Turbo Mouse®
User Manual

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KENSINGTON.

Turbo Mouse®
User Manual
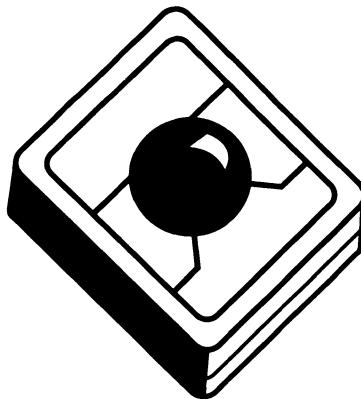
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INTRODUCTION

Thank you for choosing Kensington's Turbo Mouse for your Macintosh or Apple II computer. Turbo Mouse has won numerous awards since it was first introduced, voted Best Input Device by Apple II and Macintosh users worldwide. We hope you'll agree that Turbo Mouse is quicker, more precise and easier to use than a standard mouse. And we also hope you'll think Turbo Mouse is the Best Input Device you've ever used with your computer.

If you purchased a Turbo Mouse Plus, your package should contain:

■ Turbo Mouse Plus
■ Turbo Mouse Ball
■ Cable with round mini-DIN 8-plug at one end and rectangular DB-9 connector at the other
■ Turbo Mouse Software
■ Mouse Pocket
■ Owner Registration Card

If you purchased a Turbo Mouse ADB, your package should contain:

■ Turbo Mouse ADB
■ Turbo Mouse Ball
■ Cable with round mini-DIN 8-plugs at both ends
■ Turbo Mouse Software
■ Mouse Pocket
■ Owner Registration Card

Personalizing Your Turbo Mouse

Before you begin, you'll want to personalize your Turbo Mouse settings. To do this, you must first remove the DIP switch cover on the back of your Turbo Mouse.

To set the hardware switches, follow these steps:

1. Remove the Turbo Mouse ball from its socket.

2. Turn Turbo Mouse around and tilt it away from you, so you are looking at the back.

3. Pull up on the tab to remove the cover.

4. You will see a six position DIP switch, with all six switches set in the UP position. (The UP position is on; the DOWN position is off.)

5. Using a pen or other small pointed instrument, flip one or more of the switches from the UP to the DOWN position to select any of the options in the chart on page 2.

Special Features of Turbo Mouse ADB

If you purchased Turbo Mouse ADB, choose the function you'd like for your "chording feature." (This feature is not available in Turbo Mouse Plus.) The chording feature in Turbo Mouse ADB is so named because it is activated by pressing both buttons simultaneously — like playing a chord on the piano. Adjust the DIP switch in the back, and it will perform one of seven functions — New, Open, Close, Save, Print, Quit or Undo — when you press both buttons at once.

Please note that these functions are actually equivalent to pressing Command and a letter on the keyboard. For instance, pressing Command-S is like choosing Save from the File menu in most software, Command-Q is Quit, etc. The seven functions listed are the most common, but may vary from software to software. If you are using a macro program, such as Apple's MacroMaker that comes with System 6.0, you can also use the chording feature to launch your macro command. Make your choice and set the DIP switches as shown in the chart on page 2.

TURBO MOUSE HARDWARE

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Click/Click Lock Settings For Turbo Mouse Plus

Click/Click Lock	SW1	SW2	SW3	SW4	SW5	SW6
For right-handed use: (Left button click, right button click lock)	Down	Down	Down	Up	Up	Up
For left-handed use: (Right button click, left button click lock)	Up	Up	Up	Down	Down	Down
To disable click lock and use both buttons for click	Up	Up	Down	Up	Up	Down

Click/Click Lock Settings For Turbo Mouse ADB

Click/Click Lock	SW1
For right-handed use: (Left button click, right button click lock)	Up
For left-handed use: (Right button click, left button click lock)	Down

Chording Feature Settings for Turbo Mouse ADB

Keyboard Equivalent	Usual Function	SW2	SW3	SW6
Command N	New	Down	Down	Up
Command O	Open	Down	Up	Down
Command W	Close	Down	Up	Up
Command S	Save	Up	Down	Down
Command P	Print	Up	Down	Up
Command Q	Quit	Up	Up	Down
Command Z	Undo	Up	Up	Up
———	Disabled	Down	Down	Down

Connecting Your Turbo Mouse
First, turn off your computer and disconnect your old mouse. Then follow the instructions for the appropriate Turbo Mouse model below.

Turbo Mouse Plus
Turbo Mouse Plus has both a round Mini-DIN 8 port and a rectangular DB-9 port on the back. Using the connector cable provided, plug the Mini-DIN 8 end into the port on the back of Turbo Mouse Plus, and plug the DB-9 end into the mouse port of your computer. If you want to continue using your old mouse for some applications, plug it into the empty DB-9 port on the back of your Turbo Mouse Plus and you can switch back and forth between the two.

Turbo Mouse ADB
Turbo Mouse ADB has two Apple Desktop Bus (ADB) ports, one on either side. To connect it, simply run the ADB cable provided between one of its ADB ports and one of the ADB ports on the back of your computer. If that's not convenient — for instance, if you have a Mac II installed in a system stand beside your desk — you can connect Turbo Mouse ADB to the ADB port in the side of your keyboard.

You will probably find it most comfortable to position Turbo Mouse one or two inches from the keyboard and at a slight angle. Experiment to find the position most natural to you.

Please note: When connecting your ADB cable to the port, be careful not to force the connector into the port or the connector pins may bend.

Retiring Your Old Mouse
Turbo Mouse comes with a special Mouse Pocket. Because, even though it may take you an hour or two to adjust to the different feel of Turbo Mouse, once you do, you'll never want to use your old mouse again. The Mouse Pocket gives you a convenient place to retire your old mouse.

To install your Mouse Pocket, just remove the protective backing from the adhesive fastener attached to the back of the Mouse Pocket and press it against the side of your monitor or Macintosh. Wait a day before putting your mouse in, to give the adhesive a chance to set properly.

Using Your Turbo Mouse

Turbo Mouse is very easy to use. Its basic features are similar to your mouse. Roll the Turbo Mouse ball to move the cursor on your screen. Click or double-click the Turbo Mouse button you've set to be your regular Click button to highlight, select, or open something. Click and roll the mouse ball simultaneously to draw something.

Besides its standard mouse features, Turbo Mouse gives you additional features not found in your mouse. In both models, you can click the Turbo Mouse button you've set as your Click Lock, let it go and Turbo Mouse will function as though you were holding the click button down. (Just click the Click Lock button again to release it.) Here are a few examples of how the Click Lock feature works:

1. Move your cursor up into the menu bar at the top of your screen, Click Lock and roll your cursor across the menu headings on your screen. The menus will appear as if you were holding down the mouse button while rolling the ball. To select something from one of the menus, simply drag the cursor down to highlight your selection, then press the Click Lock button again to release the lock feature.

2. To highlight a section of a document, simply position the cursor at the beginning of the section, Click Lock, roll the Turbo Mouse ball to move the cursor to the end of the section and click the Click Lock button again. You don't have to hold the button down while you roll!

3. Click Lock is particularly handy if you want to scroll through a long document to scan its contents. Position the cursor over the down arrow in the scrolling box, Click Lock and let go. If you wish to pause momentarily, simply roll the Turbo Mouse ball to move the cursor off the down arrow. To resume scrolling, move the cursor back onto the arrow. Your document will continue to scroll until you click the Click Lock button again.

4. Click Lock is also very handy when you are using a graphics program. After you select the tool you wish to work with by clicking the regular Click button, move it into the working frame and Click Lock. You can now use the tool without holding down the button! You can use

your fingertips to manipulate the Turbo Mouse ball, and your drawing accuracy will be greatly improved!

Using the Chording Feature in Turbo Mouse ADB

Turbo Mouse ADB also offers a chording feature. If you haven't already done so, follow the instructions on page 2 to set the DIP switch in the back of your Turbo Mouse ADB. Then click both its buttons at once and Turbo Mouse ADB will perform the command or keyboard equivalent you have chosen — Command-N, Command-O, Command-W, Command-S, Command-P, Command-Q or Command-Z.

It may take a little time to get used to chording. You may find at first that you tend to click one button or the other first — you may even activate Click Lock by mistake. So if you're using the chording feature to save a document or send it to print, but you look at your screen and notice that you're unexpectedly highlighting everything in sight — chances are, you've hit the Click Lock button first by mistake. Just click it once more to release Click Lock, and try chording again.

Please note: Your Turbo Mouse ball may roll a little stiffly at first. Most units take a day or two of use for their rollers to "break in." However, by the time you get used to using your Turbo Mouse, you'll find that its action will have become very smooth.

Maintaining Your Turbo Mouse.

Your new Turbo Mouse is virtually trouble-free. However, if your cursor ever fails to respond to your movements while using Turbo Mouse, simply disconnect its cable, wait a few seconds, then reconnect it. This will reset your Turbo Mouse.

Your new Turbo Mouse is practically maintenance free. From time to time you should remove the Turbo Mouse ball and clean it with a damp rag and mild cleaning solution. (Be sure to turn off your computer and unplug your Turbo Mouse first!)

You should also wipe out the center indentation with a soft cloth from time to time to prevent dust and debris from building up inside the Turbo Mouse. Or, if you prefer, you could use a can of compressed air to blow any dust or debris out of the bottom of the unit.

You may also want to clean the rollers inside your Turbo Mouse occasionally to prevent any build up of the natural oils transferred from your hands to the Turbo Mouse ball and then to the rollers. To do this, we recommend a gentle cleaning with alcohol swabs. Be very careful to touch only the bearings, and avoid touching the optical sensors.

Turbo Mouse Software
Turbo Mouse comes with unique software that allows you to customize Turbo Mouse to exactly match the way you work.

Software Requirements
Turbo Mouse Software requires a 1-mega-byte Macintosh computer running System 6.0 and Finder 6.0 or later. To find out what versions you are presently using, choose About the Finder from the Apple menu at the far left of the menu bar. If you are using earlier versions than those required, contact your local Apple dealer for a free software upgrade.
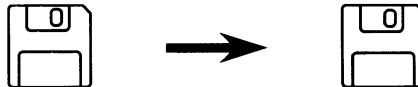
Making a Backup Disk
To prevent accidental erasure or contam-ination from viruses, you should make a backup copy right away and always use that instead of the original.

Before you insert the Turbo Mouse disk into a floppy-disk drive in your Mac to make a backup, make sure that the disk is write-protected. (You should be able to see through the square hole in the corner of the disk.)

For your convenience, the Turbo Mouse disk is not copy protected, so you can use the Finder or any other disk management utility to make a backup. If you are not sure how to copy disks using the Finder, consult your Macintosh owner's guides.

Turbo Mouse   **System Folder**
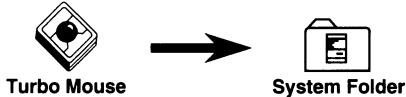
Installing the Turbo Mouse Software

To install the Turbo Mouse software, insert your backup disk into a floppy drive. Copy the Turbo Mouse file into the System folder of your startup device. (It's a Control Panel device also known as a cdev for short).

If you are using hard drives, the internal drive is usually the startup device. Alternately, if you startup your Mac using floppy disks, copy the Turbo Mouse cdev to the System folders on all of the floppy disks that you use as startup disks.

Please note: The Turbo Mouse cdev overrides most other cdevs devoted to common pointing devices (trackballs, mice, graphics tablets, etc.) — such as the Mouse cdev provided by Apple as part of the System software. As a result, all such pointing devices connected to your Mac will share the same operating characteristics — acceleration and double-click speed — that you set for your Turbo Mouse. If this is problematic for any rea-

son, simply remove the Turbo Mouse cdev from the System folder of your startup device (do not drag it to the Trash in case you want to use it later).
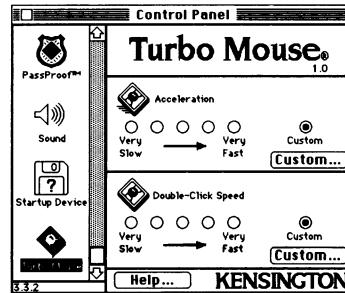
Accessing the Turbo Mouse cdev

Once you have copied the Turbo Mouse file to the System folder of your startup device, it is immediately available for use; there is no need to restart the Mac (on all subsequent times when you do restart, a small Turbo Mouse icon appears momentarily at the bottom of the screen indicating that the cdev is correctly installed).

To access the Turbo Mouse cdev, simply choose Control Panel from the Apple menu at the far left of the menu bar. The Control Panel desk accessory (DA) appears on screen, and along the left-hand side of

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the Control Panel window there should be a scrollable column of icons that represent all of the cdevs currently in the startup volume's System folder.

The icon for the Turbo Mouse cdev should appear in alphabetical order in the scrollable column. If it is not immediately visible, click on the down arrow or drag the scroll box to move through the column until the Turbo Mouse icon appears. When you click on the Turbo Mouse icon, the right-hand portion of the Control Panel window automatically changes to show you the options available to customize the operation of your Turbo Mouse.

Using the Turbo Mouse cdev
If you are already familiar with the Macintosh, you can probably figure out exactly how to use the Turbo Mouse cdev without reading further. Feel free to experiment and have fun; you can't hurt anything. If you are new to the Mac, or are just interested in how and why the Turbo Mouse cdev works the way it does, read on.

(**Help...**)

The Turbo Mouse cdev is broken into Acceleration and Double-Click sections. No matter what you are doing with the Turbo Mouse software, clicking the large Help button at the bottom presents an alert box that briefly explains the options presently

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available. The small round buttons are called radio buttons because only one in a group may be selected at any given time, just like the mechanical buttons for preset stations on older radios. Clicking a radio button in either the Acceleration or Double-Click sections tells the Turbo Mouse software to use the corresponding preset speed. If you would like to create your own Acceleration or Double-Click Speed settings, click on the appropriate Custom but-

(**Custom...**)

ton and a dialog box for customizing the Turbo Mouse software will be displayed. For detailed information on how to create your own custom settings, see the appropriate following pages.

Acceleration

The top section of the Turbo Mouse cdev is devoted to Acceleration. Simply stated, Acceleration determines the speed your cursor moves on screen according to how you move the Turbo Mouse ball. For example, if Acceleration is set to Very Slow, the cursor moves sluggishly on screen. Conversely, if Acceleration is set to Very Fast, the cursor speeds across the screen at the slightest flick of the Turbo Mouse ball. The Turbo Mouse software helps you find a setting that matches the way you work.

If you do a lot of detailed work that requires you to be able to precisely position the cursor on screen, you may want to choose one of the slow Acceleration settings. The slower the Acceleration, the more you must move the ball to move the cursor across a given amount of screen.

On the other hand, if your work requires you to move the cursor all over the desktop in broad strokes, you will probably find one of the fast Acceleration settings suits you best. The faster the Acceleration, the less you

must move the Turbo Mouse ball to move the cursor across the screen. For this reason, faster settings may make it easier to move across large screens or Macs with more than one monitor.

Creating Custom Acceleration

If you find that the pointer jumps wildly at the slightest movement, or seems like it is moving through molasses when you'd prefer greased lightning, try a different Acceleration setting, or create your own by clicking on the Custom button. A dialog box appears with a bar graph that represents the current custom Acceleration.
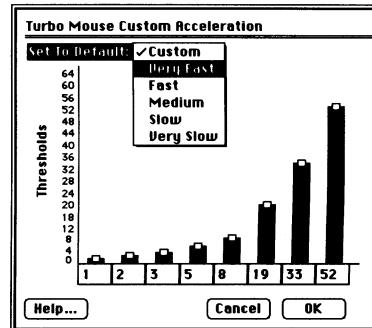
Creating a custom Acceleration setting will make your Turbo Mouse automatically behave the way you want. When you move the ball slowly, it is smart enough to know that you want to move the cursor slowly, and when you move the ball quickly, the cursor will move quickly, too.

The Acceleration graph shows how your movement is interpreted by the Mac. You can set a custom Acceleration by changing the 8 separate thresholds, represented by the bars in the graph. The 8 bars correspond to 8 "multipliers" which multiply your ball movement according to the threshold settings. By changing a threshold, you actually determine the amount your movement is multiplied for a particular speed. The smaller the bars, the lower the thresholds, and the faster the cursor moves. It may help if you think of the thresholds as hurdles on a track — the lower they are, the easier they are to jump, so you can run faster.

Each threshold must be greater than, or equal to, the one immediately to its left. If you try to change a threshold to a value less than that of a preceding threshold, the earlier figures are decreased automatically. Likewise, if you try to change a threshold to

a value greater than that of a threshold to its right, the following thresholds are increased automatically. This insures that your Acceleration thresholds always increase logically.

The Custom setting can be quite powerful because a single setting enables you to have slow cursor movement as well as the ability to zip across the screen. For example, set the custom setting to the values shown below:
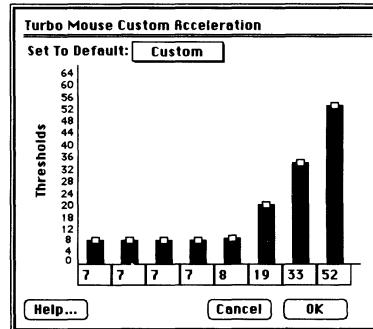
With slow ball movement, there will be no acceleration, so your cursor will move very slowly. And with quick ball movement, there will be great acceleration, so your cursor will move very quickly. As a result, a range of movement is achieved with a single, custom setting.

Once you create a custom setting, it remains intact. There are three ways to modify the custom Acceleration thresholds: the pop-up menu, the text fields, and the handles on the bars.

Set To Default:	✓Custom
	Very Fast
	Fast
	Medium
	Slow
	Very Slow
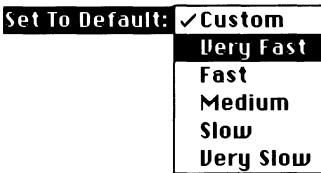
Pop-up Menu

To choose any one of the five default Acceleration settings that correspond to the radio buttons, click-lock on the Set To Default pop-up menu and then click on the desired setting. The bar graph automatically updates to reflect your choice. Acquaint yourself with the settings to get a feeling for how the bar graph relates to the responsiveness of the cursor.

1	2	3	5	8	19	33	52
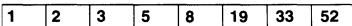
Text fields

To precisely modify thresholds, double-click on any one of the eight text fields so that the current value is highlighted. Then

enter a new value from 0 to 64 (if you enter a value outside this range, it is automatically rounded to the appropriate end of the scale). Although your new setting takes effect immediately, it is not permanent until you click OK.
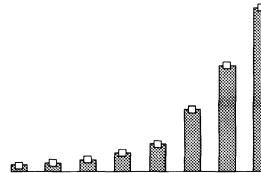
Handles on the bars

To visually modify individual thresholds, click on the box at the top of any one of the eight bars and drag it up or down. Move the cursor until the bar is the desired height, then release the button. Turbo Mouse is now affected by your new setting.

Double-Click Speed

The bottom section of the Turbo Mouse cdev is devoted to Double-Click Speed. This setting determines the responsiveness of the Mac to your double-clicking. For example, if Double-Click is set to Slow, you

can take your time pressing the button twice in a row and the Mac still interprets it as one double-click, not two single clicks.

Conversely, if Double-Click is set to Fast, you must click twice in quick succession for the Mac to interpret it as a double-click. The trick is to find a setting right for you.

Double-clicking opens a folder, application, or document from the desktop. You can also double-click to highlight a single word in text. To test the current setting, double-click on the Turbo Mouse icon the same way you would normally double-click on an item. If the icon flashes, then the current setting is right for you.

Creating Custom Double-Click Speed
If you try double-clicking and aren't getting the expected results, you may be clicking slower or faster than the Turbo Mouse is set to accommodate. Try a different setting, or create your own by clicking on the Custom button. A dialog box appears with a bar graph that represents the current custom Double-Click setting.

Creating a custom Double-Click speed is simple. You need only change the threshold
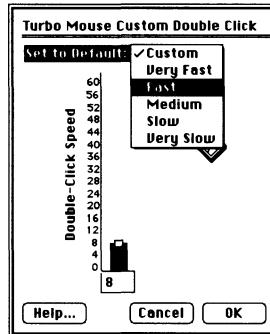
level on the bar graph. The smaller the bar, the lower the threshold, and the quicker you must double-click.

Once you create a custom setting, it remains intact. As in setting Acceleration, there are three ways to modify the custom Double-Click threshold: the pop-up menu, the text field, and the handle on the bar. (See page 11 for detailed instructions.)

Turbo Mouse Hardware

Problem: My click-lock setting doesn't work.
Solution: Be sure the individual DIP switches are positioned all the way up or down when set.

Problem: I am having difficulty moving the ball; it seems stiff.
Solution: Most units take a day or two of use for their rollers to "break in." By the time you get used to using Turbo Mouse, you'll find that its action will have become very smooth.

Problem: The ball seems to stick as I'm rolling it.
Solution: Natural finger oils, dust, etc. may get transferred from the ball to the Turbo Mouse rollers. Remove the ball and clean it with a damp rag and mild cleaning solution. (Be sure to turn off your computer and unplug your Turbo Mouse first!) You may also clean the rollers inside your Turbo Mouse with alcohol swabs. Be very careful to clean only the bearings and avoid touching the optical sensors.

Finally, wipe out the center indentation with a soft cloth. If you prefer, use a can of compressed air to blow dust or debris from the bottom of the unit. If you still have a problem, call Kensington Technical Support at (800) 535-4242.

Problem: My cursor is frozen on screen.
Solution: You may have a loose cable or connection. Simply disconnect the Turbo Mouse cable, wait a few seconds, then reconnect it. This resets your Turbo Mouse.

Problem: Can I convert my Turbo Mouse Plus to use on a Mac SE (or vice versa)?
Solution: Turbo Mouse Plus and Turbo Mouse ADB have different hardware connectors that cannot be interchanged or converted. Turbo Mouse Plus (for Mac, Mac Plus or Apple IIe with existing mouse card) has a rectangular DB-9 connector. Turbo Mouse ADB (for Mac SE or greater and Apple IIGS) has a round Mini-DIN 8 plug.

Turbo Mouse Software

Problem: My Turbo Mouse cdev conflicts with another INIT in my System folder.
Solution: Try renaming the Turbo Mouse file to (zTurbo or aTurbo) to resolve the conflict.

Problem: My graphics tablet seems to have a Very Fast acceleration setting.
Solution: The Turbo Mouse cdev overrides most other cdevs devoted to pointing devices. As a result, this device will share the same operating characteristics — acceleration and double-click speed — that you set for Turbo Mouse. Try using a Very Slow setting instead.

Problem: My Turbo Mouse setting doesn't work. (Or my Apple Mouse setting doesn't work.)
Solution: The Turbo Mouse cdev overrides most other cdevs devoted to pointing devices, and other cdevs may override the Turbo Mouse cdev. Be sure that you did not choose the Apple Mouse cdev *after* you chose a Turbo Mouse setting. Likewise, if you selected a Turbo Mouse setting *after* you chose an Apple Mouse setting, the Turbo Mouse setting will be overridden.

FCC REGULATIONS
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**Federal Communications Commission
Radio Frequency Interference Statement**

The Kensington Turbo Mouse 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 instructions, may cause harmful interference to radio communications. However, there is no guarantee 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 turning 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 the dealer or an experienced radio/TV technician for help.

In order to meet FCC requirements, all connections to equipment using Turbo Mouse should be made using only the shielded cables provided.

Users should note that changes or modifications made to Turbo Mouse or Turbo Mouse cabling not expressly approved by Kensington could cause interference and thus void the user's authority to operate the equipment.

KENSINGTON MICROWARE LIMITED ("KENSING-TON") warrants this PRODUCT against defects in material and workmanship as follows:

For a period of one year from the date you purchased the PRODUCT, KENSINGTON will, at no charge to you, either repair or replace (with new or rebuilt replacement parts) any defective parts, and will pay all labor and parts charges to repair the PRODUCT found to be defective.

Please keep the original packaging for the PRODUCT. You will need it for any warranty service for the PRODUCT. You should also keep the dated bill of sale (sales receipt) as evidence of the date of purchase.

To obtain warranty service during the warranty period you must:

1. Call the KENSINGTON return department at (800) 535-4242 or (415) 572-2700.

2. Give the date of purchase on your receipt. If the date of your call is not within one year of the date you purchased the PRODUCT, there will be a charge for repair.

3. Give a full description of the problem.

4. Get a Return Authorization Number (RA#).

5. Pack the PRODUCT in its original packaging. Enclose a letter inside the package giving us your name, RA#, address, phone number and check, if necessary. You must also enclose a copy of your sales receipt.

6. Take the PRODUCT or mail the PRODUCT (with all mailing cost paid by you) to KENSINGTON. The PRODUCT must be in its original packaging. Be sure

that your RA# is also marked clearly on the outside of the package. We will NOT accept any return without an RA# marked on the outside of the package.

In order to keep this warranty in effect, the purchaser must have handled and used the PRODUCT in accordance with the instructions accompanying this PRODUCT. This Warranty does not cover any damage or defect that is caused by improper installation, modification, misuse or abuse of the PRODUCT by you.

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