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Client: Fleetwood Group, Inc.
Model: VL4B
Standards: FCC 15.231/IC RSS-210
FCC/IC ID: FBRVL4B/1859A-VL4B
Report #: 2010155

Appendix K : Manual

Please refer to the following pages.

USER MANUAL

VL4B Module



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Printed in the U.S.A.

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Revision History:

Rev	Date	Description
A	8/11/2010	Original



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1.0 VL4B Module

1.1 Description

The VL4B Module is an infrared transmitting badge with a RF supervisory signal. The VL4B Module contains a low power RF transmitter chip which is controlled by a micro processor. The frequency synthesizer for generation of the RF output carrier is received from a low frequency external crystal. A crystal resonator chip runs the micro processor device. When an RF transmission needs to be generated the data from the microprocessor is sent to the RF chip. The modulation used by the radio frequency chip is on/off key at 433.92MHz. The RF antenna is a PCB etched loop. The VL4B is powered by a three-volt battery.

Both infrared and RF signals are independent of each other. Both infrared and RF signals contain recognition code to identify the badge, along with motion status, battery status, and switch information.

There are two ways that the VL4B Module can send RF transmission packets. The first is an automatic transmission per FCC regulations section 15.231 part (a) paragraph three, which states that the periodic rate of transmission does not exceed one transmission of not more than one second duration per hour of each transmitter. The second type of RF transmission occurs when a button is pressed on the badge. The RF transmission packets cease operation when the button is released.

1.2 Battery Replacement

The VL4B is powered from a 3V battery. The battery is replaceable. To replace battery, open the case, remove the old battery, and replace with a new battery noting its polarity. The negative side of the battery should be facing the PCB.

1.3 FCC and IC

VL4B Module

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

1.4 Standards and Guidelines

This device complies with the following USA/Canada Regulations:

- The USA Federal Communications Commission (FCC) Rules and Regulations
- Industry Canada Rules and Regulations

This device complies with the following national and international standards:

- FCC Part 15B, 15.231e (10-01-09)
- IC RSS-210 Issue 7



1.5 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.