

VRF Selection Help

V 1.5.0

1.	Menu and Toolbar	3
1.1	Menu.....	3
1.2	Toolbar.....	3
1.2.1	Project toolbar	3
1.2.2	Units toolbar.....	3
1.2.3	Tools box	4
2.	Create new project	4
2.1	Create a new project or open a project file.....	4
2.2	Create a new system by wizard.....	4
2.2.1	Create a new system (by wizard)	4
2.2.2	Edit Floor and room	5
2.2.3	Edit system	6
2.2.4	Add Local Wired Controller Equipment	7
2.3	Create a new system by manual.....	8
2.3.1	Create a new system (by manual).....	8
2.3.2	Select outdoor unit and indoor unit	9
2.3.3	Move and remove units.....	11
2.4	Main Screen and Edit System in Main Screen.....	12
2.4.1	Overview and system layout	12
2.4.2	Add / remove system controller and BMS.....	12
2.4.3	System information review	12
2.4.4	Change outdoor units	13
2.4.5	Change and add indoor units.....	13
2.4.6	Show hint for units and lines	13
2.4.7	Zoom in and zoom out	14
2.5	System Tubing Layout and Wiring Layout	14
2.5.1	Automatic tubing and wiring	14
2.5.2	Tubing and wiring by manual	14
2.5.3	Define length of tubing and wiring.....	15
3.	Print reports	16

1. Menu and Toolbar

1.1 Menu

File Menu







Create New Project	Start wizard of create a new project.
Open Project	Open project from file
Save Project	Save project to file
Save Project as	Save project to a custom file
New System Wizard	Start wizard of create a new system.
Edit Current System	Change current system's setting.
Print Reports	Export reports of the project.
Exit VRF Selection	Quit software

Controls Menu

Show/Hide Control bar	Open or Close toolbar.
Show/Hide Units bar	Open or Close toolbar.
Export tubing layout to bitmap file	Save tubing layout to a bitmap file format.
Export wiring layout to bitmap file	Save wiring layout to a bitmap file format.

1.2 Toolbar

1.2.1 Project toolbar

	Create New Project
	Edit Current System
	Open Project
	Save Current Project
	Print Reports
	Open about dialog

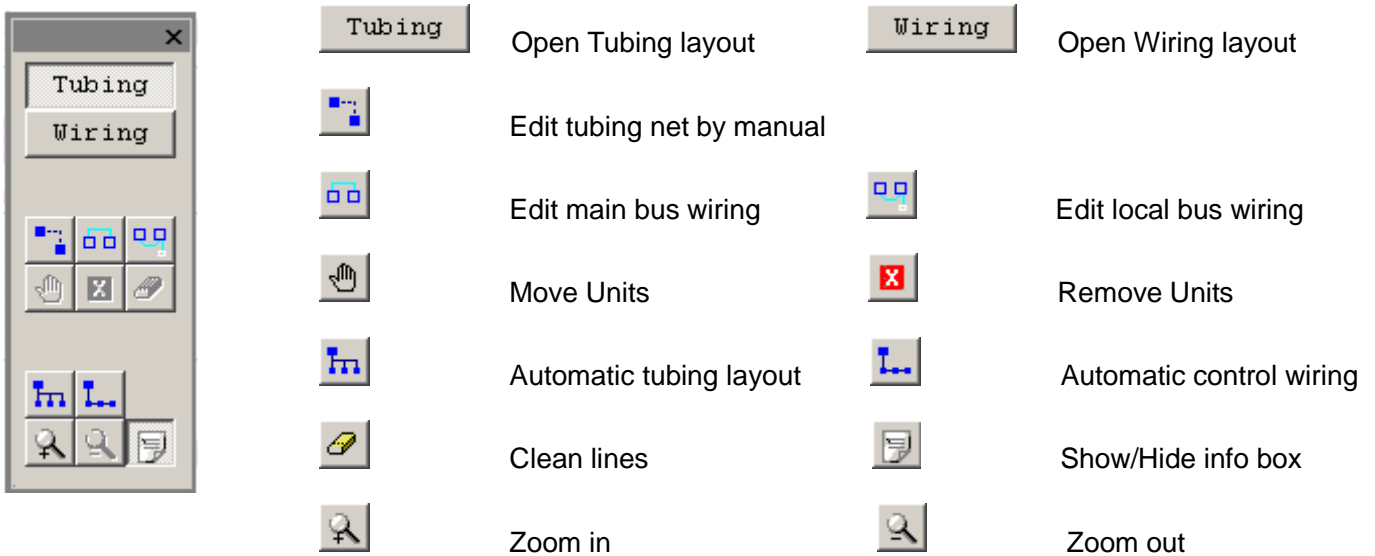
1.2.2 Units toolbar



VRF Outdoor Units and Indoor Units.
VRF LWC/LWCS/BMS/SC units.

1.2.3 Tools box

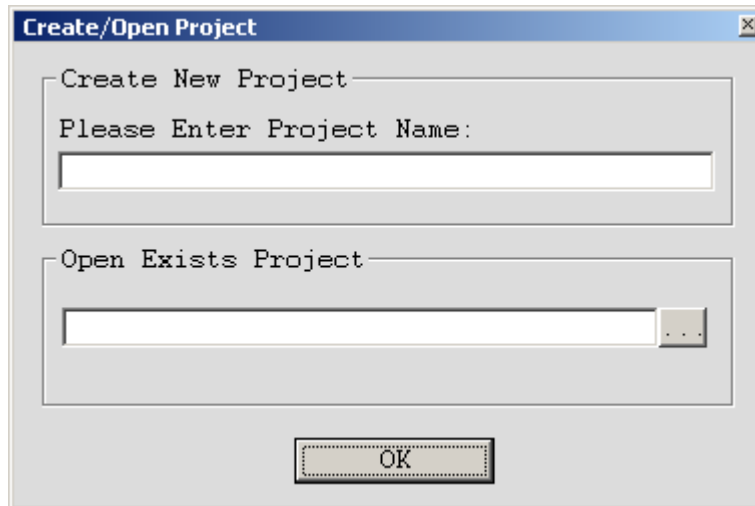
Tools box panel



2. Create new project

2.1 Create a new project or open a project file.

When start running the software, you can crate a new project or open a project file.




2.2 Create a new system by wizard

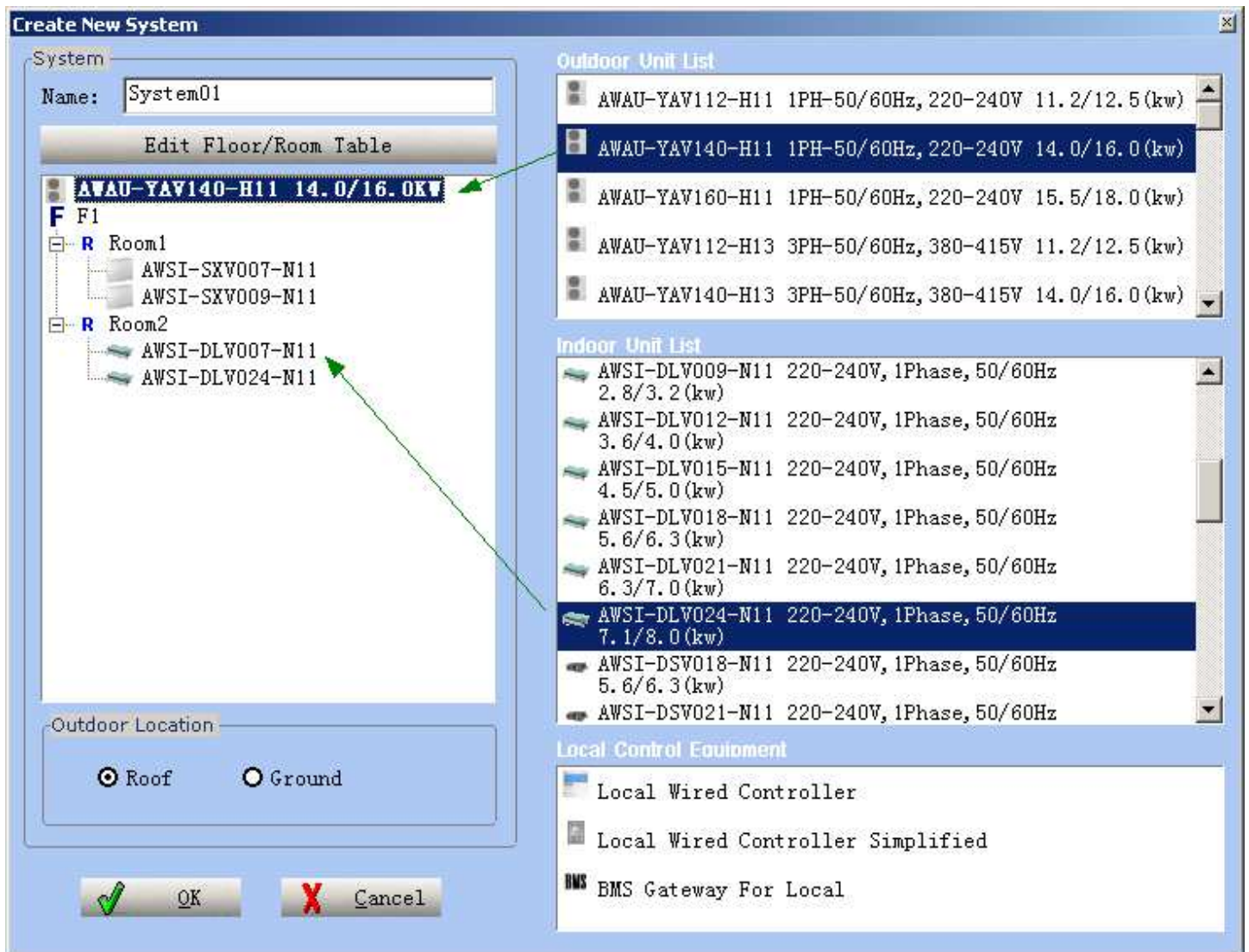
2.2.1 Create a new system (by wizard)

After create a project and then we can create a new system by wizard. (*By manual in next section*)

This software supports up to 10 systems.

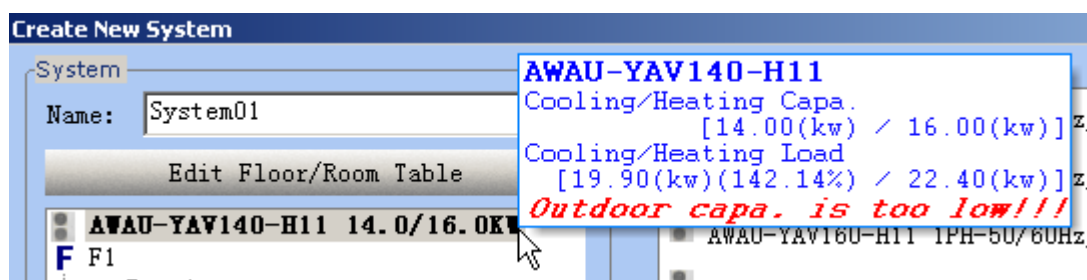
- Click the  [New system wizard](#) to open the "New system" dialog.
- Select ["New system by wizard"](#) and click "OK".

2.2.3 Edit system

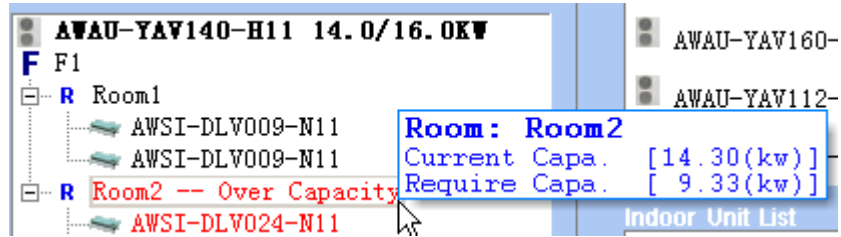


- The left tree is the current system logical tree view, we can drag the outdoor unit or indoor units from the right list by pressing left key of mouse.
- [Outdoor location](#): Define where outdoor unit placed, on the roof of building or ground.
- Show hint about capacity is suitable or not for room or outdoor unit when put mouse on room or unit.

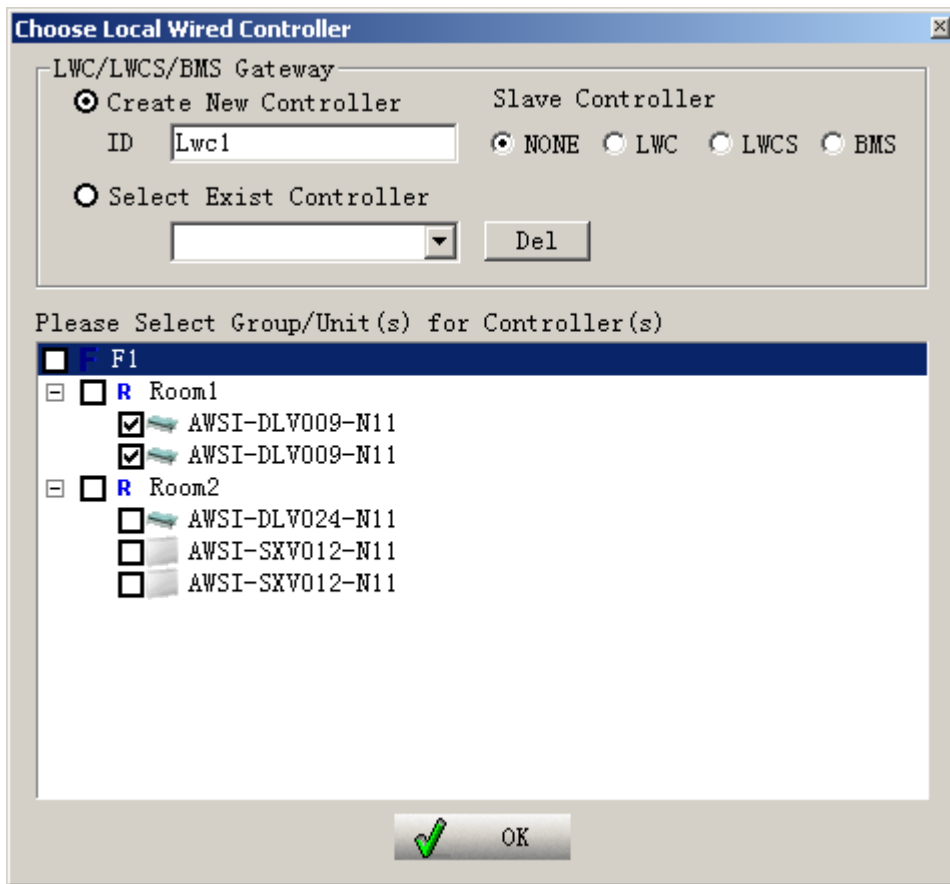
Show hint for outdoor unit:



Show hint for room:



2.2.4 Add Local Wired Controller Equipment

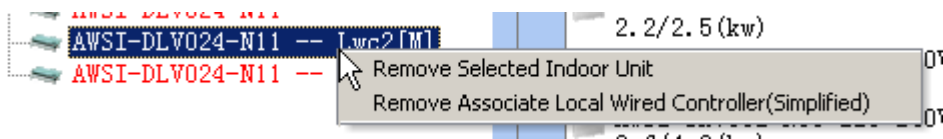


- Drag the "[Local Wired Controller](#)" or "[Local Wired Controller Simplified](#)" or "[BMS Gateway for local bus](#)" from local control equipment list and drag it to the indoor unit list of system tree view, and the "[Choose Local Wired Controller](#)" dialog is shown, check the indoor unit if you want to associate the new controller to these indoors.
- You can select slave controller also.

2.2.5 Remove indoor unit and local wired controller

In the units list of system tree view, select an indoor unit and click mouse. You can remove this indoor


unit or local wired controller.

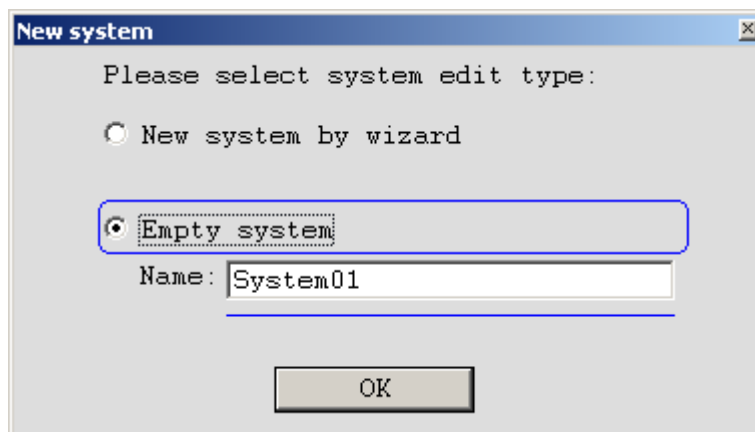


2.3 Create a new system by manual

After create a project and then we can create a new system by manual. (By wizard in previous section)
This software supports up to 10 systems.

2.3.1 Create a new system (by manual)

- Click the  [New system wizard](#) to open the “New system” dialog.
- Select “Empty system” and enter system name or use default name.
- The empty system layout is shown. You can drag outdoor unit or indoor unit or local controller to any position.



2.3.2 Select outdoor unit and indoor unit

- Select Outdoor unit: Drag outdoor unit from toolbar and select one type of ODU, and then put it on the ODU area.

Drag ODU and select one type you want:

Outdoor Unit

AWAU-YAV112-H11

AWAU-YAV140-H11

AWAU-YAV160-H11

AWAU-YAV112-H13

AWAU-YAV140-H13

AWAU-YAV160-H13

Power Supply: 1PH-50/60Hz, 220-240V

Max Connectable Units: 8

Capacity

Cooling: 14.000 (kw) Heating: 16.000 (kw)

COP

Cooling: 3.50 (w/w) Heating: 4.10 (w/w)

Electrical Rating

Cooling Running Amperes: 19.400 (A)
Power Input: 4.000 (kw)

Heating Running Amperes: 20.300 (A)
Power Input: 3.900 (kw)

Tubing Connection

Gas Pipe: 5/8 (inch) Liquid Pipe: 3/8 (inch)

Operating Sound

Normal Mode: 55 (dB) Silent Mode: 50 (dB)

DB Temperature: (Cooling) [-10~46]

WB Temperature: (Heating) [-16~18]

X Cancel OK

- Select Indoor unit: Drag indoor unit from toolbar and select one type of IDU, and then put it on the IDU area.

Drag IDU and select one type you want:

Indoor Unit

Type & Model: AWSI-DLV

AWSI-DLVO07-N11
AWSI-DLVO09-N11
AWSI-DLVO12-N11
AWSI-DLVO15-N11
AWSI-DLVO18-N11

Location
Floor:
Room:

Controls
Main Control:
Wireless Control: NONE

Power Source: 220-240V, 1Phase, 50/60Hz

Power Input
Cooling: 0.046 (kw)
Heating: 0.048 (kw)

Capacity
Cooling: 2.800 (kw)
Heating: 3.200 (kw)

Running Amperes
Cooling: 0.500 (A)
Heating: 0.500 (A)



Operating Sound
L: 28 (dB)
M: 29 (dB)
H: 31 (dB)

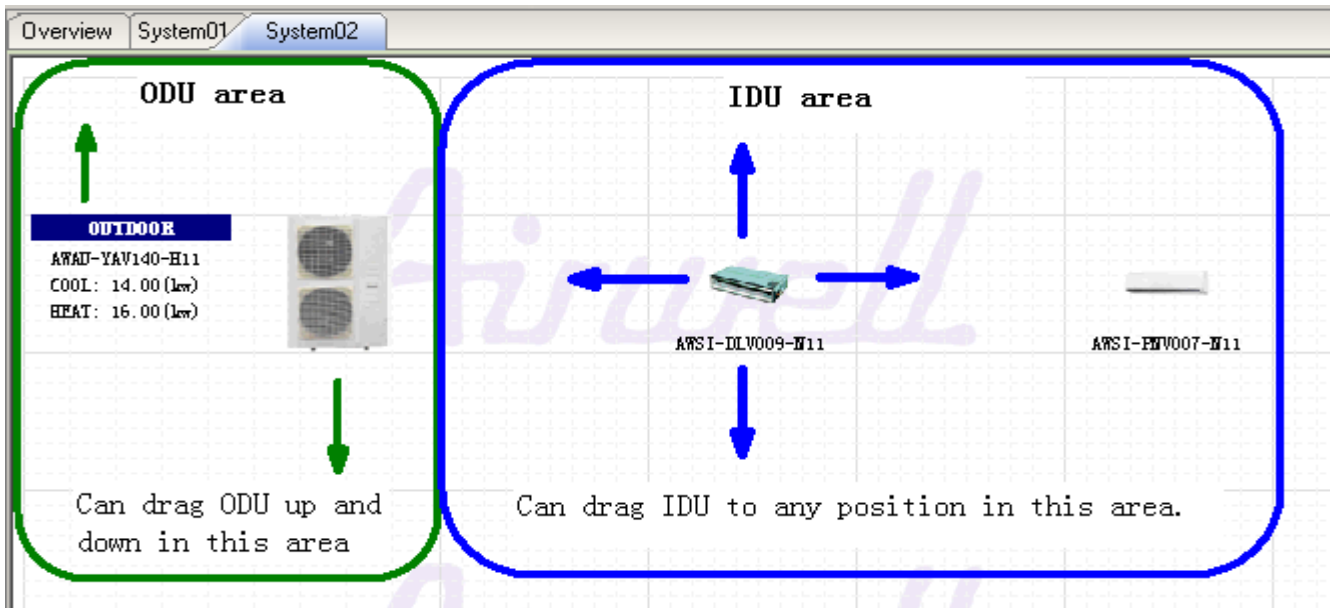
Tube Connections
Gas Pipe (Flare): 12.70 (mm)
Liquid Pipe (Flare): 6.35 (mm)

Actual Capa. Conditions
DB Temperature: (Heating) [10~27] 20
WB Temperature: (Cooling) [15~23] 19
Elevation of Outdoor-Indoor : [-40~50] 0

X CANCEL **✓** OK

2.3.3 Move and remove units

- Move and remove units: Press “” button can drag unit to any position; Press “” button can delete the unit.



2.4 Main Screen and Edit System in Main Screen

2.4.1 Overview and system layout

All systems that you had created will display in overview layout. You can open any system layout by double click the system icon or select the system directly.

VRF supports up to 10 systems.

You can select a system and click “Remove” to remove the system from this project.

The screenshot displays the 'Overview' screen of a VRF system management software. At the top, a menu bar lists 'Overview' and 'System01' through 'System10'. Below the menu, ten system icons are arranged in a grid, each with a number and technical specifications. A green arrow points to a 'Remove' button on System01 with the text 'Remove system by click this button'. To the right, a 'System information review' panel shows capacity and density limits, charge information, and tables for pipe and branch details.

System information review

CAPACITY LIMIT
Outdoor Capacity: 14.0(kw)/16.0(kw)
Indoor Capacity: 6.6(kw)/7.5(kw)
Capacity Ratio: 47.1 (%) [51%~130%]
Total Indoor Capacity Is Too Low!!!

DENSITY LIMIT
Limit Refrigerating Fluid Density:
0.192 (kg/m³) [MAX=0.440 (kg/m³)]

CHARGE
Additional Charge: 1.4 (kg)
Total Charge: 6.9 (kg)

PIPE	Diameter	Length(m)
	1/4	12.0
	3/8	20.0
	1/2	22.0
	5/8	10.0

BRANCH	Code	Model	Quantity
	A	T-joint	2

2.4.2 Add / remove system controller and BMS

Add: In overview layout, drag SC or BMS from toolbar to any system. Then outdoor units and SC and BMS can be connected by main bus.

Remove: In overview layout, click “Remove” to remove it.




2.4.3 System information review

In overview layout, the system information review will show in right after select one system.


2.4.4 Change outdoor units

In system layout, double click the ODU to reselect another model of ODU.

Or click “ [Edit current system](#)” to reselect another type of ODU if this system created by wizard, or remove the unit first and drag a new one if this system created by manual.

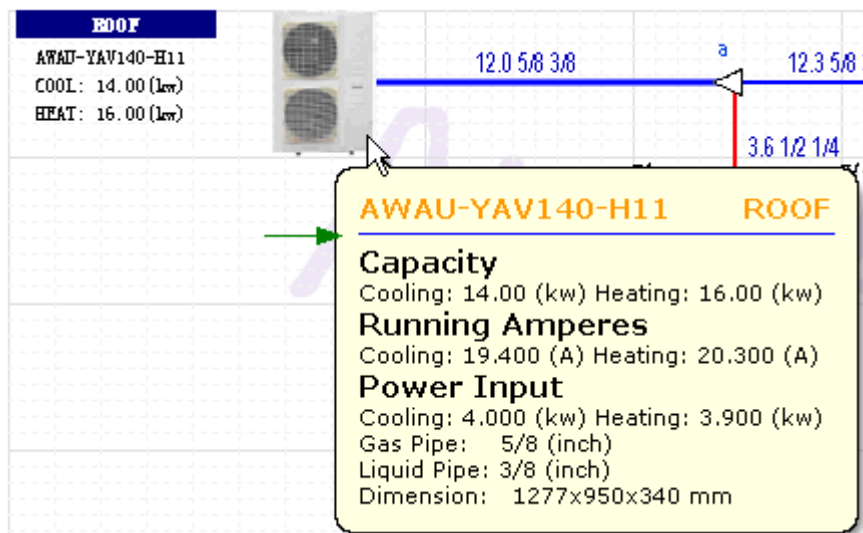
2.4.5 Change and add indoor units

In system layout, double click the IDU to reselect another type of IDU.

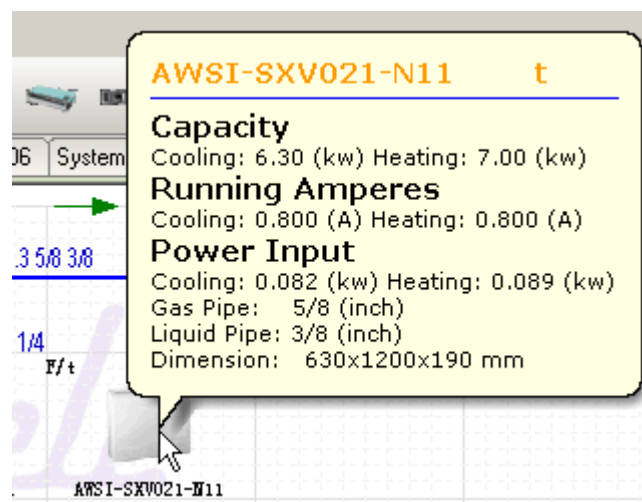
Or click “ [Edit current system](#)” to reselect or add another type of IDU.

2.4.6 Show hint for units and lines

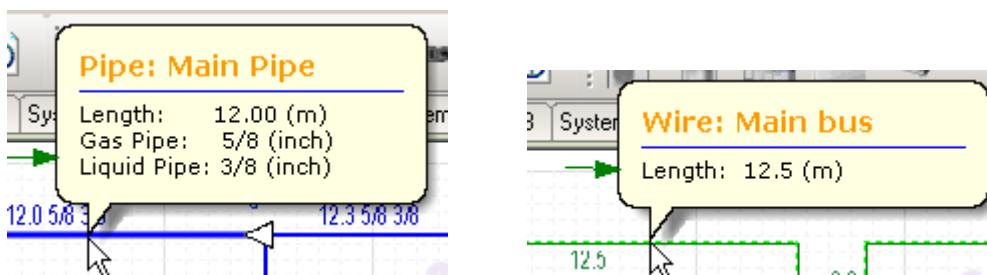
Put the mouse on the ODU and then the unit hint dialog can be shown.





Put the mouse on the IDU and then the unit hint dialog can be shown.



Put the mouse on the lines and then the line dialog can be shown.




2.4.7 Zoom in and zoom out

In system layout, you can click “” or “” to zoom in and zoom out. And you can use “Ctrl+Mouse wheel” to zoom in and zoom out also.

2.5 System Tubing Layout and Wiring Layout

2.5.1 Automatic tubing and wiring

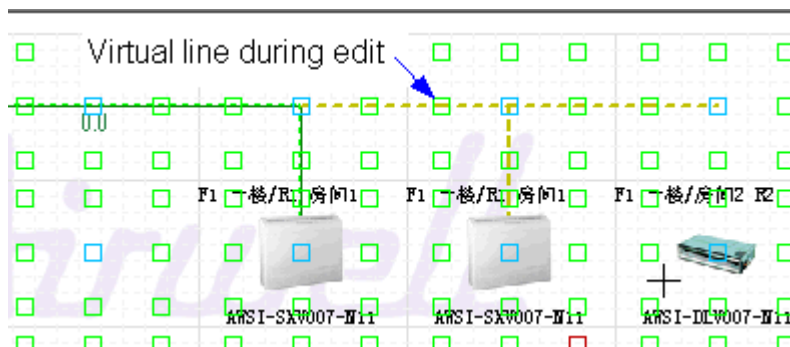
Click “” button can automatic all tubing. And click “” button to automatic all wiring.

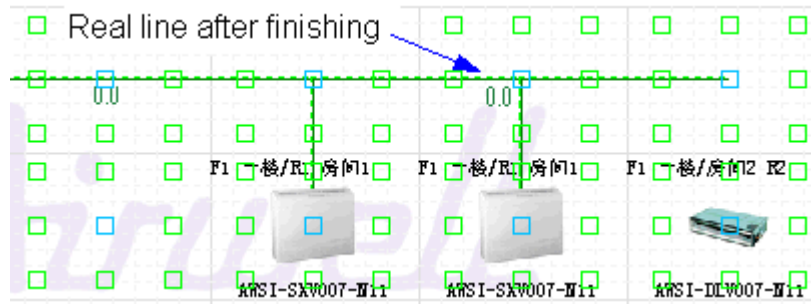
Click “” button can clean tubing line.


2.5.2 Tubing and wiring by manual


- Click “” button can edit main bus wiring layout by manual.

How to wiring: Click left key of mouse to select the “start point” and then click again to select the “end point”, a virtual line is shown and click again to go on. Click left key of mouse in empty space to finish this line. A real line is shown.







Click “” button again to exit and confirm wiring layout.

- Click “” button can edit local bus wiring layout by manual.

How to wiring: Refer the process of wiring main bus.

- Click “” button can edit tubing by manual.

How to tubing: Refer the process of wiring main bus.

- Click “” button can clean wiring line.

2.5.3 Define length of tubing and wiring

Double click the tubing or wiring to enter the length.

3. Print reports

Print reports

Print Items

All System

Equipment List

Actual Capacity of Units table

Refrigerant Tubing System Diagram

Control Wiring Schematic Diagram

Select All

Printer Options

Select Printer

PDFCreator

Copys: 1

Print

Cancel

- Select report for all systems or any system and “print items” first then select the printer that had been setup in your computer.
- Click “Print” to print reports.