

LGMV

Ver 1.2.1

How to use

| | | | |
|----|--|----|------------------|
| 2 | Start screen | 31 | ECU info |
| 3 | Serial port connection (USB LGMV Module) | 32 | MISC info |
| 4 | Wi-Fi connection (Mobile LGMV Module) | 33 | DOAS info |
| 5 | Model selection screen | 34 | Fault Diagnosis |
| 6 | Main monitoring screen (Landscape mode) | 35 | LG AI Engine |
| 7 | Main monitoring screen (Portrait mode) | 38 | Black box Viewer |
| 8 | Indoor unit control | | |
| 9 | Indoor unit control (2Set) | | |
| 10 | Indoor unit control (Smart care) | | |
| 11 | Cycle view | | |
| 12 | Detail graph | | |
| 13 | Save data and Save option | | |
| 14 | Load data | | |
| 15 | Save Black Box and Test Report | | |
| 16 | File Management | | |
| 18 | Other options | | |
| 19 | Troubleshooting guide | | |
| 20 | Test run info | | |
| 21 | Serial number info | | |
| 22 | Operating time info | | |
| 23 | Auto Test Run | | |
| 24 | LG HCT | | |

Start screen

❖ Supported Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start screen contains the following:

1. Options menu

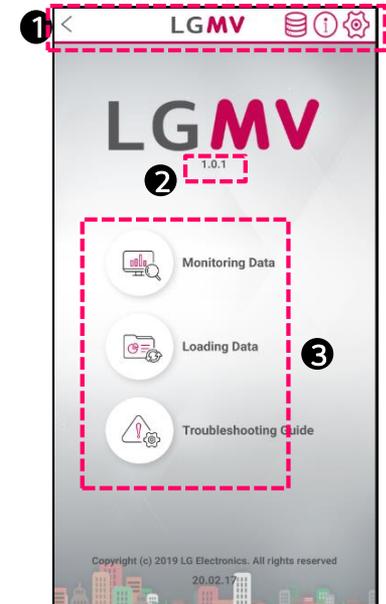
2. App version

3. Start menu

- Monitoring Data
- Loading Data
- Troubleshooting Guide



[Windows PC, Android Tablet, iPad]

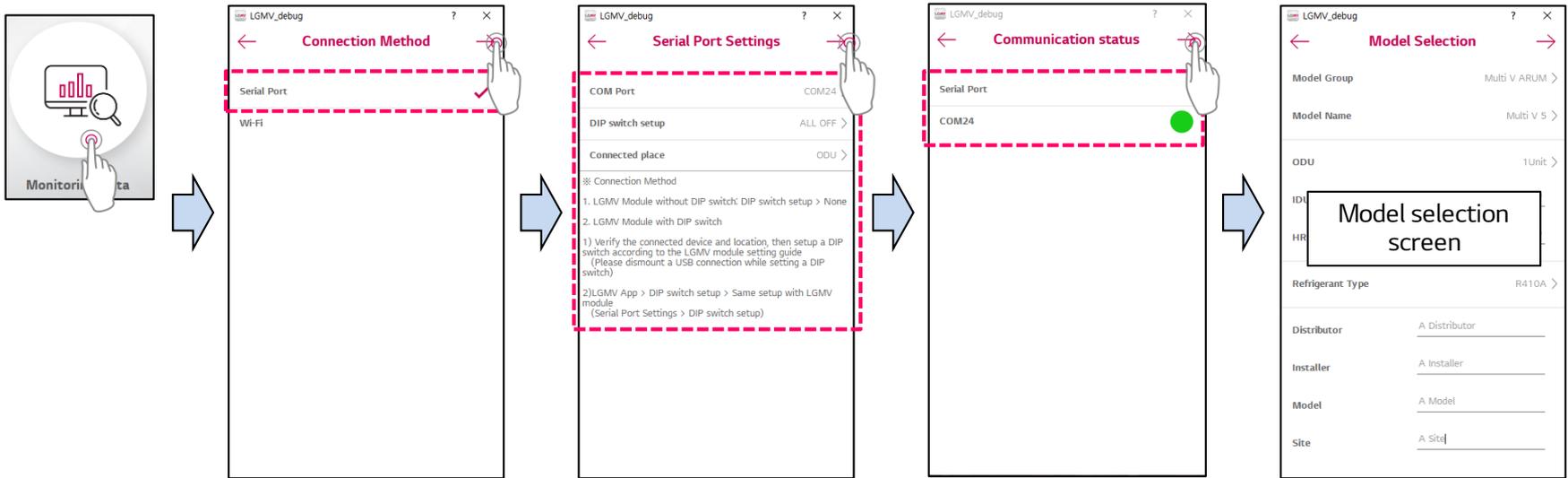


[Android Phone, iPhone]

Serial Port Connection (USB LGMV Module)

❖ Supported Device : Windows PC

➤ Serial port connection proceeds as follows.



✓ Prerequisite for serial port connection

1. After installing LGMV Module driver, check the serial port number in Windows Device Manager

2-1. (LGMV Module : ILO) Check the DIP switch status for the connected model.

2-2. (LGMV Module : FE0, FE1) For LGMV Module without a DIP-switch, set the "DIP switch" option to "NONE"

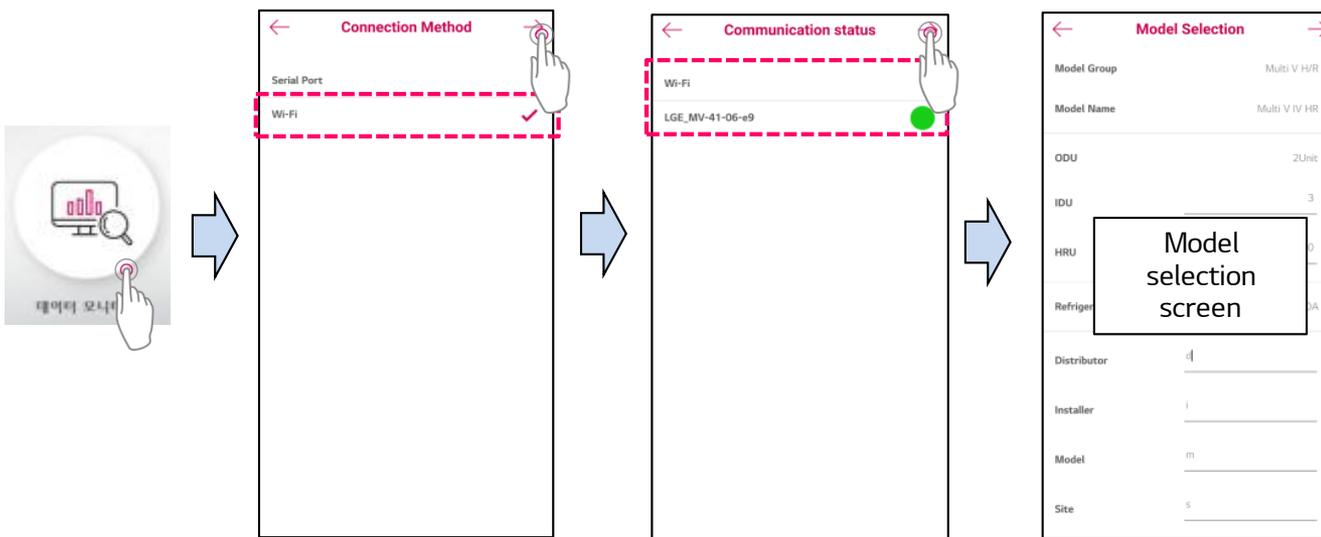
| Switch setup | Description |
|----------------------------|---|
| #2 ON + ALL OFF | Multi & Single product (Not applied unified PCB) MultiV Plus product connects to outdoor |
| #3 and #6 ON + ALL OFF | MultiV Indoor/outdoor Unit communication connection (Product only after MultiV II series) |
| #4 ON + ALL OFF | MultiV II series Outdoor unit connection Or When connecting product for which Multi unified PCB is applied |
| #1, 2, 3, 4, 5 ON + #6 OFF | For program update |
| ALL OFF | MultiV V series Outdoor unit connection |



Wi-Fi connection (Mobile LGMV Module)

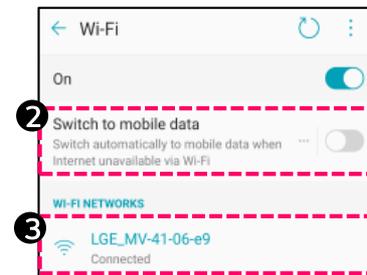
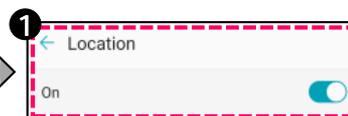
❖ Supported Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Wi-Fi connection proceeds as follows.



✓ Prerequisite for Android device

1. Device Settings > Turn on the Location function
2. Device Settings > Advanced Wi-Fi Settings > Turn off "Switch to mobile data"
3. Check the connection status of device Wi-Fi (Should be connected to LGE_MV_XXX)



ex. LG Mobile Device

Model selection screen

❖ Supported Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Details of the model selection screen are as follows.

1. Select a model group and model name for connection.
2. Set the number of outdoor and indoor units connected to the product.
3. Select the type of refrigerant
4. Specify the names of installation service provider, installation engineer, model and site.

The screenshot shows a mobile application interface titled "Model Selection". It features a list of fields for configuration, each with a value and a chevron icon. The fields are grouped into four sections indicated by red dashed boxes and numbered callouts:

- Section 1:** "Model Group" (Multi V ARUM >) and "Model Name" (Multi V 5 >).
- Section 2:** "ODU" (1Unit >), "IDU" (20), and "HRU" (0).
- Section 3:** "Refrigerant Type" (R410A >).
- Section 4:** "Distributor" (A Distributor), "Installer" (A Installer), "Model" (A Model), and "Site" (A Site).

Main monitoring screen (Landscape mode)

❖ Supported Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Main monitoring screen shows the following:

1. Model name and basic information.

2. Product version information

3. Installer information

4. ODU cycle information

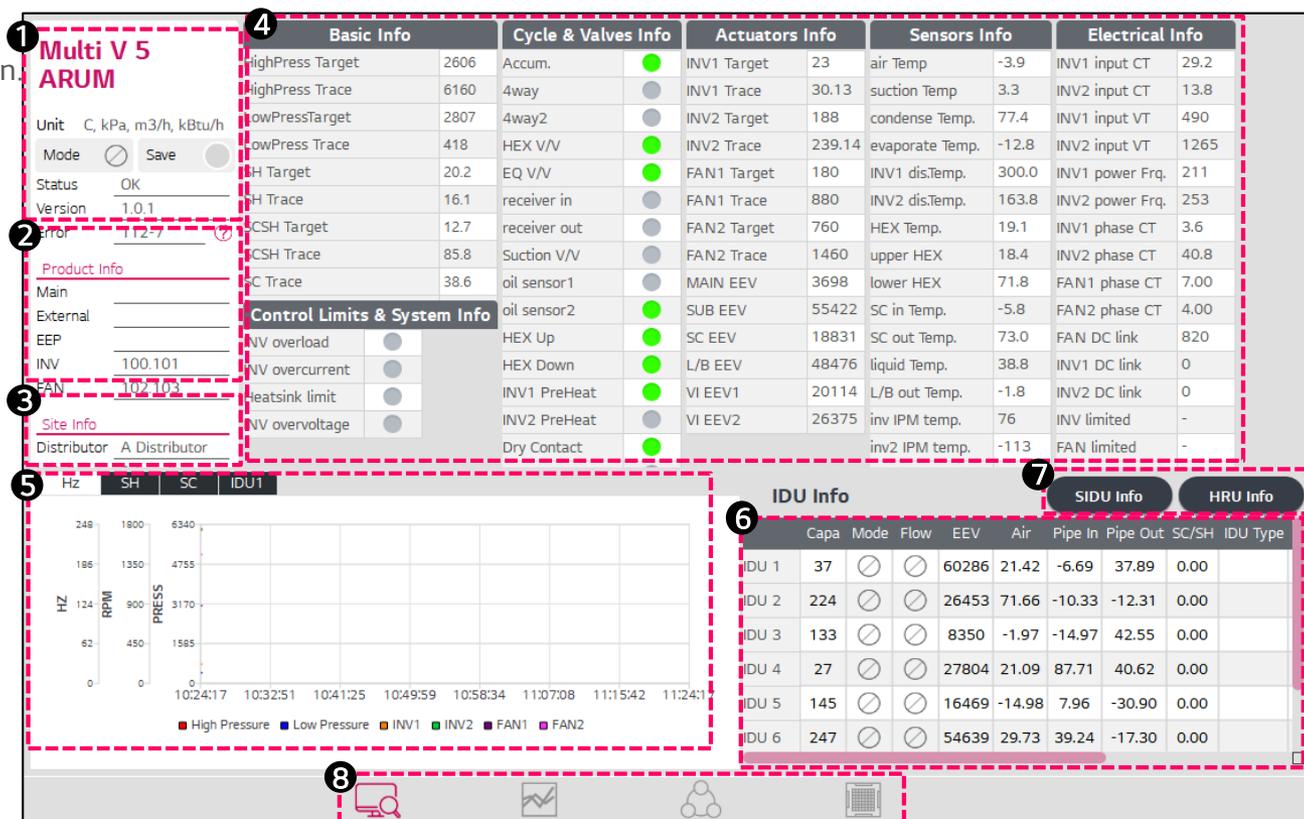
5. Mini graph for main cycle info.

6. IDU cycle information

7. Special IDU and HRU data.

8. Bottom menus

- Main monitoring
- Detail graph (Windows PC only)
- Cycle view (Windows PC only)
- IDU control



[Windows PC, Android Tablet, iPad]

Main monitoring screen (Portrait mode)

❖ Supported Device : Android Phone, iPhone

➤ Main monitoring screen shows the following:

1. Model name and basic information.

2. Product version information

3. ODU cycle information

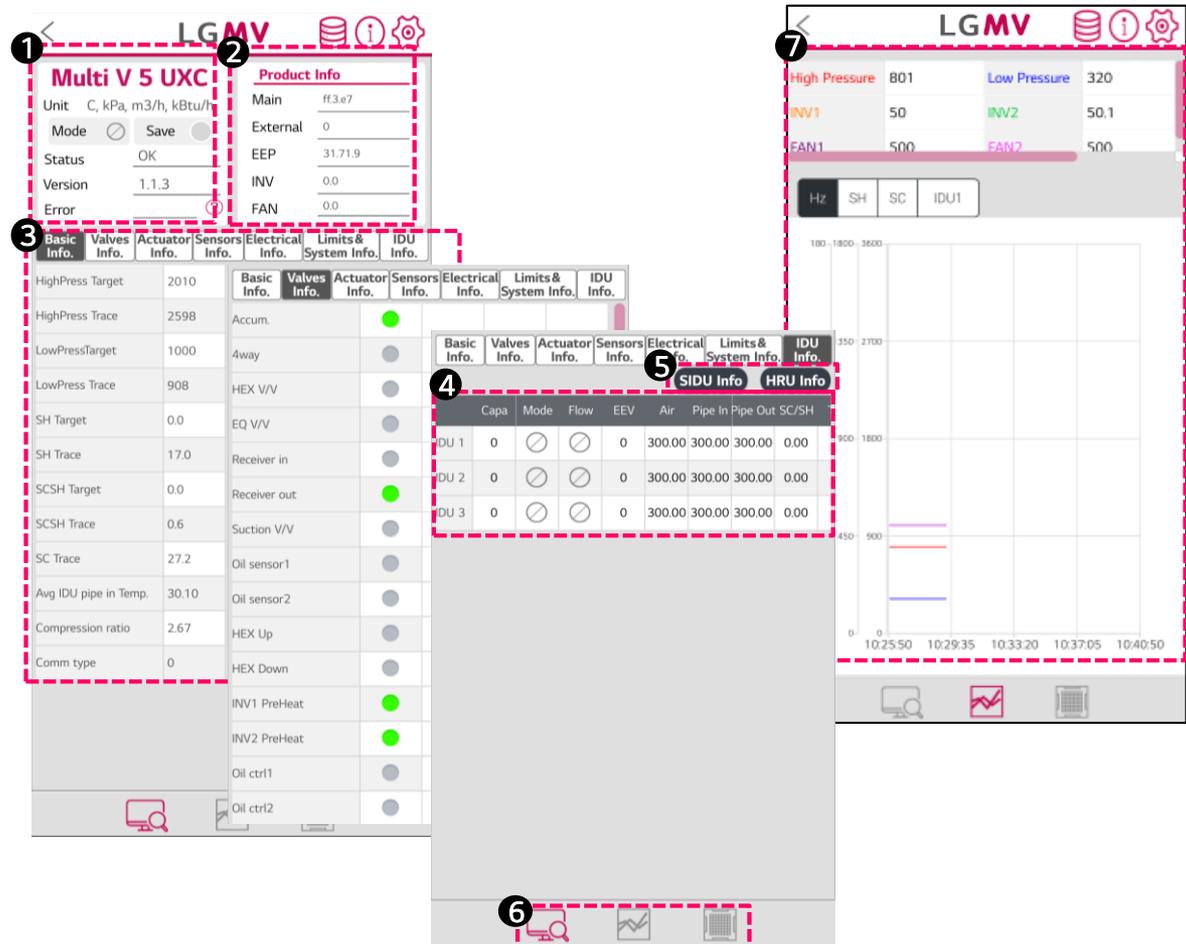
4. IDU cycle information

5. Special IDU and HRU data

6. Bottom menus

- Main monitoring
- Mini graph
- IDU control

7. Mini graph for main cycle information



[Android Phone, iPhone]

Indoor unit control

❖ Supported Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the indoor icon in the bottom menus. ()

➤ Details of the indoor unit control screen are as follows.

1. Select the IDU to be controlled

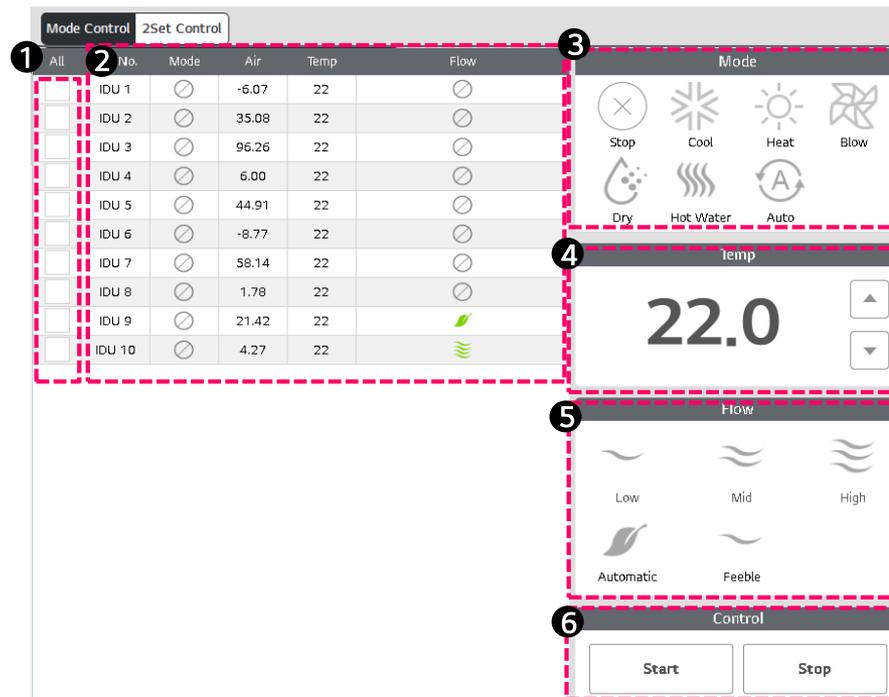
2. IDU information: the operating mode, the indoor temperature, the set temperature, the fan level

3. Operating mode

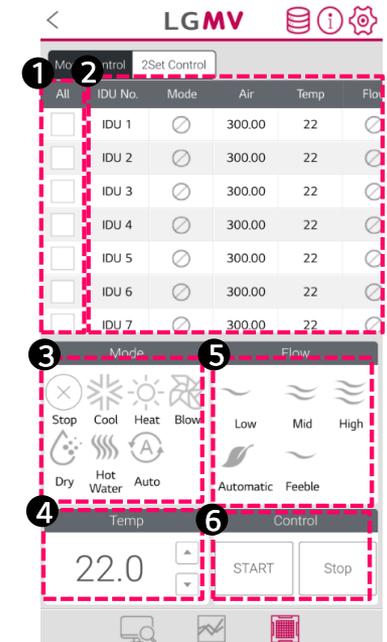
4. Set temperature

5. Fan level

6. Start/Stop the control



[Windows PC, Android Tablet, iPad]



[Android Phone, iPhone]

※ The options for the mode/flow may vary depending on the model

Indoor unit control (2Set)

❖ Supported Device : Windows PC, Android Phone/Tablet, iPhone/iPad

- Start : Select the indoor icon in the bottom menus. ()
- Select the '2Set Control' Tab
- Details of the indoor unit control screen are as follows.

1. Select the IDU to be controlled

2. IDU information

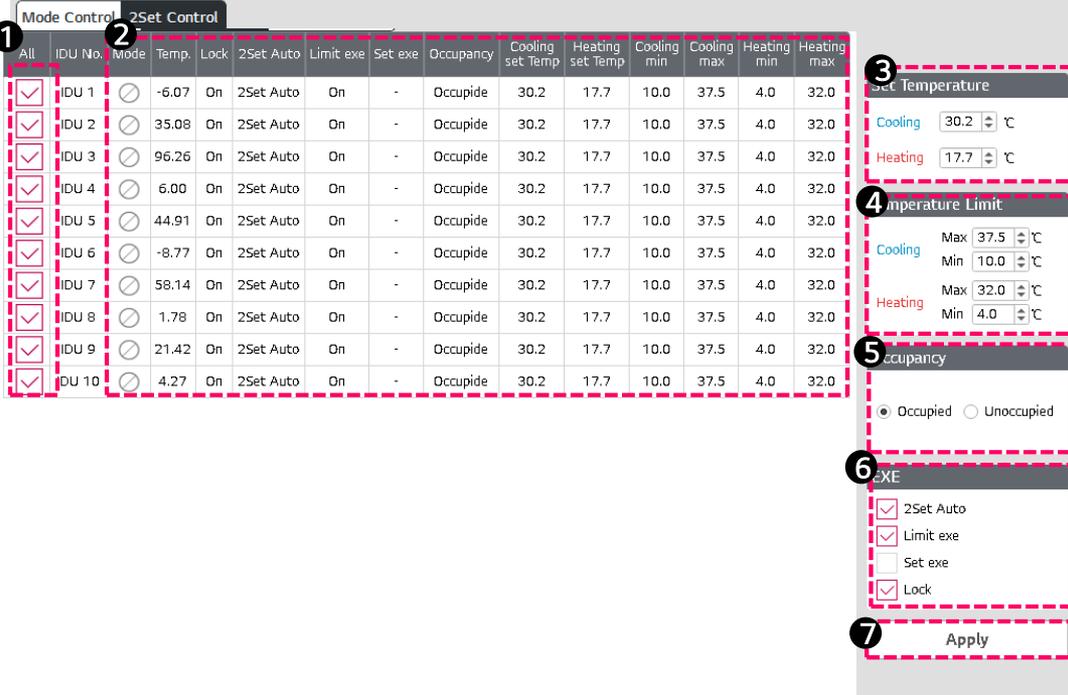
3. Set Temperature

4. Temperature Limit

5. Occupancy

6. 2Set Auto, Limit exe, Set exe, Lock

7. Start the control



| All | IDU No. | Mode | Temp. | Lock | 2Set Auto | Limit exe | Set exe | Occupancy | Cooling set Temp | Heating set Temp | Cooling min | Cooling max | Heating min | Heating max |
|-------------------------------------|---------|-----------------------|-------|------|-----------|-----------|---------|-----------|------------------|------------------|-------------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | IDU 1 | <input type="radio"/> | -6.07 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 2 | <input type="radio"/> | 35.08 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 3 | <input type="radio"/> | 96.26 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 4 | <input type="radio"/> | 6.00 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 5 | <input type="radio"/> | 44.91 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 6 | <input type="radio"/> | -8.77 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 7 | <input type="radio"/> | 58.14 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 8 | <input type="radio"/> | 1.78 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 9 | <input type="radio"/> | 21.42 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |
| <input checked="" type="checkbox"/> | IDU 10 | <input type="radio"/> | 4.27 | On | 2Set Auto | On | - | Occupide | 30.2 | 17.7 | 10.0 | 37.5 | 4.0 | 32.0 |

3 Set Temperature

Cooling: 30.2 °C

Heating: 17.7 °C

4 Temperature Limit

Cooling: Max 37.5 °C, Min 10.0 °C

Heating: Max 32.0 °C, Min 4.0 °C

5 Occupancy

Occupied Unoccupied

6 EXE

2Set Auto

Limit exe

Set exe

Lock

7 Apply

※ This feature is available on some models.

(Available models: Multi V 5, Multi V 5 HR, Multi V S)

Indoor unit control (Smart care)

❖ Supported Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the indoor icon in the bottom menus. ()

➤ Select the 'Smart care Control' Tab

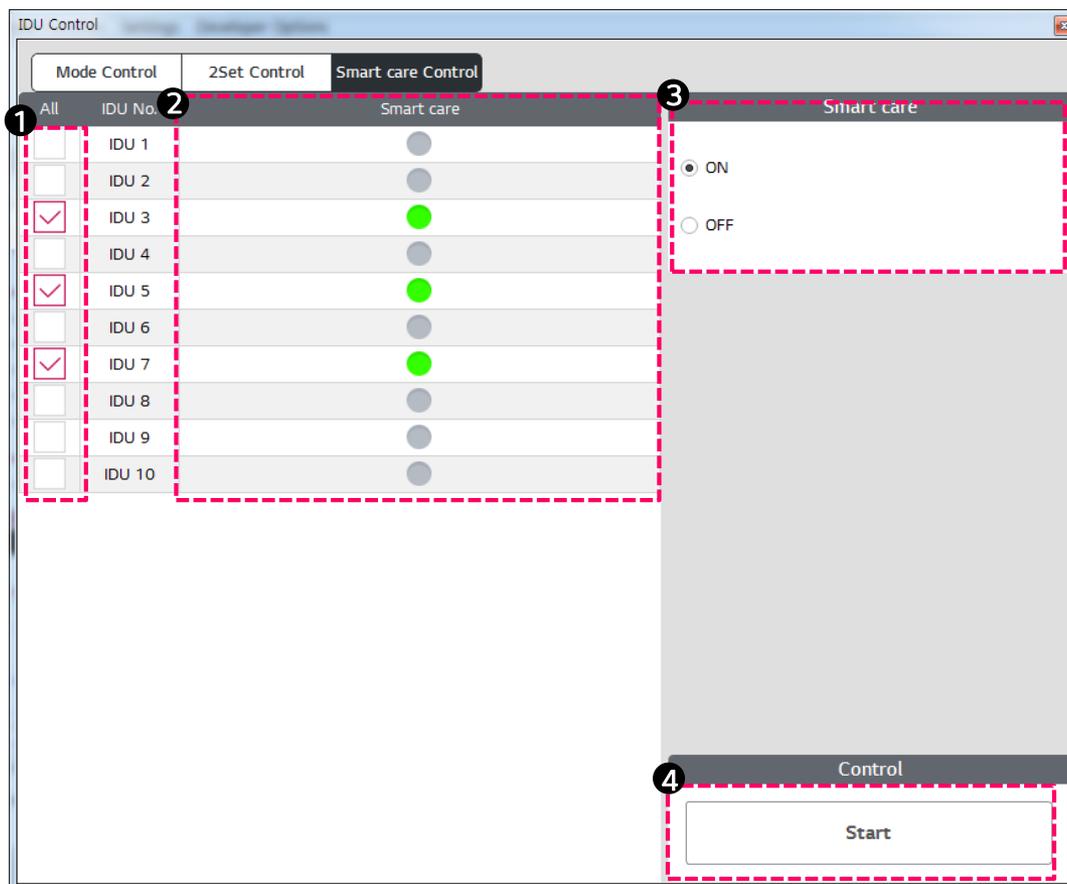
➤ Details of the indoor unit control screen are as follows.

1. Select the IDU to be controlled

2. Smart care setting

3. Smart care ON/OFF

4. Start the control



※ This feature is available on some models.

(Available models: Multi V 5, Multi V 5 HR)

Cycle view

❖ Supported Device : Windows PC

➤ Details of the cycle view screen are as follows.

1. Outdoor unit tab button

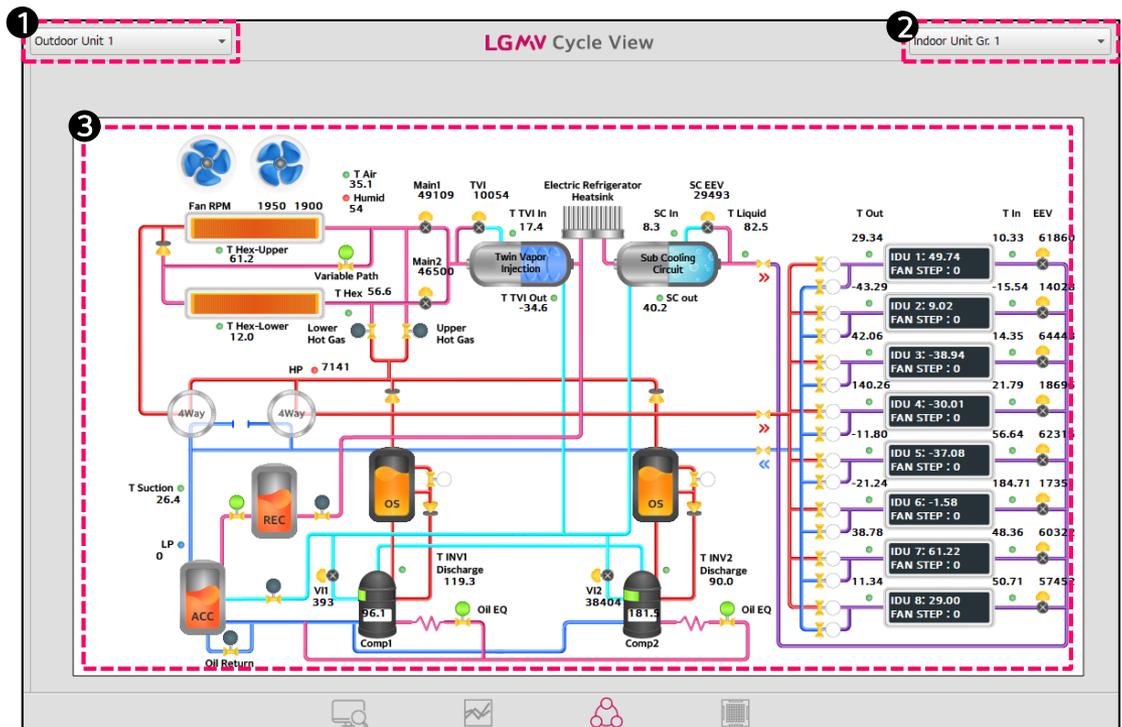
: Displays the cycle information for each connected ODU

2. Indoor unit tab button

: Displays the cycle information for each IDU group

3. Outdoor and Indoor unit cycle

: Pipe design changes according to the operation mode



Detail graph

❖ Supporting Device : Windows PC

➤ Details of the detail graph screen are as follows.

1. Up to 3 graphs can be configured to display various system information

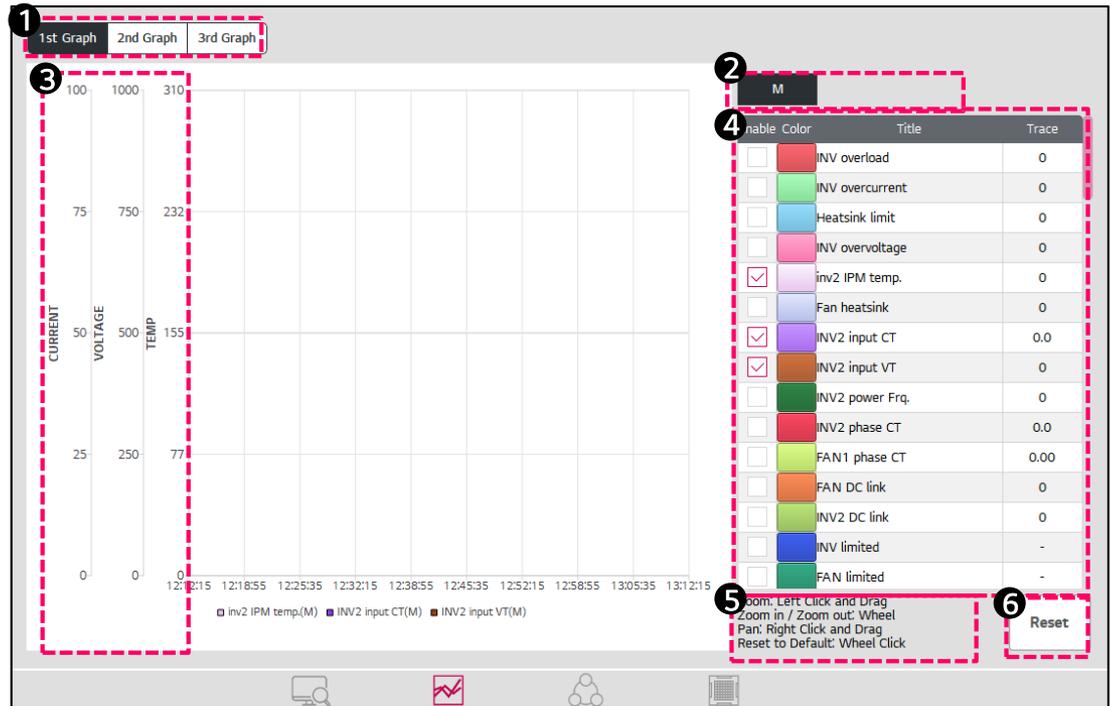
2. Select the ODU unit

3. Axis information.

4. Select items to be displayed on the graph

5. Quick guide showing how to adjust the graphs (Zoom in, Zoom out, Move, Reset)

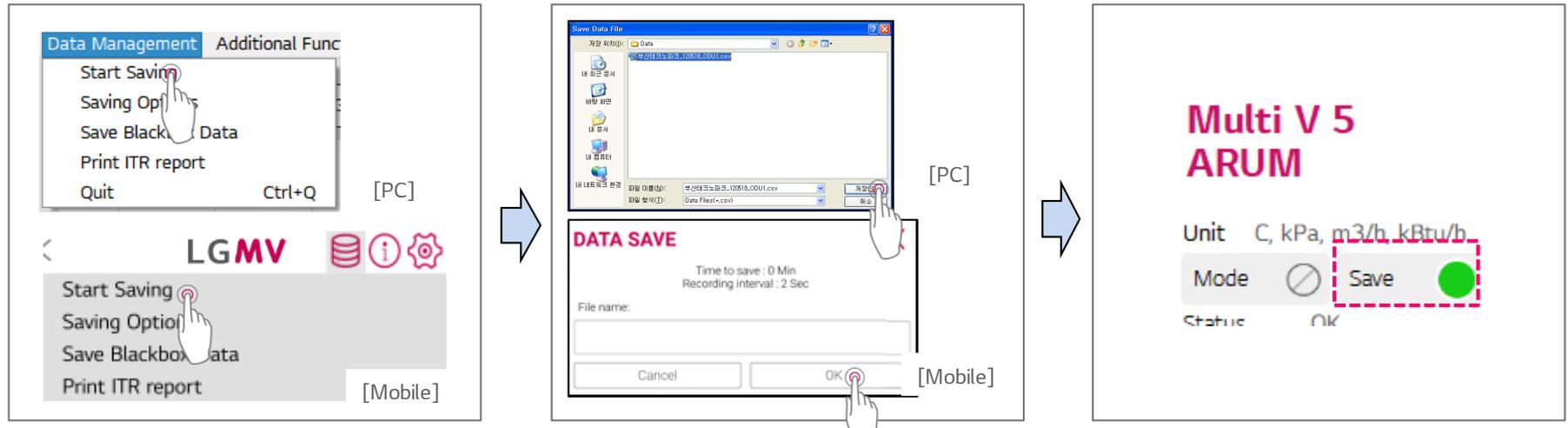
6. Initialize the zoom state of the graph



Save data and Save option

❖ Supported Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➢ Save the LGMV data as follows.



1. Data Management > Click the Start saving option.

2. Specify the folder to save the data and assign file name, and then press the OK button.
 ※ Windows PC: Folder to be saved can be specified
 ※ Android: Saved in LGMV> Data folder
 ※ iOS: Saved in App

3. The save status icon is activated in the main monitoring screen> basic information display section.

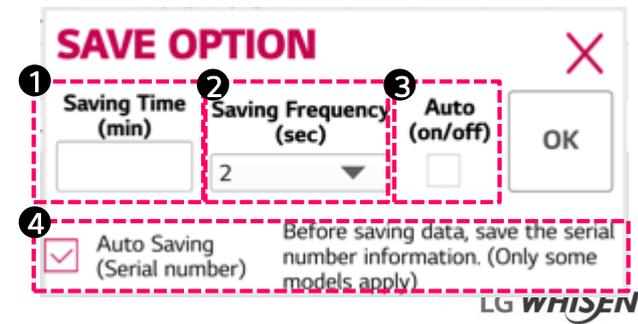
➢ Details of save data option popup screen are as follows.

1. Specify the save duration (Enter "0" to save all collected data)
2. Select the data save interval
3. Auto save option (on/off) ※ Mobile version defaults to on and cannot be changed to off

This option determines whether or not to automatically generate a pop-up window for saving data when connecting to a product through LGMV.

When set to On, when entering the monitoring screen after connecting the product, a data save pop-up automatically occurs.

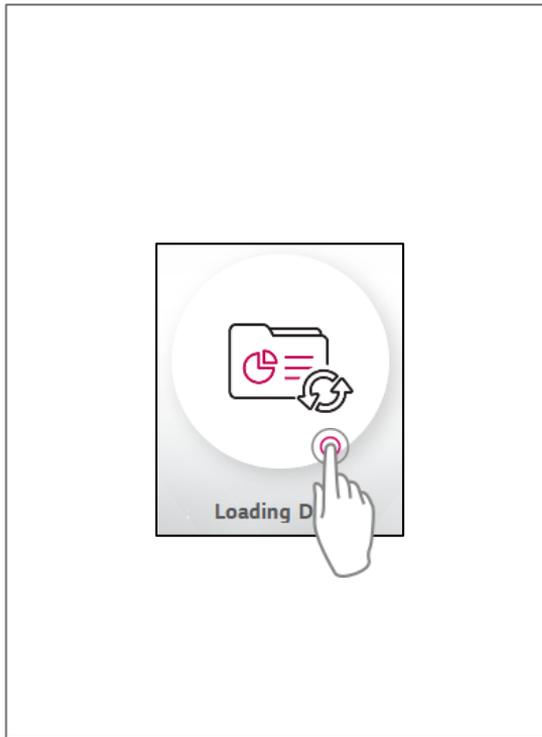
4. Auto Saving (Serial number)



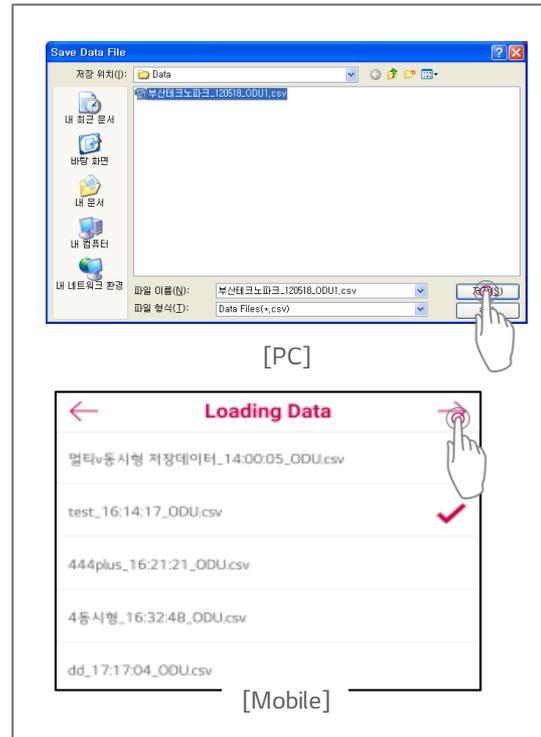
Load data

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Load the LGMV data as follows.

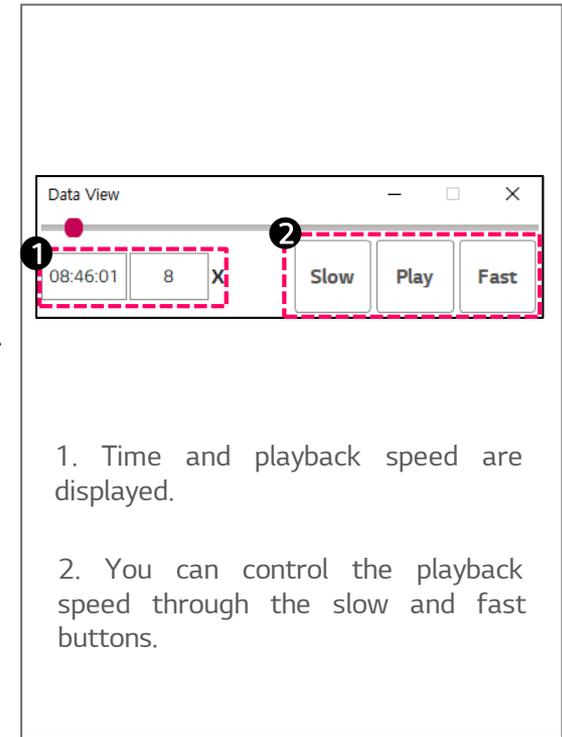


1. Select the loading data icon on the initial screen.



2. Select the outdoor unit file name to load data.

※ Windows PC: Select from the file browser.
※ Android and iOS: Select from the file list.



1. Time and playback speed are displayed.

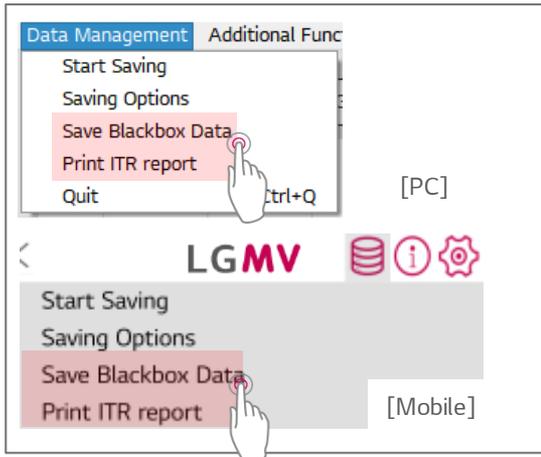
2. You can control the playback speed through the slow and fast buttons.

3. The data loading control bar will appear on the main monitoring screen, and click the play button to play the data.

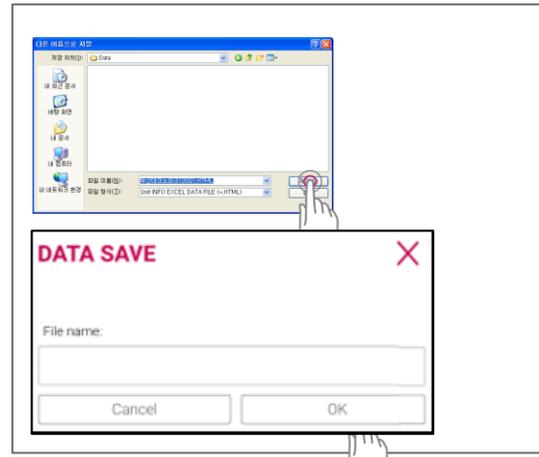
Save Black Box and Test Report

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

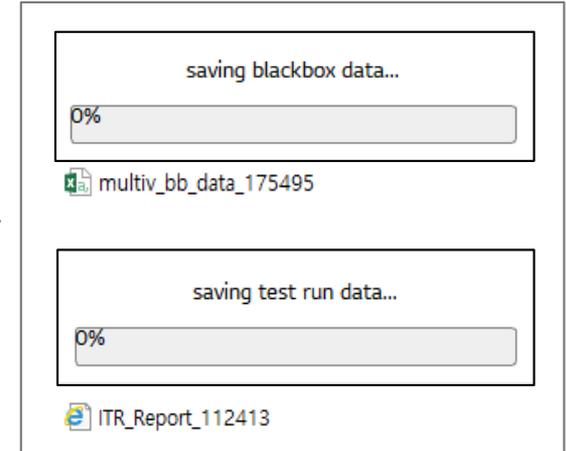
➤ Black Box save and Test Report are as follows.



1. Click "Save Black Box" or "Print ITR report" in the data management menu.



2. Enter the file name to save.



3. Read the data and save it as a file.
- Black box data: Save as csv file
- Print ITR report: Save as html file

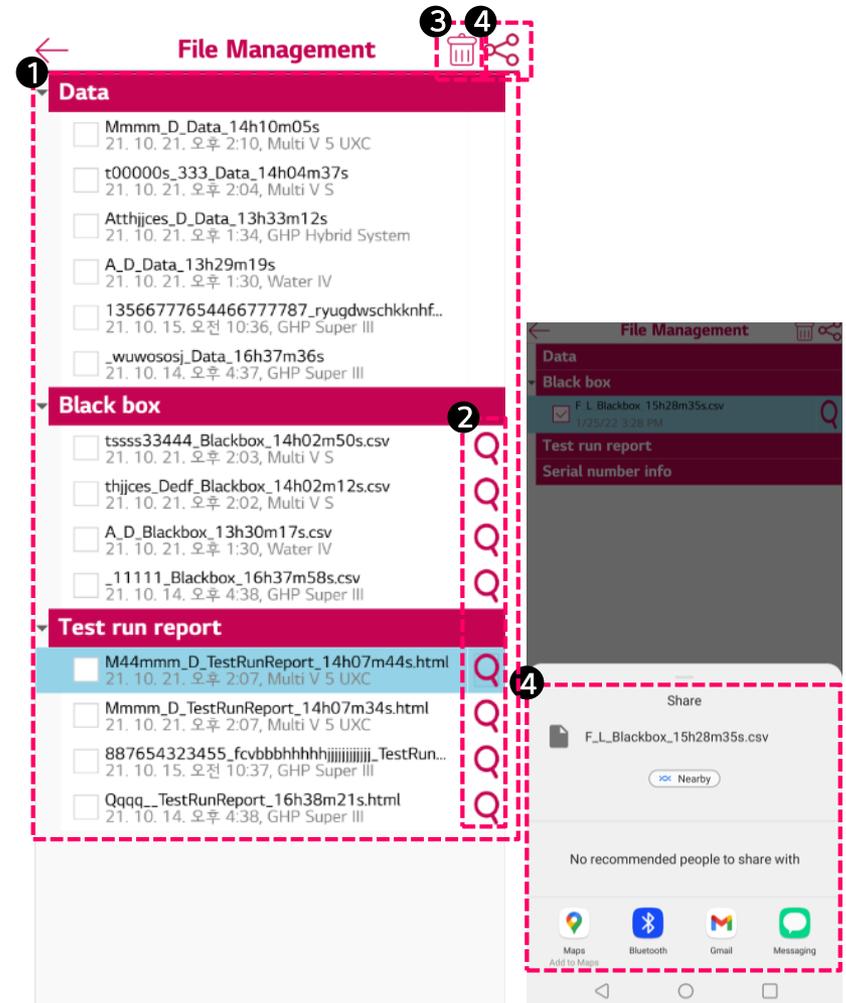
File Management

❖ Supporting Device : Android Phone/Tablet, iPhone/iPad

➤ How to execute: Select the [File Management] menu from the settings menu.

➤ Details of the share screen are as follows.

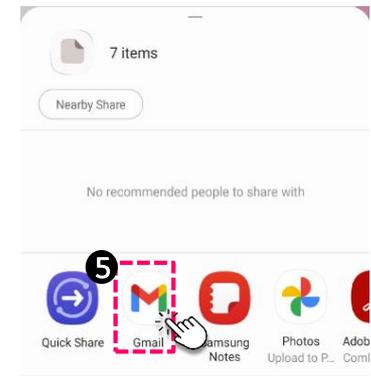
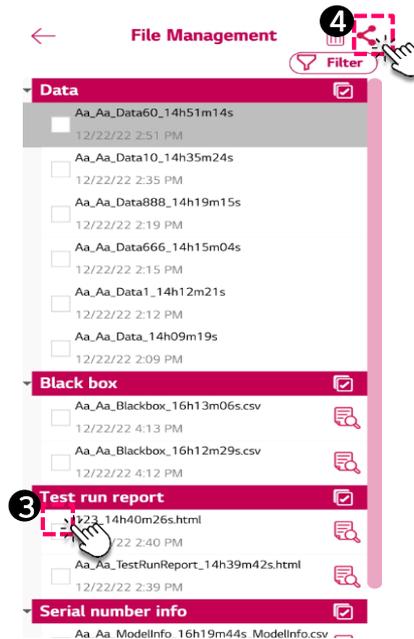
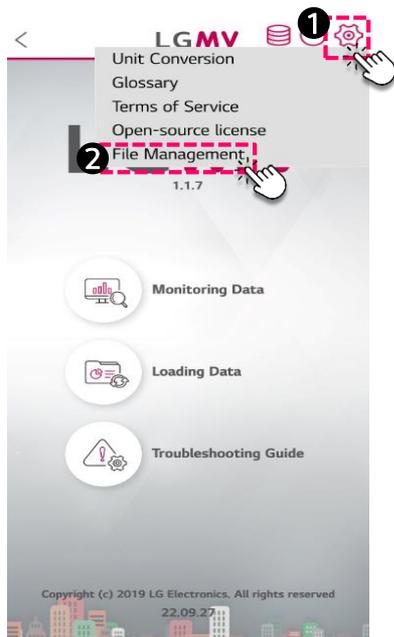
1. On the file list screen, Saved data, Black box and Test run report files are displayed.
2. You can check the contents of Black box and Test run report files through the button (2) on the right.
3. After selecting the file to be deleted, you can delete the file by clicking the Delete button at the top right.
4. After selecting the file you want to share, you can share the file by clicking the Share button at the top right.
(For file sharing, email is recommended.)



File Management - Share

❖ Supporting Device : Android Phone/Tablet, iPhone/iPad

➤ How to execute : Select the [File Management] menu from the settings menu.



1. Select Settings icon
2. Select File Management menu

3. Click the checkbox of the file to share
4. Select Share icon

5. Choose the app to use for sharing
(Recommended apps: Email)

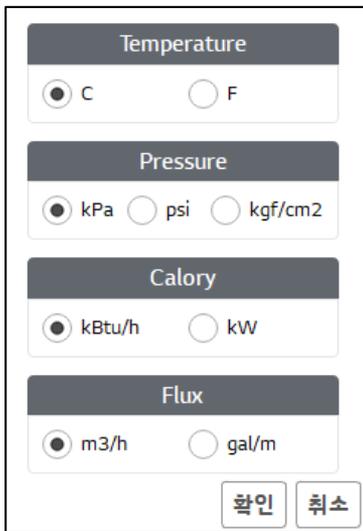
※ Internet connection is required to share files.

Other options

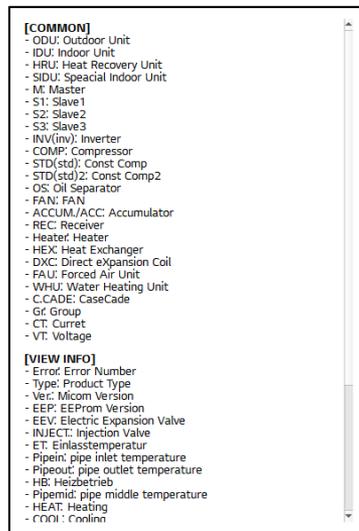
❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Various menus are provided in the settings menu.

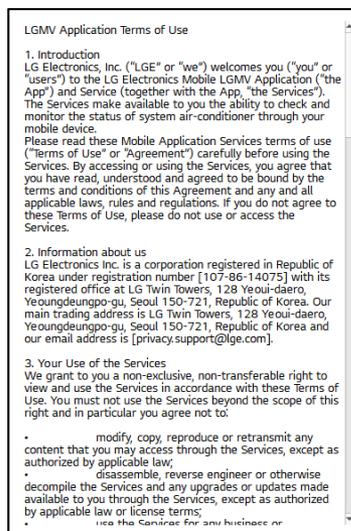
■ Unit Conversion



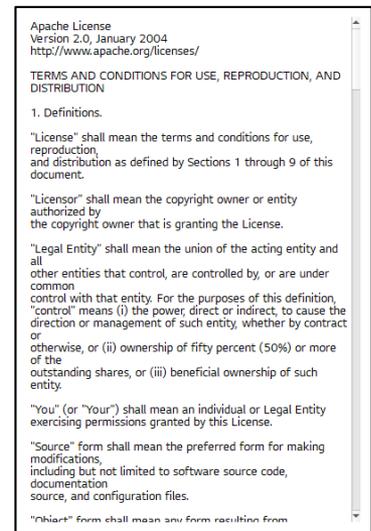
■ Glossary



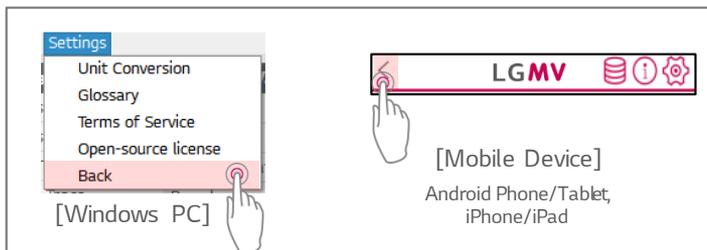
■ Terms of Service



■ Open-source license



■ Back



Troubleshooting guide

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the troubleshooting guide icon on the initial screen. ()

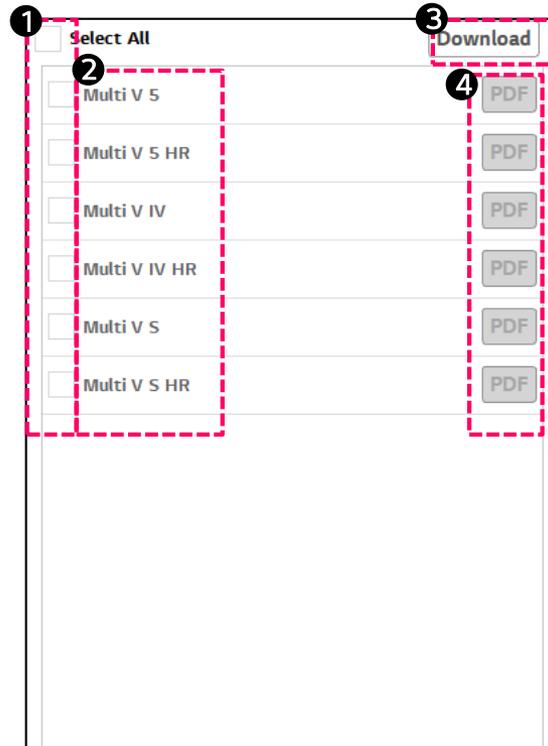
➤ Details of the troubleshooting guide screen are as follows.

1. Select the model to download

2. List of models available

3. Download

4. When the guide document is downloaded, the PDF button is activated. PDF viewer of the device will be launched as you select the PDF button



Test run info

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the [Test run info] menu from the additional functions.

➤ Details of the test-run info. screen are as follows.

1. Test-run information is displayed..

(Displayed items may vary by the model)

2. If you select the [Troubleshooting guide] button, the document will be opened in the Pdf viewer.

| Test Run Info | |
|---------------------|------------------|
| Test Run type | - |
| Test Run Step | 0 |
| Total Input Ref. | 12.0 |
| Status Finished ITR | - |
| Remain Time(min) | 0 |
| Test Run Error | Normal Operation |
| ODU EEV judge | - |
| IDU EEV judge | - |
| Ref. Mass judge | - |
| Required Ref. | - |
| Basic Ref. | 12.0 |
| Ref. unit | Kg |

2 Troubleshooting guide

※ This feature is available on some models.

(Available models: Multi V 5, Multi V 5 HR, GHP Super III)

Serial number info

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

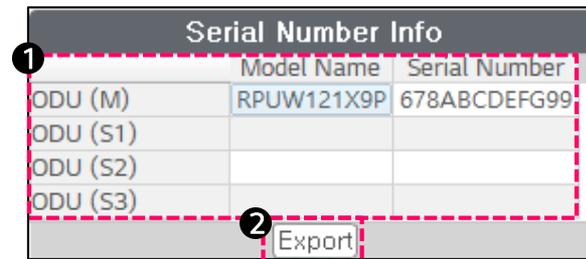
➤ Start : Select the [Serial number info] menu from the additional functions.

➤ Details of the serial number info. screen are as follows.

1. The model name and serial number of the outdoor and indoor unit are displayed.

(Indoor model name / serial number only supports some models.)

2. If you select the [Export] button, the model name and serial number information is saved as a csv file.



| Serial Number Info | | |
|--------------------|------------|---------------|
| | Model Name | Serial Number |
| ODU (M) | RPUW121X9P | 678ABCDEFG99 |
| ODU (S1) | | |
| ODU (S2) | | |
| ODU (S3) | | |
| | | Export |

※ This feature is available on some models.

(Available models: Multi V 5, Multi V 5 HR, Water V, Water V HR, Multi V S, Split&Monobloc, Pressure, GHP Hybrid System)

Operating time info

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start: Select the [Operating time info] menu from the additional functions.

➤ Details of the operating time screen are as follows.

1. It is a button to select an outdoor unit or an indoor unit.

2. The main part's operating time is displayed.

3. If you select the [Update] button, the part operation time is updated.

| | ODU 1 | ODU 2 | ODU 3 | ODU 4 |
|--------------------|-------|-------|-------|-------|
| Comp1 turn on time | 0 | 0 | 0 | 0 |
| Comp2 turn on time | 0 | 0 | 0 | 0 |
| Fan1 turn on time | 0 | 0 | 0 | 0 |
| Fan2 turn on time | 0 | 0 | 0 | 0 |
| Power turn on time | 111 | 0 | 0 | 0 |

※ This feature is available on some models.

(Available models: Multi V 5, Multi V 5 HR, Water V, Water V HR, Multi V S)

Auto Test Run

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ How to execute: Select the [Auto Test Run] menu from the additional functions.

➤ Details of the test-run info. screen are as follows.

1. This is the input section where you can enter the total charge amount of refrigerant.

2. This is a button to request [Start the test run] to the outdoor unit.

Total Input Ref. (Basic Ref. + Additional Ref.)

1

12.0 Kg

Enter the total input refrigerant mass of the system to the first decimal place.

2

Start the test run

※ This feature is available on some models.
(Available models: Multi V 5, Multi V 5 HR)

LG HCT - Overview

❖ Supported Device : Windows PC

➤ LG HCT screen contains the following:

1. Device installation status

2. Multi-select & Device Filter

: Device filter is activated after selecting "Multi-select" option

3. Device Tree (Includes central control address, model name and serial number)

4. Save File and Load File buttons

: You can save or load the settings of currently selected device.

5. Information for the selected device

6. Refresh and Apply buttons

: Refresh or apply the configuration options

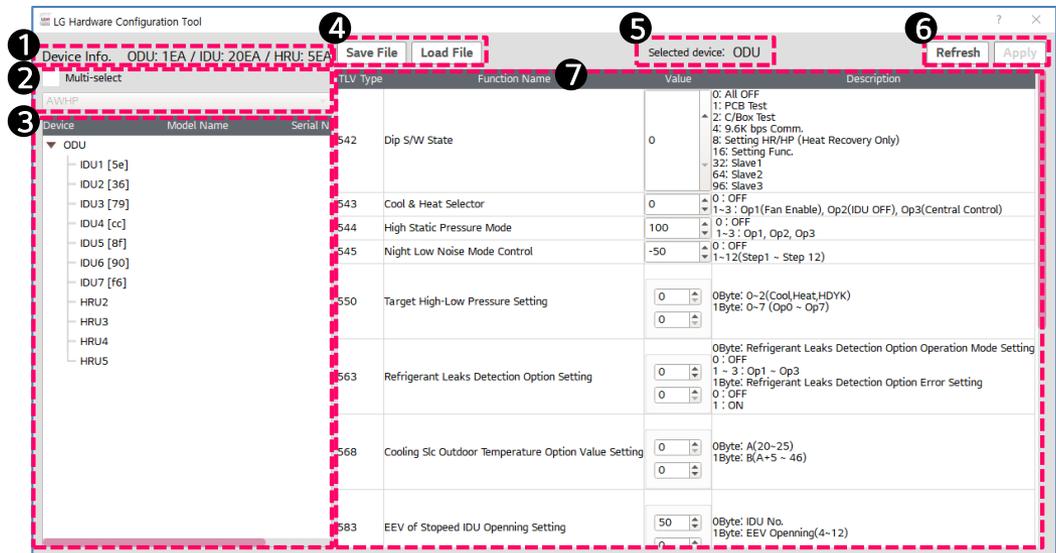
7. Configuration option list

: Displays the configuration options for the selected device

- Values cannot be changed if the item is uncontrollable
- Values specific to some device are not displayed in Multi-select mode.

※ This feature is available on some models.

(Available models: Multi V 5, Multi V 5 HR)



LG HCT - Configuration option list

➤ Configuration option list contains the following

1. For uncontrollable settings: (displayed with Textview)

- Shows the current value, cannot be modified (ex. Dip S/W State)

Ex)

| TLV Type | Function Name | Value | Description |
|----------|---------------|-------|--|
| 542 | Dip S/W State | 1 | 0: All OFF 1: PCB Test 2: C/Box Test 4: 9.6k bps Comm. 8: Setting HR/HP (HeatRecovery Only) 16: Setting Func. 32: slave1 64: slave2 96: slave3 |

2. For controllable settings: (displayed with Spinbox)

1) Single value : value can be modified according to a description

Ex)

| TLV Type | Function Name | Value | Description |
|----------|---------------------------|-------|------------------------------|
| 544 | HIGH STATIC PRESSURE MODE | 2 | 0: OFF 1~3: OP1, OP2, OP3 |

2) Two values : values can be modified according to a description

- 1st Spinbox : 1st value

- 2nd Spinbox : 2nd value

Ex)

| TLV Type | Function Name | Value | Description |
|----------|----------------------------------|--------|---|
| 550 | Target high-low pressure setting | 0 0 | 1st : 0~2 (Cool,Heat,HDYK) 2nd : 0~7 (OPO ~ OP7) |

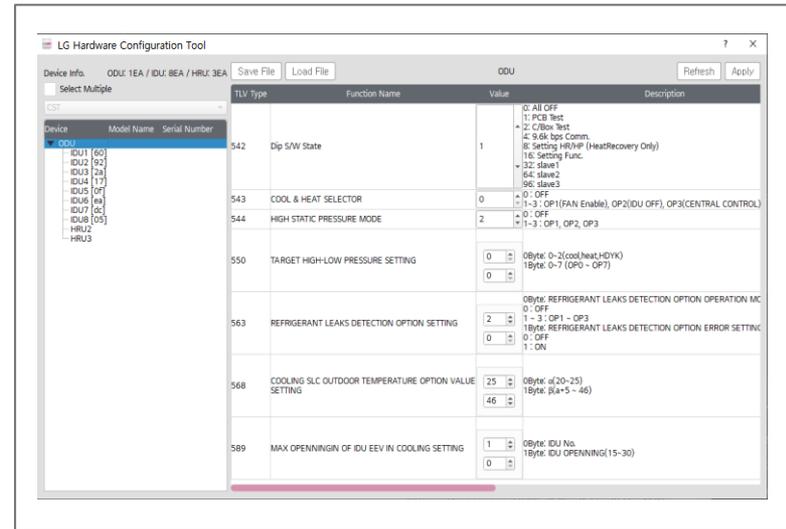
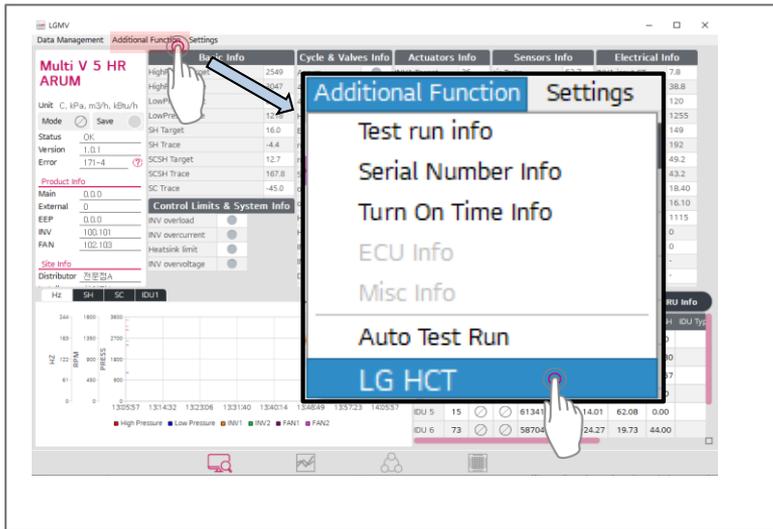
※ Note : Spinbox input range

- Positive values : 0~255

- Negative values : -127~127

LG HCT – Launch

➤ LG HCT is launched according to the following steps:

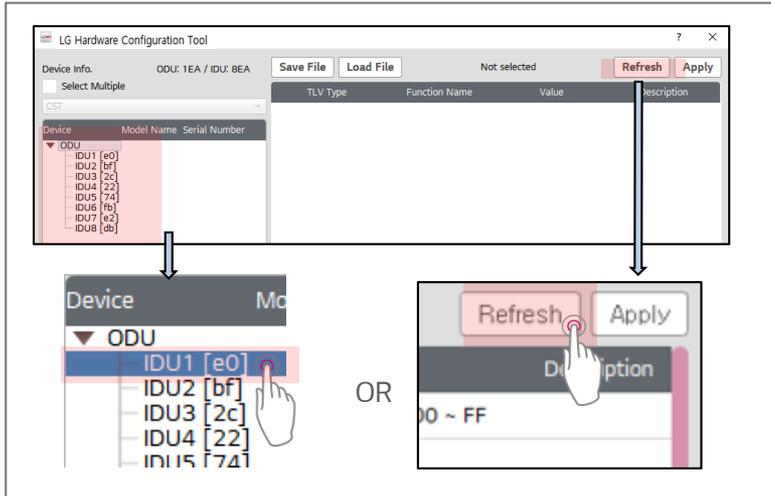


1. Press the LG HCT menu.

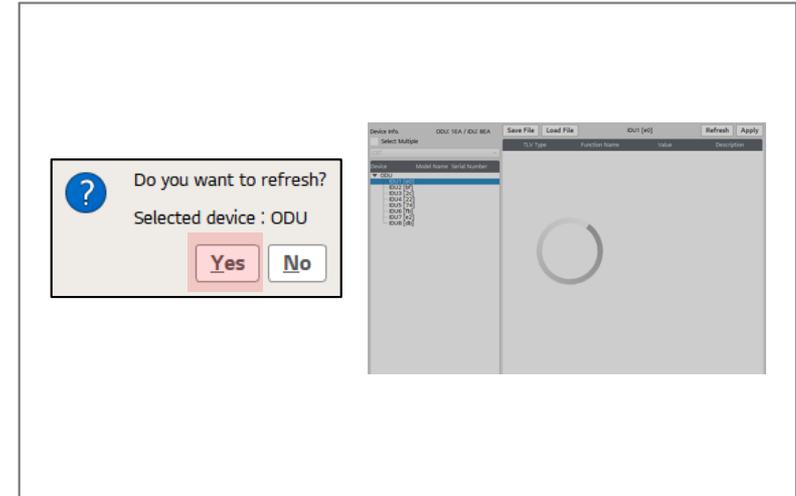
2. LG HCT operation control screen is displayed.

LG HCT – Refresh

➤ How to display the device settings (Single model)



1. Select the device from a device tree
2. Press Refresh after selecting the device



3. Press yes
4. Progress bar is shown while loading the option settings
5. Option settings are displayed in TLV List display area

※ Note

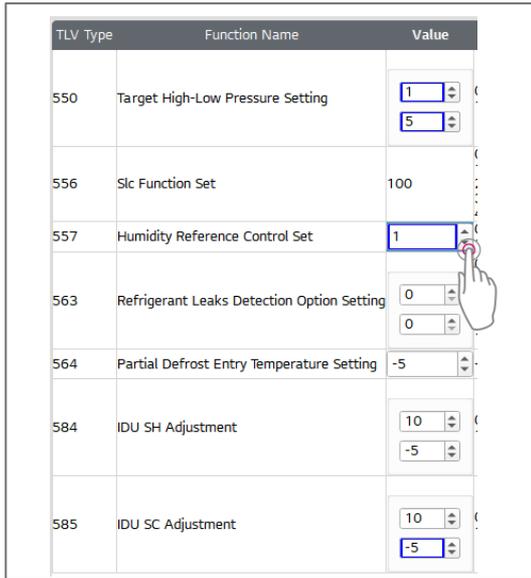
1. In case of loading failure, warning message is displayed (Maximum Timeout duration : 60 seconds)
2. Functions with IDU No. can be refreshed after modifying the value
 - When the 1st value is set to a value that is out of Description, the result for the default value (0) is displayed because the corresponding option item does not exist.

Ex) Set 1st value in TLV type 584 to '5' and refresh to display settings for IDU 5

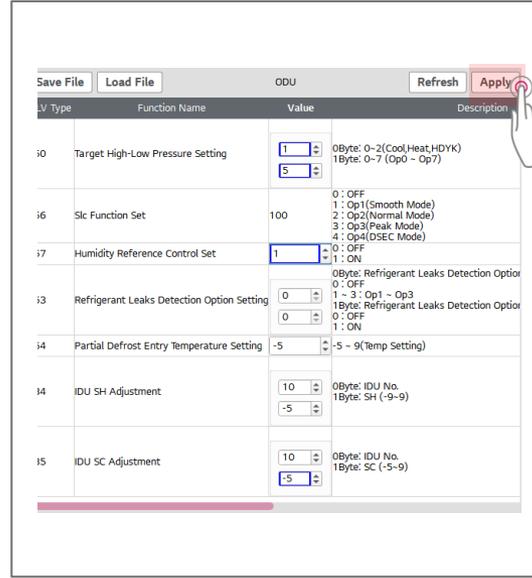
| TLV Type | Function Name | Value | Description |
|----------|-------------------|--|----------------------------------|
| 585 | IDU SC Adjustment | <input type="text" value="5"/> <input type="text" value="9"/> | 1st : IDU No. 2nd : SC (-5~9) |

LG HCT – Apply

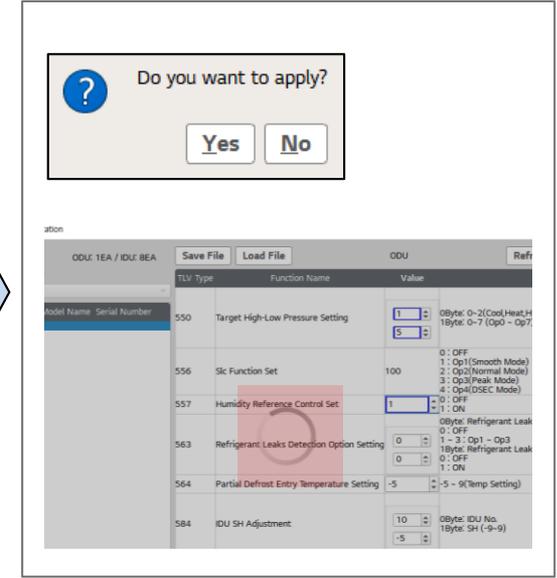
➤ How to apply the settings (Apply) (Single model)



1. Change the value for desired functions (Modified items are displayed with Blue Spinbox)



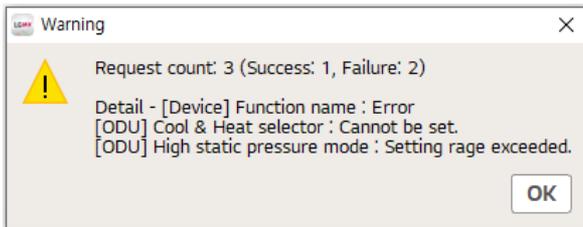
2. Press Apply



3. Press Yes

4. Progress bar is displayed while applying the settings and the values are updated (Refer to Note in case of control failure)

※ Note : Summary of the function application is displayed

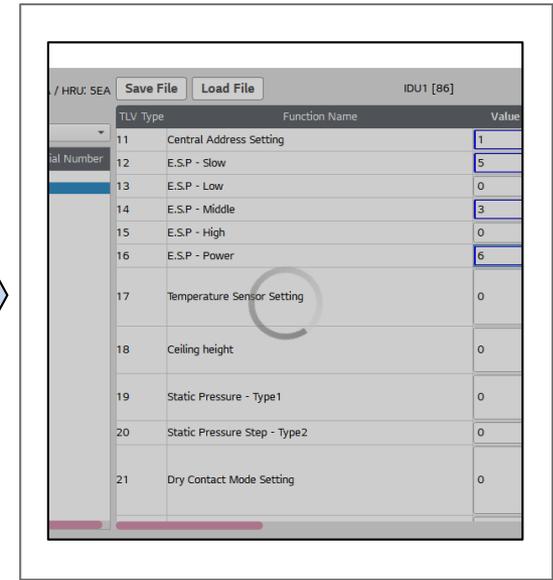
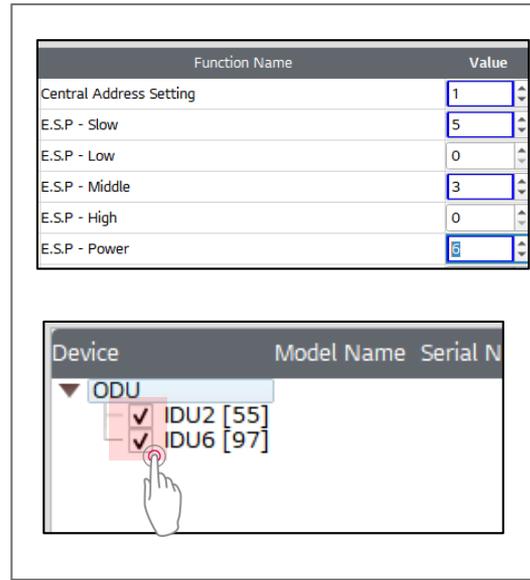
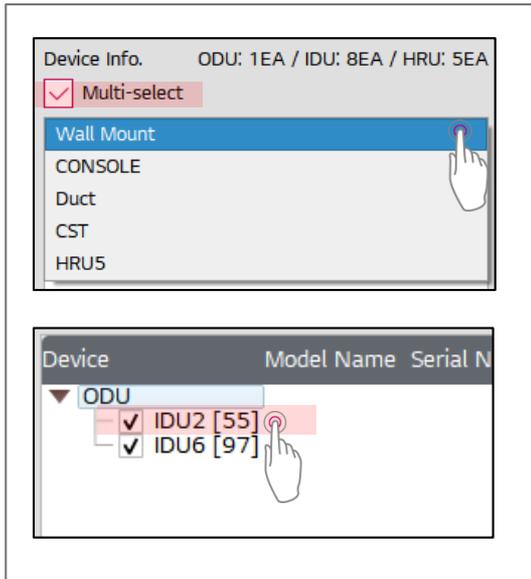


▷ Following information is shown:

- Total number of requests
- Success count
- Failure count
- Device, Function name, Error information for the options failed to apply

LG HCT – Multi-select

- Apply the same settings to multiple devices at once



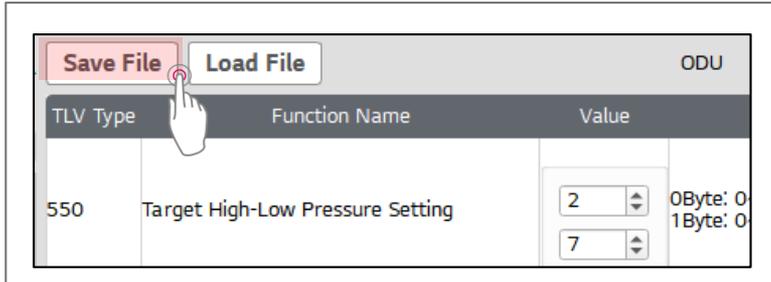
1. Select Multi-select option to display dropdown button showing types of devices
2. Choose the desired device type

2. Modify the options
3. Select devices to be controlled in the device-tree and press apply button

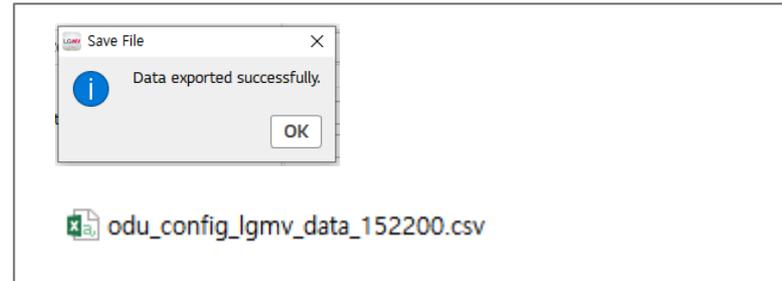
4. Option settings are applied, and items that have failed to apply will be displayed in warning pop-up

LG HCT – Save and Load

➤ How to save option settings

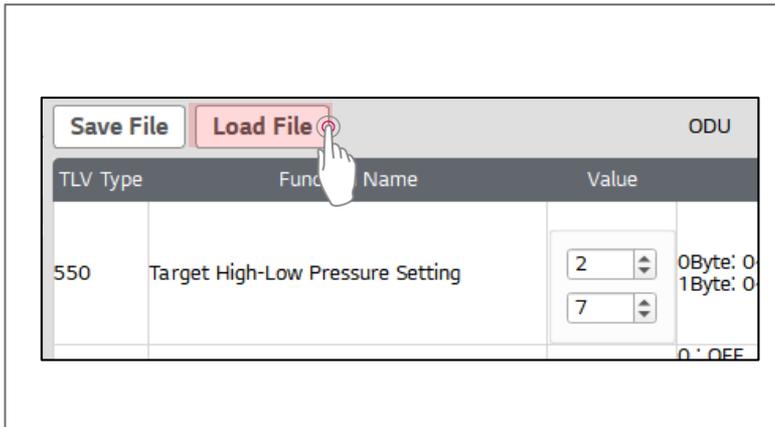


1. Press Save File

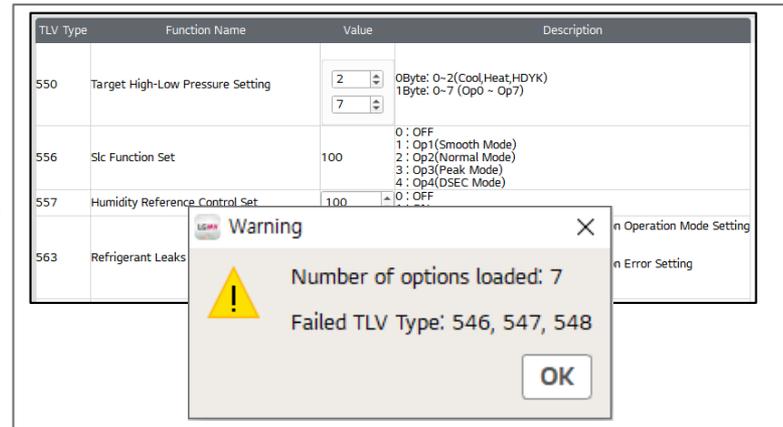


2. Current settings are saved in csv format

➤ How to load option settings



1. Press Load File to choose csv file containing settings



2. Values are updated according to the TLV list (updated values are highlighted with blue outline)

A pop-up message shows number of options loaded and TLV type that failed to load the settings

ECU Info

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the [ECU info] menu from the additional functions.

➤ Details of the ECU info. screen are as follows.

1. You can update the values of each table through the update button.
2. All ECU data can be cleared through the Clear button.
3. You can open the help document via the ECU Error Help button.

※ This feature is available on some models.

(Available models: GHP Super III, GHP Hybrid System)

The screenshot displays the ECU Info interface with four data tables and control buttons. The 'Update' buttons are highlighted with red dashed boxes and numbered 1.

| ECU Name | |
|-------------------------------|--|
| ECU hardware name | |
| ECU software Ver. name | |
| ECU software calibration name | |

| ECU NG | |
|---------------|--------|
| cooling water | -36 |
| ECU MAP | 50 |
| Engine target | 449.50 |

| ECU State | |
|-------------------------|----------------------------------|
| Battery voltage | 0.34 |
| Map voltage | 8.78 |
| TPS1 voltage | 11.29 |
| TPS2 voltage | 13.80 |
| Relative charge | 78.28 |
| Indicated actual torque | 5.88 |
| Ignition output Cy1 | 12.00 |
| Ignition output Cy2 | 12.75 |
| Ignition output Cy3 | 13.50 |
| Ignition output Cy4 | 14.25 |
| Camshaft Ctrl | <input type="radio"/> |
| Engine running detected | <input type="radio"/> |
| Synchronization succeed | <input type="radio"/> |
| Main relay | <input type="radio"/> |
| Condition start | <input type="radio"/> |
| Condition power | <input checked="" type="radio"/> |
| Ignition switch | <input type="radio"/> |
| Malfunction Indicator | <input type="radio"/> |

| ECU DTC | |
|---------|------|
| DTC1 | 504 |
| DTC2 | 706 |
| DTC3 | 908 |
| DTC4 | b0a |
| DTC5 | d0c |
| DTC6 | f0e |
| DTC7 | 1110 |
| DTC8 | 1312 |
| DTC9 | 1514 |

Control buttons at the bottom:

- Update (1)
- Update (1)
- Update (1)
- Update (1)
- Clear (2)
- ECU Error Help (3)

MISC Info

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the [MISC info] menu from the additional functions.

➤ Details of the MISC info. screen are as follows.

1. Misc data can be updated through the update button.

| Misc Info | |
|-------------------|----------------------------------|
| Eng. driven time | 1284 |
| Oil exchange time | 1798 |
| Comp1 Heater | <input type="radio"/> |
| Comp2 Heater | <input checked="" type="radio"/> |
| OS Heater | <input type="radio"/> |
| Drain Heater | <input checked="" type="radio"/> |
| Comp1 driven time | 2312 |
| Comp2 driven time | 2826 |
| eng driven number | 3340 |
| successful tries | 3854 |
| 1 Update | |

※ This feature is available on some models.

(Available models: GHP Super III, GHP Hybrid System)

DOAS info

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the [DOAS info] menu from the additional functions.

➤ Details of the DOAS info. screen are as follows.

1. DOAS information is displayed.

(Displayed items may vary by the model)

LG DOAS

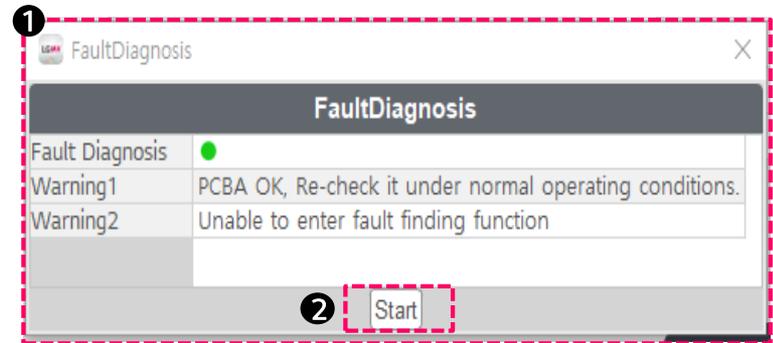
| DOAS | | | |
|-----------------------|------|------|------|
| | 1 | 2 | 3 |
| DOAS Address | 1 | 2 | 3 |
| DOAS Type | - | - | - |
| Defrost Status | ● | ● | ● |
| Forced Cooling Status | ● | ● | ● |
| Forced Cooling Signal | ● | ● | ● |
| Low Pressure Signal | ● | ● | ● |
| High Pressure Signal | ● | ● | ● |
| Target High Pressure | 0 | 0 | 0 |
| Target Low Pressure | 0 | 0 | 0 |
| DOAS Error Code | 0 | 0 | 0 |
| OA Temperature | 24.2 | 24.2 | 24.2 |
| OA Humidity | 0 | 0 | 0 |
| RA Temperature | 0.0 | 0.0 | 0.0 |
| RA Humidity | 0 | 0 | 0 |
| Space Temperature | 30.8 | 30.8 | 30.8 |
| Space Humidity | 0 | 0 | 0 |
| SA Temperature | 0.0 | 0.0 | 0.0 |
| SA Humidity | 0 | 0 | 0 |
| Main Coil LAT | 0.0 | 0.0 | 0.0 |
| Mix Temperature | 0.0 | 0.0 | 0.0 |
| Exhaust Temperature | 0.0 | 0.0 | 0.0 |
| CO2 Value | 1004 | 1004 | 1004 |
| SA Diff. Pressure | 1247 | 1247 | 1247 |
| EA Diff. Pressure | 1245 | 1245 | 1245 |
| SA Fan Heat Sink | 0 | 0 | 0 |
| EA Fan Heat Sink | 0 | 0 | 0 |

※ This feature is available on some models.

(Available models: Multi V 5 HR)

Fault Diagnosis

- ❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad
- Start : Select the [Fault Diagnosis] menu from the additional functions.
- Details of the Fault Diagnosis info. screen are as follows.
 1. Fault Diagnosis information is displayed.
 2. Fault Diagnosis data can be updated through the start button

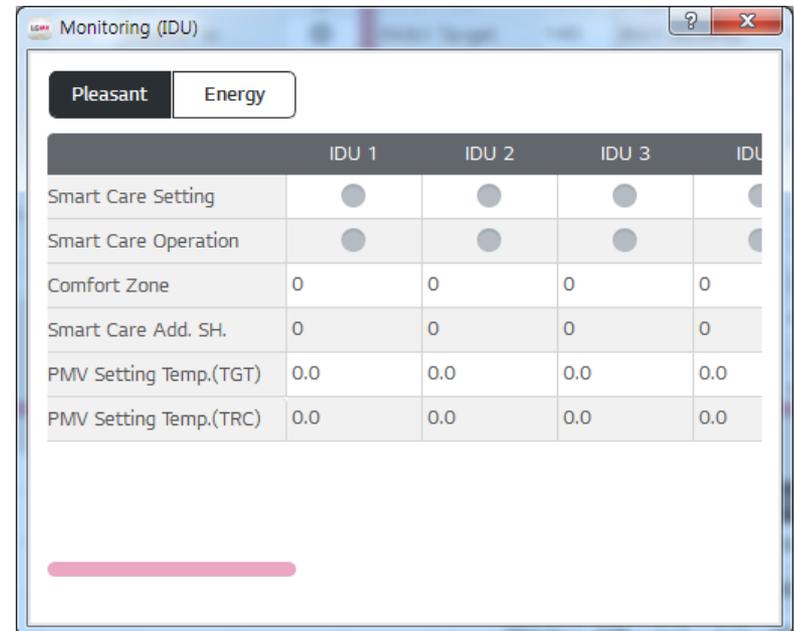
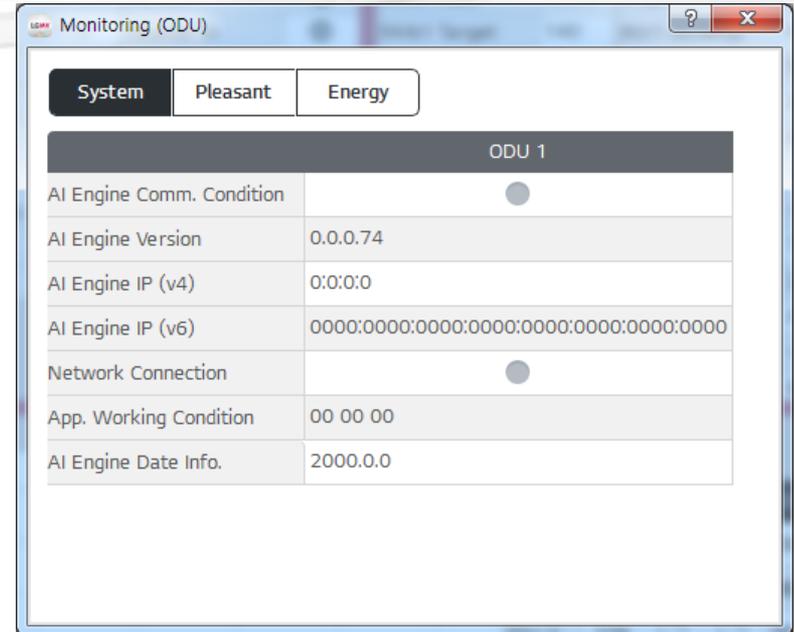


※ This feature is available on some models.
(Available models: Split&Monobloc, Pressure)

LG AI Engine

- ❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad
- Start : Select the [LG AI Engine] menu from the additional functions.
- The LG AI Engine menu consists of the following submenus:
 - Monitoring(ODU), Monitoring(IDU), Black Box Save(Large Capacity), Black Box Save(Event), SW Update, Memory Reset
 - The Monitoring (ODU) menu provides system, comfort, and energy information.
 - The Monitoring (IDU) menu provides comfort and energy information.

※ This feature is available on some models.
 (Available models: Multi V 5, Multi V 5 HR)



LG AI Engine

❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

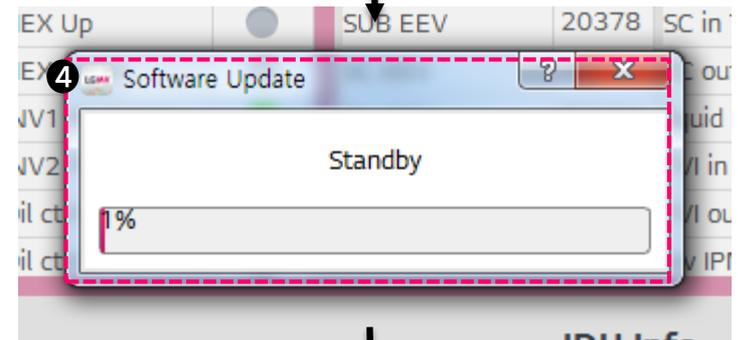
➤ Start : Select the [LG AI Engine] menu from the additional functions.

➤ The LG AI Engine menu consists of the following submenus:

➤ Monitoring(ODU), Monitoring(IDU), Black Box Save(Large Capacity), Black Box Save(Event), SW Update, Memory Reset

➤ Details of the Black Box Save(Large Capacity), Black Box Save(Event), SW Update and Memory Reset menus are as follows:

1. A warning pop-up window will occur.
2. Selecting the Cancel button closes the pop-up window without making a feature request.
3. Select the OK button to request the function.
4. The Progress window appears.
5. Depending on the result, a failed or successful message pop-up window appears.



※ This feature is available on some models.

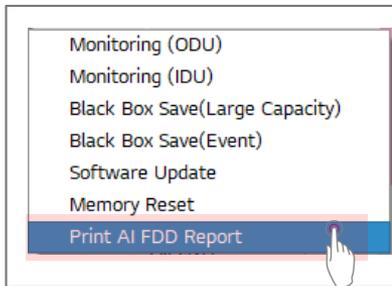
(Available models: Multi V 5, Multi V 5 HR)

LG AI Engine

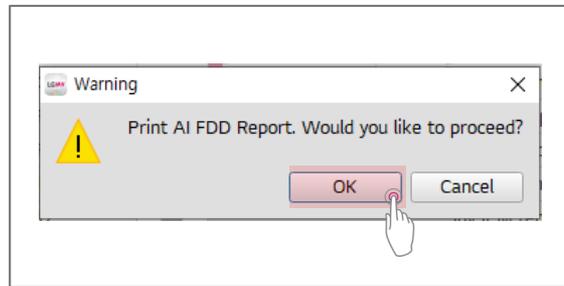
❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the [LG AI Engine – Print AI FDD Report] menu from the additional functions.

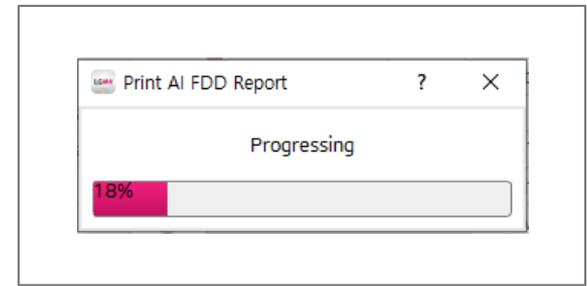
➤ Print AI FDD Report as follows.



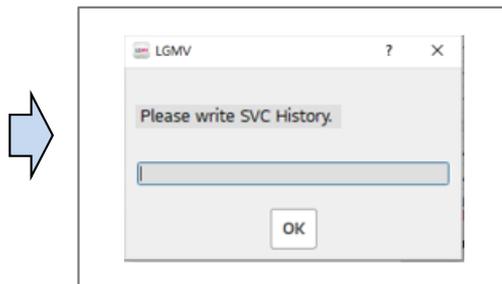
1. Select [Print AI FDD Report] menu



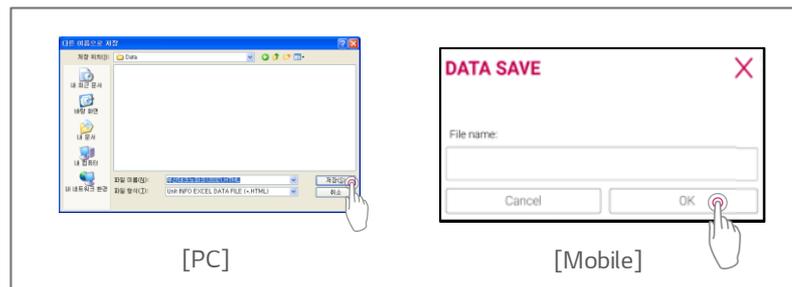
2. Select OK in the progress pop-up.



3. Progress bar is displayed.



4. After write SVC History, select OK.



5. Enter the file name to be saved.

※ This feature is available on some models.
(Available models: Multi V 5, Multi V 5 HR)

Black box Viewer

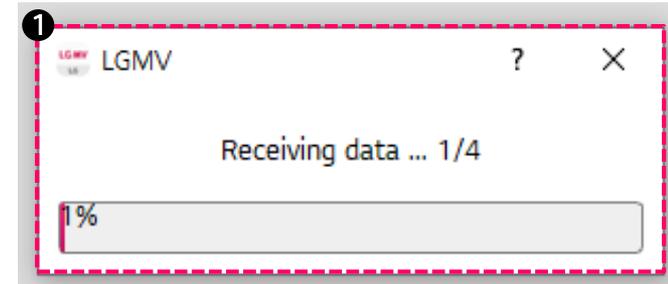
❖ Supporting Device : Windows PC, Android Phone/Tablet, iPhone/iPad

➤ Start : Select the [Black box Viewer] menu from the Data.

➤ Details of the Black box Viewer are as follows:

1. The Progress window appears.
2. When the black box data is received, the received data is displayed on the screen.
3. You can move the slider bar to view data from a different point in time.
4. Save Black box button : Save black box data as csv file
5. Troubleshooting Guide button : Open the Troubleshooting Guide document

※ This feature is available on some models.
(Pressure)



A screenshot of a window titled 'Blackbox Viewer' with a question mark and a close button in the top right. The window has three tabs: 'ODU1', 'Comm.', and 'Error History'. The 'ODU1' tab is active, showing a table of data. A red dashed box highlights the table and the 'Save Blackbox' button at the bottom. A red circle with the number '3' is next to the 'Error Code' field, and a red circle with the number '5' is next to the 'Troubleshooting Guide' button.

| | | | |
|------------------------|------|---------------------|-------|
| Operation Mode | Stop | Target H-Pressure | 0 |
| Comp Mode | 0 | Target L-Pressure | 0 |
| Inv Target Freq. | 0 | H-Pressure | 0 |
| Inv Freq. | 0 | L-Pressure | 0 |
| Fan1 Target RPM | 0 | Outdoor Temp. | 220.0 |
| Fan1 RPM | 0 | Indoor Temp.(Avg) | 220.0 |
| Fan2 Target RPM | 0 | Delta Temp. | 0.0 |
| Fan2 RPM | 0 | Inv Discharge Temp. | 300 |
| 1P Input Voltage(RMS) | 140 | Inv Sution Temp. | 220.0 |
| 1P Input Voltage(Peak) | 140 | Heatsink Temp. | 400 |
| RP Input Voltage(RMS) | 0 | Hex Midpipe Temp. | 220 |
| SP Input Voltage(RMS) | 0 | Hex Outpipe Temp. | 220 |
| TP Input Voltage(RMS) | 0 | Inner Hex Out Temp. | 220.0 |
| Input Current(RMS) | 0.0 | Power Relay ON/OFF | OFF |
| Input Current(Peak) | 0.0 | Standby Power State | OFF |
| Input Source Freq. | 0 | Defrost Operation | OFF |

Data is displayed at the time of the last 3 errors.

Error Code : -

Save Blackbox

Troubleshooting Guide