

GT-I6320C
user manual

DRAFT

SAMSUNG

safety and usage information

Comply with the following precautions to avoid dangerous or illegal situations and ensure peak performance of your mobile phone.



Safety warnings

Keep your phone away from small children and pets

Keep your phone and all accessories out of the reach of small children or animals. Small parts may cause choking or serious injury if swallowed.

Protect your hearing



Listening to a headset at high volumes can damage your hearing. Use only the minimum volume setting necessary to hear your conversation or music.

Install mobile phones and equipment with caution

Ensure that any mobile phones or related equipment installed in your vehicle are securely mounted. Avoid placing your phone and accessories near or in an air bag deployment area. Improperly installed wireless equipment can cause serious injury when air bags inflate rapidly.

Handle and dispose of batteries and chargers with care

- Use only Samsung-approved batteries and chargers specifically designed for your phone. Incompatible batteries and chargers can cause serious injuries or damage to your phone. Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
- Never dispose of batteries or phone in a fire. Follow all local regulations when disposing used batteries or phone.
- Never place batteries or phones on or in heating devices, such as microwave ovens, stoves, or radiators. Batteries may explode when overheated.
- Never crush or puncture the battery. Avoid exposing the battery to high external pressure, which can lead to an internal short circuit and overheating.

Avoid interference with pacemakers

Maintain a minimum of 15 cm (6 inches) between mobile phones and pacemakers to avoid potential interference, as recommended by manufacturers and the independent research group, Wireless Technology Research. If you have any reason to suspect that your phone is interfering with a pacemaker or other medical device, turn off the phone immediately and contact the manufacturer of the pacemaker or medical device for guidance.

Turn off the phone in potentially explosive environments

Do not use your phone at refuelling points (service stations) or near fuels or chemicals. Turn off your phone whenever directed by warning signs or instructions. Your phone could cause explosions or fire in and around fuel or chemical storage and transfer areas or blasting areas. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the phone, its parts, or accessories.

Reduce the risk of repetitive motion injuries

When sending text messages or playing games on your phone, hold the phone with a relaxed grip, press the keys lightly, use special features that reduce the number of keys you have to press (such as templates and predictive text), and take frequent breaks.



Safety precautions

Drive safely at all times

Avoid using your phone while driving and obey all regulations that restrict the use of mobile phones while driving. Use hands-free accessories to increase your safety when possible.

Follow all safety warnings and regulations

Comply with any regulations that restrict the use of a mobile phone in a certain area.

Use only Samsung-approved accessories

Using incompatible accessories may damage your phone or cause injury.

Turn off the phone near medical equipment

Your phone can interfere with medical equipment in hospitals or health care facilities. Follow all regulations, posted warnings, and directions from medical personnel.

Turn off the phone or disable the wireless functions when in an aircraft

Your phone can cause interference with aircraft equipment. Follow all airline regulations and turn off your phone or switch to a mode that disables the wireless functions when directed by airline personnel.

Protect batteries and chargers from damage

- Avoid exposing batteries to very cold or very hot temperatures (below 0° C/32° F or above 45° C/113° F). Extreme temperatures can reduce the charging capacity and life of your batteries.
- Prevent batteries from contacting metal objects, as this can create a connection between the + and - terminals of your batteries and lead to temporary or permanent battery damage.
- Never use a damaged charger or battery.

Handle your phone carefully and sensibly

- Do not allow your phone to get wet—liquids can cause serious damage. Do not handle your phone with wet hands. Water damage to your phone can void your manufacturer's warranty.
- Avoid using or storing your phone in dusty, dirty areas to prevent damage to moving parts.
- Your phone is a complex electronic device—protect it from impacts and rough handling to avoid serious damage.
- Do not paint your phone, as paint can clog moving parts and prevent proper operation.
- Avoid using the phone's camera flash or light close to the eyes of children or animals.
- Your phone and memory cards may be damaged by exposure to magnetic fields. Do not use carrying cases or accessories with magnetic closures or allow your phone to come in contact with magnetic fields for extended periods of time.

Avoid interference with other electronic devices

Your phone emits radio frequency (RF) signals that may interfere with unshielded or improperly shielded electronic equipment, such as pacemakers, hearing aids, medical devices, and other electronic devices in homes or vehicles. Consult the manufacturers of your electronic devices to solve any interference problems you experience.



Important usage information

Use your phone in the normal position

Avoid contact with your phone's internal antenna.

Allow only qualified personnel to service your phone

Allowing unqualified personnel to service your phone may result in damage to your phone and will void your warranty.

Ensure maximum battery and charger life

- Avoid charging batteries for more than a week, as overcharging may shorten battery life.
- Over time, unused batteries will discharge and must be recharged before use.
- Disconnect chargers from power sources when not in use.
- Use batteries only for their intended purpose.

Handle SIM cards and memory cards with care

- Do not remove a card while the phone is transferring or accessing information, as this could result in loss of data and/or damage to the card or phone.
- Protect cards from strong shocks, static electricity, and electrical noise from other devices.
- Frequent writing and erasing will shorten the life span of memory cards.
- Do not touch gold-coloured contacts or terminals with your fingers or metal objects. If dirty, wipe the card with a soft cloth.

Ensure access to emergency services

Emergency calls from your phone may not be possible in some areas or circumstances. Before travelling in remote or undeveloped areas, plan an alternate method of contacting emergency services personnel.

Exposure to Radio Frequency (RF) Signals

Certification Information (SAR)

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. government. These FCC exposure limits are derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurement (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases, the recommendations were developed by scientific and engineering experts drawn from industry, government, and academia after extensive reviews of the scientific literature related to the biological effects of RF energy.

The exposure limit set by the FCC for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR is a measure of the rate of absorption of RF energy by the human body expressed in units of watts per kilogram (W/kg). The FCC requires wireless phones to comply with a safety limit of 1.6 watts per kilogram (1.6 W/kg). The FCC exposure limit incorporates a substantial margin of safety to give additional protection to the public and to account for any variations in measurements.

SAR tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the 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. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach

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

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

The FCC has granted an Equipment Authorization for this mobile phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. The maximum SAR values for this model phone as reported to the FCC are:

GSM1900

Head: 0.079 W/kg.

Body-worn: 0.211 W/kg.

Body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines when used with a Samsung accessory designated for this product or when used with an accessory that contains no metal and that positions the handset a minimum of 1.5 cm from the body

SAR information on this and other model phones can be viewed on-line at www.fcc.gov/oet/fccid. This site uses the phone FCC ID number, A3LGTI6320C. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular phone, follow the instructions on the website and it should provide values for typical or maximum SAR for a particular phone. Additional product specific SAR information can also be obtained at www.fcc.gov/cgb/sar.

UL Certified Travel Adapter

The Travel Adaptor for this phone has met applicable UL safety requirements. Please adhere to the following safety instructions per UL guidelines. FAILURE TO FOLLOW THE INSTRUCTIONS OUTLINED MAY LEAD TO SERIOUS PERSONAL INJURY AND POSSIBLE PROPERTY DAMAGE. IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS. DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS. FOR CONNECTION TO A SUPPLY NOT IN NORTH AMERICA, USE AN ATTACHMENT PLUG ADAPTOR OF THE PROPER CONFIGURATION FOR THE POWER OUTLET. THIS POWER UNIT IS INTENDED TO BE CORRECTLY ORIENTATED IN A VERTICAL OR HORIZONTAL OR FLOOR MOUNT POSITION.

Consumer Information on Wireless Phones

The U.S. Food and Drug Administration (FDA) has published a series of Questions and Answers for consumers relating to radio frequency (RF) exposure from wireless phones. The FDA publication includes the following information:

What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called "cell," "mobile," or "PCS" phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of 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 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 well within the FCC's compliance limits.

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 stand-by 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.

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

Under the law, 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, 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, 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 users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

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
- "Federal Communications Commission
- "Occupational Safety and Health Administration
- "National Telecommunications and Information Administration

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

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. FCC relies on FDA and other health agencies for safety questions about wireless phones.

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 primary subject of the safety questions discussed in this document.

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 radio frequency 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 pre-disposed to develop cancer in 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 phones RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

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 ten 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.

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

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 radio frequency energy (RF).

FDA has been a leading participant in the 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.

FDA and Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative

Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to 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.

What steps can I take to reduce my exposure to radio frequency 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 radio frequency 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.

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 radio frequency 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.

Do hands-free kits for wireless phones reduce risks from exposure to RF emissions?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

Do wireless phone accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike “hand-free” kits, these so-called “shields” may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal Trade Commission (FTC) charged two companies that sold

devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, 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 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. FDA has tested 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.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

Additional information on the safety of RF exposures from various sources can be obtained from the following organizations:

- FCC RF Safety Program:
- <http://www.fcc.gov/oet/rfsafety/>
- Environmental Protection Agency (EPA):
- <http://www.epa.gov/radiation/>
- Occupational Safety and Health Administration's (OSHA):

- <http://www.osha.gov/SLTC/radiofrequencyradiation/index.html>
- National Institute for Occupational Safety and Health (NIOSH):
- <http://www.cdc.gov/niosh/emfpg.html>
- World Health Organization (WHO):
- <http://www.who.int/peh-emf/>
- International Commission on Non-Ionizing Radiation Protection:
- <http://www.icnirp.de>
- National Radiation Protection Board (UK):
- <http://www.nrpb.org.uk>
- Updated 4/3/2002: US Food and Drug Administration
- <http://www.fda.gov/cellphones>

Road Safety

Your wireless phone gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When driving 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. If available, these features help you to place your call without taking your attention off the road.**
2. **When available, use a hands-free device. If possible, add an additional layer of convenience and safety to your wireless**

phone with one of the many hands free accessories available today.

3. Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
4. 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, ice and even heavy traffic can be hazardous.
5. Do not take notes or look up phone numbers while driving. Jotting down a "to do" list or flipping through your address

book takes attention away from your primary responsibility, driving safely.

6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.
7. Do not engage in stressful or emotional conversations that may be distracting. Make people you are talking with aware you are driving and suspend conversations that have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Dial 9-1-1 or other local emergency

number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!

9. Use your wireless phone to help others in emergencies. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
10. Call roadside assistance or a special non-emergency wireless assistance number when necessary. 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 number.

“The wireless industry reminds you to use your phone safely when driving.”

For more information, please call 1-888-901-SAFE, or visit our web-site www.wow-com.com

Provided by the Cellular Telecommunications & Internet Association

Operating Environment

Remember to follow any special regulations in force in any area and always switch your phone off whenever it is forbidden to use it, or when it may cause interference or danger. When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be

used in the normal operating position (held to your ear with the antenna pointing over your shoulder).

Using Your Phone Near Other Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker.

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

Persons with pacemakers:

- should always keep the phone more than 15 cm (6 inches) from their pacemaker when the phone is switched on.
- should not carry the phone in a breast pocket.
- should use the ear opposite the pacemaker to minimize potential interference.

If you have any reason to suspect that interference is taking place, switch your phone off immediately.

Hearing Aid Compatibility with Mobile Phones

When some mobile phones are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and phones also vary in the amount of interference they generate.

The wireless telephone industry has developed ratings for some of their mobile phones, to assist hearing device users in finding phones that may be compatible with their hearing devices. Not all phones have been rated. Phones that are rated have the rating on their box or a label on the box.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use a rated phone successfully. Trying out the phone with your hearing device is the best way to evaluate it for your personal needs.

M-Ratings: Phones rated M3 or M4 meet FCC requirements and are likely to

generate less interference to hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: Phones rated T3 or T4 meet FCC requirements and are likely to be more usable with a hearing device's telecoil (°×T Switch°± or °×Telephone Switch°±) than unrated phones. T4 is the better/higher of the two ratings. (Note that not all hearing devices have telecoils in them.)Hearing devices may also be measured for immunity to this type of interference. Your hearing device manufacturer or hearing health professional may help you find results for your hearing device. The more immune your hearing aid is, the less likely you are to experience interference noise from mobile phones.

Other Medical Devices

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

Switch your phone off in any facility where posted notices require you to do so.

Potentially Explosive Environments

Switch 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.

Users are advised to switch the phone off while at a refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

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

Emergency Calls

This phone, like any wireless phone, operates using radio signals, wireless and landline networks as well as user programmed functions, which cannot guarantee connection in all conditions. Therefore, you should never rely solely on any wireless phone for essential communications (medical emergencies, for example).

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

1) To make an emergency call:

If the phone is not on, switch it on.

2) Key in the emergency number for your present location (for example, 911 or other official emergency number). Emergency numbers vary by location.

3) Press .

If certain features are in use (call barring, for example), you may first need to deactivate those features before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your phone may be the only means of communication at the scene of an accident; do not cut off the call until given permission to do so.

Restricting Children's access to your Phone

Your phone is not a toy. Children should not be allowed to play with it because they could hurt themselves and others, damage the phone or make calls that increase your phone bill.



Acknowledging Special Precautions and the FCC Notice

FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

This phone may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the phone if such interference cannot be eliminated.

Vehicles using liquefied petroleum gas (propane or butane) must comply with the National Fire Protection Standard (NFPA-58). For a copy of this

standard, contact the National Fire Protections Association, One Batterymarch Park, Quincy, MA 02269, Attn.: Publication Sales Division.

Cautions

Changes or modifications made in the radio phone, not expressly approved by Samsung, will void the user's authority to operate the equipment.

Only use approved batteries, antennas and chargers. The use of any unauthorized accessories may be dangerous and void the phone warranty if said accessories cause damage or a defect to the phone.

Although your phone is quite sturdy, it is a complex piece of equipment and can be broken. Avoid dropping, hitting, bending or sitting on it.

Other Important Safety Information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.
- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.
- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.

- Switch your phone off before boarding an aircraft. The use of wireless phone in aircraft is illegal and may be dangerous to the aircraft's operation.
- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Product Performance

Getting the Most Out of Your Signal Reception

The quality of each call you make or receive depends on the signal strength in your area. Your phone informs you of the current signal strength by displaying a number of bars next to the signal strength icon. The more bars displayed, the stronger the signal.

If you're inside a building, being near a window may give you better reception.

Understanding the Power Save Feature

If your phone is unable to find a signal after 15 minutes of searching, a Power Save feature is automatically activated. If your phone is active, it periodically rechecks service availability or you can check it yourself by pressing any key.

Anytime the Power Save feature is activated, a message displays on the screen. When a signal is found, your phone returns to standby mode.

Maintaining Your Phone's Peak Performance

For the best care of your phone, only authorized personnel should service your phone and accessories. Faulty service may void the warranty.

There are several simple guidelines to operating your phone properly and maintaining safe, satisfactory service.

- Hold the phone with the antenna raised, fully-extended and over your shoulder.
- Try not to hold, bend or twist the phone's antenna.
- Don't use the phone if the antenna is damaged.
- Speak directly into the phone's receiver.
- Avoid exposing your phone and accessories to rain or liquid spills. If your phone does get wet, immediately turn the power off and remove the battery. If it is inoperable, call Customer Care for service.

Availability of Various Features/ Ring Tones

Many services and features are network dependent and may require additional subscription and/or usage charges. Not all features are available for purchase or use in all areas. Downloadable Ring Tones may be available at an additional cost. Other conditions and restrictions may apply. See your service provider for additional information.

Battery Standby and Talk Time

Standby and talk times will vary depending on phone usage patterns and conditions. Battery power consumption depends on factors such as network configuration, signal strength, operating temperature, features selected, frequency of calls, and voice, data, and other application usage patterns.

Battery Precautions

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.
- Battery charging time depends on the remaining battery charge and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).
- Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between

the + and - terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.

- Dispose of used batteries in accordance with local regulations. In some areas, the disposal of batteries in household or business trash may be prohibited. For safe disposal options for Li-Ion batteries, contact your nearest Samsung authorized service center. Always recycle. Do not dispose of batteries in a fire.

Care and Maintenance

Your phone is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years.

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.

- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
- When the phone or battery gets wet, the label indicating water damage inside the phone changes color. In this case, phone repairs are no longer guaranteed by the manufacturer's warranty, even if the warranty for your phone has not expired.
- If your phone has a flash or light, do not use it too close to the eyes of people or animals. This may cause damage to their eyes.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

introducing your mobile phone

In this section, learn about your mobile phone's layout, keys, display, and icons.

Unpack

Check your product box for the following items:

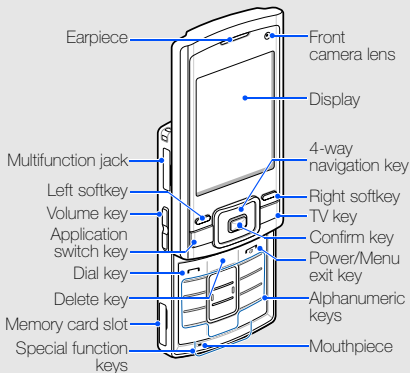
- Mobile phone
- Battery
- Travel adapter (charger)
- User manual



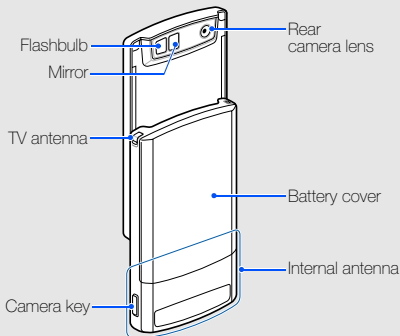
- The items supplied with your phone may vary depending on the software and accessories available in your region or offered by your service provider.
- You can obtain additional accessories from your local Samsung dealer.
- Use only Samsung-approved software. Pirated or illegal software may cause damage or malfunctions that are not covered by manufacturer's warranty.

Phone layout

The front of your phone includes the following keys and features:














The rear of your phone includes the following keys and features:




Closing the phone automatically locks the exposed keys to prevent you from accidentally pressing them. To unlock these keys, press **<Unlock>** → **<OK>**.

Keys

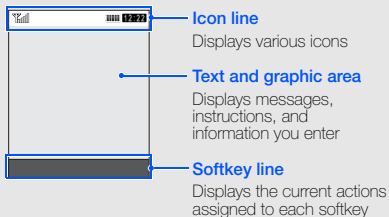
Key	Function
 Softkeys	Perform actions indicated at the bottom of the display
 4-way navigation	In Idle mode, access user-defined menus; In Menu mode, scroll through menu options
 Confirm	In Idle mode, access Menu mode; In Menu mode, select the highlighted menu option or confirm an input
 Application switch	Open the application switch window to access other applications without exiting the current application
 TV	In Idle mode, turn on the TV
 Dial	Make or answer a call; In Idle mode, retrieve recently dialed, missed, or received numbers

Key	Function
 Delete	Delete characters or items in an application
 Power/ Menu exit	Turn the phone on and off (press and hold); End a call; In Menu mode, cancel input and return to Idle mode
 Alpha- numeric	Enter numbers, letters and special characters; In Idle mode, press and hold [1] to access voice mails and [0] to enter an international call prefix
 * + # * Special function	Enter special characters or perform special functions; In Idle mode, press and hold [#] for the silent profile; Press and hold [*] to enter a pause between numbers
 Volume	Adjust the phone's volume

Key	Function
	Camera
	In Idle mode, turn on the camera (press and hold); In Camera mode, take a photo or record a video; From the dialling screen, make a video call










Display












Your phone's display consists of three areas:









Icons

Learn about the icons that appear on your display.

Icon	Definition
	Signal strength
	GPRS network status
	EDGE network status
	UMTS network status
	HSDPA network status
	Voice call in progress
	Video call in progress
	Bluetooth hands-free car kit or headset connected
	Bluetooth activated

Icon	Definition
	Music playback in progress
	Music playback paused
	Music playback stopped
	FM radio on
	FM radio suspended
	Connected with PC
	Alarm activated
	Memory card inserted
	Browsing the web
	Connecting to secured web page
	Call diverting activated

Icon	Definition
	Roaming (outside of normal service area)
	Normal profile activated
	Silent profile activated
	New text message (SMS)
	New multimedia message (MMS)
	New email message
	New voice mail message
	New push message
	New configuration message
	Battery power level
	Current time

assembling and preparing your mobile phone

Get started by assembling and setting up
your mobile phone for its first use.

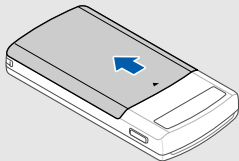
Install the SIM or USIM card and battery

When you subscribe to a cellular service, you will receive a Subscriber Identity Module, or SIM card, with subscription details, such as your personal identification number (PIN) and optional services.

To use UMTS or HSDPA services, you can purchase a Universal Subscriber Identity Module (USIM) card.

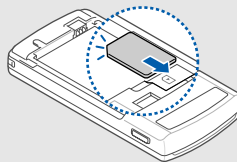
To install the SIM or USIM card and battery,

1. Remove the battery cover.



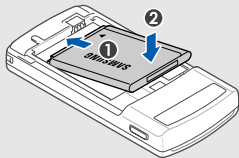
If the phone is on, press and hold [⏻] to turn it off.

2. Insert the SIM or USIM card.

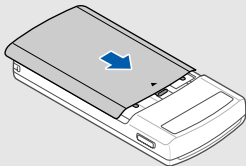


- Place the SIM or USIM card in the phone with the gold-coloured contacts facing down.
- Without inserting a SIM or USIM card, you can use your phone's non-network services and some menus.

3. Insert the battery.



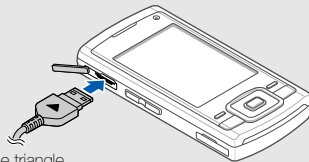
4. Replace the battery cover.



Charge the battery

Before using the phone for the first time, you must charge the battery.

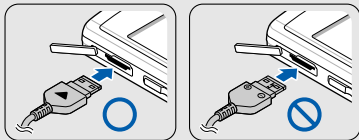
1. Open the cover to the multifunction jack on the side of the phone.
2. Plug the small end of the travel adapter into the multifunction jack.




With the triangle
facing up



Improperly connecting the travel adapter can cause serious damage to the phone. Any damages by misuse are not covered by the warranty.



3. Plug the large end of the travel adapter into a power outlet.
4. When the battery is fully charged (the  icon is no longer moving), unplug the travel adapter from the power outlet.



To ensure peak performance of your battery, fully charge and discharge (use until empty) the battery the first two or three times.

5. Unplug the travel adapter from the phone.
6. Close the cover to the multifunction jack.



About the low battery indicator

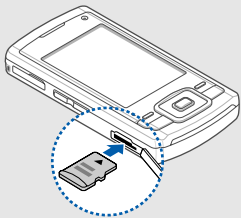
When your battery is low, the phone will emit a warning tone and a low battery message. The battery icon will also be empty and blinking. If the battery level becomes too low, the phone will automatically power off. Recharge your battery to continue using your phone.

Insert a memory card (optional)

To store additional multimedia files, you must insert a memory card. Your phone accepts microSD™ memory cards up to 8 GB (depending on memory card manufacturer and type).

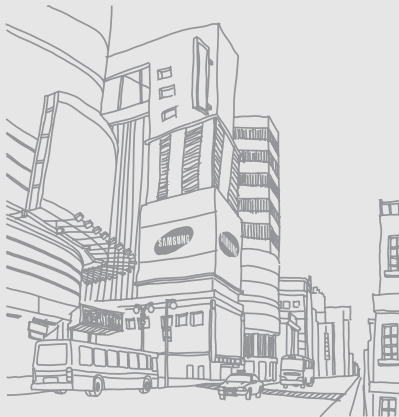
1. Open the cover to the memory card slot on the side of the phone.

2. Insert a memory card with the label side facing up.



3. Push the memory card in the memory card slot until it locks in place.

To remove the memory card, push it gently until it disengages from the phone, and then pull the memory card out of the memory card slot.




using basic functions

Learn how to perform basic operations and use the main features of your mobile phone.

Turn your phone on and off

To turn your phone on,

1. Slide open the phone.
2. Press and hold .
3. Enter your PIN and press <**Confirm**> (if necessary).

To turn your phone off, repeat steps 1 and 2 above.

Switch to the offline profile

By switching to the offline profile, you can use your phone's non-network services in areas where wireless devices are prohibited, such as aeroplane and hospitals.


To switch to the offline profile, in Menu mode, select **Settings** → **Phone profiles** → **Offline**.



Follow all posted warnings and directions from official personnel when in areas where wireless devices are prohibited.


Access menus

To access your phone's menus,

1. In Idle mode, press the Confirm key to access Menu mode.
2. Use the navigation key to scroll to a menu or option.
3. Press <**Select**>, <**Confirm**>, or the Confirm key to confirm the highlighted option.
4. Press <**Back**> to move up one level; Press [> to return to Idle mode.

Switch applications

Learn to switch to other applications from a menu, without closing the menu screen you are using.

1. While using a menu, press [>. The following applications are available:
 - **Call**: open the dialling screen
 - **Messages**: access the **Messages** menu
 - **Internet**: launch the web browser
 - **Music player**: launch the music player
2. Scroll to the application and press <**Select**>.
3. When you are finished, scroll to **End all?** and press <**Yes**>.

Customise your phone

Get more from your phone by customising it to match your preferences.

Adjust the volume of the key tones

In Idle mode, press the Volume key up or down to adjust the key tone volume.

Switch to or from the silent profile

In Idle mode, press and hold [**#**] to switch to or from the silent profile.

Change your ringtone

1. In Menu mode, select **Settings** → **Phone profiles**.
2. Scroll to the profile you are using.
3. Press <**Options**> → **Edit** → **Voice call ringtone** or **Video call ringtone**.

4. Scroll left or right to a memory location (if necessary).
5. Select a ringtone category → a ringtone.
6. Press <**Options**> → **Save**.

To switch to another profile, select it from the list.

Select a wallpaper (Idle mode)

1. In Menu mode, select **Settings** → **Display and light settings** → **Screen display**.
2. Scroll left or right to **Image**.
3. Select **Wallpaper**.
4. Scroll left or right to a memory location (if necessary).
5. Select an image category → an image.
6. Press <**Options**> → **Save**.

Select a theme for the display

To create a theme,

1. In Menu mode, select **Settings** → **Display and light settings** → **My theme** → **Create theme (Easy)** or **Create theme (Expert)**.
2. Customise the theme as desired by following the screen.
3. When you have finished, enter a name for the theme and press <**Save**>.
4. Press <**Yes**> to apply the theme.



If you select the same colour for the entire theme, you may not be able to recognise the display.

To apply a theme,

1. In Menu mode, select **Settings** → **Display and light settings** → **My theme** → **Select theme**.
2. Select a theme and press <**Save**>.
3. Press <**Yes**> to apply the theme.

Set menu shortcuts

1. In Menu mode, select **Settings** → **Phone settings** → **Shortcuts**.
2. Select a key to use as a shortcut.
3. Select a menu to assign to the shortcut key.

Lock your phone

1. In Menu mode, select **Settings** → **Security** → **Phone lock**.
2. Select **On**.

3. Enter a new 4- to 8-digit password and press **<Confirm>**.
4. Enter the new password again and press **<Confirm>**.



The first time you access a menu that requires a password, you will be prompted to create and confirm a password.

Use basic call functions

Learn to make or answer calls and use basic call functions.

Make a call

1. In Idle mode, enter an area code and a phone number.
2. Press [] to dial the number.
For a video call, press **<Options>** → **Video call**.
3. To end the call, press [].

Answer a call

1. When a call comes in, press [].
2. For a video call, press **<Show me>** to allow the caller to see you via the front camera lens.
3. To end the call, press [].

Adjust the volume

To adjust the volume during a call, press the Volume key up or down.

Use the speakerphone feature

1. During a call, press the Confirm key to activate the speaker.
2. To switch back to the earpiece, press the Confirm key again.



In noisy environment, you may have difficulty hearing the calls while using the speakerphone feature. For better audio performance, use the normal phone mode.

Use the headset

By plugging the supplied headset into the multifunction jack, you can make and answer calls:

- To redial the last call, press the headset button, and then press and hold it again.
- To answer a call, press and hold the headset button.
- To end a call, press and hold the headset button.

Send and view messages

Learn to send or view text (SMS), multimedia (MMS), or email messages.

Send a text or multimedia message

1. In Menu mode, select **Messages** → **Create message** → **Message**.
2. Enter a destination number and scroll down.

3. Enter your message text. ► p. 51
For sending as a text message, skip to step 7.
For attaching multimedia, continue with step 4.
4. Press <**Options**> → **Add multimedia** and add an item.
5. Press <**Options**> → **Advanced** → **Add subject**.
6. Enter a subject.
7. Press <**Options**> → **Send** to send the message.

Send an email

1. In Menu mode, select **Messages** → **Create message** → **Email**.
2. Enter an email address and scroll down.
3. Enter a subject and scroll down.
4. Enter your email text.

5. Press <Options> → **Attach multimedia** or **Attach organiser** and attach a file (if necessary).

6. Press <Options> → **Send** to send the email.

Enter text

When entering text, you can change the text input mode:

- Press and hold [#] to select an input mode.
- Press [*] to change case or switch to Numeric mode.
- Press and hold [✱] to switch to Symbol mode.

Enter text in one of the following modes:

Mode	Function
Pinyin	<ol style="list-style-type: none">1. Press the appropriate alphanumeric keys to enter pinyins.2. Scroll left or right to a pinyin.3. Press the Confirm key. A number appears by each character.4. Scroll up or down to a character.5. Press an alphanumeric key to enter the corresponding character.6. When you are finished, press <Back> to return to your message.

Mode	Function
S Stroke	<ol style="list-style-type: none"> 1. Press [1] through [5] to enter strokes. Press [6] when you are unsure which stroke to enter. This will insert a placeholder. 2. Scroll up or down to a character. 3. Press an alphanumeric key to enter the corresponding character. 4. When you are finished, press <Back> to return to your message.
T Stroke	<ol style="list-style-type: none"> 1. Press [1] through [5] to enter strokes. Press [6] when you are unsure which stroke to enter. This will insert a placeholder. 2. Scroll up or down to a character. 3. Press an alphanumeric key to enter the corresponding character. 4. When you are finished, press <Back> to return to your message.

Mode	Function
Numeric	Press the appropriate alphanumeric key to enter a number.
Symbol	Press the appropriate alphanumeric key to select a symbol.
T9 Abc	<ol style="list-style-type: none"> 1. Press the appropriate alphanumeric keys to enter an entire word. 2. When the word displays correctly, press [0] to insert a space. If the correct word does not display, press the navigation key up or down to select an alternate word.
Abc	Press the appropriate alphanumeric key until the character you want appears on the display.

View text or multimedia messages

1. In Menu mode, select **Messages** → **Inbox**.
2. Select a text or multimedia message.

View an email

1. In Menu mode, select **Messages** → **Email inbox**.
2. Press <**Options**> → **Download**.
3. Select an email or a header.
4. If you selected a header, press <**Options**> → **Retrieve** to view the body of the email.

Add and find contacts

Learn the basics of using the phonebook feature.

Add a new contact

1. In Idle mode, enter a phone number and press <**Options**>.
2. Select **Add to Phonebook** → a memory location (phone or SIM) → **New**.
3. Select a number type (if necessary).
4. Enter contact information.
5. Press the Confirm key, or press <**Options**> → **Save** to add the contact to memory.

Find a contact

1. In Menu mode, select **Phonebook**.
2. Enter the first few letters of the name you want to find.
3. Select the contact's name from the search list.



Once you have found a contact, you can:

- call the contact by pressing [**Call**]
- edit the contact information by pressing **<Options> → Edit**

Watch digital TV

Learn to watch digital TV with your phone.

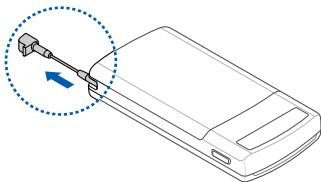
Watch TV

1. In Idle mode, press [**TV**] to turn on the TV.
The phone scans and saves the available TV channels.



- You will be prompted to set a PIN for watching age-restricted programmes, depending on your service provider.
- If you enter an incorrect PIN three times, the TV's PIN code is blocked. To restore the default PIN code (1234), reset TV settings.

2. Rotate the phone anti-clockwise to view the TV in landscape view.
3. Pull out the TV antenna and adjust it to receive a stronger broadcast signal.




4. Select a programme.
5. While watching TV, use the following keys and functions:

Key	Function
Navigation up or down	Change the channel
Alphanumeric	Select a channel
*, #	Adjust the brightness
Volume	Adjust the volume
<Options>	Access TV options

6. To turn off the TV, press [.

Update the channel list

1. In Idle mode, press [] to turn on the TV.
2. Press <Options> → **Update**.
The updated channels are automatically saved in the channel list.

Use basic camera functions

Learn the basics to capture and view photos and videos.

Capture photos

1. In Idle mode, press and hold the Camera key to turn on the camera.
2. Aim the lens at the subject and make any adjustments.

3. Press the Confirm key or the Camera key to take a photo.
The photo is saved automatically.
4. Press <📷> to take another photo (step 2).

View photos

In Menu mode, select **My files** → **Images** → **My photos** → a photo file.

Capture videos

1. In Idle mode, press and hold the Camera key to turn on the camera.
2. Press [1] to switch to Recording mode.
3. Aim the lens at the subject and make any adjustments.

4. Press the Confirm key or the Camera key to start recording.
5. Press the Confirm key or the Camera key to stop recording.
The video is saved automatically.
6. Press <**Back**> to record another video (step 3).

View videos

In Menu mode, select **My files** → **Videos** → **My video clips** → a video file.

Listen to music

Learn how to listen to music via the music player or FM radio.

Listen to the FM radio

1. Plug the supplied headset into the phone's multifunction jack.
2. In Menu mode, select **Multimedia** → **FM radio**.
3. Press <Yes> to start automatic tuning.
The radio scans and saves available stations automatically.



- The first time you access the FM radio, you will be prompted to start automatic tuning.
- Automatic tuning will only locate stations with an adequate signal.

4. Press the Confirm key to turn on the FM radio.
5. Scroll up or down to a radio station.
6. To turn off the FM radio, press the Confirm key.

Listen to music files

Start by transferring files to your phone or memory card:

- Download from the wireless web. ► Browse the web
- Download from a PC with the optional Samsung PC Studio. ► p. 65
- Receive via Bluetooth. ► p. 69
- Copy to your memory card.
- Synchronise with Windows Media Player 11. ► p. 66

After transferring music files to your phone or memory card,

1. In Menu mode, select **Multimedia** → **Music player**.
2. Select a music category → a music file.
3. Control playback using the following keys:

Key	Function
Confirm	Pause or resume playback
Volume	Adjust the volume
Navigation	<ul style="list-style-type: none"> • Left: Restart playback; Skip backward (press within 3 seconds); Scan backward in a file (press and hold) • Right: Skip forward; Scan forward in a file (press and hold) • Up: Open the playlist • Down: Stop playback

Browse the WAP

Learn to access and bookmark your favourite WAP pages.

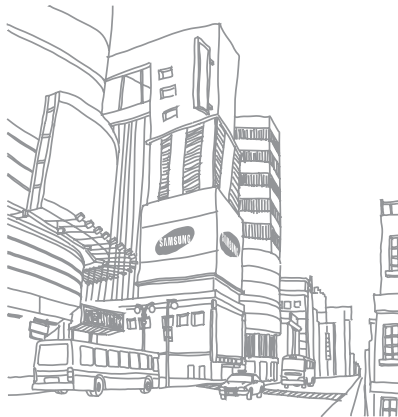
Browse WAP pages

1. In Menu mode, select **Browser** → **Home** to launch your service provider's homepage.
2. Navigate WAP pages using the following keys:

Key	Function
Navigation	Scroll up or down on a WAP page
Confirm	Select an item
<Back>	Return to the previous page
<Options>	Access a list of browser options

Bookmark your favourite WAP pages

1. In Menu mode, select **Browser** → **Bookmarks**.
2. Press <**Options**> → **Add bookmark**.
3. Enter a page title and a WAP address (URL).
4. Press <**Save**>.



using advanced functions


Learn how to perform advanced operations and use additional features of your mobile phone.

Use advanced call functions



Learn about your phone's additional calling capabilities.

View and dial missed calls

Your phone will display calls you have missed on the display. To dial the number of a missed call,

1. Press <View>.
2. Scroll to the missed call you want to dial.
3. Press [] to dial.

Call a recently dialled number



1. In Idle mode, press [] to display a list of recent numbers.
2. Scroll to the number you want and press [] to dial.

Hold a call or retrieve a held call

Press <**Hold**> to place a call on hold or press <**Retrieve**> to retrieve a held call.

Dial a second call

If your network supports this function, you can dial another number during a call:

1. Press <**Hold**> to place the first call on hold.
2. Enter the second number to dial and press [.
3. Press <**Swap**> to switch between the two calls.
4. To end the call on hold, press <**Options**> → **End call** → **Held**.
5. To end the current call, press [.


Answer a second call

If your network supports this function, you can answer a second incoming call:


1. Press <**Accept**> → **Hold active call** to answer the second call.
The first call is automatically placed on hold.
2. Press <**Swap**> to switch between the calls.

Make a multiparty call (conference call)

1. Call the first party you want to add to the multiparty call.
2. While connected to the first party, call the second party.
The first party is automatically placed on hold.
3. When connected to the second party, press <**Options**> → **Conference call**.


4. Repeat steps 1 and 3 to add more parties (if necessary).
5. To end the multiparty call, press [].

Call an international number

1. In Idle mode, press and hold [0] to insert the + character.
2. Enter the complete number you want to dial (country code, area code, and phone number), and then press [] to dial.

Call a contact from the phonebook

You can call numbers directly from the phonebook using stored contacts. ► p. 53

1. In Menu mode, select **Phonebook**.
2. Scroll to the number you want to dial and press [] to dial.

Use advanced phonebook functions

Learn to create namecards, set speed dial numbers, and create groups of contacts.

Create a namecard

1. In Menu mode, select **Phonebook**.
2. Press <Options> → **My namecard**.
3. Enter your personal details, and press the Confirm key, or press <Options> → **Save**.



You can send your namecard by attaching it to a message or email or transferring it via the Bluetooth wireless feature.

Set speed dial numbers

1. In Menu mode, select **Phonebook**.
2. Scroll to a contact to assign to the number.
3. Press <**Options**> → **Add to speed dial**.
4. Scroll to a number you want to set (2-9) and press <**Select**>.

The contact is saved to the speed dial number.



You can now call this contact from Idle mode by pressing and holding the assigned speed dial number.

Create a group of contacts

By creating groups of contacts, you can assign ringtones and caller ID photos to each group or send messages and emails to an entire group. Start by creating a group:

1. In Menu mode, select **Phonebook**.
2. Scroll left or right to **Groups**.
3. Press <**Options**> → **Create group**.
4. Enter a group name and press <**Save**>.
5. Press <**Options**> → **Group settings**.
6. To set the caller ID image, press the Confirm key → an image category → an image.
7. To set a group ringtone, scroll down and press the Confirm key → a ringtone category → a ringtone.
8. Press <**Options**> → **Save**.

Use advanced messaging functions

Learn to create templates and use templates to create new messages.

Create a text template

1. In Menu mode, select **Messages** → **Templates** → **Text templates**.
2. Press <**Create**> to open a new template window.
3. Enter your text and press the Confirm key to save the template.

Create a multimedia template

1. In Menu mode, select **Messages** → **Templates** → **Multimedia templates**.
2. Press <**Create**> to open a new template window.
3. Create a multimedia message, with a subject and desired attachments, to use as your template. ► p. 50
4. Press <**Options**> → **Save as template**.

Insert text templates in new messages

1. In Menu mode, select **Messages** → **Create message** → a message.
2. Scroll down to the text field, and press <**Options**> → **Insert** → **Text template** → a template.

Create a message from a multimedia template

1. In Menu mode, select **Messages** → **Templates** → **Multimedia templates**.
2. Scroll to the template you want and press **<Options>** → **Send**.
Your template opens as a new multimedia message.

Use advanced music functions


Learn to prepare music files, create playlists, and store radio stations.

Copy music files via Samsung PC Studio


1. In Menu mode, select **Settings** → **Phone settings** → **PC connections** → **Samsung PC studio**.
2. Press [>] to return to Idle mode.

3. Using an optional PC data cable, connect the multifunction jack on your phone to a PC.
4. Run Samsung PC Studio and copy files from the PC to the phone.
Refer to the Samsung PC Studio help for more information.

Copy music files to a memory card

1. Insert a memory card.
2. In Menu mode, select **Settings** → **Phone settings** → **PC connections** → **Mass storage**.
3. Press [>] to return to Idle mode.
4. Using an optional PC data cable, connect the multifunction jack on your phone to a PC.
When connected, a pop-up window will appear on the PC.
5. Open a folder to view files.
6. Copy files from the PC to the memory card.

Synchronise your phone with Windows Media Player

1. In Menu mode, select **Settings** → **Phone settings** → **PC connections** → **Media player**.
2. Press [>] to return to Idle mode.
3. Using an optional PC data cable, connect the multifunction jack on your phone to a PC with Windows Media Player installed.
When connected, a pop-up window will appear on the PC.
4. Open Windows Media Player to synchronise music files.
5. Edit or enter your phone's name in the pop-up window.

6. Select and drag the music files you want to the sync list.
7. Start synchronisation.

Create a playlist

1. In Menu mode, select **Multimedia** → **Music player** → **Playlists**.
2. Press <**Options**> → **Create playlist**.
3. Enter a title for your new playlist and press <**Save**>.
4. Select the new playlist.
5. Press <**Options**> → **Add** → **Tracks**.
6. Select the files you want to include and press <**OK**>.

Customise your music player settings

Learn to adjust the playback and sound settings for your music player.

1. In Menu mode, select **Multimedia** → **Music player**.
2. Press <Options> → **Settings**.
3. Adjust the settings to customise your music player.
4. Press <Save>.

Store radio stations automatically

1. Plug the supplied headset into the phone's multifunction jack.
2. In Menu mode, select **Multimedia** → **FM radio**.
3. Press the Confirm key to start the FM radio.
4. Press <Options> → **Self-tuning**.
5. Press <Yes> to confirm (if necessary).
The radio scans and saves available stations automatically.

using tools and applications

Learn how to work with your mobile phone's tools and additional applications.

Use the Bluetooth wireless feature

Learn about your phone's ability to connect to other wireless devices for exchanging data and using hands-free features.

Turn on the Bluetooth wireless feature

1. In Menu mode, select **Applications** → **Bluetooth**.
2. Press <Options> → **Settings**.
3. Scroll down to **Activation**.
4. Scroll left or right to **On**.
5. To allow other devices to locate your phone, scroll down and scroll left or right to **On**.
6. Press <Save>.

Find and pair with other Bluetooth-enabled devices

1. In Menu mode, select **Applications** → **Bluetooth** → **Search for new devices**.
2. Scroll to a device and press <**Select**>.
3. Enter a PIN for the Bluetooth wireless feature or the other device's Bluetooth PIN, if it has one, and press <**OK**>.

When the owner of the other device enters the same code or accepts the connection, pairing is complete.

Send data using the Bluetooth wireless feature

1. Select the file or item from one of your phone's applications that you want to send.
2. Press <**Options**> → **Send name card via**, **Send via**, or **Send URL via** → **Bluetooth** (when sending contact data, specify which data to send).

Receive data using the Bluetooth wireless feature

1. Enter the PIN for the Bluetooth wireless feature and press <**OK**> (if necessary).
2. Press <**Yes**> to confirm that you are willing to receive data from the device (if necessary).

Print images

Learn to print your image with an optional PC data cable or the Bluetooth wireless feature.

To print an image using an optional PC data cable,

1. Connect the multifunction jack on your phone to a compatible printer.
2. Open an image. ► p. 56
3. Press <Options> → **Print via** → **USB**.
4. Set print options and print the image.

To print an image using the Bluetooth wireless feature,

1. Open an image. ► p. 56
2. Press <Options> → **Print via** → **Bluetooth**.

3. Select a Bluetooth-enabled printer and pair with the printer. ► p. 69

4. Set print options and print the image.

Activate the mobile tracker

When someone inserts a new SIM or USIM card in your phone, the mobile tracker feature will automatically send the contact number to two recipients to help you locate and recover your phone.

To activate the mobile tracker,

1. In Menu mode, select **Settings** → **Security** → **Mobile tracker**.
2. Enter your password and press <Confirm>.



The first time you access **Mobile tracker**, you will be prompted to create and confirm a password.

3. Scroll left or right to **On** to turn on the mobile tracker.
4. Scroll down and press the Confirm key to open the recipient list.
5. Press <**Options**> → **Phonebook** to open your contact list.
6. Select a contact and press the Confirm key.
7. Select a number (if necessary).
8. Press the Confirm key to save the recipients.
9. Scroll down and enter the sender's name.
10. Press the Confirm key → <**Accept**>.

Record and play voice memos

Learn to operate your phone's voice recorder.

Record a voice memo

1. In Menu mode, select **Applications** → **Voice recorder**.
2. Press the Confirm key to start recording.
3. Speak your memo into the microphone.
4. When you are finished speaking, press the navigation key down.

Play a voice memo

1. From the voice recorder screen, press **<Options>** → **My voice clips**.
2. Select a file.
3. Control the playback using the following keys:

Key	Function
Confirm	Pause or resume playback
Volume	Adjust the volume
Navigation	<ul style="list-style-type: none">• Left: Scan backward in a file• Right: Scan forward in a file• Down: Stop playback

Use Java-powered games and applications

Learn to use games and applications powered by award-winning Java technology.

Download games or applications

1. In Menu mode, select **Applications** → **Games and more** → **More games**.
Your phone connects to the website preset by your service provider.
2. Search for a game or an application and download it to the phone.

Play games

1. In Menu mode, select **Applications** → **Games and more**.
2. Select a game from the list and follow the on-screen instructions.



Available games may vary, depending on your service provider or region. Game controls and options may vary.

Launch applications

1. In Menu mode, select **Applications** → **Games and more** → an application.
2. Press <**Options**> to access a list of various options and settings for your application.

Create and view world clocks

Learn to view the time in another country or city and set world clocks to appear on your display.

Create a world clock

1. In Menu mode, select **Applications** → **World clock**.
2. Press <**Options**> → **Add**.
3. Scroll left or right to a time zone.
4. To set daylight saving time, scroll down and press the Confirm key.
5. Press <**OK**> to save your world clock.
The world clock is set as the second clock.
6. To add more world clocks, repeat steps 2-5 above.

Add a world clock to your display

In Dual Clock Display mode, you can view clocks with two different time zones on your display.

After you have saved world clocks,

1. In Menu mode, select **Applications** → **World clock**.
2. Scroll to the world clock you want to add and press <Options> → **Set as second clock**.
3. Press <Options> → **Display settings**.
4. Scroll left or right to **Dual**.
5. Scroll down, and then scroll left or right to a dual clock style.
6. Press <Save>.

Set and use alarms

Learn to set and control alarms for important events.

Set a new alarm

1. In Menu mode, select **Alarms**.
2. Scroll to an empty alarm location and press the Confirm key.
3. Set alarm details.
4. Press <Options> → **Save**.



The auto power-up feature sets the phone to automatically turn on and sound the alarm at the designated time if the phone is turned off.

Stop an alarm

When the alarm sounds,

- Press any key to stop an alarm without snooze.
- Press <OK> or the Confirm key to stop an alarm with snooze, or press <**Snooze**> or any key to silence the alarm for the snooze period.

Deactivate an alarm

1. In Menu mode, select **Alarms**.
2. Scroll to the alarm you want to deactivate and press the Confirm key.
3. Scroll down (if necessary).
4. Scroll left or right to **Off**.
5. Press the Confirm key.

Use the calculator

1. In Menu mode, select **Applications** → **Calculator**.
2. Use the keys that correspond to the calculator display to perform basic mathematical operations.

Convert currencies or measurements

1. In Menu mode, select **Applications** → **Convertor** → a conversion type.
2. Enter the currencies or measurements and units in the appropriate fields.

Set a countdown timer

1. In Menu mode, select **Applications** → **Timer**.
2. Press <**Set**>.
3. Enter the length of time to count down and press <**OK**>.
4. Press the Confirm key to begin or pause the countdown.
5. When the timer expires, press <**OK**> to stop the alert.

Use the stopwatch

1. In Menu mode, select **Applications** → **Stopwatch**.
2. Press the Confirm key to begin and record lap times.
3. When you are finished, press <**Stop**>.

4. Press <**Reset**> to clear recorded times.

Create a new task

1. In Menu mode, select **Applications** → **Task**.
2. Press <**Options**> → **Create**.
3. Enter the details of the task.
4. Press the Confirm key, or press <**Options**> → **Save**.

Create a text memo

1. In Menu mode, select **Applications** → **Memo**.
2. Press <**Options**> → **Create**.
3. Enter your memo text and press the Confirm key.

Manage your calendar

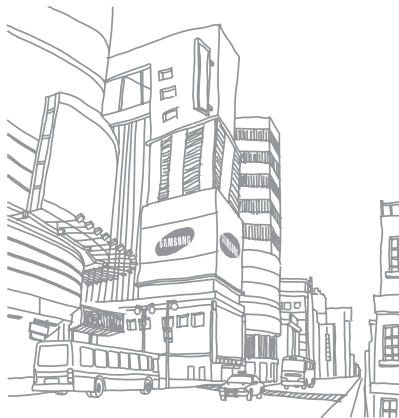
Learn to change the calendar view and create events.

Change the calendar view

1. In Menu mode, select **Calendar**.
2. Press <Options> → **View by** → **Day** or **Week**.

Create an event

1. In Menu mode, select **Calendar**.
2. Press <Options> → **Create** → an event type.
3. Enter the details of the event as required.
4. Press the Confirm key, or press <Options> → **Save**.



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troubleshooting

If you are having trouble with your mobile phone, try these troubleshooting procedures before contacting a service professional.

While using your phone, the following messages may appear:

Message	Try this to solve the problem:
Insert SIM	Ensure that the SIM or USIM card is installed correctly.
Phone lock	When the phone lock feature is enabled, you must enter the password you set for the phone.

Message	Try this to solve the problem:
PIN lock	When using the phone for the first time or when the PIN requirement is enabled, you must enter the PIN supplied with the SIM or USIM card. You can disable this feature by using the PIN lock menu.
PUK lock	Your SIM or USIM card is blocked, usually as a result of entering your PIN incorrectly several times. You must enter the PUK supplied by your service provider.

Your phone displays “No service,” “Network error,” or “Network unavailable.”

- When you are in areas with weak signals or poor reception, you may lose reception. Move to another area and try again.
- You cannot access some options without a subscription. Contact your service provider for more details.

You enter a number, but the call is not dialed.

- Ensure that you have pressed the Dial key: [📞].
- Ensure that you have accessed the right cellular network.
- Ensure that you have not set call barring for the phone number.

Another caller cannot reach you.

- Ensure that your phone is turned on.
- Ensure that you have accessed the right cellular network.
- Ensure that you have not set call barring for the phone number.

Another caller cannot hear you speaking.

- Ensure that you are not covering the built-in microphone.
- Ensure that the microphone is close to your mouth.
- If using a headset, ensure that it is properly connected.

The phone beeps and the battery icon flashes.

Your battery is low. Recharge or replace the battery to continue using the phone.

The audio quality of the call is poor.

- Ensure that you are not blocking the phone's internal antenna.
- When you are in areas with weak signals or poor reception, you may lose reception. Move to another area and try again.

You select a contact to call, but the call is not dialed.

- Ensure that the correct number is stored in the contact list.
- Re-enter and save the number, if necessary.

The battery does not charge properly or sometimes the phone turns itself off.

- The battery terminals may be dirty. Wipe both gold-coloured contacts with a clean, soft cloth and try charging the battery again.
- If the battery will no longer charge completely, dispose of the old battery properly and replace it with a new battery.

Your phone is hot to the touch.

When you use several applications at once, your phone requires more power and may heat up.

This is normal and should not affect your phone's lifespan or performance.