Un-locked: Remove the locking of KAYNET M-interface gateway device.
Emergency stop	----: Not carry out the emergency stop function. Stop: Carry out the emergency stop function, stop all the devices of the KAYNET M-interface gateway.

Icon specifications: Table.4-2

Icon	Specifications	Icon	Specifications
	KAYNET M-interface device work normal		KAYNET M-interface device locked
	KAYNET M-interface device lost connection		KAYNET M-interface device selected

Status selection:

The gateway device has 3 statuses: locked (Locked), lost connection (Offline) and selected (Selected). Click the corresponding status icon to check the relative device. Click the lost connection icon, and it will display all the devices which lost connection. Right click the “selected” icon, and it will popup the selection frame of “All select/cancel all select”, choose “All select” then it will select all the icons in the interface, and click “cancel all select” then it will cancel selecting all the icons.

4.5.2 Outdoor unit monitoring

Select the outdoor unit class, the left side of interface will display the group information under the indoor unit, and the right will display the corresponding outdoor device.

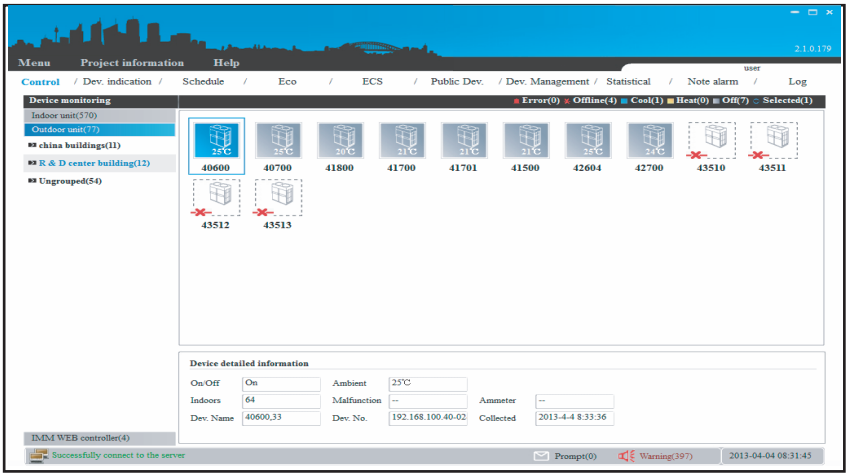


Fig.4-7

The outdoor unit display status: error, lost connection, cooling, heating and selected. Select or right mouse click a outdoor unit, then check the on and off status, ambient temperature, ammeter readings etc. detailed information of this device in the “Device details information”.

Icon specifications: Table.4-3

Icon	Specifications	Icon	Specifications	Icon	Specifications
	Outdoor unit lost connection (White)		Outdoor unit is OFF, outdoor ambient temp. is 21°C. (Gray)		Outdoor unit operates cooling, outdoor ambient temp. is 24°C.(Blue)
	Outdoor unit error (Red)		Outdoor unit operates heating, outdoor ambient temp. is 24°C. (Orange)		Outdoor unit is selected, outdoor ambient temp. is 25°C.

Status selection:

The outdoor unit display status: error (Error), lost connection(Offline), cooling(Cool), heating (Heated) , off unit(Off) and selected (Selected). Click the error, lost connection, cooling, heating and selected icons by the mouse, then the interface will display all the corresponding status. E.g.: click the cooling icon, then it will display the devices under cooling status in the selected group on the page, display as follow:

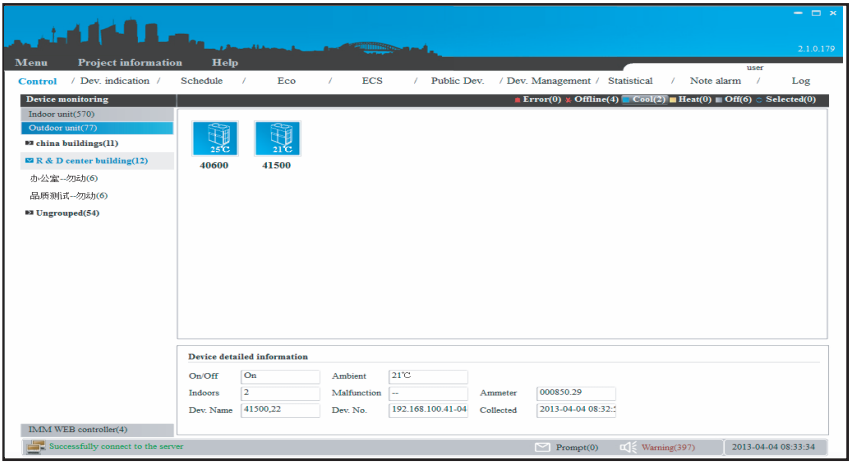


Fig.4-8

4.5.3 Indoor unit monitoring

Select the indoor unit class, the left side of interface will display the group information under the indoor unit, and the right will display all the indoor units in the KAYNET system, select the “device control” to carry out the control operation for one or more sets indoor units; select the “device details information” to check the operating detail information of a device.

1）Check the operating status of indoor unit

Choose the “device detail information”, select a indoor unit, then the bottom of the interface will display the operating detail information of this device. Display as follow:

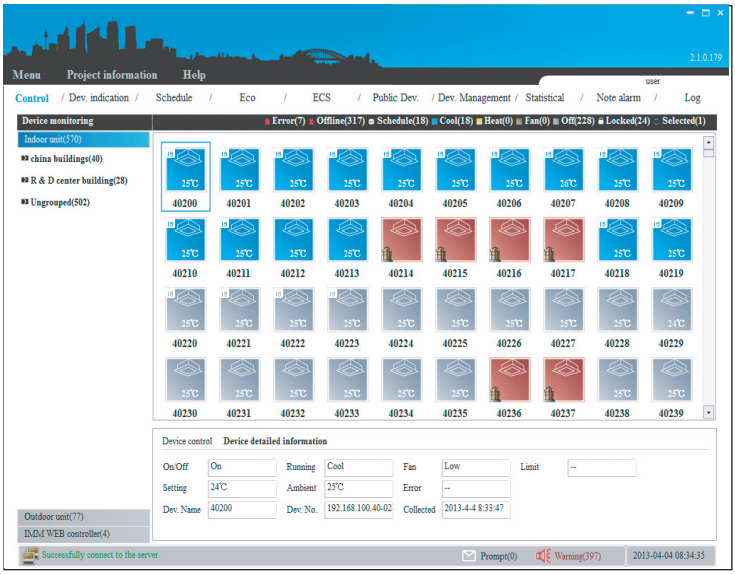


Fig.4-9

Displayed detail information: on and off status, operating mode, device name and device number etc.

2）Control the operating status of indoor unit

Choose the “Device control”, select one or more sets indoor units (selecting method refers to 4.5.4), in the bottom of the interface configure parameters: on and off setting, mode setting, operating fan speed, temperature setting and swinging setting, and click “send” button after setting, display as follow:

Fig.4-10

The interface will display the icons which wait for being sent, after the order execution, the icons will disappear, and the interface will be refresh, then can view the operating status of the control order had been executed. If control failed, the “Prompt message” in the interface bottom will display the control failed information.

Icon specification Table.4-4

Icon	Specifications	Icon	Specifications	Icon	Specifications
	Indoor unit error (Red)		Indoor unit operates heating, indoor ambient temp. is 25°C.(Orange)		Indoor unit is locked, indoor ambient temp. is 25°C.
	Indoor unit lost connection(White)		Indoor unit operates fan, indoor ambient temp. is 25°C. (Green)		Indoor unit is selected, indoor ambient temp. is 25°C.
	Indoor unit operates cooling, indoor ambient temp. is 25°C.(Blue)		Indoor unit is OFF, indoor ambient temp. is 25°C.(Gray)		The control order is carrying out, please wait

Status selection:

The indoor unit display status: error(Error), lost connection (Offline), schedule(Schedule), cooling (Cool), heating (Heated), fan (Fan), off unit (Off), locked(Locked) and selected (Selected). Click the error, lost connection, schedule, cooling, heating, fan, off unit, locked and selected icons by the mouse, then the interface will display all the corresponding status. Right click the “selected” icon, and it will popup the selection frame of “All select/cancel all select”, choose “All select” then it will select all the icons in the interface, and click “cancel all select” then it will cancel selecting all the icons. Right-click the “locked” icon, then it will display the locked lists, and click the corresponding list then will display the relative devices.

4.5.4 Shortcut keys operation

Shortcut keys operations of mouse:

The system offers shortcut keys operations of mouse, which convenient for the user to select/cancel one or more sets devices quickly.

1) Select single icon
   Left-click the icon, if the icon was framed then means it was selected.

2) Select several icons
   There are two ways for selecting several icons:
   - Select several icons as the way of selecting single icon.
   - Left-click outside the frame in the interface, drag a dotted line frame to select the corresponding icons.

3) Cancel single selected icon
   Left-click on the selected icon, then cancel selecting the icon.

4) Cancel several selected icons
   There are two ways for canceling several selected icons:
   - Cancel several selected icons as the way of canceling single selected icon.
   - Double-click the left/middle/right key of the mouse in the blank place of the page, to cancel several selected icons.

Function shortcut keys operations

Right-click the Selected icon, then it will popup the selection frame of “All select/cancel all select”, choose “All select” and “Cancel all selected” to select and cancel quickly. The operation steps as follow:

1）Select the “indoor unit” or “outdoor unit” class (or primary group or secondary group).

2）Click a status display icon (cooling, heating, error, off unit etc.), such as click the cooling status icon, the interface will display the devices of corresponding group under cooling status.

3) Click the “select all” option, then all the cooling device in the page will be selected, and if click the “cancel the selected all”, all the selected icons will be canceled selecting.

4.6 Device guide

Offer the function of user can see the location of the air-conditioning device. Right click one secondary group, will pop-up the options of “Start changing device’s location” and “Change the floor plan”, and click “Change the floor plan”, then display as follow:

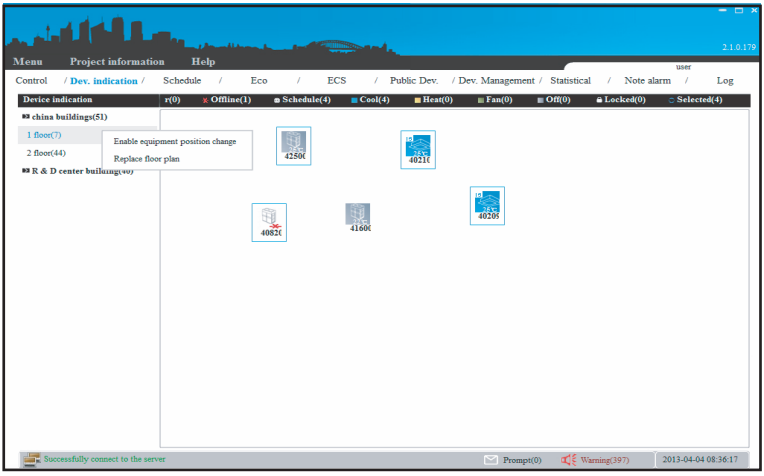


Fig.4-11

User selects the corresponding floor plan (the picture will save in the map folder of the client-side installation menus), and then click “Save” button, after finished the operation, then click “Close” button. After select the floor plan, then click “Start changing device’s location”, user can select one device, and then drag it on the interface to change its location.

4.7 Schedule management

1) Schedule management offers the schedule operations for air-conditioning indoor unit. Display as follow:

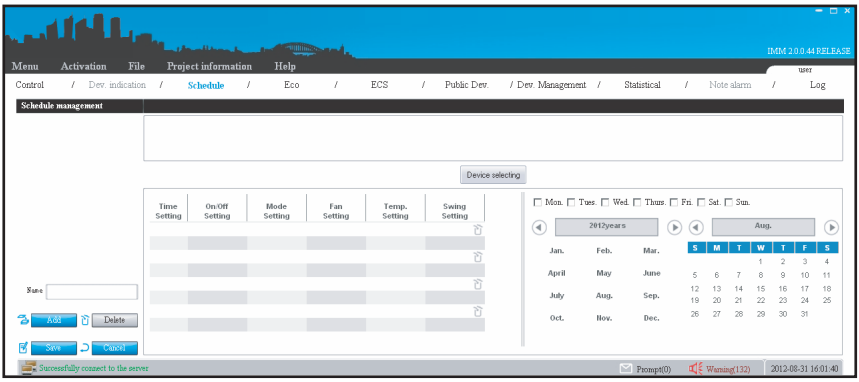


Fig.4-12

2) Schedule management operation steps as follow:

■ Add the name

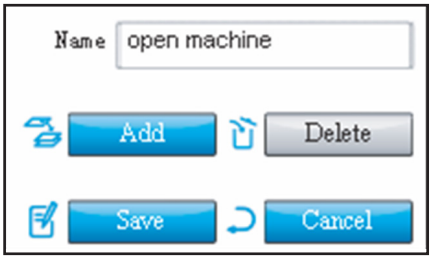


Fig.4-13

Click the “Add” button, type in schedule name.

■ Add device

Click the “Device selecting” button, then it will popup the add device frame as the following display:

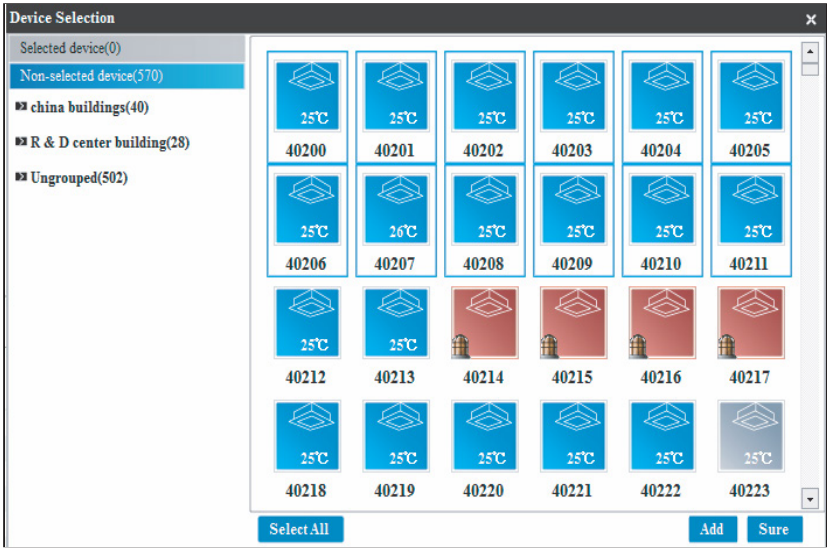


Fig.4-14

Click the “Non-selected device” option, select the device and click the “add” button. Click the “Selected device” option, and then it shows up the selected devices. Choose the relative devices, and click “Move” to move the devices into “Non-selected device”. After selection, click ”OK” and then close the selection frame. The page will display the selected devices.

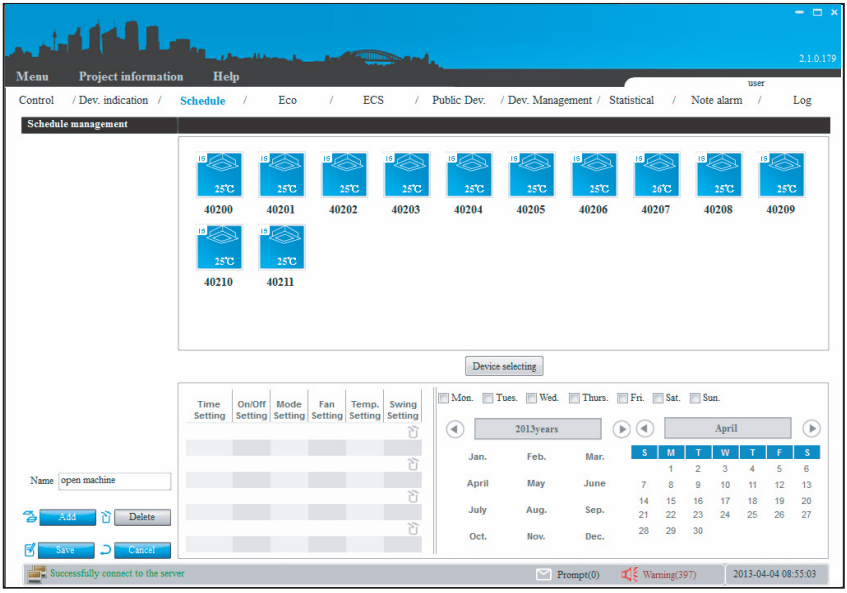


Fig.4-15

■ Control parameters setting

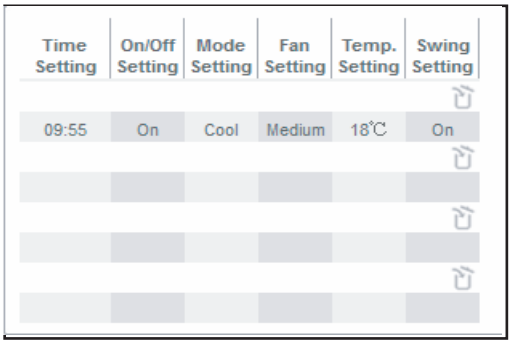


Fig.4-16

Set the time, on and off status, mode, fan speed, temperature, swinging parameters. Click the cancel icon to cancel the setting.

■ Time selecting

There are two ways of adding time: Choose date or week.

Date: Click the date under corresponding month, select the month and date which displayed in red.

Week: check the relative week, then this day of each week will be listed in the schedule. Such as selected Monday, then every Monday will carry out this schedule.

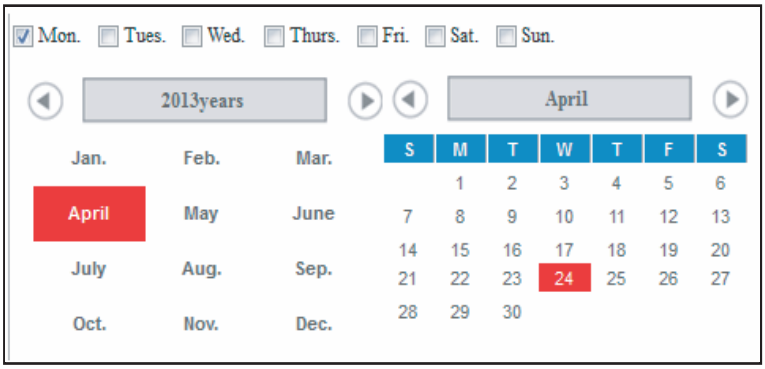


Fig.4-17

■ Save

After setting, click the save button, and display as the following:

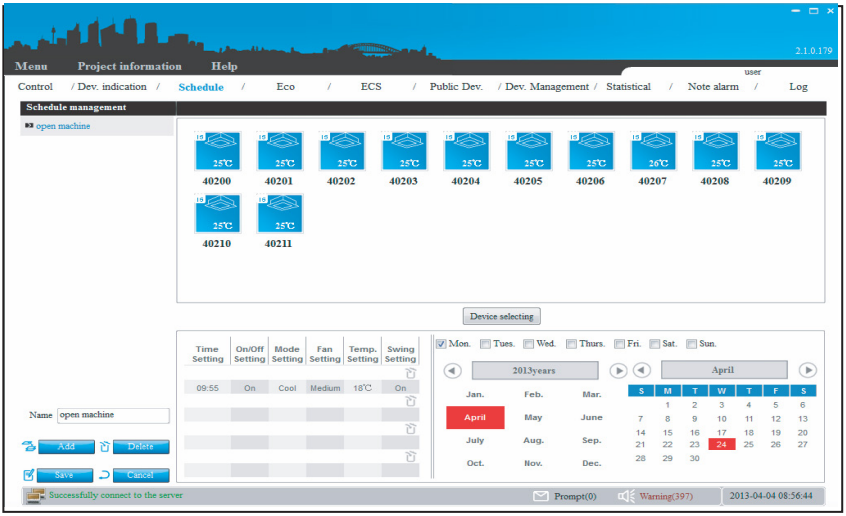


Fig.4-18

The upper left corner of the page will display the added schedule name. And the right displayed the added device. If it's the first time setting schedule of the device, then the icon will add the schedule icon. Use the "Data statistics" to check the execution status of the schedule. About the important timing plan, You should set again after 5 minutes.

4.8 Energy saving management

Energy saving management offers the energy saving control operations for air-conditioning indoor unit. Only the new type of indoor machine supports this function, Display as follow:

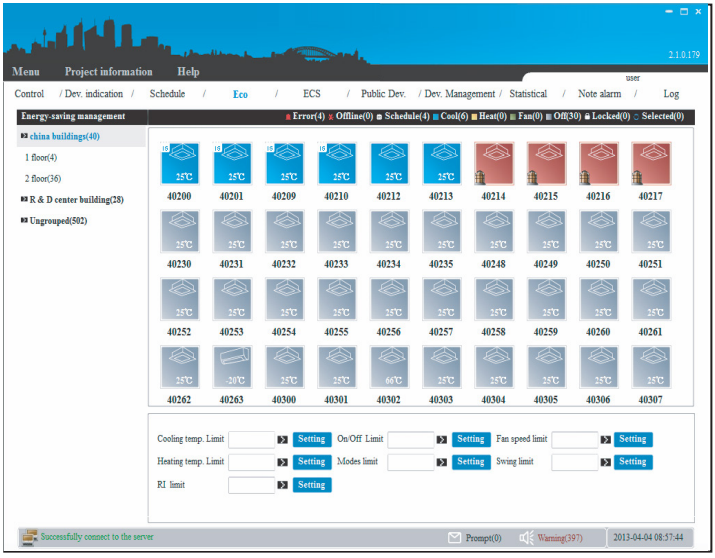


Fig.4-19

The left side will display the indoor unit group information, and select one or more sets indoor units and choose the energy saving option, then click the “Set” button. After setting, the air conditioner icon will display the locked icon. If it needs to remove the limit, then choose the “Remove” option, and click the “Set” button for removing the limit, then the locked icon will disappear. If it failed the control, check the failed information in the “Prompt message”. Click the right key of the mouse on an indoor unit, then the bottom of the interface will display the locking detail information of this device.

Options specification:

Table.4-5

Selection	Specifications
Cooling temp. limit	Set the lowest limit of cooling temp., and limit the remote controller control
Heating temp. limit	Set the lowest limit of heating temp., and limit the remote controller control
On and off unit limit	Limit the indoor unit on and off operations of the remote controller
Mode limit	Limit the unit cooling, heating mode operations
Fan speed display	Limit the fan speed control by the remote controller
Swinging limit	Limit the swinging control by the remote controller
Remote controller limit	Limit the air conditioner operations by the remote controller

4.9 Statistics of energy consumption

This function calculates the results of the device’s electric quantity division in a period. This function needs to be activated for use. display as follow:

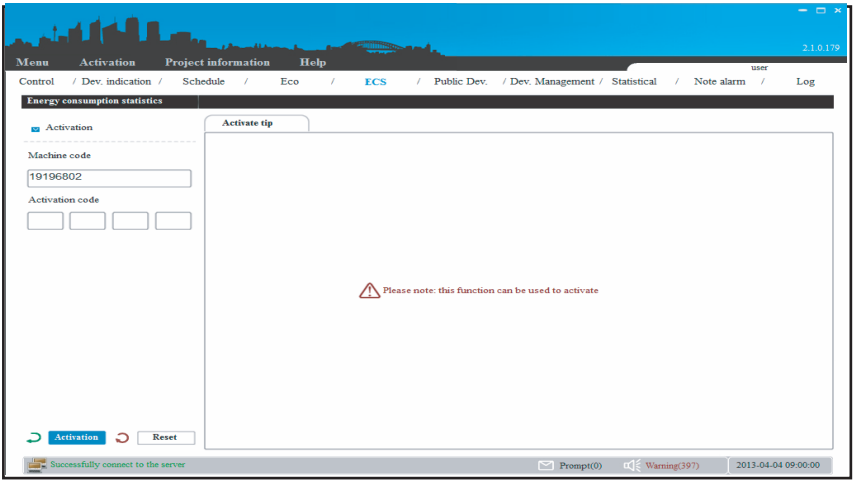


Fig.4-20

If the user needs this function please consult the dealer, and get the activation code to activate this function. The activated page as following display:

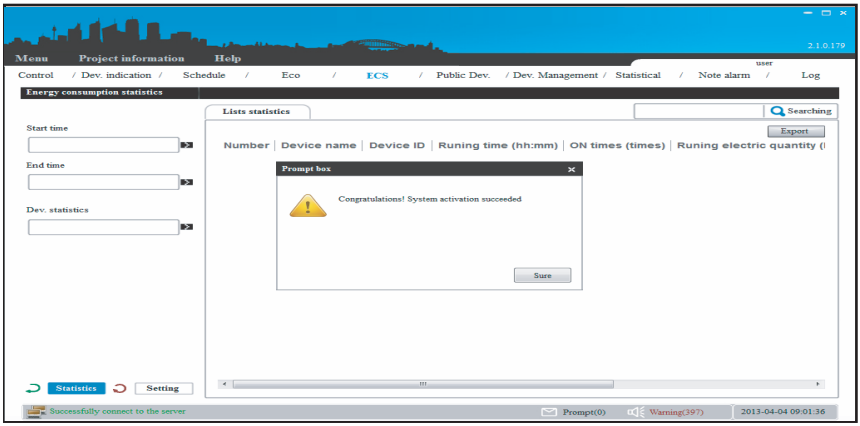


Fig.4-21

Select the “Start time”, “End time” and “Calculate device” parameters, and then click the “Calculate” button, then the page will display the result. If not select the “Calculate device”, then it default selects all the devices. Display as follow:

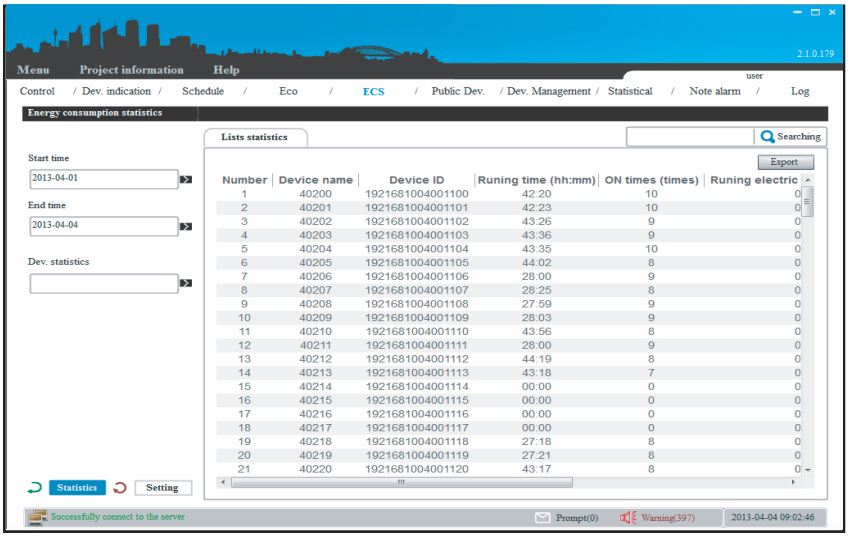


Fig.4-22

Click the “Setting” button, popup the dialogue frame, to set the calculation method of electricity price Click the “Export” then it will export the displayed results to the xls/txt/csv form. The xls form display as follow.

Number	Device name	Device ID	Runing time (hh:mm)	ON times (times)	Runing
1	40200	1921681004001100	42:20	10	0
2	40201	1921681004001101	42:23	10	0
3	40202	1921681004001102	43:26	9	0
4	40203	1921681004001103	43:36	9	0

Fig.4-23

Click the search icon, and carry out the searching operations for the contents in the page. Such as type in “40200”, then the page will display the searching results.

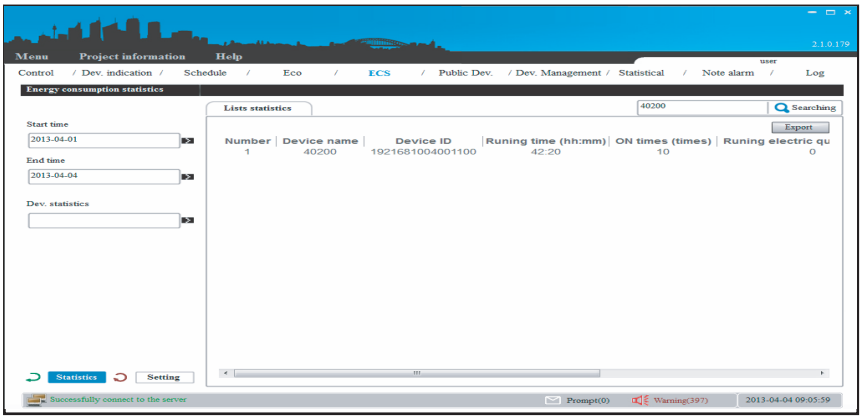


Fig.4-24

Energy consumption results are only for reference, not use for commercial calculating record. About the electric quantity division principle please consult relevant technical personnel (using this function, it is regarded as accept the electric quantity division principle). Software has the function of automatic backup data, We suggest to export the report once a month. If it is needed to query the report three months ago from now on, please consult relevant technical personnel.

4.10 Public device

For the commercial office building or apartment hotel, and for the correctness of electric quantity division, it needs to set the public device. The cost produced by the idle and public devices will be shared by other used devices in KAYNET system, Not display in the export report.

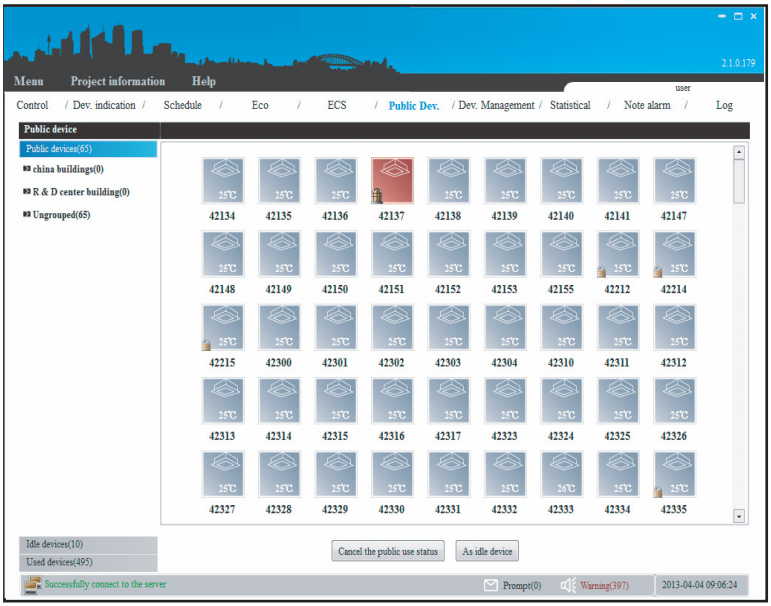


Fig.4-25

Find the relative air conditioning device in the operated device, click the “as public device” or “as idle device” button, and divide it to the public device or idle device. Idle device means the devices are not used; public device means the devices in the public place, such as air-conditioning devices in the hall or corridor.

4.11 Device management

1）Provides the group division function, convenient for device management, display as follow:

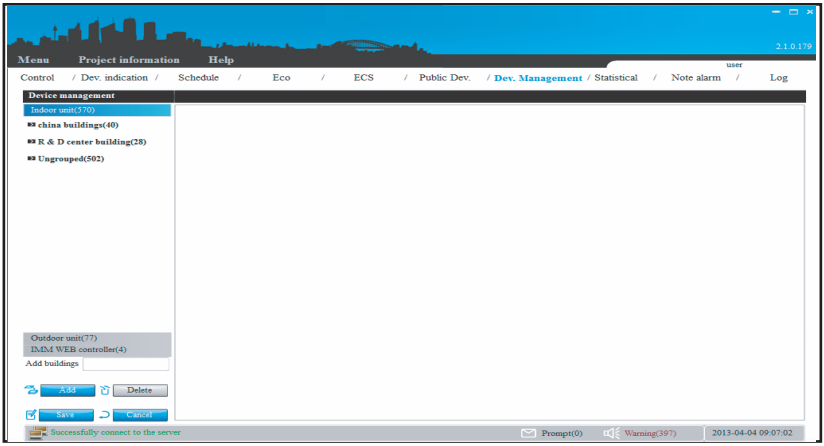


Fig.4-26

2）Click the relative group option, the corresponding device in the group will be displayed in the right of the page.

■ Add group:

The adding group method of the outdoor unit is the same as the indoor unit (Take adding the secondary group of indoor unit):

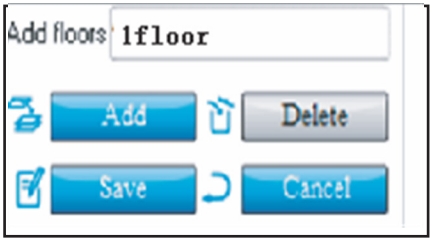


Fig.4-26

Click the primary group “Building”, and then click the “Add” button, type in the secondary group name (4 floor). And click “Save” button, then it established secondary group (4 floor) both at indoor unit and outdoor unit, and select the devices need to be added in the “4 floor”, left click the “4 floor” and choose the “add the selected devices into 4 floor”.

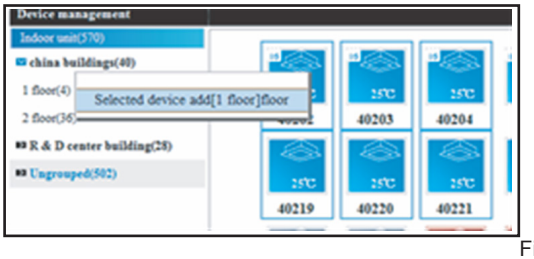
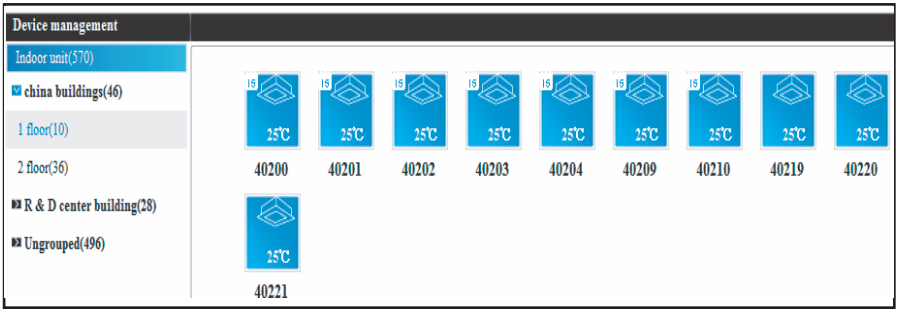


Fig.4-27

Successfully added the device, the 4 floor group will display the added devices. Devices only can be added in the secondary group.



■ Change the indoor unit model

Fig.4-28

Select a single or more set air-conditioning device under secondary group, right click then will as the follow display, pop-up the option of changing the indoor unit model.

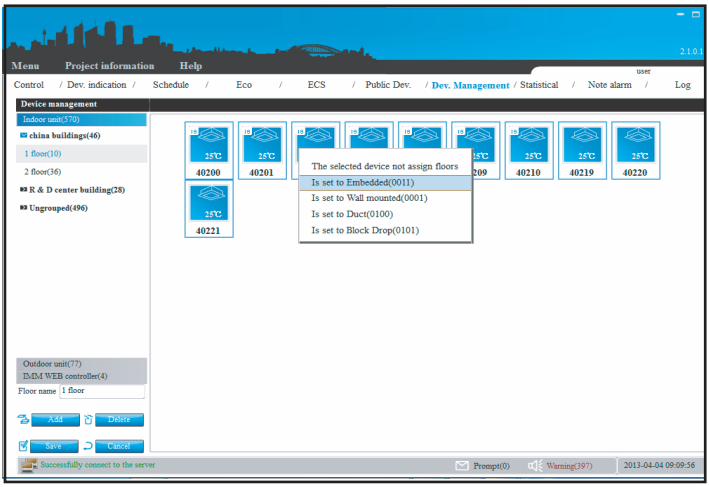


Fig.4-29

When the user selects the corresponding model, the indoor unit picture will change.

■ KAYNET M-interface gateway display:

Click the “KAYNET WEB controller”, the page display as follow:

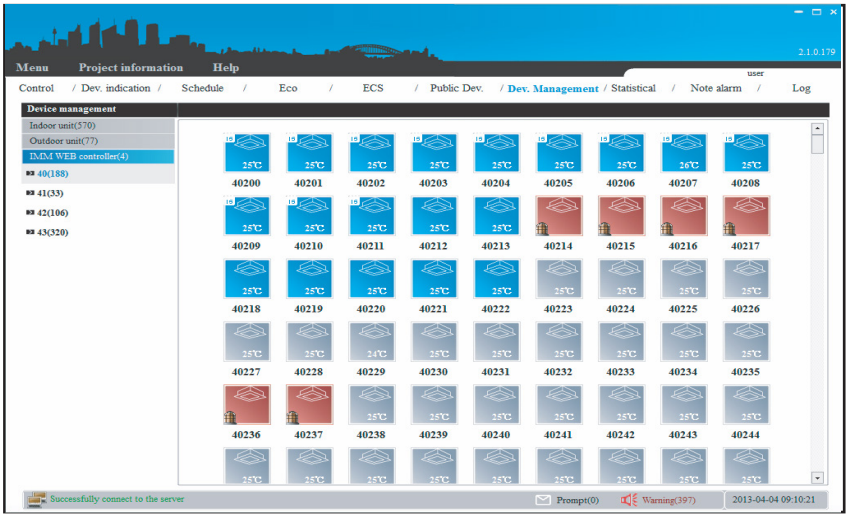


Fig.4-30

The left page will display all the gateway devices and their terminals, click the relative terminals, the right of the page will display the air-conditioning device under the terminal; 1-4 are indoor unit terminals, 5-8 are outdoor unit terminals.

4.12 Data statistics

Calculate the operation changing records of indoor unit, outdoor unit and KAYNET M-interface gateway. Check the execution status of the schedule and the changing status of the device through this function.

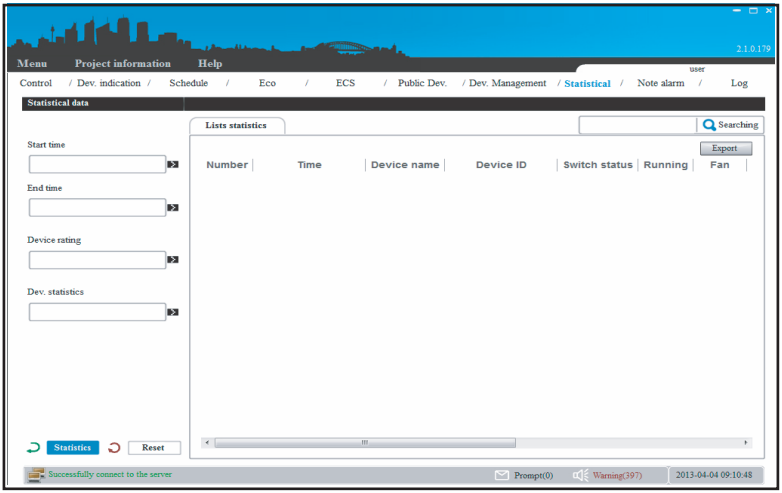


Fig.4-31

Select the “Start time”, “End time” and “Device class” parameters, and then click the “Calculate” button, then the page will display the result. Display as follow:

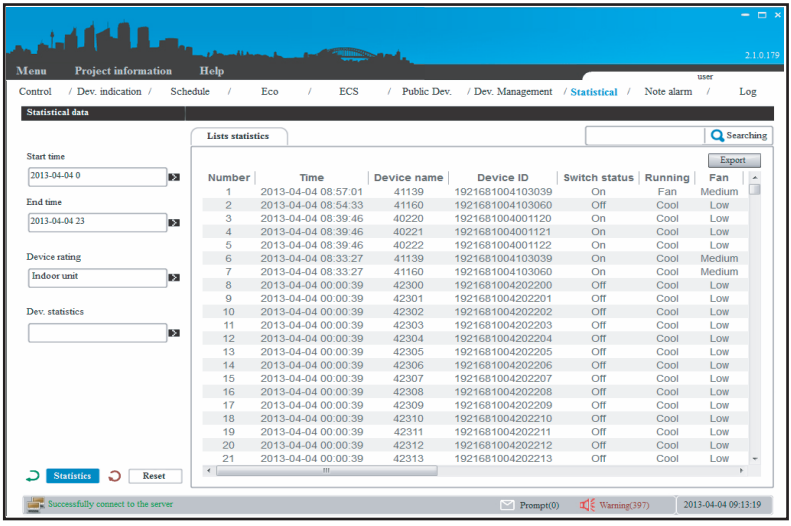


Fig.4-32

Click the search icon in the calculation page, and the result will be displayed in the page. Such as type in “41106”, then the page will display the searching results as follow:

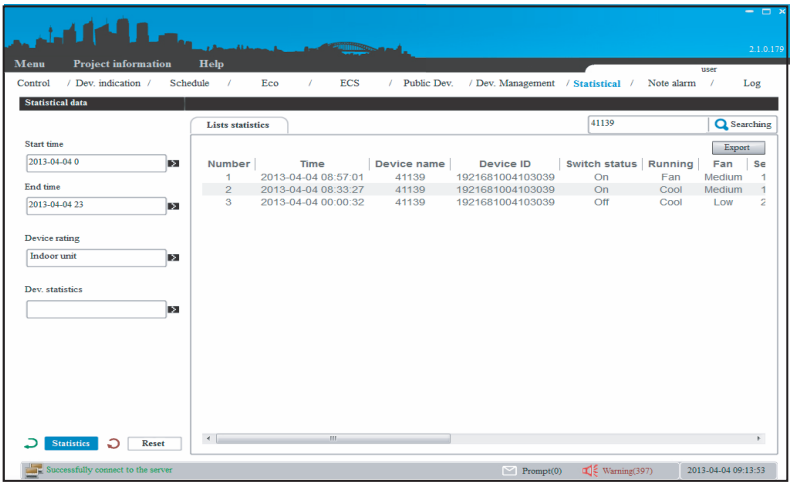


Fig.4-33

Click the “Export” button; export the page result to the xls/txt/csv form, the xls form display as follow:

Number	Time	Device name	Device ID	Switch status	Running	Fan
1	2013-04-04 08:57:01	41139	1921681004103039	On	Fan	Medium
2	2013-04-04 08:33:27	41139	1921681004103039	On	Cool	Medium
3	2013-04-04 00:00:32	41139	1921681004103039	Off	Cool	Low

Fig.4-33

4.13 Note Alarm

When the device has error, the system automatically notify the relevant personnel in the form of text message. Inform them that they should repair the air conditioning device KAYNETidiatily.

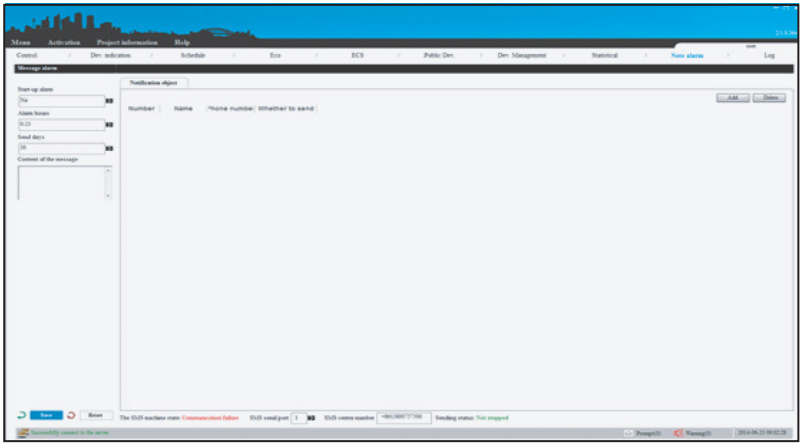


Fig.4-34

Access SMS cat hardware first, and then add the recipient phone number, configuration parameters, When the air conditioning has error, the system automatically send text messages to the recipient.

4.14 Log

Display the KAYNET system operation records by all the user.

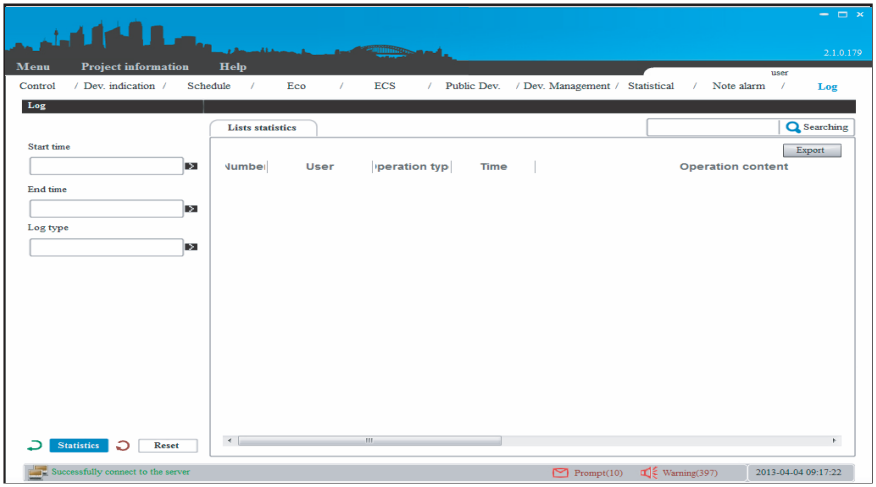


Fig.4-35

Select the “Start time”, “End time” and “Log type” parameters, the Log type has: orders, schedule, and energy saving ,login and small load prompting(means energy-requiring is lower the setting value when the outdoor unit is operated).And then click the “Calculate” button, and then the page will display the result. Click the “Reset” button, the selection frame will be cleared.

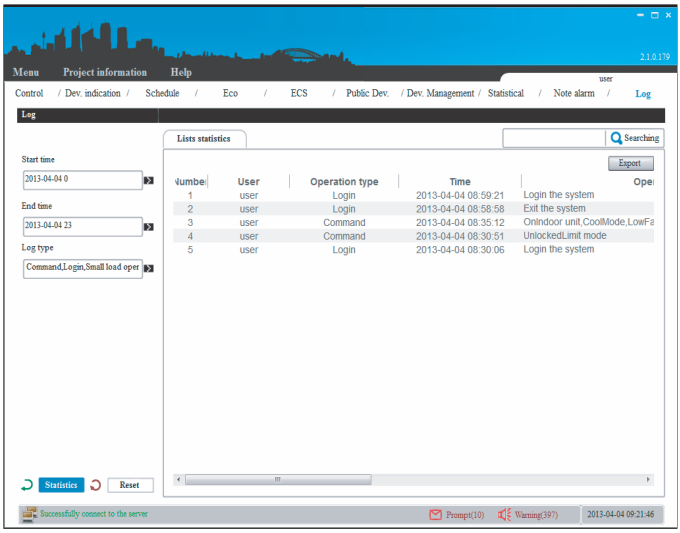


Fig.4-36

Click the search icon, and carry out the searching function. Such as type in “login”, then the page will display the searching results, display as follow:

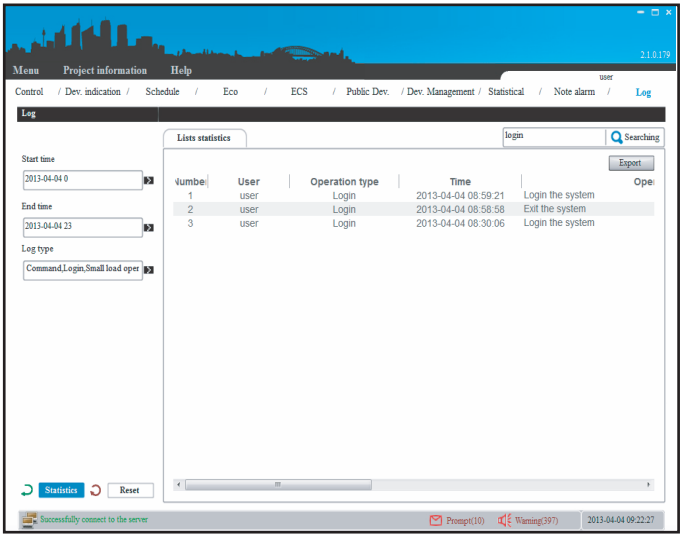


Fig.4-37

Click the “Export” button; export the page result to the xls/txt/csv form, the xls form display as follow:

Number	User	Operation type	Time	Operation content
1	user	Login	2013-04-04 08:59:21	Login the system
2	user	Login	2013-04-04 08:58:58	Exit the system
3	user	Login	2013-04-04 08:30:06	Login the system

Fig.4-38

4.15 Prompt message

If there is prompt message, the icon will become red. User can click “Prompt message” icon, to check the relative information, display as follow:

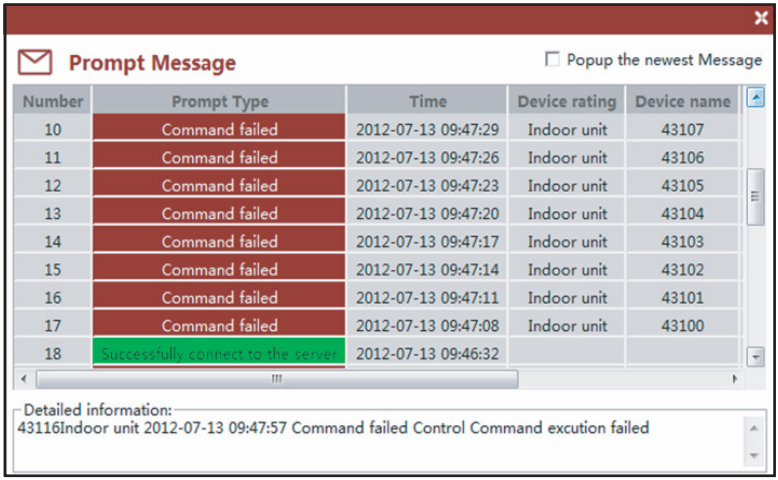


Fig.4-39

Prompt type include: cleaning the filter screen (reminding the user to clean the filter screen), small load operation, operate failed and disconnect with server. Click a prompt message, the bottom of the interface will display detailed information of this message. If checked “Popup the newest Message”, then the prompt dialogue frame will be auto popped-up when there has prompt message.

4.16 Alarm message

When there was device error, lost connection, the system would has alarm message. The alarm frame display as follow:

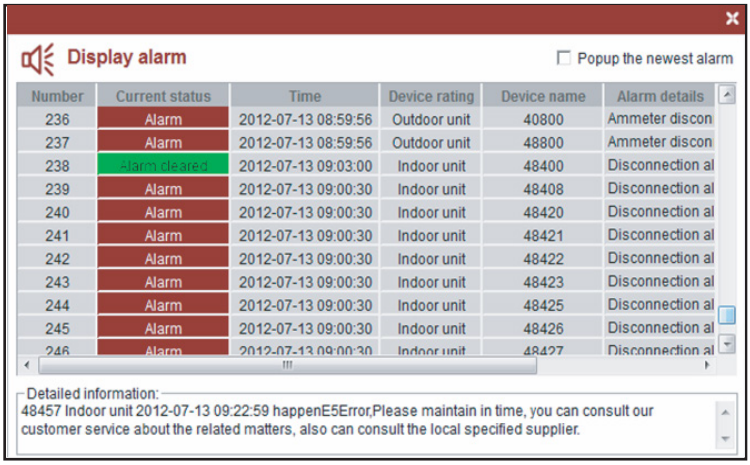


Fig.4-40

After the alarm situation removal, the alarm frame will display the alarm has been removed. Click a prompt message, the page will display details of this information. If check the “Popup the newest prompt”, then it will automatically popup this prompt frame when there is prompt message. When there was alarm message, it should be maintained KAYNETediately.

5. TROUBLESHOOTING

5.1 Login failed

1) Fail to connect the server

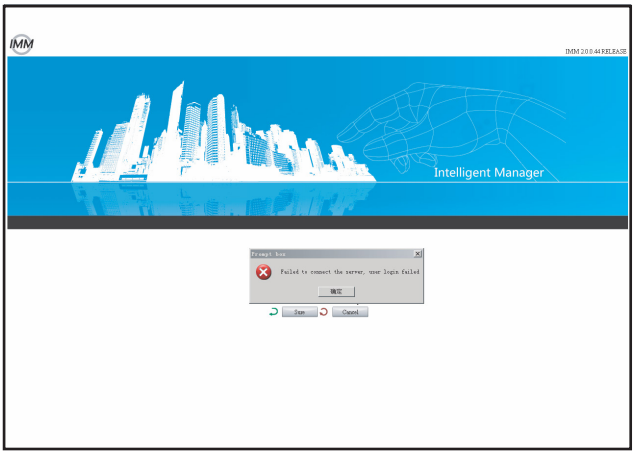


Fig.5-1

Carry out the login operation when it is not connect the server, the result be displayed as the above; it should check whether the client-side configuration information are correct and the network of the server and client-side is work, and the client-side and the data base has been connected

2) Wrong password

Fig.5-2

The above figure means the password was wrong. It needs to re-type in the correct password.

5.2 Control failed

1) When setting the mode limit, it might be caused control failed. Such as the heating mode limit has been set, then open the cooling mode, and which will cause control failed, and the failed information will display in the prompt message frame. It needs to un-lock the air-conditioner, and do the mode setting again.

2) If limited the remote controller, and then use the remote controller to control the air-conditioner will cause operation failed.

3) When controlling the indoor unit, if it was failed, then found out the reason through the prompt message.

5.3 No respond in page

If the page cannot be operated, then should check the connecting icon in the lower left of the page to judge whether it was normally connected to the server, if connection failed, then it needs to contact the local dealer or technicians to maintain the network.

6. APPENDIX

6.1 Error code analysis of client-side interface

The following error code tables are suitable for the V4+ series indoor and outdoor units. When there was error please contact technicians for maintenance KAYNETediately.

Indoor unit error code table:

Table.6-1

E0	Wrong phase order or none phase	P1	Anti cold air or defrosting protection
E1	Communication error	P2	High temperature protection of condenser
E2	T1 sensor error	P3	Temperature protection of compressor
E3	T2A sensor error	P4	Temperature protection of air exhausting pipe
E4	T2B sensor error	P5	Protection for high air exhausting pressure
E5	Air exhausting temp. sensor error of T3 or T4 or digital compressor	P6	Protection for low air exhausting pressure
E6	Zero crossing detection error	P7	Power over pressure protection
E7	EEPROM error	P8	Compressor over current
E8	Fan speed detection lose control	PF	Other protections
E9	Communication error between main board and display board	0#	Communication error between network connector module and main control board
EA	Compressor over current (4 times)	1#	Communication error between centralized monitor and network connector module
EB	Inverter module protection	2#	Communication error between centralized monitor and function module
EC	Fresh error	3#	Communication error between centralized monitor and computer (gateway)
ED	Outdoor unit error protection	4#	Order limit execution
EE	Water level detection error	5#	Order times out, no execution
EF	Other errors	6#	Excepted address do not exist
P0	Temperature protection of evaporator	7#	Wrong (not-supported) order

Outdoor unit error code table: Table.6-2

E0	Outdoor unit communication error	P2	Protection for low air exhausting pressure
E1	Wrong phase order or none phase	P3	Compressor current protection 1
E2	Indoor unit communication error	P4	Temperature protection of air exhausting pipe
E3	Air exhausting temp. sensor error of T3 or T4 or digital compressor	P5	High temperature protection of condenser
E6	T6 sensor error	P6	Inverter module protection
E9	Voltage error	P7	Compressor current protection 2
EF	Other errors	P8	Compressor current protection 3
H0	DSP communication error	P9	Power over pressure protection
H1	Network communication error	PA	Defrosting protection
H2	Outdoor unit reducing error (Valid for main unit)	PD	Oil return
H3	Outdoor unit increasing error (Valid for main unit)	PE	Oil averaging
P0	Protection for compressor top temperature	PF	Other protections
P1	Protection for high air exhausting pressure		

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