

FreeLinc[®] DualMuff Headset

User Guide

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Introduction

Welcome

Congratulations, and thank you for choosing FreeLinc products to enhance your two-way radio communications.

The FreeLinc DualMuff Headset uses cutting-edge Near Field Magnetic Induction (NFMI) wireless technology. NFMI supports mobility, freedom-of-motion, exceptional battery life, audio integrity, ease of use, durability, secure communications and comfort. This is the first technology of its kind to be implemented into practical voice and audio solutions for two-way radios.

Kardy Baily

Randy Bailey President

Introduction

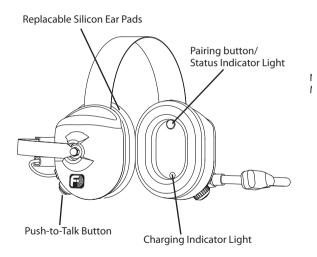
Product Overview

The FreeLinc DualMuff Headset works within a small area surrounding the user. The size of the area is determined by the distance between your headset and the adapter. If your headset and adapter are close together, the area shrinks in diameter – just large enough to accommodate the range of communication between your headset and adapter. As you increase the distance between your headset and adapter, the size of the area surrounding the user expands accordingly, up to approximately five feet in diameter.

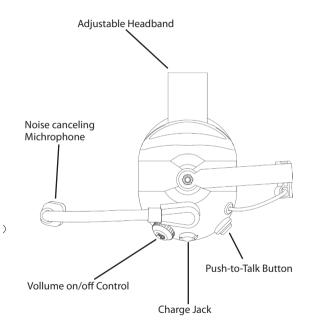
Package Contents

FreeLinc FDM300 DualMuff Headset Wall charger Tote bag Windsock

DualMuff Headset Diagram



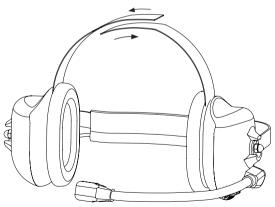
DualMuff Headset Diagram



Adjusting the Headband

Velcro Strap

Use the velcro strap to adjust the fit of your Headset. If you are in a noisy environment, to insure optimal sound quality, pull your hair away from your ears so the cushions fit directly against your head. If you wear glasses, they too should fit closely against your head to accommodate a good headset fit.



Charging Red/Green Charge Status Indicator Light C:m 0 RELINC

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Headset Alert Tones

When the link between the FreeLinc DualMuff Headset and the adapter is broken, you will hear the following alert tones:

TONE	INDICATION
Three double beeps	Link is broken
Continuous series of beeps	Push-to-Talk button pressed while the link is broken

Headset Indicator Tones

During operation you will hear the following tones from your headset:

TONE	INDICATION
Repeating short tone	Low battery
Single tone	Pairing achieved

Pairing

Before your headset can communicate with an adapter, it must establish a link. To establish a link, your headset and adapter must exchange a randomly generated software ID code, which is stored in each device. This process is called "pairing." Your headset and adapter remain paired until you initiate the manual pairing sequence with a different adapter (see *Step Four: Pair Headset to Adapter* under *Using Your Headset for the First Time*). pg11

Seek Mode

When your headset is trying to establish a link by searching for an adapter, it will initially enter "Seek Mode." If it does not detect the adapter with which it has been paired, the headset will remain in Seek Mode for 60 minutes before powering down.

Linking

After entering Seek Mode and finding the adapter with which it is paired, your headset will establish a link, and communication can occur. This link will remain active until you turn off the adapter or radio, at which point the headset will return to Seek Mode.

Turn On/Off Your Headset

To turn on/off your headset, Turn Volume knob clockwise until you feel a click. The Status Indicator light on the inside of the cup will light Green or Red when powered on.

Low Battery

When the LiPo Rechargable battery is low, your headset will sound a repeating short tone every 5 minutes after each transmission is sent, indicating that the battery should be charged soon. (10-30hr of talk time remaining). Your headset will automatically turn off when the battery is fully discharged.

Getting Started

Using Your Headset for the First Time

Step One: Attach Adapter

Attach your FreeLinc adapter to the accessory interface of your portable radio (see your portable radio's user manual if you need assistance locating the accessory interface). If your adapter has a mounting clip on top, use the clip and locking screw to secure the adapter to your radio. If your adapter does not have a mounting clip, use the thumb screw to secure it to your radio. When properly attached, the spring-loaded pins will align with the contacts on the accessory interface of your portable radio and the adapter should fit securely.

Step Two: Turn On Adapter

Turn on your portable radio and set the toggle switch to "ON." This will automatically silence the speaker on your portable radio and route all communications to your headset.

Getting Started

Step Three: Turn On Your Headset

To turn on your headset turn the On/Off Volume Knob clockwise until you feel a click. The On/Off Indicator light will illuminate red indicating your headset has powered up. Once you turn on your headset, it automatically enters Seek Mode (see Seek Mode under Operating Concepts and Terms). pg8

Step Four: Pair Headset to Adapter

When you take your headset out of the box the first time, it may be necessary to manually pair it with an adapter. To initiate manual pairing, turn on your headset and hold it within 10 inches of the adapter and press the Pairing button located inside the cup for three seconds. When you have successfully paired your headset to the adapter, the adapter indicator light and the headset Status Indicator Light will flash green, indicating a successful pairing.

CAUTION: When pairing, make sure that there are no other FreeLinc products within 6 feet of the devices being paired.

Getting Started

Step Five: Establish Link (Automatic)

Once you pair your headset to an adapter, the two devices establish a communication link. This occurs automatically after pairing, and the link persists as long as your headset remains within the communication area. If you move your headset outside the defined area, the link is lost and the unit returns to Seek Mode.

While in Seek Mode, your headset attempts to locate the adapter to which it is paired. The adapter indicator light will flash red and will persist until the unit exits Seek Mode by either:

- Re-establishing the link with the adapter with which it is paired - when this occurs the adapter indicator light will flash green.
 OR
- Powering down this occurs when no link is established for 60 minutes.

Pairing Your Headset with Other Adapters

Manually Initiating the Pairing Process

To initiate manual pairing, hold your headset close to the adapter and press the paring button in the earcup of your headset for three seconds. The adapter indicator light will flash solid green indicating a successful pairing. You can repeat this process at any time to break the existing pairing and establish a new pairing with any other adapter. Keep in mind that your headset can only be paired with one adapter at a time.

CAUTION: When pairing, make sure that there are no other FreeLinc products within 6 feet of the devices being paired.

Specifications

Wireless Technology	Near-Field Magnetic Induction
Battery Type	LiPo 3.7v 2200mAh
Battery Life	Up to 150 hours talk time
Range	Up to 5 feet 1.25m
Operating Temperature	-20 C to +60 C -22 F to +140 F
Humidity	95% @ 8 hours (non-condensing)
Noise Reduction Rating (NRR)	-25db\SPL
Microphone	Noise Canceling
Weight	16.8 oz

Frequently Asked Questions

What happens if I go out of range and lose the link between my headset and my adapter?

When your headset is out of range of the adapter, the headset will beep and the indicator light on the adapter will blink red. To re-establish the link, move your headset within range of the adapter. The adapter indicator light will resume flashing green.

Will my headset communicate with more than one adapter at a time? No. When your headset and adapter are paired they exchange a unique and individual ID. This exchange ensures

that communication occurs only between the linked headset and adapter.

Frequently Asked Questions

Do I need to modify my radio in any way for my headset or adapter to work? No. The only requirement is that the FreeLinc adapter must fit on your radio model. For a complete list of the radio models FreeLinc supports, please refer to the FreeLinc website at www.freelinc.com.

What happens if I lose my headset and need to use my radio to communicate with others?

Turn the adapter switch to "OFF". With the adapter off, your radio functions as if the adapter were not attached. You have complete functionality of the radio without having to remove the adapter.

Tips and Suggestions

For up-to-date troubleshooting information, or to get help with a specific problem, or to contact a customer service representative, please visit www.freelinc.com, and click the "support" link or call 1-866-467-1199.

Accessories

FreeLinc continually releases new accessories for its products. Please refer to: www.freelinc.com to see the latest offerings.

Saftey Information

Caution: To reduce the risk of fire or injury, please read and follow the instructions below.

• Do not dispose of product in a fire; the battery cells may explode. Check with local codes for possible battery disposal instructions.

• Never submerge your product in water or other liquids.

• Protect your product from spills, excessive rain, and wet locations.

• Do not use liquid cleaners or aerosol cleaners as they may damage the product or finish of the product. Use a dry cloth to clean the external portions of the product.

Saftey Information

• Do not stick anything inside the product as this may damage internal components.

• This product conforms to the following safety standards:

ANSI/UL 60950-1 1st Ed. CAN/CSA C22.2 No. 60950-1-03 EN 60950-1 1st Ed.

Warranty

I. What this warranty covers and for how long:

- a. Radeum, Inc., doing business as FreeLinc ("FreeLinc"), warrants to Purchaser that its FreeLinc manufactured products ("Product") will substantially conform to FreeLinc's published specifications, as of the date of the Purchaser's purchase of the Product, and for one (1) year from the date of purchase (the "Warranty Period").
- b. Rechargeable batteries will be replaced during the warranty period if the battery develops leakage.
- c. FreeLinc, at its option, will at no charge either repair, replace, or refund the purchase price for warranted Product during the warranty period provided it is returned in accordance with the terms of this warranty to the place of purchase. Repair, at FreeLinc's option, may include the replacement of parts or boards with functionally equivalent reconditioned or new parts or boards. Replaced parts or boards are warranted only for the balance of the original Warranty Period. All replaced parts or Product shall become the property of FreeLinc.

- d. This express limited warranty is extended by FreeLinc to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for Product manufactured by FreeLinc. FreeLinc assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of FreeLinc. Unless made in a separate written agreement between FreeLinc and the original end user purchaser, FreeLinc does not warrant the installation, maintenance or service of warranted Product.
- e. FreeLinc is not responsible in any way for any ancillary equipment not furnished by FreeLinc which is attached to or used in connection with Product, or for operation of the Product with any ancillary equipment and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, FreeLinc disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. What this warranty does not cover:

- Defects or damage resulting from use of the Product in other than its normal and customary manner.
- b. Defects or damage from misuse, accident, water or neglect.
- Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
- d. A Product subjected to unauthorized Product modifications, disassemblies, or repairs.
- e. Product which has had the serial number removed or made illegible.
- f. Rechargeable batteries if the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- g. Freight costs related to Product returned for warranty claims.
- A product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with FreeLinc's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was purchased.

III. How to get warranty service:

- Purchaser shall notify FreeLinc of any nonconformance during the warranty period, and obtain a written return material authorization ("RMA") and an RMA number for the nonconforming Product from FreeLinc.
- b. Purchaser shall return the nonconforming Product to the place of purchase freight prepaid.

IV. Limitation of Liability:

- This warranty sets forth the full extent of FreeLinc's responsibilities regarding the Product. Repair, replacement, or refund of the purchase price, at FreeLinc's option, is the exclusive remedy.
- b. THE FOREGOING WARRANTIES ARE THE SOLE WARRANTIES, EXPRESS OR IMPLIED, GIVEN BY FREELINC IN CONNECTION WITH THE PRODUCT, AND FREELINC DISCLAIMS ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTIBILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT OF THIRD-PARTY RIGHTS.

- c. FREELINC SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE PRODUCT, EVEN IF FREELINC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
- d. EXCEPT FOR CLAIMS FOR BODILY INJURY (including death) AND CLAIMS FOR DAMAGE TO REAL PROPERTY AND TANGIBLE PERSONAL PROPERTY, FREELINC'S LIABILITY FOR ALL OTHER CLAIMS SHALL NOT EXCEED THE AMOUNT PAID TO FREELINC FOR THE PRODUCT GIVING RISE TO FREELINC'S LIABILITY. THIS LIMIT OF LIABILITY ALSO APPLIES TO OUR MANUFACTURERS AND DISTRIBUTORS. IT IS THE MAXIMUM AMOUNT FOR WHICH WE ARE COLLECTIVELY RESPONSIBLE.

FCC Compliance

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, if not installed and used in accordance with the manufacturer's instructions, may cause interference harmful to radio communications. There is no guarantee however, 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 comparing 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 your supplier or an experienced radio/TV technician for assistance.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



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> > Rev. 0909