

---

# **Instructions for Installing and Using the HeadMaster 2000<sup>TM</sup>**

**PRENTKE ROMICH COMPANY**

**Corporate Headquarters**

1022 Heyl Rd. • Wooster, Ohio 44691

Sales: (800) 262-1933

Service: (800) 262-1990

Fax: (330) 263-4829

E-Mail Address: [info@prentrom.com](mailto:info@prentrom.com)

Web Site Address: [www.prentrom.com](http://www.prentrom.com)

---

HeadMaster 2000 and Vanguard are trademarks of Prentke Romich Company.  
AirMouse is a trademark of Selectech, Inc.  
MS Windows, Windows '95, '98, NT and MS-DOS are registered trademarks of Microsoft, Inc.  
Macintosh is a registered trademark of Apple Computer, Inc.  
IBM is a registered trademark of International Business Machines, Inc.  
WiViK<sub>2</sub>Rep and WiVox are trademarks of Hugh Macmillan Rehabilitation Centre.

**©Prentke Romich Company 1998**

All rights reserved. Under copyright laws this manual may not be copied, in whole or in part, without the written consent of the Prentke Romich Company.

---

Prentke Romich Company • 1022 Heyl Rd. • Wooster, Ohio 44691 • Sales: (800)-262-1933 • Service: (800)-262-1990 • #12549

**HeadMaster 2000 Instruction Manual**

# Table of Contents

<b>Components</b> .....	4
<b>Install the HeadMaster 2000 Software</b>	
Windows 3.1 .....	5
DOS .....	6
Windows '95 and '98 .....	7
<b>Connect the HeadMaster 2000</b> .....	9
<b>Mounting on Eyeglasses</b>	
Sensor .....	11
Positioning the Sensor .....	11
Puff Switch.....	11
Adjusting the Puff Switch.....	11
<b>Mounting on a Headset</b>	
Sensor .....	13
Puff Switch.....	13
Adjusting the Puff Tube.....	15
Headset Placement .....	15
<b>Headset Center Mount</b> .....	17
<b>Rotating the Position of the Sensor Cord</b> .....	19
<b>Start Your Computer and Adjust the HeadMaster 2000 Settings</b>	
If You are using Windows '95 or '98.....	21
Disable the HeadMaster 2000 when using Windows '95 or '98.....	22
If You are using Windows 3.1 .....	23
If You are using DOS .....	23
<b>Using the HeadMaster 2000</b>	
About the Batteries .....	25
Replacing the Batteries.....	26
About the Indicator Lights on the Body Pack.....	26
Using the Sensor and Puff Switch.....	27
Reverse the Puff/Sip Switches.....	27
Windows '95 and '98.....	27
Windows 3.1.....	27
To "Click" on a Screen Icon .....	28
To "Double-Click" on a Screen Icon .....	28
To "Drag" a Screen Icon.....	28
To Adjust the Sensitivity of the Puff/Sip Switch .....	28
<b>Troubleshooting</b> .....	29
<b>Using an On-Screen Keyboard</b> .....	30

## **HeadMaster 2000 Components**

---

Desktop Mouse with built-in infrared receiver

Adapter Cables

Body Pack and Puff Tube

Infrared Sensor

BCPS-1 Battery Charger for Body Pack

Eyeglasses or Headset for mounting and a small bag of parts

HeadMaster 2000 software floppy disks

- One disk contains software for DOS and 3.1 systems

- One disk contains software for Windows' 95

## **Install the HeadMaster 2000 Software for Windows 3.1**

### **Important Information!**

**Only install this driver if you are running Windows 3.1 operating system.**

**Do not** install this driver if you are using DOS or Windows ' 95 or Windows ' 98 operating systems.

 Prentke Romich' s HeadMaster 2000 uses the AirMouse software and the AirMouse Desktop mouse with infrared receiver. You may see the name " AirMouse" in the installation instructions. Follow the installation directions exactly as they are written. If you are told to type " AirMouse," do so. Do not type "HeadMaster 2000."

### **Installing:**

1. Start Windows 3.1.
2. Insert the HeadMaster 2000 software disk that contains the DOS and 3.1 software into your floppy drive.
3. Select "File Run" from the Program Manager menu bar.
4. Type: **X:\SETUP** (for "X" type in the letter of your floppy drive).
5. Click on **OK**.
6. Follow the directions on your computer screen to complete the installation.

## **Install the HeadMaster 2000 Software for DOS**

---

### **Important Information!**

**Only install this driver if you are running the DOS operating system.**

**Do not** install this driver if you are using Windows ' 95 or Windows ' 98.

 Prentke Romich' s HeadMaster 2000 uses the AirMouse software and the AirMouse Desktop mouse with infrared receiver. You may see the name " AirMouse" in the installation instructions. Follow the installation directions exactly as they are written. If you are told to type " AirMouse," do so. Do not type "HeadMaster 2000."

### **Installing:**

1. Boot your system up to the DOS prompt.
2. Insert the HeadMaster 2000 floppy disk that contains the DOS software into your disk drive.
3. Type: **X:\Install** (for "X" type in the letter of your floppy drive).
4. Press <RETURN>.
5. Follow the directions on your computer screen to finish the installation.

### **After the Installation is Completed:**

#### **If You Want to Load the HeadMaster 2000 Driver Manually:**

At the DOS prompt type: **C:\AirMouse\AirMouse** at the DOS prompt.

#### **If You Want to Load the Driver Automatically on Startup:**

Modify your Autoexec.bat file by adding the following line at the proper place:

**[LOADHIGH]C:\AIRMOUSE\AIRMOUSE**

The HeadMaster 2000 (Air Mouse) driver needs to load instead of any other drivers. You must "REM" out the command line(s) that would normally load the other mouse driver(s). If there are no other mouse drivers being loaded, place the AirMouse driver command at the start of the Autoexec.bat file. Save the new file.

## Installing the HeadMaster 2000 Software for Windows'95/98

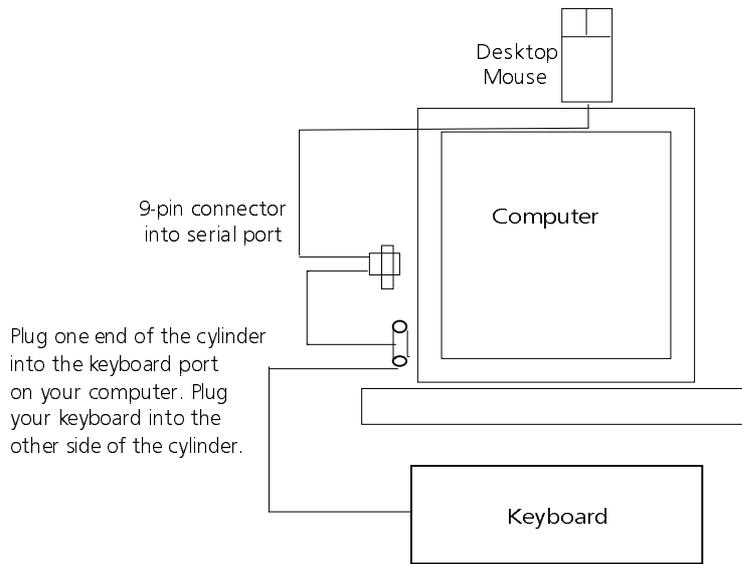
### **Important Information!**

**Only install this driver if you are running Windows '95 or '98.**  
**Do not install this driver if you are using the DOS or Windows 3.1.**

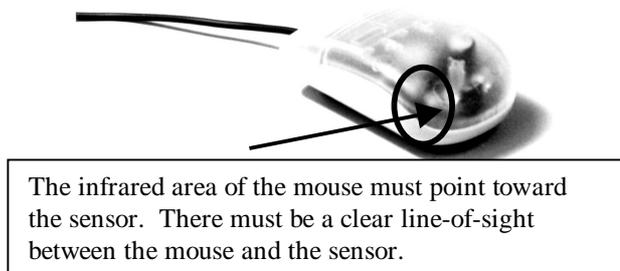
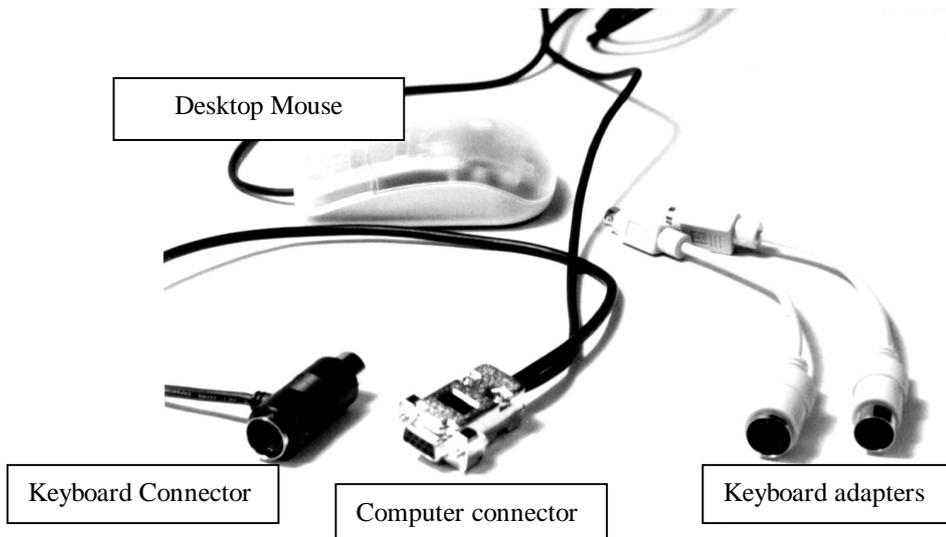
1. Insert the HeadMaster 2000 for Windows '95 disk into your floppy disk drive.
2. Open the Control Panel and click on "Add New Hardware", then click on "Next". (For Windows 98, click "Next" on two screens, then go to step #3 below.)
3. You do **not** want Windows to search for new hardware so click on the "No" box, then click on "Next".
4. Click on "Mouse" to highlight it, then click on "Next".
5. Click on the "Have Disk" button.
6. The "Install from Disk" screen pops up. If the HM2000 disk is not in the drive that is showing in the box, go to the correct drive and choose the "hm2000.inf" file. Click on "OK". Click on "Next".
7. Click on "Finish".
8. Remove the disk from your floppy drive.
9. Restart your computer.
10. Open the Control Panel and find the "HeadMaster 2000" icon.  
(If you do not see the icon, repeat these steps.)
11. Double-click on the HeadMaster 2000 icon to open it. You are now in the HeadMaster 2000 Control Panel. (See page 21 for complete information about this Control Panel.)
  - a. Set the "Tracking" and "Double-click" speeds (try setting them in the middle to start with).
  - b. Under "Configured Com port" on the left side of the Control Panel, select the Com port where you plan to connect the HeadMaster 2000.
  - c. Click "OK". **Turn your computer Off and go to the next page for information about connecting your HeadMaster 2000.**

 The desktop mouse can be used as a regular hand-operated mouse at any time. A second mouse can be connected to another com port or to the PS/2 port and can be used alternately with the HM2000 mouse.

 **Important Note:** Once the HeadMaster 2000 driver is installed, the Com Port on your computer that your HeadMaster is connected to cannot be used for anything else. If you need to use it for something other than the HeadMaster you must go to the HM2000 Control Panel to disable the HM2000. See page 22 for information about disabling the HM2000.



If the connectors on the cylinder do not match your keyboard port, use the adapter cables that came in the Headmaster 2000 package.



## Connect the HeadMaster 2000

---

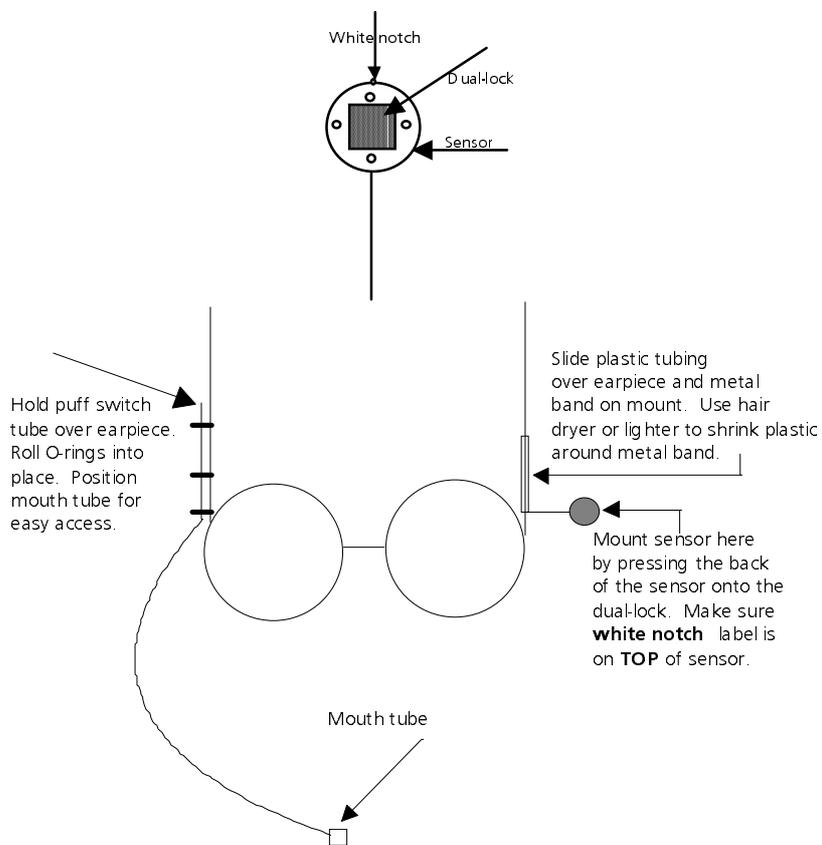
➡ **Turn your computer Off before connecting the HeadMaster 2000 and mounting the sensor.** Complete the instructions for mounting your sensor and then use the instructions on page 21 to start your computer.

The Desktop Mouse has a cable coming from it. The cable has a large 9-pin connector on it. This connector also has a cable coming from it. The connector at the end of this cable is cylinder-shaped. The cylinder has a connector on each end.

1. Plug the large 9-pin connector from the Desktop Mouse cable into an available serial port (Com1 or Com2) on your computer
2. Unplug your keyboard from your computer. Look at the connectors on the ends of the cylinder (on the cable coming from the 9-pin connector). One of the connectors should fit into the keyboard port on your computer. Plug this connector into the keyboard port. Plug your keyboard into the other connector on the cylinder.
3. If the connectors on the cylinder do not fit your keyboard port, you also received two tan colored adapter cables. One of the cables should have an end that fits into one of the cylinder's connectors and the other end should fit into the keyboard port on your computer. Find the cable that fits and plug it into the cylinder and your keyboard port. Plug the second tan cable into the free end of the cylinder. Plug your keyboard into the other end of the second tan cable.

### The Infrared Receiver in the Desktop Mouse

The back (the sloping end opposite the two mouse buttons) of the desktop Mouse contains the infrared receiver. This is the component that will pick up signals from the headpointing sensor. This downward-sloping end (the back) of the mouse **must** point **toward** the sensor. There should be a clear line-of-sight between the Desktop Mouse and the remote sensor. You might want to start by placing the Desktop Mouse on top of or near the computer screen. The sensor is worn on your head (headset) or glasses.



### Mounting the Puff Switch and Sensor

#### Important Information about Mouth Tubes

The mouth tubes that come with your HeadMaster 2000 are the saliva ejectors that dentists use. You can order them from PRC or you can get them from any dental supply company. **For hygienic reasons** you should replace used mouth tubes frequently. **Discard the used tubes. Do not try to wash them out and re-use them.**

## Mounting on Eyeglasses

---

➡ **Turn your computer Off before connecting the HeadMaster 2000 and mounting the sensor.** Complete the instructions for mounting your sensor and then use the instructions on page 21 to start your computer.

### Sensor

You received a small piece of metal with a circle on the end. One side of the circle has dual-lock on it. You also received some small pieces of plastic tubing.

Hold the metal piece on the outside of one of the earpieces on the glasses. Make sure the metal circle has the side with the dual-lock on it facing the lenses of the glasses. Slide a piece of plastic over the earpiece until it encloses the flat part of the metal mount. When the plastic is where you want it, you must shrink it around the earpiece and metal mount. You can use a small lighter or a hair dryer to apply heat to the plastic until it tightens over the metal and around the earpiece.

You received a small square of dual-lock. Remove the backing on this square and press the adhesive side of the square onto the back of the sensor. *Do not cover the screws* on the back of the sensor.

### Positioning the Sensor

There is a small white notch in the sensor case. **This notch must always be on top of the sensor (pointing toward the ceiling)** when you position the sensor. Now, press the dual-lock on sensor into the dual-lock on the circular part of the mount.

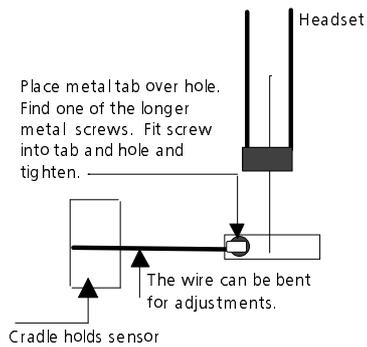
You must have a clear line-of-sight between the sensor and the infrared receiver in the back of the Desktop Mouse. The infrared areas of each unit must be able to "see" each other. Plug the unattached end of the sensor into the connector on the **top panel** of the Body Pack.

### Puff Switch

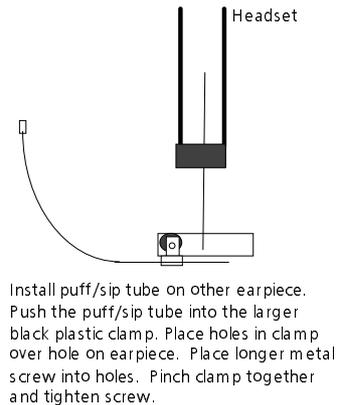
Attach the puff tube to the other earpiece on your glasses. Place the part of the tube that has the small piece of metal in it against the earpiece. Roll the small O-rings that came in your package up the glasses earpiece and over the soft plastic and metal part of the puff switch. The O-rings will hold the puff switch on the earpiece. Make sure the mouthpiece of the puff switch is in the correct position to be puffed or sipped. Plug the other end of the puff/sip tube into the connector attached to the Body Pack. Twist the ends of the tubes to screw them together. Place the body pack wherever it is convenient for you but there should be no strain on either of the cables that are attached to it. ➡ The air tubes must not be sharply bent or crimped. ➡ If the sensor cord is in the user's way, see page 19 to learn how to rotate it to a better position.

### Adjusting the Puff Switch

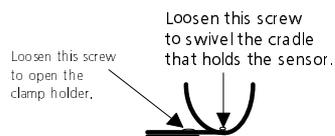
Try to have the mouth tube adjusted so that you can reach it just by opening your mouth. Bend the tube if necessary. When you push the tube out of your mouth with your tongue, the tube should rest just below the lower lip. When you open your mouth, the tube should automatically slide back into it.



### Sensor Mount



### Puff/Sip Tube



### To Swivel the Cradle

## Mounting on a Headset

---

➡ **Turn your computer Off before connecting the HeadMaster 2000 and mounting the sensor.** Complete the instructions for mounting your sensor and then use the instructions on page 21 to start your computer.

### Sensor

There is a black plastic cradle in the bag of parts that came with your headset. The cradle has a flexible "tail" coming from it with a small metal ring at the end of the "tail".

There is an earpiece on each side of the headset. These are slightly curved black plastic and each earpiece has small knob-like projections on the side that sits against the head. Each earpiece has a place where you can put a screw. Place the metal ring on the tail of the cradle over the hole on one of the earpieces. The cradle should be situated so that it is parallel to the face of the user. Place the round metal washer over the tab. Find one of the longer metal screws. Put the screw through the washer and metal tab and into the earpiece hole. Tighten the screw securely. If necessary, you can bend the wire "tail" that is connected to the cradle to help position the cradle.

If you need to change the position of the cradle that will hold the sensor, loosen the screw that is at the base of the cradle. When this is loose, you can swivel the cradle. You want the sensor to sit in it so that the infrared area is pointing toward the Desktop Mouse. When the cradle is positioned, tighten the screw.

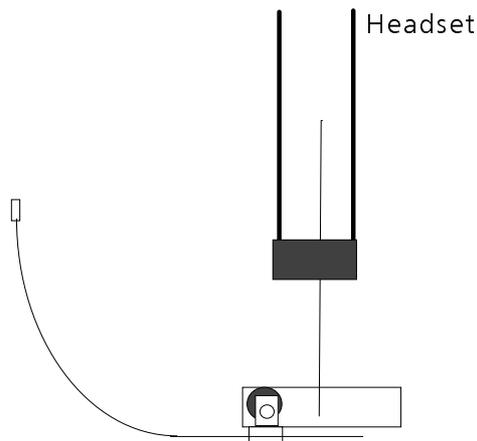
Place the sensor in the cradle. The infrared area of the sensor should be pointing towards the Desktop Mouse. There is a white notch on the sensor case. This notch must be **on top** of the sensor (pointing toward the ceiling) when the sensor is mounted. If the notch is not on top, the sensor will not work correctly. You must have a clear line-of-sight between the sensor and the infrared receiver in the back of the Desktop Mouse.

Plug the unattached end of the sensor into the connector on the **top panel** of the Body Pack.

### Puff Switch

In your bag of parts there are 2 small cord-guide clamps. Each clamp has a rounded end so that a cord will fit through it. One side of the cord-guide clamp is flatter than the other side. The flat side will fit over the hole in the earpiece that is not in use. Push the puff switch tube into the rounded part of the clamp. Pull the tube far enough through so that the guide holds part of the plastic that has the metal in it.

Place the flat side of the cord-guide clamp over the earpiece hole.



Install puff/sip tube on other earpiece. Push the puff/sip tube into the larger black plastic clamp. Place holes in clamp over hole on earpiece. Place longer met. screw into holes. Pinch clamp together and tighten screw.

## **Puff/Sip Tube**

Find the other long metal screw. Place the screw through the holes in the cord guide and into the hole in the earpiece. Squeeze the ends of the guide together and tighten the screw.

Bend the puff tube so that it is positioned correctly for use. ☞The tube should not be sharply bent or crimped.

Plug the round white plastic connector on the other end of the puff tube into the connector on the tube coming from the Body Pack. Tighten the Body Pack connector around the puff tube connector. Place the Body Pack where it is convenient but make sure there is no strain on either cord.

## Adjusting the Puff Tube

Try to have the puff tube adjusted so that you can reach it just by opening your mouth. Bend the tube if necessary. When you push the tube out of your mouth with your tongue, the tube should rest just below the lower lip. When you open your mouth, the tube should automatically slide back into it.

## Headset Placement:

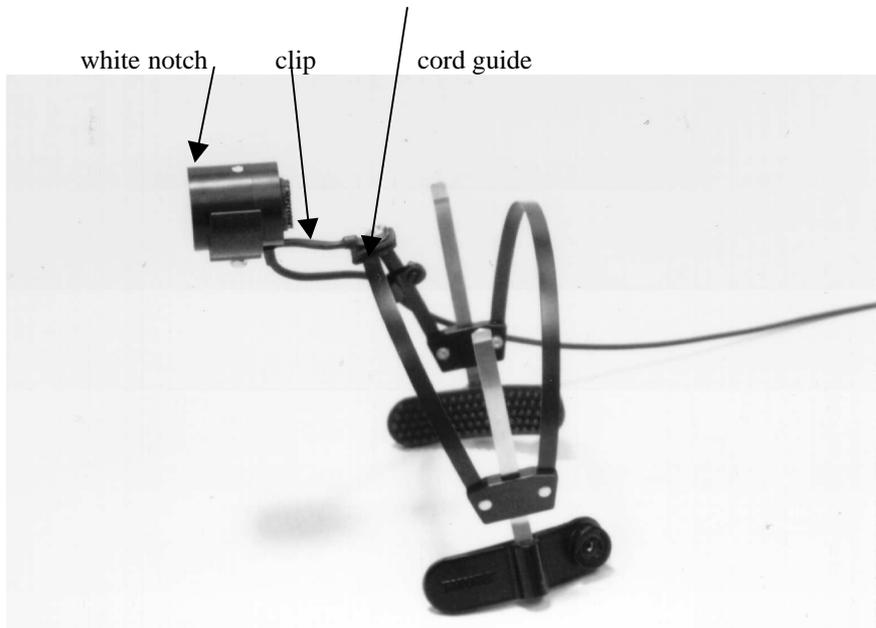
Grasp the headset by the curved, rubber-tipped pads on each side of the headset. Push the pads up as far as they will go. Place the headset over your head so that the black bands are nestled firmly over the top of your head and the pads are resting above your ears.

The headset will probably be most comfortable with the pads resting above your ears. Try different positions if you wish by moving the pads up and down. You want to insure a tight but comfortable fit. The headband part of the headset should be snugly secure on your head. If it is too loose, it will fall off when you move your head.

Make sure the sensor is always pointing *toward* the computer.

☞A little hair falling in front of the sensor should not bother the performance of the HeadMaster 2000. However, if the headset is too far back on your head, or if too much hair covers the sensor, the infrared signals may be interrupted. If the computer cursor doesn' t work once the HeadMaster 2000 is up and running, always check to make sure the sensor is clear of hair and that it is pointing toward the computer.

☞The small knobs that hold the earpieces on your head can get tangled in longer hair. Use care when placing or removing the headset.



## Headset Center Mount

---

➡ **Turn your computer Off before connecting the HeadMaster and mounting the sensor.** Complete the instructions for mounting your sensor and then use the instructions on page 21 to start your computer.

You can also mount the sensor in the center of the headset.

There is a very small flat black plastic clip with two little holes in it in your parts bag. Using your fingers, pry the edges of this clip apart and fit the clip over one of the bands. The part of the clip that has the holes in it should be pointing toward the *back* of the head. Find the small black plastic screw that fits through the clip holes. Insert the screw through the holes from the **bottom up**, so the screw is not pointing into the head. You may have to use a screwdriver to get the screw up into the holes. Place the end of the sensor mount tail over the screw. The cradle should be facing in the direction of the user' s forehead. Place the black plastic nut over the screw on top of the sensor mount tail. Use the screwdriver to tighten the screw until the mount is secure. You may need a wrench to tighten the nut.

➡ There is a small white notch on the larger part of the sensor case. Make sure that this **notch is on top of the sensor** when you position the sensor in the cradle. If the notch is not on top, the sensor will not work correctly.

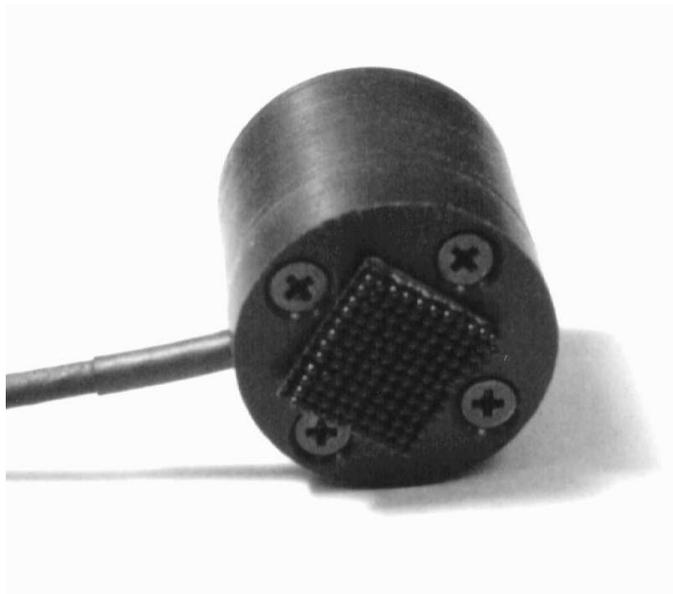
Position the sensor in the cradle so that the infrared area (the dark glassy part) is pointing toward the Desktop Mouse. There must be a clear line-of-sight between the sensor and the infrared receiver in the back of the Desktop Mouse.

There are two cord-guide clamps in your parts bag. You may already have used one to hold the puff/sip cord. Use the other one to keep the cord from dangling near the your face. Slip the sensor cord inside the guide. Place the guide over one of the bands of the headset so that the cord is trailing away from the face. Place the screw into the holes of the guide from the bottom up so the screw doesn' t point into the user' s head. Place the nut on the screw and tighten the screw.

Plug the unattached end of the sensor into the connector on the **top panel** of the Body Pack.

➡ See page 13 for information about mounting the puff/sip switch to the headset.

➡ See page 15 for information about positioning the headset on your head.



Remove back of sensor. Rotate cord at 90-degree angles. White notch must always be on top of case when it is positioned in the cradle. The cord can be up, down, left or right.  
**Gently** reposition the cord to a permanent position.

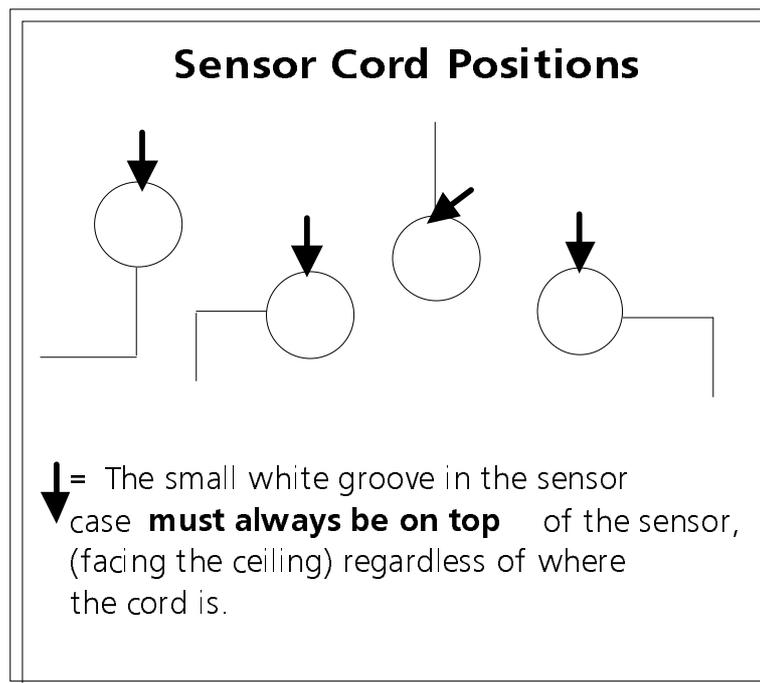
## Rotating the Position of the Sensor Cord

---

➡ **Turn your computer Off before connecting the HeadMaster 2000 and mounting the sensor.** Complete the instructions for mounting your sensor and then use the instructions on page 21 to start your computer.

You can rotate the sensor cord to a more comfortable position, if necessary. Unscrew the four small screws on the bottom of the sensor. You can move the cord to one of four right-angle positions: top of the sensor, right side of the sensor, bottom of the sensor or left side of the sensor. When the cord is positioned in the best site, replace the bottom of the case.

Remember, when you position the sensor back in the cradle, the white notch on the case must be facing **UP**. You also need to have a clear line-of-sight between the front of the sensor and the Desktop Mouse so that the infrared areas of each unit can see each other.

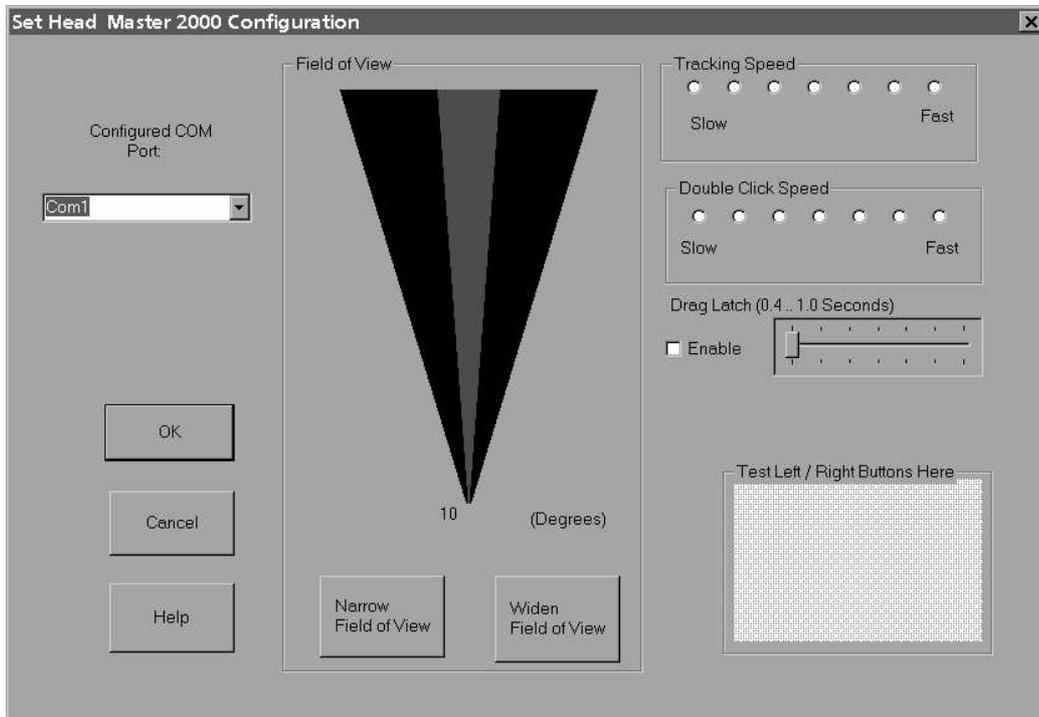


### ⚠ Important!

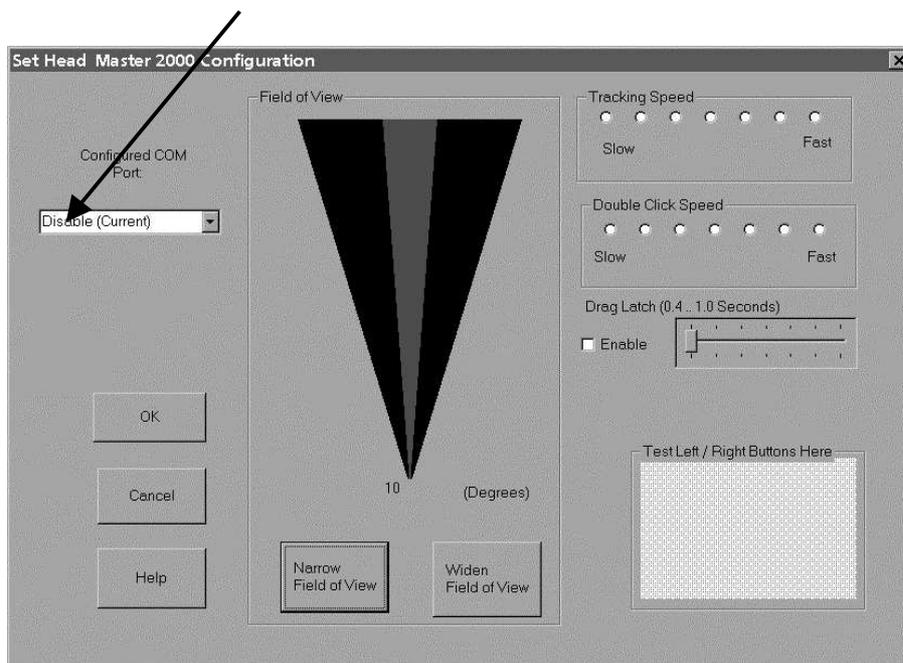
**The sensor cord wires are fragile.**

*Gently* reposition the cord to its permanent position.

Constant rotation of the cord or pulling on the cord can loosen or break the wires.



**HeadMaster 2000 Control Panel**



**Disable HeadMaster 2000**

# Start Your Computer and Adjust the HeadMaster 2000 Settings

---

You must **turn the Body Pack on and start your computer** to establish communication. Make sure you have plugged the sensor into the Body Pack.

**Start your computer.**

## Turn the Body Pack On

You can turn the Body Pack On three different ways

1. Puff once and the Body Pack will be activated.
2. If the sensor is mounted on your head or a finger or an area of your body that you can **tilt back**, do so. This will activate the Body Pack.
3. Plug a DUAL switch into the Body Pack. Activate the SELECT side of your switch to turn the Body Pack on.

Once the computer has restarted, you should see a cursor on the computer screen.

☞ If you do not see a cursor, check that the sensor is not covered by hair. Make sure it is pointing *toward* the computer and has a clear line-of sight to the computer.

You can now adjust the HeadMaster 2000 to suit your individual needs.

## If you are using Windows ' 95 or ' 98:

**Open your computer Control Panel.** Double click on the "HeadMaster 2000" icon in your Control Panel. You see the HeadMaster 2000 control panel. Below are explanations of the options on this screen.

**Tracking Speed:** This regulates how fast or slowly the pointer moves.

**Double Click Speed:** Select a position and the HeadMaster 2000 automatically sets an amount of time between puffs and the amount of time you have to get both clicks in. We suggest you try different speeds until you find one that is comfortable for you. Use the Test Area to practice double-clicking.

**Drag Latch:** When this is enabled you can drag an object or draw an object without having to puff for the duration of the drag. Select an amount of time and set the Drag Latch option to "Enable". Puff for the set amount of time, then stop puffing and drag or draw an object. When you are ready to release the object or to stop drawing, puff again.

**Field of View:** allows you to set how far you have to move your head (or whatever your sensor is attached to) to move the cursor from one side of the computer screen to the other. A low number

gives a narrow field of view and means that you do not have to move your head much at all to move the cursor from one side of the screen to the other. A higher number makes the sensor less sensitive and means that you must move your head through a wider area to move the cursor from one side of the screen to the other.

### **Test Area:**

**Test Left and Right Buttons:** the defaults are: PUFF = Left click; DOUBLE PUFF = Double click; SIP = Right click.

Click or double click your mouse buttons to test how long your switch stays down according to the speed you set above. You will see the words CLICK and DOUBLE as you sip and/or puff to click or double-click your mouse buttons.

➡ See page 25 if you want to reverse your Puff and Sip switches so that Puff is the RIGHT button and Sip is the LEFT button.

**Com Port Setting:** This tells the computer where you have connected the HeadMaster 2000. If you change this setting, you must **re-start your computer** for the new setting to work. ➡ You must change the Com Port Setting to "Disable" if you want to use that port on your computer for anything other than HeadMaster 2000. See instructions below.

### **To Disable the HM2000:**

1. Go to "My Computer".
2. Open the "Control Panel".
3. Click on "HeadMaster 2000".
4. At the top of the box, change the Com Port setting to "Disable" and click "OK".
5. You should see a message box that tells you to reboot your computer.
6. Restart your computer. After it reboots, close the Control Panel screen. You should see a "HeadMaster 2000" box. Click "OK". Another box should appear that tells you that the HeadMaster 2000 is disabled. Click "OK".
7. You can now use the Com Port for something other than the HeadMaster 2000. To use the Com Port for the HeadMaster 2000 again, repeat these steps. At Step #4, return the Com Port setting to the one you were using previously. Restart the computer.

## If You are using Windows 3.1:

Double-click on the "AirMouse Control Panel" icon in the ArtMouse Remote Control group.

**Tracking Speed:** this regulates how fast or slowly the pointer moves.

**Double Click Speed:** select a speed and the HeadMaster 2000 automatically sets an amount of time between puffs and the amount of time you have to get both clicks in. We suggest you try different speeds until you find one that is comfortable for you.

**Field of View:** allows you to set how far you have to move your head (or whatever your sensor is attached to) to move the cursor from one side of the computer screen to the other. A low number gives a narrow field of view and means that you do not have to move your head much at all to move the cursor from one side of the screen to the other. A higher number makes the sensor less sensitive and means that you must move your head through a wider area to move the cursor from one side of the screen to the other.

**Swap AirMouse Buttons:** lets you change which switch represents the left mouse button and which represents the right. The default is: **PUFF** = Left. **SIP** = Right.

**Relative Mode:** allows a little more flexibility in positioning, but the cursor control is not quite as precise.

## If You are using DOS

### If you plan to manually load the HeadMaster 2000 driver:

Do it now if you have not already done so. The driver must be loaded before you can change any settings.

DOS settings can be adjusted by using command line switches as follows:

All parameters take the form of: /Sn, /S=n. or /S:n.

"S" is the parameter to modify and

"n" is the new value to set to the parameter.

Except for /C and /I, any of these parameters may be changed after the driver has been loaded. At the DOS prompt, type in the driver name and the parameter(s) to be changed. For example:

```
\DESKTOP MOUSE\DESKTOP MOUSE/V=150 /T=50
```

Parameter	Description
/C=n	Specifies the COM port number the Desktop Mouse is connected. This parameter is ignored if the driver is already loaded. Range is 0-4; Default = 0 (check all serial ports).
/I=n	Specifies the IRQ number for COM port interrupts.

Range is 2-15 (This parameter is obsolete, but syntax is still verified.)

- /V=n Specifies the Field of View for the Desktop Mouse.  
The value is entered in tenths of degrees.  
Range is 150-240; Default = 200.
- /T=n Specifies the tracking speed of the cursor with respect to Desktop Mouse movements. Lower values mean slower movements.  
Range is 1-128; Default = 88.
- /M=n Specifies the Desktop Mouse mode of operation.  
Range is 0 = Absolute, 1 = Relative; Default = 0
- /S=n Specifies the cursor size multiplier. This does not affect applications that draw their own cursors.  
Range is 1-2; Default = 1.
- /F=n Specifies the cursor freeze time when an Desktop Mouse button is pressed. This allows the user to double click without the cursor moving between clicks. The value is expressed in 1/30<sup>th</sup> of a second (i.e. 15 = ½ second).  
Range is 0-30; Default = 1
- /D Disconnects the Desktop Mouse from operating and allows any previously installed mouse drivers to operate. This feature only works if the Desktop Mouse driver has been properly loaded.

## Using the HeadMaster 2000

---

### Positioning Yourself in Front of the Computer:

When you are wearing the headset, you do not have to sit in an absolutely centered position in front of the computer. As you get used to the HeadMaster 2000, you will see that the headset allows you quite a bit of freedom of movement. You can be close or farther away from the computer. You can lean to the left or the right. Your head does not have to be pointing toward the computer, just the sensor. The HeadMaster 2000 measures the movement and changes in the angle and rotation of your head only. It ignores any other movement.

Since you have this freedom of movement with the HeadMaster 2000, we suggest you take a little time to find which positions are best for you.

➡ Always keep in mind that there must be a clear line of sight between the sensor and the infrared receiver in the back of the desktop mouse.

### About the Batteries

#### Charging

The HeadMaster 2000 Body Pack contains a rechargeable battery. **When you first receive your HeadMaster 2000, charge the batteries overnight.** Plug the small end of the BCPS-1 into the battery charger connector on the Body Pack. Plug the other end of the BCPS-1 into a working A/C wall outlet.

The next morning, remove the charger and use the HeadMaster 2000 until the red light on the Body Pack comes on, indicating that the batteries are low. This should take 3-4 days, depending on how much you use the unit. If it takes 4 days before the red light comes on, you should re-charge the batteries **once every 3 days**. If the low battery light comes on after 3 days, re-charge the batteries **once every 2 days**.

➡ **Once a month, allow the batteries to go completely dead.** This means until the unit no longer works. When the batteries are dead, plug in the charger and charge the batteries overnight (8-10 hours). If you use the HeadMaster 2000 while the charger is plugged in, the batteries will not charge. You should plan not to use the unit while it is charging.

If you follow these guidelines the batteries should remain in good working condition for at least two years.

## Replacing the Batteries

If the batteries quit working completely, you will have to replace them. **You cannot use alkaline or NiCad batteries** in the HeadMaster 2000. If you think you need to replace your batteries, please call PRC's Service Department (1-800-262-1990) for specific battery instructions.

➡ **Use only the BCPS-1 with the Body Pack.** Other battery chargers can damage the batteries.

### About the Body Pack

**To conserve power, the Body Pack will automatically power down (go to "sleep") for two different reasons:**

1. If there is no significant sensor movement for **one minute**, the Body Pack will go to "sleep." That is, it powers down in order to conserve batteries.
2. If the sensor cannot see the Desktop Mouse for approximately **3 seconds**, the Body Pack will go to sleep.

When the Body Pack powers down, you must "wake it up" by using one of the three options listed on page 21.

### About the Indicator Lights on the Body Pack

When the Body Pack is on and the Desktop Mouse and remote sensor are working correctly, you will see a small green light and a small red light on the front of the Body Pack.

The **green light** is a communication indicator. When the Desktop Mouse and the remote sensor are "talking" to each other, the green light flashes

If, during operation, you notice erratic behavior in the cursor, check the green light to see if it is flashing steadily. If it isn't, something is interfering with the infrared communication. You will have to re-position the Desktop Mouse so that there is a clear line-of-sight between the Desktop Mouse and the sensor.

The **red light** on the **Body Pack** is a low battery indicator. It will be visible when the batteries in the Body Pack are getting low.

## Using the Sensor and Puff Switch

### Sensor

To make sure the Body Pack is turned on, move the sensor. See if the cursor moves and the green light on the Body Pack flashes. If nothing happens, perform one of the options mentioned on page 21 to turn the Body Pack on.

### Puff/Sip Switch

The following are the **default** settings. If you swap your puff and sip buttons, these settings are **reversed**.

Puff into the tube for a left click.

Puff twice for a double click.

Puff and hold to drag the cursor. Stop puffing to release the cursor. ☹ If "drag-latch" is On, puff lightly to release.

Sip for a right click.

### To Reverse the Switches

#### Windows ' 95 and ' 98

##### The default for the puff/sip switch:

**PUFF** = **LEFT** click and double click

**SIP** = **RIGHT** click

##### To Reverse the Switches:

Open the Control Panel on your computer. Do not select the HeadMaster 2000 icon. Instead, select the regular "Mouse" option in your control Panel. Select the "Buttons" page and set the buttons the way you want them. When you are finished, click on ' Apply' and close the Control Panel.

#### Windows 3.1

##### The default for the puff/sip switch:

**PUFF** = **LEFT** click and double click

**SIP** = **RIGHT** click

Use the "Swap AirMouse Buttons" in the AirMouse Control Panel.

## To "Click" on a Screen Icon

Move your head until the cursor rests on top of the icon or window tool you wish to click on. Slightly increase the air pressure inside your mouth and then immediately release the pressure. The idea is to create a short ' pressure pulse' or ' air pulse' . There is no need to let air escape around the edges of the mouth tube as you release the pressure. Try to maintain the seal with your lips. When you do this correctly, the icon will switch from a light color to a dark color to indicate that you have selected it.

## To "Double-click" on a Screen Icon

Double-clicking is an easy way to open programs and drives. To double-click with the puff switch, make two air pulses quickly, one right after the other. Remember, an ' air pulse' is when you slightly increase and then release the air pressure inside your mouth. Try to keep you head perfectly still when double-clicking. If you move your head, you may drag the icon instead of opening it.

## To "Drag" a Screen Icon

Point to the icon or window you want. Increase the air pressure in your mouth until the icon switches from light to dark. ***Without releasing the air pressure, move your head.*** The icon or window should follow your head movement. To let go of the object, stop moving your head and release the air pressure in your mouth. ☺If "drag-latch is On, puff lightly to release.

## To Adjust the Sensitivity of the Puff/Sip Switch

There are two small screws on the side of the Body Pack. The top one is labeled SIP and the bottom one is labeled PUFF. Use a small screwdriver and **gently** turn these screws to the right to increase, or to the left to decrease the puff/sip sensitivity.

## Some Troubleshooting Tips

---

- Problem** The green light on the Body Pack is not flashing.
- Solution** Make sure the sensor is in the line-of-sight of the Desktop Mouse. There should be no obstructions between the sensor and the Desktop Mouse. Make sure any other remotes are turned off or put away.  
Check all the hardware connections. Make sure they are secure.
- Solution** If you check all of the above and still nothing happens, the software may not be loaded properly. Re-install the software following the directions on pages 5-7.
- Problem** The red light on the Body Pack is lit.
- Solution** The battery is low. Plug in the BCPS-1 and charge the unit overnight.  
Use **only** the BCPS-1 with the Body Pack.
- Problem** Other remotes will not operate their own equipment.
- Solution** Let the Body Pack "sleep" by covering the sensor. Stop moving the sensor by removing it from the headset or glasses or cover the desktop mouse. The green light on the Body Pack will go out when the Body Pack is asleep.
- Problem** As you move the mouse across the screen, icons begin to move.  
As you move the mouse in a word processing application, text becomes highlighted.
- Solution** Adjust the sensitivity of the "Sip" and "Puff" switches on the side of the Body Pack.
- Problem** An Error message tells you that the computer is unable to open a Com port.
- Solution** Select a different Com port.
- Solution** Remove the device currently using the Com Port and reinstall the HeadMaster 2000 driver.

 **Note:** The sensor for the HeadMaster 2000 is the same one that is used with PRC' s Vanguard communication device. Two users who are seated close to each other and who are each using a sensor may find that the sensors interfere with each other. One of the users should move farther away from the other.

## **Using an On-Screen Keyboard**

---

HeadMaster 200 can be used with other products for typing text.

### **WiViK<sub>2</sub> REP**

WiViK<sub>2</sub> REP provides an on-screen keyboard which lets you use a pointing device to select keys instead of using conventional typing. Click or dwell on the key you want and WiViK<sub>2</sub> REP sends it to a word processor, e-mail message, web page or other text-based application you may be using.

Over 50 different keyboards are included in WiViK<sub>2</sub> REP. The keyboards are available in 22 languages, can contain any keys you want, can be moved anywhere on the screen and can be any size.

For more efficient typing, WiViK<sub>2</sub> REP also includes word prediction and abbreviation expansion. With word prediction, begin to type a word. When it appears in the prediction list, choose the word and WiViK<sub>2</sub> REP will finish typing it for you.

With abbreviation expansion, abbreviations represent entire sentences. Type 2 or 3 letters and WiViK<sub>2</sub> REP will type the entire sentence that the abbreviation represents.

WiViK<sub>2</sub> REP is compatible with Windows 3.1, '95 and '98. You can also use WiViK<sub>2</sub> REP with WiVox to speak letters, words or sentences typed in any Windows applications.

Prentke Romich Company sells WiViK<sub>2</sub> REP and WiVox.