SDV5

FULL DC INVERTER SYSTEMS
INSTALLATION & OWNER'S MANUAL
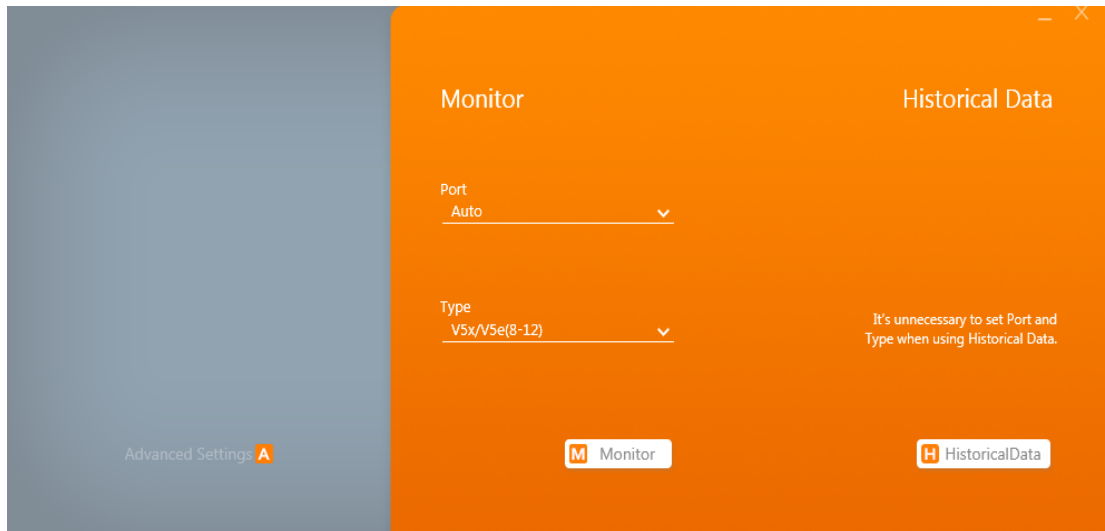
SDT-SDV5 DIAGNOSTIC SOFTWARE (SDV5-xxxEAI, SDV5-xxxEAM, SDV5-xxxEA3P)

COMMERCIAL AIR CONDITIONERS SDV5

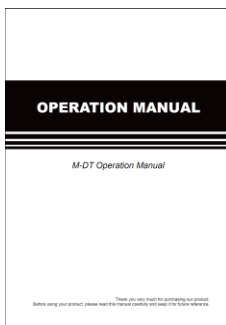SINCLAIR

Content

1 Product Introduction

Sinclair's VRF Diagnosis Software tool is used to monitor VRF systems and diagnose system errors. System settings and

operating parameters can be accessed easily and data logs can be reviewed for fault prevention purposes.

2 Packing List

User manual x 1   Dongle x 1

Note: Please ask Tech. support of Sinclair to download the Diagnosis Software and driver software for the dongle.
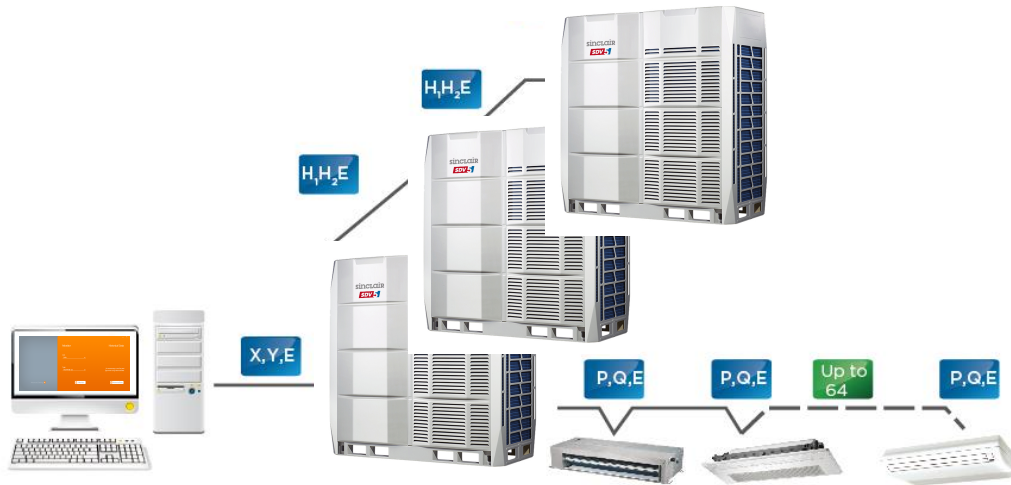
3 Runtime Environment

Operating system: Windows 7, Windows 10.

Screen resolution: 1366 x 768 and higher.

Computer settings: Set the computer DPI to 100% to ensure that the SDT-SDV5 can display

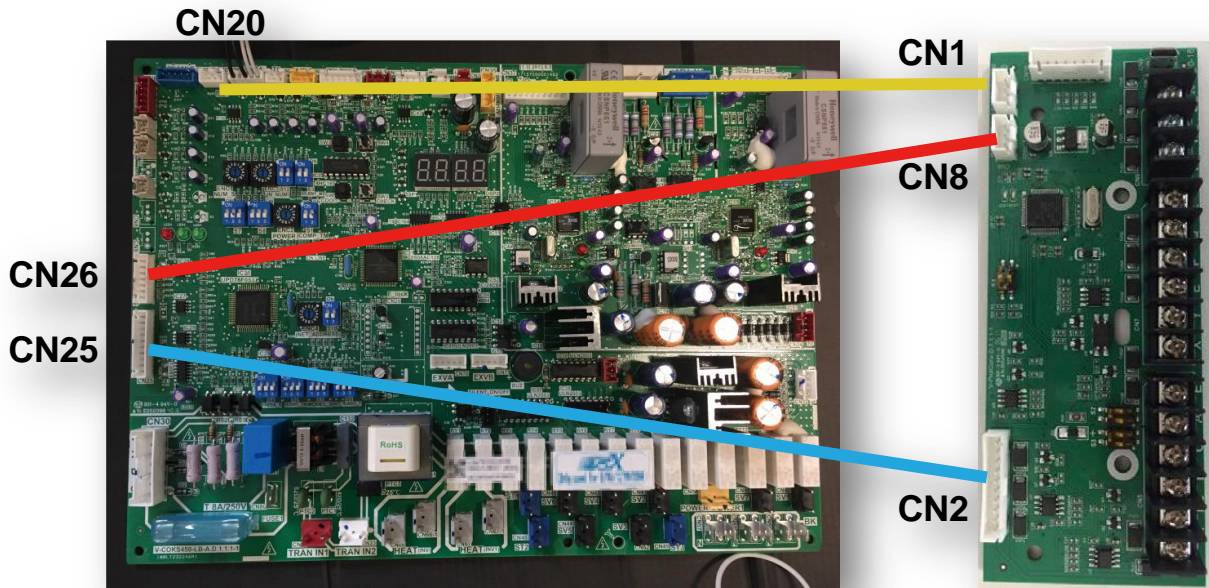properly. Note: SDT-SDV5 is the name of Diagnosis Software**.**

4 Wiring Connections

There are two connection methods: connection to SDV4F VRF unit, and connection to new generation VRF

unit. Note: The Diagnosis Software only compatible with SDV4F and new generation VRF series at present.

4.1   Connection to SDV4F   VRF unit

The complete connection schematic is as follows:

Connection to SDV4F VRF unit requires a "conversion board", and the connections are as follows:
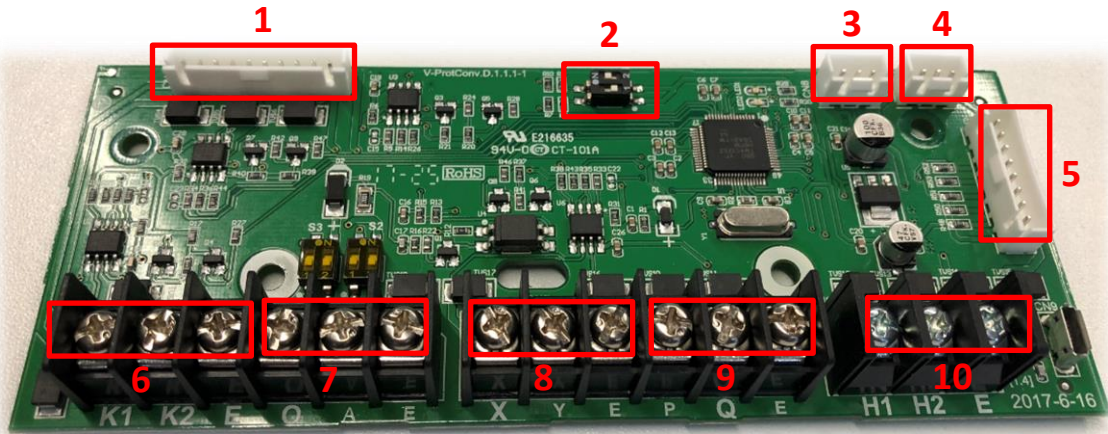
1 connects to the CN25 on outdoor main board.

2 connects to the diagnostic software, S1 must be set to ON.

3 connects to the CN26 on outdoor main board.

4 connects to the CN20 on outdoor main board.

5 reserved port.

6 connects to outdoor unit monitor controller.

7 connects to power meter.

8 connects to the USB serial port converter of the diagnostic software, X connects to RS485A, Y connects to RS485B, and E

connects to GND.

9 connects to indoor unit.

10 connects to slave outdoor unit.

4.2 Connection to new generation VRF SDV5 unit

USB serial port converter connects to XYE ports, X connects to RS485A, Y connects to RS485B, and E connects to GND.

 Notes:

1. Please contact Sinclair Technical Support for details on the specific models. V6=SDV5-xxxEAM. V6i=SDV5-xxxEAI, V6R=SDV5-xxxEA3P

2. We continue to update the SDT-SDV5, but not all the models mentioned in this connection manual are supported.

Refer to the actual software for details on the specific models supported.

3. USB serial port converter refers to the serial port to convert USB to RS485. You need to purchase this separately.
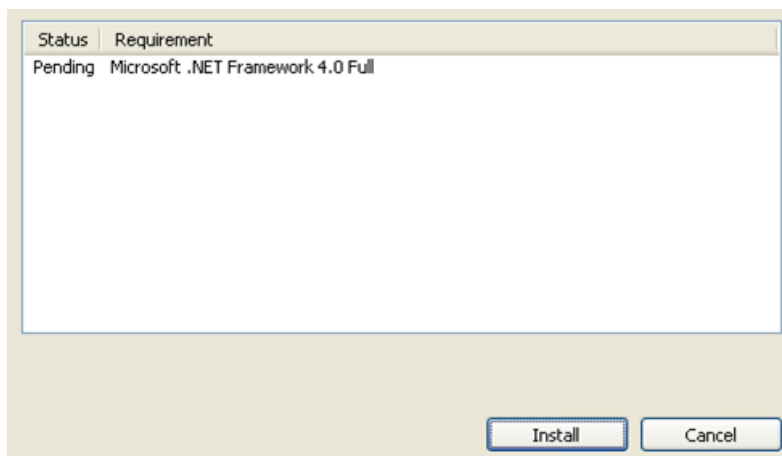
5 Installation and Uninstallation

5.1 Before Installation

Before you install the SDT-SDV5 in Windows 7, you may need to install the "Microsoft.NET Framework 4.0" (it is usually included in Windows 10).

Double click [M-DT-Setup.exe] to install the program. You will receive a prompt if "Microsoft.NET Framework 4.0" is missing. Click "Install" to automatically go to the Microsoft's official website to download and install "Microsoft.NET Framework 4.0". Please ensure that the computer is connected to the Internet at all times. You can also go to Microsoft's official website to download and install the "Microsoft.NET Framework 4.0".
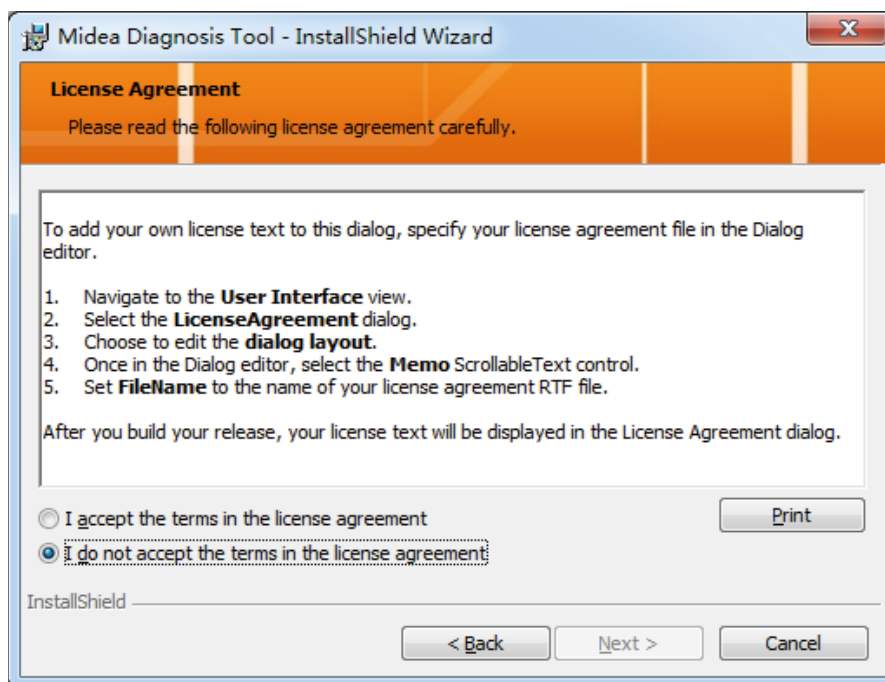

5.2 Installation

Double click [M-DT-Setup.exe] to install the program.
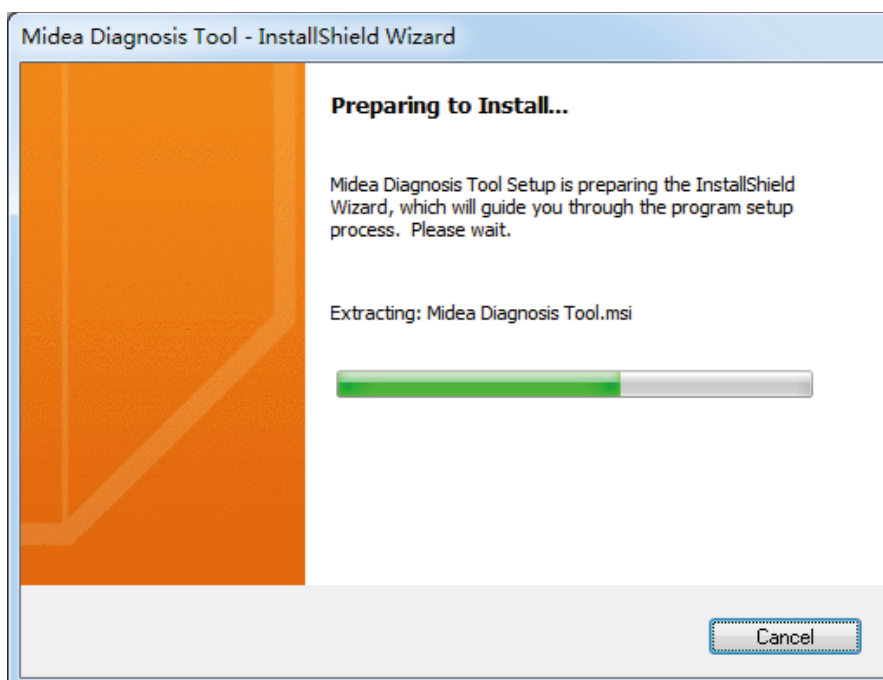
Wait until the following window appears, and click "Next".

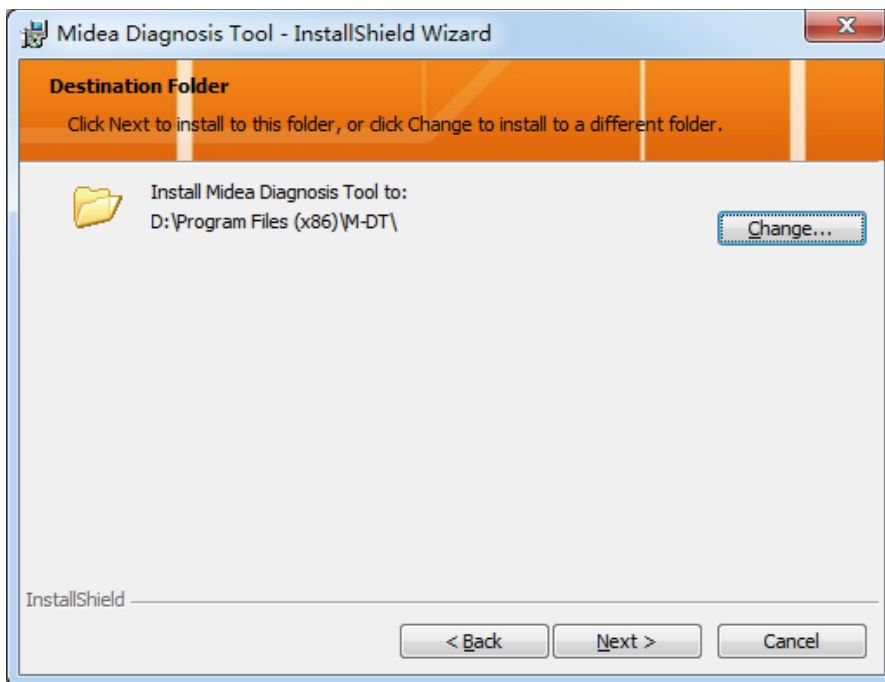Select ⊙ I accept the terms in the license agreement , and click "Next".

Fill the User Name and Organization, click "Next".

Click "Change..." to change the installation path. After that, click "Next".

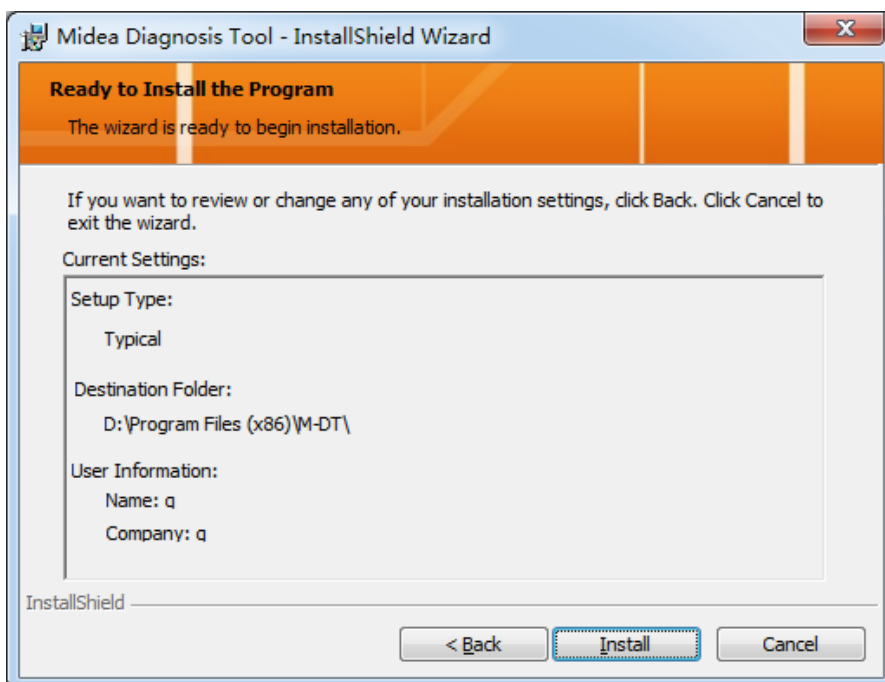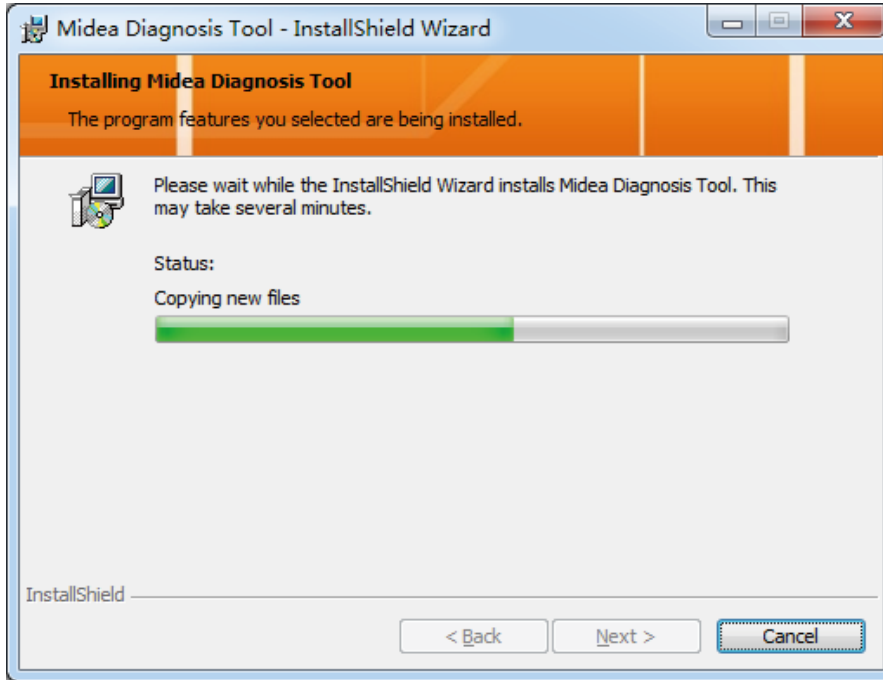Confirm the installation path and then click "Next".

Note: To ensure normal running of the SDT-SDV5, you must install the SDT-SDV5 to a non-system disk. Otherwise, you may

encounter errors like SDT-SDV5 exceptions due to system permissions. You need administrator privileges to install and run
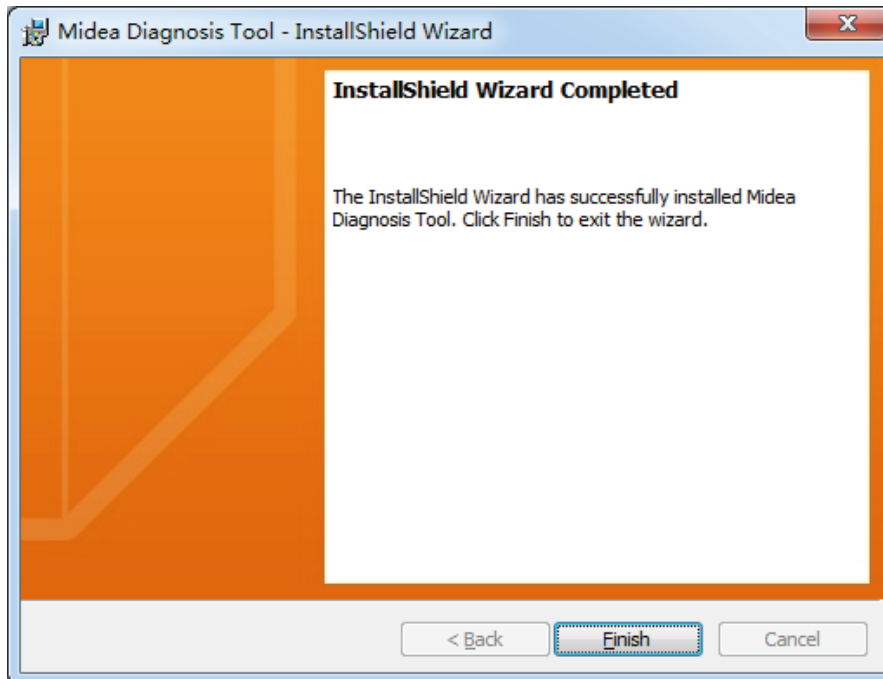
the SDT-SDV5.

Click "Install".

Wait until the SDT-SDV5 is installed.

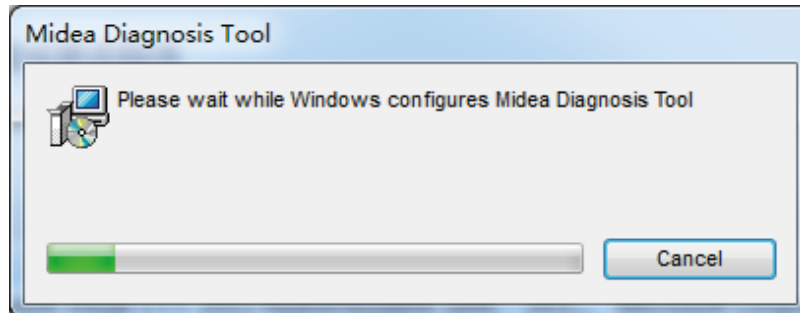Click "Finish" when the following window appears.

5.3 Uninstallation

Choose "Control Panel" > "Programs" > "Diagnosis Tool" > "Uninstall".

Midea Diagnosis Tool

Wait until the program has been uninstalled.

Midea Diagnosis Tool

Please wait while Windows configures Midea Diagnosis Tool

Cancel

Once the SDT-SDV5 program has been uninstalled, delete the installation folder manually. If you need the data that has

been used by the program, save the corresponding database file.

6 Running the SDT-SDV5

After the SDT-SDV5 is installed, a shortcut is created on the desktop. You can also execute the corresponding

"SDT-SDV5.exe" program directly from the installation path.
Notes:

1. SDT-SDV5 does not support HRV and fresh air units. If an HRV or fresh air unit is connected to the system,

    the parameters of the indoor unit are the same as those of an ordinary indoor unit.

2. SDT-SDV5 starts to monitor the system parameters only when the system operation is stable. Otherwise, the

    equipment search may be incomplete or wrong. It is recommended that you start the SDT-SDV5 fifteen minutes

    after the refrigerant system is powered on.

3. Whenever there is a change in the state of the refrigerant system, such as powering on after a power failure or

    switching between refrigerant systems, turn off the SDT-SDV5 first, and restart the SDT-SDV5 only after the system

    is stable again.

7 Using the SDT-SDV5

7.1 SDT-SDV5 Login Interface
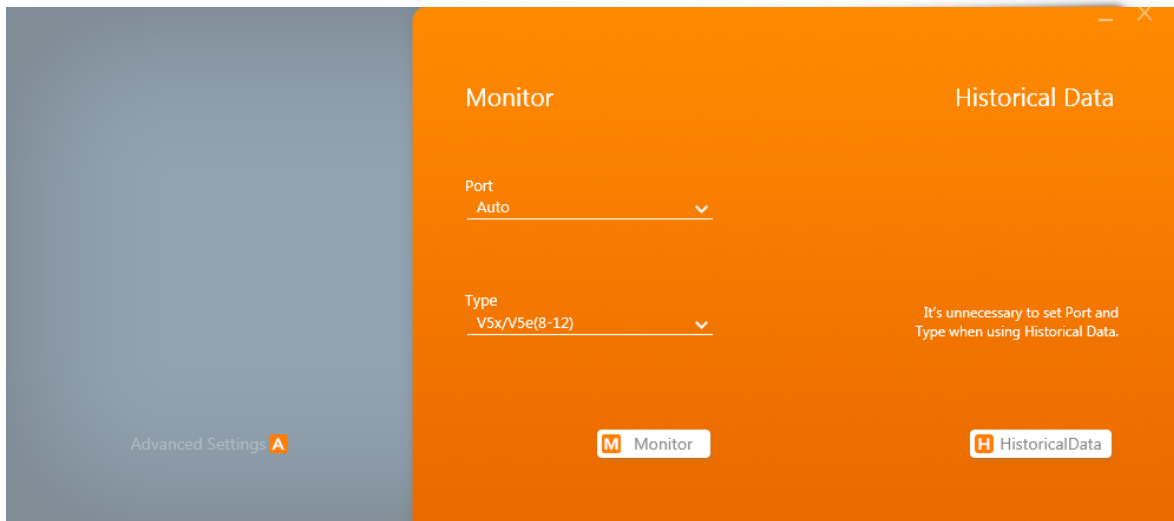
 SDT-SDV5 has three functional components in the login interface:

1. Monitor: Monitoring the operating data of the refrigerant system.

2. Data logs: Callback database that displays the data of the refrigerant system that has been monitored.

3. Advanced Setting: Advanced settings that can be used to set the language and units.
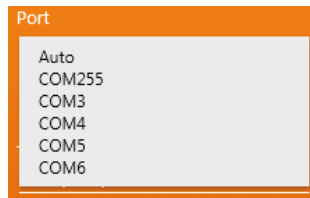
Port refers to the serial port connecting the computer to the refrigerant system.
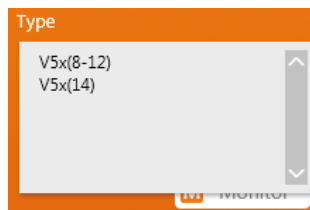
Notes:

1.   14HP refers to models at 14HP or higher, and not just the 14HP outdoor unit.

2.   If the user manually chooses a certain model which is different from the actual model connected to the computer, the SDT-SDV5 will carry out the resolution based on the model selected manually by the user, and the parameters will be wrong.

3.   The supported models may change with subsequent SDT-SDV5 upgrades. Refer to the actual SDT-SDV5 interface display.

7.2 Advanced Setting

Port and Type, highlighted in the blue boxes above, are the same as the login interface.

Do not change the Parity Bit, Data Bit, Stop Bit, and Baud Rate, highlighted in the red boxes; otherwise, the SDT-SDV5 may not run normally.

Sample Rate: interval at which the SDT-SDV5 interface refreshes the data (green box in the center-left of the above figure). Unit: unit used in the SDT-SDV5 internal parameters, and includes both metric and imperial systems (green box in the lower right corner of the above figure).

|	Temperature
Metric	Celsius
Imperial	Fahrenheit

Language: SDT-SDV5 interface languages which include Chinese, English, and Spanish (green box in the lower right corner of the above figure) Note: After the SDT-SDV5 is restarted, all the parameters except for refresh frequency, unit and Language will revert to the default settings. These are the first serial port for Port, Auto for Type and Auto for System Address.

7.3 Monitor

Note: All the data in this manual are simulated and are not actual data of any outdoor unit. The purpose of the simulated data is to illustrate how the SDT-SDV5 can be used and how the parameters are shown. Refer to the actual data of the unit.

The following prompt appears when no equipment is found.
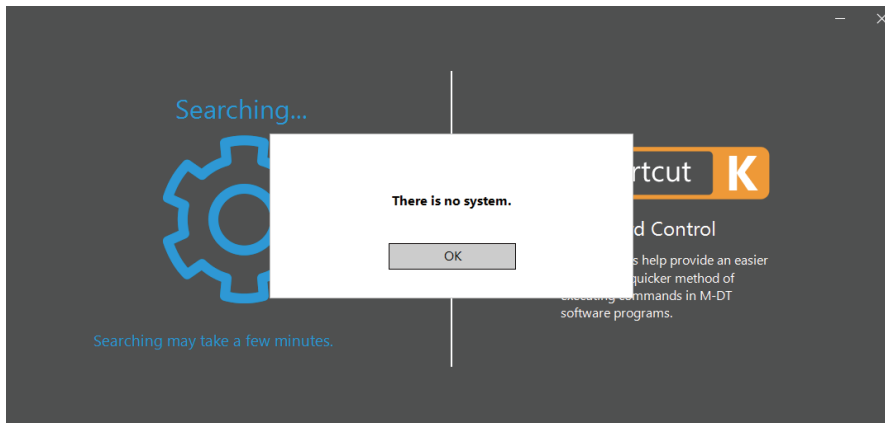
You will see the following window if there are more than one refrigerant system. SDT-SDV5 only monitors information for one refrigerant system. "System 0" is selected in this instance.
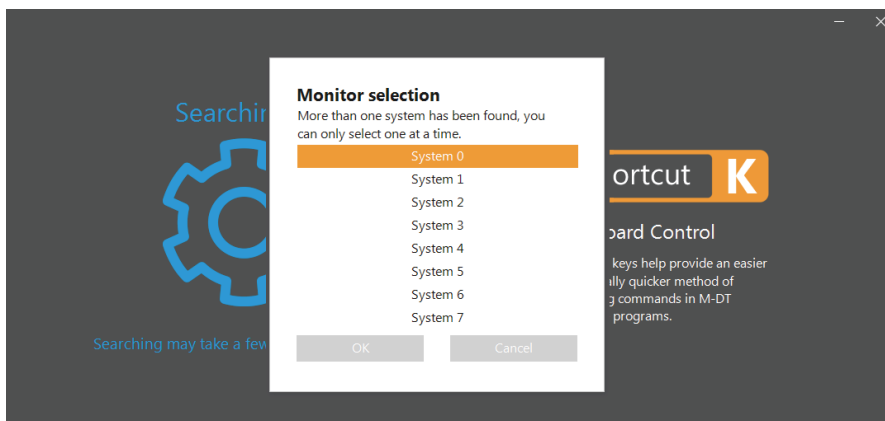
Once the system is selected, the program will pause at this interface for up to a few minutes.

Once the SDT-SDV5 is operating normally, the program will stop at the main interface as shown below.
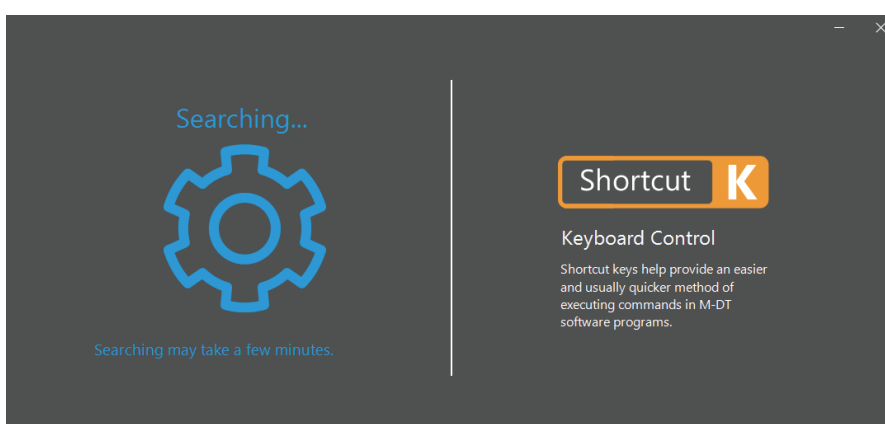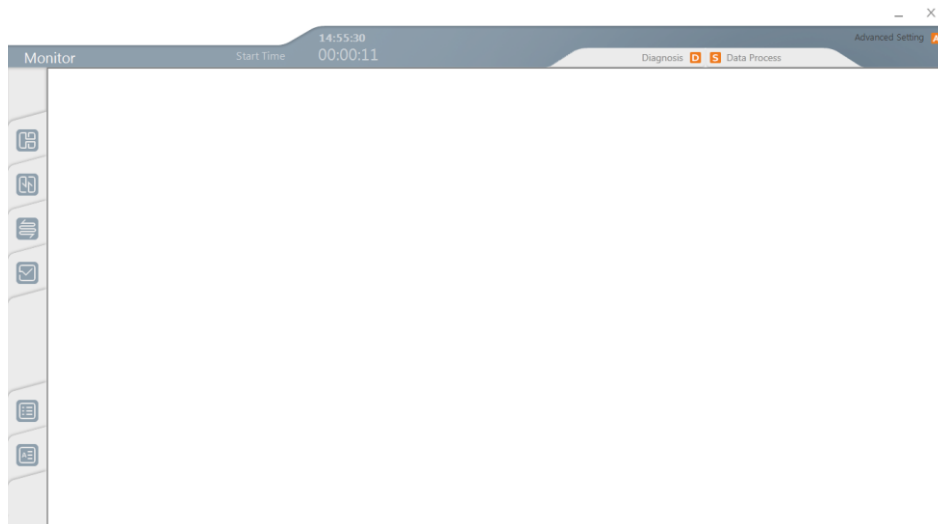

The function menu is on the left. Refer to the following table for indications of the icons:

System Diagram	Refrigerant System Diagram	Refrigerant Cycle Diagram	Data Graph	List View

After the SDT-SDV5 is loaded and running, exit the SW (click ✕ in the upper right corner). The following prompt appears:
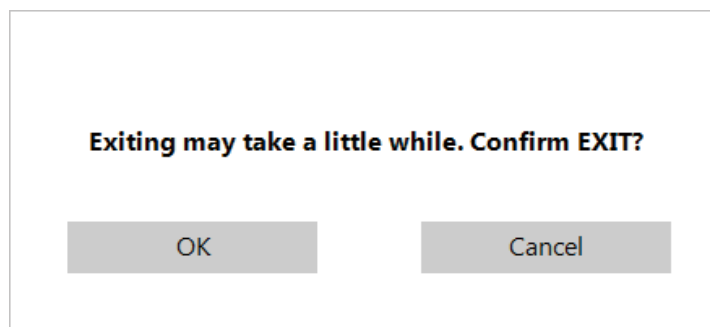
Click "OK" to exit the SDT-SDV5, or "Cancel" if you do not wish to exit the SW

Notes:

1.   It takes a few seconds for the SDT-SDV5 to exit after you have clicked "OK". Do not click again as the SW may become unresponsive.

2.   For some outdoor units, the DIP switch may need to be set to auto addressing. Otherwise, the XYE port of the outdoor unit may provide invalid data, and all the parameters on the SDT-SDV5 display will be abnormal, such as -25°C for ambient temperature.

7.3.1 System Diagram

System Diagram: An overview of the refrigerant system. It is divided into 3 main segments with the outdoor units (ODU) on the left, the indoor units (IDU) in the center, and the indoor unit controller on the right.
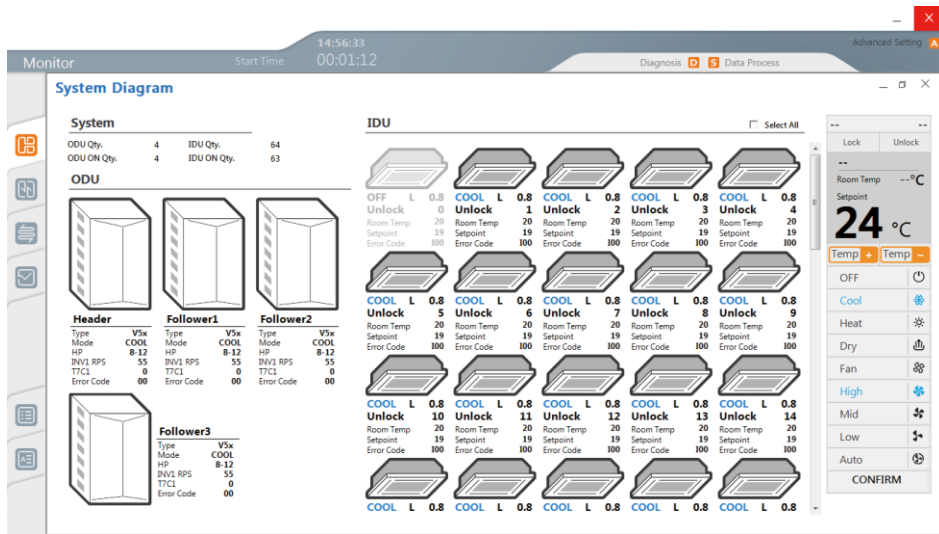
Note: For certain models, the error code shown on the SDT-SDV5 may not be consistent with the error code on the unit. When this happens, refer to the error code on the unit itself.

System Parameters

ODU Qty.	Total number of outdoor units
IDU Qty.	Total number of indoor units
ODU ON Qty.	Number of outdoor units that are on (the compressor must be turned on for the outdoor unit to be considered "ON")
IDU ON Qty.	Number of indoor units that are on

Parameters of Outdoor Unit

ODU
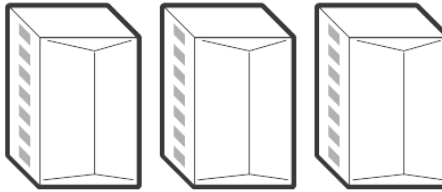
Header

Type	V5x
Mode	COOL
HP	8-12
INV1 RPS	55
T7C1	0
Error Code	00

Follower1

Type	V5x
Mode	COOL
HP	8-12
INV1 RPS	55
T7C1	0
Error Code	00

Follower2

Type	V5x
Mode	COOL
HP	8-12
INV1 RPS	55
T7C1	0
Error Code	00
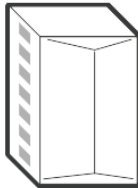
Follower3

Type	V5x
Mode	COOL
HP	8-12
INV1 RPS	55
T7C1	0
Error Code	00

Type	Unit type from the main interface
Mode	Mode Off Air Supply Cooling Heating Forced cooling: F_Cool Master cooling: M_Cool Master heating: M_Heat Forced heating: F_Heat
HP (Unit HP from the main interface)	HP
INV1 RPS	Compressor 1 Frequency
T7C1	Discharge 1
Error Code	Error Code

Parameters of Indoor Unit

COOL	L	0.8
Unlock		0
Room Temp		20
Setpoint		19
Error Code		I00

	Left	Middle	Right
Line 1	Mode	Fan speed: Low, L Mid, M High, H Auto, A Invalid fan speed, -	HP
Line 2	"Lock" when either the remote or wired controller is locked. Otherwise, it is "Unlock".	Blank	IDU Address
Line 3	Ambient Temperature		
Line 4	Set Temperature		
Line 5	Error Code		

Notes:

1. On the SDT-SDV5 display, the error code is "I**" where "**" refers to the error code shown on the indoor unit, and "I" before the error code indicates this is an indoor unit.

2.   On the SDT-SDV5 display, the error code is "I00" if the indoor unit is operating normally (error code "00").

The pictures for various indoor units are different. Below is a summary:

OLD IDU	
4-WAY	
WALL	
M-DUCT	

L-DUCT	
AHU	
H-DUCT	
COMPACT	
C&F	
FS	
FAPU	
HRV	

To differentiate indoor units that are powered on, the border is black while the rest is grey.

Power on	Power off

The offline state picture is used for disconnected equipment, and the corresponding parameters will be marked as "--":
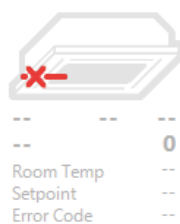
General Controls for Indoor Unit

Select the desired indoor unit to send the related control parameters to the indoor unit controller.

The selected options will turn blue when the selection is done. Click "CONFIRM" to send the command.
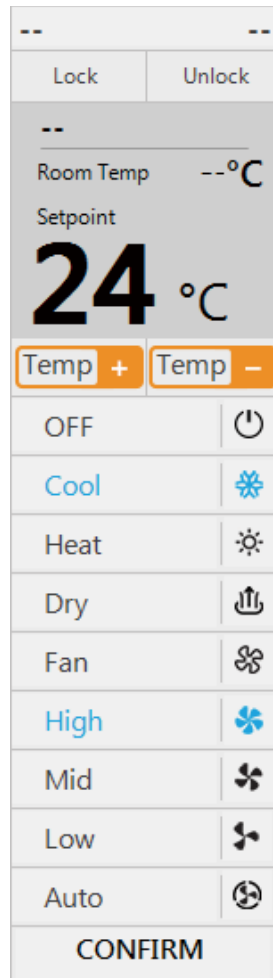
Notes:

1. When the SDT-SDV5 sends the "Dry mode", the fan speed can be adjusted but the indoor unit may not respond to the fan speed, and the default response is low fan speed. Actual implementation in specific indoor unit is based on the program inherent in the unit itself.

2. When the SDT-SDV5 sends the "Fan mode", the set temperature can be adjusted but the indoor unit may not respond to the temperature setting. Actual implementation in specific indoor unit is based on the program inherent in the unit itself.

7.3.2 Refrigerant System Diagram
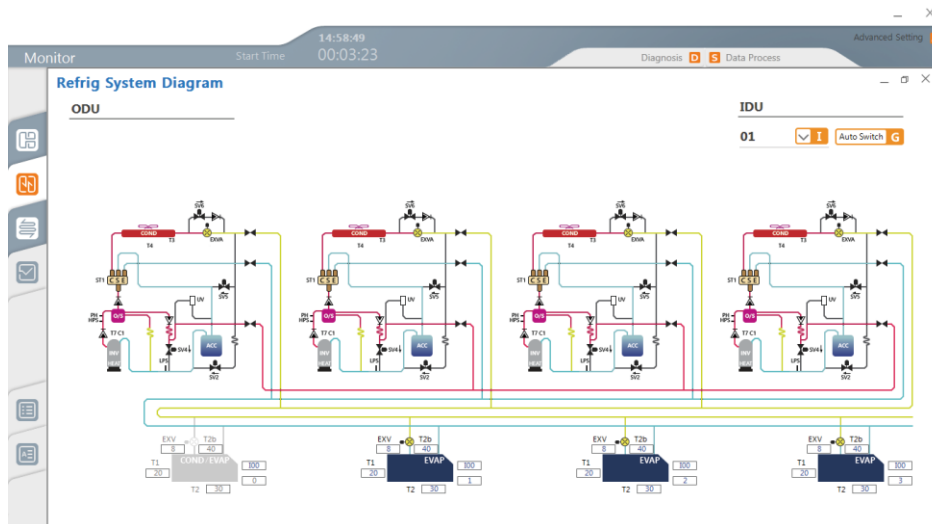
Each page will display 4 indoor units, and only the first 4 units will be shown if there are more than 4 indoor units.

Notes:

1. For certain models, the error code shown on the SDT-SDV5 may not be consistent with the error code on the unit. When

    this happens, refer to the error code on the unit itself.

2. Oil return and defrost for the non- new generation outdoor unit will be based on the basic heating diagram.

3.   The refrigerant system diagram does not show the specific parameters of the outdoor unit. It only shows the

    operating diagram of the outdoor unit. The refrigerant system diagram of the outdoor unit shows only the basic

    operating diagram, and does not show the actual state changes in the valves.

Outdoor Unit

The pictures for the outdoor unit in different states will vary according to the selected models:

Those for the V5X 8-12HP are as follows:

Cooling	Heating (oil return, defrost)
Off	
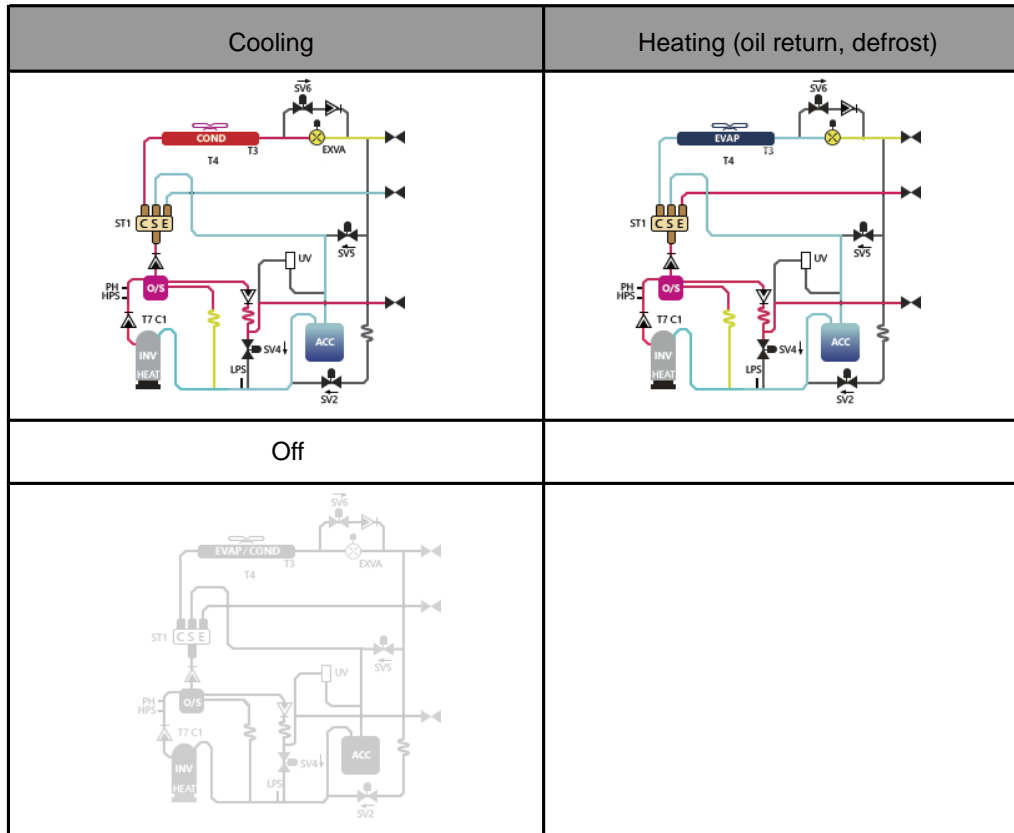
Indoor Unit

The SDT-SDV5 divides the indoor units that are online into N groups with 4 units in each group, and the group selected is 01 in this example.

Auto Switch means that the group number will be automatically switched where one group is switched every 20 seconds.

Click to change this to Hold

The variables with no parameter names in the above figure are:

I00 1	Line 1 is the error code (the first "I" is the abbreviation for IDU, and the rest is the error code for the IDU).
	Line 2 is the address.
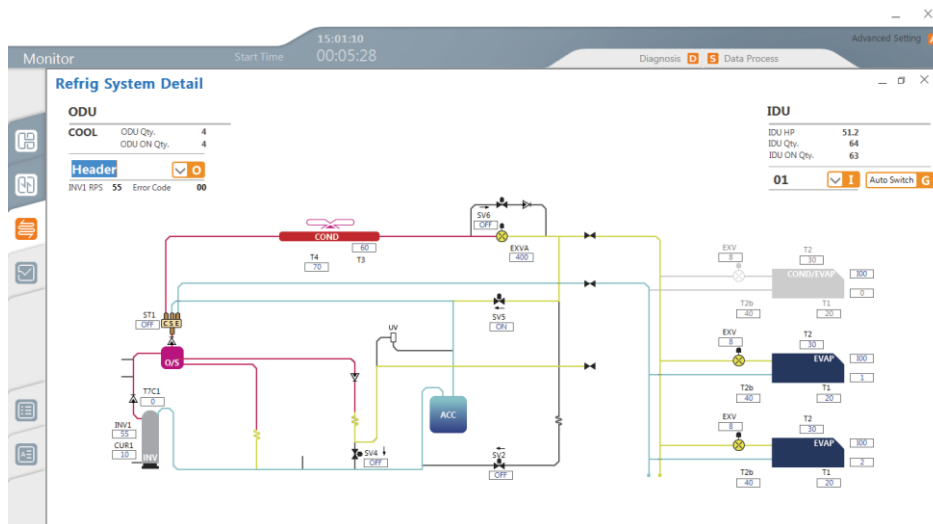
Different indoor unit modes

| Off	Exclude heating modes: Cooling, Fan	Heating
COND/EVAP	EVAP	COND

7.3.3 Refrigerant Cycle Diagram

Notes:

1. For certain models, the error code shown on the SDT-SDV5 may not be consistent with the error code on the unit. When this happens, refer to the error code on the unit itself.

2. Oil return and defrost for the non- new generation outdoor unit will be based on the basic heating diagram.

Outdoor Unit

HEAT displays the operating mode of the refrigerant system.

ODU Qty. is the total number of outdoor units.

ODU ON Qty. is the number of outdoor units that are on.
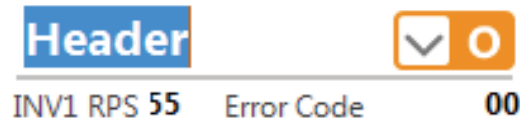
Header indicates the outdoor unit that is being displayed currently. Use the drop-down box on the right to select the

outdoor unit to be shown (Header is the master unit, Follower1 and Follower2 are slave unit 1 and slave unit 2

respectively).

INV1 RPS is the power-up frequency of compressor 1.

Check Code is the error code.

The corresponding refrigerant circulating diagram will be shown for different operating modes of the outdoor unit. The

example here is V5X (8-12HP).

Cooling	
Heating (oil return, defrost)	
Off	
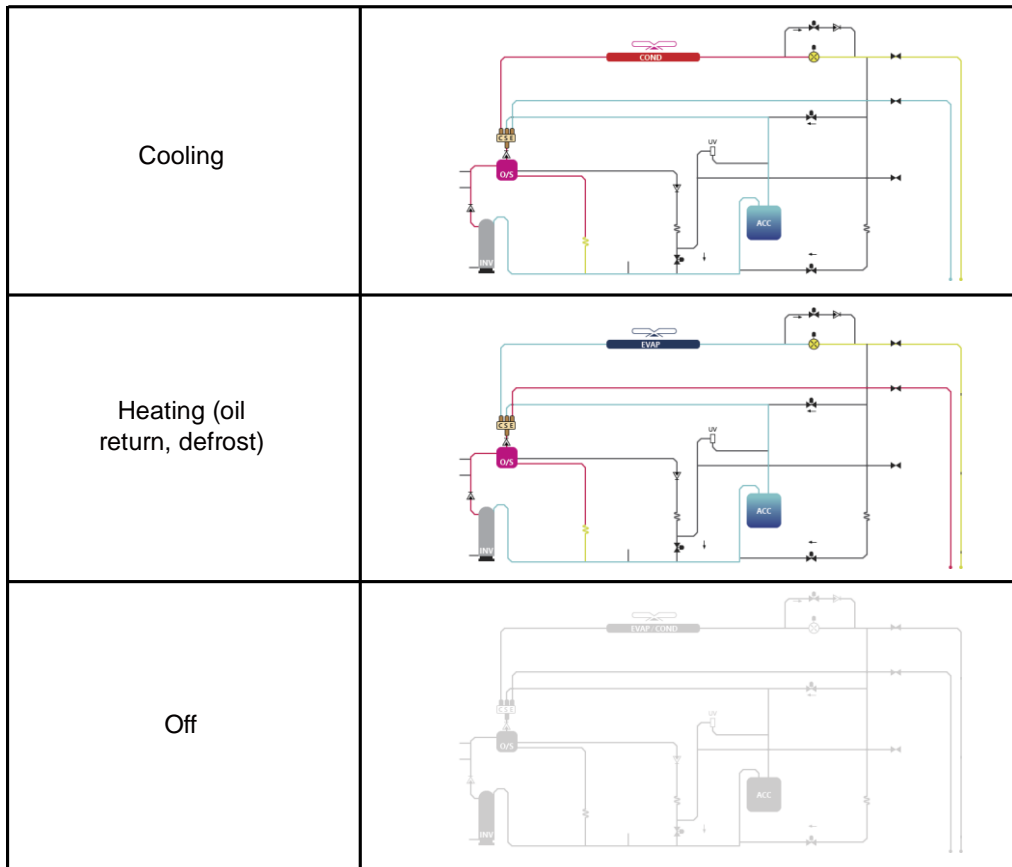
When there are state changes in the valves, the corresponding circuit will also change its color.

Indoor Unit

IDU

IDU HP	64
IDU Qty.	64
IDU ON Qty.	64

IDU HP is the total HP of indoor units.

IDU Qty. is the total number of indoor units.

IDU ON Qty. is the number of indoor units that are on.

01   ∨ I   Auto Switch G

0 is the group that is being displayed currently. Use "I" to select the group.
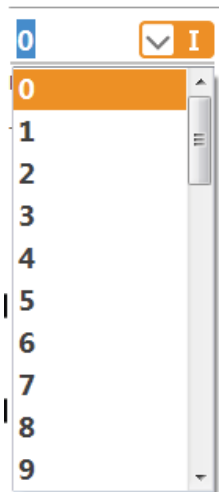
Auto Switch G has the same function for the refrigerant system diagram and is used to switch the indoor units automatically. Click to change to Hold G .

The variables with no parameter names in the above figure are:

I00	Line 1 is the error code (the first "I" is the abbreviation for IDU, and the rest is the error code for the IDU).
1	Line 2 is the address.

Different indoor unit modes

Off	
Cooling	
Heating	

7.3.4 Data Graph

Double click on the graph display area to go to the window to select the parameter data:

Note: If the default color of the graph is blank, a random color will be assigned. The random color will be assigned each time you click to save the graph.

First check box indicates if a graph will be displayed for the parameter. If this is not selected, the parameter will not be displayed.

Column 2 is the color.

Columns 3 and 4 are the parameters.

Column 5 refers to the co-ordinates of the graph.

Column 6 indicates the thickness of the line, and the default is 1.

 - Single cursor
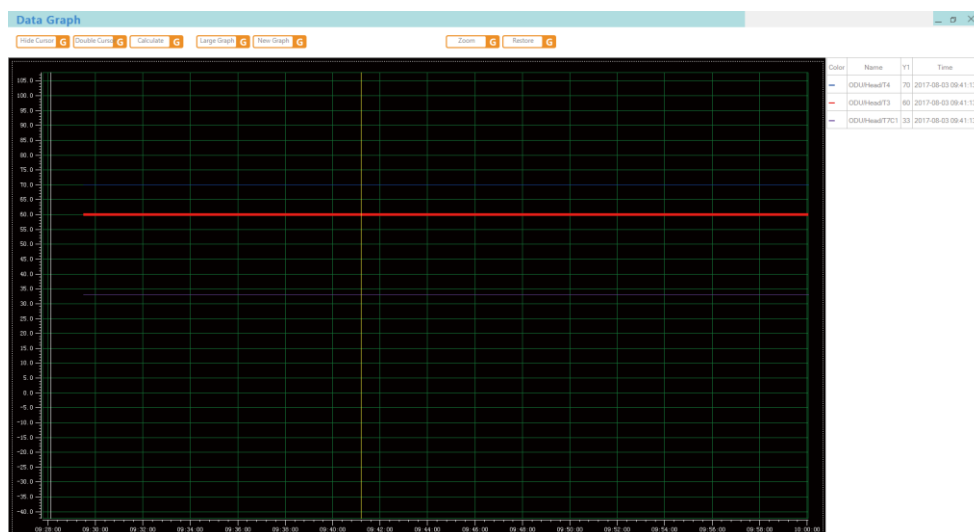
A yellow cross will appear on the interface. Use the mouse to drag the cursor, and once the mouse is released, the right side will be refreshed to show the parameters at where the cursor is.

 - Double cursor

2
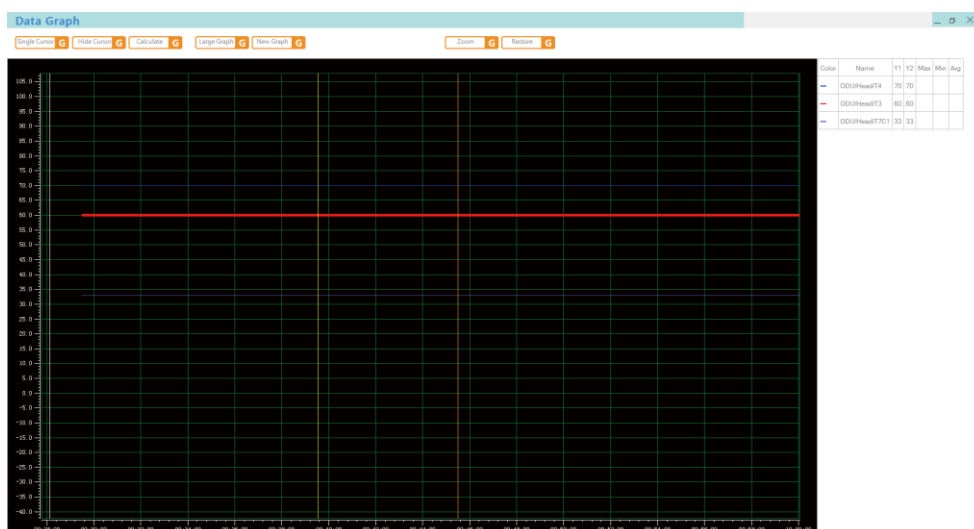
There are two cursors on the interface: yellow and ochre. Use the mouse to drag the cursor, and once the mouse is released, the right side will be refreshed to show the parameters at where the cursor is.

[Calculate G] - Calculate. With the double cursors, this will calculate the maximum, minimum and average values between the left and right cursors.
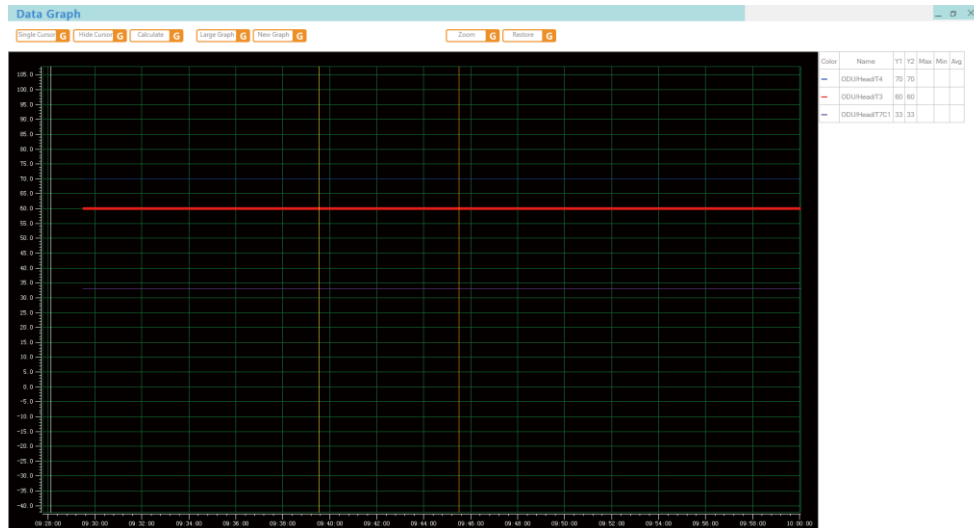
[Large Graph G] - Display the maximum range of the graph, such as all the data for 3 days when the SDT-SDV5 has been operating for 3 days.

[Large Graph G] - Show the latest graph (about 12 minutes)

Zoom **G** - Click to change to Select **G** .

In Zoom mode, you can drag the entire display in the graph display area with the mouse. You can move the cursor if it is available.

In Select mode, you can zoom in on the selected area in the graph display area with the mouse. Press and hold the left mouse cursor, move the mouse to form a selection window, and then release the mouse to scale the selected area immediately.
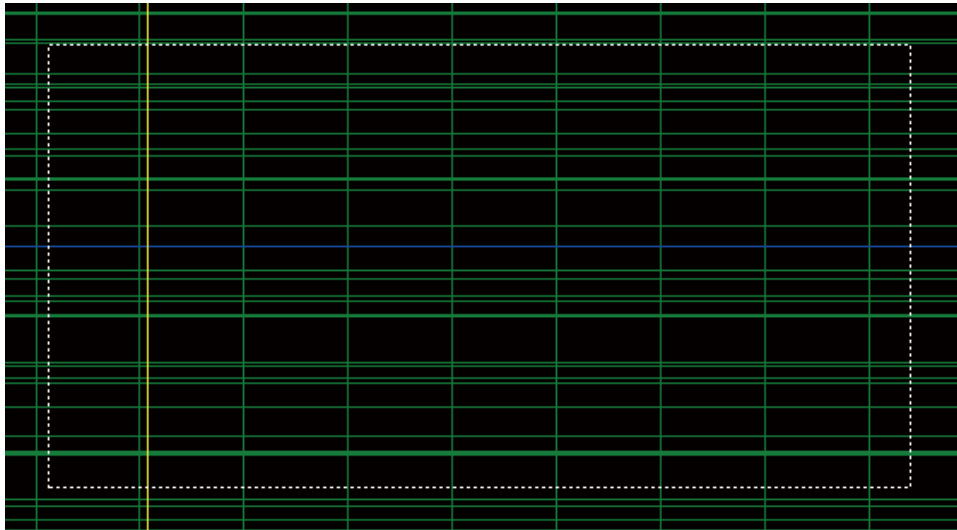
Notes:

1.   When a coordinate axis is used, the coordinates of the axis will be scaled accordingly.

2.   When you move the cursor to a specific position and the graph moves (under Zoom), the cursor display data will not automatically refresh. You need to manually move the cursor position once in order to get the latest data.

Restore **G** Click restore to return to the initial display, with the Y axis being restored to a set state, and the X axis at about 70% of the latest data point.

3.   The error code shown on the SDT-SDV5 may not be consistent with the error code on the unit. When this happens, refer to the error code on the unit itself.

4.   When the graph for a certain parameter is cancelled, you need to reselect the graph for the parameter, and redraw the graph from when the parameter is reselected.

5.   In the graph, there are only two states for the error information of the indoor and outdoor units: "0" if there is no error, and "1" if there is an error.

6.   For the fan speed in the indoor unit, 1, 3, 5, 7 corresponding to low speed, mid speed, high speed, and automatic fan respectively. In some models, the fan speed options may not use these numerical values. Refer to the actual drawing of the model.

7.   The M-DT will create the graph based on the actual corresponding values for information like mode and fan speed. As there are existing differences between the corresponding parameters of various models, such parametric curves have

no real significance.

8. In the graph, "1" means the valve is ON while "0" means the valve is OFF.

9. "0" means the selected parameter does not exist. For example, Ps1 does not exist in the MDC, and if Ps1 from the MDC is selected for the graph, the default is "0".

10. The graph interface refreshes with every query interval, and this is not related to the refresh time at the advanced setting interface. The refresh time is longer when you have more equipment, and vice versa. A query interval is about 200*2*number of equipment.

Advanced Operations

Right-click on the Y axis to configure the related information for the Y axis.
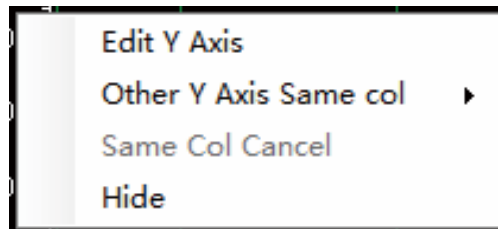
1. Edit Y Axis - Edit Y axis attributes.

1.1 Graph supports up to six Y axes. Name is the name of the graph axis.

1.2 Display indicates if this coordinate axis will be displayed.

1.3 Max is the maximum value of the coordinate axis, Min is the minimum value of the coordinate axis.

1.4 Start Dock is where the coordinate axis will start for the display area, Stop Dock is where the coordinate axis will end

for the display area (the entire Y axis is 0~1).

For example, if the Start Dock and Stop Dock of the coordinate axis are 0 and 0.5 respectively, this means that the

coordinate axis will only occupy half the column. But if the Start Dock and Stop Dock of the coordinate axis are 0 and 1 respectively, this means that the coordinate axis will take up the entire column.
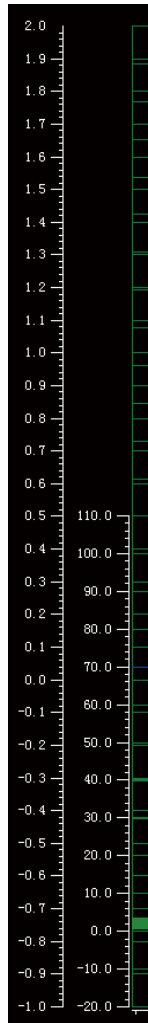
On the right, Start Dock and Stop Dock are 0 and 0.5. On the left, Start Dock and Stop Dock are 0 and 1.

When you enter a parameter that is outside 0~1, you will be prompted to enter a value between 0~1:

The start location please enter a decimal between 0 and 1! Containing 0 and 1.

OK
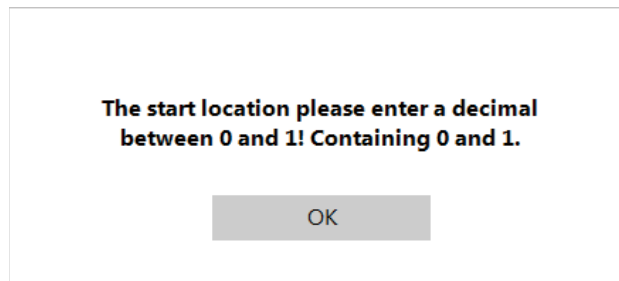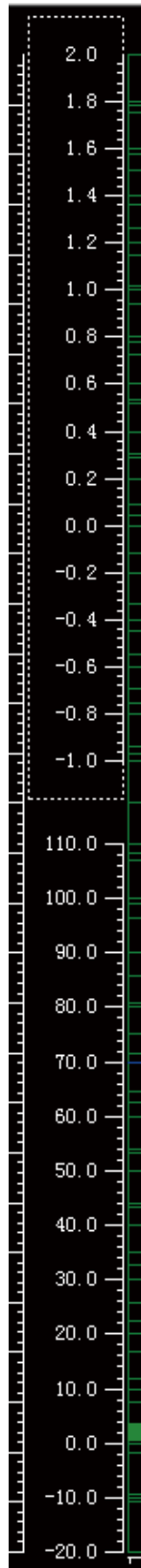
2. Other Y Axis Same Col means that one column co-exists with another column.

Notes:

1.   If there is a configuration issue with the Start Dock and Stop Dock, you may end up with overlapping Y axes.

2.   When there are multiple coordinate axes, only the selected area is rescaled if zoom is selected. For example, only the

lower half of the display area will be enlarged while the upper half of the Y axis remains the same, and the X axis will zoom

in and out accordingly.

3.   In the detailed settings, an unexpected state may result if Y axes in the same column are selected. When column A is set up as column B, and column B is set up as column A, then column B will appear in the original location of column A (if the column is empty, column B will occupy the 0~1 position), and the display will look like columns A and B are different columns.

3. Same col cancel will cancel the same column attribute, and return the parameter back to its original column.

4. Hide is to hide the current coordinate axis, and corresponds to the display in the configured parameters.

Notes:

1.   The exit key in the upper right corner of the graph and the minimize key are the same, which is to minimize the window to the task bar so that you can see the graph you have selected earlier when you view the graphical display again.

2.   The graph configuration is not saved, and the parameters are blank each time the M-DT is turned on.

3.   The Y axis of the graph will be saved after the information has been edited, and the next time the M-DT is turned on, the Y axis of the display is the same as the last modified information. Take note of the blank parameters in the partitions.

4.   A configuration window will pop up when you right click the mouse in the left area if all the Y axes are hidden.

7.3.5 List View
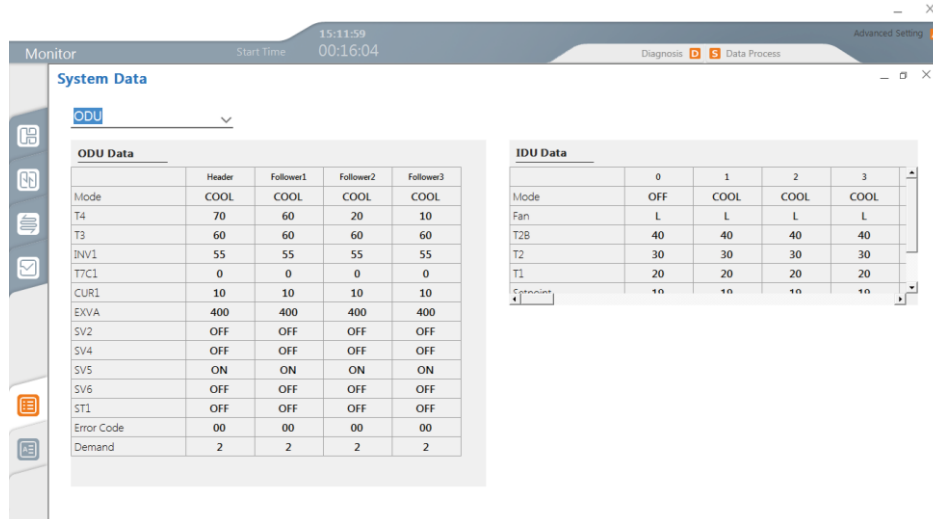
Different equipment models have different parameters. The V5X (8-12HP) is an example.

Outdoor Unit	Indoor Unit
ODU Operating Mode	Operating Mode
Outdoor Ambient Temperature (T4)	Actual Fan Speed
Condenser Temperature (T3)	T2B
Compressor 1 Frequency (INV1)	T2
Discharge 1 (T7C1)	Indoor Temperature (T1)

Current 1 (CUR1)	Set Temperature
Electronic Expansion Valve (EXVA)	EXV
SV2	Error Code
SV4	IDU Address
SV5	
SV6	
ST1	
Error Code	
Operating Energy Demand	

7.3.6 Troubleshooting

Troubleshooting Manual
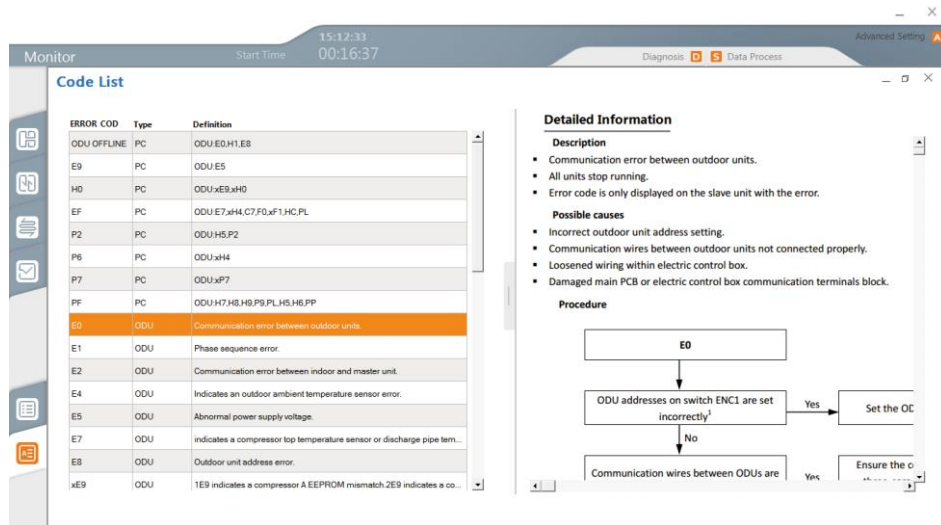
Notes:

1. If the error type is PC, no corresponding content will be shown on the right.

2. A PC error means that the corresponding outdoor unit may display the error code for the error shown on the M-DT display.

3. An ODU error means that the outdoor unit may display the corresponding troubleshooting.

4. The error code is shown on the left, and the corresponding troubleshooting process is displayed on the right.

5. Troubleshooting may not contain all the information about the error and protection features. For example, the protection details for defrost and oil return are not included in the error information. Refer to the troubleshooting manual of the outdoor unit for specific equipment errors.

7.3.7 Data Process
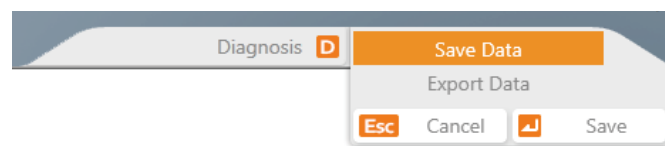
Click "Save Data", and M-DT will save the current data to the database.

Note: Even if this option is not selected, the backend database will automatically save the data.

Click "Export Data" to go to the interface to save the data

In this interface, you can opt to export the indoor unit (IDU), and outdoor unit (ODU). Select CSV or Excel for the exported data format, and select the time segment to be exported.

Click "Export" to go to the window to select the saving path. Select the path.

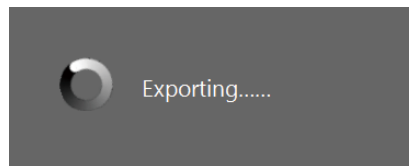While the data is being exported, you will see a window that indicates the progress. Please be patient. At this time, clicking on any M-DT operation may lead to M-DT downtime:

Note: If there are many operating records, it may take a longer time to export the data.

The data file has a default name with the format "ODU_View-[Time]", "IDU_View-[Time]"

ODU content:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	ID	Frame No	Time	RefSys Address	Address	Type	HP	Mode	T4	T3	INV1	T7C1	CUR1	EXVA	EXVB	SV2	SV4	SV5	SV6	ST1	Error Code	Demand
2	1	1	2017/10/18	0	129	V5x	10	OFF	70	60	55	33	0	400	800	OFF	OFF	ON	OFF	OFF	00	2
3	2	1	2017/10/18	0	130	V5x	10	OFF	70	60	55	33	0	400	800	OFF	ON	ON	OFF	OFF	H3	2

ID	No.
Frame No	M-DT frame number, each M-DT query is 1 frame
Time	Time of query
RefSys Address	Refrigerant System Address
Address	External network address: 129 - master unit /130 - slave unit 1/131 - slave unit 2/132 - slave unit 3
Type	ODU model

HP	HP of ODU
Mode	Operating Mode
...	The remaining parameters are the same as the list of parameters

IDU content:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	ID	Frame No	Time	RefSys Address	Address	Type	HP	Mode	Fan	T2B	T2	T1	Setpoint	EXV	Error Code
2	1	1	2017/10/18	0	0	HWALL	0.8	HEAT	A	-25	-25	-25	16	8	IE7
3	2	1	2017/10/18	0	1	HWALL	0.8	OFF	A	-25	-25	-25	16	8	I00

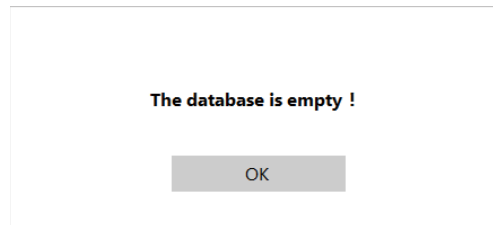| ID	No.
Frame No	M-DT frame number, each M-DT query is 1 frame
Time	Time of query
RefSys Address	Refrigerant System Address
Address	External network address: 129 - master unit /130 - slave unit 1/131 - slave unit 2/132 - slave unit 3
Type	IDU model ("OLD" for non-V6 indoor units, model abbreviations for the other models)
HP	IDU HP
Mode	Operating Mode
...	Subsequent data will be consistent with the list of parameters.

CSV file has been exported successfully.

OK
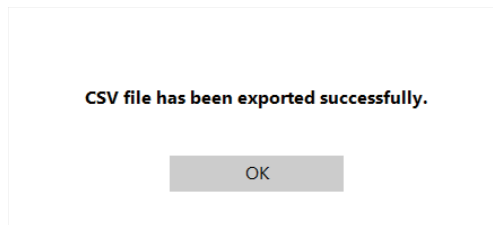
Notes:

1. The data export time must be within the M-DT effective time period. Data export may fail if the Start Time is earlier than when the M-DT is turned on, or if the End Time is later than when diagnostics are turned off.

2. When exporting the Excel file, if the excel file is in use, it may cause the export to fail. Please close Excel and try to export again.

3. Office 2012 or higher must be installed in the computer.

4. If the system has non- new generation indoor or outdoor units, the refrigerant system addresses exported from the indoor units may not be consistent with the refrigerant system of the outdoor unit.

5. Data export should be carried out only after the M-DT has been running for 5 minutes. Otherwise, the M-DT may exit with exception.

7.4 Data logs

Once the M-DT is turned on, a copy of the database will be saved. The path is DBFolder under the installation directory.

Click the "Data logs" button on the login interface to go to the database window where you can select the database that you want to view.

If the loaded database is empty, the following prompt appears.

Click to return to the login interface.
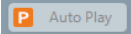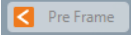

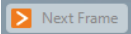118 is the frame number of the current data;

434 is the total number of frames.

"12/22/2017 11:51:48" is the corresponding time of the current frame number.

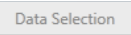Scroll along the progress bar to jump to a particular frame.
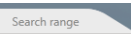
P Auto Play - Jump automatically to the next frame.

< Pre Frame - Jump to the previous frame.

> Next Frame - Jump to the next frame.

Data Selection	Cond	Search range

Data Selection - Select the search parameters.

Cond - Parameter condition "<, >, =".
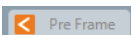
Search range - Numerical value of the search parameter.

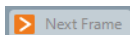| ODU/T4	>	100

Example:

Used to search for data that fulfills the search conditions, such as searching for data at ambient temperature >30°C. This will automatically jump to the frame that fulfills the search conditions each time you click. If such a frame does not exist, the following prompt appears.

> **No data has been found.**
>
> OK
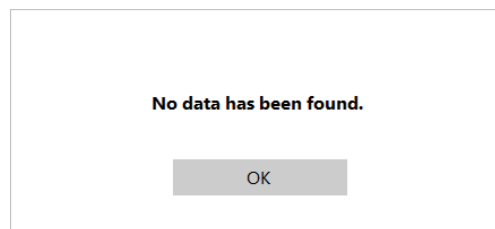
Notes:

1. A minimum of one functional interface must be on for **P** Auto Play , **<** Pre Frame , **>** Next Frame ,

    ▬▬▬▬▬▬▬▬▬▬ , and scrolling along the progress bar to work. Otherwise, the

    above functions will not work (no effect on clicking).

2.   As long as the data in any equipment satisfies the search parameters, the equipment will be considered to have

    fulfilled the search conditions. If the temperature is set to be "greater than" 17°C in the search, and there is an indoor

    unit where the temperature exceeds 17°C, then the corresponding frame data is considered to have fulfilled the data

    conditions.

3.   The history interface refreshes at every query interval (one data frame), and this is not related to the refresh time at

    the advanced setting interface. The refresh time is longer when you have more equipment, and vice versa. A query

    interval is about 200*2*number of equipment.

NOTE CONCERNING PROTECTION OF ENVIRONMENT

This product must not be disposed of via normal household waste after its service life, but must be taken to a collection station for the recycling of electrical and electronic devices. The symbol on the product, the operating instructions or the packaging indicate such disposal procedures. The materials are recyclable in accordance with their respective symbols. By means of re-use, material recycling or any other form of recycling old appliances you are making an important contribution to the protection of our environment. Please ask your local council where your nearest disposal station is located.

In case of quality problem or other please contact your local supplier or authorized service center.
Emergency number: 112

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This product was manufactured in China (Made in China).

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NOTE CONCERNING PROTECTION OF ENVIRONMENT

This product must not be disposed of via normal household waste after its service life, but must be taken to a collection station for the recycling of electrical and electronic devices. The symbol on the product, the operating instructions or the packaging indicate such disposal procedures. The materials are recyclable in accordance with their respective symbols. By means of re-use, material recycling or any other form of recycling old appliances you are making an important contribution to the protection of our environment. Please ask your local council where your nearest disposal station is located.

In case of quality problem or other please contact your local supplier or authorized service center.
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