Maestro LIBERO HERO

LG Electronics' products have led the global air conditioner market with excellent performance and innovative design. MAESTRO a brilliant new addition to LG's lineup, is a high-performance air conditioner with a high COP inverter and excellent design.

- Eco Eye
- High Efficiency
- Optimized Cooling and Heating
- Allergy Free Filter
- Moisture Cooling
- Quick & Easy Installation
- Neo Plasma +Triple Filter

A perfect harmony of stylish design and innovative technology.

Inverter

S09AF SH0
S12AF SH0

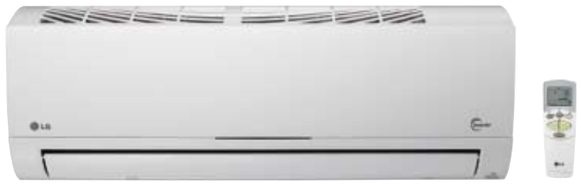
- Optimized Cooling and Heating
- Allergy Free Filter
- Triple Air Filter
- Quick & Easy Installation
- Low Noise
- Auto Cleaning

Cooling A
Heating A

Super Inverter

HERO

New



2.5~3.5kW

Specifications

Model	INDOOR UNIT / OUTDOOR UNIT		S09AF NH0 / CS09AF NH0 S09AF UH0	S12AF NH0 / CS12AF NH0 S12AF UH0
Cooling Capacity	(Min/Rating/Max)	W	890 / 2,500 / 3,700	900 / 3,500 / 4,040
		Btu/hr	3,040 / 8,500 / 12,600	3,070 / 11,900 / 13,800
Heating Capacity	(Min/Rating/Max)	W	890 / 3,200 / 4,100	890 / 4,010 / 5,100
		Btu/hr	3,040 / 10,900 / 14,000	3,070 / 13,700 / 17,400
Input	Cooling	W	620	1,060
	Heating	W	780	1,080
Running Current	Cooling	A	2.8	4.7
	Heating	A	3.5	4.8
Power Supply		ø,V, Hz	1, 220-240, 50	1, 220-240, 50
E.E.R	Cooling	W/W	4.03	3.3
		Btu/hr'W	13.65	11.26
C.O.P	Heating	W/W	4.10	3.71
ENERGY Efficiency Class	Cooling/Heating		A/A	A/A
Noise Level	Indoor(H/M/L/Sleep)	dB(A)±3	37/33/25/20	38/33/25/20
(SoundPress,1m)	Outdoor, Max	dB(A)±3	47	47
Air Flow	Indoor, Max	m^3/min(CFM)	11(388)	12(423)
	Outdoor, Max	m^3/min(CFM)	27(953)	27(953)
Dehumidification Rate		l/h	1.1	1.3
Refrigerant charge(R410A)		g	900	900
SVC Valve	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)
	Gas	mm(inch)	9.52(3/8)	9.52(3/8)
Dimensions	Indoor	mm	798*290*210	798*290*210
(W*H*D)	Outdoor	mm	717*483*230	717*483*230
Net Weight	Indoor	kg(lbs)	8.5(18.7)	8.5(18.7)
	Outdoor	kg(lbs)	28(61.7)	28(61.7)

Note: Specifications, design and feature are subject to change without prior notice.
CS09AF NH0, CS12AF NH0 → Compatible with Inverter Multi System

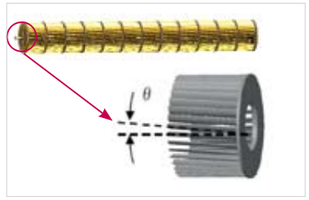
20 dB

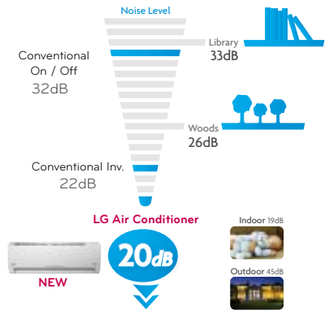
Low Noise Level

The indoor unit has a quiet operational noise level in the sleep mode to offer you peace and quiet for the bedroom or office. For example, LG model S09AF in sleep mode is only 20dB. In addition, the outdoor units have reduced vibration and noise thanks to a super quiet fan and motor.

Skew Fan, LG's new technology

LG Air Conditioner has Skew Fan, a patent-pending feature that was developed by LG Electronics. With tilted blades, Skew Fan greatly reduced interference with the heat exchanger and achieved extremely quiet cooling.





Optimized two way airflow for cooling and heating

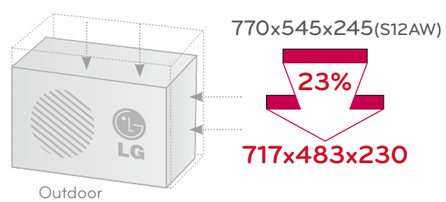
For cooling, the vane is adjusted upwards to let the cold air travel up and air condition a wider area. As for heating, the vane sends the heated air downwards to heat the space from the floor for a pleasant and balanced room temperature.

Quick & Easy Installation

Detachable bottom cover

LG's indoor unit has a detachable chassis bottom and a supporter, which makes installation possible without having to disassemble or support the unit. With LG's patented supporter, installation can be completed by just one person.

Compact outdoor unit



Outdoor

770x545x245(S12AW)

23%

717x483x230

Comfort Everyone in a Greener Way

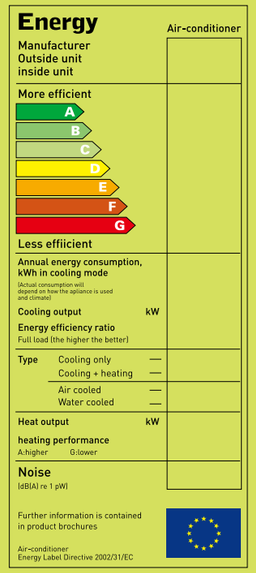
Pursuing a more comfortable life in today's complicated society has become second nature. However, we cannot afford to compromise the health of the environment for our own personal comfort. In order to achieve a balance between these two needs, LG provides products and solutions for those who seek comfortable lives in a greener way; comfort and eco-friendliness are our key values.

We at LG create optimal living and working conditions by enabling our customers to control their environment: including temperature, humidity and air quality to make them more comfortable. LG products are safe to operate and easy to manage and we provide our business partners with reliable and cost-effective solutions. Customer satisfaction motivates us to work closely and productively with our partners and we also offer a comprehensive after-sales and one-stop service system.

LG is committed to protecting our environment by enhancing the energy efficiency of our products and our business operations by adhering to eco-friendly principles. LG has been significantly investing in R&D and pursuing continuous innovation to enhance product energy efficiency. LG uses eco-friendly refrigerants in its air conditioners, which help save the ozone layer and all LG's products are produced under an 'Eco-Design' system, which ensures environmentally-friendly processes from production to disposal.

LG is fully committed to making the lives of our customers more comfortable in an environmentally sustainable way and we strive to ensure our business partners benefit from partnering with us. Our commitment and innovation enable us to uphold our key values - Green and Comfort. With commitment and innovation, we comfort everyone – our business partners and customers – in a greener way.

'Eco-Design, Energy Efficient,
Reduce CO2 Emissions'



Energy Efficiency Class of The Unit In Cooling Mode :

A	EER 〉 3.20
B	3.20 ≥ EER 〉 3.00
C	3.00 ≥ EER 〉 2.80
D	2.80 ≥ EER 〉 2.60
E	2.60 ≥ EER 〉 2.40
F	2.40 ≥ EER 〉 2.20
G	2.20 ≥ EER

Energy Efficiency Class of The Unit In Heating Mode :

A	COP 〉 3.60
B	3.60 ≥ COP 〉 3.40
C	3.40 ≥ COP 〉 3.20
D	3.20 ≥ COP 〉 2.80
E	2.80 ≥ COP 〉 2.60
F	2.60 ≥ COP 〉 2.40
G	2.40 ≥ COP

Design Award

International Forum Design

reddot design award

Good Design Mark

If you wish to reduce the amount of energy
your air conditioning consumes, you need LG inverter technology....

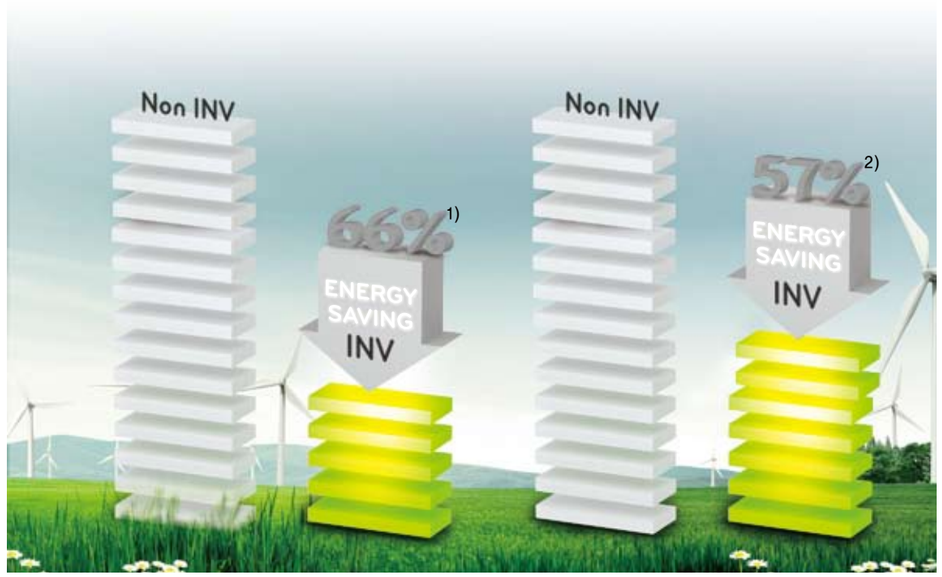
DC Inverter Technology

You may have heard the excitement about Inverter technology, LG Inverters are the pinnacle of energy efficiency due to the innovative operation. Rather than using a constant speed compressor, the LG Inverter system uses a variable speed compressor, which means the Cooling or Heating capacity of the Air Conditioning can be varied to suit Indoor conditions.
This makes the LG Inverter Units more economical & efficient to operate, produce less noise than standard counterparts and contain most superior features on the market. All LG Inverter units have 6 major benefits including premium features like

More Energy Saving

Save energy by up to 66% with LG's DC Inverter Technology

As a way to fight global warming, heat pump products are recently receiving a lot of attention for its energy-saving effect. In particular, inverter heat pump products have incomparably higher energy efficiency than constant-speed, non-inverter units. As a result, LG DC Inverter products can help you save up to 57% of the energy in cooling and 66% in heating operation. By using an energy-efficient inverter product, you can do your part in reducing CO2 emission.

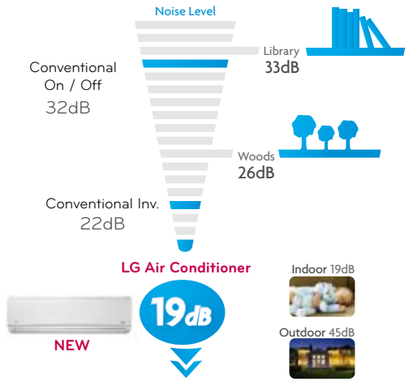


During Heating During Cooling

Inverter model : S12AQ & CS12AQ / Non Inverter model : S12AHP
1) Comparison of cumulative electricity consumption during heating to reach setting temperature (LG in-house comparison) Test conditions - Outdoor temperature : 4°C / Setting temperature : 23°C
2) Comparison of cumulative electricity consumption during 2 month of cooling (LG in-house comparison) Test conditions - Setting temperature : 27°C

More Silent

The Inverter technology, the BLDC Motor technology, and LG's unique new Skew Fan technology have achieved the world's lowest noise level of 19dB. Thus, the Sleep mode will allow pleasant sleeping.



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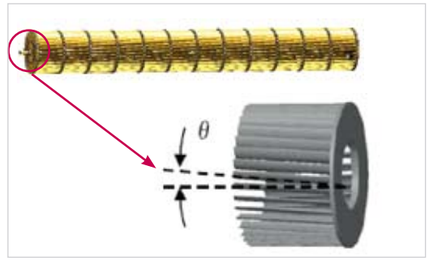


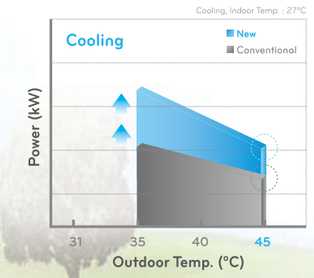
More Strong

LG's New DC Inverter has further enhanced the basic cooling and heating performance, eliminating your worries over the sizzling summer weather and the freezing winter weather. The cooling performance has improved by 15%, and the heating performance has been enhanced by 30%.

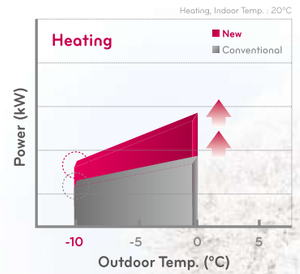
Enhanced maximum cooling and heating performance

- Despite the outside bad conditions in summer, the air conditioner with enhanced performance can secure cooling temperatures.
- Even at the outside temperature of -10°C, the air conditioner can secure heating capabilities.

15% improved
(Conventional contrast)



30% improved
(Conventional contrast)



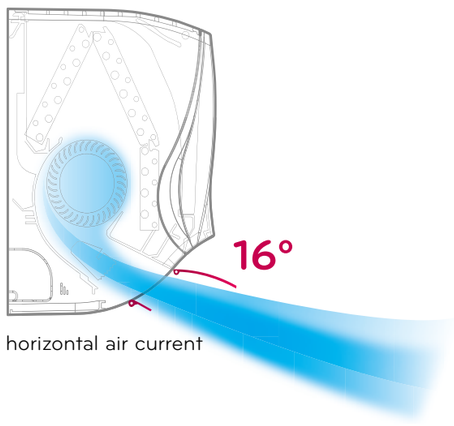
If you want customised climate control and airflow....

Optimised Airflow

Optimized two way airflow for cooling and heating

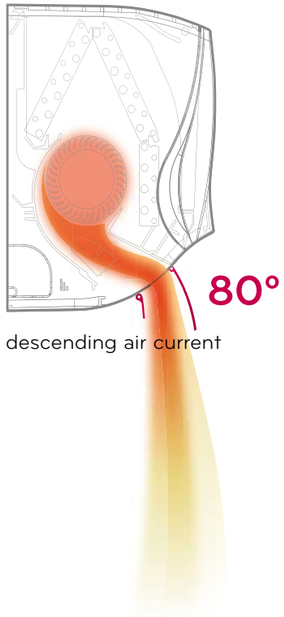
For cooling, the vane is adjusted upwards to let the cold air travel up and air condition a wider area. As for heating, the vane sends the heated air downwards to heat the space from the floor for a pleasant and balanced room temperature.

Cooling Mode



horizontal air current

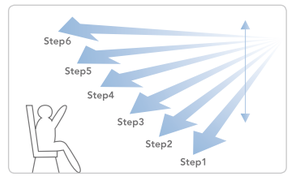
Heating Mode



descending air current

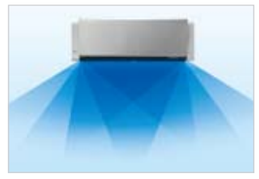
Horizontal Vane Step Control

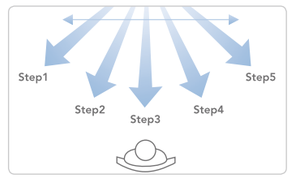
The direction of the horizontal vane can be adjusted from step 1 to step 6 and full auto swing. This function can cool specific areas much faster.



Vertical Louver Step Control (Optional)

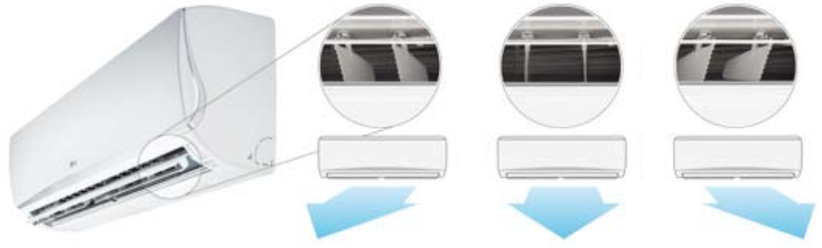
Direction of vertical louver can be adjusted from step 1 to step 5, left & right, and full auto swing. This function also allows the air conditioner to cool specific areas in short periods of time.

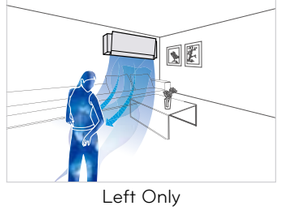




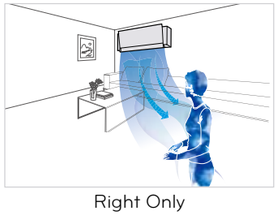
Stepping control

With vane that can be controlled by various steps, MAESTRO & LIBERO can send airflow in more precision and to a wider zone thus allowing the user to choose the location of indoor unit more freely.





Left Only

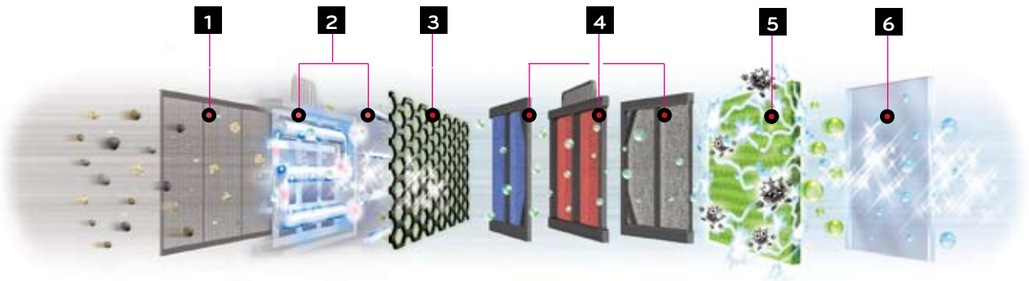


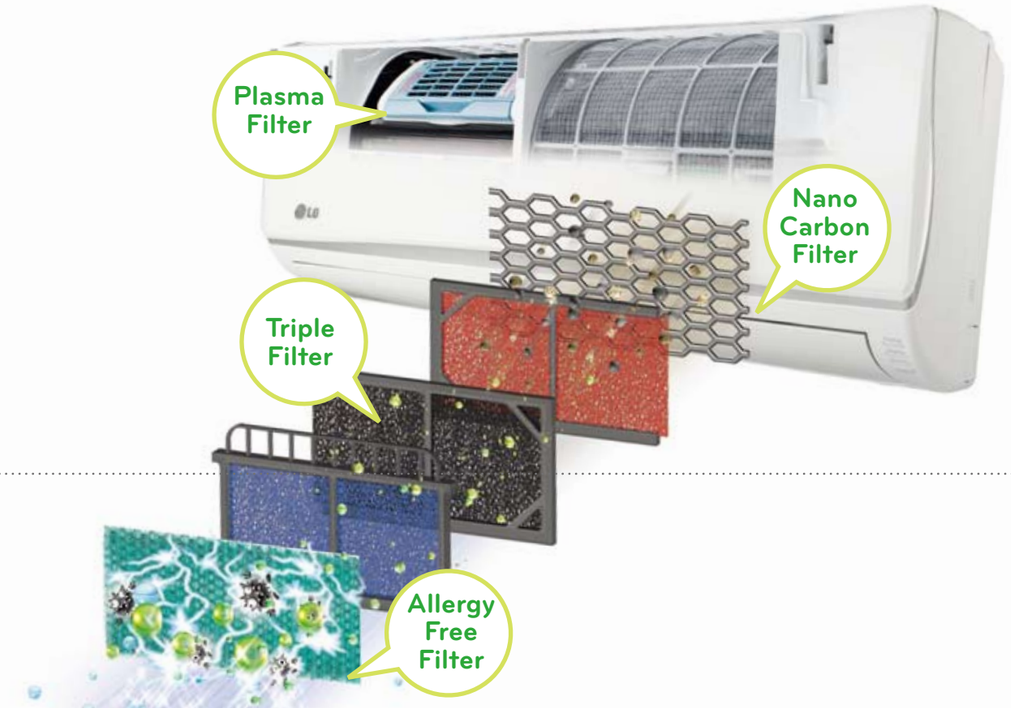
Right Only

If you care about your families health....

Air Purifying System

LG's unique Air Purifying system is equipped with 7 specialized filters in 5 separate stages to enhance its cleaning power. It reduces fine dust and mould, unpleasant odors and cigarette smoke as air passes each filter.





NEO-Plasma

1
2
3

Pre Filter

The antibacterial pre-filter primarily reduces large dust, mold and quilt dust.

Plasma Filter

The Plasma air purifying system was initially developed by LG not only reduction of microscopic contaminants and dust, but also removal of house mites, micro dust, and pet fur in order to reduce allergy and asthma symptoms.

Nano Carbon Filter

The Nano-size carbon filter removes fine odor particles at home for more fresh environment. Therefore, active Carbon filter will be replaced by Nano Carbon Ball filter. This product was also developed by LGE as promotion of the Household & Health Care and it is the first product using Nano technology all around the world. The state of the art Nano technology controls pore size, shape, and their distribution for deodorant effects.

What is Nano Carbon Ball?

Microscopic sized (1/1000000000) filter to ensure optimal filtration of odors.

4

Triple Filter

The triple filter consists of three specialized filters to reduce the symptoms associated with various organic compounds including formaldehyde. It also has the ability to remove unpleasant odors creating a more comfortable environment.

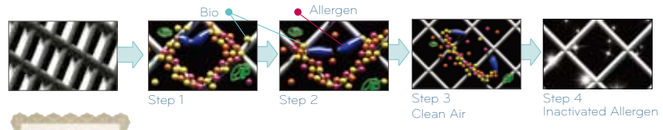
- Red filter removes stench in daily life such as smoke, fish-stink, food-smelling and foot-stink.
- Black filter removes the odor of construction ingredient such as formaldehyde.
- Blue filter removes the chemical substances such as a smell of fresh paint.

Allergy Care

5

Allergy Free Filter

Filter consists of enzyme that breaks down allergen, apatite, and organic/inorganic binder that attaches the enzyme to the filter. When the air passes the filter, allergen clings to the filter and like tiny pairs of scissors the enzymes cut allergen's protein to deactivate the allergen.



BAF Certification

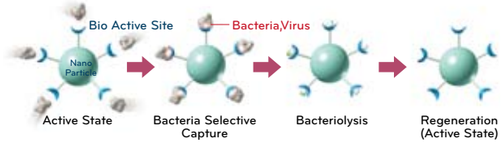
Recognised by the British Allergy Foundation and Allergy UK, the LG Air Conditioners have been proven to reduce allergens in the home,offering you healthy and comfortable climate control.

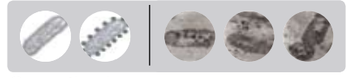
6

Test Result Certification

Nano Bio Fusion Filter

The Nano bio fusion filter allows its nano-size bio enzymes to directly penetrate through cell walls of bacteria and allergen to decompose into its cell nuclei.

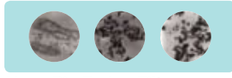




Conventional

Simply inactivation of bacteria

Destruction of bacteria but allowing part of them to survive



Nano Bio Fusion Filter

The bio enzyme destroys cell walls and nuclei of bacteria and allergens, thus completely kills bacteria

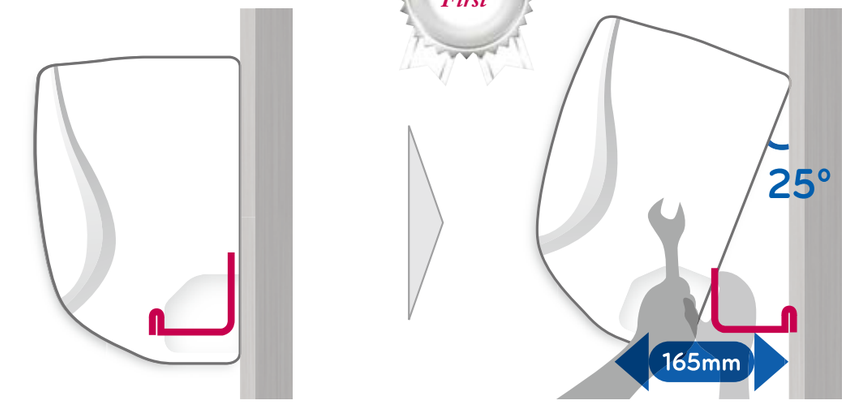
If you are worried about having to take time off work for installation....

Quick & Easy Installation

Quick & Easy Installation

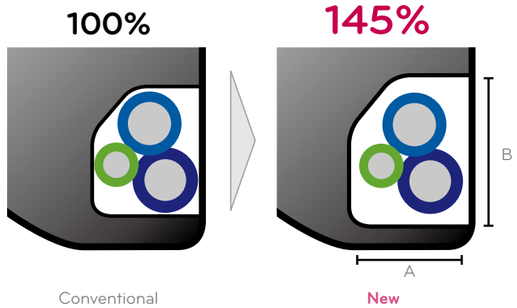
Installation support clip

Installation support clip makes installation easier



Bigger tubing space

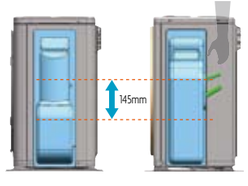
Wider installation space can make you installation much easier.



	LG	Co.A	Co.B	Co.C
A(mm)	67.7	50.0	60.0	45.0
B(mm)	72.0	80.0	70.0	70.0
%	116%	95%	100%	75%

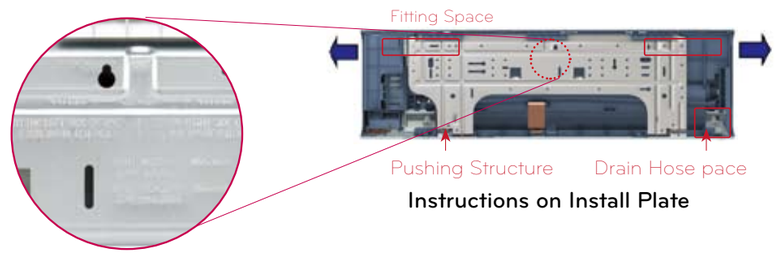
Elevated service valve

For convenient installation in places without balcony, location of service valve has been adjusted upward for workers to reach more easily.



Installation plate improvement

LG's installation plate is wider and modified to save installation time.
The instruction tip engraved in the plate also enables easy installation without having to look through the manual.



Instructions on Install Plate

Detachable bottom cover

LG's indoor unit has a detachable chassis bottom and a supporter, which makes installation possible without having to disassemble or support the unit. With LG's patented supporter, installation can be completed by just one person.

Hanging an indoor unit ⇨ **Separate chassis bottom** ⇨ **Lift up using the supporter** ⇨ **Piping** ⇨ **Wiring** ⇨ **Finishing**

Detachable bottom

support

Easy wiring

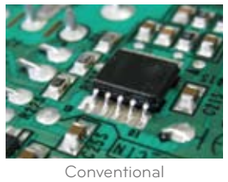
Conformal Coating Controller

High Reliability Conformal Coating

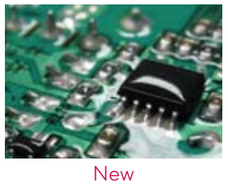
LG's controller is an silicon coating on the surface of the PCB. This ensures that the surface is more resistant to extreme environment condition.

1. Anti corrosion from salt
2. Anti malfunction from moisture, dust
3. Anti malfunction from insect

*Only Hero models



Conventional



New

If you are concern that it might be too complicated....

Convenient & Smart Control

Ez-Remote Controller

User Friendly & Modern Design and Easy use!!

Central Controller

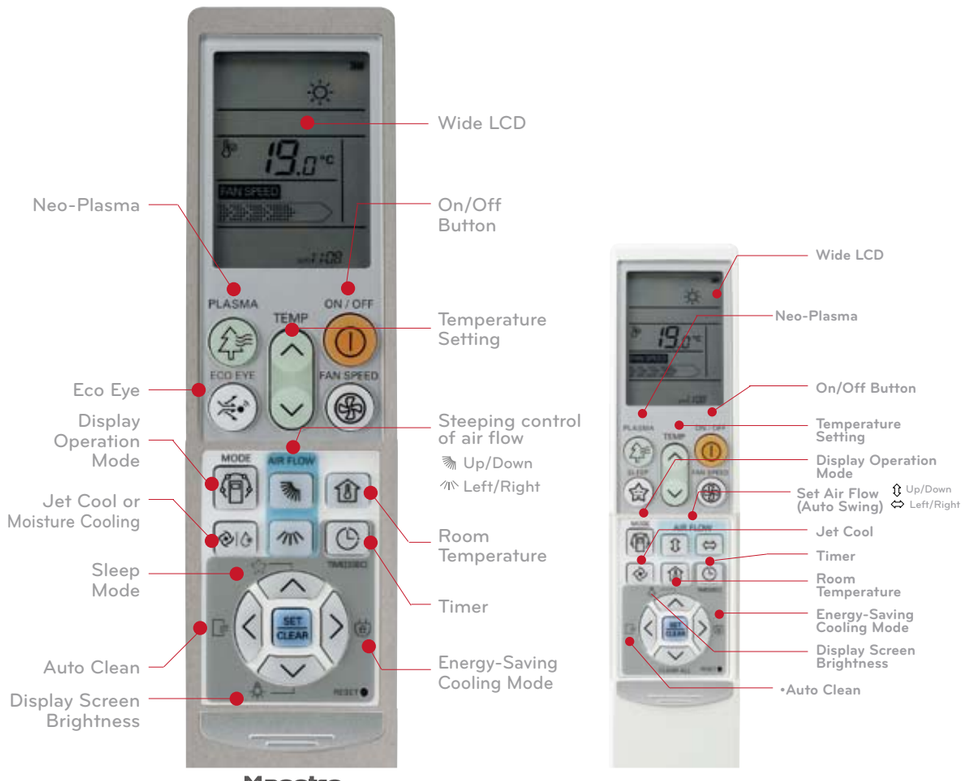
LG units come with advanced control options, take for instance the Central Controller. Designed for the commercial application, where multiple Air Conditioning units have been installed. You can control or fault find up to 16~2048 Air Conditioning units (via 8 separate controllers) individually or all together.

Easy Use

- Bigger size button
- Highlighted some buttons with different colors
- Easy to recognize functions with graphics

User Friendly Design

- Comfortable to grab
- Sliding type

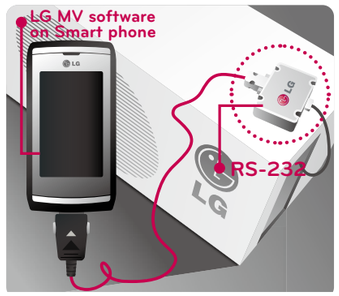


Smart phone Solution for Operation monitoring & Trouble shooting

The SmartPhone solution allows the user to accurately check the state of the inverter product, and to objectively estimate the pilot operation results. The SmartPhone enables much faster checking and allows it to be put in the pocket, compared with other notebooks which are difficult to use in the field and that requires a long booting time.

Smart phone connection

When faults have occurred, you can see the Error code during the check of indoor and outdoor units, select the Error code, and find solutions to each problem through Q&A. It is like the trouble shooting guide book embedded in the smart phone.



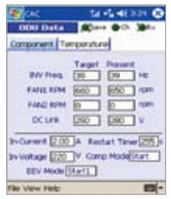
Wired

Bluetooth Module

Operation Monitoring

Select communication method and language

Check the installation status

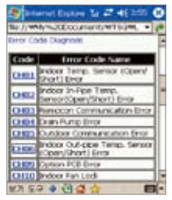


Compressor operation status

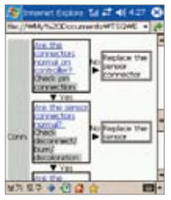
Check the indoor unit status

Operational status in line with the frequency

Troubleshooting on Smart phone



1. Select Error Code



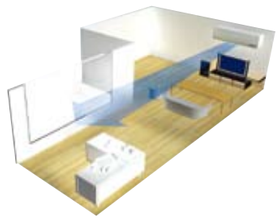
2. Easy Process

3. Service Action

For cool and healthy summer...

Jet Cool™

The Jet cool function allows quick cooling. In this mode, strong, cool air is blown at high speed for 30 minutes, until the room temperature reaches 18°C .



Sleep Mode

With one touch of the Sleep mode button, it automatically programs the Air Conditioning Unit to turn off, controls the fan speed and adjusts the set temperature for a more comfortable sleep.

Healthy Dehumidification

Dehumidification mode reduces uncomfortable humidity from the room without over cooling.

Indoor Temperature Distribution Chart

Conventional
Since the surrounding temperature is measured after the air from the unit is widely distributed, an accurate assessment of the air is not possible.

LG Healthy Dehumidification
By increasing the Vane Angle, a better assessment of the actual temperature is possible to prevent over cooling.

Auto Clean

A main cause of air conditioner odors is mould and bacteria that breed in the heat exchanger. The Auto Clean function dries the wet heat exchanger to help prevent mould and bacteria from breeding thus significantly reducing the old rag smell and saves you from frequent cleaning.

Conventional

LG Auto Clean

1 STEP

Dries the evaporator with gentle low noise air from the fan by removing any remaining moisture.

Pressing the Auto Clean button will activate the automatic cleaning function after the cooling operation.

2 STEP

Removes moulds through the Neo Plasma system.

Only the fan will operate to dry the inner part of the air conditioner in just 30 minutes.

For warm and safe winter...

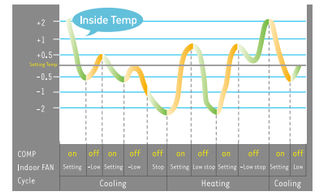
Hot Start Function

During starting of the unit in the heating mode it prevents cold air blowing from the unit. It starts the indoor fan only after indoor unit pipe temperature reaches a preset value (28°C). When indoor unit pipe temperature reaches 28°C, then for initial 1 minute the indoor fan runs at a low speed and after that at the setting speed.

Auto Changeover

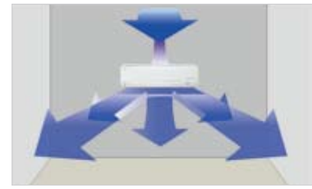
With heat pump model,cooling and heating operation is changed automatically on the base of setting temp.

- **Initial Setting Temp:18°C Memorize final setting temp.**



4 Way Auto Swing

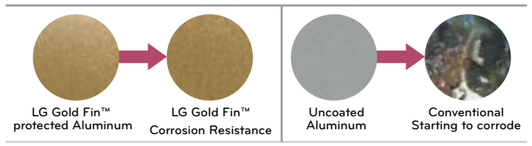
Most LG air conditioners automatically distribute the air to eliminate hot and cold patches to keep the room at a more constant temperature.



Anti Corrosion Gold Fin™

LG's Gold Fin is an anti corrosion coating on the surface of the heat exchanger. This ensures that the surface is more resistant to corrosion and increases the durability to help the exchanger perform like new for a much longer period.

Salt Spray Test for 15 Days



After 15 Days [Test Standard : ASTM B-117, KS D9502]

Using an outdoor case made of galvanised steel, a metallic grill and electrostatic powder coated screws, LG outdoor units are built to last.

Test Result of Screw & Discharging Grill

Air Quality Control

- NEO Plasma Air Purifying System
- Triple Air Filter
- Auto Cleaning
- Smart Clean
- One-Touch Air Filter (Anti-Bacteria)

Airflow Control

- Jet Cool
- 4-Way Auto Swing
- 3-Dimensional Air Flow
- Vertical Auto Swing
- 4-Way Air Deflection

Comfort Control

- Low Noise
- Auto Changeover
- Healthy Dehumidification
- Hot Start (Heat pump Only)

Reliability Control

- Anti Corrosion Gold Fin
- Auto Restart

Timers

- Sleep Mode Auto Operation
- 24-Hour ON/OFF Setting Timer

Convenient Function

- Wireless Remote Controller
- Reversible-Open-Grille
- Slide-Out Chassis

Special Function

- Smart Saving With Eco Eye
- Optimized Cooling and Heating
- Allergy Free Filter
- Moisture Cooling
- Quick & Easy Installation
- Compatible with Inverter Multi System
- Smart phone Solution for Operation monitoring & Trouble shooting