

INSTALLATION/USER MANUAL

V-NET™ ACS

- Make sure to read the cautions for safety before installation and use, and use it correctly.
- It is intended to keep protect the safety of the installer and user and to prevent the property damage, etc.
- After reading the user manual, please keep it at a place where user can access any time.

TYPE : Internet Bridge
MODEL : PWFMDB000



P/NO : MFL67940704

www.lg.com

TABLE OF CONTENTS

**3 CAUTIONS BEFORE THE
INSTALLATION**

**6 ACCESSORY COMPO-
NENT PARTS**

**7 NAMES OF EACH PART
OF THE INTERNET
BRIDGE**

**8 INSTALLING THE INTER-
NET BRIDGE**

- 8 Check list before installing the internet bridge
- 9 Selecting the installation place
- 10 Indoor unit address setting
- 11 Connecting Pl485 cable
(for MultiV Super3 model or lower)
- 12 Connecting Pl485 cable
(for MultiV Super4)
- 13 Fixing the internet bridge on the wall
Connecting RS-485 cable to the inter-
net bridge
- 14 Connecting power and wired LAN to
the internet bridge
Check the operation
- 15 Combining the internet bridge cases

**16 INTERNET BRIDGE SET-
TING**

- 16 Internet bridge network environment
setting

- 24 ACCS access environment setting
- 29 Setting of the indoor units and ventila-
tion devices connected to the internet
bridge

**43 CHECKLIST BEFORE
INSTALLATION
INQUIRIES**

CAUTIONS BEFORE THE INSTALLATION

- Installation work requires specialized technology, so it must be installed by service center or installation specialty store acknowledged by the company.
- If the installation work is done without installation qualification, the installer is responsible for all the problems related to the installation, and in such case, the company will not provide free service.
- The following safety cautions are to prevent unexpected danger or damage.



WARNING

If the instructions are not followed, it may cause death or severe injury of the user.



CAUTION

If the instructions are not followed, it may cause injury of the user or property damage.



It is the symbol to call attention for the matters and operations that may cause danger.
To avoid the danger, carefully read it and follow the instructions



It is the symbol marking the usages to avoid, to prevent the danger.

WARNING

During the installation

- When you install internet module inside the product, make sure to cut off the outdoor unit power.
 - It may cause electric shock.
- Do not touch with hand while power is supplied.
 - It may cause fire, electric shock, explosion, injury, or failure.
- Make sure to contact service center or installation specialty store for product installation.
 - It may cause fire, electric shock, explosion, injury, or failure.
- Use standard parts (connectors).
 - It may cause fire, electric shock, explosion, injury, or failure.
- When you reinstall an installed product, request to a service center or installation specialty store.
 - It may cause fire, electric shock, explosion, injury, or failure.
- Do not disassemble, repair, or modify the product without authorization.
 - It may cause fire, electric shock, explosion, injury, or failure.
- Do not install at a place exposed to rain.
 - It may cause product failure.
- Do not install at a place with a lot of moisture.
 - It may cause product failure.

During the usage

- Do not change or extend the connection cable without authorization.
 - It may cause fire, electric shock, explosion, injury, or failure.
- Do not place inflammables near the product.
 - It may cause fire.
- Do not use a heating device near the connection cable.
 - It may cause fire or electric shock.
- Do not let water enter the product.
 - It may cause electric shock or failure.
- When the product is flooded, make sure to contact service center or installation specialty store.
 - It may cause electric shock or failure.
- Do not impose shock on the product.
 - The shock on the product may cause failure.

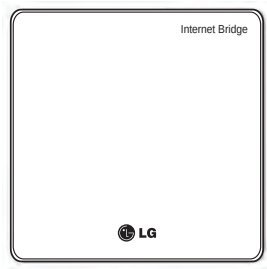
 WARNING

- Firmly install on a place that can endure the weight of the internet bridge.
 - If the installation place is not strong enough, the internet bridge may fall and break.
- Do not use the product in the following environments.
 - If the product is used in a place with oil, steam, or sulfuric acid gas, it may cause performance degradation or product damage.
- Do not press switch or button with a sharp object.
 - It may cause electric shock accident or product failure.
- Check the operation temperature.
 - If it is used in an environment exceeding the operation temperature range, it may cause a severe damage. Check the usage temperature range specified in the manual. If there is no specified temperature, use in the range of 0~40°C.
- Make sure to request electric work to the specialty store where you purchased the product or service center.
 - It may cause fire or electric shock.
- Do not damage, process, or force to bend the power cord for usage.
 - Do not place a container with water, etc. on the product.
- Do not place a container with water, etc. on the product.
 - It may cause fire or electric shock.
- Do not connect the power cable to the control signal cable connector.
 - It may cause fire or explosion.
- Do not touch the switch with wet hand.
 - It may cause electric shock accident or product failure.
- For the connection with PC or peripheral devices, read the installation and user manual.
 - Incorrect connection may cause a fire or product failure.
- If a warning window appears on PC and if the device stops or does not work, immediately stop using the product.
 - It may cause fire or product failure.

ACCESSORY COMPONENT PARTS

Internet Bridge Components

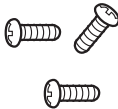
Open the packaging box of the internet bridge, and check if all the corresponding components are enclosed.



Internet Bridge



Internet bridge manual

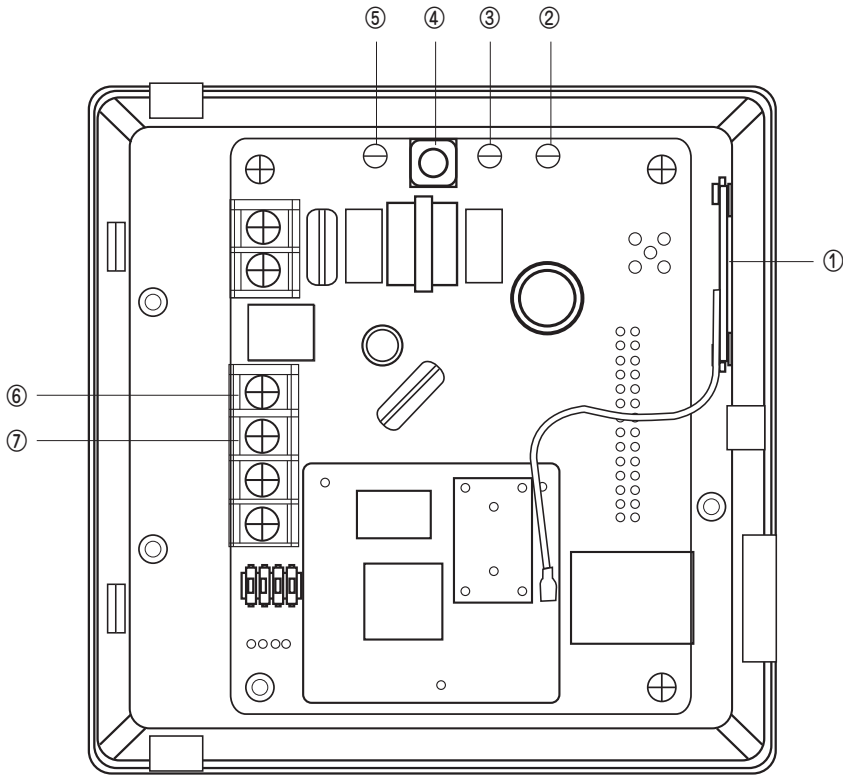


Installation screw 3EA

NAMES OF EACH PART OF THE INTERNET BRIDGE

Names of each part of the internet bridge

It is the figure where PCB is installed inside the case, and the names of each part are as follows.



- ① Antenna
- ② LED1
- ③ LED2
- ④ AP switch
- ⑤ Power LED
- ⑥ BUS-A
- ⑦ BUS-B

INSTALLING THE INTERNET BRIDGE

Check list before installing the internet bridge

- When you configure the internet bridge network, you can connect up to 16 outdoor units. Internet bridge composes the network with RS-485, and up to 16 outdoor unit PI485s can be connected. (But, you can connect up to 31 SINGLE / Ventilation PI485s.)
- Internet bridge can connect up to 16 indoor units or Ventilator.
- During the configuration of the internet bridge RS-485, check the polarity. RS-485 is divided to BUS-A and BUS-B. If the corresponding Port is switched, there will be no communication, so be careful. (RS-485 communication line can be used up to 1Km.)
- Internet bridge can be connected to internet. You need to request the internet bridge's IP address, Gateway address, and Netmask to the person in charge of the network in the corresponding site.
- Check if other installed central controllers are set as Slave mode. Internet bridge only works as Master mode, and it cannot interface with in master mode central controller.
- Power socket shall be near the internet bridge power connection part, and the corresponding socket shall be easily accessed.
- SSID and password of wireless router supports only ASCII code.
- Internet bridge supports only wireless router that uses the signal of 2.4GHz band.

Mobile App Usage Environment

<Recommended Specification>

Platform	android
OS	4.0.x(ICS), 4.1.x(JellyBean)
Resolution	480 x 320, 1280 x 720, 1280 x 768

- * According to the smart phones, some functions may not work or some screens may not be displayed properly.
- * This app is optimized for the above recommended specifications, some actions can not in other environments.
- * This App may not work in Tablet.

Mobile App may be updated to improve usability / design or to reinforce the contents.

Selecting the installation place

- When it is installed with wireless communication
Internet bridge shall be installed within 10m from AP.
Communication is possible up to obstacles made of concrete wall (thickness 10cm or less) or wooden door (or window).
- When it is installed as wired cables
Connect wired LAN cable of 10m or less to the internet bridge.
Protect the exposed wired LAN cable with cable pipe.
- Power connection
Internet bridge shall be installed within 2m from the power socket.
Arrange and connect the power cable.
- RS485 cable
It shall be installed at a place where it is connected to RS485 connecting to the outdoor unit.
- Indoor installation
Internet bridge shall be installed indoor, not outdoor.
Do not install at a place exposed to rain or with a lot of moisture.
Do not store or use flammable gas or inflammables near the product.

Indoor unit address setting

The addresses of the indoor units connected to one internet bridge shall be assigned without overlapping. You can set the indoor unit address as hexadecimal 00 ~ FF.

Note : Indoor unit address setting completed site

- The site that already completed the indoor unit address does not require address setting again.

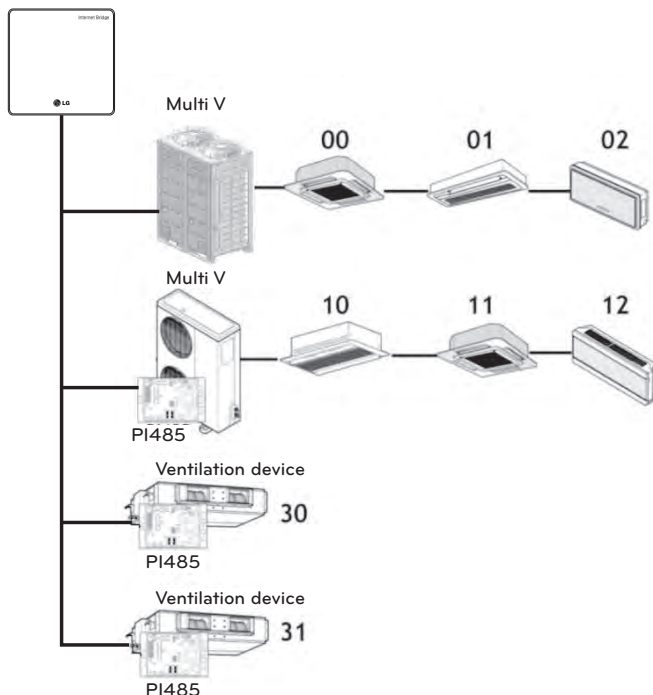
Note : Assignment of outdoor unit and indoor unit number

- If the outdoor unit product is Multi V, it is recommended to set the first digit of the address with outdoor unit number, and set the second digit with indoor unit number, so that the system composition and division can be easily identified during the address setting.



Outdoor unit (group) number Indoor unit number

The following is an example of assigning addresses to the indoor unit.



Note : How to set the indoor unit's central control address

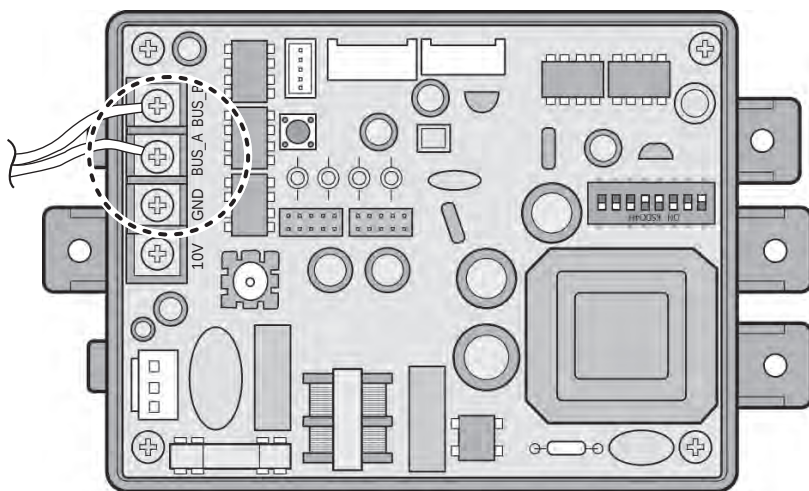
- According to the indoor unit product or the type of the remote controller, the methods of setting the central control address may be different, so refer to the indoor unit product or wired remote controller manual for the address setting.

Connecting PI485 cable (for MultiV SuperIII model or lower)

When you install PI485, you need to set DIP switch.
(For DIP switch setting, refer to each PI485 manual.)
After installing PI485, connect RS-485 cable.

To connect PI485 and the internet bridge, two RS-485 cables shall be connected to PI485's BUS_A and BUS_B.

Refer to the following figure to connect RS-485 cable.

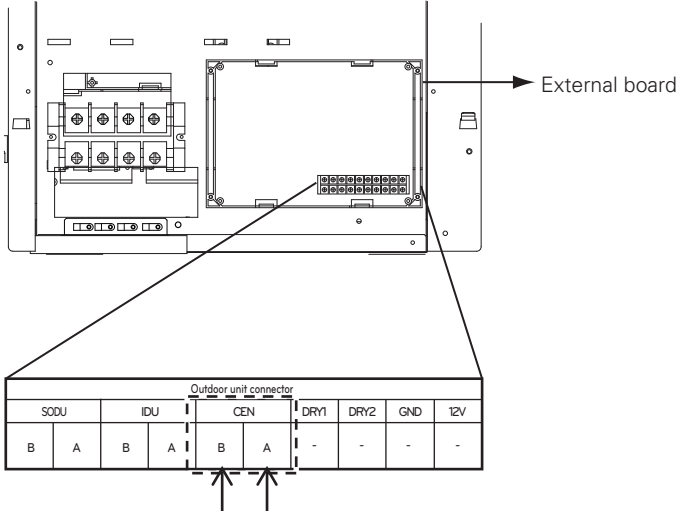


If several PI485's are connected to the internet bridge, connect the cable's BUS_A part to BUS_A connector of each PI485, and connect cable's BUS_B part to BUS_B connector of each PI485.

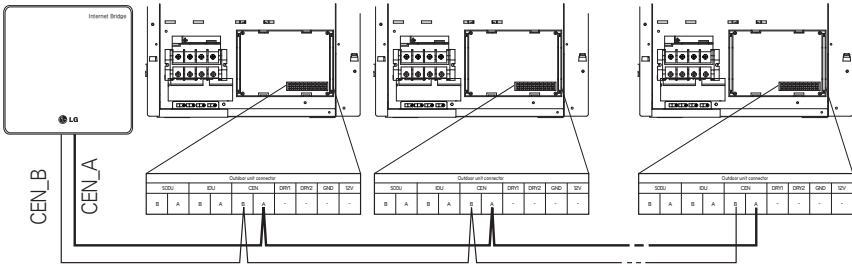
Connecting PI485 cable (for MultiV Super IV)

- 1 Connect the central controller communication line (RS485 cable) to the central control connector (CEN_A, CEN_B) of the external board.

* It shall be connected according to the polarity between the wires.



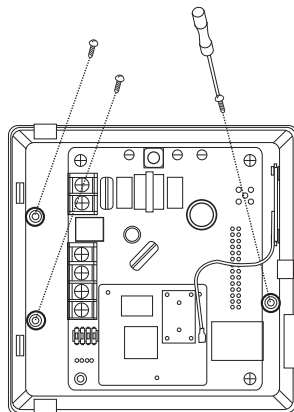
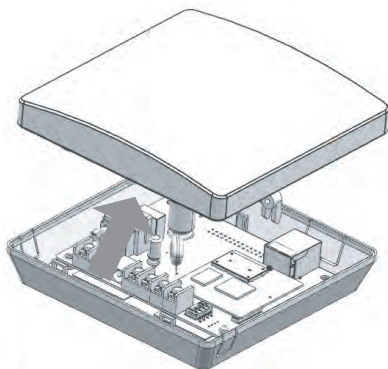
- 2 If you connect several outdoor units and the central controller, make sure to connect in the form of a BUS.



Fixing the internet bridge on the wall

Internet bridge can be installed on a wall.

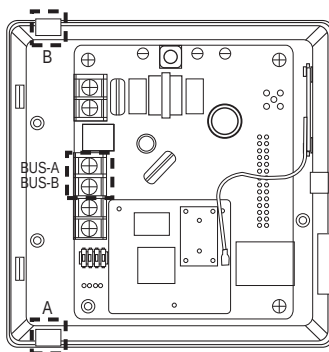
- 1 Remove the screws on the right side to open the case of the Internet bridge.
- 2 Fix it on the wall using the enclosed screws on the locations marked in the following figure.



Connecting RS-485 cable to the internet bridge

You need to connect RS-485 cable to the internet bridge.

- 1 Connect the end of RS-485 cable connected to BUS-A of PI485 to BUS-A part of the internet bridge.
- 2 Connect the end of RS-485 cable connected to BUS-B of PI485 to BUS-B part of the internet bridge.
- 3 Arrange the cables into A part or B part.

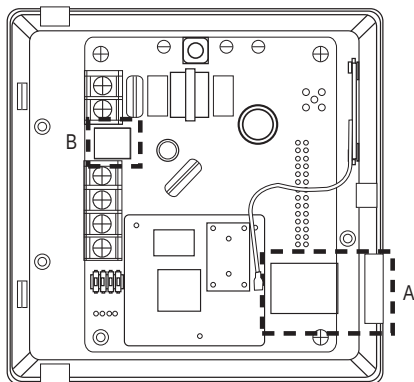


! CAUTION

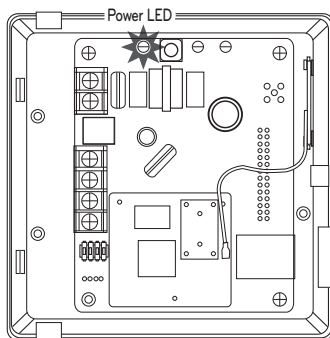
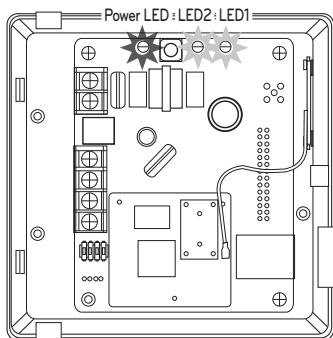
During the use of B part, foreign objects may enter, so close the hole after arranging the cable.

Connecting power and wired LAN to the internet bridge

- 1 If wired LAN is used, connect LAN cable to A part in advance, and when wireless LAN is used, take a memo of the information (SSID, password, etc.) of AP to connect in advance.
- 2 Internet bridge can work with DC 12V power. Connect to B part in the following figure.



Check the operation

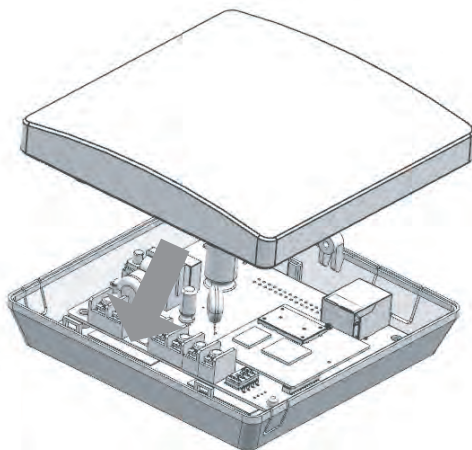


- 1 Apply power to the internet bridge.
(Check if power LED, LED1, LED2 are light-
ed)
- 2 When the booting is completed, LED1 and
LED2 will be turned off.

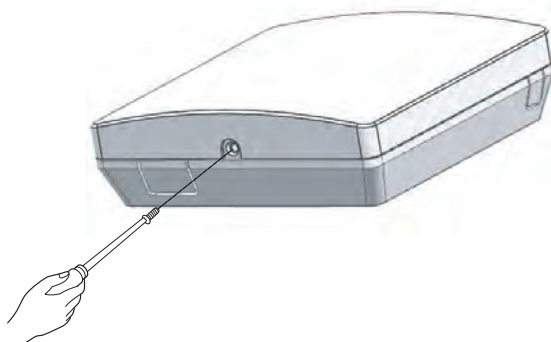
Combining the internet bridge cases

Combine the cases after going through the internet bridge setting in the next page.

- 1 When the network setting is completed, combine the cases.
- 2 Connect the upper part and the lower part to each other.



- 3 Fix the right side of the case with a screw.

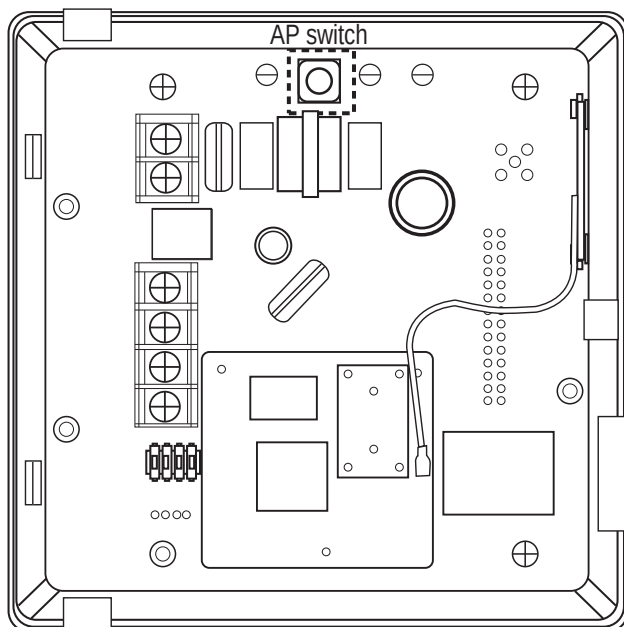


Internet bridge network environment setting

Note : Preparations before the internet bridge network setting

- For this step, LG Whisen system air conditioner App needs to be installed in the smart phone.
- LG Whisen system air conditioner App can be downloaded from Google Play Store, and refer to the App manual for details.

- 1  Press the marked AP switch for 1~5 sec.
- 2 When LED 2 blinks once, take off your finger from the switch.
- 3 After 5 seconds, if LED 1 blinks with 1 second interval, move to the next step.
(If LED 2 does not blink, press the switch again for 1~5 sec.)

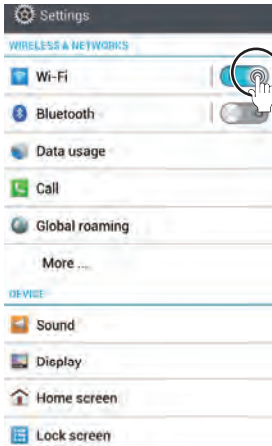


CAUTION

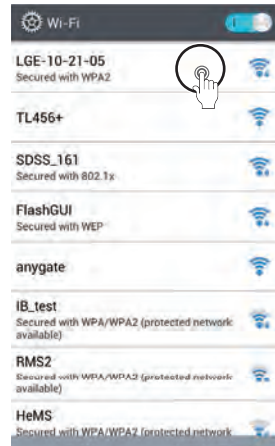
Switch operation

- When the internet bridge AP switch is pressed for 5 seconds or longer, it is reset, so be careful.
- When Green LED 1 blinks, if you press the internet bridge switch once again, it returns to the operation mode.

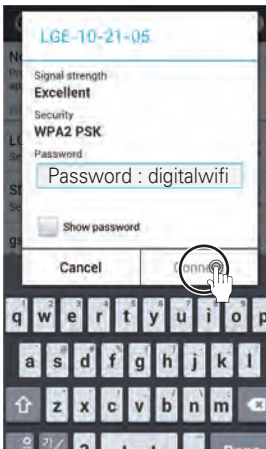
4 Connect the internet bridge and the smart phone with wireless communication.



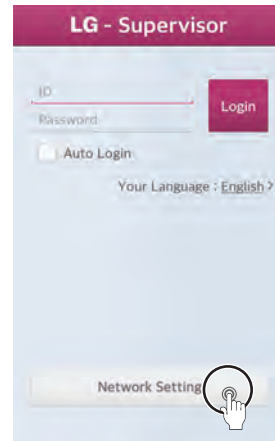
Turn on Wi-Fi in the system setting of the smart phone.



Select LGE-XX-XX-XX.



Input password and select connection.



After running the system air conditioner App, select network setting button.



CAUTION

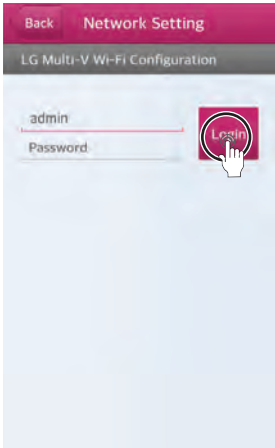
The network setting button appears only when the internet bridge and the smart phone is connected with wireless connection.

Note : Setting the wired communication

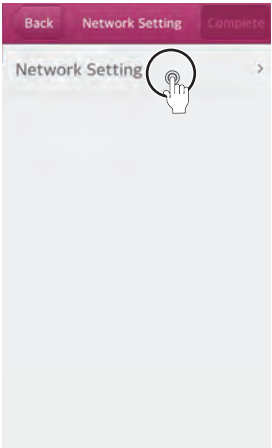
- To set wired communication for the internet bridge, refer to the wired communication setting section.

Wireless communication setting

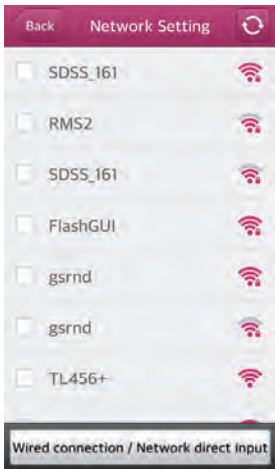
1 Select AP to connect to the internet bridge with wireless communication.



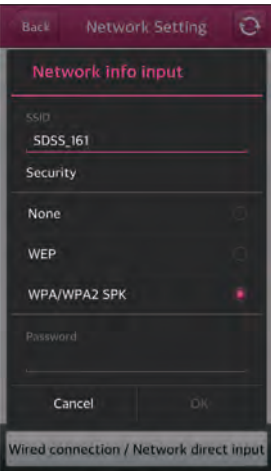
Input the password, and select log-in button.



Select the network setting.



Select AP to connect.



If it is an AP with security setting, input password and select Confirm button.

Note : AP information

You need to receive AP name (SSID) and password to use for the internet bridge from the person in charge of the network in the corresponding site.
IP will be automatically assigned.

**CAUTION**

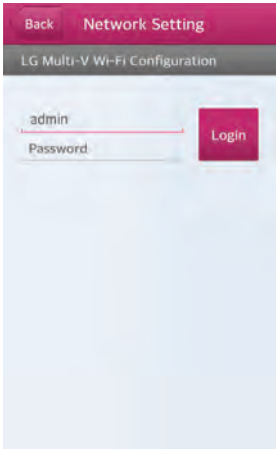
If the network setting is incorrectly input, there may be communication defect, or control through the internet bridge may be impossible. Therefore, be careful and input correctly.

Note : The password

The LG System Air Conditioner Configuration password, please refer to the LG air conditioning system home page.

Wired communication setting

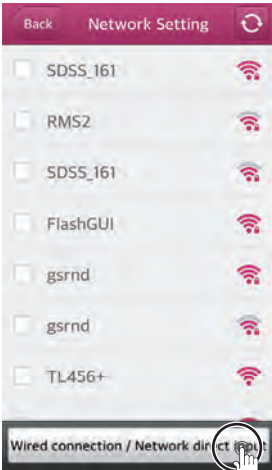
1 Set the wired communication for the internet bridge.



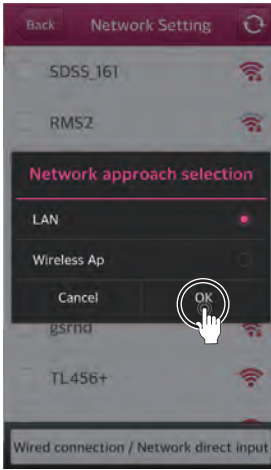
Input the password, and select log-in button.



Select network setting.



Press wired connection/network direct input.



Select LAN, and press OK button.

Note : The password

The LG System Air Conditioner Configuration password, please refer to the LG air conditioning system home page.

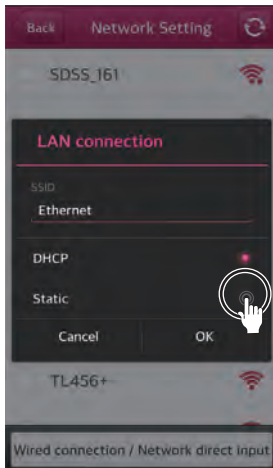
2 Set the IP.

2-1 Set dynamic IP.

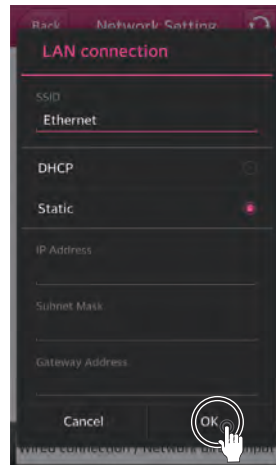


Select DHCP and press
OK button.

2-2 Set static IP.



Select Static.



Input the network information
and select OK button.

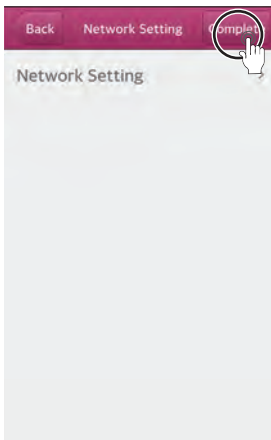
**CAUTION**

For static IP setting, if the network settings (IP address, Gateway address, Subnet mask) are incorrectly input, there may be communication defect or control through the internet bridge may be impossible. Therefore, be careful and input correctly.

Note : Network address assignment

Internet bridge can use both the dynamic IP type and static IP type, but static IP type is recommended, and if dynamic IP type is used, it may cause inconvenience of the user.

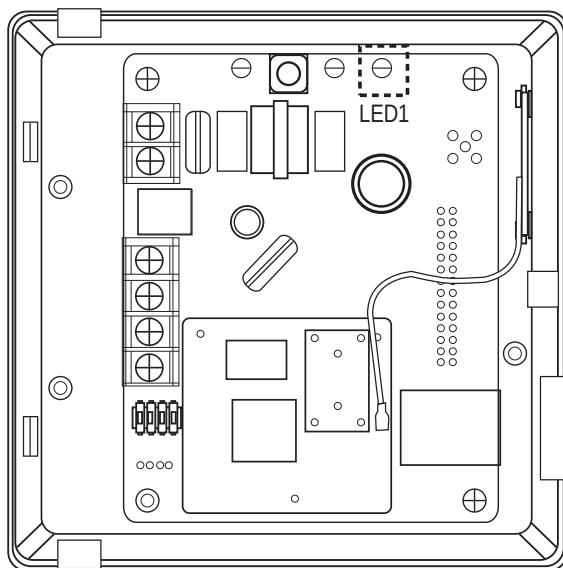
If static IP type is used, you need to receive the network addresses from <person in charge of the network> in the corresponding site. (IP address, Gateway address, Subnet mask)



When you press Complete button, the internet bridge network setting is completed.

5 When it is successfully set, LED 1 lamp continues to be lighted.

If LED 1 lamp is not turned on, run the internet bridge setting again.



ACCS access environment setting

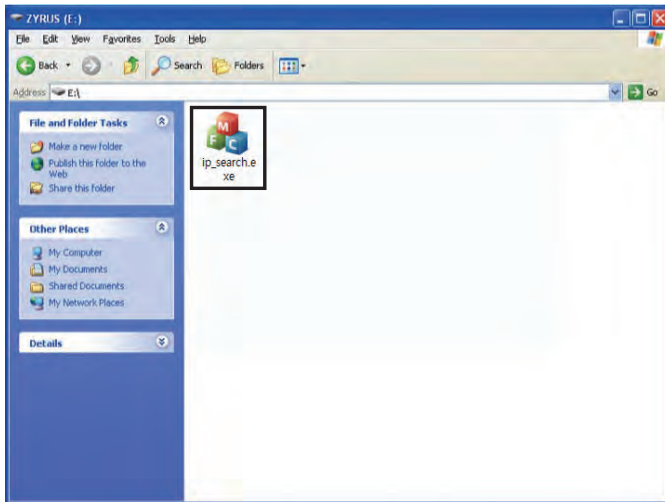
It configures ACCS access environment setting.

In PC environment, use IP_Search program to set ACCS access environment.

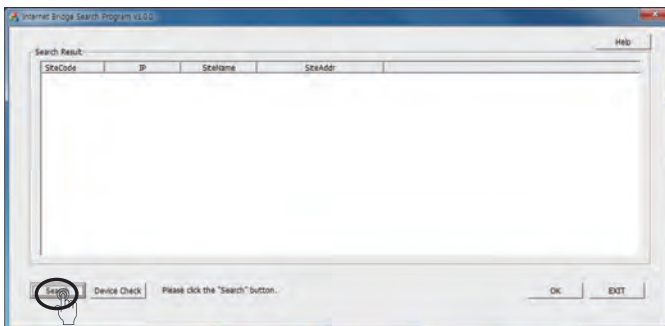
Note : IP_Search program

For information about installing IP_Search program, please refer to the LG Electronics air conditioning system home page.

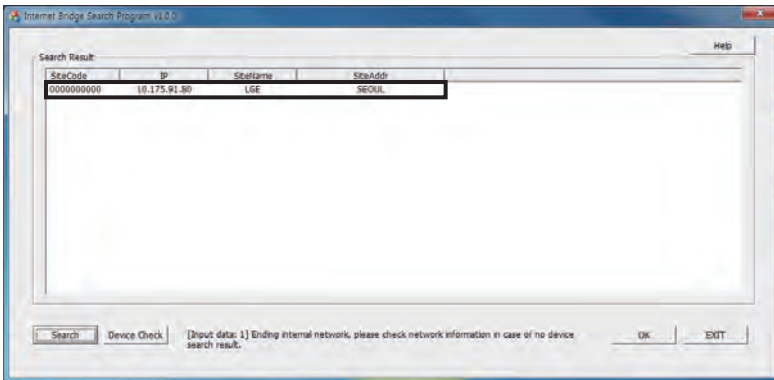
- 1 Run Ip_search.exe



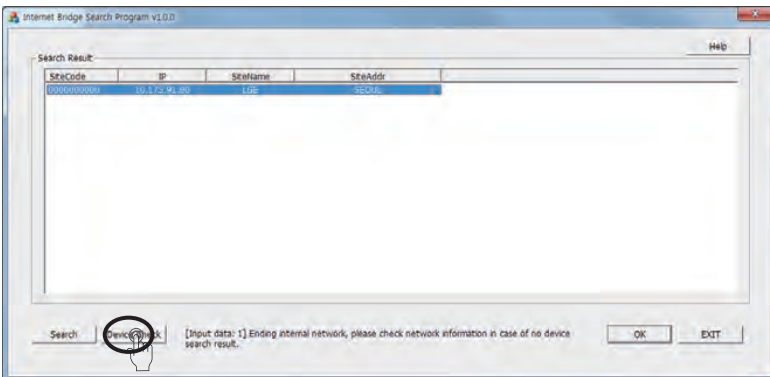
- 2 Click search button to start the search for the internet bridge.



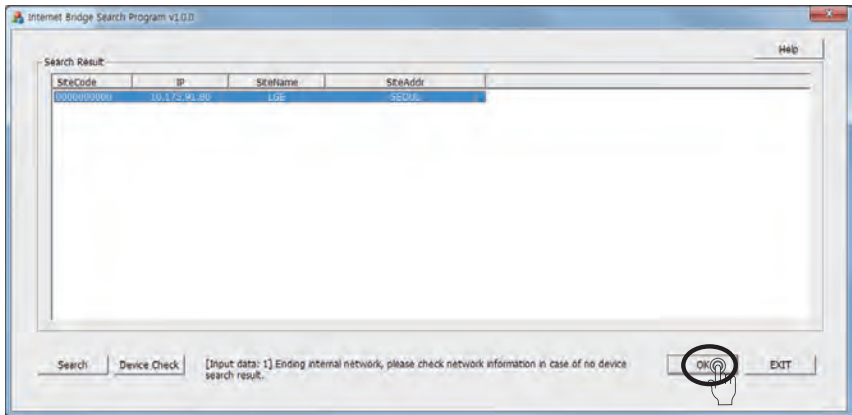
3 When the search results are displayed, select the desired device.



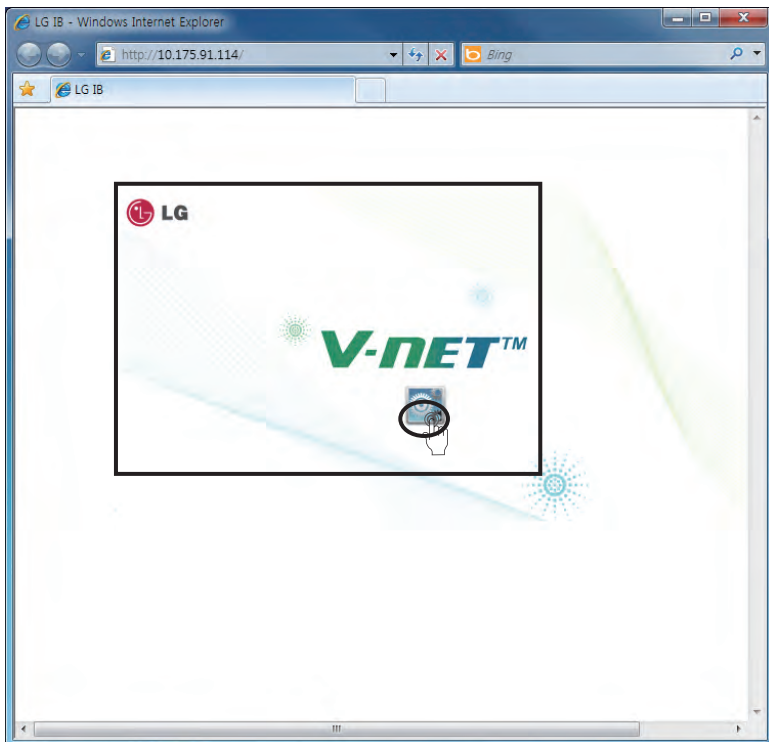
4 Select a device and click "Confirm Device" button, then you can see that LED 1 of the corresponding internet bridge blinking 3 times with 1 second interval.



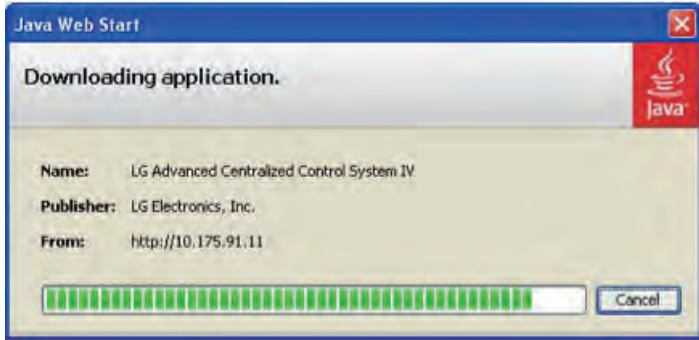
5 When you completed the verification of the internet bridge, click OK button after the selection.



6 When the web browser is launched and the screen is displayed as follows, click the corresponding screen.



7 When you click the corresponding screen, the following program is automatically installed.



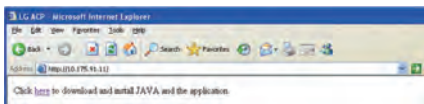
Note : Program installation

If the JAVA program usually is not installed, you can install it manually by downloading from the website of JAVA (<http://www.java.com>).

[Recommended: JAVA6]

• Java installation

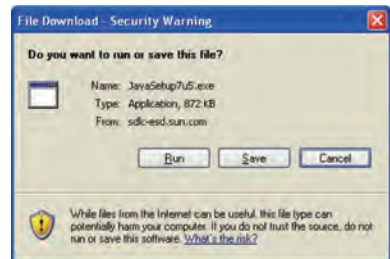
If the following page appears, install Java following the figures.



• Click 'Here'.



• Click 'Agree and Start Free Download'.



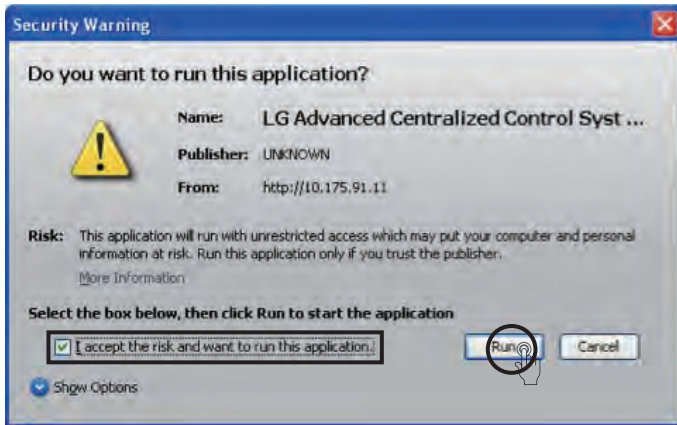
• Click 'Run'.



• Click 'Installation' to install.

8 If the program is installed, the following screen is displayed.

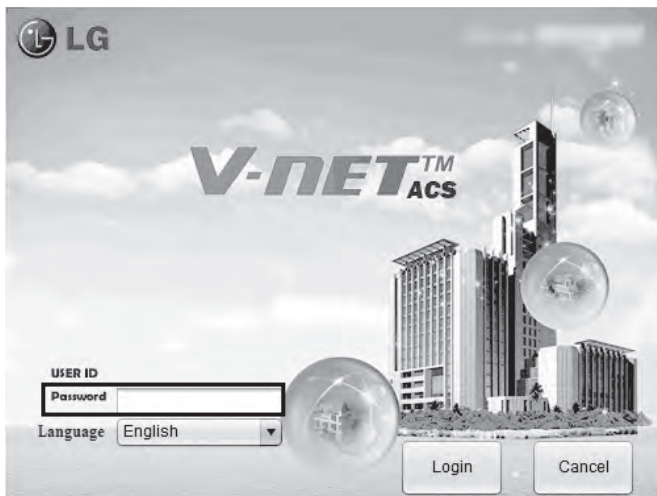
Select Check Box and click Run button.



9 When the program is successfully installed, the following screen is displayed.

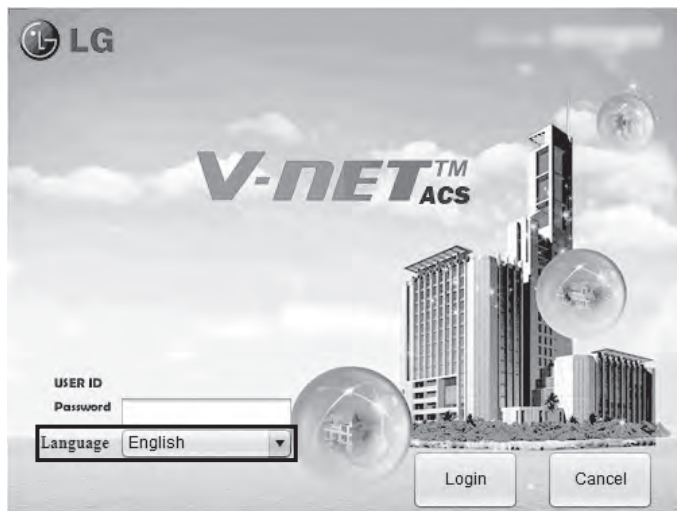
Note : Password

The corresponding program is a program for the installer.
Please refer to the LG system air conditioning website password.



Setting of the indoor units and ventilation devices connected to the internet bridge

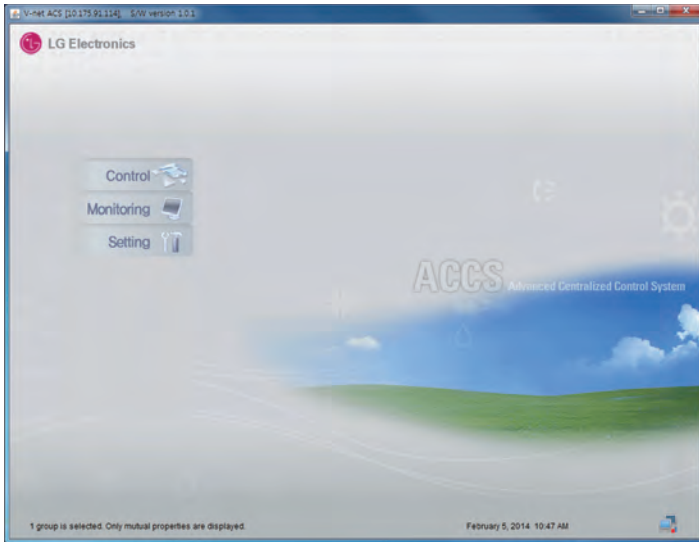
- 1 To the (Korean / English) and select the language.



- 2 Input password and click Login button.



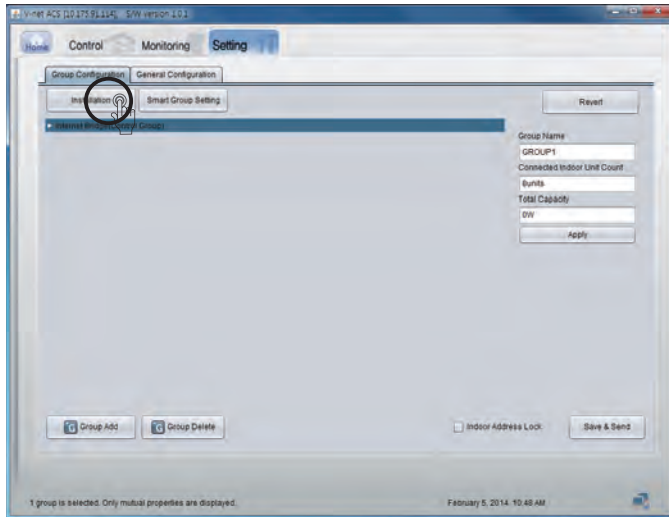
3 When the program runs normally, the following screen is displayed.



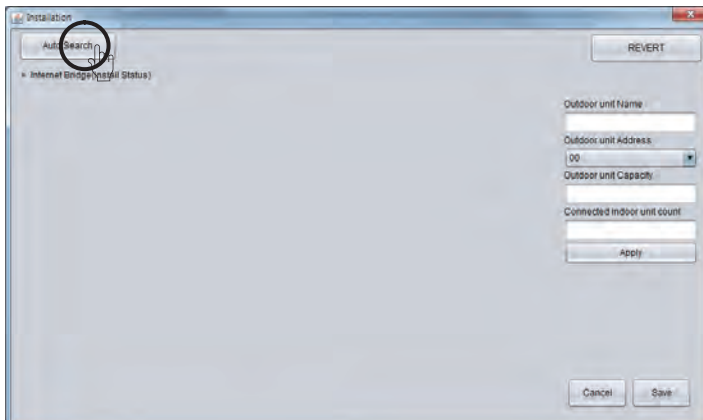
4 Click system setting menu.



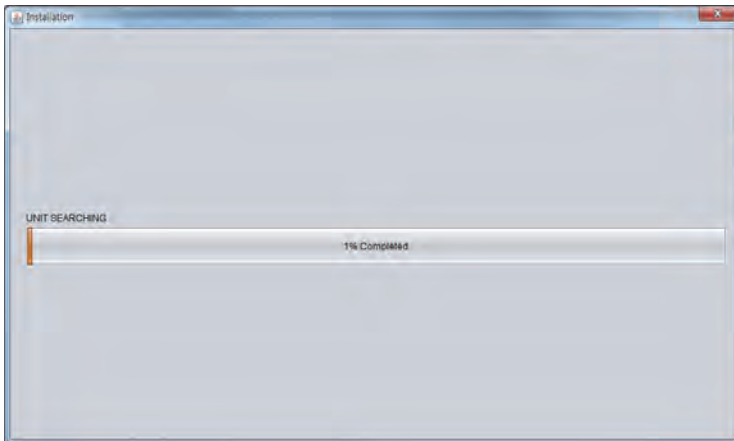
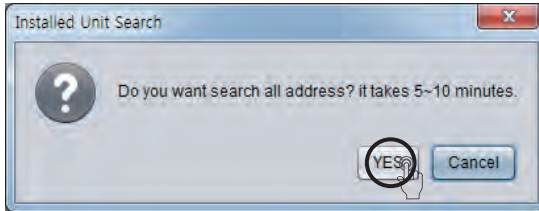
5 Click the installation button.



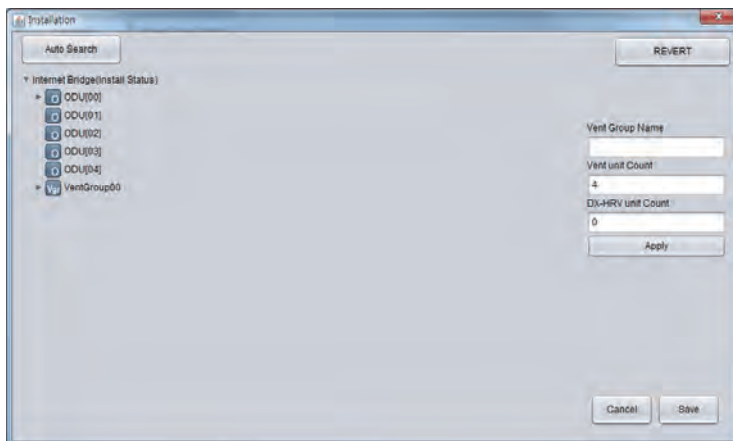
6 Select Auto search button at the top left corner.



If automatic search button is pressed, it starts the search for the indoor units and ventilation products that are connected to the internet bridge. Automatic search takes about 5~10 min.



7 When the search is completed, indoor units/outdoor units list for each group is displayed.



Change outdoor unit information

Outdoor unit Name

Outdoor unit Address

Outdoor unit Capacity

Connected indoor unit count

You can change the outdoor unit name, central control address, outdoor unit capacity, and the number of the connected indoor units. After changing the information, you must press [Apply] button. When you change the number of the connected indoor units, if you input a number smaller than the number of the previously connected indoor units, it deletes from the last input indoor unit, and if you input a number greater than the number of the previously connected indoor units, it asks the first address of the indoor unit to add, and from the input address, it finds an empty address and adds the indoor units as many as the number of the indoor units to add sequentially.

Change indoor unit information

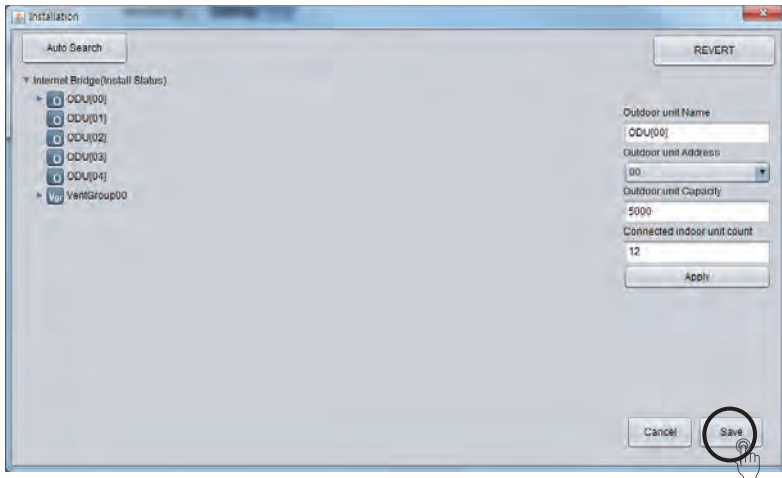
Indoor name

Indoor address

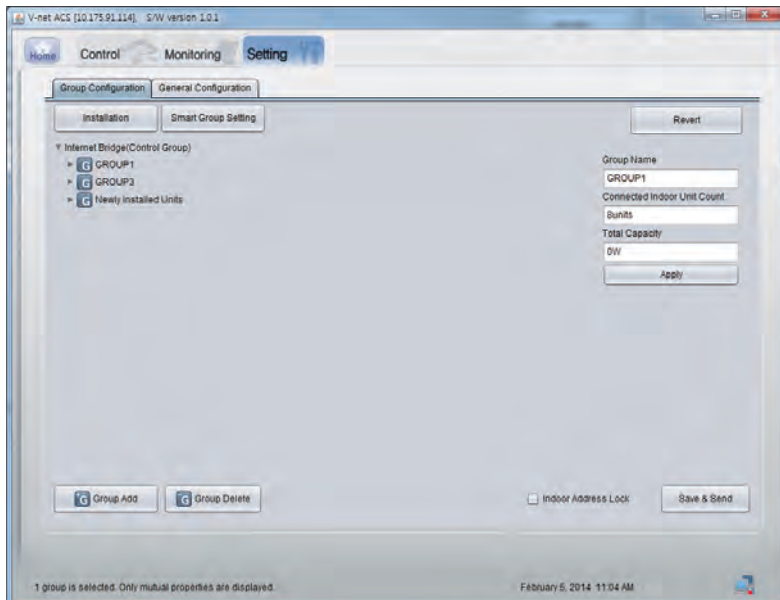
Indoor Capacity

You can change the indoor unit name, central control address, and the indoor unit capacity. After changing the information, you must press [Apply] button.

8 Apply the edited contents and click Save button.



9 When it is saved, the following screen is displayed.



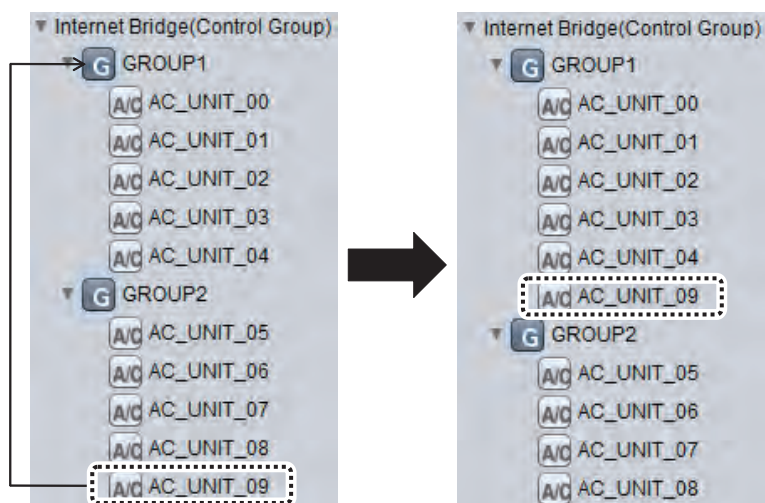
Automatic creation of the control group

Smart Group Setting

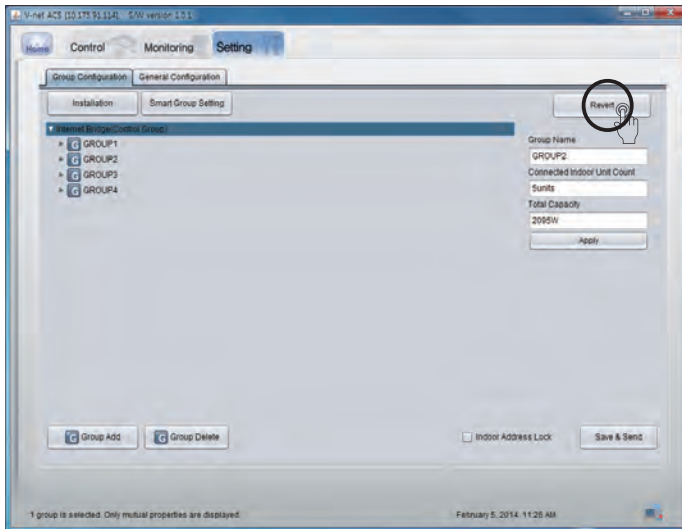
If you press [Smart Group Setting] button, the control group is automatically created based on the outdoor unit and ventilation group information input in the installation status.

Moving indoor unit

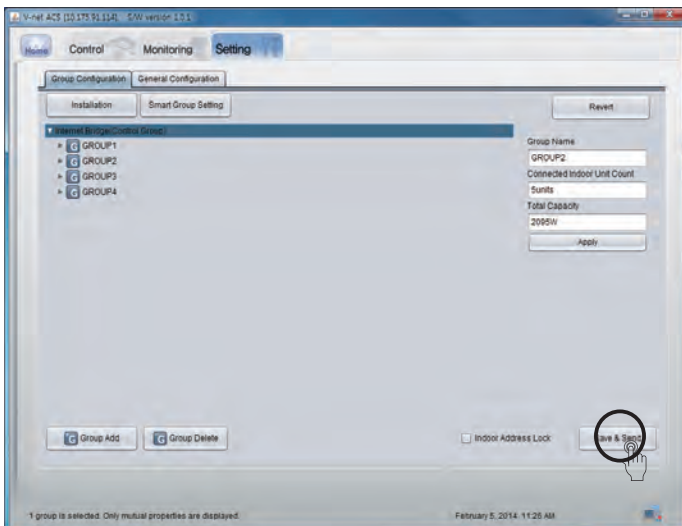
You can select an indoor unit and move to another outdoor unit. When you move an indoor unit, click an indoor unit with mouse, drag it and put it on another outdoor unit.



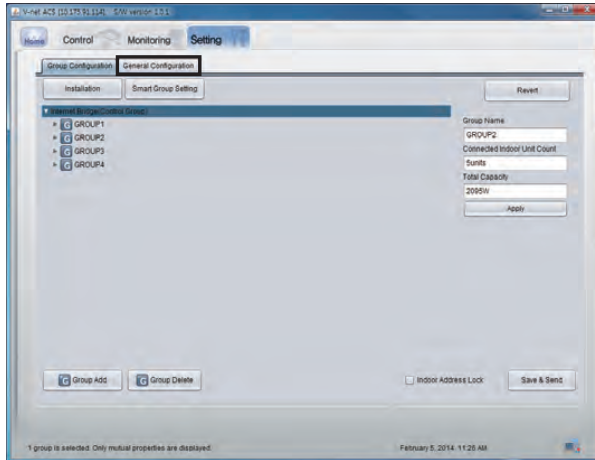
- 10 If you press Revert button, contents edited so far disappears, and the last saved information is displayed again.



- 11 Click Save & Send button to save the information. You need to finish the group setting to save the information.

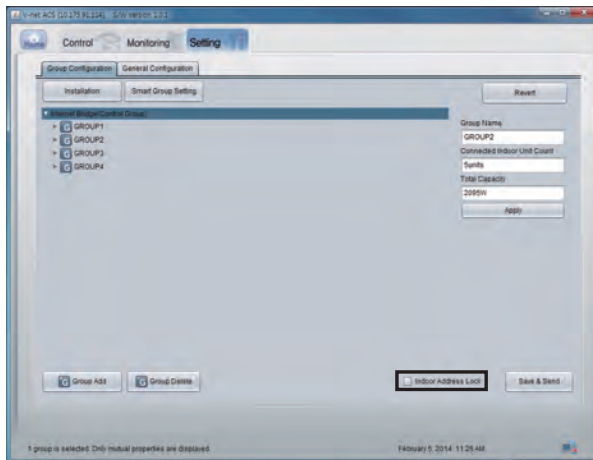


12 Click General Configuration tab to move to TMS interface information management screen.



Locking indoor unit address

When indoor unit address lock is set, central control address cannot be changed from the indoor unit remote controller.



CAUTION

- Beware that the central control address cannot be changed from the remote controller when the address lock is set.
- Address lock function is limited to some indoor/outdoor units and remote controllers.

- 13 Modify each category except the site code by referring to the next page's TMS interface information.

Item	Set Value
SVCnet System URL	tms2.lge.com
Server's port	23
Site Name	LGE
Site Code	0000000000
Site Address	New York
Observation Period(10~600Sec./variable)	10
Time Zone	GMT-09:00

Note : TMS interface information

TMS interface information to input are as follows

Category	Description
① Management system address	Input TMS system internet address (http://tms2.lge.com).
② Connection PORT number	Input TMS system communication port number. (Select one from 21 or 23)
③ Site name	Input the site name.
④ Site code	Site code is unique for each site. If you press [Request site code] button on the right side, the online request for site code registration is submitted, and if you press [View] button within about 1 min., you can check the issued site code.
⑤ Site address	Input the site address. ※ You can search the address in http://maps.google.co.kr . Input the address searched from the above site.
⑥ Monitoring period	Input the monitoring period in the units of seconds. (Minimum monitoring period is 10 seconds)
⑦ Time Zone Settings	Press the button [Select TimeZone] on the right side, and then enter the information of the city closest to the site.

! CAUTION

Save

When the contents of the table are changed, you must press [Save] button to save the changed information.

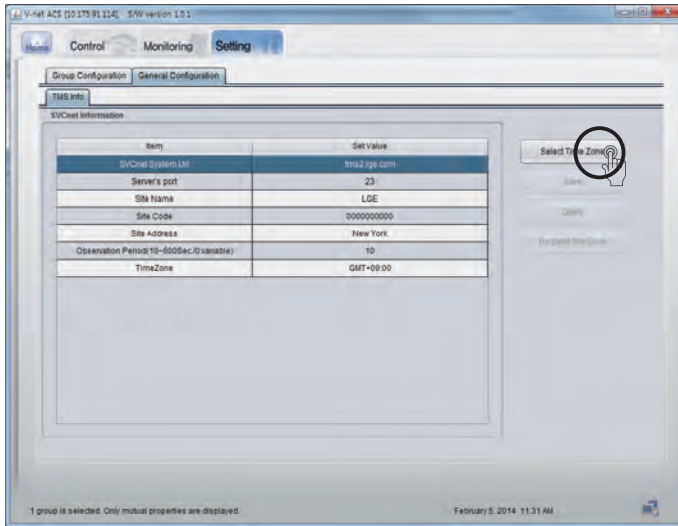
TMS interface information

Information related to TMS interface must be handled by an installation technician with installation qualifications. Even if you input the above information, you may not be able use TMS interface right away. If you have inquiries or questions related to the above, please contact service center or installation specialty store acknowledged by the company.

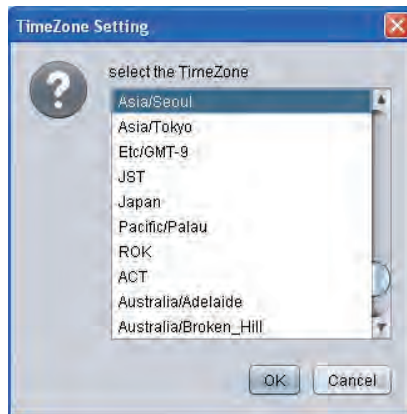
Time Zone Settings

If you do not set the time zone, you will not be able to set the TMS linked information. In countries where the application of the daylight saving, please use it to check the time.

14 Click the 'Select TimeZone' button



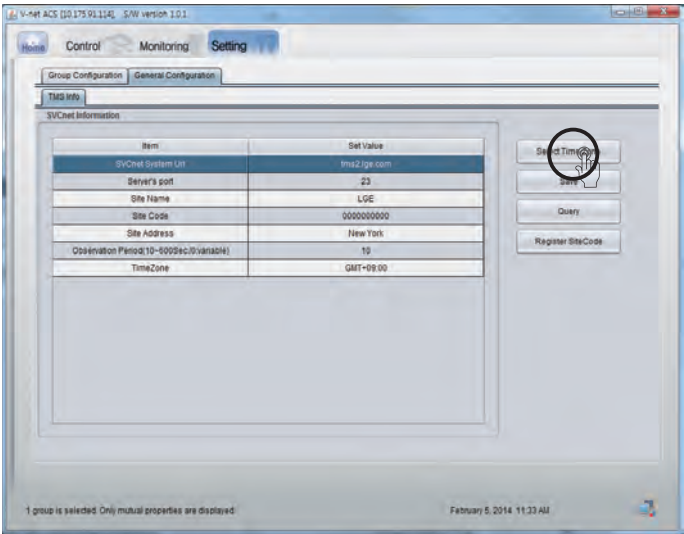
15 Select the city closest to the location of the installation of the product.



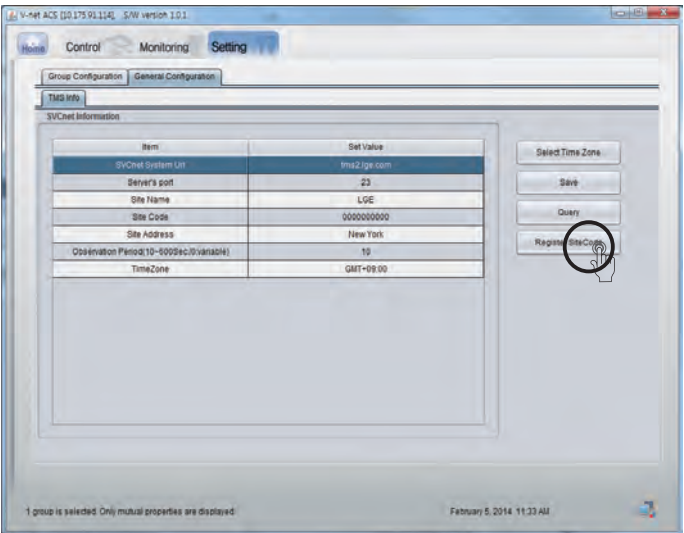
! CAUTION

If you do not set the TimeZone, you will not be able to set the TMS linked information.

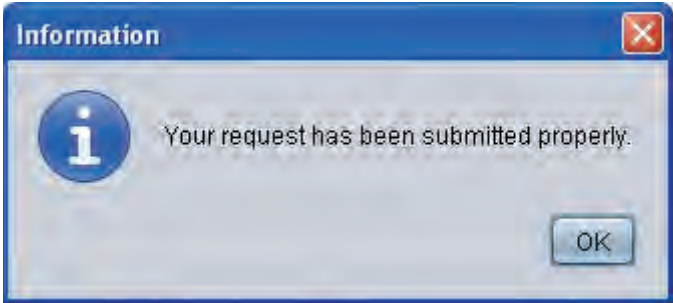
16 Click Save button to save TMS interface information.



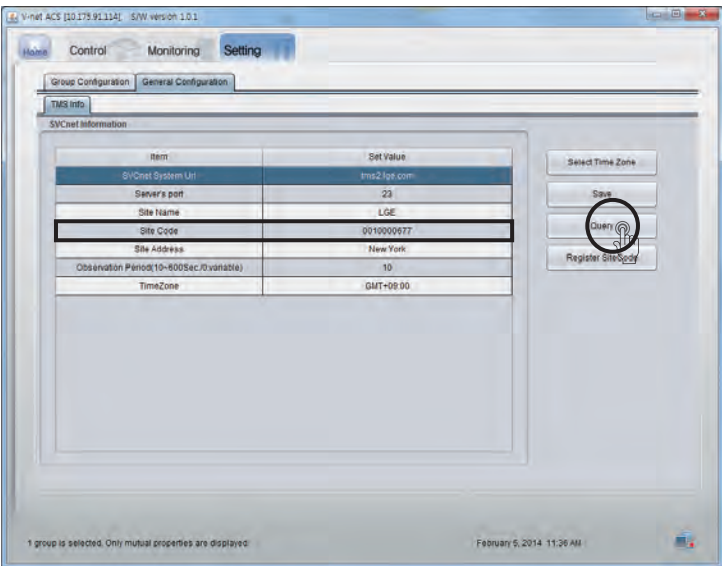
17 Click Register site code button to request the site code.



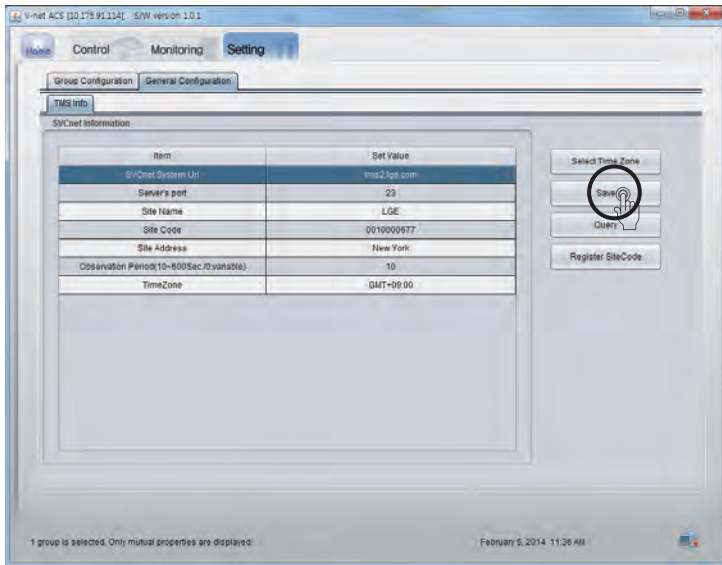
18 When the popup window appears, press Confirm button.



19 If you press Query button within about 1 min., you can see that the site code is changed.



20 Click Save button to save the changed information.



21 Check the site code, and apply for registration in TMSII home page.
(Refer to TMS User Manual)

※ Record the site code separately and directly hand over to the customer.

CHECKLIST BEFORE INSTALLATION INQUIRIES

Trouble Shooting Guide

Major Function	Possible causes	Corrective action
Internet bridge LED 2 does not blink.	• Did you complete the group setting using ACCS? • Is RS485 cable correctly connected to BUS-A and BUS-B?	• Set the indoor unit and outdoor unit groups and run again. • Check RS485 connections of BUS-A and BUS-B.
LGE-xx-xx-xx is not searched in the smart phone.	• Is the internet bridge LED 1 ON? • Is Wi-Fi signal weak? • Is the internet module LED 01 blinking?	• Press the setting the AP switch for 1 second to check if LED 01 starts blinking. • Maintain distance with internet bridge to be 0.3~2 m. • Run the smart phone Wi-Fi search again.
Internet bridge wireless communication does not work.	• Is AP turned off? • Is AP at a long distance?	• Turn on the AP. • Install the AP within 10m from the internet bridge.
Internet bridge wired communication does not work.	• Is LAN cable disconnected from the wired LAN connector?	• Connect LAN cable to the wired LAN connector.
Wi-Fi is connected, but it does not work.	• Is the internet bridge LED 1 ON? • Did you input AP password correctly when you register the equipment? • Did you register as wired during the network setting?	• If Wi-Fi connection is unstable, it may not work correctly. • If you did not input the wireless AP password correctly during the Network setting, Wi-Fi connection may not work correctly. Input correct wireless AP password. • During the network setting, set as wireless.
IP_Search program cannot search the internet bridge.	• Is the internet bridge LED 1 ON? • Is the PC connected to the same network (AP) with the internet bridge?	• Perform the network setting again. • Connect the PC to the same network (AP) as the internet bridge.
IP_Search program can search the internet bridge, but JAVA program does not open.	• Did you make Internet bridge network settings to DHCP?	• Please restart internet bridge by pressing the AP switch of internet bridge until the LED1 blinks twice (about 7 seconds).

Trouble Shooting Guide

Major Function	Possible causes	Corrective action
LG ACCS GUI is not operational.	• Are several programs running in the computer?	• Close Explorer window and run a new explorer to access again. • In the process manager, end all iexplore.exe processes and access the internet bridge again.
In LG ACCS, ventilation device becomes network error state (CH 242).	• Is RS-485 cable correctly connected? • Is there remote controller communication defect? • Is PI485 DIP switch setting correct? • Is central control indoor unit address set?	• Connect RS-485 cable to BUS-A and BUS-B. • Solve the remote controller communication defect problem. • Refer to PI485 manual for DIP switch setting. • Set the indoor unit address.
CH 242 (network error) keeps appearing and disappearing in the internet bridge controller.	• Are all RS-485 communication lines connected to each other? • Is there any overlapping indoor unit address setting?	• Remove the interconnecting communication lines outside the communication lines connecting to the internet bridge. • Assign unique address to each indoor unit so that there is no indoor unit with overlapped address.
16 rooms central controller and internet bridge interfaced and installed, but some indoor units are not recognized or central control commands are not well performed.	• Is the simple central controller DIP switch setting correct? • Are the simple central controller and the controlled indoor unit physically connected on the same line?	• Set all central controllers (16 rooms central controller) to Slave mode, and reset the power. • Modify the connections so that the simple central controller is surely on the same RS-485 communication line with the controlled indoor unit.

OPEN SOURCE SOFTWARE NOTICE

To obtain the source code under GPL, LGPL, MPL and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>.

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping and handling) upon email request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.

NOTE

FCC Compliance Information

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received. Including interference that may cause undesired operation.

Changes or Modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

RF Exposure statement

Warning: Exposure to Radio Frequency Radiation The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact during normal operation is minimized. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna should not be less than 20 cm during normal operation. The gain of the antenna for WLAN must not exceed dBi

Can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid after searching on FCC ID : BEJPWFMD000

Class B device**! NOTE**

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

! CAUTION

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

**Disposal of your old appliance**

- 1 When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC. 2 All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- 3 The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
- 4 For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

