

SAMSUNG New DVM-Pro

User Manual (Sales **mode)**

English Version

2011. 11.

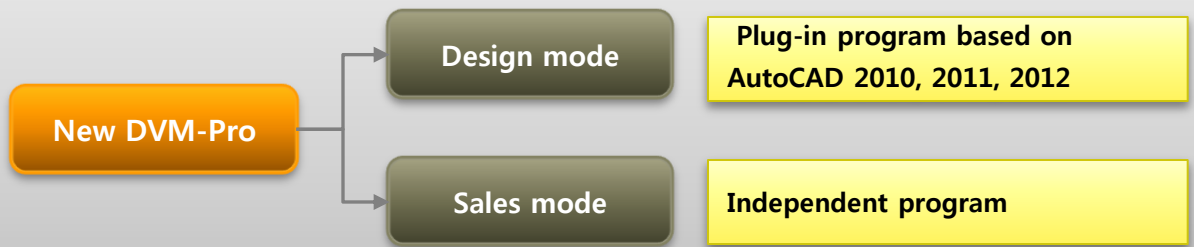
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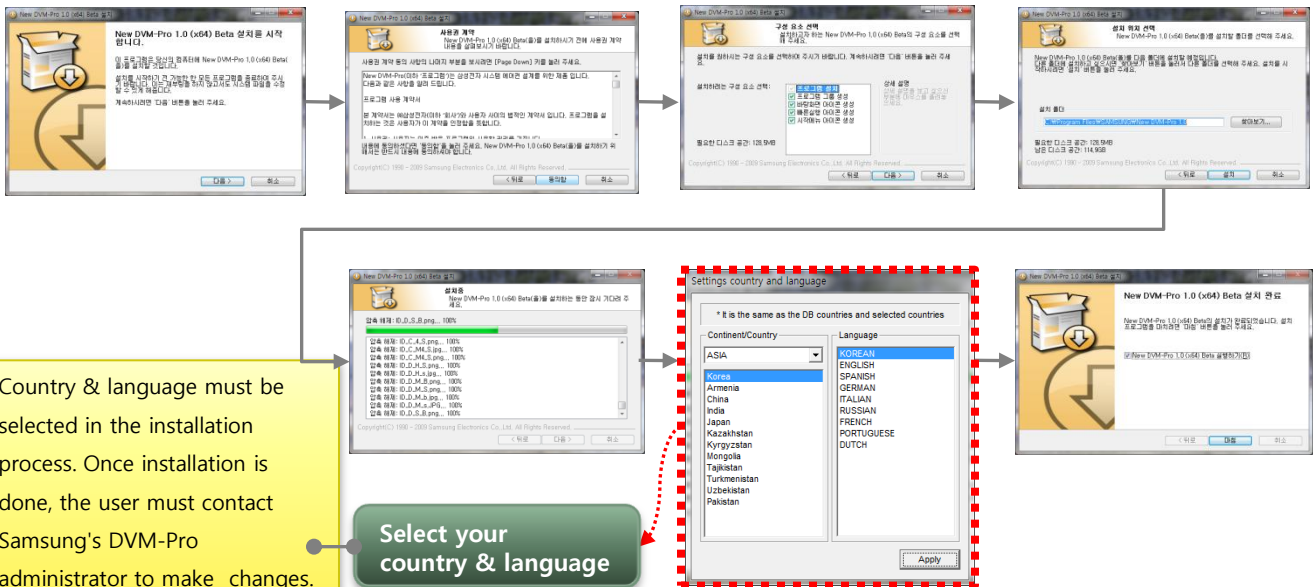
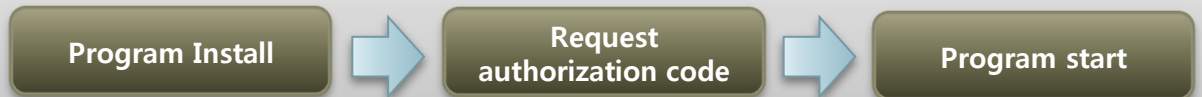
01 New DVM-Pro Install & Run

- New DVM-Pro supports Windows XP/7 32bit, 64bit system.
- After installation, the user must obtain an authorization code to use New DVM-Pro.
- New DVM-Pro is composed of 'design mode' and 'sales mode'.

New DVM-Pro composition

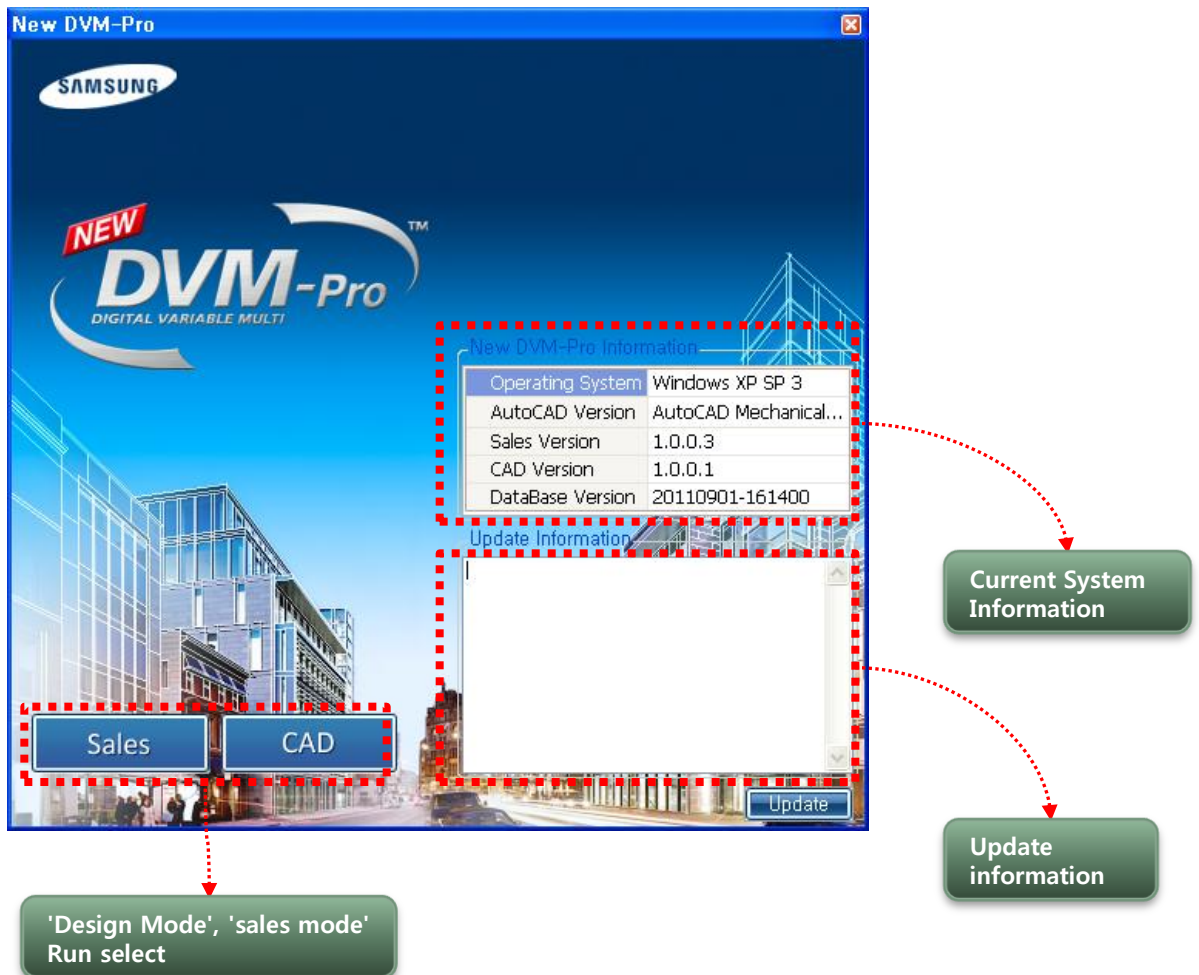


Program Installation & activation



01|| New DVM-Pro Install & Run

- New DVM-Pro is composed of the 'design mode' and 'sales mode' , so in starting the program the following window appears and the user can choose between the two modes.
- The update information appears in the below section and the user can make the update optionally.



02 Sales Mode Usage Process

New DVM-Pro sales mode procedure is as follows.



03 || Operation Procedure

(1) Project Define

- To create the project, enter basic information.
- Enter the project name, the project name will be saved as the file name. file format is ".dvmx".
- Customer and designer information entering is optional.
- In the Design condition, select your city. It also can be edited manually.

Project Information

Project name

Customer information

Name

Tel.

E-MAIL

Address

Designer information

Name

Tel.

E-MAIL

Address

Design condition

Country: Korea

State

City: 서울

°C	Cooling		Heating	
	Outdo	Indoo	Outdo	Indoo
DB.Te...	31.8	27.0	-12.1	20.0
WB.T...	24.7	19.0		15.0
R.H.(%)	61.0	51.0	0.0	64.0

OK Cancel

Required Field

Project Information

Project name

project_20110928

Customer information

Name

Tel.

E-MAIL

Address

Designer information

Name

Tel.

E-MAIL

Address

Design condition

Country: United Kingdom

State

City: LONDON/GATWICK ARPT

°C	Cooling		Heating	
	Outdo	Indoo	Outdo	Indoo
DB.Te...	26.4	27.0	-3.7	20.0
WB.T...	18.4	19.0		15.0
R.H.(%)	61.0	51.0	0.0	64.0

OK Cancel

Not mandatory

Project Information

Project name

project_20110928

Customer information

Name

Tel.

E-MAIL

Address

Designer information

Name

Tel.

E-MAIL

Address

Design condition

Country: United Kingdom

State

City: LONDON/GATWICK ARPT

°C	Cooling		Heating	
	Outdo	Indoo	Outdo	Indoo
DB.Te...	26	27.0	-3.7	20.0
WB.T...	18.0	19.0		15.0
R.H.(%)	49.0	51.0	0.0	64.0

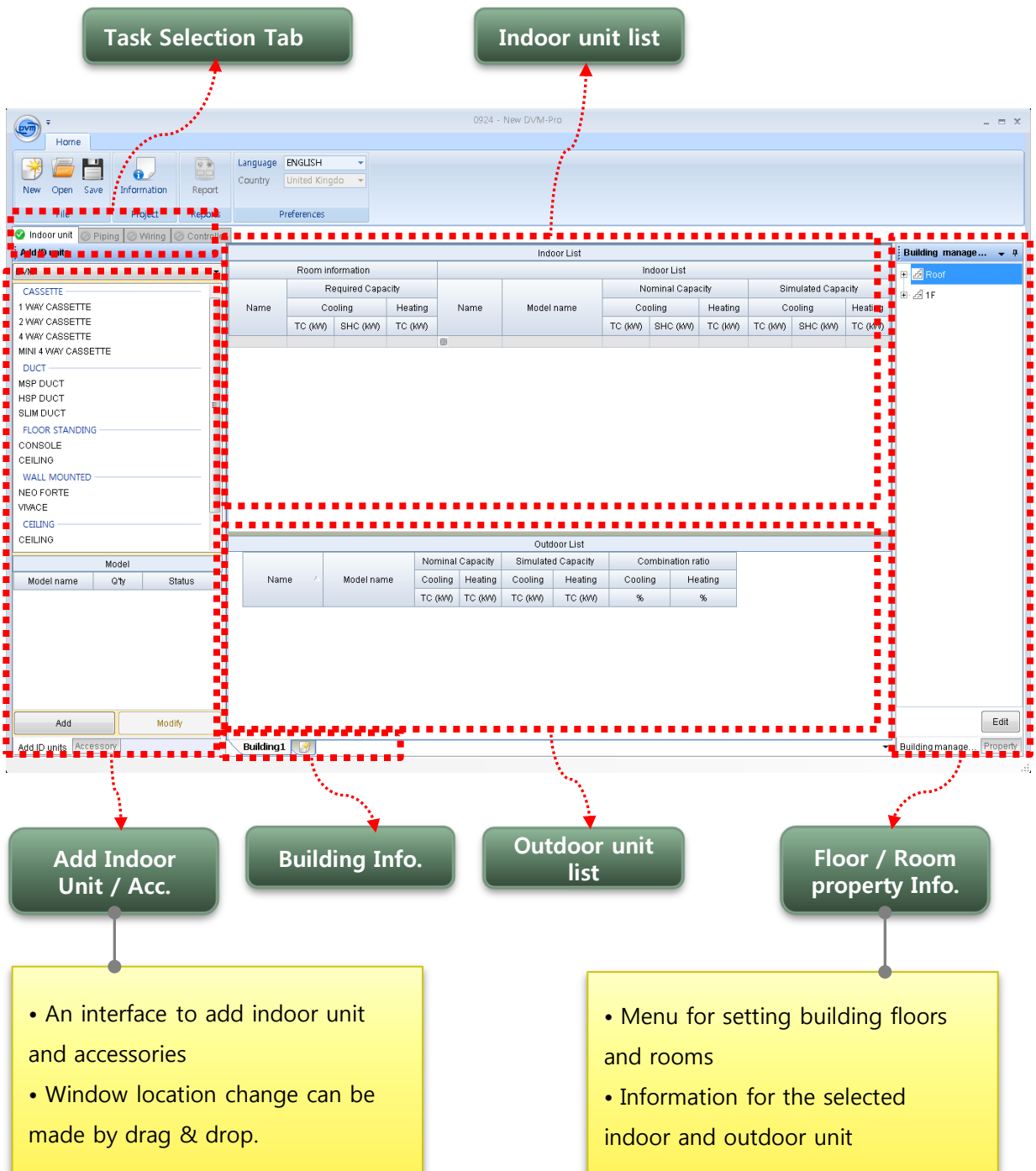
OK Cancel

Can be modified manually

03 || Operation Procedure

(1) Project Define

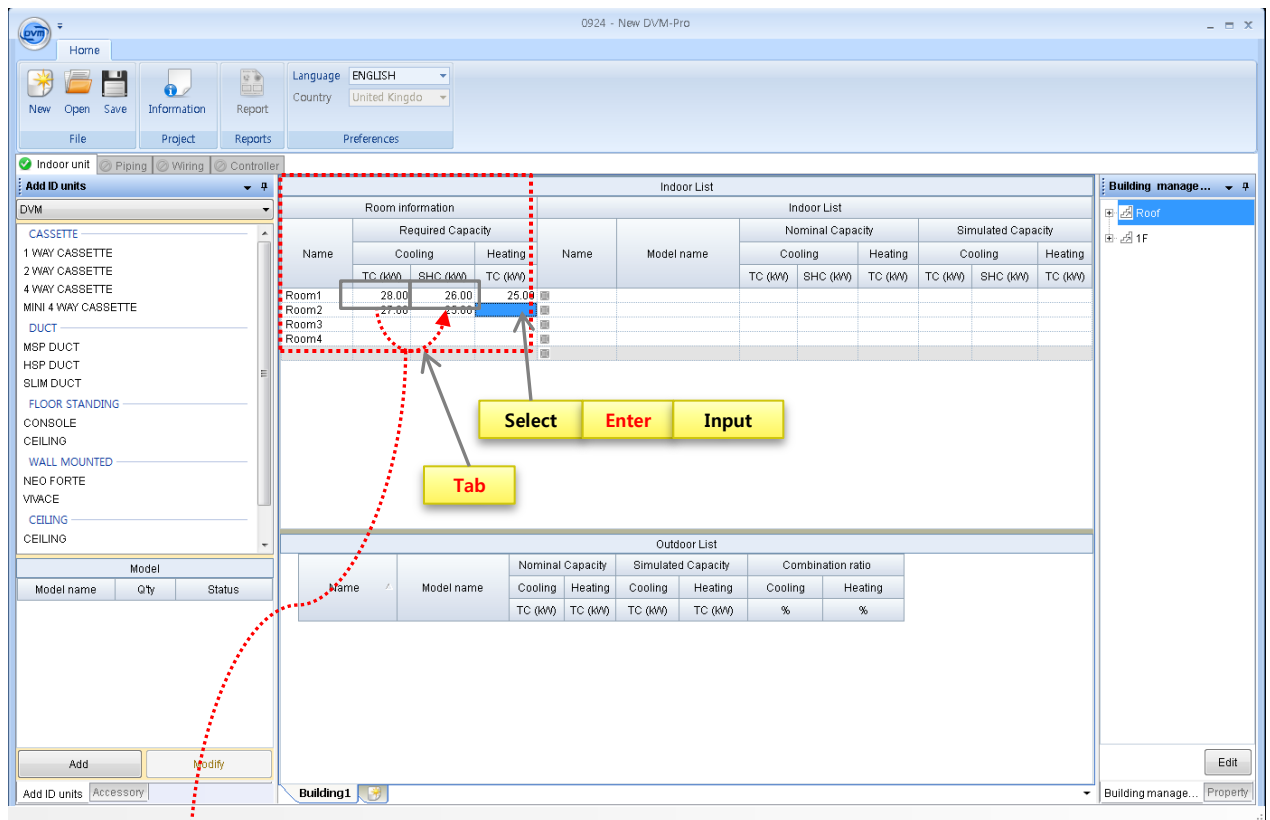
- New DVM-Pro sales mode default interface are as follows:
- Room defining, indoor & outdoor unit selection and connection, system information checking can be done on one screen.



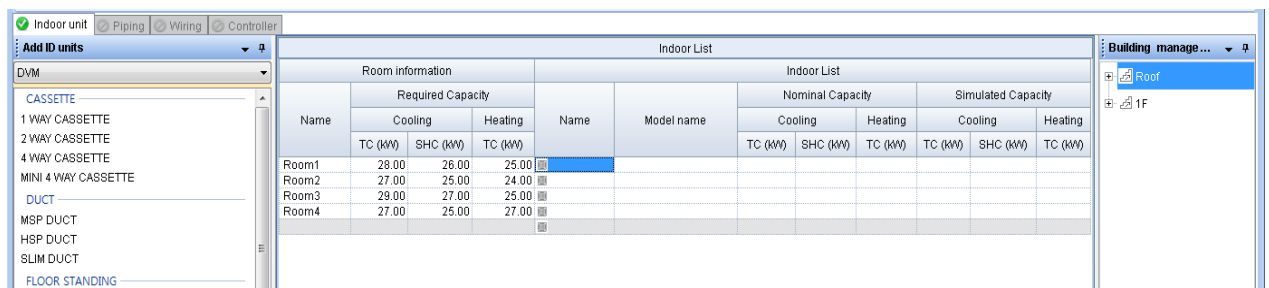
03 || Operation Procedure

(2) Indoor Unit Design – Room Info.

- To register Indoor unit, Room name and demand load must be registered first.
- To enter a value in the grid, select the position then press 'Enter'. Use 'Tab' key to move on to the next space.
- Data entering and management can be done easily using the 'Enter' and 'Tab' keys,



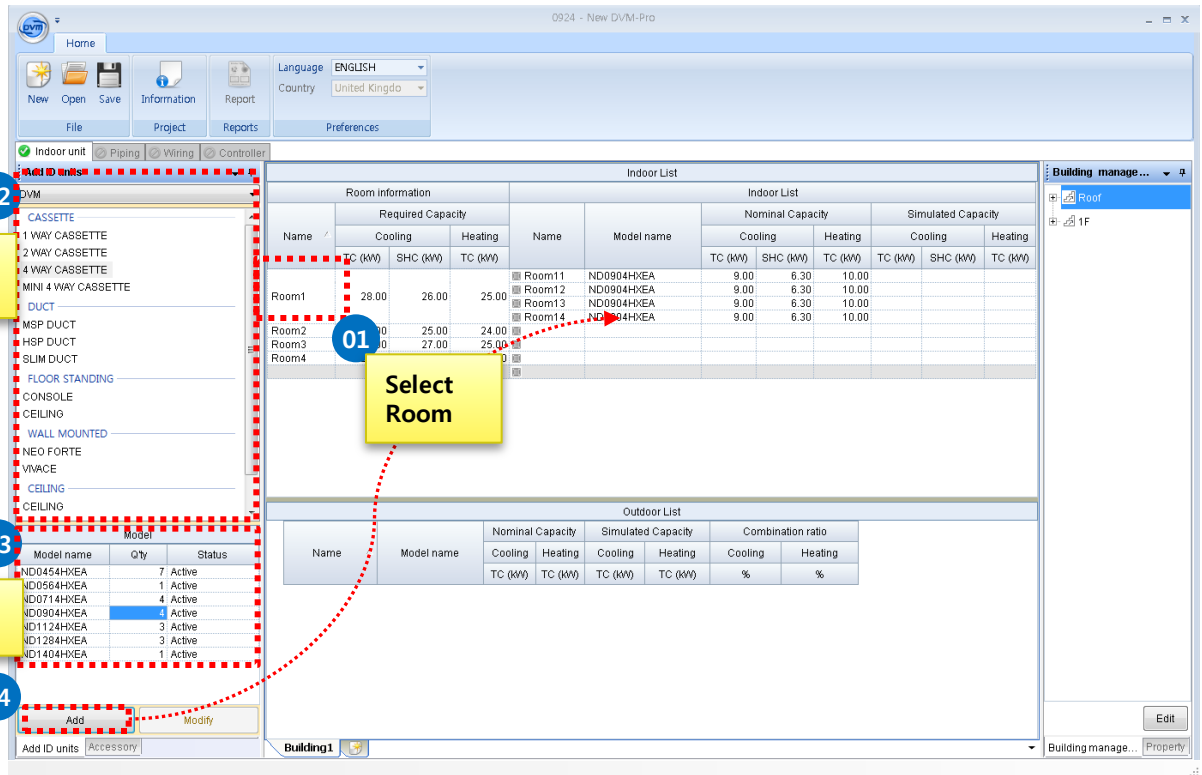
Enter the room information



03 Operation Procedure

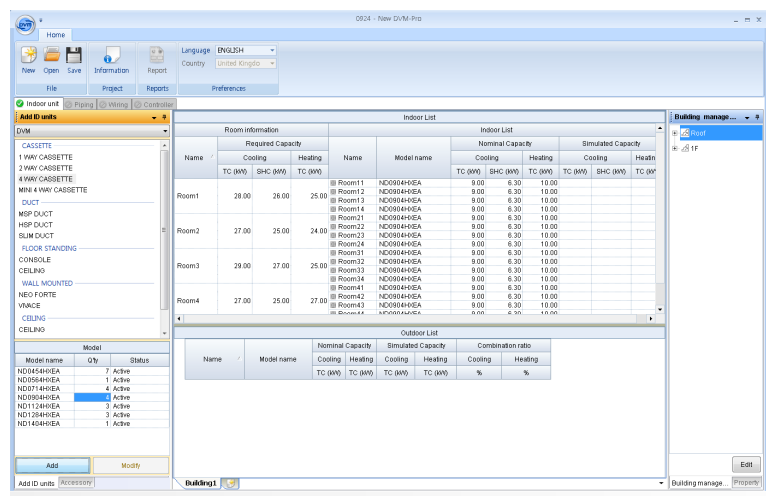
(2) Indoor Unit Design – Select & register indoor unit

- Select the corresponding room, then add the indoor unit using the “Add” button.



Model		
Model name	Qty	Status
ND0454HXEA	7	Active
ND0564HXEA	1	Active
ND0714HXEA	4	Active
ND0904HXEA	4	Active
ND1124HXEA	3	Active
ND1284HXEA	3	Active
ND1404HXEA	1	Active

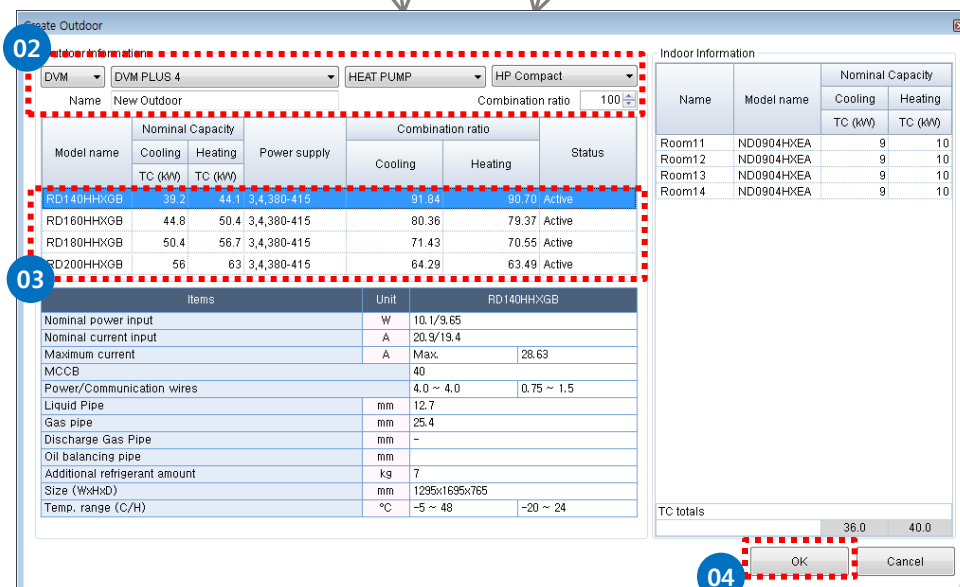
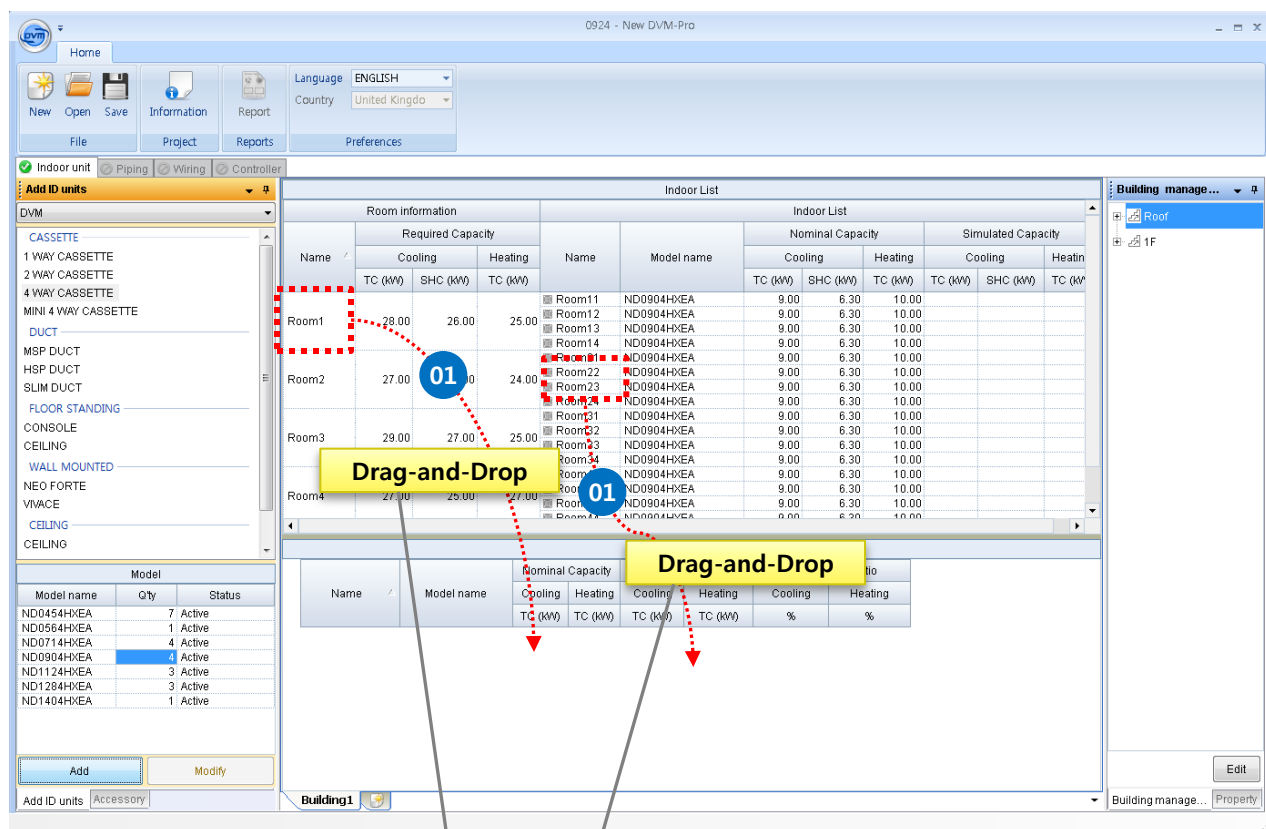
If you select the model, it automatically calculates the quantity and can be changed manually



03 Operation Procedure

(3) Outdoor Unit registration

- To register the outdoor unit, select room or indoor unit from the list of the indoor units, then drag and drop to the outdoor unit list. A window will appear for registering the outdoor unit.
- Select the type and model of the outdoor unit and enter "OK", then the outdoor unit is registered.



03 || Operation Procedure

(3) Outdoor Unit Registration

- Once registered, color distinguishment is made as the figure below. The connected indoor unit can be identified in the Outdoor unit list.

The connected outdoor and indoor units and the unconnected units can be distinguished by color

The screenshot displays the Samsung DVM-Pro software interface. The main workspace is divided into two sections: 'Indoor List' and 'Outdoor List'. The 'Indoor List' table shows room information and required capacity. The 'Outdoor List' table shows outdoor unit information, including model name, nominal capacity, simulated capacity, and combination ratio. A red dashed box highlights the 'Indoor List' table, and a yellow 'click' label points to a row in the 'Outdoor List' table. A red dotted line connects the 'click' label to the 'Indoor List' table, indicating a double-click action to view product details.

Room information				Indoor List				
Name	Required Capacity			Name	Model name	Nominal Capacity		
	Cooling TC (kW)	SHC (kW)	Heating TC (kW)			Cooling TC (kW)	SHC (kW)	Heating TC (kW)
Room1	28.00	26.00	25.00	Room11	ND0904H-XEA	9.00	6.30	10.00
Room2	27.00	25.00	24.00	Room12	ND0904H-XEA	9.00	6.30	10.00
Room3	29.00	27.00	25.00	Room13	ND0904H-XEA	9.00	6.30	10.00
Room4	27.00	25.00	27.00	Room14	ND0904H-XEA	9.00	6.30	10.00

Outdoor List							
Name	Model name	Nominal Capacity		Simulated Capacity		Combination ratio	
		Cooling TC (kW)	Heating TC (kW)	Cooling TC (kW)	Heating TC (kW)	Cooling %	Heating %
New Outdoor	RD140HH-XGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HH-XGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HH-XGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HH-XGB	39.20	44.10			91.84	90.70

The 'Property' sidebar on the right shows details for the selected unit, including Model type (4 Way Cassette S), Model name (ND0904H-XEA), Power supply (0.8V/Hz, 1.2, 220-240.50), and various capacity and input/output specifications.

Double-clicking indoor, outdoor shows the product details

03 || Operation Procedure

(4) Space management

- New DVM-Pro can manage the floors and rooms in conjunction.

01 Edit

02

Floor	Name	Height
Roof	Roof	0
1	1F	3000

03

Floor	Name	Height
Roof	Roof	0
7	7F	3000
6	6F	3000
5	5F	3000
4	4F	3000
3	3F	3000
2	2F	3000
1	1F	3000

Automatic generation of the ground floor

Enter the ground floor and height

04

Floor	Name	Height
Roof	Roof	0
7	7F	3000
6	6F	3000
5	5F	3000
4	4F	3000
3	3F	3000
2	2F	3000
1	1F	3000
-3		

Enter the basement and height

05

Floor	Name	Height
Roof	Roof	0
7	7F	3000
6	6F	3000
5	5F	3000
4	4F	3000
3	3F	3000
2	2F	3000
1	1F	3000
-1	B1	
-2	B2	
-3	B3	

Automatic generation of the basement

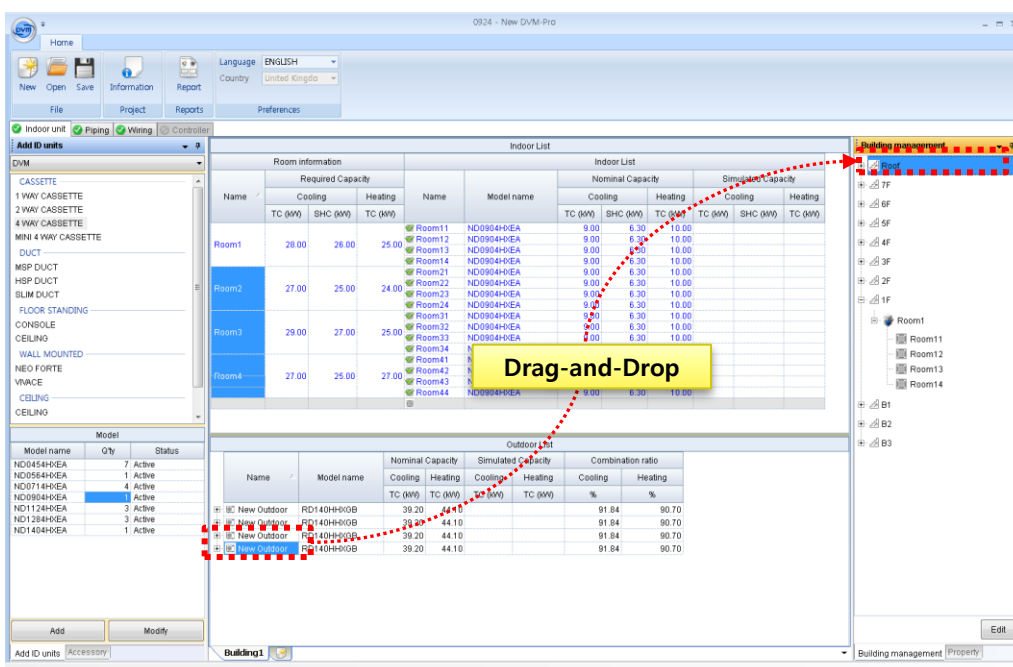
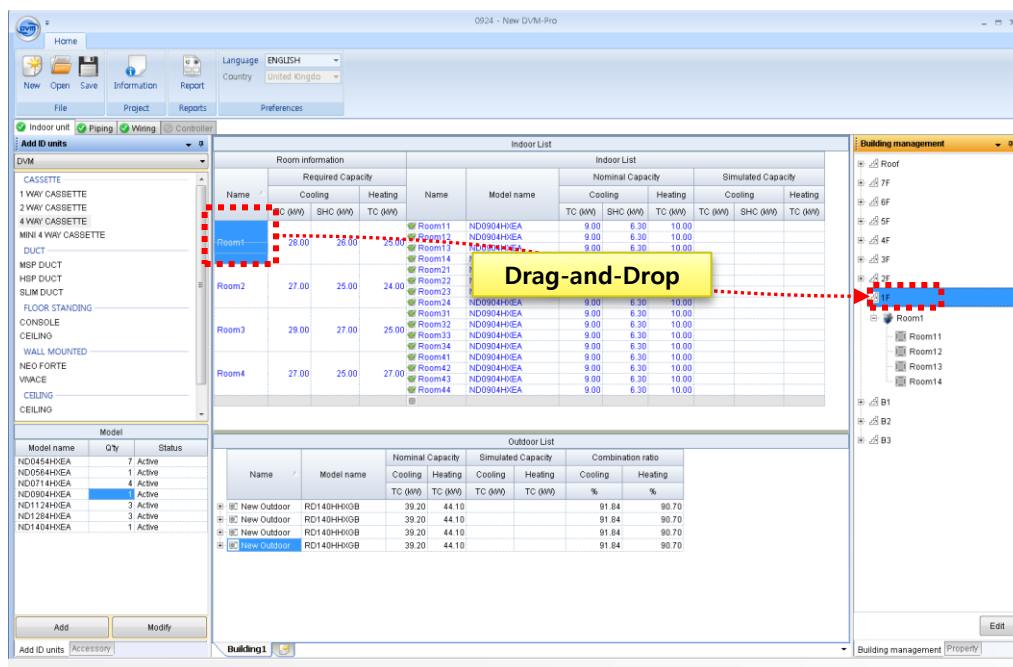
Building management

- Roof
- 7F
- 6F
- 5F
- 4F
- 3F
- 2F
- 1F
- B1
- B2
- B3

03 || Operation Procedure

(4) Space management

- Rooms can be registered to floors. Select indoor unit, room or outdoor unit and by drag and drop to the desired floor, registration is complete.



03 || Operation Procedure

(5) Piping – Automatic

- After registration of the indoor and outdoor unit is complete, the piping tab is activated, the user will be able to write.
- The default mode is auto-piping, the user can manually direct if needed,.
- Like the CAD, the user can use the mouse wheel to zoom in / out, and pan.

Outdoor Unit list

Automatic/Manual

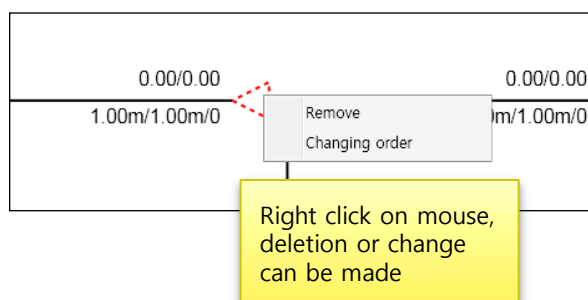
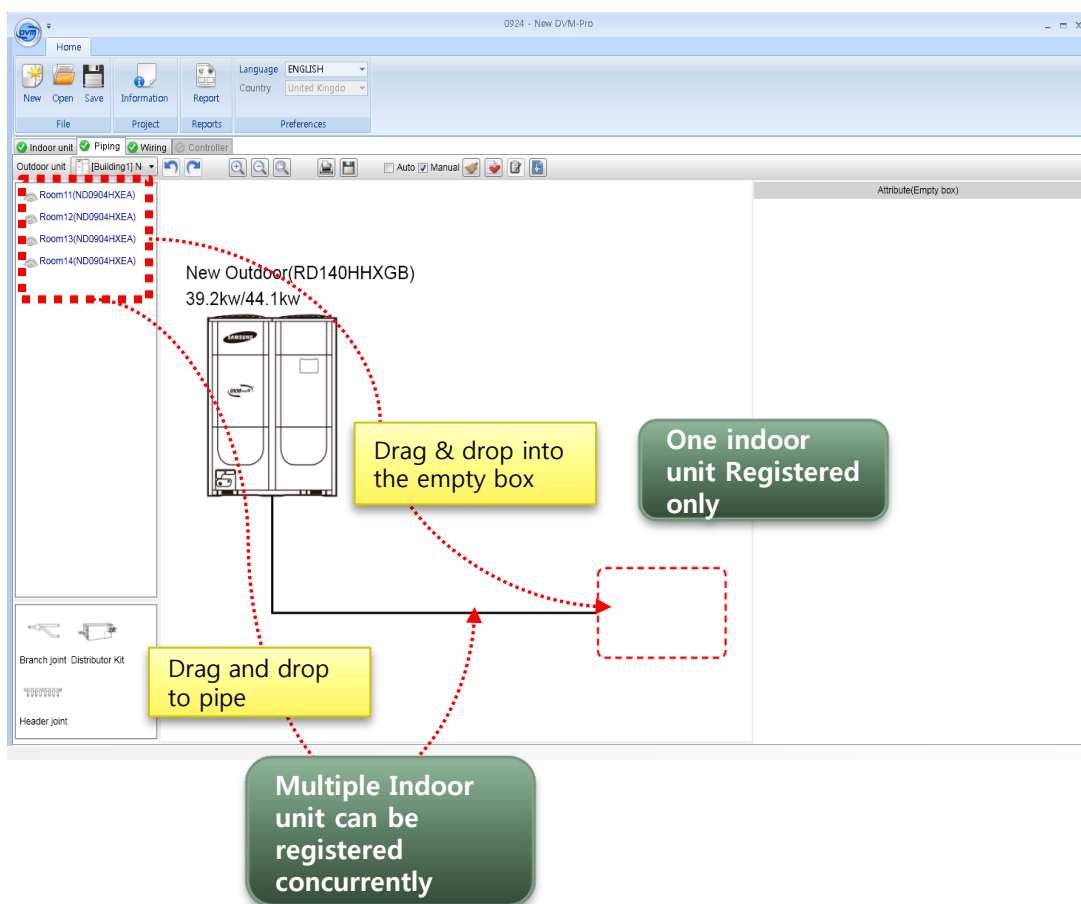
**Zoom In/Out, Pan →
Mouse wheel**

Attribute(Indoor unit)			
Model type	-	4 Way Cassette S	
Model name	-	ND0904HXEA	
Power supply	0.8V Hz	1,220-240,50	
Image	-		
Nominal capacity	Cooling	kw	9
	Cooling (SH)	kw	6.3
	Heating	kw	10
Simulated capacity	Cooling	kw	-
	Cooling (SH)	kw	-
	Heating	kw	-
Power Input	Cooling	kw	50
	Heating	kw	50
Current Input	Cooling	A	0.23
	Heating	A	0.23
Airflow	H/M/L	CMM	-
	ESP	mmAg	-
Sound pressure	dB(A)	32 / 39	
Piping	Liquid Pipe	mm	9.52
	Gas Pipe	mm	15.88
	Drain	mm	VP25 (OD 32JD 25)
Power cable	mm2	1.5 ~ 2.5	
Communication cable	mm2	0.75 ~ 1.50	
Refrigerant	Type	-	R410A
	Control	-	EEV(O)
Dimensions & Weight	Weight	Kg	15.1
	Dimensions	mm	840x204x940
Design condition (Cooling)	Outdoor(DB)	°C	27.4
	Indoor(WB)	°C	19

03|| Operation Procedure

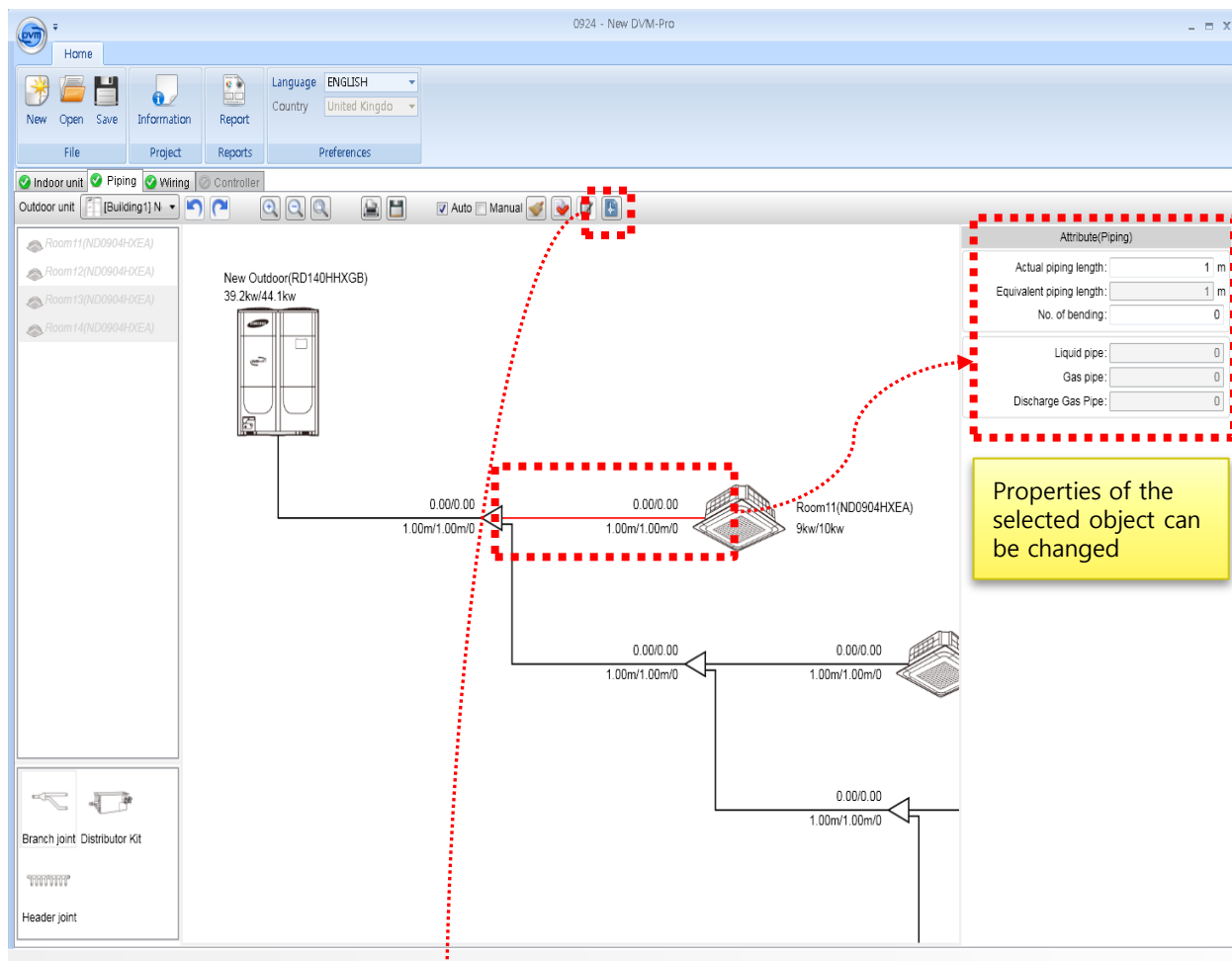
(5) Piping – manual

- When you select manual, a list of indoor units connected to the selected outdoor unit is shown.
- Drag-and-drop placement is possible and automatic Y-joint setting can be made depending on the situation.
- Depending on your needs EEV Kit or Header can also be used.

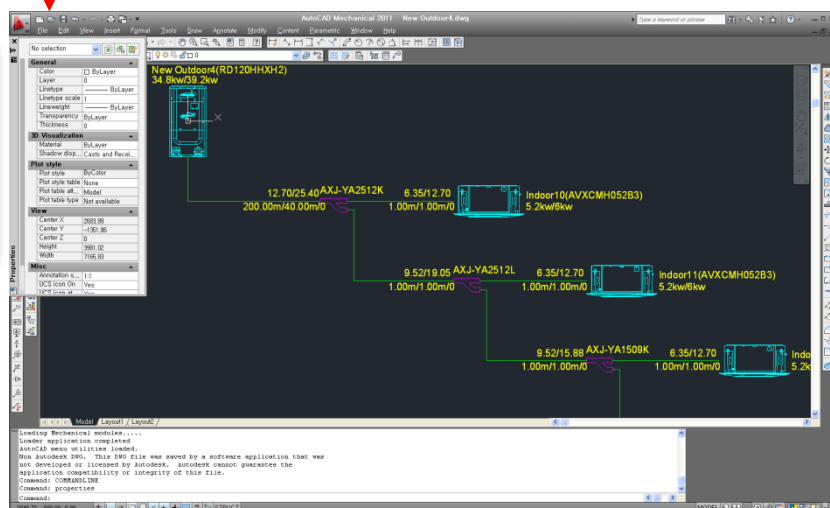


03 || Operation Procedure

(5) Piping – manual



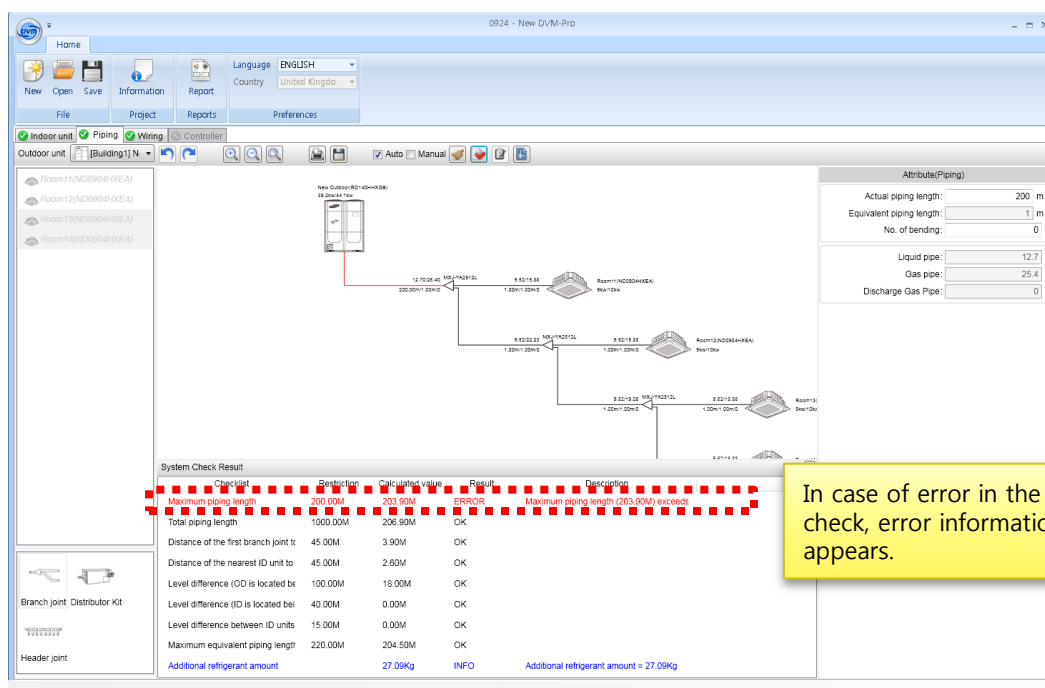
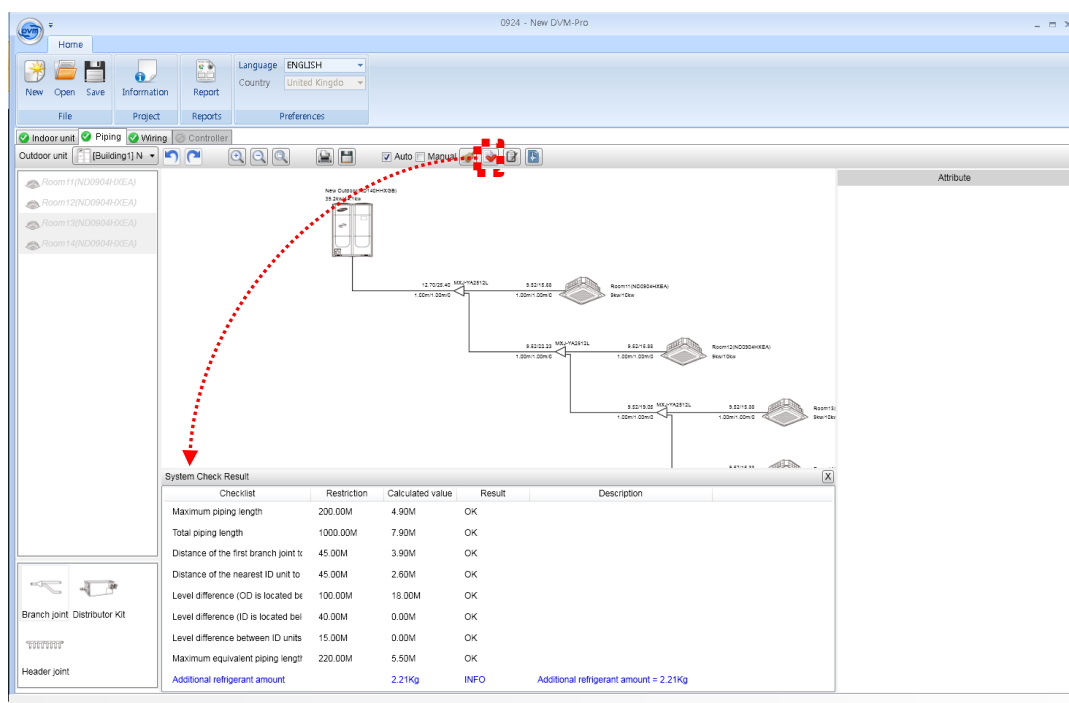
- Piping schema can be outputted by AutoCAD files
- This is not made by AutoCAD files so the following message appears and is normal



03 || Operation Procedure

(6) System Check

- Once Piping system is complete, you can proceed with system check and the results are displayed on the bottom.
- If there is a problem in the system check, error description appears in red at the bottom. Modify errors and perform system check again.



03 || Operation Procedure

(7) Capacity Correction

- Capacity correction can be done after system check is completed.

Capacity correction

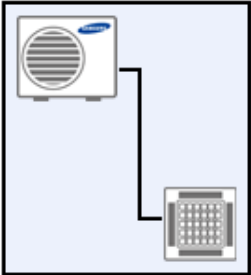
Design condition : Indoor

Cooling WB.Temp °C Heating DB.Temp °C

Design condition : Outdoor

Cooling DB.Temp °C Heating DB.Temp °C





Maximum piping m Maximum level m



Outdoor unit

Type	DVM PLUS 4		Cooling	Heating
Mode	HEAT PUMP	Combination ratio	91.84	90.70
Name	New Outdoor	Nominal Capacity	39.20	44.10
Model name	RD140HHXGB	Simulated Capacity	0.00	0.00

Indoor unit

Name	Model name	Nominal Capacity			Simulated Capacity		
		Cooling		Heati	Cooling		Heati
		TC	SHC	TC	TC	SHC	TC
 Room11	ND0904HXEA	9,00	6,30	10,00			
 Room12	ND0904HXEA	9,00	6,30	10,00			
 Room13	ND0904HXEA	9,00	6,30	10,00			
 Room14	ND0904HXEA	9,00	6,30	10,00			
Totals		36,00	25,20	40,00	0,00	0,00	0,00

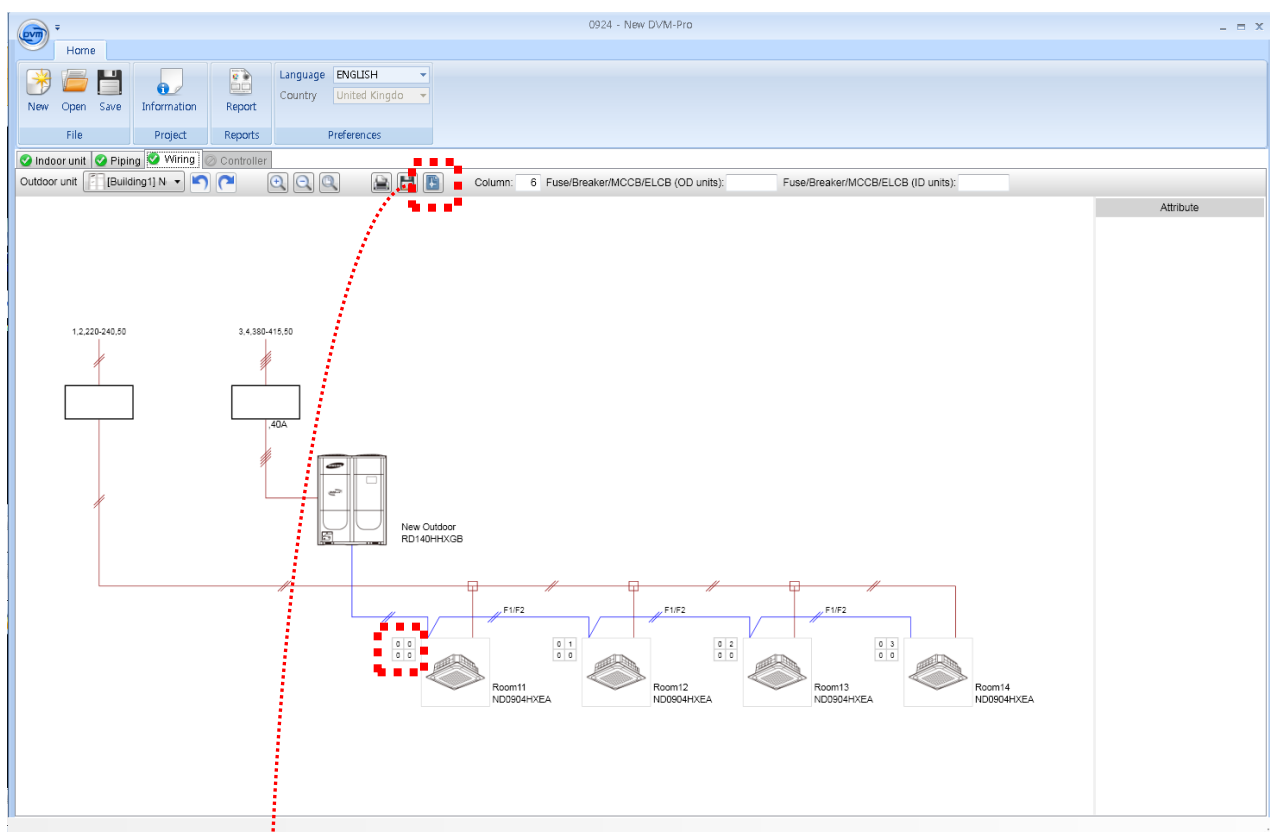
01 Capacity correction

OK Cancel

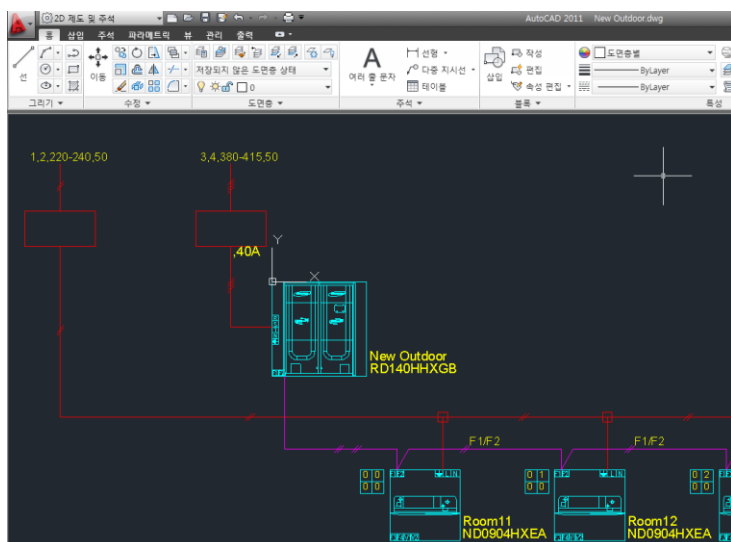
03 || Operation Procedure

(8) Wiring Diagram

- Can manage RMC address, column number
- Like the CAD, the user can use the mouse wheel to zoom in / out, and pan.



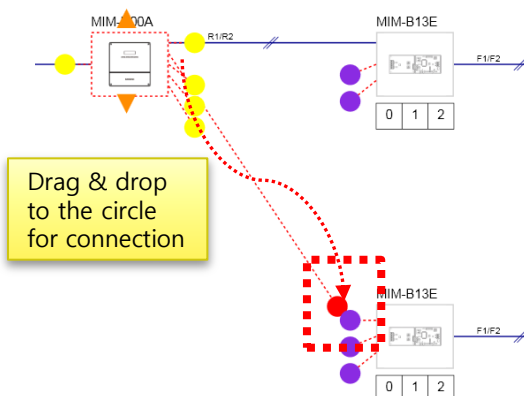
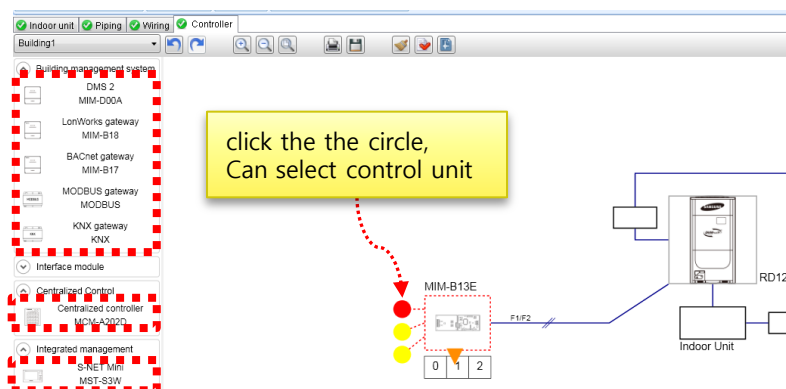
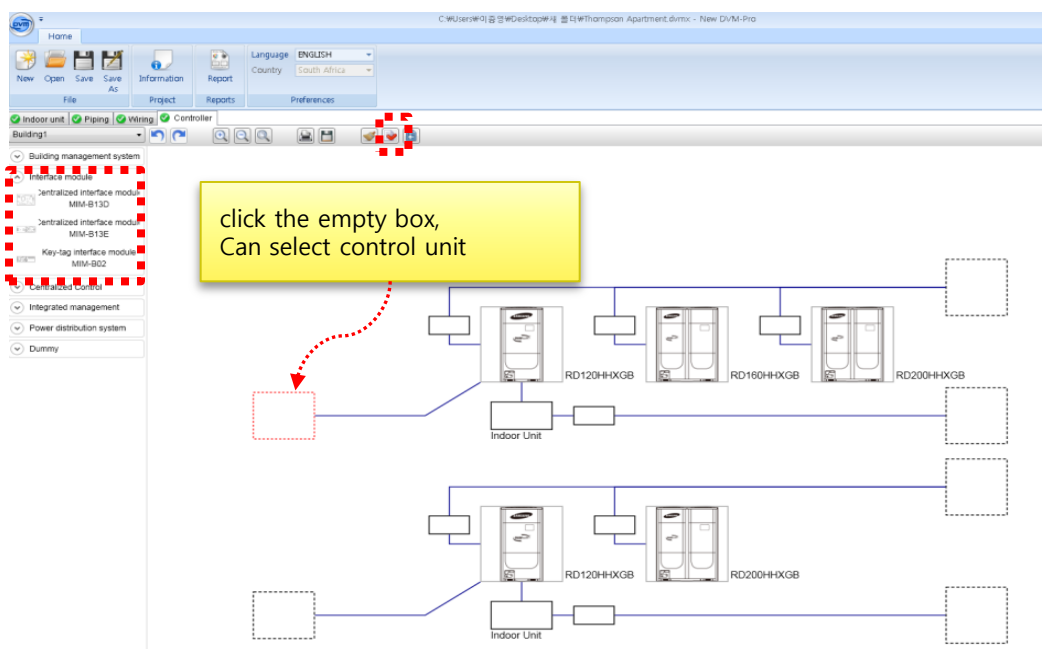
- Wiring schema can be outputted by AutoCAD files
- This is not made by AutoCAD files so the following message appears and is normal



03 || Operation Procedure

(9) Control System Selection

- Control system management
- If there is a problem in the system check, error description appears in red at the bottom. Modify errors and perform system check again.



03 Operation Procedure

(10) Report

■ Report

