



# Verizon Wireless

## 5G CPE

### Product Safety and Warranty

Please read this manual before operating your device and keep it for future reference.  
This document contains important terms and conditions with respect to your device.  
By using this device, you accept those terms and conditions.

# SAMSUNG

Printed in Korea





## Legal Information

### READ THIS INFORMATION BEFORE USING YOUR DEVICE.

**Samsung Limited Warranty** - This product is covered under the applicable Samsung Limited Warranty **INCLUDING ITS DISPUTE RESOLUTION PROCEDURE** and your right to opt out of arbitration within 30 calendar days of the first consumer purchase. You may opt out by either sending an email to [optout@sea.samsung.com](mailto:optout@sea.samsung.com) with the subject line "Arbitration Opt-Out" or by calling 1-800-SAMSUNG (726-7864). For more detailed procedures, please refer to the "Dispute Resolution Procedures and Arbitration OptOut" section of the Limited Warranty.

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**WARNING!** This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, please call 1-800-SAMSUNG (726-7864).

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## Intellectual Property

All Intellectual Property, as defined below, owned by or which is otherwise the property of Samsung or its respective suppliers relating to the SAMSUNG Device, including but not limited to, accessories, parts, or software relating thereto (the "5G CPE"), is proprietary to Samsung and protected under federal laws, state laws, and international treaty provisions. Intellectual Property includes, but is not limited to, inventions (patentable or unpatentable), patents, trade secrets, copyrights, software, computer programs, and related documentation and other works of authorship. You may not infringe or otherwise violate the rights secured by the Intellectual Property. Moreover, you agree that you will not (and will not attempt to) modify, prepare derivative works of, reverse engineer, decompile, disassemble, or otherwise attempt to create source code from the software. No title to or ownership in the Intellectual Property is transferred to you. All applicable rights of the Intellectual Property shall remain with SAMSUNG and its suppliers.

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IF YOUR CARRIER PROHIBITS THIS, IF YOU ATTEMPT TO DOWNLOAD SOFTWARE ONTO THE DEVICE WITHOUT AUTHORIZATION, THE DEVICE WILL NO LONGER OPERATE. YOU MUST THEN CONTACT YOUR CARRIER TO RESTORE THE DEVICE TO THE CARRIER AUTHORIZED SETTINGS.

## Samsung Electronics America (SEA), Inc

Address:  
85 Challenger Road  
Ridgefield Park,  
New Jersey 07660

Phone: 1-800-SAMSUNG (726-7864)

Internet Address:  
[www.samsung.com](http://www.samsung.com)

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Do you have questions about your Samsung Mobile Device?

For 24 hour information and assistance, we offer a new FAQ/ARS System (Automated Response System) at:

[www.samsung.com/us/support](http://www.samsung.com/us/support)

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## Section 1: Product Safety

This user guide contains important operational and safety information that will help you safely use your 5G CPE.

### General Precautions

There are several simple guidelines to operating your 5G CPE properly and maintaining safe, satisfactory service.

- Do not attempt to open the 5G CPE or power supply, or disassemble the 5G CPE component case. You run the risk of electrical shock and/or burn and voiding the limited warranty. No user-serviceable parts are located within the 5G CPE enclosure.
- Avoid abuse such as dropping, hitting, bending, and placing items on top of the 5G CPE.
- Any changes or modifications to your 5G CPE not expressly approved in this document could void your equipment warranty and void your authority to operate this equipment.

### Using Your 5G CPE Near Other Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, RF signals from your 5G CPE may affect inadequately shielded electronic equipment.

Conversely, ensure the unit is placed at least 2 feet away from products which generate electromagnetic radiation, such as a computer monitor or microwave oven.

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**Note:** For the best care of your 5G CPE, ensure that only authorized personnel service your device. Failure to do so may be dangerous and void your warranty. Consult the manufacturer of any personal medical devices, such as pacemakers and hearing aids, to determine if they are adequately shielded from external RF signals.

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### Radio Frequency (RF) Energy

#### *Understanding How Your 5G CPE Operates*

Your 5G CPE functions as a radio transmitter and receiver. When it is turned on, it receives and transmits radio frequency (RF) signals. When you use your 5G CPE, the system handling your call controls the power level. This power can range up to 8W peak (2x4W).

#### *Knowing Radio Frequency Safety*

The design of your 5G CPE complies with updated NCRP standards described below:

In 1991-92, the Institute of Electrical and Electronics Engineers (IEEE) and the American National Standards Institute (ANSI) joined in updating ANSI's 1982 standard for safety levels with respect to human exposure to RF signals. More than 120 scientists, engineers and physicians from universities, government health agencies and industries developed this updated standard after reviewing the available body of research.

In 1993, the Federal Communications Commission (FCC) adopted this updated standard in a regulation. In August 1996, the FCC adopted a hybrid standard consisting of the existing ANSI/IEEE standard and the guidelines

published by the National Council of Radiation Protection and Measurements (NCRP).

For more information about RF exposure, visit the FCC Web site at [www.fcc.gov](http://www.fcc.gov).

#### **FCC Part 15 Information to User**

FCC ID number: A3LSFG-D1100.

Pursuant to part 15.21 of the FCC Rules, you are cautioned that changes or modifications not expressly approved by Samsung could void your authority to operate the device.

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.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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### *Important Note.*

#### *FCC Radiation Exposure Statement*

To ensure the safety of users, the FCC has established criteria for the amount of radio frequency energy various products may produce depending on their intended usage. This product has been tested and found to comply with the FCC's exposure criteria.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The installation of the base unit should allow at least 20 centimeters between the base and persons to be in compliance with FCC RF exposure guidelines.

Use only Samsung-approved accessories.

Samsung-approved chargers and accessories are specifically designed for your device.

Please read the following important safety notices and instructions before installing or using the product.

1. Follow all warnings and instructions marked on the product.
2. Unplug this product from the wall outlet before cleaning.
3. This product should be operated using the type of power indicated on the marking label. If you are not sure of the type of power available, consult

your dealer or local power company.

4. Do not allow anything to rest on the power cord. Do not locate this product where people will walk on the cord.
5. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
6. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks.
7. Refer all questions regarding servicing of this product to qualified service personnel.

Electric current from power, telephone, and communication cables is hazardous, and could result in electric shock and/or fire.

To avoid electric shock, use caution when connecting cables. For example, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors.

To avoid electric shock, do not operate the product or connect or disconnect cables during electrical storms.

To avoid electric shock, do not use this product in or near water.

To reduce the risk of fire or overheating, keep this product in well ventilated areas, away from radiators or other heat sources. Do not block cooling vents.

The plug-socket combination must be accessible at all times because it serves as the main power-disconnecting device.

Use only the manufacturer-provided AC adaptor approved for use with this product. Use of another AC adaptor may cause a fire or explosion.

This product relies on short-circuit (over current) protection installed in your home or office. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15A U.S. is used on the phase conductors (all current carrying conductors).

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power cord or plug is damaged or frayed.
- b. If the product does not operate normally when the operating instructions are followed.

This product generates, uses, and can radiate radio frequency energy and, if not installed or used in

Section 1: Product Safety

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accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This product has been tested and found to comply with the limits set forth in Part 15 of the Federal Communications Commission Rules.

#### *Owner's Record:*

The model name, model number, regulatory number, and FCC ID are located on a label affixed to the back of the unit. The MSN and MAC ID are on a sticker affixed on the side of the unit. Record the MSN and the MAC ID in the space provided below. This will be helpful if you need to contact us about your CPE in the future.

Model: Verizon Wireless 5G CPE

MSN: \_\_\_\_\_

MAC ID: \_\_\_\_\_

## Section 2: Product Warranty

### **READ THIS INFORMATION BEFORE USING YOUR MOBILE DEVICE.**

**Samsung Limited Warranty** - This product is covered under the applicable Samsung Limited Warranty **INCLUDING ITS DISPUTE RESOLUTION PROCEDURE** and your right to opt out of arbitration within 30 calendar days of the first consumer purchase. You may opt out by either sending an email to [optout@sea.samsung.com](mailto:optout@sea.samsung.com) with the subject line "Arbitration Opt Out" or by calling 1-800-SAMSUNG (726-7864). For more detailed procedures, please refer to the "Dispute Resolution Procedures and Arbitration Opt-Out" section of the Limited Warranty.

SAMSUNG ELECTRONICS AMERICA, INC. ("SAMSUNG") warrants that SAMSUNG's devices and accessories ("Products") are free from defects in material and workmanship under normal use and service.

Samsung Electronics America, Inc.  
85 Challenger Road  
Ridgefield Park, New Jersey 07660  
Phone: 1-800-SAMSUNG (726-7864)

### **Procedures for Dispute Resolution/30-day Arbitration and Opt-Out Policy**

ALL DISPUTES WITH SAMSUNG ARISING IN ANY WAY FROM THIS LIMITED WARRANTY OR THE SALE, CONDITION OR PERFORMANCE OF THE PRODUCTS SHALL BE RESOLVED EXCLUSIVELY THROUGH FINAL AND BINDING ARBITRATION, AND NOT BY A COURT OR JURY.

ANY SUCH DISPUTE SHALL NOT BE COMBINED OR CONSOLIDATED WITH A DISPUTE INVOLVING ANY OTHER PERSON'S OR ENTITY'S PRODUCT OR CLAIM, AND SPECIFICALLY, WITHOUT LIMITATION OF THE FOREGOING, SHALL NOT UNDER ANY CIRCUMSTANCES PROCEED AS PART OF A CLASS ACTION. THE ARBITRATION SHALL BE CONDUCTED BEFORE A SINGLE ARBITRATOR, WHOSE AWARD MAY NOT EXCEED, IN FORM OR AMOUNT, THE RELIEF ALLOWED BY THE APPLICABLE LAW. The arbitration shall be conducted according to the American Arbitration Association (AAA) Commercial Arbitration Rules applicable to consumer disputes. The AAA Rules are available online at [adr.org](http://adr.org) or by calling the AAA at 1-800-778-7879. This arbitration provision is entered

pursuant to the Federal Arbitration Act. The laws of the State of Texas, without reference to its choice of laws principles, shall govern the interpretation of the Limited Warranty and all disputes that are subject to this arbitration provision. The arbitrator shall decide all issues of interpretation and application of this arbitration provision and the Limited Warranty.

For any arbitration in which your total damage claims, exclusive of attorney fees and expert witness fees, are \$5,000.00 or less ("Small Claim"), the arbitrator may, if you prevail, award your reasonable attorney fees, expert witness fees and costs as part of any award, but may not grant SAMSUNG its attorney fees, expert witness fees or costs unless it is determined that the claim was brought in bad faith. In a Small Claim case, you shall be required to pay no more than half of the total administrative, facility and arbitrator fees, or \$50.00 of such fees, whichever is less, and SAMSUNG shall pay the remainder of such fees. Administrative, facility and arbitrator fees for arbitrations in which your total damage claims, exclusive of attorney fees and expert witness fees, exceed \$5,000.00 ("Large Claim") shall be determined according to AAA rules. In a Large Claim case, the arbitrator may grant to the prevailing party, or apportion among the parties, reasonable attorney fees, expert witness fees and costs. Judgment may be entered

on the arbitrator's award in any court of competent jurisdiction.

This arbitration provision also applies to claims against SAMSUNG's employees, representatives and affiliates if any such claim arises from the Product's sale, condition or performance.

**You may opt out of this dispute resolution procedure by providing notice to SAMSUNG no later than 30 calendar days from the date of the first consumer purchaser's purchase of the Product. To opt out, you must send notice by e-mail to [optout@sea.samsung.com](mailto:optout@sea.samsung.com), with the subject line: "Arbitration Opt Out." You must include in the opt out e-mail (a) your name and address; (b) the date on which the Product was purchased; (c) the Product model name or model number; and (d) the IMEI or MEID or Serial Number, as applicable, if you have it (the IMEI or MEID or Serial Number can be found (i) on the Product box; (ii) on the Product information screen, which can be found under "Settings;" (iii) on a label on the back of the Product beneath the battery, if the battery is removable; and (iv) on the outside of the Product if the battery is not removable). Alternatively, you may opt out by calling 1-800-SAMSUNG (726-7864) no later than 30 calendar days from the date of the first consumer purchaser's purchase of the Product and providing the**

**same information. These are the only two forms of notice that will be effective to opt out of this dispute resolution procedure. Opting out of this dispute resolution procedure will not affect the coverage of the Limited Warranty in any way, and you will continue to enjoy the benefits of the Limited Warranty.**

### Severability

If any portion of this Limited Warranty is held to be illegal or unenforceable, such partial illegality or unenforceability shall not affect the enforceability of the remainder of the Limited Warranty. [013016]

## Terms & Conditions of Sale and Standard Limited Warranty

### What is covered and for how long?

The warranty period commences upon the date of purchase by the first consumer purchaser and continuing for the following specified period of time after that date:

Device	1 Year
Battery(ies)*	1 Year
Other Accessories*	1 Year

\*If applicable.

### What is not covered?

This Limited Warranty is conditioned upon proper use of the Product.

This Limited Warranty does not cover: (a) defects or damage resulting from accident, misuse, abnormal use, abnormal conditions, improper storage, exposure to liquid, moisture, dampness, sand or dirt, neglect, or unusual physical, electrical or electromechanical stress; (b) scratches, dents and cosmetic damage, unless caused by SAMSUNG; (c) defects or damage resulting from excessive force or use of a metallic object when pressing on a touch screen; (d) equipment that has the serial number or the enhancement data code removed, defaced, damaged, altered or made illegible; (e) ordinary wear and tear; (f) defects or damage resulting from the use of Product in conjunction or connection with accessories, products, or ancillary/peripheral equipment not furnished or approved by SAMSUNG; (g) defects or damage resulting from improper testing, operation, maintenance, installation, service, or adjustment not furnished or approved by SAMSUNG, including but not limited to installation of unauthorized software and unauthorized root access, both of which shall void this limited warranty; (h) defects or damage resulting from external causes such as collision with an object, fire,

flooding, dirt, windstorm, lightning, earthquake, exposure to weather conditions, theft, blown fuse, or improper use of any electrical source; (i) defects or damage resulting from cellular signal reception or transmission, or viruses or other software problems introduced into the Product; or (j) Product used or purchased outside the United States. This Limited Warranty covers batteries only if battery capacity falls below 80% of rated capacity or the battery leaks, and this Limited Warranty does not cover any battery if (i) the battery has been charged by a battery charger not specified or approved by SAMSUNG for charging the battery; (ii) any of the seals on the battery are broken or show evidence of tampering; or (iii) the battery has been used in equipment other than the SAMSUNG device for which it is specified.

#### **What are SAMSUNG's obligations?**

During the applicable warranty period, provided the Product is returned in accordance with the terms of this Limited Warranty, SAMSUNG will repair or replace the Product, at SAMSUNG's sole option, without charge. SAMSUNG may, at SAMSUNG's sole option, use rebuilt, reconditioned, or new parts or components when repairing any Product, or may replace the Product with a rebuilt, reconditioned or new Product.

Repaired/replaced cases, pouches and holsters will be warranted for a period of ninety (90) days. All other repaired/replaced Products will be warranted for a period equal to the remainder of the original Limited Warranty on the original Product or for ninety (90) days, whichever is longer. All replaced Products, parts, components, boards and equipment shall become the property of SAMSUNG. Except to any extent expressly allowed by applicable law, transfer or assignment of this Limited Warranty is prohibited.

#### **What must you do to obtain warranty service?**

To obtain service under this Limited Warranty, you must return the Product to an authorized phone service facility in an adequate container for shipping, accompanied by the sales receipt or comparable proof of sale showing the original date of purchase by the first consumer purchaser, the serial number of the Product and the seller's name and address.

To obtain assistance on where to deliver the Product, please call SAMSUNG Customer Care at 1 800 SAMSUNG (726 7864). If SAMSUNG determines that any Product is not covered by this Limited Warranty, you must pay all parts, shipping, and labor charges for the repair or return of such Product.

You should keep a separate backup copy of any contents of the Product before delivering the Product to SAMSUNG for warranty service, as some or all of the contents may be deleted or reformatted during the course of warranty service.

#### **What are the limits on SAMSUNG's liability?**

THIS LIMITED WARRANTY SETS OUT THE FULL EXTENT OF SAMSUNG'S RESPONSIBILITIES, AND THE EXCLUSIVE REMEDY REGARDING THE PRODUCTS.

ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL SAMSUNG BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT OR FOR, WITHOUT LIMITATION, COMMERCIAL LOSS OF ANY SORT; LOSS OF USE, TIME, DATA, REPUTATION, OPPORTUNITY, GOODWILL, PROFITS OR SAVINGS; INCONVENIENCE; INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES; OR DAMAGES ARISING FROM THE USE OR INABILITY TO USE THE PRODUCT. SOME STATES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE DISCLAIMER OR LIMITATION OF INCIDENTAL

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Nothing in the Product instructions or information shall be construed to create an express warranty of any kind with respect to the Products. No agent, employee, dealer, representative or reseller is authorized to modify or extend this Limited Warranty or to make binding



representations or claims, whether in advertising, presentations or otherwise, on behalf of SAMSUNG regarding the Products or this Limited Warranty.

This Limited Warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

### *Precautions for Transfer and Disposal*

If data stored on this device is deleted or reformatted using the standard methods, the data only appears to be removed on a superficial level, and it may be possible for someone to retrieve and reuse the data by means of special software.

To avoid unintended information leaks and other problems of this sort, it is recommended that the device be returned to Samsung's Customer Care Center for an Extended File System (EFS) Clear which will eliminate all user memory and return all settings to default settings. Please contact the **Samsung Customer Care Center** for details.

**Important!** Please provide warranty information (proof of purchase) to Samsung's Customer Care Center in order to provide this service at no charge. If the warranty has expired on the device, charges may apply.

No reproduction in whole or in part allowed without prior written approval. Specifications and availability subject to change without notice. [013016]

## End User License Agreement for Samsung Software (EULA)

**IMPORTANT. READ CAREFULLY:** This End User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Samsung Electronics Co., Ltd. ("Samsung") for software, whether pre-installed or downloaded, owned by Samsung and its affiliated companies and its third party suppliers and licensors, that accompanies this EULA, which includes computer software and may include associated media, content and data, printed materials, or electronic documentation in connection with your use of Samsung Mobile Device, which will be defined below ("Samsung Software").

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**4. SAMSUNG SOFTWARE UPDATES.** Samsung may make available to you updates, upgrades, supplements and add-on components (if any) of the Samsung Software, including bug fixes, service upgrades (parts or whole), and updates, enhancements and feature improvements

or deletion to any Samsung Software (including entirely new versions), (collectively "Update") after the date you obtain your initial copy of the Samsung Software. This EULA applies to all and any component of the Update, unless we provide other terms along with such Update. To use Samsung Software provided through Update, you must first be licensed for the Samsung Software identified by Samsung as eligible for the Update.

While the Update will be generally available, in some limited circumstances, the Samsung Software updates will only be offered by your network carrier, and such Samsung Software updates will be governed by your contractual relationship with your network carrier.

With the "Automatic Update" function enabled (as in the default setting in the System Update menu in the Setting), your device downloads certain Updates automatically from time to time. If you have chosen to disable the "Automatic Update" function, then you can check the availability of new Updates by clicking on the "Check Update" menu in the Setting. Given the importance of receiving Updates for security software in a timely manner to defend against new threats, however, security-related Updates may be automatically downloaded and installed without your consent, even if you have disabled the "Automatic Update" function.

We recommend that you check availability of any new Updates periodically for optimal use of your device.

#### 5. CONSENT TO USE OF DATA.

(a) Privacy Policy Collection of data using software or applications on your device will be performed in accordance with the provisions of this section and as set forth in Samsung's Privacy Policy. For your reference, Samsung's Privacy Policy can be viewed at:

<http://account.samsung.com/membership/pp>.

(b) To provide updates to the Samsung Software, you agree that Samsung and its affiliates may collect and use technical information gathered as part of the product support services related to the Software provided to you, if any, such as IMEI (your device's unique identification number), device number, model name, customer code, access recording, your device's current SW version, MCC (Mobile Country Code), and MNC (Mobile Network Code). Samsung may use this information solely to improve their products or to provide customized services or technologies to you and will not disclose this information in a form that personally identifies you.

(c) Diagnostic and Usage Data If you opt in to diagnostic and usage collection, Samsung and its affiliates may collect maintain, process and use diagnostic, technical and usage related information ("Diagnostic and Usage

Data"), that is gathered to provide and improve Samsung products and services, facilitate the provision of software updates, product support and other services to you, if any, related to the Samsung Software, and to verify compliance with the terms of this License. Samsung may use this information for the purposes described above and in accordance with its privacy policy available at the hyperlink above.

(d) Location Data As described in the Samsung Privacy Policy, available for view at the hyperlink above, Samsung and its partners, licensees and third party developers may provide certain services that rely upon location information, such as your device's GPS signal or information about nearby WiFi access points and cell towers that may be transmitted to us, with your consent, when you use such location enabled services.



(e) Device Identifier-based Services To facilitate the use of enhanced messaging and file sharing functions with a simplified set up process, device identifier-based services for file sharing features and messaging features ("Device Identifier-based Services") are provided within the Samsung Software. These features are available through existing interfaces of Contacts and Messages, respectively, as additional features to them. If you opt-in to Device Identifier-based Services, certain

unique identifiers for your Samsung Mobile Device are needed to set up and use these features. These unique identifiers may include hardware identifiers, subscription information and telephone number for your Samsung Mobile Device. If you allow sharing of Contacts information, the telephone numbers of the people in your Contacts are collected by Samsung to facilitate file sharing and messaging with the people in your Contacts. You may turn off this sharing feature or restrict the scope of the sharing under your profile settings.

If your message cannot be sent as a message using the Device Identifier-based Services, your message may be sent as an SMS or MMS message, for which carrier messaging rates may apply.


(f) Voice-based Features As described in the Samsung Privacy Policy, available for view at the hyperlink above, in order to provide Voice-based features we may require the collection of your voice information. Some voice-based services may not be available in all languages or in all countries.

(g) Samsung Keyboard If you opt in to the Predictive text feature, the words that you typed are collected and stored on your Samsung Mobile Device to provide a word suggestion that you would be typing. You can clear the collected typing data anytime under the Predictive



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License for many libraries. However, the Lesser license provides advantages in certain special circumstances. For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention

to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

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Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which

must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a “work that uses the Library”. Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a “work that uses the Library” with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a “work that uses the library”. The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a “work that uses the Library” uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is

especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a “work that uses the Library” with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer’s own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply

a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable “work that uses the Library”, as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user’s computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user

installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the “work that uses the Library” must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do

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a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

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Version 3.1, 31 March 2009

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Version 3, 29 June 2007

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Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid

the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS

### 0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you".

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To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

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### 1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

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The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those



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- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the

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c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to

ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A “User Product” is either (1) a “consumer product”, which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, “normally used” refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such

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