

# NeuroSky MindSet

## Quick Start Guide

### Quick Tips

1. You should allow the MindSet to fully charge before you begin usage.
2. Do not charge the MindSet while it is on your head.
3. Recharge the MindSet as necessary.
4. Make sure to properly clean your MindSet to ensure the best signal quality.
5. The MindSet only works with MindSet enabled programs.

### Power On & Charge

To turn on the MindSet, hold down the power button until you see the blue light turn on. Turn off the MindSet by holding down the same power button until the blue LED goes from flashing to solid. Then let go of the button and the LED will turn off.

The MindSet has a rechargeable lithium ion battery that is charged by using the mini-B USB jack on the left ear cup. Rotate the cup outwards to reveal the USB jack. To charge the headset, plug in the USB cable to the mini-USB connector and connect the other end to a PC or USB charger. The red LED on the MindSet will turn on to indicate that the MindSet is charging. Once the MindSet is completely charged, the red LED will turn off. The MindSet cannot be used while it is charging.

## Windows Vista/XP Setup

### A. Minimum Requirements

- OS: Windows Vista or XP
- Processor: Pentium 4; 1.6 Ghz
- Memory: 512 MB RAM
- HDD:200 MB
- An open USB Port

### B. MindSet Bluetooth Setup

The MindSet can connect to your Windows Vista or XP PC using the Bluetooth Control Panel settings. The Quick Start Guide describes the most standard setup. Additional information and tips can be found in the Instruction Manual.

### C. Bluetooth Dongle Setup

#### Important

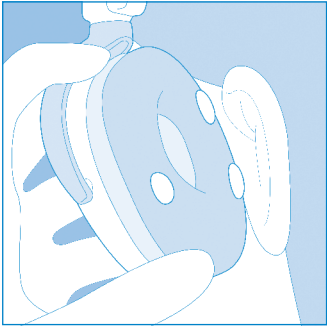
It is recommended to use the supplied Bluetooth adapter.

1. Run the Bluetooth software setup on the BCI Demonstration Software CD.
2. Insert the Bluetooth adapter into an available USB port when prompted.
3. Restart computer.

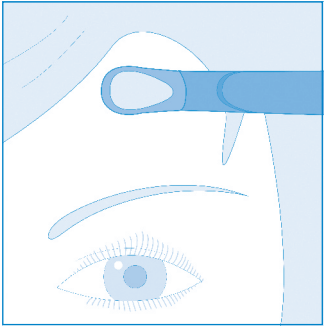
### How to Properly Wear your Mindset



Orient the MindSet with the sensor arm on your **left hand side**.



Make sure the contact points on the left ear pad make **skin contact** with your ear. Move any hair or other obstructions out of the way.

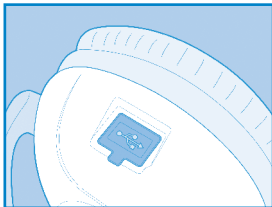


Gently bend the Sensor Arm down until the sensor rests comfortably on the forehead above the eyebrow. The sensor arm can be gently bent forward or back for the best fit.



This is how the MindSet should look when properly worn. If you are not receiving a signal, you may need to make some minor adjustments to ensure the sensors have proper skin contact.

### Mini-B USB Charging Port



Plug in your USB cord to a PC's USB jack to charge your MindSet.

### Forehead Sensor

The Forehead Sensor **must touch the forehead** to maintain accuracy. Move any hair out of the way.

### Sensor Arm

The Sensor Arm is flexible to bend comfortably towards your forehead.

## The MindSet

The MindSet is more than your average headset. It has the ability to use your brainwaves for exciting new applications. In order to take full advantage of these functions and features of the MindSet, the MindSet **must be properly worn**.

### Pairing/Media Button

By holding the Pairing/Media Button directly down, you enable the Bluetooth Pairing mode. Directional pushes enable full media playback controls. **Pass Code: 0000**

### Phone Button

Press the Phone Button to answer incoming phone calls when your MindSet is paired as a communication device.

### Power Button

Press and hold the Power Button until the blue LED turns on. To turn off, press and hold the button until the blue LED stops flashing.

### Microphone

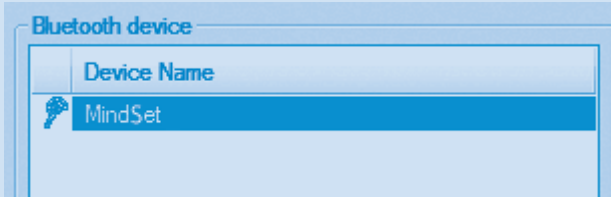
When your MindSet is paired as a Bluetooth hands free device, the microphone is used to pick up your voice.

### Ear Contacts

The contacts on these pads must touch the skin of the ear to ensure accurate brainwave reading.

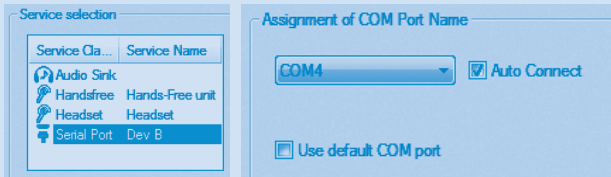
## Windows Vista/XP Bluetooth® Pairing

1. Power on the MindSet by holding down the power button for 2 seconds or until the blue LED blinks.
2. Place the MindSet into pairing mode by pushing in the Media Button for three seconds. The red and blue LEDs will blink to indicate that the MindSet is in pairing mode.
3. Double-click on the Bluetooth icon in the system tray. If the Bluetooth icon is not present, find the Bluetooth icon in the Control Panel.
4. Click on **New Connection**.
5. Choose the **Custom Mode** option and then click **Next**.
6. If the Bluetooth adapter detects the MindSet, it will show up as **MindSet**. Select **MindSet** and click **Next**.

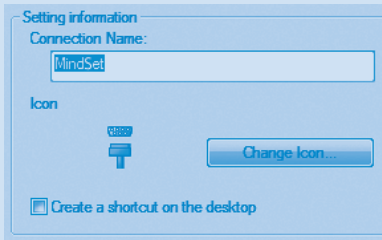


*Note: If the MindSet does not appear on the list, verify that the MindSet is in pairing mode and click on Refresh.*

7. Select Serial Port Dev B and click **Next**.
8. Uncheck **Use default COM port** and select the lowest numbered available COM port. Click **Next**.



9. Use the default name and icon. Click **Next**.



10. Click **Next** to complete the pairing of the MindSet.
11. Double click on the MindSet icon to connect to the COM port. The Bluetooth manager will ask for a passkey (PIN) to connect to the MindSet. Enter in 0000 in the passkey box and click **OK**.



12. The MindSet is now connected.
13. To use the MindSet's other features, such as Bluetooth Audio, repeat the pairing process and choose the desired service in **Step 7**.

# Mac *Bluetooth* Setup

## A. Minimum Requirements

- OS: Mac OS X 10.5 “Leopard” or later
- Processor: Any Intel Mac
- Memory: 1GB
- HDD: 200 MB

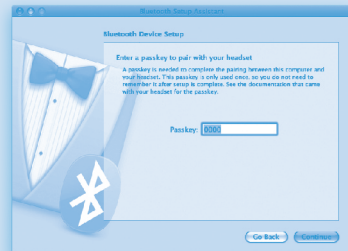
## B. *Bluetooth* Setup and Pairing

1. If your Mac already has *Bluetooth*, proceed. Otherwise, plug in the included dongle.
2. Set the powered-on MindSet in pairing mode by holding down the Media Button for three seconds. The red and blue LEDs will alternate flashing lights to indicate “Pairing Mode”.
3. Open System Preferences, and click on the *Bluetooth* icon to configure *Bluetooth* devices.
4. Click on the “+” icon in the lower-left to add a new *Bluetooth* device.
5. When asked to Select Device Type, choose “Any Device”, then click “Continue”.
6. MindSet should appear in the list of *Bluetooth* devices in range. Select it, then click “Continue”.

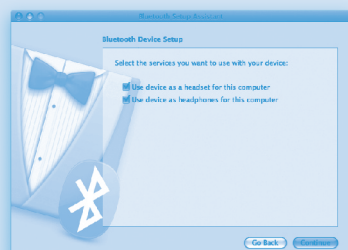


7. Once the wizard is done gathering information about the MindSet, click “Continue”.

8. When prompted for a passkey, enter “0000”. Then click “Continue”.



9. When asked about services, just use the default setting. Then click “Continue”.



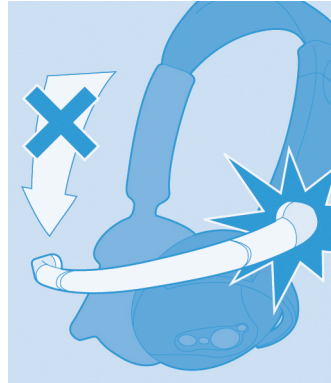
10. You are now ready to use the MindSet with the accompanying software. Refer to the MindSet diagram to properly wear your MindSet.

# Care and Maintenance

- Clean the sensor and ear contacts with alcohol wipes periodically to ensure the best signal quality. Do not clean the plastic area with alcohol as this will dry it out and make it brittle.



- For travel and storage, gently push the sensor boom up until it is aligned with the top of the headset. Be careful not to over extend the maximum range of the boom by adjusting it beyond the natural stopping point.



- Do not leave the headset in your car in extreme temperatures. High temperatures may damage the MindSet.
- Be careful not to kink or over bend the sensor boom. This will reduce the ease of fit.
- Dropping or throwing the headset may damage the internal components.
- Do not charge the MindSet while it is on your head.

## Warnings & Disclaimers

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*The MindSet is designed for entertainment purposes only. For users fourteen and older.*

*\*The descriptions used in this guide are meant to provide a non technical description of the technology and should be considered as such.*

# Troubleshooting

## *The MindSet does not turn on.*

The MindSet charge may be low. Recharge the MindSet by plugging in the USB cable. We recommend charging your MindSet after approximately 10 hours of usage.

## *I am having issues with my Bluetooth connection.*

Please use the *Bluetooth* dongle included with the MindSet. If the problem continues, more information is available in the MindSet Instruction Manual.

## *I cannot get my Bluetooth sound to work.*

### Important

*The MindSet audio service must be paired to your computer before audio will work. Please follow the MindSet Bluetooth Audio pairing instructions in the MindSet Instruction Manual.*

- If you have already paired the MindSet Bluetooth Audio, double click on the MindSet Audio icon in the Bluetooth control panel to connect the MindSet audio service.
- You may need to restart your media player or other application to enable sound through the MindSet after pairing.
- If you still cannot connect, delete the MindSet Audio icon and pair the MindSet again.

## *The signal quality status is consistently poor (fewer than three bars).*

The ear contacts should be resting directly on your ear and the forehead sensor should be touching your forehead. Also, check that the sensor and contacts are making good contact with the skin. Remove any hair or jewelry that may be in the way.

In order to help the MindSet calibrate, try and stay still while the headset is on your head. It usually takes three or four seconds for the headset to validate the signal after holding still. Also, make certain to keep the sensor and contacts clean.

## *The eSense meters do not move.*

First, verify that the *Bluetooth* is paired correctly. Next, use the Brainwave Visualizer to verify if the headset is transmitting. Select “Show data output” from the menu. If the numbers are changing that means the headset is transmitting data to the PC.

Allow the eSense meters a few moments to go through initialization before troubleshooting. If the meters do not move after 10 seconds, make sure the sensor rests on the forehead and the contacts are on the left ear. All sensors need to maintain firm and consistent contact with your skin.

## *I don't seem to be able to control the eSense™ meters.*

Like exercising a long-unused muscle, it may take some time to gain full proficiency with the eSense™ meters. First, be sure you understand how the eSense meters work and what they are measuring by reading the explanation in the MindSet Instruction Manual. The Instruction Manual also provides further hints and techniques for training your mind to control the meters.

## *I have a problem that is not covered by this Troubleshooting section.*

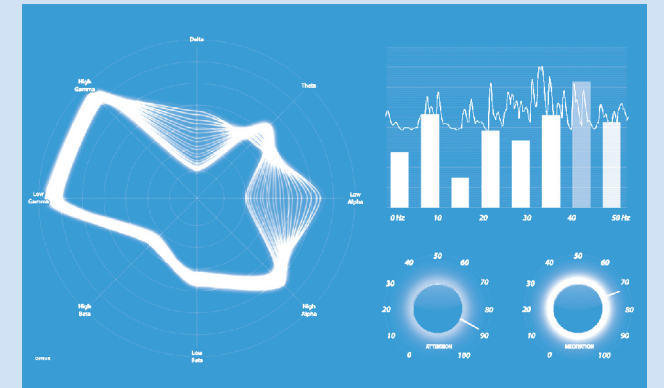
Read the MindSet Instruction Manual for more troubleshooting tips. If the Instruction Manual doesn't address your issue, head to the NeuroSky Support Forums at <http://support.neurosky.com>

# Software

Applications must be designed to interface with the MindSet. Additional software that takes full advantage of the MindSet can be found at: <http://store.neurosky.com>

## Brainwave Visualizer

A colorful, interactive application that shows a graphical representation of your brain's activity. The Brainwave Visualizer includes various brainwave visualizations, the power spectrum graph, and output of the eSense Attention and Meditation meters. Try listening to music and watch how your mind experiences the melodies.



## The Adventures of NeuroBoy BCI Tech Demo

As NeuroBoy, use your special telekinetic powers to push, pull, lift or burn objects. Different objects in the world weigh different amounts, so you'll need to hone your mental muscle to pick up the heavier items.



# NeuroSky Store

To find new and exciting ways to unlock the full potential of your MindSet, visit the NeuroSky Store for additional software and applications. <http://store.neurosky.com>

## Develop and Sell Your Own BCI Applications In The NeuroSky Store

Develop your own innovative and useful applications and sell them to the world through the NeuroSky Store. The MindSet Development Tools (MDT) are now available as a free download on the NeuroSky Store.

The MindSet Development Tools (MDT) software package includes everything necessary to develop your own applications, including: API library and device drivers, support for C/C++, C#, .NET, and Java, documentation, guides, and examples. The MDT makes it possible to develop across a wide range of platforms, from microcontrollers to scripting languages.