



ENGLISH

USER GUIDE

LG-P990hN



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www.lg.com

Bluetooth QD ID B017628



LG-P990hN User Guide - English

- Some of the contents of this manual may not apply to your phone depending on your phone's software and your service provider.
- This handset is not recommended for the visually impaired because of its touch-screen keypad.
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For Your Safety

Important Information

This user guide contains important information on the use and operation of this phone. Please read all the information carefully for optimal performance and to prevent any damage to or misuse of the phone. Any changes or modifications not expressly approved in this user guide could void your warranty for this equipment.

Before You Start

Safety Instructions

 **WARNING**

To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as the bathroom, swimming pool, etc.

Always store your phone away from heat. Never store your phone in settings that may expose it to temperatures less than 32°F (0°C)

or greater than 104°F (40°C), such as outside during extreme weather conditions or in your car on a hot day. Exposure to excessive cold or heat will result in malfunction, damage and/or catastrophic failure.

Be careful when using your phone near other electronic devices.

RF emissions from your mobile phone may affect nearby in adequately shielded electronic equipment. You should consult with manufacturers of any personal medical devices such as pacemakers and hearing aides to determine if they are susceptible to interference from your mobile phone.

Turn off your phone in a medical facility or at a gas station. Never place your phone in a microwave oven as this will cause the battery to explode.

For Your Safety

Safety Information

Read these simple guidelines. Breaking the rules may be dangerous or illegal. Further detailed information is given in this user guide.

- Never use an unapproved battery since this could damage the phone and/or battery and could cause the battery to explode.
- Never place your phone in a microwave oven as it will cause the battery to explode.
- Do not dispose of your battery by fire or with hazardous or flammable materials.
- Make sure that no sharpedged items come into contact with the battery. There is a risk of this causing a fire.
- Store the battery in a place out of reach of children.
- Be careful that children do not swallow any parts such as rubber plugs (earphone, connection parts of the phone, etc.). This could cause asphyxiation or suffocation.
- Unplug the power cord and charger during lightning storms to avoid electric shock or fire.
- When riding in a car, do not leave your phone or set up the hands-free kit near to the air bag. If wireless equipment is improperly installed and the air bag is activated, you may be seriously injured.
- Do not use a hand-held phone while driving.
- Do not use the phone in areas where its use is prohibited. (For example: aircraft).
- Do not expose the battery charger or adapter to direct sunlight or use it in places with high humidity, such as a bathroom.
- Never store your phone in temperatures less than -4°F (-20°C) or greater than 122°F (50°C).

- Do not use harsh chemicals (such as alcohol, benzene, thinners, etc.) or detergents to clean your phone. There is a risk of this causing a fire.
- Do not drop, strike, or shake your phone severely. Such actions may harm the internal circuit boards of the phone.
- Do not use your phone in high explosive areas as the phone may generate sparks.
- Do not damage the power cord by bending, twisting, pulling, or heating.
- Do not use the plug if it is loose as it may cause a fire or electric shock.
- Do not place any heavy items on the power cord. Do not allow the power cord to be crimped as it may cause fire or electric shock.
- Do not handle the phone with wet hands while it is being charged. It may cause an electric shock or seriously damage your phone.
- Do not disassemble the phone.
- Do not place or answer calls while charging the phone as it may short-circuit the phone and/or cause electric shock or fire.
- Only use the batteries, antennas, and chargers provided by LG. The warranty will not be applied to products provided by other suppliers.
- Only authorized personnel should service the phone and its accessories. Faulty installation or service may result in accidents and consequently invalidate the warranty.
- Do not hold or let the antenna come in contact with your body during a call.
- An emergency call can be made only within a service area. For an emergency call, make sure that you are within a service area and that the phone is turned on.

For Your Safety

- Use accessories, such as earphones and headsets, with caution. Ensure that cables are tucked away safely and do not touch the antenna unnecessarily.

Memory card information and care

- Always insert/ remove the memory card while the handset power is off. If you remove it while the power is on, it may be damaged.
- If a damage cannot be fixed, format the memory card.
- The memory card cannot be used for recording copyright protected data.
- Do not write forcefully on the memo area.
- Carry and store the memory card in its case.
- Do not allow the memory card to get wet.
- Do not leave the memory card in extremely hot location.

- Do not disassemble or modify the memory card.

FCC RF Exposure Information

WARNING

Read this information before operating the phone.

In August 1996, the Federal Communications Commission (FCC) of the United States, with its action in Report and Order FCC 96-326, adopted an updated safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies.

The design of this phone complies with the FCC guidelines and these international standards.

CAUTION

Use only the supplied and approved antenna. Use of unauthorized antennas or modifications could impair call quality, damage the phone, void your warranty and/or result in violation of FCC regulations. Do not use the phone with a damaged antenna. If a damaged antenna comes into contact with skin, a minor burn may result. Contact your local dealer for a replacement antenna.

Body-worn Operation

This device was tested for typical body-worn operations with the back of the phone kept 2 cm (0.79 inches) between the user's body and the back of the phone. To comply with FCC RF exposure requirements, a minimum separation distance of 2 cm (0.79 inches) must be maintained between the user's body and the back of the phone. Third-party belt-clips, holsters,

and similar accessories containing metallic components should not be used.

Body-worn accessories that cannot maintain 2 cm (0.79 inches) separation distance between the user's body and the back of the phone, and have not been tested for typical bodyworn operations may not comply with FCC RF exposure limits and should be avoided.

Vehicle Mounted External Antenna (optional, if available)

A minimum separation distance of 20cm (8 inches) must be maintained between the user/bystander and the vehicle mounted external antenna to satisfy FCC RF exposure requirements. For more information about RF exposure, visit the FCC website at www.fcc.gov

For Your Safety

FCC Part 15 Class B Compliance

This device and its accessories comply with part 15 of FCC rules and ICES-003 Class B digital apparatus requirements for Industry Canada.

Operation is subject to the following two conditions:

(1) This device and its accessories may not cause harmful interference, and (2) this device and its accessories must accept any interference received, including interference that may cause undesired operation.

Cautions for Battery

- Do not disassemble.
- Do not short-circuit.
- Do not expose to high temperature: 140°F (60°C).
- Do not incinerate.

Battery Disposal

- Please dispose of your battery properly or bring to your local wireless carrier for recycling.
- Do not dispose in fire or with hazardous or flammable materials.

Adapter (Charger) Cautions

- Using the wrong battery charger could damage your phone and void your warranty.
- The adapter or battery charger is intended for indoor use only.

Do not expose the adapter or battery charger to direct sunlight or use it in places with high humidity, such as the bathroom.

Avoid damage to your hearing

- Damage to your hearing can occur if you are exposed to loud sound for long periods of time. We therefore recommend that you do not turn on or off the handset close to your ear. We also recommend that music and call volumes are set to a reasonable level.
- If you are listening to music whilst out and about, please ensure that the volume is at a reasonable level so that you are aware of your surroundings. This is particularly imperative when attempting to cross the street.

Safety Guidelines

TIA Safety Information

Provided herein is the complete TIA Safety Information for Wireless Handheld phones. Inclusion of the text covering Pacemakers, Hearing Aids, and Other Medical Devices is required in the owner's manual for CTIA Certification. Use of the remaining TIA language is encouraged when appropriate.

Exposure to Radio Frequency Signal

Your wireless handheld portable telephone is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals. In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones.

Those guidelines are consistent with the safety standards previously

set by both U.S. and international standards bodies:

ANSI C95.1 (1992) *

NCRP Report 86 (1986)

ICNIRP (1996)

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

* American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

The design of your phone complies with the FCC guidelines (and those standards).

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Phone Operation

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Tips on Efficient Operation

For your phone to operate most efficiently:

- Do not touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

Driving

Check the laws and regulations on the use of wireless phones in the areas where you drive. Always obey them. Also, if using your phone while driving, please:

- Give full attention to driving
 - driving safely is your first responsibility;
- Use hands-free operation, if available;
- Pull off the road and park before making or answering a call if driving conditions so require.

Electronic Devices

Most modern electronic equipment is shielded from RF signals.

However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

Safety Guidelines

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6") inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker.

These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six inches from their pacemaker when the phone is turned ON;
- Should not carry the phone in a breast pocket.
- Should use the ear opposite the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, turn your phone OFF immediately.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Health Care Facilities

Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may use equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle.

You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Turn your phone OFF before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a 'blasting areas or in areas posted: 'Turn off twoway radio'. Obey all signs and instructions.

Potentially Explosive Atmosphere

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, marked clearly. Potential areas may include: fueling areas (such as gasoline stations); below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas

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where the air contains chemicals or particles (such as grain, dust, or metal powders); and any other area where you would normally be advised to turn off your vehicle engine.

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Safety Information

Please read and observe the following information for safe and proper use of your phone and to prevent damage. Also, keep the user guide in an accessible place at all the times after reading it.

Charger and Adapter Safety

- The charger and adapter are intended for indoor use only.

Battery Information and Care

- Please dispose of your battery properly or take it to your local wireless carrier for recycling.
- The battery does not need to be fully discharged before recharging.
- Use only LG-approved chargers specific to your phone model since they are designed to maximize battery life.
- Do not disassemble or impact the battery as it may cause electric shock, short-circuit, and fire. Store the battery in a place out of reach of children.
- Keep the battery's metal contacts clean.

- Replace the battery when it no longer provides acceptable performance. The battery can be recharged several hundred times before replacement.
- Recharge the battery after long periods of non-use to maximize battery life.
- Battery life will vary due to usage patterns and environmental conditions.
- Use of extended backlighting, Media Net Browsing, and data connectivity kits affect battery life and talk/standby times.
- The self-protection function of the battery cuts the power of the phone when its operation is in an abnormal state. In this case, remove the battery from the phone, reinstall it, and turn the phone on.
- Actual battery life will depend on network configuration, product settings, usage patterns, battery and environmental conditions.

Explosion, Shock, and Fire Hazards

- Do not put your phone in a place subject to excessive dust and keep the minimum required distance between the power cord and heat sources.
- Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it is dirty.
- When using the power plug, ensure that it is firmly connected. If it is not, it may cause excessive heat or fire.
- If you put your phone in a pocket or bag without covering the receptacle of the phone (power plug pin), metallic articles (such as a coin, paperclip or pen) may shortcircuit the phone. Always cover the receptacle when not in use.

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- Do not short-circuit the battery. Metallic articles such as a coin, paperclip or pen in your pocket or bag may short-circuit the + and – terminals of the battery (metal strips on the battery) upon moving. Short-circuit of the terminal may damage the battery and cause an explosion.
- When the phone is not used for a long period time, store it in a safe place with the power cord unplugged.
- Using the phone in proximity to receiving equipment (i.e., TV or radio) may cause interference to the phone.

General Notice

- Using a damaged battery or placing a battery in your mouth may cause serious injury.
- Do not place items containing magnetic components such as a credit card, phone card, bank book or subway ticket near your phone. The magnetism of the phone may damage the data stored in the magnetic strip.
- Talking on your phone for a long period of time may reduce call quality due to heat generated during use.
- Do not use the phone if the antenna is damaged. If a damaged antenna contacts skin, it may cause a slight burn. Please contact an LG Authorized Service Centre to replace the damaged antenna.
- Do not immerse your phone in water. If this happens, turn it off immediately and remove the battery. If the phone does not work, take it to an LG Authorized Service Centre.
- Do not paint your phone.
- The data saved in your phone might be deleted due to careless use, repair of the phone, or upgrade of the software. Please

backup your important phone numbers. (Ring tones, text messages, voice messages, pictures, and videos could also be deleted.) The manufacturer is not liable for damage due to the loss of data.

- When you use the phone in public places, set the ring tone to vibration so as not to disturb others.
- Do not turn your phone on or off when putting it near your ear.

FDA Consumer Update

The U.S. Food and Drug Administration Centre for Devices and Radiological Health Consumer Update on Mobile Phones.

1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof,

however, that wireless phones are absolutely safe. Wireless phones emit low levels of radio frequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the standby mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

Safety Guidelines

2. What is the FDA's role concerning the safety of wireless phones?

Under the law, the FDA does not review the safety of radiation emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radio frequency energy (RF) at a level that is hazardous to the user. In such a case, the FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace, or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, the FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing of wireless phones with the best possible information on possible effects of wireless phone use on human health.

The FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Occupational Safety and Health Administration (Administración de la seguridad y salud laborales)

- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities, as well.

The FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. The FCC relies on the FDA and other health agencies for safety questions about wireless phones.

The FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times

lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

3. What kinds of phones are the subject of this update?

The term 'wireless phone' refers here to handheld wireless phones with builtin antennas, often called 'cell', 'mobile', or 'PCS' phones. These types of wireless phones can expose the user to measurable radiofrequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by FCC safety guidelines that were developed with the advice of the FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly

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with increasing distance from the source. The so-called 'cordless phones,' which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures far below the FCC safety limits.

4. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radiofrequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals

that had been genetically engineered or treated with cancer causing chemicals so as to be predisposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health. Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures.

However, none of the studies can answer questions about longterm exposures, since the average period of phone use in these studies was around three years.

5. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer.

This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6. What is the FDA doing to find out more about the possible health effects of wireless phone RF?

The FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radiofrequency energy (RF). The FDA has been a leading participant in the

Safety Guidelines

World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The project has also helped develop a series of public information documents on EMF issues. The FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. The FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA funded research is conducted through contracts with independent investigators. The initial research will include both laboratory studies and studies of wireless phone users.

The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. How can I find out how much radiofrequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit radiofrequency energy (RF) exposures. The FCC established these guidelines in consultation with the FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National

Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects. Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (<http://www.fcc.gov/oet/rfsafety>) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has the FDA done to measure the radiofrequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radiofrequency energy (RF) exposure from wireless phones and other wireless handsets

with the participation and leadership of FDA scientists and engineers. The standard, 'Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques,' sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissuesimulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

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9. What steps can I take to reduce my exposure to radiofrequency energy from my wireless phone?

If there is a risk from these products - and at this point we do not know that there is - it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radiofrequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure. If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected

to a remote antenna. Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radiofrequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure. Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For

example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless phone interference with medical equipment?

Radiofrequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, the FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of

Medical Instrumentation (AAMI). The final draft, a joint effort by the FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. The FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a 'compatible' phone and a 'compatible' hearing aid at the same time. This standard was approved by the IEEE in 2000. The FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference

Safety Guidelines

be found to occur, the FDA will conduct testing to assess the interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to the following resources:
FDA web page on wireless phones
(<http://www.fda.gov/>)

Federal Communications
Commission (FCC) RF Safety
Program (<http://www.fcc.gov/oet/rfsafety>)

International Commission on Non-
ionizing Radiation Protection
(<http://www.icnirp.de>)

World Health Organization (WHO)
International EMF Project
(<http://www.who.int/emf>)

National Radiological Protection
Board (UK)
(<http://www.nrpb.org.uk/>)

10 Driver Safety Tips

Your wireless phone gives you the powerful ability to communicate by voice almost anywhere, anytime. An important responsibility accompanies the benefits of wireless phones, one that every user must uphold. When operating a car, driving is your first responsibility.

When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips:

- 1.** Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.

2. When available, use a handsfree device. A number of handsfree wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can reach it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voicemail answer it for you.
4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a “to-do” list while driving a car, you are not watching where you are going. It is common sense. Don’t get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip — dial only a few numbers, check the road and your mirrors, then continue.

Safety Guidelines

7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix; they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations — with your phone at your side, help is only three numbers away. Dial 911 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!
9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a “Good Samaritan” in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 911 or other local emergency number, as you would want others to do for you.
10. Call roadside assistance or a special wireless nonemergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you can still use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle, you know to be stolen,

call roadside assistance or other special non-emergency wireless number.

For more information, please call to 888-901-SAFE, or visit our website www.wow-com.com

Consumer Information on SAR (Specific Absorption Rate)

This Model Phone Meets the Government's Requirements for Exposure to Radio Waves.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on

standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg.

* Tests for SAR are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands.

Although SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. Because the phone is designed to operate at multiple power levels to use only the power

Safety Guidelines

required to reach the network, in general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model.

The highest SAR value for this model phone when tested for use at the ear is 0.53 W/kg and when worn on the body, as described in this user's manual, is 1.24 W/kg. (Body-worn measurements differ among phones models, depending upon available accessories and FCC/IC requirements.) While there may be differences between SAR levels of various phones and at various positions, they all meet the

government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/ea/fccid> after searching on FCC ID: BEJP990HN.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) website at <http://www.ctia.org/>

* In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public

and to account for any variations in measurements.

- * Product meets current FCC & IC Radio Frequency Exposure Guidelines.

FCC ID: BEJP990HN

IC ID: 2703C-P990HN

Important notice

Please check to see if any problems you have encountered with your phone are described in this section, before taking the phone in for service or calling a service representative.

1. Phone memory

When available space on your phone memory is less than 10%, your phone can't receive new messages. You will need to check your phone memory and delete some data, such as applications or messages to make more memory available.

To manage the application:

- 1 On the home screen, touch **Applications** tab and select **Settings > Applications > Manage applications**.
- 2 When all applications appear, scroll and select the application you want to uninstall.
- 3 Tap **Uninstall** and touch OK to uninstall application you desired.

2. Optimising battery life

You can extend your battery's life by turning off features that you don't need constantly running in the background. You can also monitor how applications and system resources consume battery power.

To extend the life of your battery:

- Turn off radio communications that you aren't using. If you aren't using Wi-Fi, Bluetooth or GPS, turn them off.
- Turn down screen brightness and set a shorter screen timeout.
- Turn off automatic syncing for Gmail, Calendar, Contacts and other applications.
- Some applications you have downloaded may cause your battery's life to be reduced.

To check the battery charge level:

- 1 On the home screen, touch **Applications** tab and select **Settings > About phone > Status**.

- 2 The battery status (charging, discharging) and level (as a percentage of fully charged) are displayed at the top of the screen.

To monitor and control what uses the battery:

- 1 On the home screen, touch **Applications** tab and select **Settings > About phone > Battery use**.
- 2 The top of the screen displays battery usage time. This is either how long since your phone was last connected to a power source or if connected to a power source, how long since your phone was last run on battery power. The body of the screen lists applications or services using battery power from greatest amount to least.

3. Installing an open source OS

If you install an open source OS on your phone and you do not use the OS provided by the manufacturer, this may cause your phone to malfunction.

 **WARNING**

If you install and use an OS other than the one provided by the manufacturer, your phone is no longer covered by the warranty.

Important notice

WARNING

To protect your phone and personal data, download applications only from trusted sources, such as Android Market. If some applications are not properly installed on your phone, your phone may not work properly or serious errors may occur. You will need to uninstall those applications plus all of its data and settings from the phone.

4. Using unlock pattern

Set unlock pattern to secure your phone.

You can draw your own unlock pattern by connecting four or more dots.

If you set a pattern, the phone screen will lock. To unlock the phone, draw the pattern you have set on the screen.

Caution: When you set an unlock pattern, you need to create your Gmail account first.

WARNING

Precautions to take when using the Pattern Lock

It is very important that you remember the unlock pattern you set. You have 5 opportunities to enter your unlock pattern, PIN or password. If you have used all five chances, you can try again after 30 seconds.

If you can't recall your unlock pattern:

If you have tried to log on to your Google account on the phone and failed to use correct pattern five times, tap the Forgot pattern button. You will then be required to sign in with your Google account to unlock your phone.

5. Connecting to Wi-Fi networks

To use Wi-Fi on your phone, you need to access a wireless access point or “hotspot.” Some access points are open and you can simply connect to them. Others are hidden or implement other security features, so you must configure your phone to connect to them.

Turn off Wi-Fi when you're not using it to extend the battery life.

To turn Wi-Fi on and connect to a Wi-Fi network:

- 1 On the home screen, touch **Applications** tab and select **Settings > Wireless & networks > Wi-Fi settings**.
- 2 Touch **Wi-Fi** to turn it on and begin scanning for available Wi-Fi networks.
 - List of available Wi-Fi networks is displayed. Secured networks are indicated by a lock icon.
- 3 Touch a network to connect to it.
 - If the network is open, you are prompted to confirm that you want to connect to that network by touching **Connect**.
 - If the network is secured, you are prompted to enter a password or other credentials. (Ask your network administrator for details.)
- 4 The status bar displays icons that indicate Wi-Fi status.

Important notice

6. Opening and switching applications

Multi-tasking is easy with Android because open applications keep running even when you open another application. There's no need to quit an application before opening another, use and switch among several open applications. Android manages each application, stopping and starting them as needed, to ensure idle applications consume necessary resources only.

To stop the application:

- 1 On the home screen, touch **Applications** tab and select **Settings > Applications > Manage applications**.
- 2 Scroll to the desired application and touch **Force Stop** to stop using it.

TIP!

Getting back to a recent Application

Touch and hold the **Home** key. A screen will appear listing the applications you have used recently.

7. Installing the LG PC suite on your PC

To synchronize your phone with your PC via a USB cable, you need to install the LG PC suite program on your PC.

You can download this program from the LG website (<http://www.lg.com>). Go to <http://www.lg.com> and select your region, country & language. Visit the LG website for more information on installing and using the program. The PC suite is saved in the microSD memory card found as part of the in-box contents and you can simply copy it to your PC.

LG PC SUITE

The LG PC Suite IV is a program that helps you connect your mobile phone to a PC using a USB data communication cable, so that you can use the functions of your mobile phone from your PC.

Major functions of the LG PC Suite IV

- Create, edit and delete phone data conveniently
- Synchronise data from a PC or phone (contacts, calendar, message (SMS), bookmark)
- Transfer multimedia files (photo, video, music) conveniently with a simple drag & drop between your PC and your phone
- Transfer messages from your phone to your PC

- S/W update without losing your data

LG-P990hN does not support:

- PC Connection via Bluetooth
- To-do in Calendar
- Java Application

For more information, please refer to the user's guide for LG PC Suite IV. This can be found in the Help menu after installing LG PC Suite IV.

To Install the LG PC Suite to your PC

- 1 Insert the microSD memory card into your phone. (It may already be inserted in your phone.)
- 2 Before connecting the USB data cable, make sure that the **Mass storage** mode is enabled on your phone. (On the **Applications** tab, choose **Settings > Applications > Development > uncheck USB debugging.**)

Important notice

- 3 Connect your phone to your PC using the USB data cable.
- 4 Touch **Turn on USB storage**.
 - (1) You can view the mass storage content on your PC and transfer the files.
 - (2) Copy the 'LGPCSuiteIV' folder on your mass storage device to your PC.
 - (3) Run 'LGInstaller.exe' file on your PC and follow the instructions.

* When LG PCSuite IV installation is completed, disable **Mass storage** mode to run the LG PCSuite IV.

NOTE: Please do not remove or delete other program file installed on your memory card as this may cause damage to the pre-installed applications on your phone.

8. Connecting your phone to a computer via USB

To transfer files in your microSD card using USB devices:

- 1 Install your microSD card in your phone. (It may already be inserted on your phone.)
- 2 Before connecting the USB data cable, make sure that the **Mass storage** mode is enabled on your phone. (On the **Applications** tab, choose **Settings > Applications > Development > uncheck USB debugging**.)
- 3 Use the USB cable with your phone to connect the phone to a USB port on your computer. Touch **Turn on USB storage**. You will receive notification that the USB is connected.

When the phone is connected as USB storage, you will receive a notification. Your phone's microSD card is mounted as a drive on your computer. You can now copy files to and from the microSD card.

NOTE: When uninstalling PC Suite IV, USB and Bluetooth Drivers are not automatically removed. Therefore, they must be uninstalled manually.

TIP! To use the microSD card on your phone again, you need to open the notification drawer and touch **Turn off USB storage**. During this time, you can't access the microSD card from your phone, so you can't use applications that rely on the microSD card, such as camera, gallery and music functions. To disconnect your phone from the computer, carefully follow your computer's instructions for correctly disconnecting USB devices, to avoid losing information on the card.

- 1 Open the notification drawer and touch **Turn off USB storage**.
- 2 Touch **Turn off** in the dialog that opens.
- 3 Safely disconnect the USB device on your computer.

 **WARNING**

Do not insert or remove the microSD card when the phone is on. Otherwise, it may damage the microSD card as well as your phone, and the data stored on the microSD card may be corrupted. To remove the microSD card safely, from the home screen, touch the **Menu** key and touch **Settings > SD card & phone storage > Unmount SD card**.

Important notice

9. Unlock screen when using data connection

Your display will go dark if untouched for a period of time when using data connection. To turn on your LCD screen, just press the Power/Lock key.

10. Do not connect your phone when you power on/off your PC

Make sure you disconnect your phone and PC via data cable as it might cause errors on your PC.

11. Hold your phone upright

Please hold your phone straight and upright, as with a normal phone. The LG-P990hN has an internal antenna. Be careful not to scratch or damage the back of the phone, as this will cause loss of performance. While making/receiving calls or sending/receiving data, try to avoid holding the lower part of the phone where the antenna is located. This may affect call quality.

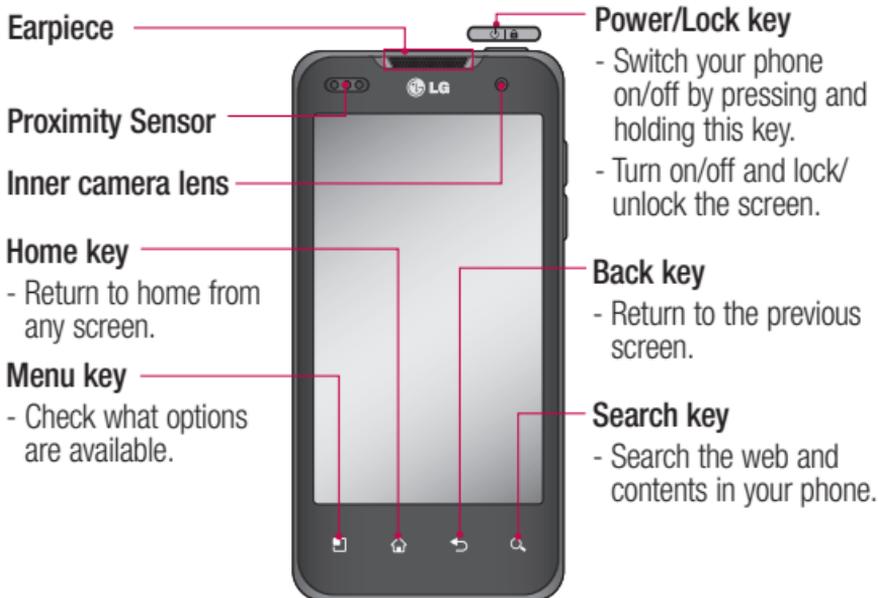
12. If the screen freezes

If the phone does not respond to user input or the screen freezes: Remove the battery, insert it again and switch on the phone. If it still does not work, please contact the service centre.

Getting to know your phone

To turn on the phone, press and hold the **Power** key for 3 seconds.

To turn off the phone, press and hold the **Power** key for 3 seconds, touch **Power off** and touch OK.



WARNING: Placing a heavy object on the phone or sitting on it can damage its LCD and touch screen functionalities. Do not cover the protective film on the LCD's proximity sensor. This can cause the sensor to malfunction.

NOTE: Proximity sensor

When receiving and making calls, the proximity sensor automatically turns the backlight off and locks the touch keypad by sensing when the phone is near your ear. This extends battery life and prevents the touch keypad from activating unintentionally during calls.

Getting to know your phone

Stereo earphone connector



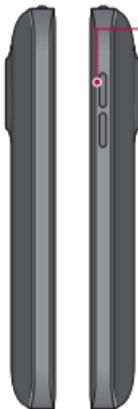
HDMI cable connector

Power/Lock key

Microphone Speaker



Charger, micro USB cable connector



Volume keys

- On the home screen: control ringer volume.
- During a call: control your earpiece volume.
- When playing a track: control volume continuously.

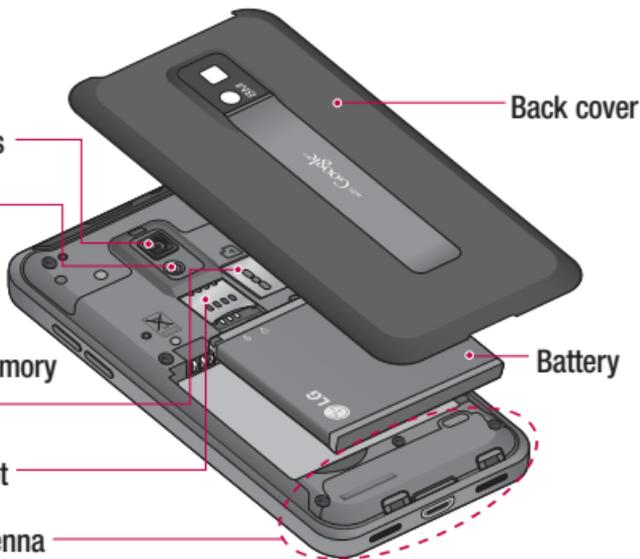
Camera lens

Flash

microSD memory card slot

SIM card slot

Internal antenna



Back cover

Battery

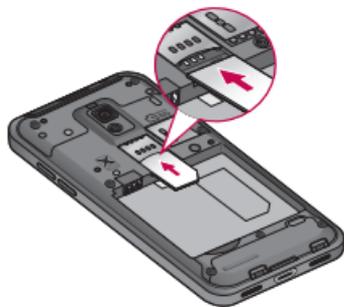
Installing the SIM card and battery

Before you can start exploring your new phone, you'll need to set it up. To insert the SIM card and battery:

- 1 To remove the back cover, hold the phone firmly in your hand. With the other hand, firmly press down the centre of the battery cover, while pulling the top away with your forefinger. Then lift off the battery cover.



- 2 Slide the SIM card into the SIM card holder. Make sure the gold contact area on the card is facing downwards.



Getting to know your phone

- 3 Insert the battery into place by aligning the gold contacts on the phone and the battery.



- 4 Replace the back cover of the phone.



Charging your phone

Insert the charger and plug it into an electrical socket. Your LG-P990hN must be charged until you can see



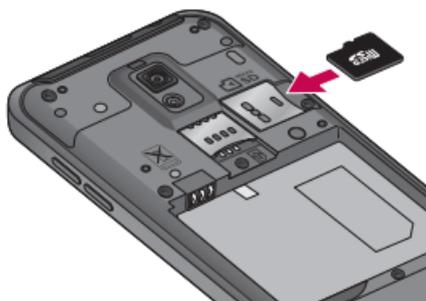
NOTE: The battery must be fully charged initially to extend battery lifetime.

Notice!

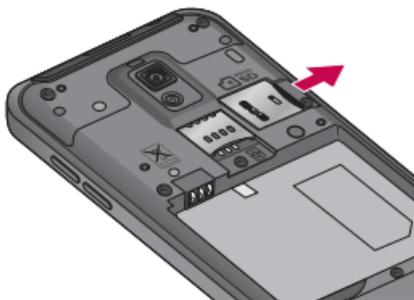
Use only LG-approved battery, charger (1A) and data cable (1A) specific to your phone model since they are designed to maximise battery life. Using other chargers and data cables will not guarantee full battery charge and normal charging time.

Installing the memory card

Slide the memory card into the slot until it clicks into place. Make sure the gold contact area on the card is facing downwards.



Carefully remove the memory card by gently pushing it in to the phone and quickly releasing it.



Formatting the memory card

Your memory card may already be formatted. If it isn't, you must format it before you can use it.

NOTE: All files on your memory card are deleted when you format it.

- 1 On the home screen, touch the **Applications** tab to open the applications menu.
- 2 Scroll and touch **Settings**.
- 3 Scroll and touch **SD card & phone storage**.
- 4 Touch **Unmount External SD Card**.
- 5 Touch **Format External SD card**, then confirm your choice.
- 6 If you set the pattern lock, input the pattern lock and select **Erase Everything**. The card will then be formatted and ready to use.

NOTE: If there is content on your memory card, the folder structure may be different after formatting, as all the files will have been deleted.

TIP! If your memory card is already unmounted, you can use the following steps to format it. Touch **Applications > Settings > SD card & phone storage > Format External SD Card**.

Getting to know your phone

WARNING

Do not insert or remove the memory card when the phone is on. Otherwise, you may damage the memory card as well as your phone and the data stored on the memory card may be corrupted. To remove the memory card safely, please select **Applications > Settings > SD card & phone storage > Unmount External SD card.**

Your Home screen

Touch-screen tips

Here are some tips on how to navigate around your phone.

Touch - To choose a menu/option or open an application, touch it.

Touch and hold - To open an options menu or grab an object you want to move, touch and hold it.

Drag - To scroll through a list or move slowly, drag across the touch screen.

Flick - To scroll through a list or move quickly, flick across the touch screen (drag quickly and release).

Flip - Pause or mute in incoming call, Music/video player or alarm menus.

Tilting & Panning - Zoom in/out and navigate through lists.

Tapping - Control music and move the cursor on a text page by tapping one of the four sides of the phone.

NOTE:

- To select an item, touch the centre of the icon.
- Do not press too hard; the touch screen is sensitive enough to pick up a light, firm touch.
- Use the tip of your finger to touch the option you want. Be careful not to touch any other keys.

Lock your phone

When you are not using the LG-P990hN, press the **Power** key to lock your phone. This helps to prevent accidental touching of the keys and saves battery power.

If you do not use the phone for a while, the home screen or other screen you are viewing is replaced by the lock screen to conserve the battery.

NOTE: If there are any programs running when you lock the phone, they may continue running in lock mode. It is recommended that you

Your Home screen

exit all programs before entering lock mode to avoid unnecessary charges (e.g. phone call, web access and data communications).

Unlock screen

To turn on your phone, press the **Power** key. The lock screen will appear. Touch and slide up the lock screen to unlock your home screen. The last screen you were working on will open.

Home

Simply swipe your finger to the left or right to switch between the home panels.

You can also customise each panel with widgets, LG widgets, shortcuts to your favourite applications, folders and wallpapers.

NOTE: Some screen images may be different depending on your phone provider.

In your home screen, you can view quick keys on the bottom of the screen. The quick keys provide easy, one-touch access to the functions you use the most.



Touch the **Phone** to bring up the touch-dialling pad to make a call.



Touch the **Contacts** to open your contacts.



Touch the **Messaging** icon to access the messaging menu.

Here, you can create a new message.



Touch the **Applications** tab at the bottom of the screen. You can then view all your installed applications. Just touch to scroll through your applications.

To open the desired application, simply touch the icon in the applications list.

NOTE: Preloaded applications may be different depending on your phone's software or your service provider.

Setting the number of home screens

Touch the **Menu** key from the home screen and select **Home settings**. Select the desired number of home screens and press **OK**.

Adding widgets to your home screen

You can customise your home screen by adding shortcuts, widgets, or folders to it. For more convenience when using your phone, add your favourite widgets to the home screen.

To add a desired icon to your home screen:

- 1 On the home screen, touch the **Menu** key and select **Add**. Or long touch the empty part of the home screen.
- 2 On the **Add to Home screen** menu, touch the type of item you want to add.

- 3 For example, select **Folders** from the list and tap it. Select **Contacts with phone numbers** from the list and tap it.
- 4 You will see a new folder's icon on the home screen. Drag it to the desired location on the desired panel and release your finger from the screen.

TIP! To add an application icon to the home screen on the **Applications** menu, touch and hold the application you want to add.

To remove an application icon from the home screen:

- 1 Touch and hold the icon you want to remove.
- 2 Drag and drop an application icon to the bin icon .

NOTE: You cannot delete the preloaded applications. (Only their icons can be deleted from the screen.)

Your Home screen

Getting back to a recently used application

- 1 Touch and hold the **Home** key. The screen will show you a pop up with icons of applications that you have used recently.
- 2 Touch an icon to open its application. Or touch the **Back** key to return to the current application.

Home preview function

You can move to the home preview screen by placing two fingers on the home screen and bringing them closer together.

You can move back to the home screen by placing two fingers on home preview screen and spreading them farther apart.

Capturing the screen

If you touch and hold the Home key and press Power/Lock key at the same time, the current image on the

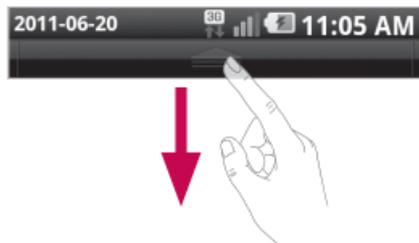
screen is captured with a camera shutter sound effect. You can find the captured image in the Gallery. (Note that you cannot capture an image from a video.)

Notification drawer

The notification drawer runs across the top of your screen.



Touch and slide the notification drawer down with your finger.



Or on the home screen touch the **Menu** key and select **Notifications**. Here you can check and manage

sound, Wi-Fi, Bluetooth, GPS and Auto-rotate status as well as other notifications.

Viewing the status bar

The status bar uses different icons to display phone information, such as signal strength, new messages, battery life and active Bluetooth and data connections.

Below is a table explaining the meaning of icons you are likely to see in the status bar.



[Status bar]

Icon	Description
	No SIM card
	No signal
	Flight mode
	Connected to a Wi-Fi network
	Wired headset

Icon	Description
	Call in progress
	Call hold
	Speakerphone
	Phone microphone is muted
	Missed call
	Bluetooth is on
	Connected to a Bluetooth device
	System warning
	Alarm is set
	New voicemail
	Ringer is silenced
	Vibrate mode
	Battery fully charged
	Battery is charging
	Data in and out

Your Home screen

Icon	Description
	Phone is connected to PC via USB cable
	Downloading data
	Uploading data
	GPS is acquiring
	Receiving location data from GPS
	On-Screen Phone connected
	3 more notifications not displayed
	Data is syncing
	Download finished
	New email
	New Gmail
	New Google Talk message
	New message

Icon	Description
	Song is playing
	Upcoming event
	FM radio turned on in the background
	USB tethering is active
	Portable Wi-Fi hotspot is active
	Both USB tethering and portable hotspot are active
	SmartShare On
	SmartShare sharing request

Onscreen keyboard

You can enter text using the onscreen keyboard. The onscreen keyboard appears automatically on the screen when you need to enter text. To manually display the keyboard, simply touch a text field where you want to enter text.

Using the keypad & entering text

   Tap once to capitalise the next letter you type. Double-tap for all caps.

  Tap to switch to the numeric and symbol keyboard. You can also touch and hold this tab to view the settings menu.

 Tap to view or long press to change the writing language.

 Tap to insert the emoticon you prefer which writing a message.

 Tap to enter a space.

 Tap to create a new line in the message field.

 Tap to delete the previous character.

 Tap to hide the onscreen keyboard.

Entering accented letters

When you select French or Spanish as the text entry language, you can enter special French or Spanish characters (e.g. á).

For example, to input "á", touch and hold the "a" key until the special characters are shown. And select the special character you want.

Google Account Set-up

The first time you open the Google application on your phone, you will be required to sign in with your existing Google account. If you do not have a Google account, you will be prompted to create one.

Creating your Google account

- 1 On the home screen, touch **Applications** tab  to open the applications menu.
- 2 Tap **Gmail** and tap **Next > Create** to start the Gmail set up wizard.
- 3 Touch a text field to open the touch keyboard and enter your name and username for your Google account. When entering text, you can move to the next text field by touching **Next** on the keyboard.
- 4 When you have finished inputting your name and username, tap **Next**. Your phone is

communicating with Google servers and checking username availability.

- 5 Enter and re-enter your password. Then follow the instructions and enter the required and optional information about the account. Wait while the server creates your account.

Signing in to your Google account

- 1 Enter your email address and password, then tap **Sign in**. Wait for signing in.
- 2 After sign in, you can use Gmail and take advantages of Google services on your phone.
- 3 Once you have set up your Google account on your phone, your phone will be automatically synchronised with your Google account on the web. (This depends on your synchronisation settings.)

After sign in, you can use Gmail, Google Calendar and Android Market; download applications from Android Market; and take advantage of other Google services on your phone.

IMPORTANT!

- Some applications, such as Calendar, only work with the first Google Account you add. If you plan to use more than one Google Account with your phone, be sure to sign into the one you want to use with these applications first. When you sign in, your contacts, Gmail messages, calendar events and other information from these applications and services on the web are synchronised with your phone. If you don't sign into a Google account during setup, you will be prompted to sign in or to create a Google account the first time you start an application that requires one, such as Gmail or Android Market.
- If you have an enterprise account through your company or other organisation, your IT department may have special instructions on how to sign into that account.

Calls/Contacts

Making a voice call

- 1 Touch  to open the keypad.
- 2 Enter the number on the keypad.
To delete a digit, touch **Clear** icon .
- 3 Touch **Call** icon  to make a call.
- 4 To end a call, touch **End** icon .

TIP! To enter “+” to make international calls, touch and hold down .

TIP! To bring up the keypad during a call, touch **Dialpad**.

Calling your contacts

- 1 Touch  to open your contacts.
- 2 Scroll through the contact list or enter the first letter(s) of the contact you want to call.

Answering and rejecting a call

When screen locked:

When your phone rings, drag **Accept** icon  to the right.

Drag **Reject** icon  to the left to reject an incoming call.

When screen is unlocked:

When your phone rings, touch the **Accept** icon . Touch decline icon  to Decline/Reject an incoming call.

TIP! Excuse messages

When you want to decline/reject a call, you can send a message quickly by dragging **Excuse msg** on the screen. This is useful if you need to reply the message during a meeting.

Adjusting call volume

To adjust the in-call volume during a call, use volume up & down keys on the right side of the phone.

Making a second call

- 1 During your initial call, touch **Add call** .
- 2 Dial the number or search your contacts to select the number you want to call.
- 3 Touch the **Call** icon  to connect the call.
- 4 Both calls will be displayed on the call screen. Your initial call will be locked and put on hold.
- 5 Touch the list of holding on to switch between calls.

NOTE: You can touch **Merge calls**  to make a conference call.

- 6 To end active calls, touch **End** icon .

Viewing your call logs

On the home screen, touch  and choose **Call log** tab.

View a complete list of all dialed, received and missed calls.

TIP! Touch any single call log entry to view the date, time and duration of the call.

TIP! Touch the **Menu** key, then touch **Delete All** to delete all the recorded items.

Call settings

You can configure phone call settings, such as call forwarding and other special features offered by your carrier.

- 1 On the home screen, touch the **Applications** tab to open the applications menu.
- 2 Scroll and touch **Settings**.
- 3 Tap **Call settings** and choose options that you want to adjust.

< Fixed Dialing Numbers >

Select **Fixed Dialing Numbers** to turn on and compile a list of numbers that can be called from your phone. You'll need your PIN 2

Calls/Contacts

code, which is available from your operator. Only numbers within the fixed dial list can be called from your phone.

< Voicemail >

Voicemail service – Allows you to select your carrier's voicemail service.

Voicemail settings – If you are using your carrier's voicemail service, this option allows you to enter the phone number to use for listening to and managing your voicemail.

< Other call settings >

Call forwarding – You can configure how your calls are forwarded when you're on the phone, or when you don't answer and so on.

Additional settings – This lets you change the following settings:

- **Caller ID:** Choose whether to display your number on an outgoing call.

- **Call waiting:** If call waiting is activated, the handset will notify you of an incoming call while you are on a call. (Depends on your network provider.)

- **Select line:** Allow two different phone numbers in your SIM to select and use, if applicable.

Call costs – View the charges applied to your calls. (This service is network dependent; some operators do not support this function.)

Call barring – Select when you would like calls to be barred. Enter the call barring password. Please check with your network operator about this service.

Call duration – View the duration of all calls including all, dialed, received calls and the last call.

Excuse message – When you reject a call, you can send a message quickly by using this function. This is useful if you need to reply the message during a meeting.

Contacts

You can add contacts on your phone and synchronize them with the contacts in your Google account or other accounts that support syncing contacts.

Searching for a contact

- 1 On the home screen, touch  to open your contacts.
- 2 Touch **Search** and enter the contact name using the keypad.

Adding a new contact

- 1 On the home screen, touch , and enter the new contact's number, then touch the **Menu** key, touch **Add to contacts**. Select **Create new contact** or **Add to existing**.
- 2 If you want to add a picture to the new contact, touch . Choose from **Capture picture** or **Pick from Gallery**.
- 3 Select the contact type by touching .

- 4 Touch a text field to open the touch keyboard and enter a new contact's name.
- 5 Touch a category of contact information and enter the details about your contact.
- 6 Touch **Save** to save the contact.

Favourite contacts

You can classify frequently called contacts as favourites.

To add a contact to your favourites:

- 1 On the home screen, touch  to open your contacts.
- 2 Touch a contact to view their details.
- 3 Touch the star to the right of the contact's name. The star turns gold.
- 4 The favorites contact will be saved under groups as Favourites.

Calls/Contacts

To remove a contact from your favourites list:

- 1 On the home screen, touch  to open your contacts.
- 2 Touch **Groups** tab and select **Favourites**. Touch a contact to view their details.
- 3 Touch the gold star to the right of the contact's name. The star turns grey and the contact is removed from your favourites.

Messaging/Email

Messaging

Your LG-P990hN combines SMS and MMS into one intuitive, easy-to-use menu.

Sending a message

1 Touch  icon on the home screen and touch **New message** to open a blank message.

2 Enter a contact name or call number in the **To** field. As you enter the contact name, matching contacts appear. You can touch a suggested recipient. You can add multiple contacts.

NOTE: You will be charged for a text message for every person you send the message to.

3 Touch **Type to compose** below to start entering your message.

4 Touch **Send** to send your message.

TIP! You can touch  icon to attach the file you want to share with your message.

5 The message screen opens, with your message after your name. Responses appear on the screen. As you view and send additional messages, a message thread is created.

WARNING

The 160-character limit may vary from country to country depending on how the SMS is coded and the language.

WARNING

If an image, video or audio file is added to an SMS message, it will be automatically converted into an MMS message, and you will be charged accordingly.

NOTE: If you get an SMS message during a call, there will be ring notification.

Messaging/Email

Changing your message settings

Your LG-P990hN message settings are predefined, so you can send messages immediately. You can change the settings based on your preferences.

Touch **Messaging** icon on the home screen and touch the **Menu** key, then tap **Settings**.

Opening your email and email accounts screen

You can use the **Email** application to read email from services like Gmail. The **Email** application supports the following account types: POP3, IMAP and Exchange.

- 1 On the home screen, touch the **Applications** tab and tap **Email** to view the account list.

TIP! Select the **Email** shortcut icon on the home screen to move to the list of email accounts.

- 2 The first time you open the **Email** application, a setup wizard opens to help you add an email account.
- 3 After initial setup, **Email** displays the contents of your **Inbox** (if you have only one account) or the **Accounts** screen (if you have multiple accounts).

TIP!

- If you long-press an account from the list of email accounts, you can select the desired option in the pop-up window. For example, select **Add to home screen** to create a shortcut icon of the account on the home screen.
- Select the **Email** shortcut icon on the home screen to move to the list of email accounts. Likewise, if you select the shortcut icon of an account on the home screen, you can move to the inbox of the corresponding account.

The Accounts screen

The **Accounts** screen lists your **Combined inbox** and each of your email accounts.

- 1 Open the **Email** application. If you're not on the email account screen, touch the **Menu** key and touch **New**.
- 2 Select the email service provider. You can touch an account to view its **Combined inbox**. The account from which you send email by default is indicated with a tick.

To open your Combined inbox:

If you have configured email to send and receive email from more than one account, you can view all messages sent to all accounts in your **Combined inbox**.

- 1 Open the **Email** application.
- 2 Touch **Combined inbox** (in the **Accounts** screen). Messages in the **Combined inbox** are colour coded along their left sides, by

account, using the same colours that are used for your accounts in the **Accounts** screen.

Composing and sending email

To compose and send a message:

- 1 While in the **Email** application, touch the **Menu** key and touch **Compose**.
- 2 Enter an address for the message's intended recipient. As you enter text, matching addresses are offered from your contacts. Separate multiple addresses with commas.
- 3 Touch the **Menu** key and touch **Add Cc/Bcc** to be able to add Cc or Bcc other contacts/email addresses.
- 4 Enter the text of the message body.
- 5 Touch **Attach** to attach the file you want to share with your message recipients.

Messaging/Email

6 Touch **Send**.

If you're not ready to send the message, touch the **Menu** key and touch **Save as draft** draft to save it in a **Drafts** folder. Touch a draft message in a **Drafts** folder to resume working on it. Your message will also be saved as a draft if you touch the **Back** key  before sending it. Touch **Discard** to abandon and delete a message, including any saved drafts. If you aren't connected to a network, for example, if you're working in flight mode, the messages that you send are stored in your **Outbox** folder until you're connected to a network again. If it contains any pending messages, the **Outbox** is displayed on the **Accounts** screen.

Please note that messages sent using an Exchange account will not be located on the phone; they will,

however, be located on the Exchange server itself.

If you want to see your sent messages in the **Sent** folder (or with the **Sent** label), you will often need to open the **Sent** folder/label and select **Refresh** from the options menu.

TIP! When a new email has arrived at the inbox, a notification with sound and vibration will be displayed on status bar, tap this email notification to view the mail.

Working with account folders

Each account has **Inbox**, **Outbox**, **Sent** and **Drafts** folders. Depending on the features supported by your account's service provider, you may have additional folders.

Adding and editing email accounts

To add an email account:

- 1 Touch the **Applications** tab and select **Email**.
- 2 Select **MS Exchange** or **Others**.
- 3 Enter your email address, password, and any other relevant information and touch **Next**.
- 4 Enter a name for the account, confirm how you want your name to appear in outgoing mail, then touch **Done**.

To change account settings:

- 1 Open the **Accounts** screen.
- 2 Touch the **Menu** key and touch **Settings**. Touch and hold the account which you want to change the settings of.

Social networking

With your phone, you can enjoy the social networking and manage your micro-blog in on-line communities. You can update your current status upload photos and view your friends' status updates.

If you don't have an account, you can visit the website to set one up.

NOTE: Additional costs may be incurred when connecting and using online services. Check data charges with your network provider.

Adding your account to your phone

- 1 On the home screen, touch the **Applications** tab to open the applications menu.
- 2 Choose any social networking client application you want to use among Facebook, Twitter, and MySpace.
- 3 Enter your email address and the password that you set up on your community, then tap **Log in**.

- 4 Wait a while for your details are checked with your community.
- 5 If you tap your community, you can see the current status of your social community.

TIP! If you add 'My Status' widget on your home screen, it will show your status and help you update your status directly on the social community.

You can also add 'Social Feeds' widget on your home screen which shows any updates and news from the social community.

Viewing and updating your status

- 1 Choose a community you want to access.
- 2 You can see the current status of your social community.
- 3 You can update your current status with comments or uploading photos.

NOTE: This is dependent on network services.

TIP! You can use information about friends only in the social networking site or sync all data to contacts.

Removing accounts on your phone

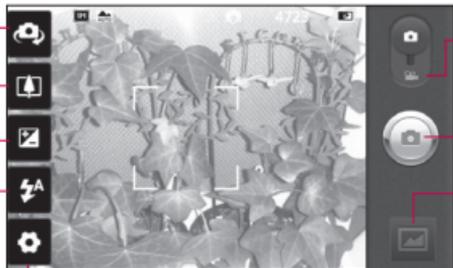
- 1 Choose **Applications > Settings > Accounts & sync**.
- 2 Choose the account you want to delete, then touch **Remove account**.

Camera

Getting to know the viewfinder

Zoom - Zoom in or zoom out. Alternatively, you can use the side volume keys.

Convert - You can convert to the internal camera from the external one.



Video mode - Slide down this icon to switch to video mode.

Taking a photo

Gallery - Touch to view the last photo you captured. This enables you to access your gallery and view saved photos from within camera mode.

Settings - Touch this icon to open the settings menu. See Using the advanced settings.

Flash - Allows you to turn on the flash when taking a photo in a dark place.

Brightness - This defines and controls the amount of sunlight entering the image. Slide the brightness indicator along the bar, towards “-” to lower the brightness of the image or towards “+” to increase it.

TIP! You can close all the shortcut options to give a clearer viewfinder screen. Just touch the centre of the viewfinder once. To recall the options, touch the screen again.

NOTE: In internal camera mode, you cannot enable the zoom or flash function.

Taking a quick photo

- 1 Open the **Camera** application.
- 2 Holding the phone horizontally, point the lens towards the subject you want to photograph.
- 3 Touch the shutter icon .
- 4 The camera brings the image into focus. When the image is in focus, the focus indicators in each corner turn green and then camera takes a picture.

Notice: A shading issue may occur when you try to take a picture indoors due to the characteristics of camera. (The meaning of shading is a little colour-difference between centre and side.)

Once you've taken the photo

Your captured photo will appear on the screen.

Share Touch to share your photo via **Bluetooth, Email, Facebook for LG, Gmail, Messaging, Myspace for LG, Picasa or Twitter for LG.**

NOTE: Additional charges may apply when MMS messages are sent/downloaded while roaming.

TIP! If you have a social networking site account and set it up on your phone, you can share your photos to your community.

Set as Touch to set the image as **Contact icon or Wallpaper.**

Rename Touch to edit the name of the selected picture.

 Touch to delete the image.

 Touch to take another photo immediately.

 Touch to view the last photo you captured.

Camera

Using the advanced settings

In the viewfinder, touch  to open all advanced options.

You can change the camera setting by scrolling the list. After selecting the option, touch the **Back** key.

Image size – Touch to set the size (in pixels) of the picture you are taking. Select a pixel value from the options: 8M (3264x2448), 5M (2560x1920), 3M (2048x1536), 2M (1600x1200), 1M (1280x960), VGA (640x480), QVGA (320x240).

NOTE: Options for **Image size** may vary depending on the camera mode.

Focus – Touch this icon to select the options menu. See Using the focus mode.

Scene mode – Choose from **Auto**, **Portrait**, **Landscape**, **Sports**, **Sunset** and **Night**.

ISO – The ISO rating determines the sensitivity of the camera's light sensor. The higher the ISO, the more sensitive the camera will be. This is useful under darker conditions when you cannot use the flash. Select from ISO values of **Auto**, **800**, **400**, **200** and **100**.

White balance – Choose from **Auto**, **Incandescent**, **Sunny**, **Fluorescent**, and **Cloudy**.

Color effect – Choose a colour tone for your new photo.

NOTE:

- Options for **Color effect** may vary depending on the camera mode.
- **Solarize** for **Color effect** is only supported in internal camera mode.
- **Blue**, **Emboss**, **Posterize**, and **Vivid** for **Color effect** are supported only in external camera mode.

Timer – The self-timer allows you to set a delay after the shutter is pressed. Select off, 3 seconds, 5 seconds, or 10 seconds. This is ideal if you want to be included in a photo.

Shot mode – Select various shooting mode from the options. Choose from **Normal**, **Continuous shot**, **Out-focusing shot**, **Smile shot**, **Beauty shot**, **Art shot**, **Panorama shot** and **Stitch shot**.

Image quality – Choose from **Super fine**, **Fine**, and **Normal**. The finer the quality, the sharper the photo. However, the file size will increase as a result, which means you'll be able to store fewer photos in the memory.

Stabilization – Select **On** to compensate for unsteady hands.

Auto review – If you set **Auto review** to **On**, it will show you the picture you have just taken automatically.

Shutter sound – Select one of the four shutter sounds.

Tag location – Activate to use your phone's location-based services. Take pictures wherever you are and tag them with the location. If you upload tagged pictures to a blog that supports geotagging, you can see the pictures displayed on a map.

NOTE: This function is available when GPS and GPRS is active or WPS is connected.

Storage – Choose whether to save your photos to the phone memory or to the external memory.

-  Restore all camera default settings.
-  Touch whenever you want to know how this function operates. This will provide you a quick guide.

TIP! When you exit the camera, some settings will return to default. Check camera settings before you take your next photo.

Camera

Using the focus mode

You can select the focus mode using the following options;

Auto – Set the camera to focus automatically.

Macro – Macro mode allows you to take extreme close-ups. If you are trying to take a close-up shot but the focus box remains red, try turning the macro mode on.

Face tracking – If you set Face tracking and take a photo, your camera detects and focuses on human faces automatically.

Manual – Set the camera to focus manually.

Viewing your saved photos

You can access your saved photos from within the camera mode. Just touch  and your gallery will appear on the screen. Touch the

photo on the screen. You will then see **Slideshow** and **Menu**.



Touch to see slide show.



Touch **Menu** and select the options you want.



Touch to share the contents.



Touch to delete a photo.



Touch **More** for more options below.

Details - Find out more information about the contents.

Set as - Set as contact icon or wallpaper.

Crop - Crop your photo. Move your finger across the screen to select the area.

Rotate - Rotate left or right.

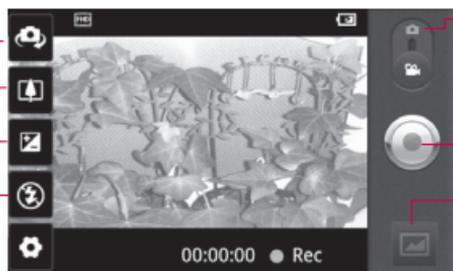
TIP! Tapping the left or right side of the phone while photo is viewing allows you to go to the previous/next photo, if Photo Viewing Gesture is set to ON.

Video camera

Getting to know the viewfinder

Zoom - Zoom in or zoom out. Alternatively, you can use the side volume keys.

Convert - You can convert to the internal camera from the external one.



Camera mode - Slide up this icon to switch to camera mode.

Start recording

Gallery - Touch to view the video you recorded last. This enables you to access your gallery and view your saved videos from within the video mode.

Settings - Touch this icon to open the settings menu. See Using the advanced settings.

Flash - Allows you to turn on the flash when taking a photo in a dark place.

Brightness - This defines and controls the amount of sunlight entering the video. Slide the brightness indicator along the bar, towards “-” to lower the brightness of the video or towards “+” to increase it.

Video camera

Shooting a quick video

- 1 Open the **Camera** application and slide the camera mode button down to the **Video** position. The shutter icon  will change to .
- 2 The video camera viewfinder will appear on the screen.
- 3 Holding the phone horizontally, point the lens towards the subject of the video.
- 4 Touch the start video icon .
- 5 Rec will appear at the bottom of the viewfinder with a timer showing the length of the video.
- 6 Touch the stop video icon  to stop recording.

After shooting a video

A still image representing your video will appear on the screen.

Play

Touch to play the video.

Share

Touch to share your video via **Bluetooth, Email, Gmail, Messaging or YouTube.**

NOTE: Additional charges may apply when MMS messages are downloaded while roaming.

Rename

Touch to edit the name of the selected video.



Touch to delete the video you just made and confirm by touching **Yes**. The viewfinder will reappear.



Touch to shoot another video straight away.



Touch to view the last video you recorded.

Using the advanced settings

Using the viewfinder, touch  to open all the advanced options.

Adjust the video camera settings by scrolling the list. After selecting the option, touch the **Back** key.

Video size – Touch to set the size (in pixels) of the video you record. Choose your video image size from Full HD (1920x1088), HD (1280x720), TV (720x480), VGA (640x480), QVGA (320x240) and QCIF (176x144).

White balance – The white balance ensures that white areas in your video are realistic. To enable your camera to adjust the white balance correctly, you may need to determine the light conditions. Choose from **Auto**, **Incandescent**, **Sunny**, **Fluorescent**, and **Cloudy**.

Color effect – Choose a colour tone to use for your new video.

NOTE: Options for **Color effect** may vary depending on the camera mode.

Video quality – Choose from **Super fine**, **Fine** and **Normal**.

Duration – Set a duration limit for your video. Choose between **Normal** and **MMS** to limit the maximum size to send as an MMS message.

Voice – Choose **Mute** to record a video without sound.

Auto review – If you set to **On**, it will automatically show you the video you have just recorded.

Storage – Choose whether to save your video clip to the phone memory or to the external memory.

 Reset all the video camera settings.

 Touch whenever you want to know how this function operates. This is to provide you with a quick guide.

Video camera

Watching your saved videos

- 1 In the viewfinder, touch .
- 2 Your gallery will appear on the screen.
- 3 Touch a video once to bring it to the front of the gallery. It will start to play automatically.

TIP! Flip your phone to pause the playing video, if the corresponding Gesture it set to ON.

Adjusting the volume when viewing a video

To adjust the volume of a video while it is playing, use the volume keys on the right side of the phone.

Multimedia

Gallery

You can store any multimedia files on your phone's memory that will be displayed in your Gallery so that you have easy access to all of your pictures and videos.

You can also save your files to your external memory card. The advantage of using a memory card is that you can free up space on your phone memory.

Touch **Applications** tab, then select **Gallery**.

To change how the contents of an album are displayed

You can view the images and videos in your albums in a chronological grid or in stacks, sorted by the date and the location where they were taken.

 Drag the Album View switch to the left to view the album contents in a chronological grid.

 Drag the Album View switch to the right to view the contents of the album in stacks.

Music

Your LG-P990hN has a built-in music player that lets you play all your favourite tracks. To access the music player, touch **Applications** tab, then select **Music**.

Playing a song

- 1 On the home screen, touch **Applications** tab and select **Music**.
- 2 Touch **Songs**.
- 3 Select the song you want to play.
- 4 Touch  to pause the song.
- 5 Touch  to skip to the next song.
- 6 Touch  to go back to the first part of the song. Touch  twice to go back to the previous song.

Multimedia

To change the volume while listening to music, touch the up and down volume keys on the right-hand side of the phone.

Touch and hold any song in the list. It will display **Play**, **Add to playlist**, **Use as phone ringtone**, **Delete**, **Share**, **Search** and **File info** as options.

TIP! Double tapping left side on the phone during playing music, you can go to the previous song. Double tapping right side on the phone during playing music, you can go to the next song. You need to set the Gesture. Refer to 92 page to set this function.

NOTE: Music file copyright may be protected by international treaties and national copyright laws.

Therefore, it may be necessary to obtain permission or a licence to reproduce or copy music. In some countries, national laws prohibit private copying of copyrighted material. Before downloading or copying the file, please check the laws of the relevant country concerning the use of such material.

Using the radio

Your LG-P990hN has a built-in FM radio so you can tune in to your favourite stations and listen on the go.

NOTE: You must attach your headphone to listen to the radio.

Searching for stations

You can tune in to radio stations by searching for them manually or automatically. They will then be saved to specific channel numbers, so you don't have to keep re-tuning it.

- 1 On the home screen, touch **Applications** tab and select **FM Radio**.
- 2 Touch the **Scan FM radio stations**.
- 3 If there are pre-set channels, you will see a pop-up with 'All channels will be reset. Continue?'. If you choose **OK**, all the pre-set channels will be deleted and auto scan will start.
- 4 During auto scanning, touch **Stop scanning** if you want to stop scanning. Only channels scanned before you stop scanning will be saved.

NOTE: You can also manually tune in to a station using the wheel displayed.

Listening to the radio

- 1 On the home screen, touch **Applications** tab and select **FM radio**.
- 2 Touch the channel number of the station you want to listen to.
- 3 Touch  icon. You can listen to the radio via built-in speaker.

Transferring files using USB mass storage devices

To transfer files using USB devices:

- 1 Connect the LG-P990hN to a PC using a USB cable.
- 2 If you haven't installed LG Android Platform Driver on your PC, you need to choose **Settings > SD card & phone storage > turn on Mass Storage only**.
- 3 Touch **Turn on USB storage**.
- 4 You can view the mass storage contents on your PC and transfer the files.

Multimedia

NOTE:

- You need to install your microSD card first. Without a microSD card, you cannot use USB mass storage.
- After using USB mass storage function, if you want to synchronize your phone with your PC using the LG PC suite, you need to touch **Settings > Applications > Development > uncheck USB debugging**, then **Turn on USB storage** mode from status bar.

How to save music/ video files to your phone

- 1 Connect your phone to the PC using the USB cable.
- Touch and drag down the status bar on the home screen. Select **USB connected > Turn on USB storage > Open folder to view files**.
- If you haven't installed LG Android Platform Driver on your PC, you will need to set it manually. For more information, refer to 'Transferring files using USB mass storage devices'.
- 2 Save music or video files from your PC to the phone's removable storage.
- You may copy or move files from your PC to the phone's removable storage using a card reader.
 - If there is a video file with a subtitle file (.srt file with the same name as the video file), place them in the same folder to display the subtitle automatically when playing the video file.
 - When downloading music or video files, copyright must be secured. Please note that a corrupted file or file with a wrong extension may cause damage to your phone.

How to move contacts from your old phone to your current phone

Export your contacts as a CSV file from your old phone to your PC using a PC sync program.

- 1 Download PC Sync for Android at www.lg.com and install it on your PC. Run the program and connect your Android mobile phone to the PC using a USB cable.
- 2 Select the **Contacts** icon. Go to **File > Import** and select the CSV file saved in the PC.
- 3 If the fields in the imported CSV file are different from the ones in PC Sync for Android, you need to map the fields. After mapping the fields, click OK. Then the contacts are added in PC Sync for Android.
- 4 If the connection for the LG-P990hN phone (using the USB cable) is detected by PC Sync for Android, click "Sync" or "Sync

contacts" to synchronize the contacts saved in the PC to your phone and save them.

How to send data from your phone via Bluetooth

You can send data via Bluetooth by running a corresponding application, rather than from the Bluetooth menu as with normal mobile phones.

- **Sending pictures:** Run the **Gallery** application and select **Picture > Menu**. Click **Share** and select **Bluetooth > Check if Bluetooth is turned on** and select **Scan for devices >** Choose the device you want to send data from the list.
- **Exporting contacts:** Run the **Contacts** application. Touch the address you want to export. Touch the **Menu** and select **Share > Bluetooth > Check if Bluetooth is turned on** and select **Scan for devices >** Choose the device you want to send data from the list.

Multimedia

- **Sending multi-selected contacts:** Run the **Contacts** application. To select more than one contact touch the **Menu** key and touch **Share**. Select the contacts you want to send or touch **Select all > Share > Bluetooth > Check if Bluetooth is turned on** and select **Scan for devices > Choose the device you want to send data from the list**.
- **Connecting to FTP (Only the FTP server is supported on this handset):** Select **Settings > Wireless & networks > Bluetooth settings**. Then, select the **Discoverable** checkbox and search for other devices. Find the service you want and connect to the FTP server.

NOTE: If you want to search for this phone from other devices, go to **Settings > Wireless & networks > Bluetooth settings**. Then, select the **Discoverable** checkbox. The

checkbox is cleared after 120 seconds.

NOTE: Supported profiles are SDAP, HFP, HSP, OPP, PBAP (server), FTP (server), A2DP and AVRCP.

Google applications

- 1 First, set up a Google account. Enter your user name and password.
- 2 After signing in, your contacts, email and calendar in your Google account will automatically synchronize with your LG-P990hN.

Maps

Check your current location and traffic and receive directions to your destination. Your phone must be connected to Wi-Fi or 3G.

NOTE: Google Maps does not cover all cities and countries.

Market

Android Market lets you download useful applications and games. If you install applications and games from Android Market, they appear in the LG-P990hN menu.

You can check others' comments regarding an application or you can post your own comments.

Gmail

Gmail is configured when you first set up your phone. Depending on your synchronization settings, Gmail on your phone is automatically synchronized with your Google account on the web. The inbox conversations list is your default Gmail view.

Touch the **Menu** key, then touch **Refresh** to send or receive new emails and to synchronize your emails with your Google account on the web. With the **Menu** key, you can compose an email, add accounts, go to labels, search and so on.

Google applications

Talk

Google Talk is Google's instant messaging program. It lets you communicate with other people who also use Google Talk.

Touch the **Menu** key and select available options as below: **All friends, Add friend, Search, Sign out, Settings** and so on.

Google Search

Google Mobile Web Search allows you to search from web resources.

YouTube

YouTube is a free website where you can watch or upload videos.

NOTE: You can access YouTube with your Google account but you need a YouTube account for some services such as video uploading.

Utilities

Setting your alarm

- 1 On the home screen, touch **Applications** tab and select **Alarm/Clock**.
- 2 If you want to add a new alarm, touch **Add alarm**.
- 3 Set the alarm and touch **Save** to turn on.

NOTE: To delete the alarm on alarm list screen, touch the **Menu** key and select **Delete/Delete all**.

Using your calculator

- 1 On the home screen, touch **Applications** tab and select **Calculator**.
- 2 Touch the number keys to enter numbers.
- 3 For simple calculations, touch the function you want (+, -, x or ÷), followed by =.
- 4 For more complex calculations, touch **Menu > Advanced panel**, then choose sin, cos, tan, log and so on.

Adding an event to your calendar

- 1 On the home screen, touch **Applications** tab and select **Calendar**.
- 2 First, you must create and/or sign-in a Google account to use **Calendar**.
- 3 To check the event, touch the date. Touch and hold if you want to add a new event. then touch **New event**.
- 4 Touch **What**, then enter the event name. Check the date and enter the time you want your event to begin and finish.
- 5 Also touch **Where**, then enter the location.
- 6 If you would like to add a note to your event, touch **Description** and enter the details.
- 7 If you want to repeat the alarm, set **Repetition** and set **Reminders** if necessary.

Utilities

- 8 Touch **Done** to save the event in the calendar. A coloured square in the calendar will mark all days that have saved events. An alarm will sound at the event start time to help you stay organised.

Recording a sound or voice

Use the voice recorder to record voice memos or other audio files.

- 1 On the home screen, touch **Applications** tab and select **Voice Recorder**.
- 2 Touch  Record to begin recording.
- 3 Touch  Stop to end recording.
- 4 Touch  Play to listen to the recording.
- 5 Touch  List to access your album. You can listen to the saved recording.

Notice: The available recording time may differ from the real time.

Sending the voice recording

- 1 Once you have finished recording, you can send the audio clip by touching **Share**.
- 2 Choose from **Bluetooth**, **Email**, **Gmail** and **Messaging**. When you select **Email**, **Gmail** and **Messaging**, the voice recording will be added to the message that you write, and it will be sent normally.

The Web

Browser

Browser gives you a fast, full-colour world of games, music, news, sports, entertainment and much more, right on your mobile phone. Wherever you are and whatever you're into.

NOTE: Additional charges apply when connecting to these services and downloading content. Check data charges with your network provider.

Using options

Touch the **Menu** key to view options.

-  **New window:** Open a new window.
-  **Bookmarks:** Add/show bookmark, show most visited site and history.
-  **Windows:** Show all your open windows.
-  **Refresh:** Touch to refresh the web page.
-  **Forward:** Goes to the page you connected to after the current page. The **Back** key takes you to the previous page.

More

- **Add bookmark:** Add the current web page as a bookmark.
- **Find on page:** If you enter a letter or word, it will mark all the letters you entered in web page.
- **Select text:** Touch and select the lines you want to copy. Long touch any input box then you can paste it.
- **Page info:** Show the web page information.
- **Share page:** Send the web page.
- **Downloads:** Show downloaded history.
- **Settings:** Change web browser settings.

NOTE: To return to the previous web page, touch the **Back** key.

Settings

On the home screen, touch **Application** tab then scroll and touch **Settings**.

Wireless & networks

Here you can manage Wi-Fi, SmartShare and Bluetooth. You can also set mobile networks and airplane mode.

Airplane mode – After setting Airplane mode, all wireless connections will be disabled.

Wi-Fi – Touch to select: This turns on Wi-Fi to connect to available Wi-Fi networks.

Wi-Fi settings – Allows you to set up and manage wireless access points. Set network notification or add a Wi-Fi network. The advanced Wi-Fi settings screen is accessed from the Wi-Fi settings screen. Touch the **Menu** key and touch **Advanced**.

TIP! How to obtain the MAC address

To set up a connection in some wireless networks with MAC filters, you may need to enter the MAC address of your LG-P990hN into the router.

You can find the MAC address in the following user interface: Touch **Applications > Settings > Wireless & networks > Wi-Fi settings** and touch the **Menu** key. Then select **Advanced > MAC address**.

SmartShare – Touch to select: This turns on **SmartShare** to share your multimedia contents with your DLNA (Digital Living Network Alliance) enabled devices.

SmartShare settings – Allows you to change device name and select content type to be shared.

Bluetooth – Touch to select: Turns on Bluetooth to connect to Bluetooth devices.

Bluetooth settings – Set device name & discoverable mode, scan for other devices. Or check a list of Bluetooth devices that you've previously configured and those detected when the phone last scanned for Bluetooth devices.

Tethering & portable hotspot – You can configure the settings of USB tethering and portable Wi-Fi hotspot.

VPN settings – Displays the list of Virtual Private Networks (VPNs) that you've previously configured. Allows you to add different types of VPNs.

Mobile network settings – Set options for data roaming, network mode & operators, access point names (APNs) and so on.

On-Screen Phone settings – Allows you to change the On-Screen Phone password (the default password is "0000"). On-Screen Phone allows you to view your mobile phone screen from a PC via a USB or Bluetooth connection. You

can also control your mobile phone from your PC using the mouse or keyboard.

Sound

< General >

Silent mode – Allows you to silence all sounds (including call and notification ringtones) except the audio from music, videos and any alarms you have set. (You must silence media and alarms in their own applications.)

Notice: After setting silent mode it is not available to use **Settings > Sound > Volume** menu.

Vibrate – Allows you to set your phone to vibrate when you receive an incoming call.

Volume – Allows you to set the volume for ringtones, media and alarms. If you un-select the option to use the same volume for both calls and notifications, you can set both volumes separately.

Settings

< Incoming calls >

Phone ringtone – Allows you to set your default incoming call ringtone.

< Notifications >

Notification ringtone – Allows you to set your default notification ringtone.

< Feedback >

Audible touch tones – Allows you to set the phone to play tones when using the dial keypad to dial numbers.

Audible selection – Allows you to set your phone to play a sound when you touch buttons, icons and other onscreen items that react to your touch.

Screen lock sounds – Allows you to set your phone to play a sound when locking and unlocking the screen.

Haptic feedback – Allows you to set your phone to vibrate briefly when you touch the soft keys and perform other actions.

Display

Brightness – Adjust the brightness of the screen.

Auto-rotate screen – Allows you to set the orientation to automatically switch to landscape mode or portrait mode when you turn the phone sideways or upright.

Animation – Allows you to set animated transitions when navigating from screen to screen.

Screen timeout – Allows you to adjust the delay time before the screen automatically turns off. For the best battery performance, use the shortest convenient timeout.

Display font - Change the display font.

Gesture

Adjust the gesture settings for home screen, incoming call, alarm, gallery, music, and video player.

Location & security

< My Location >

Use wireless networks – If you select **Use wireless networks**, your phone will determine your approximate location using Wi-Fi and/or mobile networks.

Use GPS Satellites – If you select **Use GPS satellites**, your phone will determine your location to street-level accuracy.

< Screen unlock >

Set up screen lock – Set unlock pattern to secure your phone. Opens a set of screens that guide you through drawing a screen unlock pattern. You can set a **PIN** or **Password** instead of a **Pattern**, or leave it as **None**.

TIP! To lock your screen by using the **Pattern Lock**

- 1 The first time you do this, a short tutorial about creating an unlock pattern appears.
- 2 You are prompted to draw and redraw your own pattern. The next time you turn on your phone or wake up the screen, you will be prompted to draw your unlock pattern to unlock the screen.

< SIM card lock >

Set up SIM card lock – Set up SIM card lock or change SIM PIN.

< Passwords >

Visible passwords – Select to show passwords as you type them or deselect to hide passwords as you type them.

< Device administration >

Select device administrators – Add or remove device administrators.

Settings

< Credential storage >

Use secure credentials – Select to allow applications to access your phone's encrypted store of secure certificates and related passwords and other credentials. You use credential storage to establish some kinds of Wi-Fi connections. If you have not set a password for credential storage, this setting is dimmed.

Install from SD card – Allows you to install encrypted certificates from a microSD card.

Set password – Allows you to set or change the password for your secure credential storage. Your password must have at least eight characters.

Clear storage – Deletes all secure certificates and related credentials and erases the secure storage's own password.

Applications

Unknown sources – Permits installation of applications that you obtain from websites, email or other locations other than Android Market.



WARNING

To protect your phone and personal data, download applications only from trusted sources, such as Android Market.

Manage applications – Manage and remove installed applications.

Running services – Allows you to view and control currently running services and applications. This option displays what processes each running service needs and how much memory it is using.

Development – Allows you to set options for application development, such as **USB debugging**, **Stay awake** and **Allow mock locations**.

Accounts & sync

<General sync settings >

Background data – Permits applications to synchronise data in the background, whether or not you are actively working in them. Un-selecting this setting can save battery power and lowers (but does not eliminate) data use.

Auto-sync – Permits applications to synchronise, send and receive data on their own schedule.

< Manage accounts >

List of all Google accounts and other accounts you've added to your phone. If you touch an account in this screen, its account screen opens.

Privacy

Factory data reset – Erases all of your personal data from internal phone storage, including information about your Google account, any other accounts, your system/application

data and settings, any downloaded applications and your DRM licence. Resetting the phone does not erase any system software updates you have downloaded or any files on your microSD card, such as music or photos. If you reset the phone in this way, you are prompted to re-enter the same information as when you first started Android.

SD card & phone storage

< USB connection mode >

Your phone can be used as a mass storage device. You can set the default USB connection mode setting to **Mass storage only**.

< External SD card >

Checks total space and available space. Touch **Unmount External SD card** for safe removal. If you want to delete all data from the external microSD card, touch **Format External SD card** to format it.

Settings

< Internal SD card >

Checks total space and available space. Touch **Unmount Internal SD card** for safe removal. If you want to delete all data from the internal microSD, touch **Format Internal SD card** to format it.

< Internal phone storage >

Check the **Available space**.

Language & keyboard

Use the **Language & keyboard** settings to select the language and region for the text on your phone and for configuring the onscreen keyboard, including words that you've added to its dictionary.

Voice input & output

< Voice input >

Voice recogniser settings –

Use the **Voice recogniser settings** to configure the Android voice input feature.

- **Language:** Opens a screen where you can set the language you use when entering text by speaking.
- **SafeSearch:** Opens a dialog where you can set whether you want Google SafeSearch filter to block some results.
- **Block offensive words:** When un-selected, Google voice recognition will recognise and transcribe words many people consider offensive, when you enter text by speaking. When selected, Google voice recognition replaces those words in transcriptions with a place holder comprised of hash symbols (#).

< Voice output >

Text-to-speech settings –

Use the **Text-to-speech settings** to configure the Android text-to-speech synthesiser for applications that can take advantage of it.

NOTE: If you don't have speech synthesiser data installed, only the **Install voice data setting** is available.

- **Listen to an example:** Plays a brief sample of the speech synthesiser using your current settings.
- **Always use my settings:** Check to use the settings on this screen in place of speech synthesiser settings available in other applications.
- **Default Engine:** Opens a dialog where you can set the text-to-speech application you want to use if you have more than one installed.
- **Install voice data:** If your phone does not have speech synthesiser data installed, this connects to Android Market and guides you through the process of downloading and installing the data. This setting is not available if the data is already installed.

- **Speech rate:** Opens a dialog where you can select how quickly you want the synthesiser to speak.
- **Language:** Opens a dialog where you can select the language of the text you want the synthesiser to read. This is particularly useful in combination with **Always use my settings** to ensure that text is spoken correctly in a variety of applications.
- **Pico TTS:** Configure the Pico TTS settings.

Accessibility

Use the **Accessibility** settings to configure any accessibility plug-ins you have installed on your phone.

NOTE: Requires additional plug-ins to become selectable.

HDMI

Adjust the HDMI connection setting. If your phone is connected with TV/PC via HDMI cable, you can see

Settings

the image and video file through the TV/PC, when the video player/image viewer is visible on your phone screen.

NOTE:

- It may take time to play media files depending on the device connected to your phone using an HDMI cable.
- Files may not be played properly when using a cable or device that is not HDMI-certified.
- The image orientation set in your phone also applies to the image displayed on the device.
- If your phone data is not displayed properly on the device due to a sync issue, you need to change the resolution of your phone. (You need to reboot your phone to reflect the new HDMI resolution.)

Date & time

Use **Date & time** settings to set your references for how dates are

displayed. You can also use these settings to set your own time and time zone rather than obtaining the current time from the mobile network.

About phone

View legal information and check phone status and software version.

Wi-Fi

With Wi-Fi, you can use high-speed Internet access within the coverage of the wireless access point (AP). You can enjoy wireless internet with Wi-Fi, without extra charges.

Turn on Wi-Fi

From the home screen, open the notification drawer and touch  on.

Or touch **Application > Settings > Wireless & networks**, then turn **Wi-Fi** on.

To connect to Wi-Fi

Choose Wi-Fi network you want to connect to. If you see , you need to enter password to connect.

NOTE:

- If you are out of Wi-Fi area and choose 3G connection, additional charges may be applied.
- If your phone changes to sleep mode, even when connected to Wi-Fi, the Wi-Fi connection will be disabled automatically. In this case, if your phone has access to 3G data, it may be connected to the 3G network automatically, and additional charges may be applied.
- The LG-P990hN supports WEP, WPA/WPA2-PSK and 802.1x EAP security. If your Wi-Fi service provider or network administrator sets encryption for network security, fill in the key in the pop-up window. If encryption is not set, this pop-up window will not be shown. You can obtain the key

from your Wi-Fi service provider or network administrator.

Sharing your phone's mobile data connection

You can also share your phone's data connection with up to five devices at once, by turning your phone into a portable Wi-Fi hotspot.

When your phone is sharing its data connection, an icon appears in the status bar and as an ongoing notification in the notifications drawer.

Icon	Description
	USB tethering is active
	Portable Wi-Fi hotspot is active
	Both USB tethering and portable hotspot are active

Settings

For the latest information about portable hotspots, including supported operating systems and other details, visit <http://www.android.com/tether>.

NOTE: Additional costs may be incurred when connecting and using online services. Check data charges with your network provider.

USB tethering & portable Wi-Fi hotspot settings

On the home screen, touch the **Application** tab and select **Settings**.

Touch **Wireless & networks** and select **Tethering & Portable hotspot**.

Choose options that you want to adjust.

USB tethering – Check to share your phone's mobile network data connection with your computer, via a USB connection.

Portable Wi-Fi hotspot – Check to share your phone's mobile network data connection as a portable Wi-Fi hotspot.

Help – Opens a dialog with information about portable Wi-Fi hotspots as well as information about where to learn more.

To share your phone's data connection via USB

If your computer is running Windows 7 or a recent distribution of some flavours of Linux (such as Ubuntu), you typically don't need to prepare your computer for tethering. But if you're running an earlier version of Windows or another operating system, you may need to prepare your computer to establish a network connection via USB. For the most current information about which operating systems support USB tethering and how to configure them, visit <http://www.android.com/tether>.

USB tethering and data sharing

You can't share your phone's data connection and microSD card via USB at the same time. If you are using your USB connection to make your microSD card available to your computer, you must disconnect it first.

- 1 Use the USB cable that came with your phone to connect your phone to your computer.
- 2 On the home screen, touch the **Applications** tab and select **Settings**.
- 3 Touch **Wireless & networks** and select **Tethering & portable hotspot**.
- 4 Check **USB tethering**.
 - The phone starts sharing its mobile network data connection with your computer, via USB connection. An ongoing notification  is added to the status bar and notifications drawer.

- 5 Un-tick **USB tethering** to stop sharing your data connection. Or just disconnect the USB cable.

To share your phone's data connection as a portable Wi-Fi hotspot

- 1 On the home screen, touch the **Applications** tab and select **Settings**.
- 2 Touch **Wireless & networks** and select **Tethering & Portable hotspot**.
- 3 Check **Portable Wi-Fi hotspot**.
 - After a moment, the phone starts broadcasting its Wi-Fi network name (SSID), so you can connect to it with up to five computers or other devices. An ongoing notification  is added to the status bar and notifications drawer.
 - When **Portable Wi-Fi hotspot** is selected, you can change its network name or secure it.

Settings

- 4 Unselect **Portable Wi-Fi hotspot** to stop sharing your data connection via Wi-Fi.

To rename or secure your portable hotspot

You can change the name of your phone's Wi-Fi network name (SSID) and secure its Wi-Fi network.

- 1 On the home screen, touch the **Applications** tab and select **Settings**.
- 2 Touch **Wireless & networks** and select **Tethering & Portable hotspot**.
- 3 Ensure **Portable Wi-Fi hotspot** is selected.
- 4 Touch **Portable Wi-Fi hotspot settings**.
- 5 Touch **Configure Wi-Fi hotspot**.
 - The **Configure Wi-Fi hotspot** dialog opens.
 - You can change the network SSID (name) that other computers see when scanning for Wi-Fi networks.

- You can also touch the **Security** menu to configure the network with Wi-Fi Protected Access 2 (WPA2) security with a pre-shared key (PSK).
- If you touch the **WPA2 PSK** security option, a password field is added to the **Configure Wi-Fi hotspot** dialog. If you enter a password, you will need to enter that password when you connect to the phone's hotspot with a computer or other device. Or touch **Open** in the **Security** menu to remove security from your Wi-Fi network.

ATTENTION!

If you set the security option as **Open**, you can not prevent unauthorised usage of online services by other people and additional charges can be incurred. To avoid unauthorised use, you are advised to keep the security option.

6 Touch **Save**.

Using SmartShare

SmartShare uses DLNA (Digital Living Network Alliance) technology to share digital content through a wireless network.

Both devices must be DLNA certified to support this feature.

To turn SmartShare on and allow sharing contents

- 1 Touch application tab and select Settings.
- 2 Choose **Wireless & networks and SmartShare settings**.
- 3 Touch SmartShare to checkmark and turn the function on.
Touch **Always allow requests** if you would like to automatically accept sharing requests from other devices.
- 4 Under the Sharing contents section, touch to checkmark the types of content you would like to share.

5 Choose from **Pictures, Videos, and Music**.

6 SmartShare is now activated and ready to share contents.

To share contents from remote content library to other devices

Let your renderer device (e.g. TV) play multimedia contents from your remote content library (e.g. PC).

NOTE: Make sure that the DLNA functionality of your devices is properly configured (e.g. TV and PC)

- 1 Touch the top right button to or select the device from renderer lists.
- 2 Touch the top left button and select the device of the remote content library.
- 3 Touch SmartShare to checkmark and turn the function on.
- 4 You can browse the content library.
- 5 Touch and hold a content thumbnail and flick them to the top area with your flinger or touch the play button.

Settings

To share contents from your phone to your renderer device (e.g. TV)

NOTE: Make sure that your renderer device is properly configured.

- 1 While browsing your pictures or videos using the Gallery application, touch and hold to select files.
Then you will be able to select multiple files to be shared.
- 2 Touch Share on the menu and select the SmartShare.
- 3 SmartShare is automatically launched with the selected files.
- 4 Touch the top right button to select the device from renderer lists.
- 5 Touch the play button to let your renderer device play the files.

NOTE: Follow the same steps to use the Music player to share music files.

NOTICE: Check that your device is connected with your home network using Wi-Fi connection to use this application.

NOTICE: Some DLNA enabled device (e.g. TV) support only the DMP feature of DLNA and will not appear in the renderer device list.

NOTICE: Your device might not be able to play some contents.

Enabling Wi-Fi Direct to share through SmartShare

Wi-Fi Direct cannot be enabled while using other Wi-Fi functions.

Wi-Fi Direct automatically scans nearby Wi-Fi Direct devices and the searched devices will be listed up in the order of arrival and you can select a specific device to share multimedia data through **SmartShare**.

- 1 On the home screen, touch the **Application** tab and select **Settings**.
 - 2 Touch **Wireless & networks** and select **Wi-Fi Direct Settings**.
 - 3 Ensure **Wi-Fi Direct** is selected.
 - 4 Select a device to connect in the scanned device list.
- **Forced G/O mode** - Touch to activate group owner mode that enables the legacy Wi-Fi devices to connect by scanning your phone. In this case you must enter the password that is set in the **Menu > Advanced > Password**.

NOTE: When your phone becomes group owner, it will consume more battery power than being a client. Wi-Fi Direct connection does not provide Internet service. Additional cost may be incurred when connecting and using online services. Check data charges with your network provider.

How to use On-Screen Phone

On-Screen Phone allows you to view your mobile phone screen from a PC via a USB or Bluetooth connection. You can also control your mobile phone from your PC using the mouse or keyboard.

On-Screen Phone icons

-  Connects or disconnects your mobile phone to/from your PC.
-  Rotates the On-Screen Phone window (only available at applications that support rotation).
-  Changes the On-Screen Phone preferences.
-  Exits the On-Screen Phone program.
-  Minimises the On-Screen Phone window.

Settings

On-Screen Phone features

- Real-time transfer and control: displays and controls your mobile phone screen when connected to your PC.
- Mouse control: allows you to control your mobile phone by using the mouse to click and drag on your PC screen.
- Text input with keyboard: allows you to compose a text message or note using your computer keyboard.
- File transfer (mobile phone to PC): sends files from your mobile phone (e.g. photos, videos, music and Polaris Office files) to your PC. Simply right-click and drag to send a file to your PC.
- File transfer (PC to mobile phone): sends files from your PC to your mobile phone. Simply select the files you wish to transfer and drag and drop into the On-Screen

Phone window. The files you send are stored on a micro SD card.

- Real-time event notifications: prompts a pop-up to inform you of any incoming calls or text/multimedia messages, as well as alarm and event notifications.

Notice: The Camera preview and Video are not supported in OSP, so it is not available on the PC.

How to install On-Screen Phone on your PC

Visit LG Home (<http://www.lg.com>) and go to Support > Mobile Phone Support > Download LG Mobile Support Tool to PC. If you download LG PC Suite IV, the On-Screen Phone program will also be downloaded on your PC. Then you can install the On-Screen Phone on your PC.

How to connect your mobile phone to your PC

USB connection:

- 1 Open Connection Wizard, select "USB Cable connection" and click "Next".
- 2 Connect your mobile phone to the PC using a USB cable and click "Next".
- 3 Enter the On-Screen Phone password and click "Next". The default password is "0000". You can change the password in **Settings > Wireless & Networks > On-Screen Phone Settings**.
- 4 Click "OK" to exit the window.

Wireless connection with Bluetooth:

- 1 On your mobile phone, go to **Settings > Wireless & networks > Bluetooth settings**. Select **Turn on Bluetooth** and select **Discoverable**.

- 2 If you have previously connected using a cable, run the New Connection Wizard to create a new connection.
- 3 Run the Connection Wizard on the computer, select "Bluetooth connection", then "Next".
- 4 The wizard starts searching for Bluetooth-enabled mobile phones. When the mobile phone that you wish to connect to appears, click "Stop" to stop searching.
- 5 Select "LG-P990hN" from the device list and click "Next". You can rename the device if you wish.
- 6 Enter the PIN code (e.g. "0000") and click "Next".
- 7 On your mobile phone, accept the request and enter the same PIN code, then touch "OK".
- 8 Enter the On-Screen Phone password and click "Next" (the default password is "0000").
- 9 Touch "OK" to exit.

Settings

To check the phone to PC connection

Once the devices have been connected, drag down the notification bar at the top of the home screen to check the On-Screen Phone connection status.

To disconnect your phone from your PC

Click  in the top left of the On-Screen Phone window. Or drag down the notification bar at the top of the home screen and select "On-Screen Phone". Touch "Yes" in the Disconnect window.

NOTE: You must restart your phone after shutting down the On-Screen Phone service.

Phone Software update

LG Mobile Phone Software update from internet

For more information on using this function, please visit the <http://update.lgmobile.com> or <http://www.lg.com/common/index.jsp> → select country and language.

This feature allows you to update the firmware of your phone to the newer version conveniently from the internet without the need to visit a service centre. This feature is only available if and when LG makes the newer version of the firmware available for your device.

As the mobile phone firmware update requires the user's full attention for the duration of the update process, please make sure to check all instructions and notes that appear at each step before proceeding. Please note that removing the USB data cable or battery during the upgrade may seriously damage you mobile phone.

NOTE: LG reserves the right to make firmware updates available only for selective models at its own discretion and does not guarantee the availability of the newer version of the firmware for all handset models.

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May play  video up to 1920x1080.

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Notice!

Open Source Software

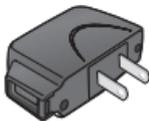
To obtain the corresponding source code under GPL, LGPL, MPL and other open source licences, please visit <http://opensource.lge.com/>

All referred licence terms, disclaimers and notices are available for download with the source code.

Accessories

These accessories are available for use with the LG-P990hN.
(Items described below may be optional.)

Charger



Data cable

Connect your LG-P990hN and PC.



Battery



User Guide

Learn more about your LG-P990hN.



Stereo headset



NOTE:

- Always use genuine LG accessories.
- Failure to do this may void your warranty.
- Accessories may vary in different regions.

Troubleshooting

This chapter lists some problems you might encounter while using your phone. Some problems require you to call your service provider, but most are easy to correct yourself.

Message	Possible causes	Possible Corrective Measures
SIM error	There is no SIM card in the phone or it is inserted incorrectly.	Make sure that the SIM card is correctly inserted.
No network connection/ Losing network	Weak Signal outside of WCDMA network area. Operator applied new services	Move towards a window or into an open area. Check the network operator coverage map. Check if the SIM card is older than 6~12 months. If so, change your SIM at your network provider's nearest branch.
Codes do not match	To change a security code, you will need to confirm the new code by entering it again. The two codes you have entered do not match.	The default code is [0000]. If you forget the code, contact your service provider.
Any application cannot be set	Not supported by service provider or registration required	Contact your service provider.
Calls not available	Dialing error New SIM card inserted Prepaid Charge limit reached	New network not authorised. Check for new restrictions. Contact service provider or reset limit with PIN 2.
Phone cannot be switched on	On/Off key pressed long enough Battery is not charged Battery contacts are dirty	Press the On/Off key down for at least two seconds. Keep charger attached for longer. Clean the contacts. Take out the battery and insert again.

Troubleshooting

Message	Possible causes	Possible Corrective Measures
Charging error	Battery is not charged.	Charge battery.
	Outside temperature is too hot or cold	Make sure phone is charging under normal temperatures.
	Contact problem	Check the charger and connection to the phone. Check the battery contacts and clean them if necessary.
	No voltage Charger defective	Plug into a different socket. If the charger does not warm up, replace it. Only use original LG accessories.
	Wrong charger. Battery defective.	Replace battery.
Number not permitted	The Fixed Dial Number function is on.	Check settings.
Impossible to receive/ send SMS & Picture	Memory Full	Delete some existing messages in the phone.
Files not open	Unsupported file format	Check the file format that can be supported
SD Card not working	FAT16, FAT32 file system supported	Check SD card file system via card reader or format SD card using phone
The screen does not turn on when I receive a call.	Proximity sensor problem	If you use any protection tape or case, check if it is covering the area around the proximity sensor. Make sure that the area around the proximity sensor is clean.
No Sound	Vibration or manner mode	Check the settings status of the sound menu to make sure you are not in vibrate or silent mode.
Hang up or freeze	Intermittent software problem	Remove and re-insert battery. Turn on the phone. Try to do a software update service via website.

LIMITED WARRANTY STATEMENT

1. WHAT THIS WARRANTY COVERS:

LG offers you a limited warranty that the enclosed subscriber unit and its enclosed accessories will be free from defects in material and workmanship, according to the following terms and conditions:

1. The limited warranty for the product extends for ONE (1) year beginning on the date of purchase of the product by the original end user.
2. The limited warranty extends only to the original end user of the product and is not assignable or transferable to any subsequent purchaser/end user.
3. This warranty is good only to the original end user of the product during the warranty period as long as it is in Canada.
4. Upon request from LG, the consumer must provide information to reasonably prove the date of purchase.
5. During the applicable warranty period, LG will repair or replace at LG's sole option, without charge to the original end user, any defective component part of the phone or accessory.
6. LG may use rebuilt, reconditioned or new parts or components when repairing any product or replace a product with a rebuilt, reconditioned or new product.

2. WHAT THIS WARRANTY DOES NOT COVER:

1. Defects or damages resulting from use of the product in other than its normal and customary manner.
2. Defects or damages from abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation or other acts which are not the fault of LG, including damage caused by spills of food or liquids.
3. Breakage or damage to antennas unless caused directly by defects in material or workmanship.
4. The fact that the Customer Service Department at LG was not notified by the original end user of the alleged defect or malfunction of the product, during the warranty period.

5. Products which have had their serial numbers removed or made illegible.
6. Damage resulting from use of non-LG approved accessories.
7. All plastic surfaces and all other externally exposed parts that are scratched or damaged due to normal customer use.
8. Products serviced by non-authorized persons or companies.

Notes:

1. This limited warranty supersedes all other warranties, expressed or implied either in fact or by operations of law, statutory or otherwise, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose.
2. Shipping damage is the sole responsibility of the shipping company.

3. EXCLUSION OF LIABILITY:

No other express warranty is applicable to this product.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. LG ELECTRONICS CANADA, INC. SHALL NOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THIS PRODUCT OR FOR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY APPLICABLE TO THIS PRODUCT.

4. HOW TO GET WARRANTY SERVICE:

To obtain warranty service, please call the following telephone number from anywhere in Canada:

LG Electronics Canada, Inc.

Tel. 1-888-LG-Canada (1-888-542-2623)

http://www.lg.com/ca_en (see links to "Support > Mobile phone support")



LG

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