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Client: Fleetwood Group, Inc.
Model: KG3EI
Standards: FCC 15.247/IC RSS-210
FCC/IC ID: FBRKG3EI/1859A-KG3EI
Report #: 2009149

Appendix K : Manual

Please refer to the following pages.

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USER MANUAL

KG3EI Wireless Response Keypad



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Revision History:

Rev	Date	Description
A	3/16/2009	Original

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1.0 KG3EI

1.1 Description

The KG3EI is a low power wireless response keypad. The KG3EI is used to interact with an audience so they can provide real time feed back to questions. It communicates at 2.4GHz, GFSK to a base station. The base unit polls keypads, and displays result.

The overall operation of the KG3EI is controlled by a microcontroller. This microcontroller is powered from approximately 3V and uses a 16 MHz reference. The microcontroller handles control of the RF communications, keypad inputs, EEPROM, and LCD.

RF communications use the Nordic 24L01+ 2.4 GHz transceiver. The Nordic chip uses a 16 MHz reference oscillator that is shared with the microcontroller for TX/RX and is also powered by 3V. The Nordic transceiver uses an integral PCB antenna.

1.2 FCC, IC, and EU Compliance Information

KG3EI Low Power Wireless Response Keypad
Responsible Party Pertaining to the Declaration of Conformity

Fleetwood Group, Inc.
11832 James Street
Holland, MI 49424
Attn: Product Service Coordinator
Phone: 888-467-3759

1.3 Standards and Guidelines

This device complies with the following European Directives and USA/Canada Regulations:

- Directive 1999/5/EC on radio equipment and telecommunication terminal equipment and the mutual recognition of their conformity
- Directive 2006/95/EC on the harmonization of laws of member states related to electrical equipment designed for use within certain voltage limits
- The USA Federal Communications Commission (FCC) Rules and Regulations
- Industry Canada Rules and Regulations

This device complies with the following national and international standards:

- EN 301 489-1 V1.8.1
- EN 301 489-17 V1.3.2
- EN 300 328 V1.7.1
- EN 60950-1: 2006
- FCC 15B, 15.247: 10-01-08
- IC RSS-210 Issue 7

1.4 FCC/IC Compliance

This device complies with Part 15 of the FCC Rules and RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) this device may not cause interference and (2) this device must accept any interference, including interference that may cause undesired operation of the device. The user is cautioned that changes or modifications to the device that are not approved by the manufacturer could void the user's authority to operate the device.

1.5 EU Compliance

This device is a 2.4 GHz low power response system controller intended for residential and commercial use in all EU and EFTA member states .

Notice

The base and keypad units may be susceptible to Electrostatic Discharge (ESD) and other similar fast transient events causing system interruption. Should system interruption occur, reboot computer, reset base unit by disconnecting and reconnecting USB cable and push any key on keypads which have powered down.

1.6 Technical Specifications

		Min	Typ	Max	
V_{DD}	Supply Voltage Battery, 2AA	2.2	3.0	3.4	V
T_o	Operating Temperature	15		40	Deg C