# **REVISED HISTORY**

	DATE	ISSUE	CONTENTS OF CHANGES	S/W VERSION
Γ	JULY/2002	ISSUE 1	Initial Release	

- \*The information in this manual is subject to change without notice and should not be construed as a commitment by LGE Inc. Furthermore, LGE Inc. reserves the right, without notice, to make changes to equipment design as advances in engineering and manufacturing methods warrant.0
- \*This manual provides the information necessary to install, program, operate and maintain the W3000.

# 1. INTRODUCTION

# 1.1 Purpose

This manual provides the information necessary to repair, calibration, description and download the features of the W3000.

# 1.2 Regulatory Information

## A. Security

Toll fraud, the unauthorized use of telecommunications system by an unauthorized part (for example, persons other than your company's employees, agents, subcontractors, or person working on your company's behalf) can result in substantial additional charges for your telecommunications services. System users are responsible for the security of own system. There are may be risks of toll fraud associated with your telecommunications system. System users are responsible for programming and configuring the equipment to prevent unauthorized use. LGE does not warrant that this product is immune from the above case but will prevent unauthorized use of common-carrier telecommunication service of facilities accessed through or connected to it. LGE will not be responsible for any charges that result from such unauthorized use.

#### B. Incidence of Harm

If a telephone company determines that the equipment provided to customer is faulty and possibly causing harm or interruption in service to the telephone network, it should disconnect telephone service until repair can be done. A telephone company may temporarily disconnect service as long as repair is not done.

## C. Changes in Service

A local telephone company may make changes in its communications facilities or procedure. If these changes could reasonably be expected to affect the use of the W3000 or compatibility with the network, the telephone company is required to give advanced written notice to the user, allowing the user to take appropriate steps to maintain telephone service.

#### D. Maintenance Limitations

Maintenance limitations on the W3000 must be performed only by the LGE or its authorized agent. The user may not make any changes and/or repairs expect as specifically noted in this manual. Therefore, note that unauthorized alternations or repair may affect the regulatory status of the system and may void any remaining warranty.

### E. Notice of Radiated Emissions

The W3000 complies with rules regarding radiation and radio frequency emission as defined by local regulatory agencies. In accordance with these agencies, you may be required to provide information such as the following to the end user.

### F. Pictures

The pictures in this manual are for illustrative purposes only; your actual hardware may look slightly different.

#### G. Interference and Attenuation

An W3000 may interfere with sensitive laboratory equipment, medical equipment, etc. Interference from unsuppressed engines or electric motors may cause problems.

#### H. Electrostatic Sensitive Devices

#### **ATTENTION**

Boards, which contain Electrostatic Sensitive Device (ESD), are indicated by the sign. Following information is ESD handling:



- Service personnel should ground themselves by using a wrist strap when exchange system boards.0
- · When repairs are made to a system board, they should spread the floor with anti-static mat which is also grounded.
- Use a suitable, grounded soldering iron.
- Keep sensitive parts in these protective packages until these are used.
- When returning system boards or parts like EEPROM to the factory, use the protective packageas described.

# 1.3 Abbreviations

For the purposes of this manual, following abbreviations apply:0

APC	Automatic Power Control		
BB	Baseband		
BER	Bit Error Ratio		
CC-CV	Constant Current – Constant Voltage		
DAC	Digital to Analog Converter		
DCS	Digital Communication System		
dBm	dB relative to 1 milliwatt		
DSP	Digital Signal Processing		
EEPROM	Electrical Erasable Programmable Read-Only Memory		
EL	Electroluminescence		
ESD	Electrostatic Discharge		
FPCB	Flexible Printed Circuit Board		
GMSK	Gaussian Minimum Shift Keying		
GPIB	General Purpose Interface Bus		
GSM	Global System for Mobile Communications		
IPUI	International Portable User Identity		
IF	Intermediate Frequency		
LCD	Liquid Crystal Display		
LDO	Low Drop Output		
LED	Light Emitting Diode		
W3000	LG GSM Phone		
LGE	LG Electronics		
OPLL	Offset Phase Locked Loop		
PAM	Power Amplifier Module		
PCB	Printed Circuit Board		
PGA	Programmable Gain Amplifier		
PLL	Phase Locked Loop		
PSTN	Public Switched Telephone Network		
RF	Radio Frequency		
RLR	Receiving Loudness Rating		
RMS	Root Mean Square		
RTC	Real Time Clock		
SAW	Surface Acoustic Wave		
SIM	Subscriber Identity Module		
SLR	Sending Loudness Rating		
SRAM	Static Random Access Memory		
STMR	Side Tone Masking Rating		
TA	Travel Adapter		

TDD	Time Division Duplex	
TDMA	Time Division Multiple Access	
UART	Universal Asynchronous Receiver/Transmitter	
VCO	<u> </u>	
VCTCXO		
WAP		