



LG Smart AC

**Smart Inverter
Remote Control System
User's Manual**



**WLAN Module for
LG Smart Air Conditioning Application**

Model: PCRCU DT2/ PCRCU DT3

Proprietary Data Notice

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Do not throw away, destroy, or lose this manual.

Please read carefully and store in a safe place for future reference.

Content familiarity required for proper installation and operation.

Follow the instructions in this manual to prevent product malfunction, property damage, injury, or death to the user or other people. Incorrect operation due to ignoring any instructions will cause harm or damage. The level of seriousness is classified by the symbols described below.

WARNING

This symbol indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury

Note: *This symbol indicates situations that may result in equipment or property damage accidents only.*

 *This symbol indicates that the following action should not be performed.*

A summary of safety precautions is on page 4.

UM-SmartAC-AII-06-14

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Safety Precautions

LG Smart AC App is for use with LG Duct-free Split (DFS) systems only. Do not attempt to use this app with any other type of system.

The information in this manual is intended for use by an end user (customer) of the DFS system installed in their home environment.

Note:

Failure to carefully read and follow all instructions in this manual can result in equipment malfunction.

Input power to the indoor unit remains connected and on during procedures in this manual. Do not touch any exposed indoor or outdoor unit wiring, terminals, or other electrical components with tools or exposed skin. Only qualified technicians should install, remove, or re-install this unit.

⚠ WARNING

Improper installation or use may result in fire, explosion, electric shock, physical injury or death.

All electrical work must be performed by a licensed electrician and conform to local building codes or, in the absence of local codes, with the National Electrical Code, and the instructions given in this manual.

⚠ WARNING

If the power source capacity is inadequate or the electric work is not performed properly, it may result in fire, electric shock, physical injury or death.

Do not install the LG Smart AC unit in a location exposed to open flame or extreme heat. Do not touch the unit with wet hands.

⚠ WARNING

There is risk of fire, electric shock, explosion, and physical injury or death.

Safely dispose of the packing materials.

⚠ WARNING

Tear apart and throw away plastic packaging bags so that children may not play with them and risk suffocation and death.

Do not store or use flammable gas or combustibles near the unit.

⚠ WARNING

There is risk of fire, explosion, and physical injury or death.

LG Smart AC Terms and Conditions

In using LG Smart AC hardware and smartphone application you agree to the LG Smart AC terms and conditions.

- LG Smart AC hardware and smartphone application are to be used only with LG Electronics, Inc. inverter air conditioner products.
- LG Smart AC hardware and smartphone application cannot be sold/transferred/rented to any other parties.
- All data generated by LG Smart AC hardware and smartphone application cannot be sold/transferred/rented to any other parties.
- A complete list of LG Smart AC terms and conditions is at www.lghvac.com.

LG Smart AC

This manual describes how to install and use the LG Smart AC Models PCRCUdT2/PCRCUdT3. LG Smart AC consists of a hardware Wireless Local Area Network (WLAN) module, and a free smartphone application (app). The user must supply the smartphone; either an Apple® iPhone or an Android® phone. LG Smart AC is not optimized for tablets.



Note:

LG Smart AC will also be referred to as Smart AC in this manual.

Before using Smart AC, you must download and install the latest version of the free LG Smart AC app from either the App store (iOS) or the Play store (Android).

Figure 1 shows the Smart AC app and WLAN module communicating through the home setup wireless network. Direct communication to the WLAN module occurs during initial registration.

Figure 2 shows the Smart AC app communicating through a remote internet access back to the LG duct-free system.

The hardware WLAN module and the smartphone app together provide monitoring and remote control capabilities for LG duct-free systems. Smart AC functions only with certain models of the LG duct-free system products. This product is intended for customers of DFS systems, that wish to control their indoor inverter units within their home or remotely at other locations (provided they have wireless connection) through the LG Smart module.

Note:

Some functionality of the Smart AC App may be limited due to the duct-free single zone model. Check your owner's manual for your model's capabilities.

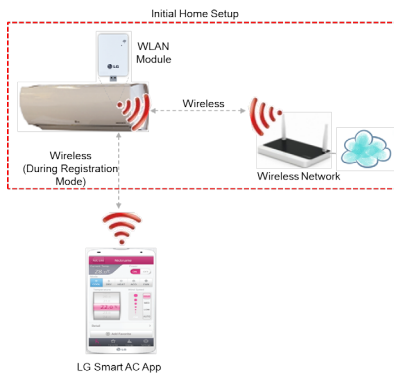


Figure 1: LG Smart AC App Communication through Home Network

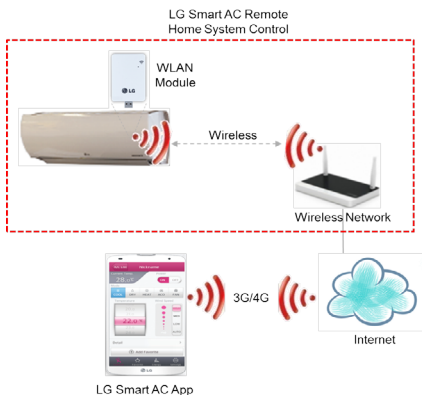


Figure 2: LG Smart AC App Remote Communication

User Smartphone Environment

Following minimum specifications are needed to successfully run the LG Smart AC app on a smartphone:

- OS: Android 2.3 or higher; iOS 6 or higher
- Resolution: Android 320 x 480 or higher; iOS 960 x 640 or higher

Note:

Normal operation may be hindered if the environment does not satisfy minimum specifications as outlined above. Some functions may not operate, may be slow in performance, or part of the screen may be unclear.

Table 1: LG Smart AC Wireless Network Requirements

Standard	IEEE 802.11 b/g/n
Frequency Range	2.412 – 2.472 GHz
Security	128 bits WEP, AES WPA, WPA2
Output Power	802.11b: 11 dBm (11 Mbps) 802.11g: 15 dBm (54 Mbps) 802.11n : 11 dBm (72.2 Mbps)
Data Rate	802.11b: 11 Mbps 802.11g: 54 Mbps 802.11n: 72.2 Mbps
Sensitivity	802.11b: -88 dBm (11 Mbps) 802.11g: -74 dBm (54 Mbps) 802.11n: -69 dBm (72.2 Mbps)
Modulation	QPSK + OFDM
Class of Emission	G1D, D2D
Number of Channels	13
Oscillator/Communication mode	Crystal/Half-duplex

Note: *This device is not available for laptop computers or similar portable systems.*

Installation Sequence

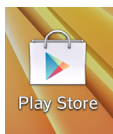
To use LG Smart AC, you must install the app on your smartphone and sign up for a new account (first time install) and then connect the WLAN module to the indoor unit. This manual will show download and installation of the app on both Android and Apple (iOS) platforms, however, procedural screens will mostly be through the iOS smartphone platform. Note that the app is not optimized to work on tablets. Where there is a slight difference in procedural steps, both platform screens will be shown.

Downloading and Installing the App

Follow the instructions for your smartphone, either Android or iPhone.

Install the Android App

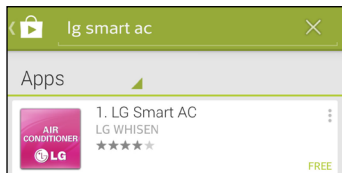
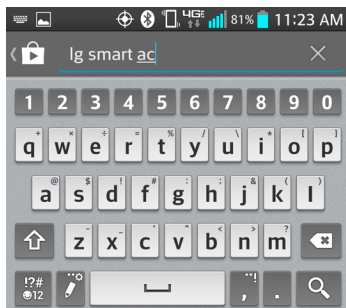
Follow these steps to install the app on an Android smartphone.



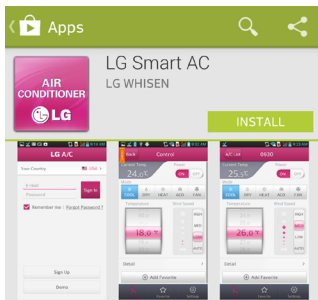
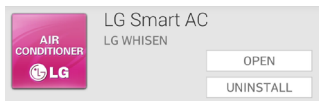
Note:

Be sure your phone meets the specifications listed on page 7.

1. Tap the Play Store icon on the phone.
2. Type LG Smart AC in the search window and search for the app.
3. Tap the LG Smart AC icon in the search results list.



4. Tap the **INSTALL** button on the LG Smart AC screen.
5. Tap the **ACCEPT** button on the App permissions screen.
6. When the app is finished installing, an **OPEN** button is displayed on the screen.

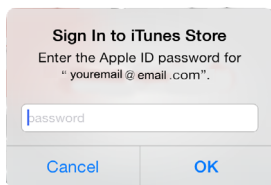
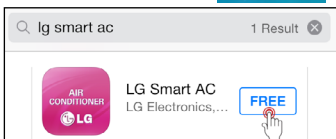
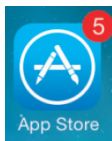


7. If you are ready to begin Smart AC registration, tap **OPEN** and the app will start.

Install the iPhone App

Follow these steps to install the Smart AC app on an iPhone.

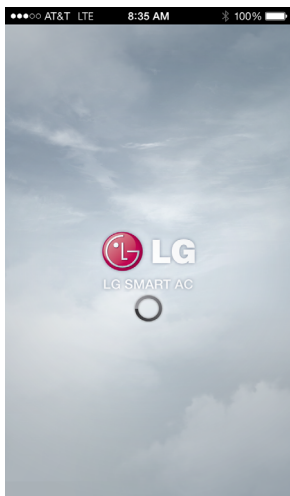
1. Be sure your phone meets the specifications listed in on page 10.
2. Tap the App Store icon on the iPhone screen.
3. Type LG Smart AC in the search window and search for the app.
4. Tap the LG Smart AC icon in the search results list and then tap the **FREE** button.
5. If asked, enter your Apple iTunes password, and then tap **OK** to proceed.
6. When the app is finished installing, an **OPEN** button is displayed on the screen.
7. If you are ready to begin Smart AC registration, tap **OPEN** to launch the app.



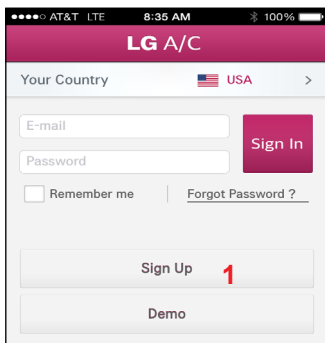
LG Smart AC Registration

This step can be performed either right after the installation of the app on your smartphone or after you proceed with the Smart AC module installation on your indoor unit. It is helpful however to sign up as a new user and go through the email verification prior to module installation so that you can proceed easily with app and module communication.

- From your smartphone, launch the app by tapping on the icon.
 - The LG Smart AC welcome screen will appear.



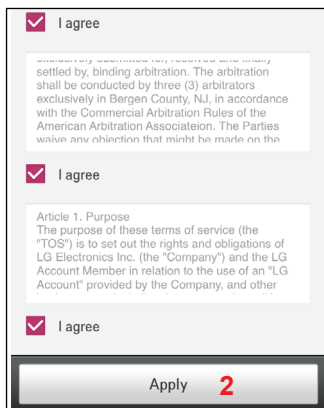
- Select your country.
 - The app will change to the language selected.
- Next, tap the Sign up button to begin your registration process (1).



Note:

- Each user in the household can sign up for their own user account and go through email verification.
- A household may also share one account.

4. At the Terms and Conditions screen, accept all the terms, by tapping each “I agree” box and then tap Apply (2).



I agree

settled by, binding arbitration. The arbitration shall be conducted by three (3) arbitrators exclusively in Bergen County, NJ, in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The Parties waive any objection that might be made on the

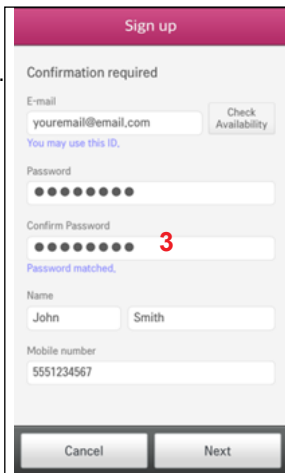
I agree

Article 1. Purpose
The purpose of these terms of service (the "TOS") is to set out the rights and obligations of LG Electronics Inc. (the "Company") and the LG Account Member in relation to the use of an "LG Account" provided by the Company, and other

I agree

Apply **2**

5. Enter your email address, choose a password; and then retype your password to confirm (3).
6. Enter your name in the fields as shown. Note that your first and last name cannot exceed 15 characters.
7. Enter your phone number as shown and then tap Next to proceed.



Sign up

Confirmation required

E-mail
youremail@email.com
You may use this ID.

Password
●●●●●●●●

Confirm Password
●●●●●●●● **3**
Password matched.

Name
John Smith

Mobile number
5551234567

Cancel Next

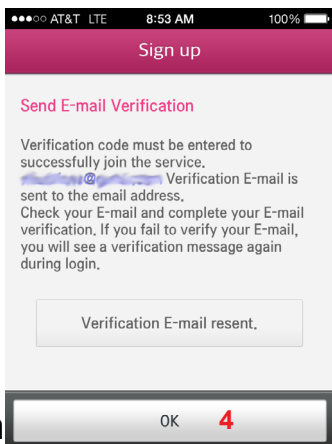
8. At the Send E-mail Verification screen, review the information to be sure everything is correct, and then tap OK (4).
9. Log into your email and click on the link to confirm your registration through the LG website.
10. Proceed to LG Smart AC Module Installation section in this manual.

LG Smart AC Module Installation

Before your app can communicate successfully with your indoor unit(s), you must install the WLAN module. Note that you will need one WLAN module for each indoor unit that you plan to control through your app.

WLAN Module Install

1. Open the LG Smart AC box, and remove the module from the plastic wrapper.
2. Verify that indoor unit is turned off and power is cut off at the outdoor unit's input power circuit breaker.
3. Open the front panel of the indoor unit and remove the USB port plastic cap (1) and insert WLAN module (2). Close front panel of unit.
4. Turn power on by turning back on through the power breaker and then turn indoor unit on.
5. Optionally, place a WLAN module into each indoor unit as necessary before proceeding.



WLAN Connection

To use LG Smart AC, the app must be installed on your smartphone and the WLAN module must be connected to the air conditioning system's indoor unit. The indoor unit must be turned on. Follow the instructions for Android or for iPhone for first time pairing of your smartphone to the WLAN module.

Note:

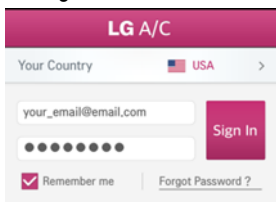
The initial connection setup must be done at your home over your home wireless network.

Initial WLAN Module and Smart AC Connection

Note:

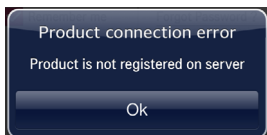
This WLAN connection step needs to be performed the first time the WLAN module is installed into the indoor unit, so that it can establish communication with the unit and your home's wireless network connectivity. Under normal circumstances, the WLAN Module remains connected to the indoor unit at all times.

1. Tap the LG Smart AC icon.
2. Enter your account and password, then tap Sign In.



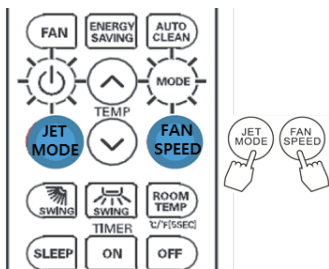
3. A product connection error prompt will display. Tap Ok to proceed.

- The product connection error display is normal since you have not registered and paired your connection to the WLAN at this time.



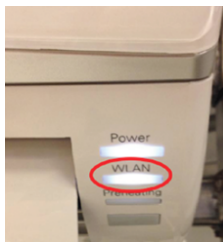
Initial WLAN Module and Smart AC Connection (Continued)

- The Register New Air Conditioner screen will display.
 - Before tapping “Continue” you will have to set the registration mode.



Remote Controller may appear slightly different, depending on your model.

- Point the remote control at the indoor unit, and press the Jet Mode and Fan Speed buttons simultaneously for 3 seconds.
- Wait for the WLAN light to blink at the indoor unit (this may take a couple of minutes after the beep).
 - If the WLAN light does not start to blink after three minutes, reset the registration mode again, using the remote controller, as in step 5.



Note:

Check the WLAN light once more. If the above pairing process has not been successful, follow the instruction below:

- Turn off the indoor unit, wait 10 seconds and then turn the indoor unit back on (power up). Then try the above registration steps after waiting three minutes.*

WLAN Light Description

OFF:

- *Not connected to the wireless network that communicates to the external network.*
- *Connected to the wireless router, however the air conditioner unit is not operating.*

ON:

Air conditioner is connected to the wireless network and is operating properly.

BLINKING:

Air conditioner generates a wireless signal; same as a router.

(Soft AP mode = registration mode)

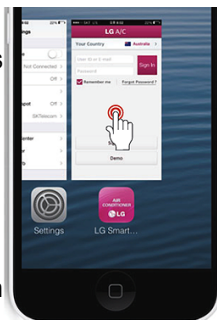
If registering through iOS, follow step 7, for Android smartphones continue to step 8:

7. While on the LG Smart AC Registration screen, press the home button of the iPhone twice quickly, to minimize the app.

- Tap Settings, and then tap Wi-Fi.
- Select the wireless named LG_AC-xx-xx-xx, where “x” represents numbers which will be exclusive to your module.



- A checkmark will appear when connection has been made.
- Enter the following password: **Ige12345**
- Press the home button on the iPhone twice quickly and then touch the LG Smart AC miniature screen to return to the app.

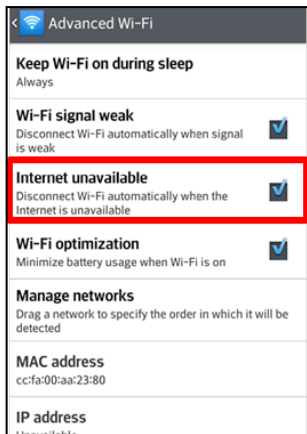
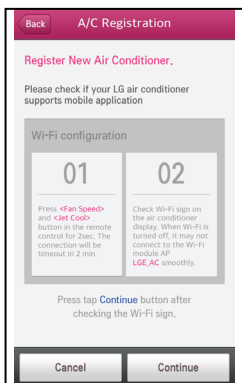


8. Once pairing is successful (WLAN light is blinking on unit), tap Continue at the AC Registration screen.
9. If asked to reset product, tap Ok.

Note:

If the Android smartphone does not connect automatically, check the following:

- From the Advanced Wi-Fi settings, make sure “Internet unavailable - Disconnect Wi-Fi automatically when the Internet is unavailable” is checked.
- Note that the wording of the above might be slightly different, depending on your smartphone model.
- This setting is unavailable on iOS smartphones.



10. From the smartphone, select the wireless network that you want to connect to.

11. If asked, type in your wireless password and tap OK, to proceed.

- For specific configuration information regarding your wireless network, consult the user manual of your wireless router.
- The smartphone screen of the wireless network password may vary, depending on your wireless network setup.



Note:

- If the wireless network router is setup as a WEP-open security, you may not be able to complete the registration and set up your network.
- You will have to make modifications to your wireless network, and then go through the registration steps once more.

12. Once this procedure has completed, the WLAN light will stop blinking and be on (steady light) as it is connected to the server.

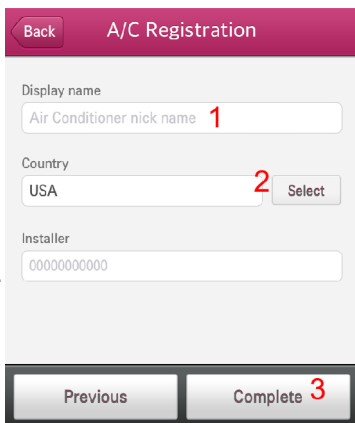
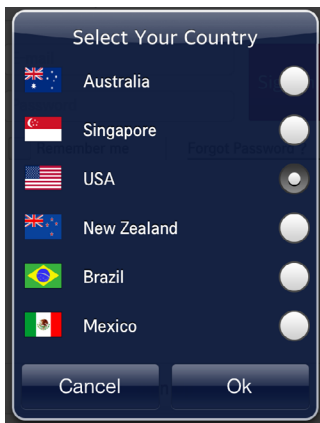
Note:

- Depending on your home network, connection to the unit could take up to 30 minutes.
- If the wireless network router is physically too far from the unit, it may fail to connect to the server.

Naming the New AC Unit

Once connection is established between the app and the new AC through the registration process, you have the opportunity to give your newly registered unit a unique name. This is helpful if you have more than one indoor unit in your building. In this way, if you have a WLAN module installed in more than one indoor unit, you can register each one and give them unique names. For example, one could be named Living room AC and the other could be named Master Bedroom AC. You can run both through your app on the smartphone by picking the AC unit names.

1. Once wireless password is entered as shown on previous page, tap Ok.
2. At the A/C Registration screen, enter a new descriptive name at the Display name box (1).
3. Tap Select to the right of the Country box (2).
 - This step is optional and can be performed at a later date.

4. Tap your country's radio button and then tap Ok to commit the change.

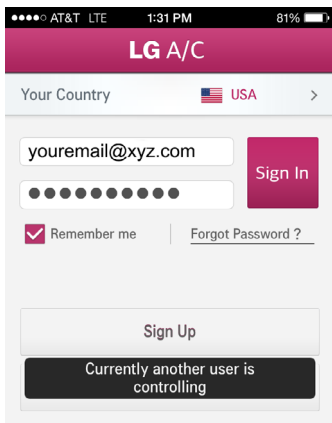
5. From the A/C Registration screen, tap Complete (3).

Using Smart AC

Using Smart AC with an Android smartphone or an iPhone is similar. The instructions given in this manual use iPhone screens.

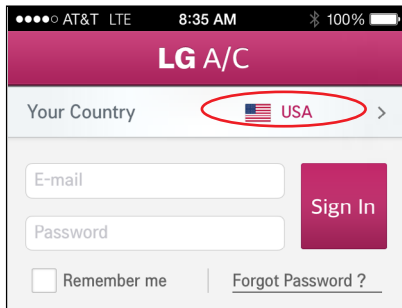
Note:

You cannot be logged into two smartphone devices at the same time while using the same user account. If you attempt to log in, you will see the following message. Be sure you log out from one device before logging in with another.



Initial Setup

1. From the Sign In screen, tap your country's name at the top of the screen.

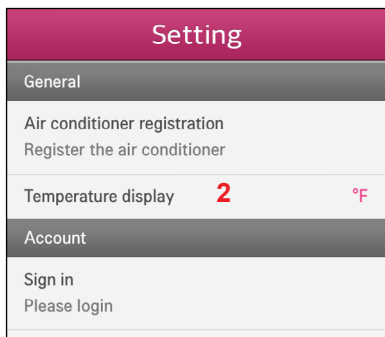
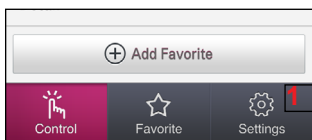
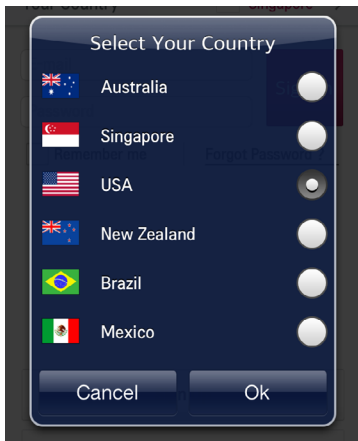


Using Smart AC - Continued

Note:

You can skip country selection steps, if you have done this in the previous sections of this manual.

2. Tap the country's radio button and then tap Ok to commit the change.
3. Sign In, in the usual manner as in previous sections.
4. If you have not done so previously, tap Settings at the bottom of the main screen (1).
5. Verify that temperature is set to your country's unit of measurement ($^{\circ}\text{F}$ or $^{\circ}\text{C}$). To change the unit, tap Temperature display (2) and then tap the $^{\circ}\text{F}$ or $^{\circ}\text{C}$.
6. Tap Ok when done.



Control Functions

Use the Control screen to make instant updates to the temperature and fan speed on your indoor unit. Additionally, you may save any of the settings to a Favorites screen.

Cooling Function

- From the Control screen be sure you have Power turned on (1).
 - The current temperature setting of your unit will display to the top left of your control screen.
- Tap the Cool Mode button (if not already selected) (2).
- From the Temperature “drum” scroll to the new cool temperature setting (3).
- Optionally, from the Wind Speed settings, tap a fan speed (4).



Note:

- Every time a setting is changed on this screen, you will hear a beep from the indoor unit, acknowledging the change. This ensures successful communication between your app and the WLAN module.
- If you do not hear the beeps, double check to be sure that your unit is communicating with the app. You may need to re-establish communication through previous pairing steps in this manual.

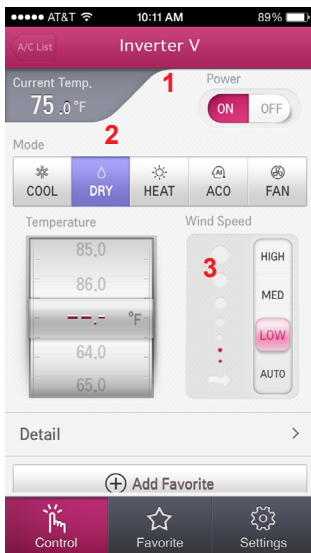
Dehumidifying (Dry) Function

This mode removes excess moisture from an environment with high humidity or during local rainy seasons. This method prevents mold from setting in. This mode adjusts the room temperature automatically to maintain the optimal level of humidity.

Note:

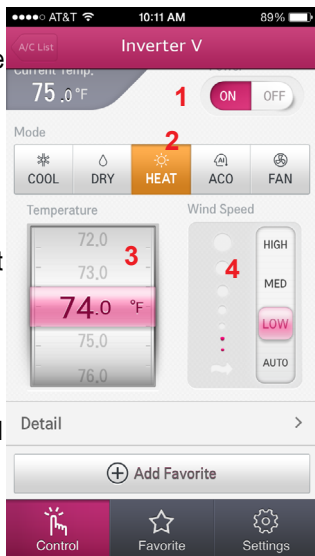
When indoor unit is in dehumidifying mode, you cannot adjust the room temperature. Temperature is being adjusted automatically.

1. From the Control screen be sure you have Power turned on (1).
 - The current temperature of your unit will display to the top left of your control screen. This temperature may fluctuate during the Dehumidifying process, however, you cannot control the temperature setting.
2. Tap the Dry Mode button (if not already selected) (2).
3. From the Wind Speed settings, tap a fan speed (3).



Heating Function

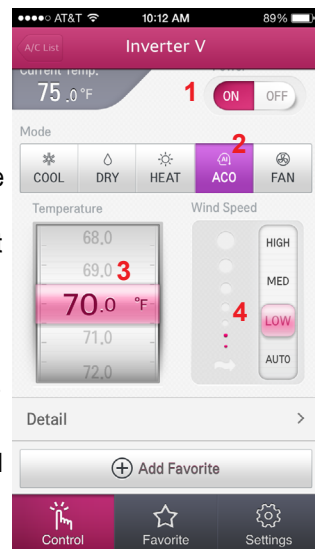
- From the Control screen be sure you have Power turned on (1).
 - The current temperature setting of your unit will display to the top left of your control screen.
- Tap the Heat Mode button (if not already selected) (2).
- From the Temperature “drum” scroll to the new heat temperature setting (3).
- Optionally, from the Wind Speed settings, tap a fan speed (4).



Auto Changeover Operation

This functionality changes the operation mode automatically to maintain a set temperature of $\pm 3.6\text{ }^{\circ}\text{F}$ ($\pm 2\text{ }^{\circ}\text{C}$), from the temperature set on the Control screen.

- From the Control screen be sure you have Power turned on (1).
- Tap the ACO Mode button (if not already selected) (2).
- From the Temperature “drum” scroll to the new auto cooling temperature setting (3).
 - The temperature range is 64 °F (18 °C) through 86 °F (30 °C).
- Optionally, from the Wind Speed settings, tap a fan speed (4).



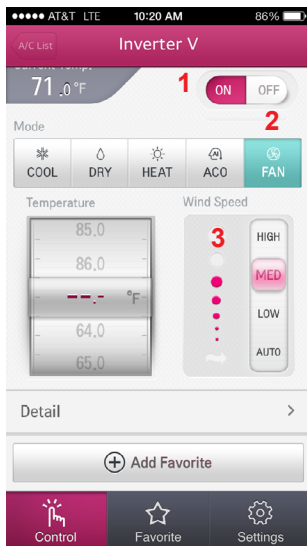
Fan Function

This mode only circulates the indoor air without changing the room temperature.

Note:

- The cooling lamp lights up in air circulation mode on the indoor unit.
- You cannot change temperature settings while in this mode.

1. From the Control screen be sure you have Power turned on (1).
2. Tap the Fan Mode button (if not already selected) (2).
3. From the Wind Speed settings, tap a fan speed (3).

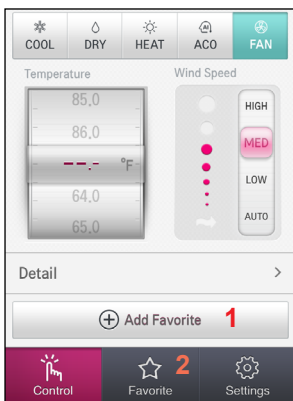


Creating Favorite Settings

You can create a favorite setting or save any existing setting combination as a Favorite. Favorites allow you to save your most frequently used configurations and activate them quickly when launching the app.

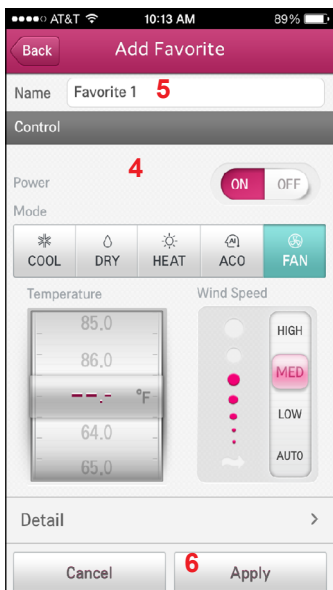
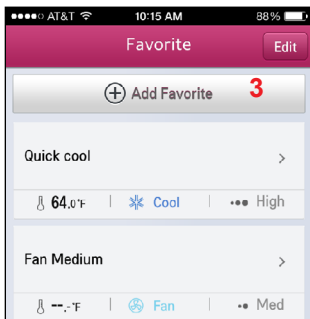
Note:

- An existing Favorite setting can be edited and resaved.
- The controls on a Favorite screen cannot be changed. They are static settings.
- The listed Favorites are based on the user's account and not based on the particular indoor unit.



Creating Favorite Settings - Continued

1. Create a Favorite setting by doing one of the following:
 - Tap one of the Control modes, adjust temperature and Wind; and then tap Add Favorite (1) (continue with step 4 below).
 - Tap Favorite (2) on Menu bar, and then tap Add Favorite (3) on Favorite screen (follow the steps below).
2. Navigate to the mode screen you want (4).

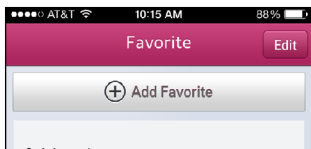


3. Make your temperature and Wind Speed selections as needed (some settings may not be allowed in the mode you are in).
4. At the name box, name your new Favorite (5).
 - It is helpful to give it a descriptive name that is associated with the mode setting.
 - Two Favorites cannot have the same name given.
5. Tap Apply when done (6). The newly named Favorite setting will now be listed on the Favorite screen.

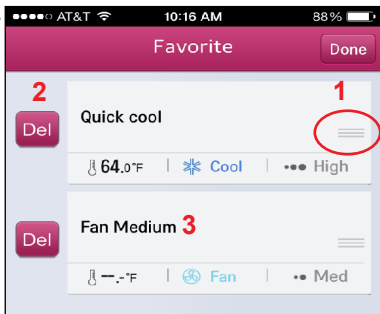
Deleting/Sorting Favorites

You can re-order or delete your Favorites from the Favorites screen.

1. Tap the Edit button.



- To re-order your favorites in the list, tap and hold the 'list bars' that appear on the right side of the Favorite. Using your finger, drag the Favorite, up or down until the placement (order) is correct and then release (1).
- To delete a Favorite, tap the Del button to the left of the listed Favorite (2).



Modifying a Favorite

Once you have created a favorite, you can make modifications to it anytime. You can change the temperature settings, wind strength and even give it a new name.

1. From the Favorites screen, tap Edit.

2. Tap on the name of the Favorite (see 3 above).

- The appropriate mode screen will launch with the current favorite settings in place.

3. Modify the settings on the mode screen as needed.

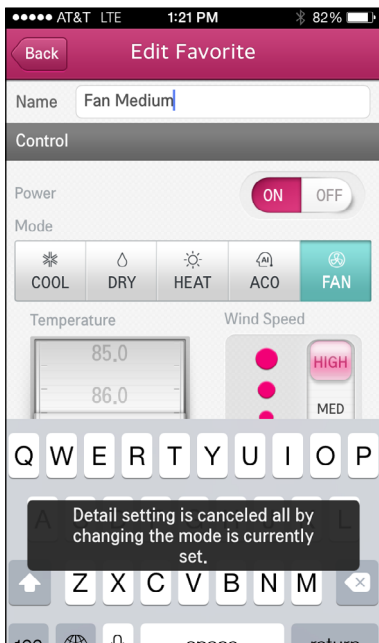
- For example, scroll to a new temperature, or choose a new wind speed.
- Tap a new mode screen if needed in your modifications.
- Optionally, give the modifying Favorite a new name by tapping the Name box and re-entering a name (see 5 on previous page).

4. Tap Apply (see 6 on previous page) when done.

Modifying a Favorite - Continued

Note:

When making certain modifications to an existing Favorite, such as changing the mode screen, you might see the following message. This message alerts you that all your previous settings will be overwritten by the new modifications that you are making. Tap Apply at the bottom of the screen to proceed with your modifications.

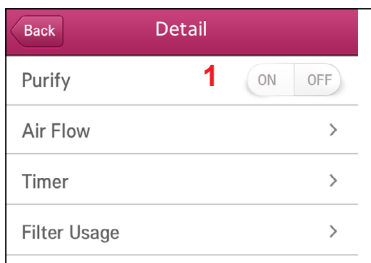
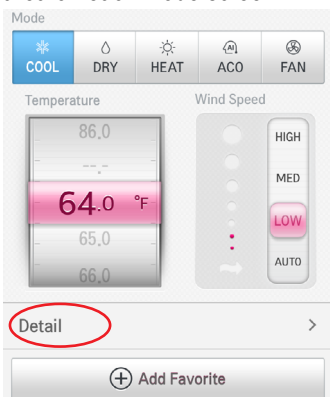


Advanced Functions

Depending on the Single Zone AC that you have, you can control additional features of the unit through the Smart AC app. These features are located via the Detail area on each mode screen.

The Detail area allows you to:

- Turn purification operation on/off (not available in some Single Zone models)
- Adjust air flow (swing)
- Set filter renewal date
- Set sleep timer
- Monitor the remaining filter percentage



Purify Mode

Depending on your indoor unit's model type, you can turn the purification mode of the unit on or off manually, using the app (1).

Note:

If this function is not available on your unit, the Purify ON/OFF buttons will be grayed out and you will not be able to use them.

Air Flow (Swing Direction)

You can set the up/down and left/right swing directions of the louver using the Air Flow screen.

1. From any of the mode screens, tap Detail.
2. From the Detail screen, tap Air Flow.
3. From the Air Flow screen, tap either Jet or Saving to place the Air Flow into those modes.
 - Refer to your indoor unit owner's manual for specific definitions of these two modes of operation.
4. From the Air Flow screen, tap the up and down arrows to the right of the Swing directions to adjust direction.
 - If you want the louvers to swing back and forth automatically, tap the up and down arrows until "Auto Swing" is displayed (as shown in the screen shot above).
5. Tap Apply to commit changes.



Setting the Timer/Sleep

The unit can be placed into a countdown mode which will then activate the Sleep Mode. Additionally, this screen allows you to set the timer which allows you to start and stop air conditioner activity.

1. From any of the mode screens, tap Detail.
2. From the Detail screen, tap Timer.

To Set Sleep Countdown:

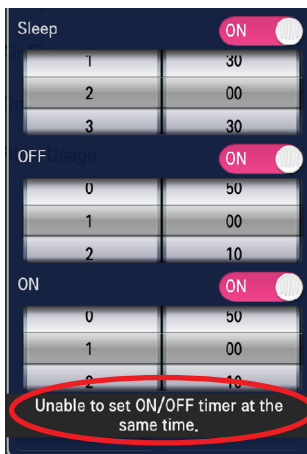
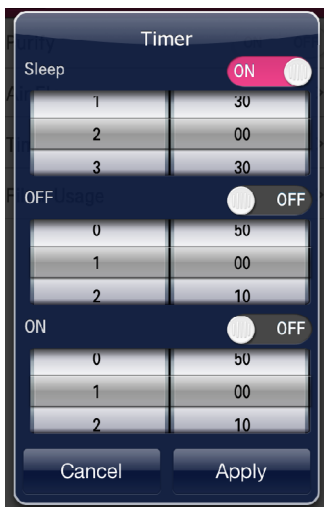
- Slide the button to the right of the Sleep area of the screen to ON.
- Scroll the amount of time to countdown to Sleep Mode. You can set it up to 7 hours in advance.
- Tap Apply.

To Set Timer Countdown:

- Slide the button to the right of the Off and/or On area of the screen to ON.
- Use the scrolls to set the hour and minutes to be counted down (rounded to 10 minute intervals).
- Tap Apply.

Note:

- You **cannot** place the Sleep countdown timer and the Off and/or On timers in the ON position at the same time. An error message will display to the bottom of the screen as shown.
- Timer only sets the amount of time (as a count down, not as a time of day that is being set) before Sleep Mode activation.



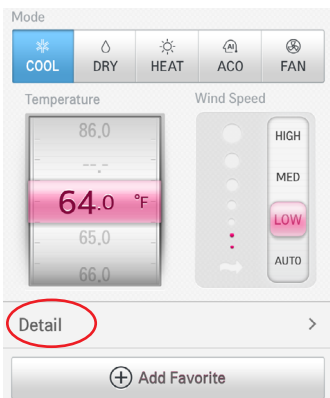
Filter Usage and Stats

The app can monitor filter usage by showing the percentage remaining before you need to clean the filter. You can also set the filter renewal date from this area of the app. The app will alert you when it is time to clean the filter.

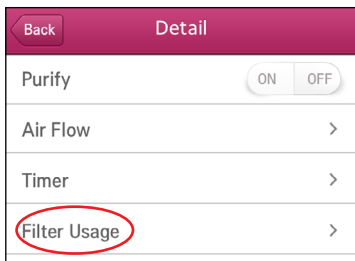
Filter Usage - Monitoring

The app will give a visual percentage detail as to the remainder of usage left on the existing filter, along with remaining hours of available usage.

1. From any of the mode screens, tap Detail.



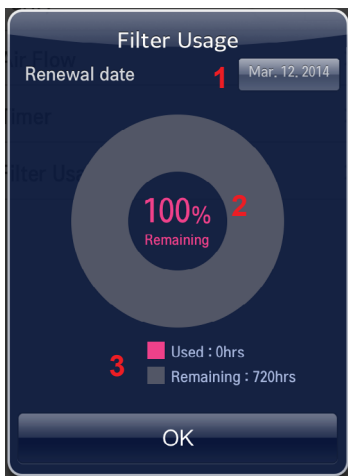
2. From the Detail screen, tap Filter Usage.



Filter Usage - Monitoring - Continued

At the Filter Usage screen, you can see the Renewal date (1) and percentage of filter remaining (2) as well as, the Used and Remaining time (as hrs) before the filter needs to be cleaned (3).

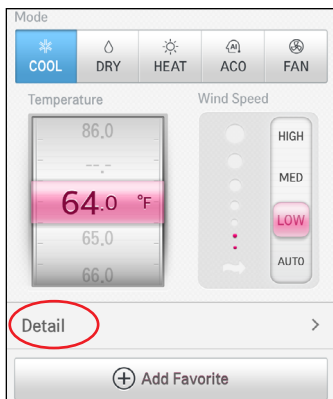
3. Tap OK to close the screen when done.
 - You will be returned to the mode screen.



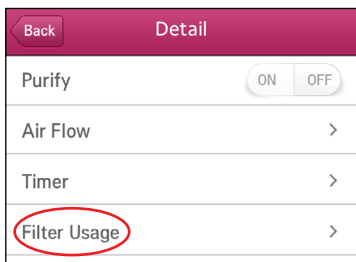
Setting Filter Renewal Date

You can set a reminder date that will alert you when it is time to clean your filter. Follow your unit owner's manual for suggested maintenance cycles (i.e., monthly or quarterly). To set up a renewal date follow the steps below.

1. From any of the mode screens, tap Detail.



Setting Filter Renewal Date - Continued



2. From the Detail screen, tap Filter Usage.

3. From the Filter Usage screen, tap the date window to the right of "Renewal date" (see 1 on previous page).

4. At the Filter renewal date screen, use the Year/Month/Day scrolls to choose the date that you want to renew/clean the filter.

5. Tap OK when done.

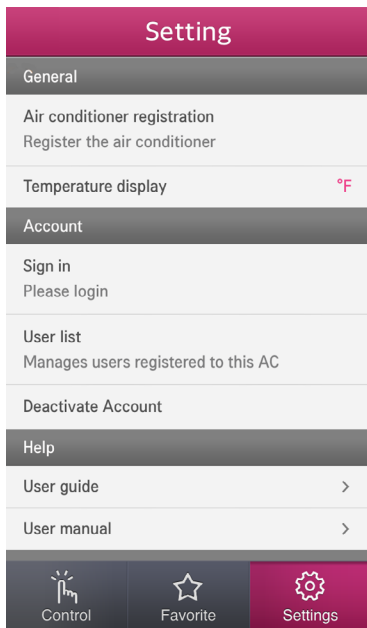
- The Filter Usage screen will display and will re-refresh the "Renewal date" window (see 1 on previous page.)



Additional Settings

The Setting screen of the Smart AC app provides additional setting choices that can be made by the user. This area allows for the following additional functionality:

- Registration of an air conditioner unit.
- Set temperature unit display (°F or °C).
- Sign in or log out of account by the user.
- A list of all users associated to the main (Master) account).
- Deactivation of the account.
- A user guide (which is an online website) and user manual (which is a PDF document).
- Displays the current software version installed on your smart-phone (not shown on screen below).
- Displays the wireless module version (not shown on screen below).
- Displays the open source license (not shown on screen below).



General Settings

Registering an Air Conditioner

1. From the Setting display page, under General, tap Air Conditioner registration.
2. Follow the prompts to register your air conditioner.
 - Refer back to “LG Smart AC Registration” on page 11 for more information

Changing the Temperature Unit Display

From the Settings page, tap the Temperature Display to change temperature display units between °F and °C.

Account Settings

This area of the page allows you to do the following:

- Login to your account.
- Sign out of your account (allowing a sign in on another device for example).
- Manage your registered users, through your Master account setup.
- Deactivate your account.

To login to your account:

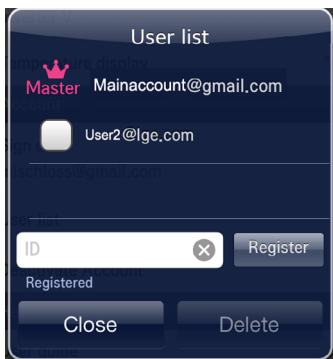
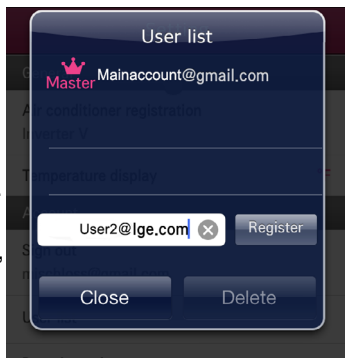
1. Tap Sign in.
2. Sign into your account in the usual manner.

Account Settings - Continued

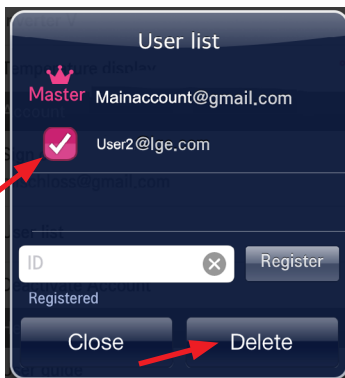
Adding/deleting a user to the account (registering):

Additional users can be added to your account, so that they in turn can access controls through the Smart AC app. Each user must go through online email verification and registration before you can add them to your user account. New user account registration is available at “LG Smart AC Registration” on page 11 of this manual.

1. From the Setting screen, tap User list.
2. At the User list screen, enter the new user's email account.
3. Tap Register.
 - If the user has been verified, their account email will then appear on the User list screen.



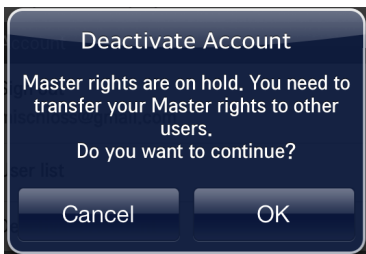
4. Delete: Tap the box to the left of the user account name. A checkmark will appear.
 - Tap Delete.



Account Settings - Continued

To deactivate the account:

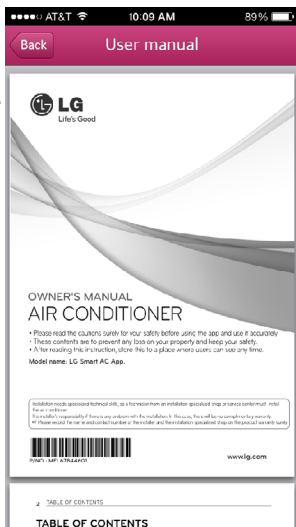
1. From the Setting screen, tap Deactivate Account.
2. If you are trying to delete the Master account, a prompt will appear confirming that you want to delete the account.
 - You will need to follow prompts to transfer the Master “rights” to another account holder before you can proceed.
3. Tap OK to continue with the deletion.



Help

The Setting screen provides users with two forms of available guidance. Through a dedicated website for LG Smart AC Help and through the activation of a User Manual that is loaded as a PDF document.

- Tap Help Guide to launch the dedicated website.
- Tap Help Manual to open the PDF manual.

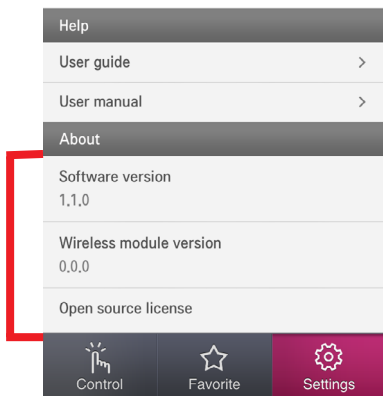


Account Settings - Continued

About

The Setting screen gives additional information regarding the software version, wireless module version and open source licensing. Simply tap any of these choices for further information about the app.

If you would like to get the source code of GPL, LGPL, MPL, and others which are developed with open source license and installed in this product, please visit <http://opensource.lge.com>.



Troubleshooting LG Smart AC App Operation

Refer to the troubleshooting procedures below, if the LG Smart AC app does not function as expected.

Smartphone Will Not Connect to Wireless Module

Main Function	Possible Cause	Solution
Cannot sign in to the app.	<ul style="list-style-type: none"> • Wireless connection needs a password. • Verify and confirm from email. 	<ul style="list-style-type: none"> • Check your carrier's wireless network and be sure you have access rights. • Check your email and confirm the app through the LG website.
Unable to sign up for membership.	Incorrect email address.	Make sure to provide accurate email in the format of: email@abc.com
Cannot connect LG Smart AC app to indoor unit.	<ul style="list-style-type: none"> • Indoor unit is turned off. • Wireless signal is not strong enough. • Wireless network which is connected to the indoor unit is turned off. • Something is wrong with the LG Smart AC app on the phone. • App lost communication with the indoor unit suddenly (dropped the connection). 	<ul style="list-style-type: none"> • Turn the indoor unit on. • Move to a place where the wireless connection is strong. • Turn on wireless connection. • Turn off the wireless on smartphone and then turn it back on. • Turn off smartphone and turn back on. • Sign into the LG Smart AC app again to establish communication with indoor unit.

Troubleshooting - Continued

Main Function	Possible Cause	Solution
The indoor unit is not connecting to the wireless.	<ul style="list-style-type: none"> • Wireless is turned off. • Internet cable is unplugged from the wireless connection. • Wireless network is situated too far from indoor unit to communicate. 	<ul style="list-style-type: none"> • Turn on the wireless network. • Plug internet cable into the wireless connection. • Install wireless closer to the indoor unit.
Smartphone device is not registering through the indoor unit.	<ul style="list-style-type: none"> • Wireless is turned off. • Internet cable is unplugged from the wireless connection. • Wireless network is situated too far from indoor unit to communicate. • Membership is not active. 	<ul style="list-style-type: none"> • Turn on the wireless network. • Plug internet cable into the wireless connection. • Install wireless router closer to the indoor unit. • Sign up for the LG Smart AC app through LG website.
Smart device is shown connected to the wireless but is not operating.	<ul style="list-style-type: none"> • WLAN indicator light is not illuminating on indoor unit. • Password provided to the wireless is not correct when registering the device. 	<ul style="list-style-type: none"> • Wireless is not stable and has disconnected communication between smart device and indoor unit. Re-establish communication through the app. • If password is not correctly provided, to the wireless when registering the device, the wireless connection may not operate properly. Re-enter the correct password.
Cannot delete the registered air conditioner.	After signing in, more than 2 air conditioner names are displayed on the list for the same unit.	Two or more air conditioners names are registered on one account. To delete one of the units, go to http://sg.marthing.com .

Troubleshooting - Continued

Main Function	Possible Cause	Solution
Previously registered account information has disappeared.	Check to see if product is registered with a new account.	If the same product is registered under a new account, the previous account and information will be deleted. The new account supersedes the old account information.
Cannot sign up, due to a duplication of existing account (user ID).	LG Electronics registration has occurred multiple times.	The membership sign up is managed by LG Electronics enterprise wide. If you have signed up previously, log in with your account information and then register the product. When attempting to sign up with the same ID, a message stating that the ID already exists will pop up.
Cannot control indoor unit with app.	Currently another user is controlling the unit.	The air conditioner control is given to the smartphone which is logged in first. The A/C cannot be controlled by multiple users at the same time. Once the user logs out, the A/C becomes available for other users.
	Network connection issues. Check the indicator.	Check the wireless connection status of the smartphone.
App closes unexpectedly.	The smartphone app suddenly shuts down.	The app may shut down once in a while due to memory limitations of the smartphone. Close any unnecessary apps that may be running in the background before using the LG Smart AC app to control the indoor unit.

Warning Message - Troubleshooting

The following warning messages may appear on the LG Smart AC app during use. Follow the guidelines below to troubleshoot.

Message	Possible Cause	Solution
<i>Product Registration</i>		
Product is not registered on server.	Product is not registered as yet.	Complete product registration.
New air conditioner will be registered. Previously registered information will be deleted. Do you want to continue?	Seen while registering again from the Settings area of the app.	Complete product registration again.
Wi-Fi on the smart phone is turned off. Try again after turning the Wi-Fi on.	Displayed while trying to register the product, however wireless is turned off on smartphone.	Turn on wireless setting on your smartphone.
Check if your product is in Wi-Fi mode. Wi-Fi access may not be stable depending on network quality.	After product searching, connection has failed.	<ul style="list-style-type: none"> • Check blinking WLAN light on the indoor unit. • Check if Smart AC module wireless number (LGE_AC-xx-xx-xx) can be found through smartphone. • From the Advanced Wi-Fi settings on the smartphone, make sure "Internet unavailable - Disconnect Wi-Fi automatically when the Internet is unavailable" is checked. (Note wording may be slightly different, depending on your particular smartphone.)
The wireless network setup information you entered is incorrect or connection to wireless network is not stable.	Network failure.	<ul style="list-style-type: none"> • Verify wireless connection information is correct. • Verify wireless connection.

Warning Message - Troubleshooting - Continued

Message	Possible Cause	Solution
Network connection is unstable.	Product registration has failed due to network error.	<ul style="list-style-type: none"> • Check network status of smartphone and product. • Try to register at a later time. • Start the registration again from the beginning. • The registration mode times out after 5 minutes automatically if not completed. User must restart the registration process.
Product has connected to the server. In order to continue normal operation, please re-sign in.	Server has disconnected from the product.	Message appears when the server is no longer in communication with the product. Log in again to establish communication.
<i>Communication Issues Between Smartphone & Server</i>		
Product is not connected to the server.	Product is not connected to server.	<ul style="list-style-type: none"> • Server connection may take time (slow). • Try to log in again. • Check wireless network.

Warning Message - Troubleshooting - Continued

Message	Possible Cause	Solution
Due to a network error or server load, the connection is unstable. Please try again in a few minutes.	Network environment not stable.	Try to log in again at a later time.
Network error. Check the connection.		<ul style="list-style-type: none"> • Server connection may take time (slow). • Try to log in again. • Check wireless network.
Session timed out due to inactivity.		<ul style="list-style-type: none"> • Try to log in again at a later time. • Turn air conditioner off, by powering the entire unit down and then powering back up. This will recycle the unit.
Command Fail due to network error.		<ul style="list-style-type: none"> • Check wireless network connection. • Turn air conditioner off, by powering the entire unit down and then powering back up. This will recycle the unit.

Data Guide

Open Source

If you would like to get the source code of GPL, LGPL, MPL, and others which are developed with open source license and installed in this product, please visit <http://opensource.lge.com>.

In addition to the source code, indications of all applicable license contents, copyright, and no responsibility on warranty can be downloaded.

If you request the open source code of the software that is installed on this product by sending email to opensource@lge.com within 3 years of purchasing this product, we will provide it on CD-ROM with a minimum cost of shipping and handling.

Notice

FCC (Certification)

This device complies with part 15 of the 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.

FCC WARNING: 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.

U.S. Regulatory Wireless Notice

This product emits radio frequency energy, but 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 with the antenna during normal operation is minimized.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance of 8 in. (20 cm) between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance 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 to radio 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.

End Product Labeling

The modular transmitter must be labeled with its own FCC ID number, and, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: BEJPCRCUdT2" (BEJPCRCUdT3) or "Contains FCC ID: BEJPCRCUdT2" (BEJPCRCUdT3). Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.

IC (Certification)

This device complies with RSS-210 of the Industry Canada Rules.

Operation is subject to the following two conditions:

1. This device may not cause Interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

IC Warning

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including Interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

IC Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm (8 in.) between the radiator and your body.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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LG Electronics Commercial Products Support
1-888-865-3026 USA
Follow the prompts for commercial A/C products.

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www.lghvac.com

UM-SmartAC-All-06-14