



FreeLinc®  
FreeMotion™ 200  
Wireless Headset  
User Guide



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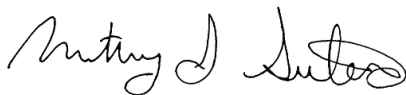
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# Introduction

## Welcome

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

The FreeMotion 200 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.



Anthony J. Sutera  
CEO

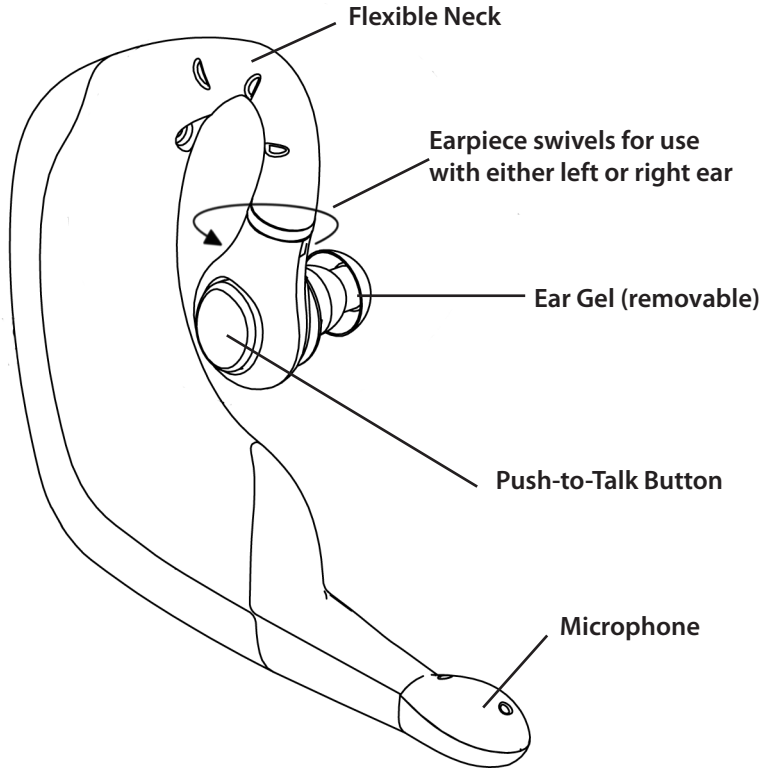
## Product Overview

The FreeMotion 200 Headset works within a small area surrounding the user. The size of the area is determined by the distance between the headset and the adapter. If the headset and adapter are close together, the area shrinks in diameter – just large enough to accommodate the range of communication between the headset and adapter. As you increase the distance between the headset and adapter, the size of the area surrounding the user expands accordingly, up to approximately five feet in diameter.

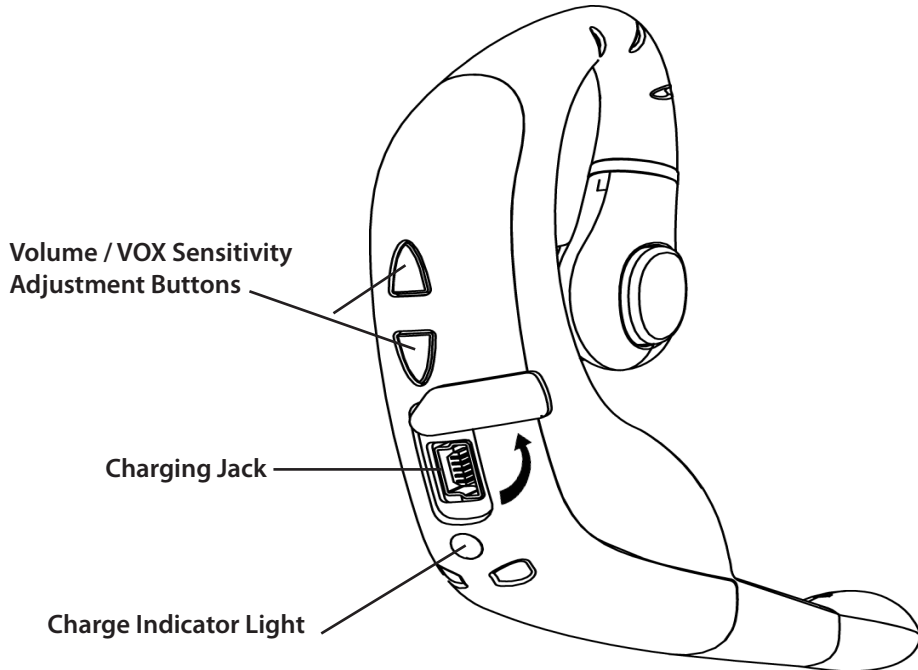
## Package Contents

FMT-200 Headset  
AC Power Adapter  
User Guide  
Quick Start Card  
Ear Gels  
Windscreen  
Tether Cord

# FreeMotion 200 Headset Diagram



# FreeMotion 200 Headset Diagram



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# Before You Begin

## Operating Concepts and Terms

### Pairing

Before your headset can communicate with an adapter, it must establish a link. To establish a link, the headset and adapter must exchange a randomly generated software ID code, which is stored on each device. This process is called “pairing.” The 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*).

### 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 two minutes before entering Sleep Mode.

### Linking

After entering Seek Mode and finding the adapter with which it is paired, the 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 returns to Seek Mode.

### Sleep Mode

When your headset has remained in Seek Mode for two minutes without finding a link, it will enter Sleep Mode. To wake up your headset from Sleep Mode, press the **Push-To-Talk** button, which activates Seek Mode.

## Charging the Battery

To charge the battery on your headset, connect the included AC power adapter into an AC power outlet then to the charging jack located on the back of the headset (see *FreeMotion 200 Headset Diagram*). In a few seconds, the charge indicator light on the headset will flash red, indicating that charging is in progress.

A fully charged battery should give you around 20 hours of talk time.

**Important:** Charge the headset battery at least six hours before first use. Subsequent charges take three hours (approximate). The charge indicator light will flash green when the headset battery is fully charged.

**Important:** Do not attempt to charge the headset battery using a cable other than the one provided by FreeLinc. Failure to comply may result in damage to the unit and/or decreased battery capacity.

**Note:** Please do not use or wear the headset while charging.

## Changing Ear Gels

Before using your headset, take the time to select an ear gel size that is comfortable for your ear. Snap the ear gel over the plastic ridge on the ear bud. Repeat the process with each size of ear gel until you find the best personal fit and comfort.

A secure ear gel that fits properly helps the headset stay in place and function correctly.

## Headset Alert Tones

When the link between the FreeMotion 200 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 FreeMotion 200 Headset:

TONE	INDICATION
Double short tone	Low Battery
Single tone	Pairing/Linking achieved

## Headset Volume Adjustment Tones

When pressing the Volume Up or Volume Down buttons to adjust the headset volume, you will hear the following tones:

tone	INDICATION
Single tone	Volume Up/Volume Down button pressed
Double short tone, high pitched	Maximum volume reached
Mute, no sound	Minimum volume reached

### NOTE

When the minimum volume is reached and mute activated, be aware that no audio will be emitted from either your portable radio or headset.

Additionally, the adjusted volume setting(s) will be restored to the default level after charging or a forced reset.

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# 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 the headset.

### Step Three: Exit Sleep Mode

Your headset will be in Sleep Mode when you take it out of the box for the first time. To wake up your headset from Sleep Mode, press the **Push-To-Talk** button once. After you wake it up, it automatically enters Seek Mode (see *Seek Mode* under *Operating Concepts and Terms*).

### Step Four: Pair Headset to Adapter

When you take your headset out of the box for the first time, you will need to manually pair it with an adapter. To initiate manual pairing, hold the headset within 10 inches of the adapter and simultaneously press the **Volume Up** and **Volume Down** buttons for three seconds. When you have successfully paired your headset to the adapter, the adapter 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.

### 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 the 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, the headset attempts to locate the adapter to which it is paired. The adapter indicator light will flash red and 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
- Entering Sleep Mode - this occurs when no link is established for two minutes.

### Step Six: Adjust Product Volume and Fit

The headset has eight volume levels. Use the Volume Up and Volume Down buttons on your headset to adjust the volume. You can also use these buttons to adjust the microphone

sensitivity; however, you must enter VOX mode to do so (see *VOX Operation*).

Select the ear gel that provides the most comfortable and secure fit.

**CAUTION:** If you press the Volume Down button continuously for six seconds, you will switch into VOX mode (see *VOX Operation*).

### Step Seven: Ending Use

There is no On/Off button on the headset. To turn off the headset, you can either turn the adapter toggle switch to "OFF," or turn your portable radio off. Once you turn off the adapter, the link will be broken and the headset will enter Seek Mode. When the link has been broken for two minutes, the headset will enter Sleep Mode and turn off.

### Forced Reset

You can force the headset to turn off by pressing the Volume Up button continuously for six seconds.

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# VOX Operation

## Entering VOX Mode

In VOX Mode (Voice Operated Transmit), the sound of your voice activates the transmission in the same way pressing the Push-To-Talk button does in normal mode.

To enter VOX mode, press the **Volume Down** button on your headset for six seconds. The adapter indicator light will change from flashing green to flashing orange.

## Operating in VOX Mode

To initiate a transmission in VOX mode, you simply speak into the microphone on the headset. The headset transmits your voice when you are talking then switches to receive when you stop.

## Adjusting VOX Sensitivity

Depending on background audio conditions, you may need to adjust the microphone sensitivity. Use the Volume Up and Volume

Down buttons on your headset to increase or decrease sensitivity while in VOX mode.

The adjustments you make to the microphone sensitivity will be restored to the default level after charging or a forced reset.

**Note:** While in VOX mode, you can **not** adjust the volume using the Volume Up and Volume Down buttons. To adjust the volume, use the volume setting on your radio.

## Exiting VOX Mode

To exit VOX mode, press the **Volume Down** button on your headset for six seconds. The adapter indicator light will change from flashing orange to flashing green.

## CAUTION

While in VOX mode, any communication may be transmitted over the airway.

## Additional Information

### Pairing Your Headset with Other Adapters

#### Manually Initiating the Pairing Process

To initiate manual pairing, hold the headset close to the adapter and simultaneously press the **Volume Up** and **Volume Down** buttons on 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 the 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	Lithium Polymer Rechargeable
Talk Time	Up to 20 hours continuous talk
Charger Type	6 volt AC-DC wall charger
Range	Up to 5 feet
Earbud	Conforming ear gel
Dimensions	0.5 x 3.4 x 3.6 inches (1.3 x 8.6 x 9.1 cm)
Weight	1.2 oz (34 g)
Operating Temperature	-20 C to +60 C
Humidity	95% @ 8 hours (non-condensing)

## Frequently Asked Questions

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

When the 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 the 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 the 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.

***Can I charge my headset through the USB ports on my computer?*** No. The levels on other USB ports are not the same as they are on the FreeLinc charging cables. Failure to comply could cause damage to your headset.

***Do I need to modify my radio in any way for the 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](http://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, to get help with a specific problem, or to contact a customer service representative, please visit [www.freelinc.com](http://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](http://www.freelinc.com) to see the latest offering.

# Safety 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.
- Use only the supplied charging unit to charge the product from an AC voltage or wall outlet.
- If the product becomes hot during charging, disconnect the AC adapter from the wall and contact qualified support personnel.
- Do not disassemble the AC adapter of this product as it may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the product is subsequently used.
- Do not use the charger outdoors or in damp areas.
- Only charge the product battery in accordance with the instructions in this manual.
- 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.
- 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 and FCC Compliance

## 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:

- a. 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.
- c. 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.
- h. 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:

- a. 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:
  - a. 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 MERCHANTABILITY, 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 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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The FreeLinc FreeMotion 200 Wireless Headset may not be authorized for use in some countries.

Engineered in USA  
Manufactured in China  
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